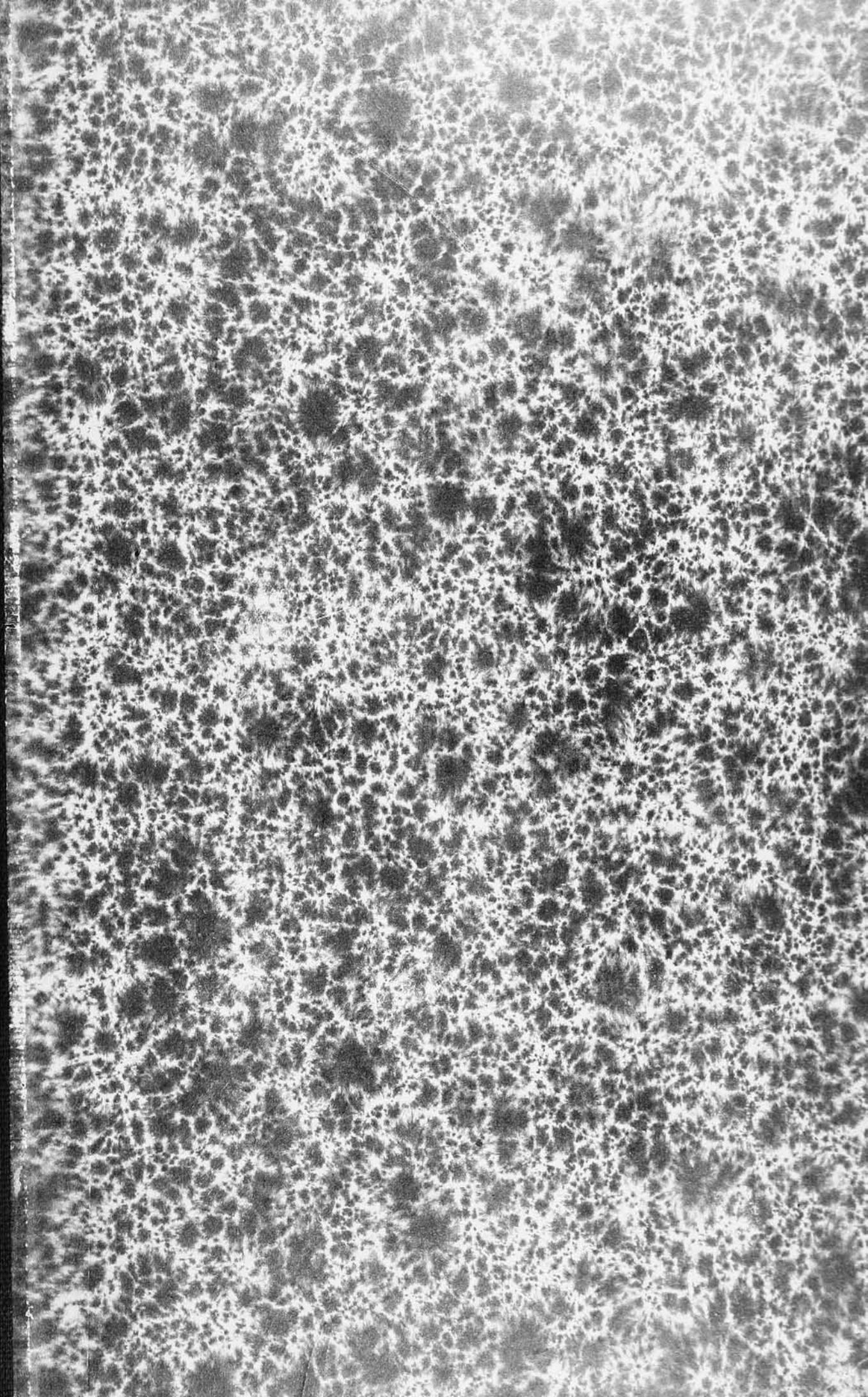


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THE CORNELL COUNTRYMAN



Volume XXIII

October, 1925 to June, 1926

THE CORNELL COUNTRYMAN

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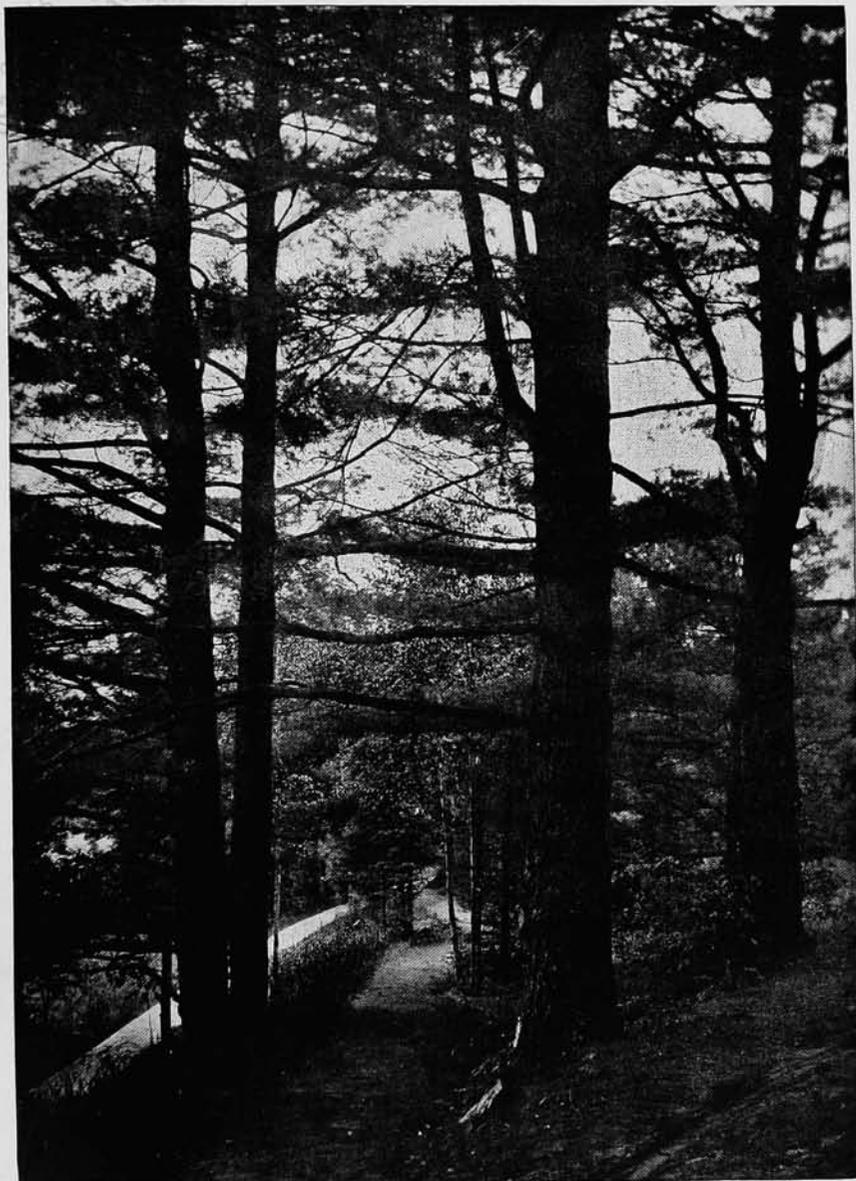
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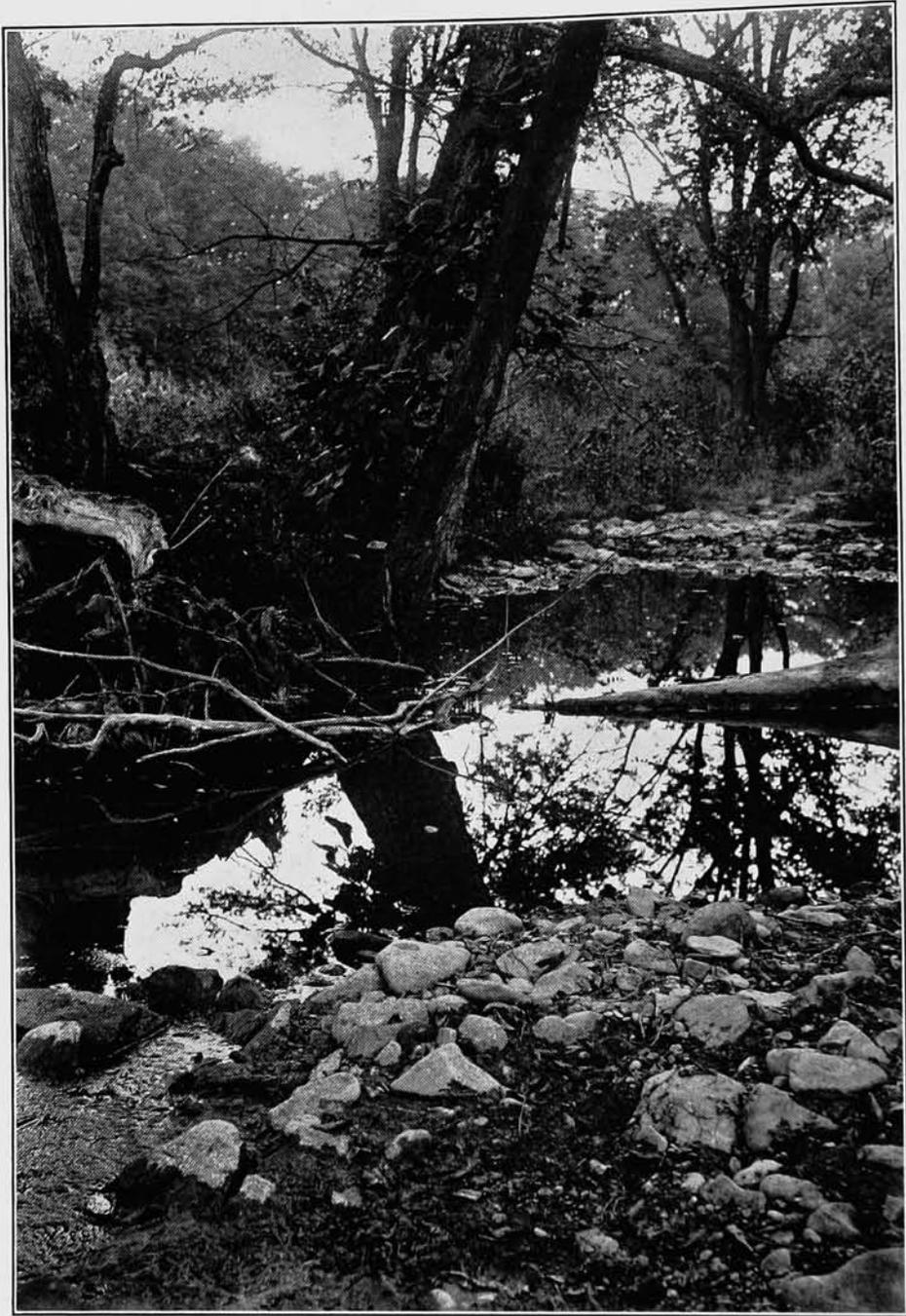
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A Shadow Study

The Cornell Countryman

A Journal of Country Life — Plant, Animal, Human

Volume XXIII

OCTOBER, 1925

Number 1

Some Agricultural Observations in Europe

By A. R. Mann

THE economic stability of a country is likely to be intimately identified with the condition of its agriculture. When we recall that many of the European countries, particularly those in central, eastern, and northern Europe, are predominantly agricultural, 60 to 85 percent of their populations being engaged in farming, we shall recognize in some degree the extent to which the welfare and progress of agriculture is a factor in their economic stability.

In Europe we are confronted with the pressure of increasing populations on the land. It is somewhat difficult for us, with our vast areas in the United States, to appreciate the pressure of population on the land areas in Europe. A few figures may set the matter in our minds: The density of population per square kilometer, which is a little over one-third of a square mile, is, in France, 71; Denmark, 74; Switzerland, 94; Germany, 126; Italy, 126; The British Isles, 151; Japan, 187; Holland, 200; Belgium, 245; the United States, 14. These figures are for the years 1920 and 1921.

The density of population is likely to be reflected in the use that is made of the land, the character of the land holdings, and the problems which arise out of the land-holding systems. We find, for example, that in France 80 percent of the holdings are in areas under ten hectares—that is, a little less than 25 acres. In Norway, 92 percent of the land holdings are under ten hectares; and in certain other countries the areas are even smaller.

THE other day the writer was on the eastern coast of Italy, near Ancona, on a farm of 720 acres. It was supporting a population working on the farm of 350 persons. It was divided into 29 farm units of an average of about 25 acres each, and on each of these units, or colonies, operated as distinct farms, there was a family averaging twelve persons; twelve persons working on each 25 acres, devoted to an intensive general

agriculture in which horticultural crops played a secondary part. That, however, is just half the story, inasmuch as they had the use of this land on a fifty-fifty basis with the owner, the latter receiving one-half the income from each colony and the average family of twelve making its entire living from the remaining twelve and one-half acres. The farm is operated on a share basis of production, not a cash wage; so that the workers must take the hazards which the weather brings in the results of their year's

When we think of Europe, there are at least two questions, among many, that come to our minds as of fundamental interest. One has reference to the economic stability of the nations of Europe; the other has reference to their political stability. In the work in which Dean Mann has been engaged, he has touched these questions at certain points.

work. The peasants appeared contented and life is simple; but they could seldom, if ever, effect savings with which to acquire a piece of land for themselves.

These conditions naturally create problems as to how there may be brought about the greatest utilization of land. In this respect we find two diverse situations which now confront many of the nations of Europe acutely. One of these is known as the pulverization of the farms, by which is meant the breaking up of farms through systems of inheritance or otherwise into very small strips, or parcels, with the result that a single owner may possess a total farm of a few acres, say 2 to 20, and these acres may be divided into many small strips which are widely scattered. The most striking example encountered was in

southern Poland, where there are some hundreds of thousands of farms averaging a few acres each, divided into an average of 19 separate isolated strips. This condition involves a very difficult problem of farm operation. The strips are not suited, by reason of their scattered location and small size, to the use of machinery. In such regions the agriculture is what may be spoken of as a "hoe" agriculture, or a "hand" agriculture. These strips are difficult of proper irrigation and drainage by reason of their scattered nature and their contact with the farms of neighbors who may not be in a position or a frame of mind to meet the requirements of irrigation and drainage. Frequently they are not accessible from the highways. The farmer lives in a village—he would find it perplexing to try to live on his land. He lives "off" the land in a double sense.

IN several countries laws exist to promote the reassembling of these strips into consolidated farms. Some progress is being made; but it is an extremely difficult undertaking. The peasants have become firmly attached to their particular pieces of land; they and probably their forefathers have invested themselves in those strips of land and they know them intimately. In order to assemble the strips there must be a most careful cataloging or analysis of all of the areas owned by each man: the soil character, the productive capacity, the size, the average distance from the village, and other factors which will enable the persons charged with the redistribution to give to each farmer a combined area as nearly as practicable identical with that which he had before in respect to these specifications. In the government office dealing with this problem extensive records are made of the character of the individual strips in order to have a basis for reassembling them. There is little immediate evidence that much will be accomplished. Whether the time will come when reconstitution will make

extended and rapid progress one cannot forecast.

THE second land problem referred to is diametrically the opposite of the foregoing, namely, what is to be done with large holdings, especially those not now fully utilized, where one owner has possession of a great tract or several large tracts, in the midst of an acute pressure for land on the part of growing populations. This problem has been accentuated since the close of the war in nearly every country of Europe having large holdings in the hands of single owners. The expropriation of these holdings, their division and allotment to owners who will farm them, is generally regarded as a reaction or concession to the growing spirit of communism and its threat of revolution at the close of the war unless large properties were divided among peasants and brought into

more intensive use. In six or more countries where the writer had occasion to talk with officials concerning the breaking up of large farms, there was general doubt as to its desirability, if not actual opposition to its continuance, fear being expressed that because of the demand for bread grains, the city populations and export conditions and trade balances would suffer, the tendency being to produce on the smaller farms less bread grains and more of the things readily consumed on the farms. In Czechoslovakia, where many large areas have been broken up during the last few years, the government has now authorized an inquiry into the effects and the desirability of the continuance of the policy.

THE methods by which these lands are taken from the original owners vary greatly, and have a bearing on the progress of the undertaking. The greatest embarrassment lies in the matter of compensating owners of seized lands. For example, in Finland, where large estates under single owners are commonly found, the engage-

ment of farm labor for the states has been based for a long time on a system of land allotments. A man and his family were given the use of a certain area of land in exchange for one day's work on the estate; for two days' work, twice as much; and for a week's work of one man, or full time for one adult person in the family, the use of an area of 12 to 14 acres might be assigned. When Finland entered upon a land reform after the war, a law was passed which provided that all farm workers should have the right

large owners. In several of the countries which instituted this type of land reform, there has not yet been worked out a system of compensating the owners.

LAND reform was already seriously complicated by other conditions of an historic character, of varying importance in the several countries. In Italy, for example, there are added to many natural limitations in the development of lands for farming, remnants of feudal systems, rights of entry, communal allotments, and other special situations, all of which enter vitally into the question of Italy's food supply. This is a constantly pressing problem by reason of the increase in Italian population and the restriction of immigration in other countries, particularly in America. One finds quite generally in Italy a feeling of depression growing out of



Peasants Harvesting in Germany

to claim from the proprietors for whom they were working the land which they had been receiving, up to a total of 25 acres each, this to become their own property and the former proprietors to be compensated on a basis later to be determined. One is told that almost the next day after the law was passed the farm workers made the demand that they should own the land which they had been using in exchange for their services. This carried with it the house in which they had been living, other buildings, and equipments. As a result of the law, large farmers found themselves suddenly without labor tenant houses, or equipments, as the laborers were no longer under obligation to work for the proprietors. That act was passed in 1918. Up to the present time a method of compensating original owners for the land and buildings thus taken has not been worked out, even though the matter has been before the Parliament (Starting) continuously since 1918. It is but natural that this should further strengthen the opposition to land reform on the part of

our restriction of immigration, since the country is unable to take care of its increase in population under present conditions. If the southern half of Italy were easily reclaimable for an intensive culture, the problem would be somewhat simplified for a time; but it can be reclaimed only at great cost and effort. The Agro Romano, in the midst of which stands Rome, the ancient civilized world capital, and present capital of Italy, is a vast area devoted primarily not to an intensive agriculture, but largely to sheep herding; and one's first impression is to wonder why, in a country having such pressing need for an increased food supply and land for its people, such a condition obtains. He learns, on inquiry, that it is due in part to what one man described as "the malediction of God" with which Italy started, given land areas very difficult to bring into cultivation. This area lacks a satisfactory rainfall, and parts of it are underlain with an impervious hard-pan. The rains come during the winter and are followed by long dry spells throughout the sum-

mer and fall; lacking irrigation, it appears quite impossible to develop parts of this area for cultivated crops. The government is experimenting with excellent results on selected areas. It finds that water can be procured by deep drilling and that the hard-pan can be broken at a depth of 30 to 36 inches by the use of a recently devised deep-cutting plow. Areas visited where these works had been carried out are now producing fine horticultural crops, and indicate a possible radical change in the use of Agro Romano in the course of time.

Another "malediction" which affects great areas in central and southern Italy and other regions in southern Europe is the prevalence of malaria. One who has not observed can scarcely realize how important a factor in southern Europe is malaria in determining the places and conditions of life, the character of the agriculture, and the well-being of the people. There are many extensive areas in which persons are unable to live continuously, due to its prevalence. They live in the mountains or hill-tops and come down to the plains to work during the day, going back to the hill-tops at night. The Pontine marshes cover a considerable area in southwestern Italy, not far from Rome. This land is potentially rich and produces generously where drainage has been carried out; but it is yielding only a fraction of what will be possible when it has been properly reclaimed. No one may now live on it because of the dreaded affliction. Those who till any part of it live in the adjacent hills.

The writer visited a hill town near the Pontine marshes last fall, owned by the then Italian ambassador to the United States, Prince Caetani. It has a population of about 1,000 persons. Ninety-eight percent of them had been found on a recent examination to be suffering from malaria and afflicted with it from forty days of age until the end of life. The prince is one of the several owners studying seriously how to rid his area of the troublesome mosquito.

One feels, as he travels about Europe, that the peasants are obtaining from the land all that is possible for persons to obtain through the investment of human labor, spent almost without limit. It is probable that they are not obtaining all that might be obtained through the investment of capital and of advancing knowledge. Many of the countries of central and southeastern Europe seriously lack capital for investment and operating purposes in both public and private

activities, and some of them still lack seriously in the development of agencies for increasing the investment of intelligence in the operation of the land, having large areas of the peasant populations not adequately served with schools.

This brings the writer to the second part of what he desires to say.

WHEN we remind ourselves that several of the countries under consideration are endeavoring, more especially since the war, to become independent republics, or democratic commonwealths, we shall realize more clearly the importance of education as a factor in their realization of these ends. The success of a democracy rests heavily upon education—general education of the people—in order that its policies may be wisely shaped and its economic resources properly developed. During the year the writer has had opportunity in a limited and somewhat hurried way to observe rural and agricultural conditions, particularly as these conditions are affected by progress in agricultural and related phases of rural education.

The character of aid which experiment stations, agricultural, veterinary, and forestry schools and agencies can give to farmers is in a measure dependent upon the intellectual attainments of the farmers themselves—on their general level of education and their ability to deal with technical facts. In considerable areas in eastern, southern, and, to a less extent, northern countries of Europe, excluding the more advanced western countries, the lack of general elementary education for peasants is a serious obstacle. In parts of Italy, of the two eastern provinces of Czechoslovakia, in large areas of eastern Poland, and elsewhere, there is a serious shortage of any rural schools whatsoever. The governments in all these countries, somewhat stimulated by the fortunes of war, are quite generally attempting to establish schools where none now exist. During the last six years, for example, Poland, which is financially in particularly hard straits, has developed 10,000 new rural schools. It asserts its need for 40,000 more in order to house the 1,200,000 rural children today said to be without any available schools. When Poland regained her freedom seven years ago, she was without a form of government, without persons trained in government, without any established sources of revenue, and without a well-developed educational system in her eastern areas; and today the per capita circulation of money in Poland

is but three dollars. A country lacking acutely both operating and investment funds, it is nevertheless facing its many problems courageously and constructively, as the above-mentioned incident will indicate.

AGAIN one is impressed with the fact—and this is quite generally true in Europe—that the educational facilities do not provide a connection between the elementary schools and a higher system of schools leading up to the universities. In practically none of the countries visited did there appear an educational ladder whereby the child of the actual farmer, should he desire and profit by a higher education, could obtain it unless he went away from home, and this is rarely possible, with the lack of finances and the pressure to gain from the farm all that the labor of the family can produce.

In Italy there are 25,000 rural schools, few of which go beyond the third grade. Occasionally one carries the pupils beyond the fourth grade. The laws require elementary education through the fifth grade or until fourteen years of age; but the requirements of the law have not been met by the municipalities which have charge of education, and there is generally no higher school available to these children of the farms. The public schools under the municipalities have certain conditions surrounding them which have been difficult of correction. The teachers in the public elementary schools in Italy have essentially a life tenure of office. It is said that they cannot be removed for inefficiency without trial and conviction, after which they have the right of appeal to three successively higher tribunals. As a result, it is reported that none have ever been dismissed for inefficiency. Furthermore, the necessary buildings and facilities and preparation of curricula have not received proper consideration from municipal authorities in many places. These conditions led some years ago to the organization of a private Society of Schools for Peasants, known also as the Association Against Un-alphabetism. Its activities gave rise to the formation of several other similar societies. They are endeavoring to develop rural schools adapted to the needs of rural folk. Together they have now 2,150 so-called private rural schools which receive government aid. While the government finances these schools, they are left under private direction and control. The teachers in these private schools are employed

(Continued on page 22)

The Agricultural Situation

By G. F. Warren

IN THE fall of 1920, the worst agricultural depression ever known in America began. Each fall since that year, newspapers have been filled with articles stating that the trouble was over. The wish has been more than "father to the thought." It has been the whole family tree. There has been little to indicate that the depression is yet over. The outlook for this winter is, however, much better than for any previous year.

The major cause of the agricultural depression was rapid financial inflation followed by rapid financial deflation, both of which could have been made much less severe had Americans known enough about economics to guide our financial policy better.

But there were some important minor contributing factors that made the depression much worse. One set of these was due to the results of the war in Europe, and another set was due to the situation in agriculture in America.

THE war left Europe very poor. It is poor yet and will be poor for some years to come. This changed the habits of consumption. It increased the demand for potatoes and other vegetable foods, and decreased the demand for meat and other choice foods.

Since the word "demand" is not understood, I will digress here long enough to define it. The demand for an article has decreased if the former consumption will not occur at the former price ratio to other things, or if a reduced supply does not result in the normal increase in price, or if an increased supply cannot be disposed of unless more than the normal price reduction is made.

We have exported enormous quantities of pork to Europe. Some persons have considered this to mean great demand. They really use the words demand and consumption as

synonymous words. But the large exports were possible because of the very low prices at which the exports were made.

So many American farm products are on an export basis that the tariff wall offers little protection for agriculture.

The full effects of the distressed state of Europe have not been felt in American cities because of immigration and tariff laws. It is probable that American farmers are better off than they would be if no such laws had been passed. But if such laws had not been passed, American cities would not be enjoying their present extreme prosperity and the contrast between cities and farms would not be so striking.

WHOLLY aside from the war, some adjustments were due in American agriculture. For a few years before the war, the improvement in agricultural yields, and expansion of agriculture had been exceedingly rapid. Spraying, fertilizing, better tillage, better seed, better feeding of animals, reclamation of arid lands, farming of dry lands in the United States, and particularly the opening of new lands in Canada had been more rapid than the expansion of population. In the long-run, population crowds food supply, but there was a sudden expanse in production that could not often be repeated. The production of wheat per capita in the United States and Canada was 8.6 bushels from 1902-1911 and 9.8 bushels from 1912 to 1921. What was to be done with the extra bushel?

Agriculture was not adjusted to the rapid introduction of the automobile, truck, and tractor. These machines greatly reduced the demand for oats, hay, and horses. It would have taken several years for population to have expanded enough to call for other products in place of these.

Prohibition was another secondary cause of the depression. Instead of drinking barley, corn, and rye, the American workman spends his money for automobiles and homes. Here again there was a lessened demand for farm products.

BUT on the farm itself, there were, too, very unfavorable factors. There are periods of over- and under-production of horses that usually come about twelve years apart. Horses are very cheap about every 25 years. They were very cheap in 1897, so cheap as to seriously curtail production. Prices then began to rise, but it was a long time before the shortage was made up. Horses reached their highest price relative to other things in 1911. The previous years of high prices led to over-expansion and horses would have dropped in price even if Henry Ford had not been born.

Beef cattle are also subject to cycles of over- and under-production. Good prices had resulted in over-production, and the decline in relative value that began in 1916 would have occurred in any event. The agricultural depression simply made it a little worse than the decline that began in 1900.

Hogs have short cycles of over- and under-production. The peak of over-production came in 1920 and prices were ready to fall. The rise that began last winter was not due to the ending of the agricultural depression. It was due to shortage of hogs. It is a temporary favorable factor.

THIS year there are many favorable factors. The foremost is the weather. This was a drouth year—not so bad as some years, but bad enough so that the combined crop production per acre is estimated at 6.7 per cent below the ten-year average. The drouth has, therefore, brought reduced yields that will have about the same effect on prices as if a city of 7,000,000 had been added to the population. It would take about four years for population to increase enough to equal what the drouth has done to prices.

The extra production of hay has been disposed of by the drouth. The crop plus the amount held over is 13 per cent less than the amount available last year.

(Continued on page 22)

CROP CONDITIONS IN THE UNITED STATES

Crop	5 years 1920-1924	1924	1925	Percent of 5 year average
		December estimate	September forecast	
Hay, tons	107,000,000	112,000,000	94,000,000	88
Potatoes, bu.	418,000,000	455,000,000	344,000,000	82
Apples, bu.	182,000,000	179,000,000	162,000,000	89
Wheat, bu.	837,000,000	873,000,000	700,000,000	84
Feed grains, lb. (corn, oats, barley)	216,000,000,000	195,000,000,000	219,000,000,000	101

Concerning Cows

By H. A. Hopper

TO GIVE color and zest to a threadbare subject is not an easy task; but although the qualities and improvement of the dairy cow have been widely discussed, they will always merit further consideration, because of their vital connection with human welfare.

For many years dairymen have been urged to keep better cows. They have been slow to act, although the methods to pursue have been plainly pointed out. The change in practice toward higher producing cows has been extremely slow, the step apparently being taken only in response to keen economic pressure. It is well to recall, however, that while progress could have been more rapid, the usual process of building up flocks and herds is of necessity a time consuming venture.

TO secure a better herd is a relatively simple matter. It requires that only two or three factors be kept in mind and that the program be followed persistently. The desired results are sure to follow.

1. Test the cows now in the herd. Eliminate all that do not give promise of paying their way. It does not pay nor is it necessary to start with the poorer sorts.

2. Enlarge the capacity of the future herd for production, by service from superior sires. This has been shown to be the breeder's best investment.

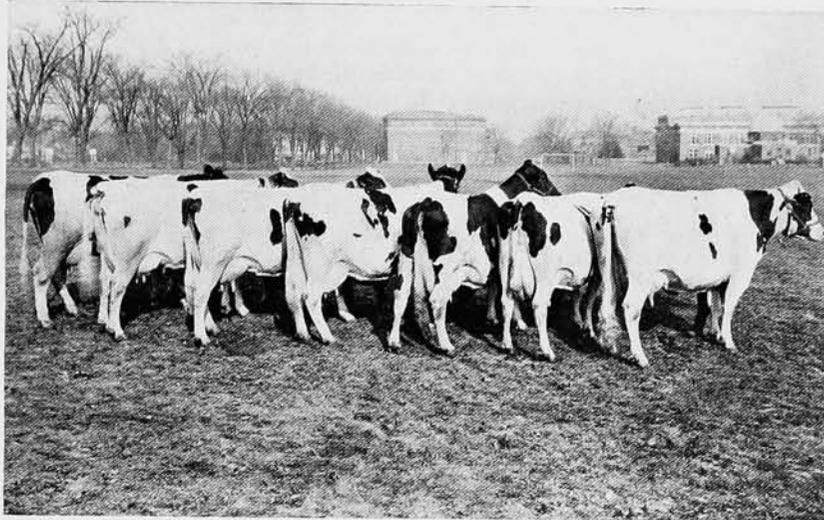
3. Capitalize the gains from 1 and 2 by good feeding and management.

Evidences are not lacking to indicate that many dairymen during recent years have received an overdose of marketing propaganda. They have been led to over-estimate what marketing would do for them instead of appreciating what they could get for themselves through better cows and better methods of production. It

should be apparent that the individual dairy farmer has very little influence in controlling the prices of his products, while the efficiency of his dairy herd and the conditions under which it operates are largely under his control. By fully utilizing these factors he may determine whether he is to receive a high or a low price for hay, silage, and other dairy feeds

this factor more than all others, that the economy of production hinges, and the opportunity of greatest prosperity in the dairy industry of this country depends."

THE burden imposed by poor cows both on production and marketing is shown in a report from a cow testing association in Oneida County. In all herds there were 2,480 cows with



Seven exceptional daughters of Emblagaard Tritomia Homestead, bred and developed at the University of Illinois

raised on his farm. Emphasis on these points first, without ignoring his personal interest in good marketing organization, will best serve his ends.

THE number of dairy cows is of necessity large because the average quality is low. If two-thirds of the cows were what they should be and received the right management, dairymen could dispense with the remaining one-third and be money ahead.

The significance of the individual cow is far-reaching, but frequently under-estimated. The following quotation from Dr. C. W. Larson, chief of the bureau of dairying, is worthy of careful reading:

"The average cow is not good enough. The developments of the past year, when reviewed from every angle, are full of encouraging features, but the greatest need in our industry today, is to increase not the number of dairy cows, but the amount of production per cow. The future success of the industry will be largely measured by the success of dairymen in developing herds of cattle of greater producing ability, for it is upon

an average production of 7,238 pounds of milk a year. Even with as good an average as this, 15% of the cows, or 364, produced only 4,125 pounds on the average and lacked \$3,623 of paying their bill for feed. With these eliminated, the remaining 2,116 cows would have shown an average of 7,773 pounds, above feed cost with receipts of \$45,139. If these poor cows had been thrown

out at the beginning of the year, there would have been saved \$23,290, which was spent for feed, not including cost of labor required to care for them. The market would have been relieved of 1,500,000 pounds of milk, all of which was produced at a far higher price than it could ever bring. There are other obvious benefits, but these are sufficient to show the possibilities of vigorous culling if it is more seriously practiced.

IT HAS been suggested that all cows failing to reach a certain minimum production of milk or butterfat should be killed. This is exactly what should be done throughout all dairy sections. The fixing, however, of an arbitrary standard, say, five or six thousand pounds of milk for any given dairy region, is probably too sweeping. The final answer to this question should be made by the owner of the cows. While 7,000 pounds might be the lower limit on one farm, on an adjoining farm circumstances might make it desirable to continue on a 6,000-pound basis, at least, temporarily. If individual rec-

(Continued on page 21)

Why Agricultural Journalism?

By Bristow Adams

TEN YEARS ago the first course in agricultural journalism was offered at Cornell, on the petition to the Dean of the College of Agriculture, by a group of students, most of whom were connected with the CORNELL COUNTRYMAN. That first course was one-hour one term, without credit. Those who took it stuck to the course to the end in spite of the demands made by final examinations in credit courses. That one course has since grown from one hour without credit to a three-hour with credit, and three other courses have been added to it.

These courses are not labelled as "journalism," but appear among those grouped in "extension teaching." They are so included because they are thought to be a desirable part of the educational equipment of persons who expect to engage in extension; as farm bureau agents, home bureau agents, or specialists. The agents themselves are at least partly responsible for the courses, too, for when they were asked what subjects were most needed in a well-rounded training for their jobs, journalism was given as one of the three major requisites. Thus, the courses now given at Cornell resulted from a combination of undergraduate petition, and county agent experience.

THE courses are not likely to be augmented; on the contrary, the tendency may be to limit them, even though agricultural colleges in the middle west have regularly established departments of rural journalism; one, Iowa, gives a four-year journalism course with about 45 actual credit hours in journalism subjects alone. Kansas State Agricultural College has about 35 hours.

The New York State College of Agriculture has never given more than 9 credit hours of journalistic training, in four courses, though it requires certain other studies. No student is eligible to the basic course, called "Agricultural Journalism," until his sophomore year, and not even then unless he has maintained an average grade of C, or better, in the required courses in English composition. For the course on the "Country Weekly" he must have first a course on "The Rural

Community" in the department of Rural Social Organization.

IN a former article in the COUNTRYMAN, published in November, 1922, the present author made the point that journalism is journalism, and that its principles are about the same applied to agriculture as to other subjects. The most simple and obvious things are taught: to know news and to be able to write news in statements of fact, uncolored by the writer's opinion; to instil the ABC's of journalism, which are Accuracy, Brevity, and Clearness; to be able to write in the language that most persons read and can understand.

That the agricultural journalism courses have succeeded in turning out successful newspaper men and women may be due more largely to the innate abilities of the students than to the methods of the instruction. It was Maurice Sherman of the *Union*, of Springfield, Massachusetts, who had four of the former students in the Cornell courses, and who said on one occasion, "Professor Adams, any time you have a student you are willing to recommend for a job on this paper, just let me know. You don't teach them enough to do them any harm." He supplemented this somewhat doubtful compliment by adding the infor-

mation that he had recently taken on his staff two graduates of a much-advertised and heavily-endowed school of journalism, and that he and these two graduates had been forced to part company without any great reluctance when the young journalists found they could not entirely re-make his newspaper in the space of two short weeks.

A CONSTANT demand exists for those who have the journalistic training given at Cornell, and the supply of those who have done well in those courses does not begin to meet that demand. Those who have become county agricultural agents and county home demonstration agents have insisted, with some emphasis and particularity, that the Cornell courses have been of inestimable value. The training given has aided many who have since had to write agricultural bulletins, both technical and popular, or who have edited or written agricultural news.

So, after all, the question of "why agricultural journalism?" may be answered by a mere list of some of those who have had the courses, together with a brief statement which meets the test of the Napoleonic touchstone: "What has he done?" Taking them somewhat at random, and in no order save that of the years in which they took the courses, here follows such a list. It is presented with apologies to any graduates from the courses who may be in the journalistic field and whose names are inadvertently omitted:

Birge Kinne, advertising manager of *American Agriculturist*; Arthur W. Wilson, agricultural advertising for the Thresher Advertising Agency; David Greenberg, member of the firm of Greenberg, Publishers, Incorporated, who has brought out many successful books; Alice M. Blinn, who has been with the *Delineator*, and in charge of publication and information services for the New York State College of Home Economics; Van B. Hart, who does a good deal of writing for the department of farm management and rural economics at Cornell; Oliver M. Olson, editorial work on the *Journal of Heredity*; J. A. Vanderslice, at one time managing editor of *The Field, Illustrated*, and later with the house



organ of the Hercules Powder Company.

HARRY BUCK was on the promotion staff of the Rochester *Democrat-Chronicle* before he went into publicity for the Eastman Kodak Company; Frank DuMond is putting his training to use in getting the public, and particularly the children, interested in the natural history museum, with which he is connected at Grand Rapids, Mich. Donald Hoagland has done well with an advertising agency which deals mainly with farm papers; B. Y. Kinzey was publicity director for the Virginia-Carolina Chemical Company before he went into general advertising and publicity campaigns.

Russell Lord, one of the outstanding products of these courses, went from publicity for the Hampden County Improvement League in Massachusetts, via the *Springfield Union*, to Ohio State University as agricultural news editor, and from there to his present position as associate editor of *Farm and Fireside*; James Plummer is running a country paper in the South; H. A. Stevenson, a contemporary of Russell Lord, was supervisor of Cornell Correspondence Courses and managing editor of the *Cornell Alumni News* until he recently went to the MacMillan Company to help develop their business in agricultural books.

John R. Fleming followed in Russell Lord's footsteps in Hampden County, and surpassed his predecessor in getting to be city editor of the *Springfield Union*, leaving that paper to go to Ohio State University as agricultural extension news editor, and teacher of agricultural journalism. Helen Lorraine is reading manuscripts for a publishing house; Earle D. Merrill, as agricultural agent in Monroe County, New York, is furnishing a lot of news to the papers and is editing the Monroe County Farm Bureau *News*. Harold M. Schneck is publicity director of the H. O. Company, and as such has charge of all that firm's advertising, and relations with the public and the firm's customers. Joseph Sterling has a responsible editorial position on the *Brooklyn Eagle*.

GERTRUDE LYNAHAN was a reporter for a year on the *Corning Leader*, from which paper she went to the *Springfield Union*, and recently left that paper for travel in Europe, from which she has just returned to newspaper work in New York. John B. Bennett was extension editor at Kansas State Agricultural College at Manhattan, and resigned his position there to go to the Federal Department



of Agriculture at Washington. Howard B. Cushman, after serving as a reporter and editorial feature writer on the *Springfield Union*, went to the *New Rochelle Standard-Star*, and from there to New York, where he is a free-lance writer.

Roger W. DeBaun is extension news editor for the New Jersey State Agricultural College at New Brunswick. Dorothy C. Delany is home demonstration agent in Chenango County and edits the home bureau pages of the *Farm and Home Bureau News* of that county. Gertrude Mathewson is preparing news material for the New York State College of Home Economics, and also preparing home economics articles for magazines. Edward N. Moot and Fred B. Morris, agricultural agents in Tompkins and Oswego counties, are publishing the farm bureau papers in their respective counties. Carolyn P. Slater is engaged in publicity for the Cornellian Council and is organizing the Cornell women graduates for work with the Council.

Otis P. Williams is editing the house organs and trade papers for the Linde Air Products Corporation, makers of oxy-acetylene cutters and welders. Murray Wigsten is agricultural agent in Ulster County and editor of the *Farm and Home Bureau News* there. Louis A. Zehner is assistant agent in Onondaga County, and is mainly responsible for its excellent *Farm and Home Bureau News*, which has frequently won highest awards in the annual judgments of these papers held in connection with the extension conferences at the College.

MARGARET BATEMAN, teaching home economics at Johannesburg, South Africa, says she makes frequent use of the teachings in agricultural journalism in calling attention to the pioneer work she is doing. Florence Becker, as home demonstration agent in Sullivan County, is mainly respon-

sible for the excellent *Farm and Home Bureau News* in her county, of which she is joint editor. Marguerite Coffin was on the editorial staff of the home economics department, and also on the *Cornell Alumni News*, and now earns her living as a free-lance writer for newspapers and magazines. Caroline Morton, as assistant extension professor of home economics, has made use of what she learned in the courses, and at least partly as a result of the interest there aroused has taken an active part in arranging news writing schools, held under the auspices of the county home bureaus, for those who report organization activities.

William A. Mears is on the editorial staff of the *Wall Street Journal* and has done much to promote that paper's interest in agricultural affairs, particularly as to agricultural finance and business. William L. Norman is agricultural agent in Madison County, and as such edits the farm bureau paper, as he did formerly in Tompkins County, bringing them both to a high degree of effectiveness. He is particularly interested in advertising. Ruth Oviatt is rated as one of the best reporters on the *Philadelphia Public Ledger*; Wallace Purcell, after about a year on the *Chicago News*, is now in publicity for a gas and electric corporation of Illinois and Indiana; Marion W. Staples, recently married, made money, even as an undergraduate, making and selling news photographs.

David S. Cook is the mainstay of the agricultural news service of the New York State College of Agriculture, and the second in command in its office of publication. John S. Crossman after a year writing syndicated farm news for the papers of Ohio, at Ohio State University, has just gone to Michigan Agricultural College at East Lansing to do similar work there. Oliver T. Griswold is reporting for the *Ithaca Journal-News* and is also doing some free-lance writing. Irving Ingalls is on the advertising staff of *American Agriculturist*.

THE foregoing somewhat bare and fragmentary catalog of names and places ought to answer the question of "why agricultural journalism?" at Cornell. The list proves that study at the New York State College of Agriculture has helped many to find careers of usefulness and service. Considering the time the courses have been established, and the actual hours of study devoted to the subject, it may be said that the records of the graduates probably equal those from any courses in the subject in any college.



Through Our Wide Windows



The Cornell Countryman

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Incorporated 1914

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Ithaca, New York

October, 1925

VACATION days are past, and we are entering with new hopes and aspirations upon another college year. For many of us, this is a time of glad returning to familiar places and faces; to some it is the beginning of a new life and friendships; for all of us it is a time of new privileges and of renewed ambitions.

Now is the time to stop and take inventory of ourselves, to see if we are headed in the right direction. A little self-criticism may assure us that we are on the right track, or if we are not, may help to put us there.

As students, we have great opportunities to fit ourselves for future success, which depends largely upon our present objectives and ideals. In our inventory, then, our first job is to determine our objective in attending this university. The chief object in going to college should be to *know*, in spite of a host of diversions, and important as many of them are in a well-rounded education; if we are not here to know, or if we have no definite objective, we are missing the true point of our education, and we had better think seriously of a little

mental housecleaning. We should next examine our ideals, for without them we cannot hope for true success. If we have not these two—objectives and ideals—the time and money that we spend here will be wasted. With them, we may better concentrate on the best things the university affords, and capitalize to the best advantage the means of education offered us. A little thought given to these things now may help to determine what we are to get out of our college life during the coming year.

Such a periodical self-inventory will do none of us a bit of harm, and it may do a world of good. Let us try it.

AT LAST we have a message from Dean Mann—the first he has written for publication since he began his great work among the nations of Europe a little over a year ago.

His work has brought him in contact with conditions of living and working as they exist in rural districts of the old world—conditions which in normal times were bad enough, but which since the war have become deplorable indeed in some countries. But poor as some of these nations are, one bright hope lies in their awakening realization of the necessity of education, especially for the people in the rural districts. True, comparatively little has been done as yet, except perhaps in the northern European countries, but now that the need is recognized, a great step has been taken forward.

MOST of us have taken the present agricultural sickness too much for granted, like the mumps or measles; too few have been wise enough to stop and diagnose the case, and from the result predict the turning point of the disease. In this issue we have an article on the agricultural situation, written by one of our leading agricultural economists. Dr. Warren explains the factors which helped to make the depression which began in 1920 one of the most serious in our history. He says that the turning point will not come right away, although the depression may be temporarily relieved, but when the reconstruction period for the farmer does come, it will herald an agricultural boom seldom if ever equalled. This sounds as sensational as the popularists could wish to have it, but it comes from one who knows what he is talking about.



Former Student Notes

'90

Frank H. Burnette Sp. says that he is really enjoying life on his farm of 180 acres, even though he cannot get much help and does most of the work alone. He is rather proud of his Alpha barley and Cornelian oats, but just ask him about his gladiolas. He lives at Phelps, N. Y.

'98

Anyone living in or near Wichita, Kansas, has heard of or seen the work of B. F. Copley W.C. unless they don't eat ice cream. Mr. Copley is the head of the Wichita Creamery Company in that city. They are manufacturing pure pasteurized cream butter, and ice cream.

'99

Professor Walter Mulford, B.S.A., head of the division of forestry at the University of California, lectured at the Oakland Hotel some weeks ago under the auspices of the Oakland, California, Forum. His subject was "California Forests," and his talk was illustrated by lantern slides and photographs. For the past few years he has been president of the Society of American Foresters.

'03

Since leaving Cornell, E. A. Howes W.C., has had a varied experience in agricultural educational lines. He taught three years in elementary agricultural courses in the schools of Ontario, four years in school consolidation work, attended the Guelph Agricultural College for a degree, spent one year at the Dominion Seed Branch at Ottawa, and later was professor of field husbandry at the agricultural college at Reno, Nevada. Since then he has been principal of the school of agriculture, Vermilion, Alberta, and at present is the Dean of the College of Agriculture, University of Alberta, Edmonton, Canada.

It is with a distinct feeling of a personal loss that we publish the news of the death of Harold Northrup Smith '26 while swimming in Ramsdell Lake near Newburgh, N. Y., on July 28, 1925. "Smithy" as he was known to his many campus friends was visiting H. R. Chandler '26 of Newburgh after attending the Citizen's Military Camp at Plattsburg, N. Y., and was returning to his home at Ontario, N. Y. According to a doctor present his death was caused by exposure to the hot sun which caused dilation of the heart blood vessels and their consequent collapse for he sank without a struggle despite the efforts of Chandler to save him.

His presence will be missed on the campus this year for he was the manager-elect of the Student Rooming Agency, a member of the Glee Club, the Officers' Club, and a member of Alpha Zeta fraternity. We mourn his loss and sympathize deeply with his parents, Mr. and Mrs. E. Jay Smith in their sorrow.

'05

Four years ago Jesse A. Bailey W.C., started in the white goods manufacturing business with \$450 and last year sold \$65,000 worth of merchandise. He has established the Bailey Manufacturing Company at 27 Albany Street, Boston, Mass. He is married and has one son eight years old to whom he expects to leave his business some time in the future.

'07

Marion I. Case Ex., is dealing in cattle and sheep and operating 1,500 acres of land which he owns around Canandaigua. His address is 186 Main Street, Canandaigua, New York.

The Wadsworth Farms at Oswego,

N. Y., are owned and operated by M. N. Wadsworth W.C. They are producers of high grade apples, cherries, pears, and grapes, and breeders of registered Jersey cattle.

'09

W. M. Hotaling W.C., is dealing in livestock at present. He was formerly a milk dealer in Binghamton, N. Y., and doing a grade A business, but sold out last spring. He resides at 2 Asbury Court, Binghamton, N. Y.

A. S. Chapin W.C., writes that he "is now specialist in poultry husbandry for the University of Tennessee located at Knoxville, although my address is Court House, Chattanooga, Tenn." He is anxious to hear from his old friends at Cornell.

'10

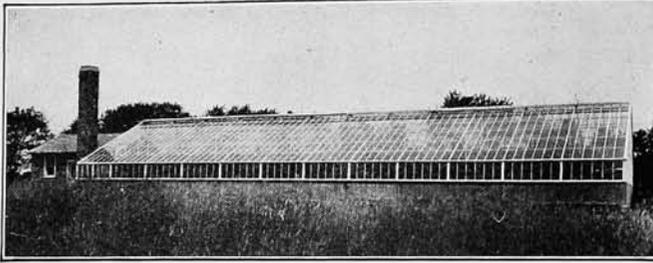
B. D. Gilbert B.S., is now Farm Bureau agent in Herkimer County. His office is Herkimer, New York.

Joseph Menzel W.C., is working with his father on the home farm of 325 acres at Windsor, New York. They are milking 27 purebred Holsteins.

'11

Frank Hahnel B.S. is farming at Romulus, New York. He is also life secretary of the Seneca County Farm Bureau.

Ransford R. Gould W.C. writes that he is the man who made "such a ridiculous (though successful) argument in the Morrison Cup Debate in 1911, when we had the pleasure of defeating Professor 'Jimmie' Rice's poultry team." He adds that for thirteen years he has been connected with his uncle who is president of the Ten Thousand Lakes of Minnesota Association and that for the last six years he has also been selling property insurance for the Rhode Island Insurance Co. His address is Brainerd, Minn.



A Money Making Business For You After Graduation Days

JUST listen to this instance. E. I. Hiscox, of East Patchogue, Long Island, is a college man who worked for years in a New York office.

Always he chafed at being tied down to a desk.

Always he wanted to be free to do things that meant sunshine and flowers; health and happiness.

He saw men with seemingly little money build a greenhouse.

He saw one house grow to many.

He saw their owners always strong and well, and getting an abundance of wholesome joy out of life.

So he mortgaged his home, borrowed all he could, and built his first house 40 ft. x 150 ft.

Didn't know a thing about greenhouse growing.

But he found out, and made that first house pay the first year.

He has three now. Three of our finest iron frame houses, growing carnations.

If you like flowers and are not afraid to get some dirt on your hands, here's a contentment-filled, money-making business for you.

Let's get acquainted. Let's start by your writing us asking the questions that right now are popping into your mind.

Here may be the answer to what to do after graduation, to make money and have your share of life's pleasures.

If interested write to the Manager of our Service Department, Ulmer Building, Cleveland, Ohio, who will give it his personal attention.

Lord & Burnham Co.

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Eastern Factory
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Des Plaines, Ill.

New York
Denver
Buffalo

Canadian Factory
St. Catharines, Ont.

Philadelphia
Kansas City
Montreal
Chicago
St. Louis
Greensboro

R. E. Minthorn W.C. is the head of a large retail business for the Cloverdale Farms Co. in Binghamton, N. Y. He lives at 17 Dickinson Avenue.

George B. Birkhahn B.S.A. has resigned as an officer and director of the Farmers' Service Company, Inc., at Middletown, N. Y., after being president for six years. He has accepted a position with Bateman Brothers, Inc., covering the Hudson

River Valley and adjacent territory and distributing farm operating equipment to the wholesale trade. He and his wife and young son live at 11 Mills Avenue, Middletown, N. Y.

'12

Reverend Ralph S. Nanz B.S. and Miss Helen M. Vasburgh of Canajoharie, were married in Groton, September 1, 1925. Dr. Nanz has been for several years Episcopal student

pastor in Ithaca. They will live in Waukesha, Wisconsin, where Dr. Nanz will be connected with Carrol College.

Herman K. Crofoot B.S. is operating a large farm near Moravia, N. Y. He and his wife have two small daughters, Marian and Virginia.

'13

Few graduates of the Ag College who have entered into the business of breeding purebred cattle, have advanced to prominence as has John S. Clark 3rd B.S. Soon after graduation he went to the Mixter Farms at Hardwick, Massachusetts. He became manager of the place which was breeding registered Guernseys and continued the work so that by the time the herd was dispersed last June it was known wherever purebreds were raised. As the herd became known so did "Jimmie", so that his services were sought by many breeders after the sale which averaged \$1,300 on more than a 100 head of cattle. "Jimmie" is now at the Marshall Field Estate called Caumsett at Huntington, L. I. He was a member of the judging team while at Cornell.

'14

T. E. Donovan W.C. is manager of the Westlawn Farm, Johnson City, N. Y. The farm is producing grade A milk which is retailed in Johnson City. The mailing address is Dayton Street.

Dr. Andrew J. Dadisman M.S.A. is the head of the department of farm economics at West Virginia University, Morgantown, W. Va.

R. F. Buckman, who has been Farm Bureau agent in Herkimer County, is now doing extension work in the farm management department, here at the College.

Carl L. Masters B.S. is president and general manager of the Southern Dyestuffs Company of Nitro, W. Va. He writes that another future Cornellian arrived at his home on January 29, 1925, and "is prospering mightily."

'15

Winifred Edna Nash B.S. and Hugh Black were married on June 26, 1925. Their address is Hall, N. Y.

'16

We regret to learn of the death of Mrs. Edna Foster Trask '11 A.B., wife of Warren Ira Trask B.S. of Almond, N. Y., on August 24, 1925.

Miss Florence Ethel Axtel B.S. was married to Homer DeLong in August, 1925. They are living in Trumansburg, N. Y.

Frederick V. Foster B.S. was married on June 4 in Washington, D. C., to Miss Margaret Davis, daughter of Congressman and Mrs. Ewin L. Davis of Tennessee. They are living at 158 Harrison Street, East Orange, N. J. Foster has business interests at 5 Nassau Street, New York City.

Roland S. Baker B.S., who has been Detroit, Michigan, agent for the Corporation Trust Company, is now located at 1110 Federal Commerce Trust Building, St. Louis, Mo.

On April 24, Marie McCarthy B.S. was married to William Kennedy of Findlay, Ohio. They went on a honeymoon trip through the West and Canada and on their return took up residence in Findlay.

Gilbert M. Montgomery B.S. is building a new home near Devon, Pa., and until after October will be located at White Oak Farm, Glen Moore, Pa.

Paul F. Sanborne B.S. is a flour broker in Washington, D. C., with offices in the Munsey Building. He recently purchased a new home at 3319 Cleveland Avenue.

'17

Charles Wille B.S. is manager of the Dieckeroff estate, at Parksville, N. Y. He was formerly county agent in Sullivan County.

'18

Mrs. George G. Snarr B.S. (Reba L. Beard) is now living at 448 North Braddock Street, Winchester, Va. She and her husband moved there from Harrisonburg, Va., last September. He is a practicing physician, specializing in diseases of the eye, ear, nose, and throat. They have a daughter, Reba Shaeffer, who hopes to enter Cornell about 1940.

'19

M. C. Hammond B.S., the county agent in Broome County, is located in Binghamton, N. Y., and among other things belongs to the Rotary Club of the city. He is happily married and has two children. They may be reached at 38 Vine Street.

Frederick A. Buell W.C. is working his father's farm at Holcomb, N. Y.

Mr. and Mrs. William Merle Webster announce the birth of a son, William Merle, Jr. Mrs. Webster was formerly Miss Carrie M. Luce graduate from the College of Agriculture in 1919. They reside at 64 Livingston Street, Warsaw, N. Y.

'20

The person in charge of the publications for the Fidelity & Deposit



Protection Plus Appearance
 You prevent decay—and improve the looks of your house—by giving it the right care. Are you just as careful of your teeth? They are a whole lot more important.

*Don't Wait—
 Prevent Trouble!*



Good Teeth—Good Health—Good Times

Colgate's removes causes of tooth decay

People who care how they look are concerned with their teeth. Not only are good teeth important to beauty, they are essential to health.

Because good teeth and good health are so closely related, modern dentists are urging preventive dentistry. Its aim is to combat disease by preventing tooth troubles. Colgate's Ribbon Dental Cream always has been in the forefront of this scientific move for better teeth and health.

Colgate's "washes" your teeth thoroughly clean—does not scratch or scour them. Causes of tooth decay are safely and effectively removed by Colgate's.

The taste of Colgate's is pleasant. This dental cream is made and advertised sensibly, and is sold at a sensible price—25c for a large size tube.

COLGATE & CO.—Established 1806.



Truth in advertising implies honesty in manufacture

CLEANS
 TEETH THE RIGHT
 WAY



Colgate's Cashmere Bouquet Soap—25c



Colgate's Talc 25c each



Colgate's "Handy Grip" Shaving Stick—35c



Colgate's Rapid-Shave Cream—35c

Company of Maryland at Baltimore is Sidney C. Doolittle B.S. He was married last October to Miss Elizabeth C. Murray of Pittsburgh and Baltimore.

Jaime M. Coelho W.C. writes from Establecimiento "La Juanita" Estacion La Rica, F. C. O. Argentine Re-

public, that he owns a 2,000-acre ranch and raises beef and dairy cattle, wheat, corn, and alfalfa.

Mr. and Mrs. Edward L. Plass B.S. (Louise M. Hambruger '19) announce the birth of a son, Robert William. They have two other children, Ed-

ward B. and Barbara L. They live at Arlington, N. Y.

One of the instructors in the New York State School of Agriculture at Morrisville, N. Y., is George A. Spader B.S. He is instructing in horticulture.

Bryan M. (Pete) Eagle B.S. is manager of the investment department of the American-Southern Trust Company, Little Rock, Ark. He is married to Miss Virginia Fleming of Memphis, Tenn.

Jesse VanDoren B.S. was married on June 10, 1925, to Alice Conger. He is now acting county club agent for Alton Adams who is now on a trip to Europe. His headquarters are at Watertown, New York, Jefferson County.

Edwin S. Larrabee B.S. has a position with the Grove City Creamery Company, Grove City, Pa. The Government is carrying on dairy experiments at the plant under the direction of Howard C. Jackson '15, formerly assistant professor in the College's dairy department.

In answer to our inquiry to Olief A. Christensen W.C., we received a gayly stamped envelope containing the information that he is a practical farmer on a rented 150-acre farm at 8 Reventlowsgade Street, Copenhagen, Denmark. He says that "The time I spent as a short horn at Cornell was the best I had during my stay in U. S. A.", and adds he is interested in taking some of the College's reading courses to get the "latest American information" on farming.

Samuel L. Althouse B.S. is managing editor of *The Poultry Item*, the largest poultry journal in the East. His address is Sellersville, Pa.

The general manager of the Leechtman Ice Cream Company at Hazelton, Pa., is Harry L. Cooke B.S. He was married to Miss Corinne M. Ingalls and they have two children, a boy of five and a daughter one year old.

They are living at the Krapf Apartments.

Walter I. L. Duncan B.S. has resigned from the advertising department of the New York *World* to become sales manager of the City Suburban Securities Corporation. This corporation is at present engaged in completing the financing of Blind Brook Lodge, at Rye, N. Y., a sub-urban apartment building.

'21

Clarence P. Hotson B.S. is still assistant professor of English at the University of Maine, Orono, Me. He

'98 B.S.—The Dominican Republic has called Professor John W. Gilmore of the University of California to conduct a survey of the agricultural situation within its territory. This Republic, also called Santa Domingo, is the eastern part of the Island of Haiti in the West Indies. The western part is the Haiti Republic. Santa Domingo is taking some progressive steps in the development of its agricultural resources and appealed to the United States Department of Agriculture for guidance. Professor Gilmore, professor of agronomy in the college of agriculture, at Berkeley, was recommended to the island authorities by Washington experts and arrangements have been consummated. His survey will be extensive and will occupy six months or more.

Professor Gilmore is recognized internationally as an authority upon the larger aspects of agronomy and agricultural practice. In addition to his work in the Orient, the Philippines and Hawaii, he was in 1921, exchange professor to the University of Chile, and has traveled in Central and South American countries.

He is Fellow of the American Association for the Advancement of Science; Life Member of the American Genetic Association; Member of the American Society of Agronomy; Member of the Ecological Society of America; Member of Sigma Xi, National Honor Society for Science; Member Alpha Zeta; National Honor Society for Agriculture; Recipient Gold Medal La. Purchase Exposition, 1904; Member Jury of Awards and recipient of Medal and Diploma for distinguished services, P.P.I. E., 1915, Exchange Professor to the University of Chile, 1921.

His publications, over a quarter of a century, cover such themes as commercial fibers, fertilizers, rural engineering, potatoes, timothy hay, stock feeding, root crops, the College of Hawaii wheat, the organization of agricultural education and research, horticulture in Chile, etc.

is teaching classes in technical composition and modern literature and expects to be there another year. He writes that he recently completed a year of study of Sanskrit under Dean Chase of the Graduate School at Maine. In the fall of 1927 he hopes to enter Harvard and study for a Ph. D. degree. Mail should be addressed to him at Box 222, Orono, Me.

The Posey Jane's Gardens at Crown Point, N. Y., are run by Esther G. Walrath W.C.

Martha Louise Kinne B.S. '24 and James Beckley Palmer B.S. '21 were married on July 11, 1925, at Ovid, N. Y. They will live in Edinboro, Pa.

Silus N. Ferguson Ex. and Miss Freida Marie Schooley, of Prospect Valley, were married July 2, 1925. They are living at 252 Fort Covington Road, Malone, N. Y.

Edson I. Case W.C. is operating his own farm on the island, inside the city limits of Canandaigua. On this farm there are 75 acres of bearing apples.

John E. Connolly recently resigned as assistant county agent in Ontario County, N. Y., to become a field horticulturist for the Niagara Sprayer Company in northern Ohio. "Jack" is making his headquarters at the Hollenden Hotel in Cleveland, Ohio.

'22

Barton Baker B.S., who is practicing law in Rochester, N. Y., was married on June 6 to Bernice Dennis '26, daughter of Mr. and Mrs. Irving E. Dennis of Ithaca.

While on a tour of Europe Miss Rosamond Wendell B.S. met Mr. Ferdinand P. Fisher, a graduate of the University of Illinois, who is now teaching at Crane College, Chicago, Ill. They were married the last of June with Miss Mabel Buckner B.S., also '22, acting as maid of honor. After a honeymoon in the Rocky Mountains they are living on the North Shore of Chicago, Ill. At present we are unable to give their exact address, but mail sent to 256 East Avenue, Lockport, N. Y., will reach them.

Lewis M. French B.S. is a contractor and is doing his bit to further civilization by building cozy homes in and about Binghamton, N. Y. His wife was formerly Esther Cornwall B.S., also of the class of '22. They are residing on the State Road, Port Dickinson, N. Y.

We regret to learn of the death of James Robert Mack B.S. of 389 West Water Street, Elmira, New York, on August 18, 1925.

Clarence G. Bradt has transferred

Shoes, Mittens and Livestock Rations

In provincial times the farmers and their families made their own stockings and mittens out of the wool which they raised upon their farms. They made soap out of wood ashes from their fire-places, and candles out of bees-wax. At times they even made their shoes from "home-grown leather."

But modern farmers live in an age of specialization. A farmer's time is far too valuable to spend in making shoes and mittens. He finds that it is wiser for him to sell his milk or his beef and to buy his shoes from the shoemaker. The shoes are better and they cost him less!

The modern scientific farmer, who keeps a careful record of his

costs and profits, has found that the same is true of making livestock rations as is true of making shoes and mittens. He finds that such an organization as the Purina Mills is able to furnish him a far

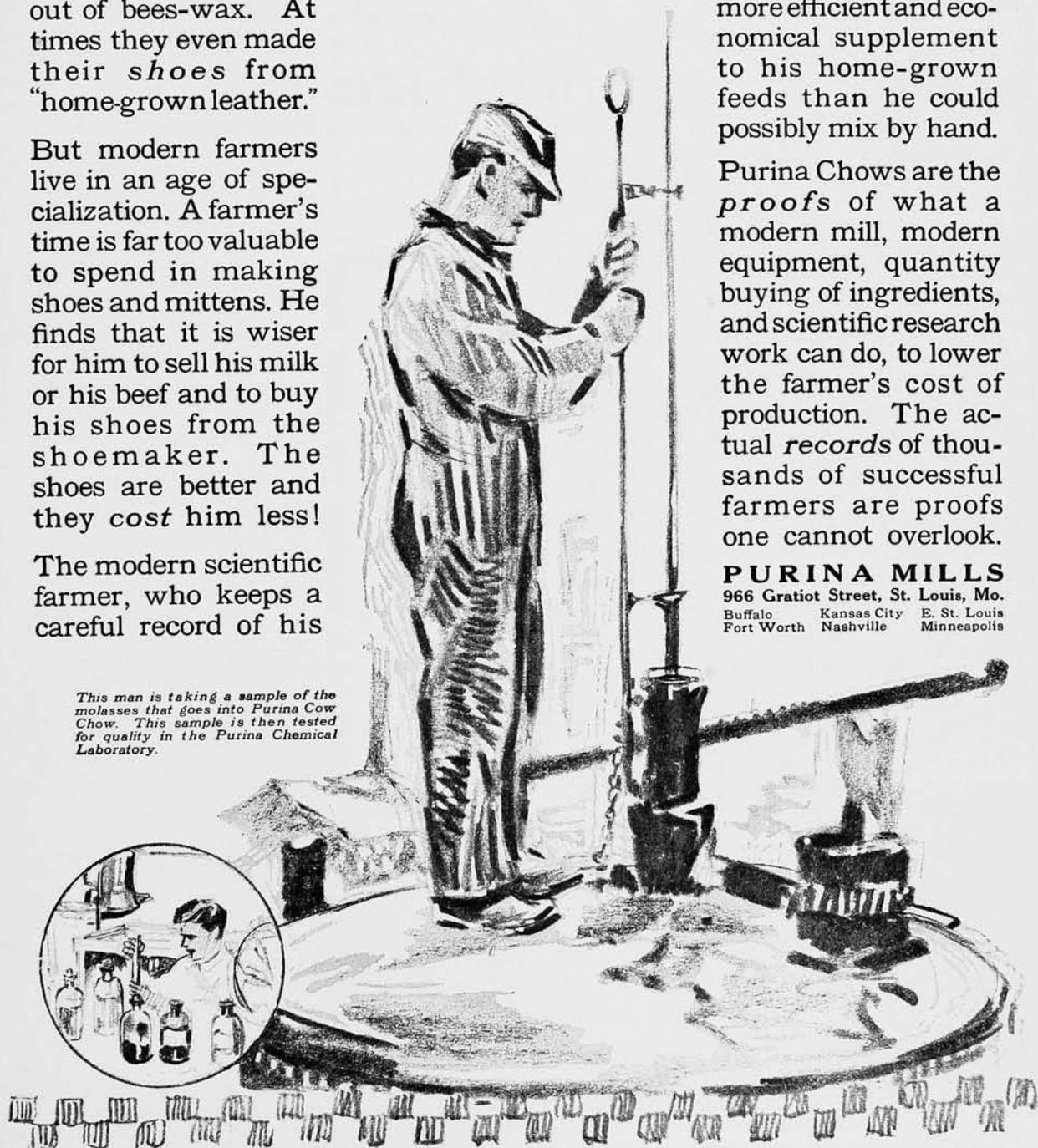
more efficient and economical supplement to his home-grown feeds than he could possibly mix by hand.

Purina Chows are the *proofs* of what a modern mill, modern equipment, quantity buying of ingredients, and scientific research work can do, to lower the farmer's cost of production. The actual *records* of thousands of successful farmers are proofs one cannot overlook.

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Buffalo Kansas City E. St. Louis
Fort Worth Nashville Minneapolis

This man is taking a sample of the molasses that goes into Purina Cow Chow. This sample is then tested for quality in the Purina Chemical Laboratory.





Loafers *never* produce

STUMPS and boulders are "loafers" on the farm—they produce nothing while they prevent the entire cultivation of the field.

Stumps and boulders are breeding places for vermin and are frequently the cause of broken implements. Thoroughly clearing the land already under cultivation increases its value and lessens the cost of farming.

Du Pont dynamite will clear land easier, quicker and better. Back of the du Pont name is 123 years of explosives manufacture. The oval trade mark on stick and case identifies du Pont dynamite.

A post card request will bring you the free, 110-page illustrated "Farmers' Handbook of Explosives"—telling all about the use of explosives on the farm. You will find this book copy useful in your college work. Send for *your* copy today.

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EQUITABLE BLDG., NEW YORK, N. Y.



from Schenectady County as Farm Bureau agent, to Delaware County in the same capacity. His address is Walton, New York.

'23

G. M. Ross B.S. is in the vegetable gardening business on a 40-acre farm along the Susquehanna river valley. He expects to build a new green house this fall costing about \$9,000. He is continually improving his farm and

some day will probably make us all wish we had gone into the vegetable business. He is happily married and carrying more responsibility than most ag college graduates. The farm is on the Conklin Road, Binghamton, N. Y.

Edwin T. Fletcher Ex. is superintendent of the Sgaw Karen High School, at Bassein Burma, India.

W. Guy Meal B.S. is now County

Agent in Schenectady County. His previous job was leader of Junior Project in Tompkins County. His present address is Schenectady, N. Y.

Ruth V. B. Rice B.S. '23 and "Bill" McMillan B.S. '24 were married June 27, 1925 in Sage Chapel. They are living at Seven Gables, Inlet Valley Road, Ithaca. "Bill" is managing H. E. Babcock's farm with its herd of pure bred Guernseys.

Donald D. Whitson B.S. was married on July 25 to Miss Cornelia H. Ireland at the home of the bride's sister in Afton, N. Y. They are making their home in that place.

On June 18th, Eva M. Peplinski B.S. and Willard C. Drumm W.C. were married at the Presbyterian Chapel in Troy, N. Y. Mrs. Drumm has managed the High School Cafeteria at Troy for the past two years. Mr. Drumm was president of Stone Club in 1923 and is now farming at Niverville, Columbia County, N. Y.

'24

Mr. and Mrs. Frederick T. Kirkendall of Wilkes Barre, Pa., have announced the marriage of their daughter, Cordelia, to Henry T. Buckman B.S. on June 1. Buckman is in business in Wilkes Barre with offices in the Wyoming National Bank Building.

"Jim" Sears B.S. is farming at Baldwinsville, N. Y.

Leslie L. Lane W.C. writes from "Lynwood," Tolteridge, Herts, England, that after returning from America he was assistant manager at the model working dairy at the British Empire Exhibition at Wembley in 1924. At present he is assistant secretary to the Manor Farm Dairy, Ltd. 39 High Road, East Finchley, London. This dairy company was the first firm in England to supply pasteurized milk in bottles which they did as long ago as 1906.

LaClair W. Davis B.S. and Coyla M. Miller were married on June 24, 1925. Mail will reach them at Cayuga Heights, New York.

Charles Winton Skeele B.S. and Miss Iva Springstead A.B. '25 were married at Clockville, N. Y., on June 16, 1925. Their address is Clockville.

Martha Elizabeth Wool B.S. and Henry C. Strahan E.E. '23 were married July 11, 1925. They are living at Poughkeepsie, N. Y.

Florida seems to have an attraction for business managers of the COUNTRYMAN. "Johnny" Gilmore '24 B.S., a former business manager, has been

down there for some time connected with a land development company and farming on the side. And now last year's manager, "Andy" Ackerman '25 B.S., is working with "Johnny" for the land company. Their address is Star Route, West Palm Beach, Florida.

Z. H. Stoughton B.S. is teaching agriculture at Perry, N. Y.

"Mac" Makuen B.S. is the banker of the class of '25. He keeps the burglars out of the National Bank at Goshen, N. Y.

"Mac" McKenzie B.S. was located in Rochester for the summer doing junior extension work. He is back in Ithaca now taking graduate work. He opens his mail at 214 Thurston Ave.

Mr. and Mrs. F. Veitch announce the marriage of their daughter, Isabel Chartres, to Theodore Bissell M.S., on July 9th at College Park, Maryland. "Ted" assisted in the department of entomology last year while taking graduate work.

Hervey D. Forward B.S. has gone back to till the soil at Elbridge, N. Y.

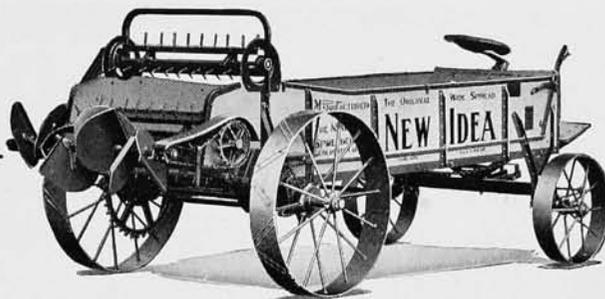
Lambert Kenfield B.S. and Ida May Banfield, both of Ithaca, were married on August 15, 1925. Their home is in Goshen, N. Y., where Mr. Kenfield has a position as agricultural teacher.

During the summer "Jimmie" Reeves B.S. chased figures through the books of feed concerns throughout the State under the direction of E. A. Perregaux, instructor in ag ec. Lately he has been employed in a large produce shipping establishment, Pennington & Black Co., Inc., at Canandaigua, N. Y. He is living at R. D. 8, c/o Mrs. Cotton.

Dorothea M. Hazlitt Sp. of Hector and James F. Vorhees of Lodi were married August 26, 1925. They will reside at Lodi, N. Y.

"Stubby" Spahn B.S. is a geologist with Brokaw, Dixon, Garner & McKee Company of 120 Broadway, New York City, geologists and petroleum engineers. He expects to sail soon for work in South America.

We ran across "Dick" Laubengayer B.S. the other day while he was getting a brick of cheese at the Roberts Hall lunch counter, to allay his appetite on his trip east to Schenectady, N. Y., and through the New England states. He's been working in the botany department all summer and will return at the opening of school to assist in one of the botany courses. His



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New Idea Farm Equipment offers the best possible investment. It is thoroughly efficient—and can be depended upon for a long life of Trouble-Free Service.

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The NEW IDEA Transplanter

A scientifically built machine for all kinds of transplanting, including Tobacco, Truck crops, Nursery stock, small Fruits, Bulbs, etc. Write for information.



Your Prof. will Confirm This:

The ingredients of a good dairy ration, containing 35% of

Buffalo Corn Gluten Feed

can be bought and mixed by the dairyman at a cost of about \$45.00 per ton. Fed in the regular way to good grade Holsteins or other cows, a ton of such a ration will produce 3 tons of milk, which at \$2 per cwt. amounts to \$120; at \$3 per cwt. \$180.

This is economical feeding. It is possible because BUFFALO, the milk-producing part of the ration, is low in cost but high in protein and total digestible nutrients. That's why BUFFALO will always be a part of

EVERY LIVE DEALER'S STOCK
AND
EVERY GOOD DAIRY RATION

Corn Products Refining Co.
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Reap the Benefit

the First Year ~ and many Years Thereafter



Spread Solvay Pulverized Limestone! You'll find it the best investment you ever made. Big returns the first year, and for four or five years thereafter. Keep the soil sweet and productive. Easy to handle, in bulk or 100-lb. bags, safe to use, non-caustic, guaranteed high test. Learn all about LIME; write for the new Solvay Booklet, full of valuable information. It's FREE!

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PULVERIZED
LIMESTONE

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SOLVAY PROCESS
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LOCAL DEALERS

home address is 224 Bryant Avenue, Ithaca, N. Y.

"Bill" W. Porter B.S. is now with the standards department of Swift & Company in Chicago. He lives at Momence, Illinois.

"Irv" Rodwell B.S. is an inspector for the Pennsylvania Railroad and is located at 212 Lexington Avenue, Buffalo, N. Y.

Mr. and Mrs. A. Holroyd announce the marriage of their daughter, Lois Fern, to Mr. Leon Packer, B.S., on July 15th at Plymouth, Iowa. They are at home at present at Union Springs, N. Y.

Walter E. Stevens B.S. is secretary-treasurer of three mutual fire insurance companies in Greenville, N. Y.

George R. Kreisel B.S. will assist Professor M. P. Rasmussen '19 B.S. in making a study of the city end of marketing in the same manner that the country end was studied. The work will be carried on in New York City, but mail addressed to George at 214 Thurston Avenue, Ithaca, N. Y., will reach him.

Announcement is made of the birth of a daughter, Mary Catherine, to Mr. and Mrs. J. A. Bizzell of 811 East State Street, Ithaca, N. Y., on May 31, at the City Hospital. Mrs. Bizzell

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EMPLOY your time in improving yourself by other men's writings; so you shall come easily by what others have labored hard for.—*Socrates*.

Send for catalog of free bulletins which will help you on the farm and in the home. Just ask for E47

Address:

College of Agriculture
Ithaca, New York

was formerly Miss Elizabeth T. Peters B.S.

Mary Nichols B.S. was married on June 25, 1925, to Harvey Weaver, who is farming out on the Inlet Valley Road. Their address is Ithaca, N. Y.

A son, Richard Harrison, was born on July 19 to Mr. and Mrs. Charles Scott B.S. They live in Middletown, N. Y.

'25

"Eddie" Foster is assistant County Agent in Chataqua County. His address is Jamestown, N. Y.

Mr. and Mrs. George F. Gray announce the marriage of their daughter, Mabel Lucile, to Cuyler Emory Paine, B.S., on August 1, 1925. Cuyler is operating both his own and his father's farm at Albion, N. Y.

Ralph Barrett B.S. is working for an ice cream concern in Binghamton, N. Y. His address is 12 Grand St.

"Johnnie" Miller B.S. has been home on the farm all summer at New Market, Va., but is teaching at present in the local high school.

"Shrimp" McNeil B.S. writes that "Russ" Young '25 B.S. went around without a shirt this summer so he would look like a real farmer this fall as he is teaching agriculture at Randolph High School, Randolph, N. Y. "Shrimp" modestly admits he is "pestering the Binghamton, N. Y., cow juice distributors" while making a study of milk marketing in that city under the direction of Professor H. A. Ross of the ag ec department of the College. He is returning to take some graduate work and assist Professor Ross in his course in milk marketing.

Concerning Cows

(Continued from page 9)

ords have not been kept, divide the total amount of milk delivered during the year by the average number of cows kept. If this average is below 6,000 pounds, money expended for feed is probably being lost, or labor is being contributed without adequate return. If the amount is between 6,000 and 7,000 pounds the account may balance. Passing beyond 7,000 pounds, the returns from good management show progressive improvement. With cows of strong breeding and great food capacity, the law of diminishing returns may not be encountered short of 20,000 pounds. Since herd averages in this case are somewhat misleading, individual production records should always be kept and the herd culled to as high a standard as circumstances justify.



A Protein Feed That Pays

Corn Gluten Feed—23% Protein

"Almost Wholly Digestible"

Corn Gluten Feed is a profitable protein ingredient for every ration. Successful feeders in 32 States are feeding it regularly. These practical men know its value. It pays them to feed it.

One or more feeding experiments with Corn Gluten Feed in the ration will make your school work more interesting and profitable to you. There are several good reasons why this is so.

Corn is grown in all the States. It is worth more than any other farm crop. We need corn more than anything else grown on the farm, and without it we would almost starve.

The product of corn most needed by the farmer and feeder is Corn Gluten Feed. A ton of it contains as much protein as 2½ tons of corn and also the natural salts of five tons of the whole grain.

Corn Gluten Feed is palatable and safe. It is never given as medicine nor has it ever caused abortion or blindness. Some dairymen feed it straight for high production tests.

You are going to help the farmer get the most out of his corn crop. This Research Bureau can be of great service to you, and we want to tell you about it.

Write us today and we will send you our bulletins and show what we are doing in our nation-wide campaign for better feeding.

Associated Corn Products Manufacturers

Feed Research Department

Hugh G. Van Pelt, Director

208 South La Salle St., Chicago, Ill.

No. 12

ELMINATING low producers before they are born shortens the route to a better herd. The dairymen's outlook is rosy only in proportion as his program of herd improvement, including the sort of sires used, promises to give a much better herd five years hence. Only through better bred cows can the closer competition of the approaching years be met. The great opportunities to step the herd up to higher levels of production are in the breeding. Eliminating poor cows, aside from preventing possible losses, serves only to raise the average of the group. Higher yields and

wider margins must be sought in superior sires.

Probably the most fascinating feature of animal husbandry is the possibility of influencing economy of production through a skillful combination of germ cells. Apart from all the glamour of pedigrees, families, and unusual prices, the rôle of every good sire is to reduce the cost of production. As sires have the major influence numerically, whether owned individually or cooperatively, any serious attempt at lasting herd improvement logically begins with them.

NOT only the cows, but the bulls as well, should prove their worth. It

is as easy to breed down as up. Where fifty percent of the bulls in use are grades or scrubs, as is the case in New York, any progress noted is accidental and faltering. Bulls must be seven years old before the worth of their daughters is known. Every tried and tested bull should be used as long as possible. When the daughters have type, impulse to produce, and capacity for feed, the sire's opportunity for service should be enlarged. While untried bulls must be used, they should be selected with care and withdrawn from service promptly on evidences of poor results. In spite of every precaution, some will prove worthless. Since few animals are genetically pure for both high production and type, the possession of such a sire can not be prized too highly.

TO discuss the use of sires is to infer the need and desirability of rearing young stock. Some question the economy of rearing heifers. This may be true in a few congested dairy centers, but to question broadly the practice of rearing heifers, and then retire without further explanation, leaves one wondering where the rising generation of athletes will get its lime and vitamins.

In an Iowa demonstration, starting with common scrubs averaging 3,782 pounds of milk and 176 pounds of butterfat, two crosses with Holstein-Friesian sires gave an average of 11,126 pounds of milk and 420 pounds of fat. Change of feeding and better care helped some, but the enlarged possibility for greater yields through better blood was the real cause.

In the Jersey breed, the daughters of Sultan's Virginia Lad are frequently cited. Sixteen daughters sired by this bull averaged 2,373 pounds of milk and 168 pounds of fat more than their dams at the same age, an increase of 44 percent for milk and 60 percent for fat. All daughters are included. The type as well as the performance of each daughter was superior to that of her dam.

Among the Holstein-Friesian sires, the bull Emblagaard Tritomia Homestead, owned by the University of Illinois, has an enviable record. The average increase in production of his first ten daughters over their dams at the same age was 3,907 pounds of milk and 161 pounds of fat. This figures 40 percent increase in milk and 52 percent in fat. The significance of this improvement is the more impressive when it is known that four of the ten dams already had milk records above 10,000 pounds. The uniformity and the excellence of seven

of these daughters is shown in the accompanying illustration.

It is the promise of results of this sort that urge men on in their efforts to improve the dairy industry. Early and late they work in the quest of their ideal—a high producing herd. From the exceptional cows thus produced, great sires arise, which if rightly used, may lighten the burden of dairy farming. If this simple program is persistently followed, the outlook becomes entirely new.

The Agricultural Situation

(Continued from page 8)

The high demand for potatoes that came when food was high relative to wages resulted in too many acres of potatoes. The lack of desire to eat potatoes now that food is so cheap in terms of wages reduced the demand so that for a few years high production of potatoes has been accompanied by abnormally low demand. This resulted in such distress in potato regions as to cause a decrease in acreage of 6 per cent this year, but yields per acre now promise to be 24 per cent below the high yield of last year. The total crop now proves to be 18 percent below the five-year average.

The horse cycle has reached bottom and shows some signs of improvement although it will probably be at least five years before horses will be high enough to leave any profit to the horse producer.

Beef cattle started up this year and prices may be expected to improve for three or four years and continue good for perhaps three years thereafter. Hogs may be expected to continue to bring good prices for about a year.

There are, therefore, some favorable factors that may be expected to last for a year for hogs and for several years for beef cattle, but the major improvement this fall is due to weather. A single good year will help, but will not solve the agricultural depression. It will probably be several years before real expansion of agriculture will again occur.

THE severity of the depression has so checked all kinds of provision for the future that, when the increased population presses on the food supply, there will almost certainly be a number of years of feverish expansion of agriculture with great solicitude about the farmer on the part of all who have now forgotten that he exists. There will then occur an even more decided expansion of agriculture than that which occurred from 1905 to 1915.

At the present time there is a great building boom, but very few buildings are being put up on farms, and most of the present ones are being seriously neglected. There is a great expansion of manufacturing equipment, but no new lands are being cleared, few tile drains are being laid, and many of the ones now laid are being neglected.

Some persons feel that the outlook for agriculture must be very gloomy because so little provision is being made for its future. As a matter of fact, the future is very bright, for when expansion is needed it will take so long to get started that there will be a number of prosperous years when efforts expended on farm improvements will add their cost to the value of the farm. Probably it will be several years before the tide turns. The longer the turn is delayed and the worse the intermediate period, the surer, more violent, and more prolonged the recovery will be. The man who is making a long-time investment in a farm or in an education is concerned not with the present prices but with future prices of farm products.

Some Agricultural Observations in Europe

(Continued from page 7)

on an annual basis, subject to easy removal if not satisfactory. The societies are demanding a higher type of teacher, but the country is without facilities for preparing them. The absence of institutions for the training of rural teachers is a general condition; it is doubtful, however, whether any country has yet developed a good system for the preparation of such teachers.

ONE finds in practically all of the countries visited a nucleus of persons eager to develop a system of education which will enable the peasant population—the neglected factor in the educational arrangements—to take its place in the social life of the country on a basis of equality. The leaders in Italy, with many of whom opportunity was had to discuss the matter at length, spoke with fervor of their eagerness to see the peasant enabled to throw off his sense of inferiority, resulting from centuries of subordination, and to make it possible for him, to the extent that individually it may be merited, to proceed up the ladder and take his place, educationally and socially, alongside other elements in the population.

One finds in Italy, to take a single instance, a real struggle between the old conditions and the new. In northern Italy there is a highly developed

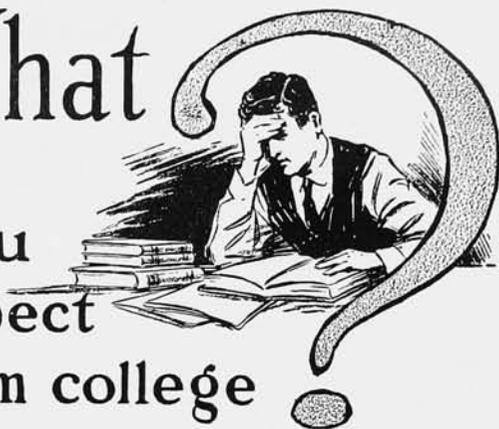
and progressive agriculture; the land is intensively used and is producing excellently. In large areas of central and southern Italy strikingly backward conditions are noted. In the area around Rome, the Agro Romano, there are said to be 50,000 persons living in straw huts in thoroughly primitive fashion. To a considerable extent they are sheep herders who travel from place to place, living in the mountains during the malaria season and coming down to the valleys and plains during the free season; but many are permanent residents.

One day in connection with visits to rural schools, the writer came at dusk to one of the improved rural schools to which reference has been made. It was conducted by two young women, 20 to 25 years of age. The frail but on the whole excellent buildings for school, health, and living purposes stood on the edge of a little grove. We walked through the grove and came upon a clearing in which stood a permanent village of straw huts, "dropped down" wherever a family could find an area large enough for a hut, and a little brush fence enclosure for the donkey up against the hut; dirt floors, a single opening for entrance, cooking done on the ground inside the hut, and the whole family, sometimes including small farm animals, sharing the hut together. The school was attempting to serve the needs of the children of this village and farms roundabout. The village was without any other institution of any kind: no stores, no churches, no sanitary conveniences, nothing but the huts to shelter the people who worked on neighboring farms, and this within fifty miles of Rome! In the struggle between the old and the new, progress is coming very slowly in parts of Italy and other eastern and southern countries, despite the efforts of earnest men. But the ever-present nucleus of hopeful and ambitious men may find a way out.

IN every one of these countries visited the governments are giving attention to the requirements of progress through some form of agricultural education and research. Italy, for example, has five superior schools of agriculture, or agricultural colleges, and about thirty agricultural experiment stations. These schools and stations are doing a very useful work. Yugoslavia has two colleges of agriculture; Hungary has three; Greece one; Poland five; Lithuania, Esthonia, Latvia, Finland, Norway, each one. Other countries range from two in Sweden to fourteen in Germany.

Austria has a very excellent college of agriculture in Vienna. Before the war it had several strong colleges. In its dismemberment it suffered greatly. From a population of forty million it

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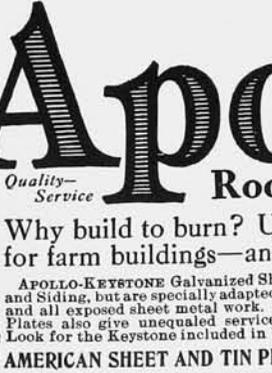
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has left a population of six million. Of the area remaining to it, 80 per cent is mountainous or hilly, and 37 to 40 percent of this is in forests. It has wholly new and difficult agricultural problems. The retrenchment following the war necessitated retrenchment in every one of the public services. The Commission on Budgetary Control, placed in charge of Austrian finances by the League of Nations, found it necessary to require the dismissal of 20,000 government employees. The agricultural institutions had to share in the curtailment necessary to the rehabilitation of the country's finances. But it has not been without hardship. With 80 per cent of the area mountainous, 37 to 40 percent in forests, Austria now has but one experiment station for forestry. Before the war this station had fifteen men on its scientific staff; today it has four men. Before the war, Austria was one of the great centers of Europe for the production of fish for market. It was an important source of income. In its dismemberment the country lost much of the area on which fish production had been carried. It is now seeking to develop the industry in the Alpine lakes and other areas not previously util-

ized. This calls for new methods. To meet the need there was established in the College of Agriculture at Vienna a division of fish culture. An able scientist with two or three assistants was placed in charge of it. This division is undertaking the public duty assigned to it on an annual appropriation of six dollars a year. Other similar instances of the difficulties in the present situation could be given both for Austria and other countries greatly affected by the war. With the passage of time these conditions should, of course, yield to improvement; but the present generation will suffer.

IN all of the countries there is recognition of the importance of the higher institutions for agricultural education and research. All are handicapped by post-war financial economy. With one or two exceptions, notably Czechoslovakia, schools of forestry and of veterinary science are receiving at least equal attention with agricultural schools and stations. Agricultural extension services of one kind or another exist in all but two of the countries visited, namely, Czechoslovakia and Austria. Boys' and girls' club work is beginning to find its place in the educational system

of Europe. It is now being definitely established in Denmark and Sweden. Agricultural associations in Norway are seeking cooperation in undertaking its establishment. Czechoslovakia, Poland, Jugoslavia, and Italy have indicated a definite interest in the work. In Jugoslavia, 2,000 boys and girls are now engaged on projects on a plan closely resembling that used in the United States.

The work in which the writer is engaged led him especially to inquire regarding some of the more difficult situations, and these have entered into this rambling discussion. It should not be inferred, however, that the agricultural institutions of Europe are of essentially lower character than those found in the various states in America. On both continents there is great diversity. Many of the leading scientists engaged in agriculture today are in the institutions of Europe, and many of the most significant advances in knowledge are issuing from these institutions. One is deeply impressed with the thorough, painstaking, and productive work of the scientists in many of these countries. America has much to learn in industry and devotion as well as in specific achievements from these workers.

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JUNIOR FIELD DAYS HELD AT CORNELL, JUNE 24-26

Record-Breaking Crowd of Youngsters Liven Up the Campus

"Cryin' in the sink! We want to play ball; we can hear all the talkin' we want to when we have to go to church on Sundays." This was one of the unofficial comments of some of the 4-H club boys who were attending the Junior Field Days at Cornell on June 24 to 26. Their ball game in the drill hall had just been called, not on account of the rain, but rather that they might walk out to the an hus building to hear a lecture.

To be sure, there were some lectures, but the 1,450 boys and girls who attended did not spend all their time working. Fun and entertainment ruled supreme throughout the whole program.

A huge campfire supper on Wednesday evening started the program. The girls' athletic field was covered with campfires, where everyone cooked his own "hot dogs." Salad and cocoa were served from central points. The dessert was in the form of oranges which were passed out from baskets, which were carried around the grounds. No correlation has been made as yet, but apparently the youngsters have cooperation instilled in their minds, because this request predominated, "Gimme two, my buddy didn' come over."

Thursday and Friday mornings were given over to lectures and demonstrations. Thursday afternoon was given over to trips about the campus and to nearby points of interest. One group made tours of the forestry plantations and nurseries; another visited the greenhouses and student gardens, while small groups made tours of the campus to look over the buildings. Two special trips were made, one of 22 automobile loads to Watkins Glen and a somewhat smaller group to Enfield Glen.

On Friday afternoon a parade half a mile long was staged, ending in front of Roberts Hall, where pictures of each county delegation were taken. Following this a speed-ball tournament took place. The Tioga county team won the tournament over Ontario by a close margin.

At twilight on Friday evening the closing ceremonies took place. Fol-

lowing a short talk by Dr. E. A. Bates on the Indians of New York, came the 4-H candle lighting ceremonies. With this impressive ceremony in which nearly 1,500 candles, symbolical of the light of achievement, lighted up the college buildings about the upper quadrangle, the field days came to a close.



Snitchin' the Oranges

After working over the statistics it was found that only 19.7 per cent had been here before. 12.3 per cent came on money received as prizes, 40.7 per cent came on money that they had earned, and 21.4 per cent came at club expense.

Those who helped with the Field Days decided that a frosh cap-burning couldn't compare with these 1450 4-H Club boys and girls for pep and excitement.

DR. PERKINS TEACHES TWENTY YOUNGEST COLLEGE STUDENTS

No longer will the Syracuse papers be able to call the COUNTRYMAN office a playhouse for profs' kiddies, for we're to have a great big home all fitted up especially for the little tots. Then they can play with paper dolls, blocks, clay, have a mid-morning lunch and a noon meal. It will amount to a new home for a part of each day.

Dr. Nellie L. Perkins, formerly director of the Wayne County psychopathic clinic in Detroit, Michigan, who lectured on child training here during Farmers' Week, has charge of the nursery school for the coming year. The school will serve as a laboratory for the study of child behavior. The former home of Miss Van Rensselaer and Miss Flora Rose at 1 1/2 The Circle is altered so that everything will be ready to receive the twenty youngsters when they are cut loose from their mother's apron strings and taken into the school where they will be under the direct charge of Dr. Perkins and her assistants.

CAMPUS CLUB OFFICERS ARRANGE TEAM SEND-OFF

"Happy" Sadd '26 Plans Banner Year's Program of Facts and Fun

Once more the familiar calls of the dairyman, the horseman, the sheep-raiser, and others interested in animal husbandry will be heard issuing from the eastern extremities of the ag campus. The cause of the unusual sounds will be the first of the never-ending arguments of the enthusiastic members of the Round Up club at the initial bi-weekly meetings of that organization. The gathering will take place in the an hus building on the evening of October 6th and will be in the nature of the send-off for the members of the judging team who will participate in the student's judging contest at the National Dairy Show at Indianapolis, Indiana.

President "Happy" Sadd '26 has arranged an attractive program which may be expected to afford considerable exercise of the mandibles and some use of members' hearing apparatus. The eats will be withheld, we are told, long enough to permit the speakers of the evening to add fuel to the burning support which the members of the club give to the department's judging team.

Mr. Ray E. Deuel '11 of Manlius, N. Y., a member of the judging team and a former Farm Bureau manager, will be one of the speakers. Mr. Deuel is at present a member of the executive committee of the Onondaga County Farm Bureau and operates a farm at Manlius, N. Y. He will be followed by Mr. McConnell '21, who was also a member of the team several years ago and has since graduation been an instructor in the department of animal husbandry and now manager of the mixing plant of the G. L. F. Inc. at Peoria, Ill.

"Happy" had hoped to have as another speaker, Professor T. E. Elder '11 of the Mt. Hermon School in Massachusetts, but Professor Elder is such a well known judge of Holstein cattle that he has accepted an invitation to judge the cattle at the Chilian National Dairy Show in South America and will not therefore be able to address the club. Mr. Deuel was a mem-

(Continued on page 38)

EIGHT DEPARTMENTS PUT ON EXHIBITS AT STATE FAIR

Value of Alfalfa and Known Origin Seed Especially Emphasized

The College of Agriculture, as usual, participated in the State Fair, September 12-19, by offering several educational exhibits. Professor R. H. Wheeler of extension and extension professors from each department which had an exhibit were in charge of the work.

The agronomy department featured alfalfa, showing the soil requirement, methods of seeding, and the importance of known origin seeds. As a drawing card, the department had two mechanical cows, one nodding contentedly as she ate alfalfa, while the other one shook its head dolefully as it munched timothy.

Farm management emphasized the value and use of the farm inventory. Also, by a series of pictures, they showed the "Factors Involved in Success in Farming."

Plant breeding, by a display of specimens and figures, placed their usual stress on the new and recommended varieties of wheat, corn and barley. They also showed the results of their hill-selection of potatoes. They further emphasized the value of good seed for all crops.

Dirt Flies

The vegetable gardening department, in an effort not to be outdone by any of its sister departments, picked up several real gardens bodily and hurried them up to the fair. In these gardens they showed by contrast the value of good seed. Otherwise than the seed the gardens had the same treatment. After showing the difference in plant growth, due to the seeds, samples of the good and poor seeds were exhibited to show their similarity of appearance. The answer to it all was, use seeds of known origin.

The an hus exhibit was even more striking than the others. In this exhibit there were six head of young stock which had been used in a 120 days' demonstration, to show the relative value of timothy hay as compared to alfalfa for roughage for livestock. Besides being cleaner, slicker and more thrifty looking at the end of the experiment the youngsters fed the alfalfa made a 41 percent greater gain in weight, 3.6 percent greater gain in skeleton growth at the withers, and 36 percent better use of the grain that was fed than their mates who ate the timothy.

Rickets to Fence Posts

The exhibit of the poultry department consisted of six pens of 30 chickens each. The feature of the exhibit was the control of rickets in chicks by feeding and proper bone development. Some of the pens had been fed on cod-liver oil, some had had the ultra-violet ray treatment; the other pens showed different experiments and checks.

The forestry department showed graphically the farm requirement of posts for fences and vineyards. They also showed the result of 8 years' experiment on different methods of treating fence posts. Some of these posts

had had the brush treatment, some the open tank, and others, no treatment as a check. The department also recommended the varieties to plant for durable fence posts to supplant the chestnut.

The dairy department, besides showing different methods of cooling milk, put on as the main part of the exhibit a Niagara Falls of milk, which showed pictorially the volume of milk produced in New York.

Judging from the audiences collected and from the comments picked up among the crowd, those in charge of the eight different exhibits were well pleased with their work.

WEATHER FORECASTS COVER RURAL DISTRICTS DAILY

Farmers Save Hay Crops by Heeding Telephoned Warnings

During the past summer last year's special harvest weather forecast service was continued and further extended. The forecasts were available in all but two or three counties in the State outside of the Adirondack region and those counties around New York City.

One of the excerpts from a farmer's letter, of which the weather bureau office here at the college has over 100 on file, will serve to illustrate how many of the farmers feel about the service: "I was ready to cut a field of clover. The weather looked good, but the weather report said rain was coming. I held off. The forecast saved me a great loss for it rained nearly all week."

This year, each forecast contained a key word to indicate the weight which, in the opinion of the forecaster should be given to the forecast. These were, *strongly indicated*—90-100 per cent, *indicated*—70-90 per cent, and *doubtful*—no forecast.

The forecasts were sent out from the Ithaca office of the Weather Bureau under the direction of John C. Fisher B.S., '09, around 10:00 A. M. each day, and were available to farmers having telephones about two hours later. Over 350 distributors selected by the County Agents, received the forecasts by telegraph from the weather bureau. The service began as needed in the different counties, starting in most of them around July 1; it ended rather abruptly on August 22 due to a shortage of funds.

In the opinion of many farmers and agricultural workers this is a form of extension which can be made of great value to farmers once they learn to use it to the best advantage.

SAVAGE JUDGES

Professor E. Savage of the an hus department judged the cattle at the Chenango County Fair at Norwich, N. Y., on August 26-27 and also gave a lecture on "The Use of Legumes to Save Protein in Grain Mixtures" at the Farmers' Week at the Virginia Polytechnic Institute at Blacksburg, Virginia.

ANNUAL FORESTERS CAMP HELD ON LAKE FRANCIS

Seniors Work Out Management Plans in Woods of Fisher Tract

The summer camp of the department of forestry of the College of Agriculture was held this year on the lands of the Fisher forestry and realty company, on Lake Francis, near Number Four, in Lewis County, New York.

Through the courtesy of Hon. Clarence L. Fisher, twenty of the seniors worked under the direction of three members of the instructing staff from August 31 to September 19. These seniors prepared a systematic forest management plan for this property, and their field work was a required part of the four years of undergraduate training given to the men in the professional forestry courses. Their tasks included an accurate estimate of the standing timber, the making of studies of the rate of growth of the various commercially important tree species, and the preparation of a map showing the forest types on the tract. Based on the facts and figures so obtained the forest management plan was subsequently made. Opportunity was also afforded the men while in camp to carry on other special investigations in the forest, under the direction of the professors in charge.

A Woods Classroom

The full period of the Cornell Forestry camp is one month. This year the first week was spent at Tupper Lake, where the students visited the mills of a number of wood using industries and other places which afford instruction to foresters in that vicinity. In former years the summer camp has been held on other tracts in the Adirondacks, in cooperation with forest land owners who desired to put their lands under forest management. The camp on Lake Francis was under the personal direction of three members of the departmental staff: Professors S. N. Spring, A. B. Recknagel and John Bentley, Jr. Another faculty member of the party was D. S. Welch of the department of plant pathology, who gave instruction in tree diseases.

PROFESSOR HALL LEAVES

The College is indeed unfortunate in losing such a valuable man in Professor I. C. Hall, professor in bacteriology in the dairy department, for he has left after one year of teaching to accept a call as head of the bacteriological department in the school of medicine at the University of Colorado, in Denver. Professor Hall came to Cornell from the University of California and is one of the best known bacteriologists in the country today.

Rural Rhymes 'Riving

Another volume of Professor "Bob" Adams' *Rude Rural Rhymes* will be published this fall. It will contain 100 of his already famous domestic rhymes.

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Editor for this issue

"GID" BRITT

Associate Editors

"TOM" LAMONT "BOB" ZAUTNER

Vol. VII October, 1925 No. 1

QUITE CONTRARY

Well! Well! Well! Here we are back to our old stamping ground. Glad to see you. Oh my! Just see all the strangers amongst us. A likely looking crew too. WELCOME, FROSH. DOUBLY WELCOME. Our pen is just itching to speel out reams of advice and warnings, but you're full of it by now. We can't, however, resist the temptation to advance a morsel of food for thought. Ever try to drive a square peg in a round hole? Not very successful were you? In plain English and contrary to the opinions of many don't try to make the big red team when you're cut out to be a glee club chirper, debater, or editor. It's a waste of time and energy. Don't think we advocate flannels and regulated room temperatures. We don't. Get exercise and plenty of it, and in the meantime don't forget that you can make your college life mean more by becoming a first class editor of one of the campus publications than by making first sub quarterback on the third team. This line of reasoning leads us to urge the ag frosh and sophs to sharpen their pencils and their business wits for the COUNTRYMAN will soon open a competition which will make the winners eligible to the editor and managerships in their senior year. Drop in any time at the cottage and we'll be glad to give you a line on the work.

AN OPPORTUNITY

Those of us who were about the campus during the summer and attended the Junior Field days on June 24-26, were impressed with one striking feature of the event. There was an appalling scarcity of professors around the drill hall, which was the headquarters for the youngsters.

We feel that this annual event is one golden opportunity to increase our future enrollment, and to foster our state-wide good-will among the farmers and citizens in general.

We do not mean to say that the Field Days were not a success. The boys and girls, however, would have had one more big thing to tell their friends and parents about when they returned home, if they had seen and talked with several of the college professors who are recognized authorities in their fields. There was plenty of opportunity to help and to answer the questions of the children. We think that it would not only directly help the 4-H club work in the State, if more of the faculty were present to help entertain these boys and girls, but that it would indirectly enlarge our enrollment by increasing the interest of these children in an agricultural education.

A PREREQUISITE

In the Ag College we have two classes of students—those who have lived and worked on farms and those who have not. The first group have a wealth of practical experience and knowledge as a background for their technical training. Our farm practice requirement helps to give the second group this same fundamental background, with which the farm boys start college.

How can a professor, with the same set of lectures and laboratory exercises, find something in the experience of both groups to use as a foundation for his course? Already, we have two departments in the college, namely, farm management and pomology, who recognize this difficulty. As a remedy they make the completion of the farm practice requirement prerequisite for their courses. We feel that this is sound educational practice; that an accurate knowledge of the details of farm work and an appreciation and understanding of the farmer's problems is just as necessary as a knowledge of the fundamental sciences for the best work in the more practical ag courses. Furthermore, we are certain that the only place that this knowledge and appreciation can be acquired is in actual work on good farms.

SHINGLES

Last spring the faculty of the College decided to adopt a policy which had been advocated for several years. It voted to award shingles to the members of judging teams which represent the college in various competitions during the year. The stock judging team of the an hus department has by this time competed in two intercollegiate competitions, one at the State fair at Syracuse and another at Springfield, Mass. Three members of the team will compete in the dairy cattle judging competition at the National Dairy Show in Indianapolis, Indiana, in the early part of October. The members of the team deserve the support of the students. It is the recognition, which you and I make of the work that the team is carrying on for the college that encourages them to do their best. This personal, as well as official recognition by the college, is the best way to make winners out of our teams. Get behind the teams and boost 'em.

THIS 'ERE & THAT 'AIR

Somburg, N. Y., Sept. 21, 1925

DEAR SECATARY:

I wish to call your attention to my son, Willit Grow, who busted last Feb'y, but who, having developed in many respects since then, I am returning for registry. Please don't be too hard on him until he gets broke in, because he has had lots of tough luck this summer.

Soon after arriving home I set him to plowing our pet side-hill, but being weak from study, etc., he got knocked out in the first round from hitting a stone too hard. When he come to we tried to get the stone out and Willit took a crobar and jarred the whole hill, but the rock never budged, which was quite a disappointment to him on account of being so anxious to get it out. When he finished plowing he had to harrow and after that every once in a while all spring he had some such harrowing experience! Drilling was hard work, but he said it made him think of the army at college because he was in the field artillery there also which made me proud. Haying was an awful strain on him, but he mowed away as much victuals as he did hay so he come through all right. When he was cutting alfalfa he happened to think to get a haircut which relieved his mind a lot so he can study better now. And the worst just happened recently: We was cutting grain, me binding and Willit was, well, it was simply shocking! You will notice he is thin and pale.

Plaese remember these items when busting him out next term.

Respectfully,

NOAH TWONT GROW

For Frosh Only

DEAR FROSH:

We think that we are not amiss in offering advice like this: keep to the walk and cinder path, or stand a wet-tish aftermath at the hands of sophs in wrath; wear the li'l gray cap with pride; the frosh cap custom will abide as long as frosh have heads to hide. Keep your coats on; don't wear knickers, but let your trousers reach your kickers. Don't try to follow all the fads; and keep away from Sage, my lads. The wary upperclassman knows those co-eds are expert with "beaux." Don't smoke within the campus bounds (tobacco, cubebs, coffee grounds). To keep your mind from getting muddy pick with care each course of study. And watch that money, where it goes; don't spend too much on midnight blows, but spare a dollar, no doubt you can, and take the CORNELL COUNTRYMAN.

Flea Justice

The little fleas have lesser fleas
Upon their backs, to bite 'em;
And they in turn have lesser fleas
And so ad infinitum.

But the lesser fleas have greater fleas
For them in turn to go on;
And they in turn have greater fleas
And greater still, and so on.

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MANY NEW FACES ON STAFF AS COLLEGE OPENS DOORS

Unusually Large Number of Changes Made in Summer Months

Dr. Loren C. Petry, from Syracuse, has been appointed to the position of professor of botany, to succeed Dr. Schramm. Dr. Edwin F. Hopkins B.S. '15, who has been studying here under a post doctorate fellowship of the International Research Council, has been appointed assistant professor of plant physiology. Dr. Myron Slade Kendrick, from the economics department, is now an assistant professor of rural economy. Miss Adelin White has been made an acting assistant professor of rural education and will give courses in psychology prerequisite to the new work in child training.

Dr. J. R. Schramm has resigned as professor of botany to become editor of the International Biological Abstract. Professor E. F. Guba of plant pathology has left in order that he might change from extension to research work. He is now connected with the Massachusetts Agricultural College in that capacity. Assistant Professor H. A. Stevenson has resigned as supervisor of home study courses, to work in the agricultural text book division of the MacMillan Publishing Company in New York City. Assistant Professor N. D. Steve of the rural engineering department has resigned to enter the coal business with his father in Pittsford. He is living in East Rochester.

They Go

Sabbatic leaves have been granted to six professors. Professor W. J. Wright of rural education, state leader of Junior Project will study the application of the principles of teaching in the field of education. During the second term Professor L. A. Maynard will study nutrition and physiology in the laboratory of physiological chemistry at Yale University. Professor W. I. Myers of farm management will spend the second term in study abroad. Extension Professor C. R. Crosby of the entomology department will spend the second term of '25-'26 and the first term of '26-'27 studying in the various entomological museums. Professor H. W. Riley, head of the rural engineering department, will spend the second term studying the application of engineering to agriculture in various sections of the country. Professor H. E. Ross, during the coming year, is establishing a modified milk plant in Buenos Aires, working for the department of agriculture of the Argentine government.

And Still They Go

Leaves of absence have been granted to Assistant Professor Doris Schumacker of the College of Home Economics to study in the Merrill-Palmer school in Detroit. Assistant Professor Flora Thurston, also of the College of Home Economics, will carry on advanced study during the year. From the same college, Mrs. Ruby Smith, associate State leader of Home Demonstration agents, will be on leave dur-

ing the first term, and Assistant Professor Lucile Brewer, the second term.

A leave has also been granted to Professor C. H. Myers, of the plant breeding department, to replace Professor H. H. Love in the work now being done in connection with Nanking University, in China, with the help of the International Education Board. Professor G. A. Works, of the rural education department, will be away from October 1 to January 31. The Carnegie Corporation has asked him to study in cooperation with Chancellor Capen of Buffalo University, the organization and financial support of college and university libraries.

NOVEL EXTENSION WORK CARRIED ON IN TRAIN

Seven Agencies Cooperate in Offering Purebred Sires to Farmers

The agricultural press in the eastern section of the country is interested in a cooperative piece of extension work carried on by the Erie Railroad, the four major dairy breed associations, the State College of Agriculture, and the Farm Bureaus in the eight counties in which the work is being done.

From September 21 to October 10, these four cooperating agencies are running a "better bull" train through eight counties in the southwestern section of the State where the influence of purebred sires is needed. The object of the train is to further the use of purebred sires and to make it especially easy for a dairyman to secure one.

The educational features are arranged by Professor H. A. Hopper, an extension professor, and consists of various feeds for mature and young bulls and heifers, different rations, various charts to show the value of raising good stock and the value of a purebred sire as a cold-blooded business investment. The Erie Railroad and the four breed associations have assembled bulls for exhibition and a large number of young sires from 10 to 20 months which will be sold to farmers owning grade herds at the lowest possible price. These future herd sires have been selected for conformation and breed type as well as pedigree and records backing them. The Farm Bureaus are arranging the stops of the train and advertising so that the work is meeting with unusual success. Professor Hopper and Mr. F. N. Stimson '12, a farmer at Spencer, N. Y., are representing the College while the breed associations have men on hand to aid the farmers in selecting their bull.

This extension work is certainly bound to be a great help in promoting the greater use of the extension department of the College for the results of this work will be apparent for many years to come.

FIT YOUR FEATHERS, for

The Cornell Poultry Production Show will be held under the direction of the poultry department in December.

COUNTY EXTENSION WORKERS HOLD ANNUAL CONFERENCE

Sod and Dough-Busters Hold Dance at Breeze Inn Pavilion

This year's extension workers' conference deviated from the usual in that it was held August 10-14 instead of the latter part of October. The reason for the change was that the former date took the agents away from their counties during the October rush of work, Jay Coryell, State leader of Farm Bureau said. This new date, both he and Dr. C. E. Ladd, director of extension feel gets around this disadvantage, but runs into the problem of finding the extension specialists at home, since the majority of these work on a nine months' basis.

These conferences have two general purposes: to give inspiration to the county workers and to give them information as to subject-matter and methods. The lectures, conferences and discussions of the week were aimed at accomplishing one of these purposes for the 111 county Farm and Home Bureau leaders in attendance.

On Tuesday night of the second day a campfire supper was held on the girl's athletic field, at which Professor W. K. Stone, of the College of Architecture, "unravelled" some of his famous stories. This party wound up with a community sing.

Belgian King Presents Medals

On Thursday night the sod-busters and dough-busters held a dance at Breeze Inn. Those who did not wear overalls or calico dresses, as the case might be, had the pleasure of taking off their shoes and dancing around the whole pile, while several energetic agents tied the strings together. Miss Van Rensselaer was safe; she wore khaki union-alls and an old felt hat.

On Friday morning, Miss Smeyers, supervisor in the Department of Agriculture, of Belgium, formally presented Miss Rose and Miss VanRensselaer with two medals which were decorations from the King of Belgium for distinguished service in child welfare.

On the following week, August 17-22, the College of Home Economics conducted training schools in nutrition and clothing which were designed to prepare the home demonstration agents for their coming year's work as county leaders.

PROFESSOR SPENDS SUMMER IN 3,300 ACRE "PLAYGROUND"

Extension professor, J. A. Cope spent the summer months making a forestry survey in the Pocono plateau for the Pocono Lake Preserve. He says that the stand of timber is one of the finest in that section of the State of Pennsylvania. There are 3,300 acres in the tract and the Preserve had Professor Cope make up a forest management program that will permit cutting each year so as to yield a profit to the Preserve. H. P. Howell '25 aided Professor Cope in making the survey.

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RURAL ENGINEERING PROFS RIDE TRACTORS ALL SUMMER

Professor "Doug" Fairbanks and "Doc" Wright have spent the past summer working out on the University farm at a wide range of work, and with a variety of tractors. Their object is to determine the cost of operation of different types of tractors at various farm jobs.

Incidentally they are developing simple, durable hitches for machines which are not at the present time generally used with tractors. Professor Fairbanks feels that this is the keynote of tractor efficiency on the general farm—adapting it to a larger number of the farm operations. Work which comes under this category is drilling, cultivating, mowing, and the binding of small grains and corn.

Better Hitches Needed

He also says that the working out of these hitches, whereby the horse drawn machinery can be used with the tractor until the time comes for its replacement by tractor equipment, will greatly speed up the motorizing of the farms. His reason is that farmers cannot be expected to sell off at auction or discard the machinery which they have because it is not designed for a tractor, and on the other hand, they cannot get the most out of a tractor where it is only used for plowing and fitting, except on large farms. The development of these hitches is intended to bridge the gap which has long existed between the satisfactory handling of the machines

which are now on the farms and the efficient introduction of tractors.

They have been working out the horsepower requirement of these different machines. So far, they feel that about a 5-10 two-wheel tractor has the widest range of economical adaptability for these lighter jobs. This type, however, is not as efficient as the larger four-wheel outfits for plowing and fitting.

The work started early last spring and will continue until broken off by the cold weather. No complete tabulation and comparisons of the costs will be made until the work stops.

AG COLLEGE HAS 26 PERCENT OF ALL SUMMER STUDENTS

A total of 579 students were registered in the summer school of the State College of Agriculture here. This was in addition to the registration of 1,641 students in the summer session of the endowed colleges of Cornell University.

In this total of 2,220, Cornell maintained in its summer session its custom of drawing students from all over the United States and Canada. Though a large number in the College of Agriculture came from New York state, many registered from such widely scattered states as Mississippi, Texas, Tennessee, California, and Washington.

Dr. R. P. Sibley, secretary of the college of agriculture, said that last summer an unusually large number of teachers and educators attended.

CAMPUS BUILDINGS DISAPPEAR AND REAPPEAR OVER SUMMER

During the summer, someone stole the rural engineering laboratories from their accustomed place behind the farm management building. A thorough search was made and the buildings were finally found, out to the south and east of the animal husbandry judging pavilion. The buildings are parallel to each other, extending north and south. An addition is being built which will connect the two buildings at the north end. This will give the department some additional laboratory floor space, which it greatly needs. It is expected that the labs will be ready for use by October 1.

Greenhouses in Pasture

Another building change which has taken place is the construction of a new set of greenhouses, in the animal husbandry pasture, northeast of the new dairy building. The glass is now being put in the frames and it is expected that they will soon be in use.

The old greenhouses, directly between East Roberts hall and the poultry building will in time be taken down to make way for the new plant industry building. The funds are not definitely in sight as yet for this new building, but it is expected that they will be forthcoming within the next year or two. It was to clear the ground for this building that the rural engineering laboratories were moved.



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POMOLOGY PROFESSORS TOUR SOUTHERN FRUIT DISTRICTS

Visit Large Scale Experimental Plantings in Commercial Region

All of the professors in the pomology department spent the week of August 30 to September 6 visiting experimental fruit plots of the various experiment stations and colleges in New Jersey, Delaware, Southern Pennsylvania, and the eastern part of Maryland. They also visited experiments and commercial plantings in the Shenandoah Valley and the Cumberland district.

Professor A. J. Heinicke, head of the pomology department said that the trip was especially valuable because they could inspect and learn from experiments, which could not be developed here on as large a scale. This is due to the fact that a large percentage of the orchards in those districts are owned by large companies rather than individuals. Consequently, the orchards being large, these companies are often willing to give as much as ten acres over to research workers to try new experiments.

Professor Heinicke says that there is a larger percentage of young plantings in those sections than in New York state. They have, however, suffered from considerable hail and frost injury this year. It is the relative freedom from late spring frosts, Professor Heinicke feels, that is the chief advantage of the lake plains fruit belt

1925 Football Schedule

Sept. 26—Susquehanna—Ithaca
Oct. 3—Niagara—Ithaca
Oct. 10—Williams—Ithaca
Oct. 17—Rutgers—Ithaca
Oct. 31—Columbia—New York
Nov. 7—Dartmouth—Hanover
Nov. 14—Canisius—Ithaca
Nov. 26—Penn—Philadelphia

of western New York. Labor, he says, is much cheaper in the south.

KAMPUS KOLLOQUIALS

Mr. R. C. Ogle, poultry extension man, was assistant supervisor of the poultry show at the State Fair and was in charge of the Production Poultry Show under the direction of D. Lincoln Orr of Orr's Mills, N. Y. He said that the show had the largest number of entries ever known.

J. P. Willman, graduate of Penn State, who obtained a master's degree from Kansas last year, will supplant B. A. Leffingwell as instructor in extension. His work will be mainly with Junior Project, calf clubs, etc.

Miss O. Bell, extension instructor in clothing, left the College of Home Economics and is now teaching in a school at Springfield, Mass.

One hundred people attended the meeting of the New York State Seed Cooperative meet at Cornell July 27.

40 COUNTY 4-H CLUB TEAMS SHOW 'EM HOW TO DO IT

Contest Staged to Pick Junior Judging Team for the National

Forty demonstration teams from the boys' and girls' clubs in twenty different counties were guests of the State Fair Commission, September 12-19. There were eighty youngsters in this group who were thus entertained by the Commission, with all expenses paid, including transportation.

At different times during the week they gave demonstrations and showed some of the products of the club work they had been doing. But their time was not all taken up with work. A section in the grandstand was reserved for them; they took in the theaters down in the city, besides looking the Fair grounds all over. Some farmers thought that P. R. Young, assistant State Club Leader, was trying to buy out the house when he ordered the tickets to the show.

In addition to this group, thirty-six boys and girls were there to show their calves. They were given free maintenance by the Fair Commission.

A contest of the cattle judging teams from the various counties was staged to determine the State team which goes to the National Dairy Show at the expense of local and State Junior Project organizations.

Both groups lived in a camp on the grounds, where they indulged in all sorts of activities such as camp-fire singing and contests to determine the most physically fit.

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NEW PIED PIPER OF HAMLIN TO APPEAR IN POULTRY BELT

During the past summer, M. A. Stewart from the Biological Survey of the United States Department of Agriculture, demonstrated the calcium cyanide method of killing woodchucks. He worked in cooperation with the extension service of the College and the local Farm Bureaus. He staged in all three hundred and fifty demonstrations in 42 counties. Over the whole period he had an audience of 3,877 persons. Mr. Stewart treated from ten to thirty holes at a demonstration and made from two to six demonstrations per day.

Even the hounds around the State, who were at first very jealous of, finally admitted that his new-fangled, scientific method was much more effective than their own although less spectacular.

A rat extermination campaign is being planned for this fall in the poultry sections, and possibly the mice will "get theirs" in the fruit belt. It looks like a hard year for rodents in New York State. However, no heavy out-of-state migration is expected by the underworld interstate commerce commission.

SOLDIER PROF.

Professor "Stubby" Maynard spent part of the summer in the dusty brown clothing of Uncle Sam as a major in the Reserve Corps of the Infantry at Camp Dix, N. J.

Campus Club Officers Plan Send-off

(Continued from page 27)

ber of the same judging team with Professor Elder.

The second meeting of the club will be held on the 19th of October when the members of the team will give a report and interesting sidelights of the National Show. The officers of the club are bending every effort to make the meetings of the club unusually interesting this year and it is hoped that a large number of the new members of the campus community will be on hand to enjoy the affairs with the others.

PROF'S PRANKS

Samuel N. Spring, professor in silviculture in the forestry department traveled with his family in California and other western states during the summer visiting national forests and other places of interest.

Professor "Bob" Hinman has returned from the University of Wisconsin where he had been doing graduate work in nutrition and will resume teaching the fat stock courses in the an hus department.

Professor Paul Work who has been on sabbatic leave with the D. M. Ferris Seed Company in Detroit, Michigan, will return to the vegetable gardening department the 15th of October.

Professor "Charlie" Allen of an hus is coach of the Cornell stock judging team.

MOONLIGHT LAKE CANOE GIRL —FIVE LESS UNDERGRADUATES

With only a few of the varsity football men on hand as we write this it seems that Dan Cupid certainly got in a good summer's work amongst the students. After everyone returns we'll need a special file clerk to keep a list of summer undergraduate weddings. We picked up these five notices by chance: Mary L. Barnes '26 was married to John L. Eddy, Jr., A.B., '24 of New York City. They will live at 531 West 124th Street. Ruth M. Nuttall '28 married Roland Campbell Brill and will reside at Brookton, N. Y. "Dick" Eglinton '27 said "I do" while standing beside Marguerite Livingston and since then lives at Forest Home, Ithaca, N. Y. "Dave" J. Williams '26 was unable to resist the charms of the southern girls and married Sara F. Shawhan at Lexington, Kentucky. Also "Doc" Louis Warncke '27 succumbed to the attraction of Miss Alice Reinhardt and was married September 6 at 407 Gregory Street, Weehawken, N. J.

SOME SHOW

There were 1,055 cattle entered in the judging at the State Fair according to Professor E. Savage who has charge of the cattle department of the Fair. The Holsteins and Guernseys led all other classes in numbers while the former had more entries than the Guernseys.

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Seven billion dollars is the people's investment in the electric light and power companies. And now, a billion dollars every year is needed to keep pace with the demand. New power stations are being built, larger than the most ambitious dream of ten years back; high power transmission lines too, converters and transformers, and, lastly, the lines which bring the current to the user.

The American farmer, feeding a hundred million souls, knows the cost of food in labor and equipment. To supply these hundred million with electric service also takes time and labor and equipment.

Devising methods for the extension of useful electric service to the farmer is the problem now engaging the thought of fifteen state committees co-operating with the national committee on the relation of Electricity to Agriculture.

The Committee on the Relation of Electricity

to Agriculture is composed of economists and engineers representing the U. S. Depts. of Agriculture, Commerce and the Interior, Amer. Farm Bureau Federation, National Grange, Amer. Society of Agricultural Engineers, Farm Lighting Mfg. Ass'n, and the National Electric Light Association.

If you are interested in this work write for a booklet describing it.

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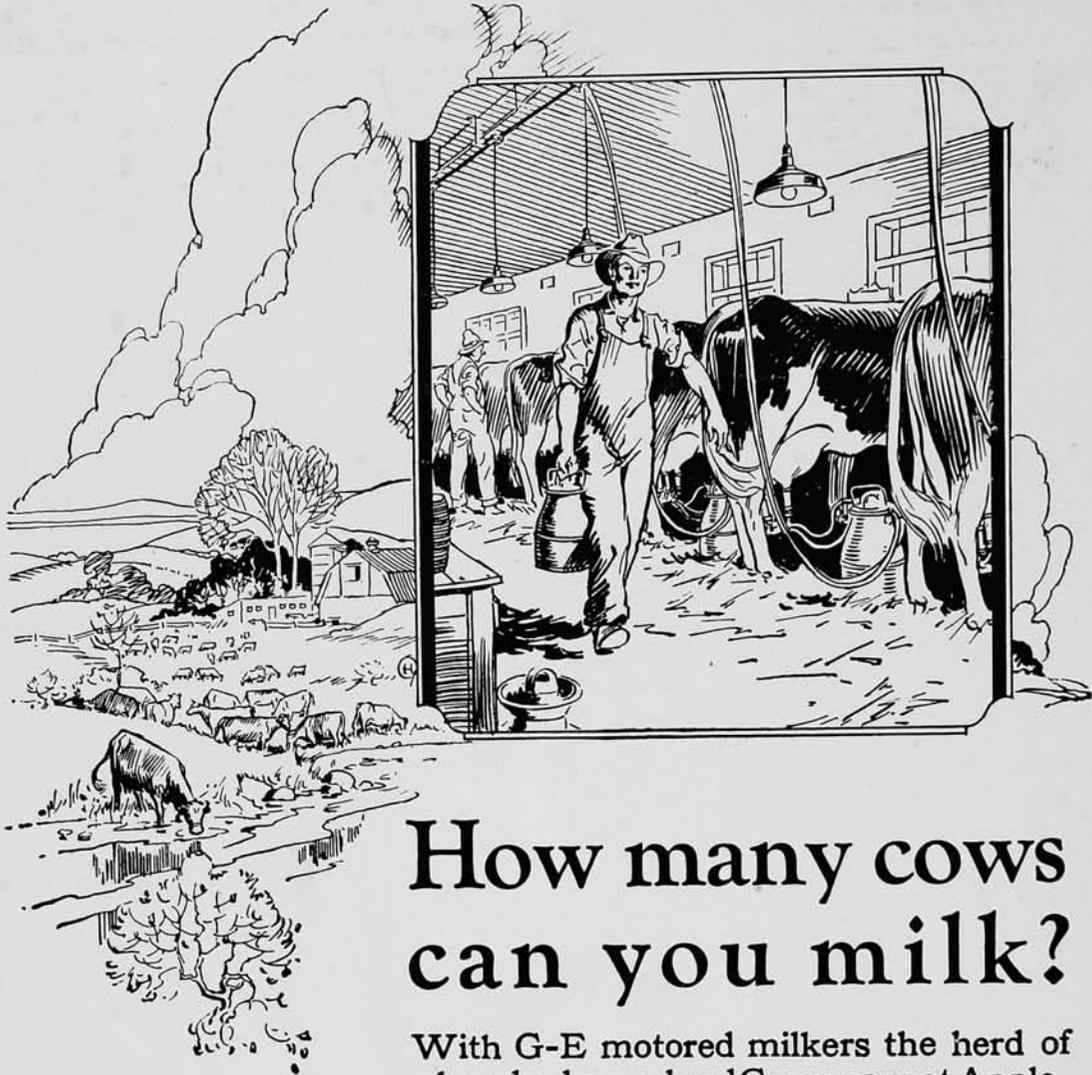


NOVEMBER

1925

Volume XXIII

Number 2



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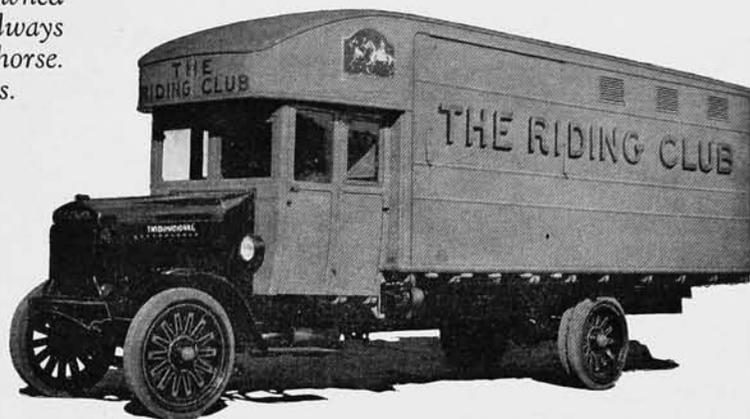
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The automobile, the motor truck, and the tractor are carrying on where the horse puts down his loads.

The horse has graduated into the class of luxuries. He has leisure to devote himself to the adornment of polo field, race course, and bridle path. He has risen from the reach of the average man exactly as the toy balloon escapes the hand of the small boy at the county fair. The poor man consoles himself with the automobile, and the ambitious man, who would acquire wealth with which to reinsert himself into the society of the horse, cultivates the profitable companionship of the motor truck and the tractor.

THIS is the age of swift traffic. He who crawls is lost in dust and poverty. The student of agriculture recognizes that the key to farm profit is lowered cost of production—maximum work with minimum expensive labor cost—waste time turned into producing time. An hour lost is silver lost. More than ever, time is money.

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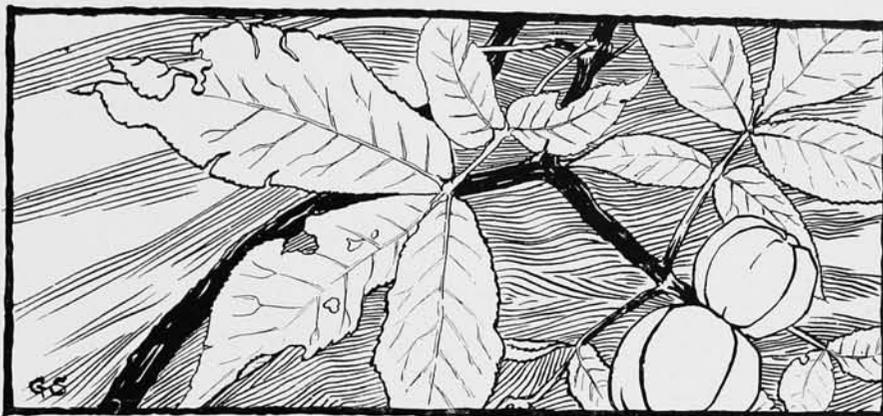
In addition to the sunlight factor in Cod Liver Meal, something is transmitted from the parent bird to the egg which results in more hatchable eggs, larger hatches, and more vigorous chicks.

There is nothing radical about the introduction of Cod Liver Meal into Ful-O-Pep Egg Mash. Scientific articles have been appearing in many publications for several years on sunlight therapy, the ultra violet ray, radiated feeds, and cod liver, the food that contains the ultra violet sunlight element.

Send for our new poultry book.

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Chicago, U. S. A.



Contents and Contributors

November, 1925

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By W. A. Stocking, former head of the dairy department. Professor Stocking represented the College of Agriculture at the international dairy exposition in Milan last year, and had an opportunity to observe the methods of handling and delivering milk in several continental cities. These methods are strikingly different from those used in this country.		By R. B. Corbett. Dr. Corbett has made a special study of costs of packing on the farm and in cooperative packing houses. He has found why some costs are higher than others, and how they can be corrected.	
The Thanksgiving Dinner.....	47	The Selection of Breeders for Egg Production.....	50
By Jessie A. Boys. Thanksgiving now-a-days is not much like it was back in the time of the Pilgrims, but Professor Boys tells how to prepare a feast which would make even their mouths water. This article will make you hungry.		By James E. Rice, head of the poultry department. Professor Rice gives the thirteen points which should be considered in selecting birds for breeding.	
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Evening comes on a hillside farm
Like song birds seeking rest
That, tired of flight as they're tired of song
Wheel home to the quiet nest.

Orange floods o'er the western sky
Merge slowly into gray
While one black tree on the hill stands guard
To watch the drowsy day.

Twilight fragrance pervades the air,
The dews of evening fall;
Then earth meets sky in a long embrace
And night is over all.

—Helen Martha Peavy

The Cornell Countryman

A Journal of Country Life — Plant, Animal, Human

Volume XXIII

NOVEMBER, 1925

Number 2

Methods of Delivering Market Milk in Some European Cities

By W. A. Stocking

LAST year it was my privilege to represent our College of Agriculture at an international dairy exposition held in Milan. In connection with this trip I visited dairy schools and experiment stations in different countries, and also gained what information I could in regard to the methods of handling and delivering milk to the city consumers. Some of these methods were extremely interesting to me, and I trust they may be to the readers of THE COUNTRYMAN, who are interested in dairy work.

While I had always heard of the primitive methods used in some foreign countries for the delivery of milk, I had become so accustomed to the modern methods used in this country that it was quite a surprise to me to find some of the old methods still in use in some of these European countries.

Within a half hour from the time I left the steamer at Naples, I saw herds of goats being driven about the streets by two or three boys and being milked to meet the requirements of the individual housewife. I also saw cows, usually in pairs, accompanied by one or two calves, led from house to house and milked into such receptacles as the consumer furnished. These receptacles varied all the way from open basins or pitchers to bowls, and even second-hand beer bottles.

A COMMON method by which the housewife receives her milk when she occupies a tenement on the third or fourth floor is to let her receptacle down to the street from her window, by means of a basket and rope. The dairyman then milks into the receptacle, replaces it in the basket, and the purchaser pulls it up to her window. This method, at least, has the advantage of saving steps for both the consumer and the milkman.

In Rome, I was informed that the

larger part of the milk supply of the city comes from northern Italy in the form of condensed or powdered milk. This is then reconstituted at the city



A Venice Milkman

milk plant to a 3 percent fat basis and delivered to the consumer. The delivery is made by means of small two-wheeled push carts. The milk is carried in a metal tank, which is insulated by a jacket of wood; suspended from the cover is a small metal chamber which is filled with ice to hold the milk at a low temperature during delivery. The milk is drawn by means of a faucet in the bottom of the tank. Measures of various sizes are carried in a compartment at the front of the cart. The cart is pushed by the dairyman, who blows a horn to announce his arrival.

The common method of delivering milk in Venice is by means of cans carried by a wooden yoke over the milkman's shoulder. Two large cans are carried for the main volume of the milk and a smaller one with a

spout is used for filling the consumers' receptacles.

In northern Italy the common method of hauling milk from the farms to the central plants is by means of two-wheeled carts with very large wheels. These carts are drawn by a single horse or mule.

SEVERAL years ago the city of Milan endeavored to furnish a supply of high grade milk for its infants and children by the establishment of a municipal milk plant. A large well-equipped establishment was erected, including stables for about one hundred cows, stables for the delivery rigs, and a large section for handling the milk and the manufacture of dairy products. These laboratories were all well equipped with modern apparatus.

Like most enterprises of this sort, however, it was soon found that it did not pay financially, and when I was there they had given up keeping the herd and were buying milk from producers outside the city. Milk was being put up in several sizes of feeding bottles, pasteurized, thoroughly cooled, and delivered ready for use. A limited amount of cultured buttermilk was being sold. Pasteurized whole milk was also supplied, primarily to lunch rooms in connection with the city parks, where large numbers of children may be found playing practically every afternoon when the weather permits. I had an opportunity to sample the milk furnished at these places and found it of excellent flavor.

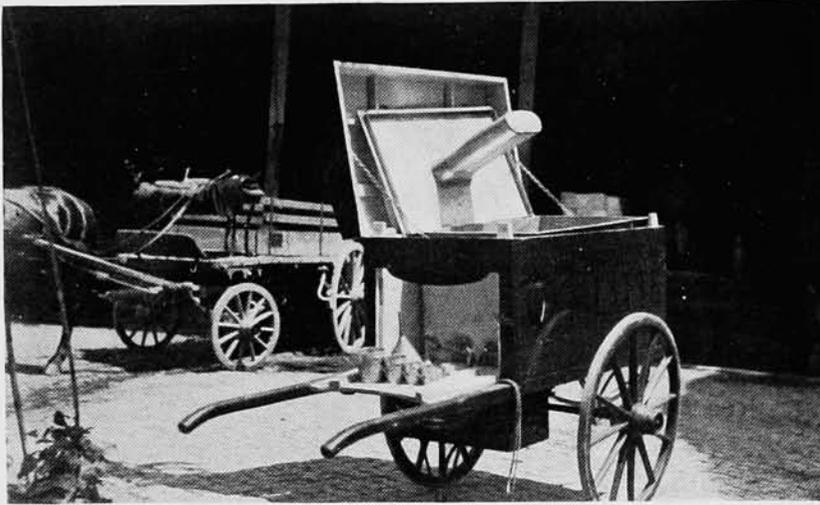
SO FAR as I was able to learn, the Italians do not use the large amounts of fluid milk which are used in this country, but depend primarily upon various types of cheeses for their supply of dairy products. The per capita cheese consumption in most European countries far exceeds that in this country.

In Switzerland milk is sold to the consumer through small dairy stores located at various points in the city, or by means of small push carts. I saw several types of these delivery carts which were either pulled or pushed by a single man or with the

with similar work in this country. So far as I could learn, all of the milk supply of Paris is pasteurized at temperatures considerably higher than those used in this country.

One of the things which I found of special interest in Belgium was the

and subjected to a temperature of 180° F. for about thirty minutes in a heavy metal chamber to which steam was admitted. This milk was then cooled immediately by submerging in cold water and shipped to the Belgian Congo, shipments being made twice each month by steamer. I was told that there was no difficulty with the keeping quality of this milk. This company is also putting up special grades of milk for infant feeding in addition to its regular supply. The company has a well equipped control laboratory.



Common Type of Cart Used for Delivering Milk in Rome

assistance of a husky dog. It was quite astonishing to see the amount of power which these dogs furnished.

Wholesale delivery is made in cans similar to the forty-quart cans with which we are familiar, the milk being brought in small lots by the nearby producers, or shipped by train from those living at greater distances. I was much interested in the method by which the farmer delivers his milk to the shipping station. This is done by means of a deep metal tank, concave on one side, which is carried on the back and suspended by means of shoulder straps. Some of these tanks hold about thirty quarts of milk.

sanitary dairy maintained in connection with one of the large city milk plants. This herd was housed in stables to which only the regular attendants were allowed access; the stable walls, mangers, and partitions between the cows were finished with white tile similar to those used in modern bath rooms; each cow stood on a cocoa mat approximately two inches thick, which was removed each day, thoroughly cleansed, by washing, and allowed to dry in the sun. The milk produced in this stable was immediately bottled, hermetically sealed,

IN HOLLAND I found quite a variety of retail delivery carts. Some of these consisted of two large brass containers mounted on a two-wheeled cart, while in others milk was carried in cans similar to those used here. The motive power was either a man, a large dog, or a combination of the two. Milk was measured into the consumer's receptacle either by dipping from the can or drawing from the faucet at the bottom of the large can. One of the things which impressed me was the extreme cleanliness of these milk delivery outfits.

The milk supply for London comes in from the surrounding country by train, the same as in many of our American cities. A common type of can, however, is much larger than our forty-quart can, very large at the bottom and sloping to a small neck at the top. These hold about 50 per cent more than our standard forty-quart can.

I had the opportunity of riding from Oxford to London on a train
(Continued on page 64)

THE methods of milk delivery in Paris compare more nearly with those in this country than do those already discussed. Large covered wagons drawn by either one or two horses make the wholesale delivery both to restaurants and to small retail dairy stores, where milk may be purchased in bottles of the type of our ordinary soda-water bottle. Paris was the first place I found where any special attempt was being made to control the quality of milk by means of chemical and bacteriological analysis. I had the opportunity of visiting the control laboratories of the largest dairy company in Paris, and found it well equipped with apparatus and in charge of highly trained men. Their control work seemed to be on a very thorough basis, comparing favorably



A Retail Milk Cart in Holland

The Thanksgiving Dinner

By Jessie A. Boys

THERE seems to be no doubt that the Pilgrims inaugurated our Thanksgiving Day. Although historians may argue over details of time, place, and reason, an invitation to Thanksgiving dinner brings forth no argument, nor is there ever a criticism of the festive meal except it be that of a lack of capacity on the part of the diner.

The menu varies but little in its essentials. Roasted stuffed turkey, cranberry sauce, and golden pumpkin pie belong to the Thanksgiving dinner just as much as fire crackers belong to the Fourth of July. They are a part of the tradition, and can be obtained in all parts of our country. And so we cling to these dishes and include them in every Thanksgiving feast.

It was easy for the Pilgrim hunters to provide the turkeys, but not so easy for the women to roast them before the open fire. Today it is much harder to pay for the turkey than to get it prepared for the table. It is easier today to make the cranberry sauce and bake the pumpkin pies than it was in that early time, with its limited kitchen equipment.

YET that feast meant much more to the Pilgrim band and its Indian guests than it seems to mean to us today. If we give a thought to their hardships and their accomplishments, it is a fleeting one, thankful that we do not have to endure their privations and discomforts.

And so Thanksgiving Day is for us a day of feasting and happiness, a day for families and friends to get together and renew the family traditions.

If turkey is too expensive or not at all available, any kind of poultry is acceptable and affords opportunity for that graceful ceremony of carving at the table. Although carving may not be indulged in by the man of the house every day, it seems to be a part of Thanksgiving, so mother gets out the best carving knife and father passes a careful thumb along its edge, then proceeds to make that edge still more edgy. When he begins to carve the beautifully roasted bird, conversation slackens and father holds the center of the stage. If the bird is placed with the neck to the left, if the platter is large enough for his operations, and if there is not

too much garnish on the bird and on the platter, father will have no embarrassed moments, and each one present will be served his favorite piece in an amazingly short time.

Creamy mashed potatoes accompany the piece de resistance and provide a good resting place for giblet gravy. Besides potato, one or two vegetables are usually served. Nearly all the candidates seem to be the strongly flavored vegetables—turnips, onions, cauliflower, cabbage,



Brussels sprouts. But there is also squash, celery, salsify, and carrots from which to choose, and these may be served buttered, creamed, scalloped, or baked, just so no two vegetables are prepared in the same way.

CRISPNESS is a desirable feature in every meal, and may be introduced by means of fine white celery, pickles, or a crisp green salad. The traditional cranberry must be present, too, in the form of sauce, jelly, ice, or sherbet, served with the meat course.

For dessert, pumpkin pie, of course, which may be served plain with or without cheese, with plum jam and whipped cream, or with whipped cream alone, or with ice cream. But no Thanksgiving dinner is quite complete without this "prince of Thanksgiving pies."

This Thanksgiving dinner menu is arranged with the traditional dishes as a skeleton. Other courses or dishes may be added without detracting from its seasonableness.

MANY people consider that it is not well for the "inner man" to begin a big dinner such as this usually is,

with the heaviest course, but like to whet and tease the appetite along with one, two, or three small introductory courses, so that when the event of the day arrives, the appetite is all keyed up, and the digestive organs are in fine fettle for the remaining courses.

For a beginning course, there is a variety from which to choose. Canapes not only stimulate the appetite, but can be appealing to the eye, as they afford opportunity for colorful designs and add a great deal to the appearance of the table, as they are placed before dinner is announced. Canapes are highly seasoned bits or combinations of foods arranged on a cracker or toasted bread foundation, and are usually eaten with the fingers. Such things as cheese, sardines, lobster, smoked salmon, olives, pickles, hard cooked eggs, beets, pimentos, parsley, and cress give the high flavor and color desired. Canapes may be hot or cold, but few of them are hot, so that they may be prepared hours in advance and leave the later time free for those things which are to be served hot.

FRUIT cocktails are preferred by many epicures to the foregoing because they are both wet and cold, and so are refreshing as well as stimulating. Grapefruit is a good beginning for heavy meals and is usually included in combinations of fruit or even used with oysters in beginning courses. Raw oysters served on the shell, pickled, or as a cocktail are a standard introductory course. The accompanying sauce is capable of so many variations that the most discriminating and particular may be suited.

Soups to precede a heavy meal should be clear, and the flavor should be entirely different from the meat of the main course. Served with a simple or elaborate garnish and an accompaniment, its office is to prepare the way for the following courses and so should not interfere with the future enjoyment or capacity of the diner.

IF A salad is to be served with the Thanksgiving dinner, it must be given some special consideration, for if there is a fruit beginning course, the salad must conform to dinner etiquette and not repeat a previously be-

spoken flavor. But there is no reason for this faux pas, as there is ample room to choose each with thought for the other. Besides, if two vegetables are served with the meat, a simple salad is all that is required, so that dressed lettuce or even cole slaw supplies the craving for salad.

If the salad is served as a separate course, it is given scant courtesy. There is a certain tangible impatience for the coming dessert. To be orthodox, it must be the aforementioned much-lauded pumpkin pie. While its usual shape is round, it is sometimes baked in a square pan or in a dripping pan. The unusualness of square or oblong pieces lends a charm unknown to the ordinary every-day wedge-shaped piece of pie, and there are those who claim that the corner pieces taste much better than any of the others.

If pie crust is not well tolerated, the same filling can be baked in custard cups or ramekins and served as pumpkin custards, plain or with whipped cream.

OTHER desserts may be substituted, but for this national holiday one must be dyspeptic indeed to forego the traditional dessert of so many national and family associations. But if one must partake of a lighter dessert, there are the fruits, which may be served in a great variety of ways: jellied puddings and ice creams galore. So that by the time nuts and raisins are reached, every one is in a state of semi-drowsiness, with a friendly feeling for the world at large.

No dissertation relating to the Thanksgiving dinner is quite complete without a word about table dec-

orations. Something seasonal is in order, and while some may object to the use of pumpkins and various vegetables upon the table in their rude garden state as speaking too loudly of earthy things, these same articles are frequently referred to, especially at this season of the year, as "fruits of the fields," and if we do not object to tree fruits, we can admit these others with good grace. A combination of field and tree offerings make a colorful and useful decoration, for they can serve as a part of subsequent meals with none of their usefulness lost because of the beauty they have contributed. While artificial decorations are taboo by many—not countenanced because they are not true and sincere—yet these may be used from year to year and grow to mean stability and permanence of the home and family life.

Costs of Packing Fruit in Western New York

By R. B. Corbett

COOPERATIVE fruit packing associations were started in western New York in 1914. From that time until 1923 they increased in numbers and in the quantity of fruit handled with surprising rapidity.

Wherever an association has been organized, there have been growers who have not been convinced of the advisability of becoming members. These growers have substantiated their position by claiming that they have received better prices than the members of the cooperative associations. Such price controversies have led to a comparison of the costs of marketing under the different systems. The costs of packing in the cooperative packing houses as compared with the costs of packing on farms have come in for their full share of discussion.

In order to inject a few facts into this argument, and also to find the factors affecting costs in cooperative packing houses, a study of packing costs was undertaken. The average costs in the cooperative associations in 1922 and 1923 are shown in Table 1.

IN comparing the costs of the individual associations, it was found that some packed a barrel of fruit for less than half of what it cost others. The

TABLE 1
Average Packing Costs Per Barrel in
35 Associations in 1922 and 28
Associations in 1923

Items	Costs per Barrel 1922	Costs per Barrel, 1923
Labor	\$0.24	\$0.25
Management .....	.03	.04
Office .....	.05	.05
Building .....	.06	.05
Equipment .....	.04	.06
Pow., Light, Heat .....	.01	.01
Other Costs .....	.02	.02
Total Packing Costs .....	.45	.48

members of the associations with the high packing charges were dissatisfied and, of course, wanted to know the reasons for these high costs. It was evident that some associations could not survive if such large deductions were to be made for packing costs.

The first factor studied was volume, or quantity of fruit packed. The associations were grouped into three groups. The first group was made up of packing houses which packed more than 18,000 barrels of apples. The second group contained associations packing more than 8,500 barrels but less than 18,000 barrels. The third group contained associations packing less than 8,500 barrels. The

average costs per barrel in each group are given in Table 2.

The average total costs per barrel are six cents higher in the middle group than they are in the group with the largest volume. The group of packing houses with the small volume have costs that are about 17 cents higher than the middle group, or 23 cents above the group with the large volume. A comparison of the costs in the first group of associations with the costs in the last, or the group with the smallest volume, shows that each item of cost is higher. The costs which increase most strikingly are management, office, equipment—which are more than double—and building, which is more than three times as high in the small volume group. These costs, which might be termed overhead costs, cannot be carried efficiently with a small volume of business.

A similar comparison of the costs in the following year shows the same results. It would seem that a sufficient volume of fruit is the first step toward efficient operation of a packing house.

THE amount of culls that must be sorted from the fruit that is packed has a marked bearing on the costs of packing. In Table 3 is shown the average costs of packing in three

TABLE 2
Relation of Volume of Fruit Packed to Costs Per Barrel

Items	18,000 Bbls. or more	8,500 to 18,000 Bbls.	Less than 8,500 Bbls.
Labor	\$0.219	\$0.224	\$0.266
Management .....	.021	.033	.049
Office .....	.032	.043	.080
Building .....	.030	.057	.096
Equipment .....	.026	.032	.058
Power, Light, Heat.....	.006	.005	.010
Other Costs .....	.014	.014	.023
Total .....	.348	.408	.582

TABLE 3
The Average Total Costs and Labor Costs Per Barrel in Association Grouped According to the Percentage of Culls

Factors Compared	Group I	Group II	Group III	All Associations
Percentage of Culls.....	13.9%	19.0%	30.7%	21.2%
Total Costs per Barrel....	\$0.356	\$0.464	\$0.561	\$0.468
Labor Cost per Barrel.....	.202	.252	.263	.239

groups of nine associations each. Packing costs increase as the percentage of culls sorted from the tree-run fruit increases. Packing costs are affected by the care given fruit in the orchards of the members of the associations.

The number of varieties packed influences the costs of packing. It is difficult to eliminate the influence of volume when studying the effect of the number of varieties upon the costs of packing. Table 4 shows that in spite of a larger volume, the group of associations having the most varieties had higher costs. It is desirable to reduce the number of varieties handled, provided the volume is not materially reduced.

Many varieties affect sales as well as packing costs. It is more difficult to sell cars containing several varieties than to sell an unmixed car. The western New York Fruit Growers' Cooperative Packing Association has handled as high as 120 recognized apple varieties, and many more that are not found in published lists. Not a few of the difficulties of marketing are attributed to this multiplicity of varieties.

SIXTEEN of the more important varieties were found to constitute 88.5% of the total crop in 1922 and 94.1% in 1923. It would seem that the other hundred-odd kinds which cause so much difficulty make up about 10% of the crop. The sixteen varieties chosen were Baldwin, Rhode Island Greening, Northern Spy, Ben Davis, Tompkins County King, Wealthy, Duchess of Oldenburg, McIntosh, Roxbury Russet, Stark, Alexander, Gravenstein, Maiden Blush,

Hubbardston, Twenty Ounce, and Wagner.

There are several other factors which influence packing costs in the cooperative associations. Management, rates of pay, equipment, and layout of the packing house all have

an effect. It is difficult to make a statistical study of these and eliminate such factors as volume, amount of culls, and number of varieties. They should be kept in mind, however, when discussing packing costs.

In order to determine the costs of packing fruit on farms, a survey was made in one township in Niagara County, New York. It was found that practically none of the growers sized their fruit as did the majority of the cooperative associations. In general it would seem that less care was used in packing on the farm than in the packing houses. Table 5 shows the average costs of packing on 55 farms, as shown by the survey.

PACKING on the farms was much cheaper than the packing done in cooperative packing houses. This is not all; in cooperative associations, packing costs are cash deductions from the sale price. A large number of the farms included in the survey had practically no cash outlay for packing. Members of the family did all of the packing in more than half (Continued on page 65)

TABLE 4
Total and Labor Costs Per Barrel in Associations, Grouped by Number of Varieties

Number of Associations	Number of Varieties Below Average			Number of Varieties Above Average			
	No. of Varieties	Cost per Bbl. Total	Labor	No. Bbls.	Cost per Bbl. Total	Labor	No. Bbls.
35 Associations in 1922	38	.435	.233	13,474	.456	.243	16,120
22 Associations in 1923	30	.486	.255	6,896	.530	.279	10,672

TABLE 5
Costs of Packing 27,734 Barrels of Apples on 55 Farms in One Township in Niagara County, New York

Items	Total Costs	Cost per Barrel
Labor, 12,635 hours.....	\$5,246.80	\$0.189
Building	472.57	.017
Equipment	89.93	.003
Other Costs	11.05	.....
Total	\$5,820.35	\$0.209

TABLE 6
Size and Make-Up of Packing Crews on Farms in One Township in Niagara County, New York

Items	Apples in Bbls.	Apples in Bus.	Peaches in Bus.
Number of Farms	53	41	42
Average Number of Persons per Crew	2.3	1.9	2.6
Family Did All Packing:			
Number of Cases.....	33	28	24
Per cent of Total Cases.....	62.3%	68.3%	57.1%
Operator's Wife Helped Pack:			
Number of Cases.....	23	18	20
Per cent of Total Cases.....	43.4%	43.9%	47.6%

The Selection of Breeders for Egg Production

By James E. Rice

EGG production or meat production are the primary objects in breeding poultry and should be considered before, but in connection with, breed characteristics, power, capacity, and the ability to transmit desirable qualities to the progeny which are the fundamental traits of a good breeder. There are thirteen points which we should consider in selecting birds for the breeding pen.

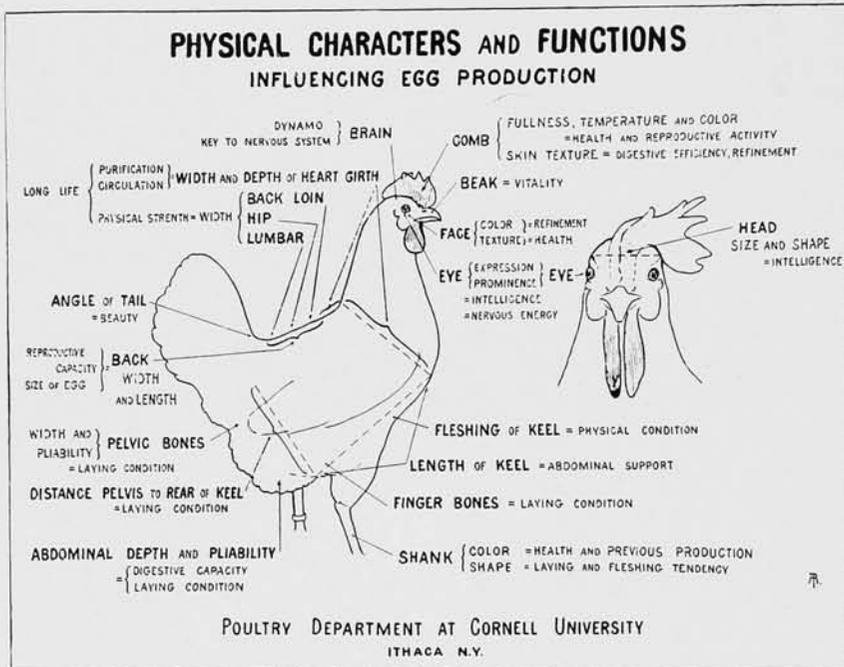
The ultimate object of the production breeder is to produce a strain of birds that will lay the greatest number of high quality eggs at the least possible cost; the bird, which as a business investment, will give the greatest net profit. Such a bird must be strong, vigorous, and alert; she must be a good transformer of food products into eggs. She must be neither too large nor too small, and there must be a delicate balance between all parts of her body, and the functions which these parts are to perform. The hen must lay her eggs with such ease that she can finish the year in a good physical condition. The male must give constant and effective service throughout the breeding season and still retain his pep and gallantry.

THERE are three fundamental characters which every bird that goes into our breeding pens should possess. The first of these is power—inborn and developed power, that is, nervous energy. Every bird should have stamina, alertness, intelligence,—she must be a store house of nervous energy. The brain is the dynamo that furnishes the power for all its activities. It gives them the pep, the punch, the ambition that is essential to a good egg machine. This is often spoken of as *character*, and is re-

vealed by a bright, intelligent eye, a friendly disposition, and a fineness of skin texture. The second quality is great body capacity. This includes the machinery and the room in which to work. The bird's digestive tract, her lungs, her heart, her reproductive organs, all must be strong and efficient, and must be enclosed in a body frame that is large enough to allow

many object is production, we must use birds that are bred for production; birds that will lay well, and that will give uniform progeny that will lay well.

2. The second point is size and type. What size and type of bird makes the most efficient transformer of food materials—the best egg machine? A hen must not be too beefy, nor yet too refined. She must not be too large, nor yet too small. Large beefy birds require too much food for body maintenance, and are therefore not efficient egg producers. Small overly refined birds may use their food very efficiently, but are unable to stand the physical strain of heavy production. Breeding for the most egg production, then, tends to bring all breeds to a common size and



them plenty of room in which to function. The third fundamental trait is the power to transmit the good qualities to the progeny. If a hen is a good layer, and has not the ability to transmit this quality to her offspring, she is of no value as a breeder. This characteristic, like many others, can be detected only by keeping trapnest records and by making a progeny test.

THE thirteen special points to be considered are closely related to the three groups of characters mentioned above. They are given in the order that production breeders should consider them. Several of these points are closely correlated, one with another.

1. The birds should be of a pure breed. The question of breed and variety is not so important. We can suit our own tastes about that. We may, and should, like birds that are bred for beauty, but since our pri-

type—one that is midway between the heavy and the light breeds. This means that the most efficient hen will weigh about 4 to 5 pounds; she will be alert, yet docile; active, yet compactly built.

3. Pullets should begin laying when reasonably young. By this they show that they have the inherited tendency to produce. However, there are two factors that determine the age at which pullets start laying: These factors are (1) the inherited tendency to lay and (2) the way she is fed and reared. The age at which high producing pullets begin laying varies from 4 to 7 months. A good production bred pullet, well cared for, *but not forced*, should begin laying at about 6 months. At this age she is well enough developed to stand the strain of production, and large enough to lay a marketable sized egg. In a given flock these early beginners are likely to be the best layers,

and should be discovered by trap nest or physical examination and kept for possible future breeders.

4. Birds should have the inherited tendency to lay for a long time before quitting. This means that they must have the capacity to furnish the nutrients to make the eggs. This quality may be termed, *persistence*, health, vigor, alertness, and an efficient digestive tract must go hand in hand with this quality. These birds persist in their production throughout the year, and are the last to stop the following fall.

From the above it will be seen that one should select the birds that begin laying first, and again from these select the ones that stop last; we are then practically certain to include the best and only layers in our flock. But there is one more test based on how a bird lays.

5. This other test is how intensively has the bird laid? How many days per month and how many months of the year has she laid? To make a high record a bird must not only begin early and quit late, but she must not lose too much time in between. She must keep steadily at it, and this requires a strong constitution and an abundance of nervous energy. Some pullets start out strong at first, but for lack of vigor and energy are soon forced to stop and rest. Many such pullets will recuperate and go at it again, but at best they lose too much time to give a very high production. So our best birds are the ones that have a lot of nervous energy and distribute that energy over a long period of time. By regularly "plugging along," laying 20 to 25 eggs per month, she gives the most eggs in a year and comes out with her body in such good condition that within about two or three months she is ready for another year's work. The trapnest is the only means of getting accurately a bird's intensity. By trapping the pullets during any three or four months we can get a reasonably accurate idea of this quality.

6. The sixth point is quality of egg. The market demands today make size, shape, and color of egg as important as the number laid. The three months' trapping will show these egg qualities and give us a chance to select the birds that lay the most desirable eggs.

There is a strong correlation between the size of an egg and the size of the chick and mature pullet that it will produce. Therefore, in order

to get good, large, husky, vigorous chicks, we must hatch only large eggs. Records show that large eggs are better money-makers than small eggs, because of the extra price they bring on the market. The market wants 24 to 28 ounce eggs, and will seek the man who can furnish them. Most of our eggs during the season of highest prices, October, November, and December, come from pullets, and in order to get a 24-ounce egg from a pullet from the first, we must expect our hens to lay 25 to 28 ounce eggs. Some people object to producing these large eggs, but we can well afford to use the 25 to 28 ounce hens' eggs in order to get the 24 ounce pullets' eggs. These 28 ounce eggs are our seed bed for future good profitable pullets, and should be highly valued as such.

The most marketable egg is typically "egg-shaped." If it is too round it is likely to break at the sides. If too long it will break at the ends. The 24 ounce "egg-shaped" egg fills the carton, is not likely to break, looks well, and appeals to the eye of the buyer.

Markets vary as to the color of eggs they prefer. But all markets want uniformity of color, whether white or brown. The breeder must therefore cater to the demands of his market, and make his selections accordingly. If he wishes to produce chalk white eggs, he must hatch from only chalk white eggs, and great care must be exercised in selecting them. Many pullets lay tinted eggs at first and pure white eggs later. Such birds should not be used as breeders. Uniformity of size, shape, and color requires years of careful breeding and selection. It means that birds must be pure bred for these qualities.

7. After quality comes *number* of eggs. How many eggs should a hen lay in order to be used as a breeder? This standard is rapidly shifting. Perhaps today two hundred eggs should be the minimum. By an intensity of 20 eggs per month, a bird can lay 200 eggs in 10 months and still have two full months in which to rest, molt and recuperate for another year's work. A 4 to 5 pound hen with plenty of stamina and properly built can do this easily. Some do even 300 eggs with apparent ease, remarkable though it may seem. In fact, there are more 300 eggers today than there were 200 eggers 20 years ago.

8. The eighth point is longevity—the ability to live and produce over a

number of years. This is perhaps our most important characteristic at the present time. Many farmers are keeping their birds only one year, and are therefore unable to test out their breeders for longevity. Such a practice does not give a chance to select the most vigorous birds, and must finally result in a general lowering of vitality and greater chick losses. On the other hand, pedigree breeding and progeny testing depends upon long life and heavy laying to give best results. This gives a chance to discover our best long lived birds and to use them as breeders, as long as they live and remain useful. If we breed from long-lived birds the chicks will not be so likely to die young.

9. High fertility and 10, high hatchability will be considered together because they are so closely correlated. By nature there is also a close correlation between high production and high hatchability. If this is true, why do we so often hear the complaint, that high producing hens will not give hatchable eggs? The answer is simple. High producing hens are so abused, so overworked just because they are willing to work, that their vitality is lowered at hatching time and therefore they cannot produce eggs that will hatch. Had these same hens been given a chance to recuperate just before hatching time, they would most likely give a 90 percent or more fertility. High producing hens recuperate much faster than low producers, but even the 200 eggers need 2 to 3 full months in which to molt and get back into condition before the breeding season starts.

Just as high egg production is the criterion for selecting hens, so the ability to produce many strong livable sperms is the criterion for selecting males. This is shown by the male's eagerness to mate and the results of his matings.

11. The eleventh point is the elimination of broodiness. Broodiness is a material instinct that was once essential to reproduction but now has no further justification, and should be bred out as soon as possible. It is an hereditary character, and hence requires close selection in order to eliminate it.

12. The breeder should be a good transmitter. This is one of the fundamental traits mentioned in the beginning. It is only by trapnest rec-

(Continued on page 65)



Through Our Wide Windows



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Ithaca, New York

November, 1925

NOT long ago we had occasion to exercise our axe on some poles in the woodlot. We were considerably out of practice, and never having been as proficient as the pioneer backwoodsmen, were striking rather futile blows.

An old man, one of those irreconcilables to college education for farmers, sat on a nearby log and watched with no little amusement and a look that spoke somewhat of triumph. After several minutes we stopped to rest and stem the sweat streams. Our friend dryly remarked, "I guess we'll have to get you a book with an axe in it."

This made us angry, then thoughtful. Just how much of an axe should a book have in it? That is, how practical should our education be?

This is a question which calls forth varying answers. We have attempted to work it out in some such manner as this: Education, in its true sense, is the development of the mind. This development may be toward abstract thought ability, or it

may be toward skill that will guide the hands in earning our bread and butter. It seems to us that a well-developed mind has both types of education—the cultural and the practical. One without the other leads to narrowness.

While preparing for the future activities of life, we should study books with an axe in them, but we must not neglect those without the axe.

THE farmer works in normal times for a relatively low financial return, and consequently has to accept a lowered standard of living. What, then, keeps him there on the farm?

The best explanation is probably that *other income*, which is peculiar to the farm. This other income is manifest in many ways. The farmer receives it as the privilege of living and working in the great out-of-doors in unmolested solitude with nature. His children can grow up amid plenty of fresh air and sunshine; they work with their parents, and learn to accept responsibility. He becomes more of an individual and less of a machine.

We wonder if this other income is not more valuable than financial return—if, after all, the farmer is not the best paid man in the world.

ABOUT three hundred years ago a little band of Pilgrims established the first Thanksgiving Day. They had endured many hardships in their struggle for existence on the new continent, and at last when a year of plenty did come, they celebrated with a feast and gave thanks to the Lord for His blessings.

Since then we have had many Thanksgiving days. Each year we have had heaped upon us more and more blessings for which to be thankful, yet the day has come to mean more of mere feasting and less of thanksgiving than it did to the faithful followers of Governor Bradford.

This year we have more than usual to be thankful for; let us make it a day of real thanksgiving. While we are enjoying our turkey dinner, let us try to get some of the old Pilgrim spirit, and be truly thankful.



Former Student Notes

'00

When Clemson College in South Carolina opened this fall, Franklin Sherman began his duties there as head of the Entomology Division. He is in charge of all entomological work, including research, teaching, extension, and crop pest regulation. For the past twenty years he has been at North Carolina State College. He holds membership in a number of scientific bodies, including the American Association for the Advancement of Science, the American Association of Economic Entomologists, and the Entomological Society of America. He is a past president of the North Carolina Academy of Science.

'12

"Jimmie" L. Strahan, a former instructor in the rural engineering department of the College, is now ventilating engineer for the Loudon Machinery Company of Fairfield, Iowa. He is interested in the series of check tests which Professors H. E. Botsford and F. L. Fairbanks are making in poultry house ventilation. He expects to postpone the development of any poultry house equipment until after the results of the tests are known.

'13

George C. Supplee of Bainbridge, New York, as First Vice-president of the International Association of Dairy and Milk Inspectors, gave the response to Dr. King's address of welcome at the Fourth Annual Convention of the Association which was held at the National Dairy Show. The Convention met in the Palm Room of the Spink Arms Hotel in Indianapolis, Indiana, from the 12th to the 14th of October.

Dr. Mortimer D. Leonard, who has been doing entomological work at Ithaca, left recently to become field director of the Florida Agriculture

On July 1, Thomas E. Millman left the Dairymen's League to become general manager of the Western New York Fruit Growers' Cooperative Association, Incorporated. His address is 70 Exchange Street, Rochester, New York.

After leaving college in 1912 he spent two and one-half years as manager of a large estate on Long Island. As "Tom" put it, he learned a lot about farm management that Professor Warren does not teach. He soon found that on such a farm, where the owner merely wanted to play, that economic factors had to be disregarded in favor of the proprietor's personal whims.

In 1915 he became county agent in Orange County. After six years of successful work he was brought to Ithaca as one of the assistant state leaders of county agents. He stayed with this job a few months, then took a position with the Dairymen's League. In this organization he was head of the department which deals with field organization. This position he held until this past July when he accepted his new managerial position in the fruit game.

Few graduates of the College have such an admirable record for continuous progress as "Tom" has made. He was in Ithaca on October 9-10, to address the class in marketing 146.

Supply Company. He is now located in Jacksonville, Florida.

Richard C. Hixon has a large poultry farm at Sparta, New Jersey. He sells white Leghorns and eggs on the New York market.

'14

L. C. Treman is now in the coal business in Rochester. His address is 2230 East Main Street.

'15

Arthur W. Wilson is connected with Thresher Service, Inc., an advertising concern, located at 136 Liberty Street, New York City.

I. F. Hall, instructor in agriculture, was married during the summer to Miss Edith Partridge of Batavia. Their home is now at 222 University Ave.

C. C. Calvert is with the Pfaudler Company at Elyria, Ohio. They specialize in glass-lined milk containers and milk cars. During October he stopped off at Ithaca for a short time, visiting the dairy department.

'16

F. R. Perry is farming at Burt, Niagara County, New York.

Arabella S. Livingston writes from 504 S. Franklin Street, Kirksville, Mo., that she "has resigned the position as instructor in the department of home economics at the University of Nebraska, which position she held for six years. She has now gone to Kirksville, Mo., to take the training for an osteopathic physician."

R. G. Bird recently resigned from his position with the Gould Paper Co.

Ralph W. Cowan, after taking his master's degree in 1918, went out to Michigan, and with his old pal, J. R. Snow, a graduate of the Vet College, established the Snow Ice Cream Company at Charlotte. Ralph is in charge of work inside the plant while Snow handles customers and sales. In the few years that they have been going, a thriving business has been developed, and both are busy, prosperous, and happy. On October 8th, they came back to visit their Alma Mater, but are now on the job again.

Russell V. Black, who has been located on the Pacific Coast and en-



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Colgate's removes causes of tooth decay

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that they have more business than they can conveniently handle. She also states that the Cornell Foresters in that part of the country are always sure of a welcome. Fred is now Borough Engineer for six boroughs, in addition to having a large private practice.

Mr. and Mrs. Robert N. Jones have announced the arrival of a son, David Robert, on September 18. Jones is connected with the Agricultural and Mechanical School, Walker Park, Ga.

P. A. Munz and Alice McCully were recently married at Pomona, California. Dr. Munz is the head of the botany department at Pomona College, California.

Dr. Howard B. Ellenberger, of Burlington, Vermont, and Mrs. Ellenberger, were visitors of the dairy department during October. They stopped off at Ithaca en route to the National Dairy Show by auto.

Le Roy Ware and Mrs. Ware were visitors of the dairy department during October while on the way to the National Dairy Show at Indianapolis. Roy is manager of a large dairy plant just outside of Burlington, Vermont.

'18

Sad news was recently received of the death of L. W. Gebo. Details are lacking, though the announcement received here stated that he died suddenly, shortly after his return to the Indian service in the Southwest.

T. Rowan Wagner is in the railway and marine sales department of the Sinclair Refining Company at 2540 West Twenty-second Street, Chicago. His house address is 2605 E. Seventy-third Street.

'19

Anne E. Cusic was married on May 23 last in the Holy Trinity Church in Philadelphia, to Dr. Benjamin T. Hudson. They are living at 242 W. Washington Ave., Pleasantville, N. J.

F. B. "Abe" Merrill furnishes considerable news in his letter. Last June, an announcement of his marriage to Miss Nora Norman of Biltmore, N. C., was received. The wedding took place at Biltmore on June 10. In September word was received that Abe had left his work in North Carolina to accept the position of State Forester of Kentucky.

Arthur F. Simpson has bought a partnership in an insurance company. His business address is Allsopp and

gages in city planning and landscape art work, has moved to Ithaca, where he will continue to practice his profession. He and his family are living at 32 Renwick Heights Road.

C. K. Harriman is now a construction engineer with Stone and Web-

ster, Inc. His address is 35 Freeman Street Walliston, Mass.

'17

Mr. and Mrs. F. H. Millen are now well established in the surveying business at Pompton Lakes, N. J. In a recent letter, Mrs. Millen states

Company, Kinney Building, Newark, New Jersey. He is living in Rutherford, N. J.

'20

Miss Olive Jones and Miss Frances Van Arsdale have been awarded the two fellowships in child training established in the college of home economics for the year 1925-26 by the Laura Spelman Rockefeller Memorial Fund. Miss Jones has taken half a year's work at the Merrill-Palmer School in Detroit. Since her graduation she has been itinerant nutrition worker for the southwestern division of the American Red Cross.

Miss Van Arsdale has been teaching home making in Rochester until her appointment to the fellowship. Both Miss Jones and Miss Van Arsdale are working for advanced degrees and will do some assisting in the nursery school in connection with their work.

Evelyn Fernald, formerly an instructor in the botany department here, is now assistant professor of botany at the Connecticut College for women. Last year Miss Fernald was an assistant professor of botany at Rockford College, Ill.

William D. Warren is back in Ithaca doing graduate work for his M.S. in rural education, and lives at Forest Home.

'21

Luther S. West has been appointed professor of biology and eugenics at Battle Creek College, Battle Creek, Mich. For the past four years he has been an instructor in entomology at Cornell.

A. S. Herzig resigned last summer from his position with the Hammond Lumber Co.

Jean Sherwood Harper and her husband have moved to Boston where Dr. Harper has accepted a position as curator of mammals at the Boston Natural History Museum.

The fellow who drew up the plans for the university laying-house and brooder-house of the poultry department in 1921 is now resident manager of the Sonoma County Farm Bureau International Egg Laying Contest at 821 North Main Street, Petaluma, California. Soon after leaving Cornell, Merrill Clayton went to California and graduated from the University Farm School at Davis. He writes that they have a fine six-months old baby boy to show any of his friends at Cornell who should visit the coast.

Jean Margaret Waterbury was



If This College Man Can Make It Pay Big So Can You

HE worked his way through college. The girl he married was a school teacher. Long before he graduated, they decided that they would build a flower shop with a greenhouse attached. Build it right along the State road, where they could catch the auto trade.

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Chicago
St. Louis
Greensboro

married on September 26 to Freeman S. Howlett at Whitelaw, New York. Mr. Howlett is now doing research work at Ohio State Experiment Station, Columbus, Ohio.

Miles H. "Cubby" Cubbon is working in the department of agronomy at the Pennsylvania State College, at State College, Pennsylvania. During the summer his engagement was announced to Nina Patten of Oil City,

Pennsylvania. His address is 134 So. Frazier Street, State College. "Cubby" was previously instructing and doing grad work in the agronomy department here. He received his Ph. D. last June.

R. H. Hine, who has been with the Southern Forest Experiment Station, since 1922, recently resigned. He is now State Forester of Louisiana, assuming his new duties on Oct. 1. His

address is Louisiana State Forestry Department, New Orleans, La.

Mary A. Miller, who was formerly in social service work in Brooklyn, is new manager of the cafeteria in the New York State School of Agriculture, in Cobleskill, New York.

R. M. Volkert has resigned from the U. S. Forest Service and left his work at the Forest Products Laboratory to accept a position with the Union Lumber Company, operators in redwood, with mills at Fort Bragg, California. It will be remembered that Bry Dain did exactly the same thing the first of this year. Dain is with the sales force, concerning himself with the sale of secondary products, with headquarters in Chicago. Volkert is doing the same sort of work in the east that Dain does in the middle west. Volkert's headquarters will be in New York.

On July 23, Mr. and Mrs. Volkert announced the birth of a daughter, Roberta Josephine.

'22

On September 16 at the Lutheran Place Memorial Church, Washington, D. C. Rev. William C. Weidt, of Mount Vernon, N. Y., was married to Miss Bew Patten, of Washington. After the wedding there was a reception at the home of the bride, and the couple left for a two weeks' honeymoon at Cape May. They will be at home at 341 S. Second Avenue, Mount Vernon, N. Y., after November 1.

Mr. and Mrs. James F. Sumner (Alice K. Burchfield) of 90 West Nineteenth Street, New York, have a son, James Frederick II, born on July 6 last.

Walter E. Loomis has been appointed assistant professor of horticulture at the University of Arkansas, Little Rock, Ark.

Eleanor R. Putnam, formerly a teacher of home economics in Bath, New York, is now teaching in the Roslyn High School, Roslyn, Long Island.

Mr. and Mrs. Clifford M. Buck (Mildred E. Cole '25) of Salt Point, N. Y., have a daughter, Shirley Lois, born on July 13.

Harold A. Merrill was married at Cortland, N. Y., on September 12, to Miss Sarah E. Potter of that city. They are now living at 6 Wolcott Park, West Medford, Mass. Merrill is an investigator for the City Planning Board of Boston.

On September 15, at Louderton, Pa., Charles Fisher and Miss Edna



This interesting snapshot was sent to Professor James Rice of the poultry department by Victor M. Buck '16 from Ebolowa, Cameroun, West Africa. He writes that the case for the eggs was made from the pith of a branch of the giant palm tree and that the tree is used for building homes, fences, baskets, chairs, and many other useful articles. The two pieces of hollowed out pith are filled with eggs, then tied together and carried on the head by the natives.

Altderfer were married. The couple are at home at 1622 Pacific Avenue, Atlantic City, N. J.

Mary Hershey, who was formerly joint manager with Hazel Kidder of Mother's Pantry in Harrisburg, Pennsylvania, is now manager of the cafeteria in the High School in Troy, New York.

Sterling H. Emerson is on a ten months' study trip to Europe as a fellow of the International Education Board. The first six months he will spend in southern Sweden at Svalof, Akarp, and Lund. He will make visits to the universities in Stockholm, Upsala, Helsingfors, Oslo, Copenhagen, Tubingen, and Lunteren.

'23

Thomas A. Brown has been made chief of the statistical department of the Standard Oil Company of New York at its plant in Mt. Vernon, N. Y.

Insurance seems to call them. John W. "Jack" Ford, Jr., has gone into the game down in Lexington, Kentucky. His address is 608 Fayette, National Bank Building.

"Bill" Davies is selling feed for the Purina Mills. His address is Box 123, Big Bend, Wisconsin.

Miles David Pirnie was married on September 19 to Miss Lucy Jane Gay of Rochester. They are now living at 502 University Avenue, Ithaca, New York. Mr. Pirnie is an instructor in ornithology.

J. B. Hartnett is now with the Todd Protectograph Co. of Rochester, N. Y.

Clement G. Bowers of 703 Main Street, Binghamton, N. Y., married Miss Janet Whitney in Sage Chapel on October 12.

Elizabeth Keyes, formerly an instructor in biology, was recently married to L. A. Burckmyer, an instructor in engineering.

A. P. Jahn resigned from the Forest Service last May and is now connected with the American Telephone and Telegraph Co., 195 Broadway, New York City.

Henry E. "Heinie" Luhrs, former varsity oarsman and president of the Ag Association, is now back in Ithaca looking for Purina customers in the surrounding counties.

Marjory Hannifan is teaching domestic in the Hutchinson High School, Buffalo, New York. Last year she taught in Bath.

Harold Sebold is a graduate student in landscape engineering at the Bussey Institute, Harvard University.

Caroline Slater, who has been working with the Cornellian Council, has recently announced her engagement to Foster Coffin '12 A.B.

'24

Leda T. Ball was married at Binghamton on September 19, to Dr. James W. Fuller. They are now living at Springville, N. Y.

Clarence Kobuski received his master's degree last June at the Henry Shaw School of Botany, Washington University, St. Louis.

"Woods" Mather is now at Hollis, N. H., as manager of a large poultry and fruit farm with 3,000 chickens and 1,400 apple trees. He previously was connected with the poultry department of the University of New Hampshire.

Harold Clum and Florence Hess Clum were at the College this summer. Dr. Clum is associate professor of botany at the Porto Rico Agriculture College.

W. R. Brooks is now a crew manager with the Pictorial Review Co. His address is 203 White Building, Buffalo.

A. M. Kent is now with the Gulfport Creosoting Company, Gulfport, Miss.

During the past summer, V. L. Crowell, Jr., taught nature study classes in a camp at Harrison, Maine. He has been offered a position as

Home-grown and Home-owned

THAT which is ours always seems better to us than even the best coming from strangers. It must be so, for without loyalty all the world would again be a jungle.

But with a land as large as ours, with swarming millions all with their own work to do, friends sometimes seem like strangers, and we do not know our own.

How many of us know that last year 225,000 more consumers of electric light and power and workers in the industry invested \$200,000,000 of their earnings in their *own* electric light and power companies? These are the companies which, through private enterprise, have come to furnish ninety-five per cent of the electric service in the United States. Municipal plants furnish the other five per cent; but in the last few years 860 communities have abandoned this experiment and have gone back to private enterprise.

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To extend the benefits of electricity to agriculture, fifteen state committees are at work with the national committee in studying the problems of farm electrification.

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and engineers representing the U. S. Depts. of Agriculture, Commerce and the Interior, Amer. Farm Bureau Federation, National Grange, Amer. Society of Agricultural Engineers, Farm Lighting Mfg. Ass'n, and the National Electric Light Association.

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teacher of general science in the new junior high school system of White Plains, N. Y. He is living at 155 South Broadway. He adds in his letter that he expects to start working for a master's degree this fall at either Columbia or New York University.

One of the instructors in the Boston Children's Museum at Jamaica Plains, Mass., is Hilda E. Karnes.

Odel Baker, who took dairying in the winter course now has a responsible position with the Purity Ice Cream Company of Montreal, Canada. He is in charge of standardizing the mix, and is supervisor of routine chemistry.

Eleanor M. Groom is assistant dietitian at the Henry Ford Hospital in Detroit, Mich. She lives at 877 Palister Street.

Gertrude Jordan, who was formerly teaching courses in foods in the Washington Irving High School, has now accepted a position as teacher of home economics at Mount Kisco, New York.

L. R. Hawthorn, who was an assistant in the botany department last year, now has a research position at the Geneva Experiment Station.

C. W. Ten Eick is now developing a private practice in Florida as Forest Engineer. His address is 410 South River Drive, Fort Lauderdale, Florida. One of his new activities is a monthly article on forestry, to the *Florida Grower*, a paper primarily devoted to agricultural interests.

Mr. and Mrs. Herald Palmer (Dorothy Larabee) announce the birth of a son, Herald Palmer, Junior, on September 16, at the Arnold Gregory Hospital, Albion, N. Y.

Mr. and Mrs. Charles Abbey of Albion, N. Y., announce the birth of a daughter, Harriet Jean, on September 3. Mr. Abbey is the assistant Farm Bureau manager in Orleans County.

Miss Sara Merrit, of the Grant hospital, and Miss Katherine Harris, of the University hospital, at Columbus, Ohio, attended the annual convention of the American Dietetic Association at the Edgewater Beach Hotel, Chicago, in October. Miss Harris was the state publicity director for the convention.

John R. Curry left the U. S. Forest Service the last of September, to accept a new position as forester with the Maryland State Board of Forestry. He can be reached at Baltimore.

A. M. Ross has, since the early part of last summer, been in the employ of the Newton Falls Pulp and Paper Co., of Newton Falls, N. Y.

'25

Ruth E. Clapp, former women's editor of the *COUNTRYMAN*, is teaching home economics in Hammondsport, New York.

Dorothy Fessenden is assisting as dietitian in the Home Economics cafeteria here at Cornell.

Josephine Steves is working in a florist shop in Rochester, New York.

H. E. Sutton is working in a nursery in Farmingham, Mass.

Myron Rice has accepted a position with a horticulture firm in Syracuse.

R. S. Ashberry is now in the College of Law. He plans to specialize

in some branch of law that will make direct use of his training in forestry.

C. A. Gillett spent the summer inspecting forest plantations established in the Great Plains region of the Northwest, being in the employ of the Bureau of Plant Industry. In a recent letter he states that he has been appointed extension forester for the state of North Dakota. His headquarters are at Bottineau, N. D.

A. H. Gardner is now with the American Forest Products Company, a concern recently organized for the purpose of obtaining poles for various telephone, telegraph and Public Service corporations. The policy of this company is concerned both with the purchase of stumpage alone, and with stumpage and land. Al's address is 1637 Ocean Parkway, Brooklyn, N. Y.

A. L. MacKinney has since graduation been with the Northeastern Forest Experiment Station. Most of the time has been spent in field work in Vermont and New Hampshire, gathering field data on the growth of red spruce, balsam and white spruce.

F. M. Porch accepted, upon graduation, a position with the American Creosoting Co. He has since June been going through a six months' training course for prospective salesmen, and has been stationed at one of the company's plants, the Georgia Creosoting Co., of Brunswick, Ga.

Charlotte Hopkins writes that she is administrative dietitian in the Children's Hospital in Boston, Massachusetts.

Wilma Jerman was married to Lieutenant Milton E. Miles in Hong Kong, China, on September 6.

"Johnny" Miller isn't teaching this year after all. He and a friend went into partnership and bought out the Henkel Press of New Market, Va. They do all sorts of printing, and are editors and publishers of *The Shenandoah Valley*, a weekly newspaper. The Henkel Press is an old, well established, and successful concern. It was established by a minister, an ancestor of "John D.'s." His friends on the campus extend their best wishes for his success as a budding editor.

How would you like to be in "Bill" Brunke's boots? He is up on the shores of Hudson Bay, foresting. Here are some bits of information from a letter sent by him. "The only means of getting mail to us for 150 miles is by airplane." From Ottawa you have to drive and canoe 12

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Big Records with Corn Gluten Feed

The sensation of the Three Big Dairy Shows of 1925 was the great herd of 100 grade cows—the pick of 200 herds in 11 States. Every one of them was fed Corn Gluten Feed.

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Use Corn Gluten Feed in your own feeding tests. It will help you to make new records for your institution. That will help the feeders of your State to earn larger profits.

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No. 16

miles to get to his place of work. "Expect to be on the job here until February, later on using snow shoes and sleeping in tents with eider downs to keep warm. . . . Region is a few miles south of Hudson Bay. . . . Moose and deer, let alone wolves, etc., abound. . . . Iroquois and Algonquin Indians are in this region. . . . Let me know the things doing in Ithaca." Drop "Bill" an occasional line. His address is J. D. Lacey Company, c/o J. R. Booth, Limited, Fort Coulonge, Quebec, Canada.

Madeline C. Heine is teaching in the High School at Addison, N. Y. Her address is 37 Maple Street.

Rika Gillett was married on August 1 at her home in Colden, N. Y., to Edward MacLennan. They are living in Cleveland, Ohio, where her husband is with the American Express Company.

Frances Olmstead is assistant manager of the Temple University cafeteria, in Philadelphia, Pennsylvania.

Mary Acker is teaching Home Economics in Wayland, New York.

A. A. Doppel completed his work for the M. F. degree in September.

Roger P. Gabriel left for California immediately after his graduation where he accepted summer employ-

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be thankful
for good light*



OF COURSE you are going home for Thanksgiving. That's what Thanksgiving is, a national back-to-the-home movement. If your home has the benefits of Colt Light, your welcome will be brighter.

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where you live, you can make your home as bright as the Woolworth building.

No more dark corners in the farm house, no more ruining of the children's eyes, no more fumbling with a lantern in the barn, no more lamps to clean and fill and wicks to trim.

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Union Carbide for use in the big 200-lb. capacity generator is sold direct to the consumer at factory prices. One of the Union Carbide Sales Company's warehouses is located near you. Union Carbide is always uniform. World's best quality. Highest gas yield. It is always packed in blue-and-gray drums.

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"COLT LIGHT IS SUNLIGHT"

ment with the Hammond Lumber Company, redwood operations in Humboldt County. He returned in late September and is now working for his M.F. at the Harvard Forest, Petersham, Mass. Gabriel has a fellowship for the year at that institution.

Bernard Frank has, since the first of July, been with the Wayagamack Pulp & Paper Company, with head-

quarters at Flamond, P. Q., Canada. During the summer he has been cruising timber, but expects to spend the fall and winter inspecting cutting operations. Frank came to Ithaca for a short vacation recently and had the ill fortune to suffer an attack of appendicitis. He was operated upon and is now convalescing prior to his return to Canada for the winter.

Olive Hoefle is assisting with the

children nature study at the Providence Museum.

Paul Tinker started the four-year course last February after finishing general agriculture in the winter. His address is 108 Cook Street.

Jane Belle Snow is the new Home demonstration agent in Chemung County.

Dorothy VanWert is at present in Macy's Training School, New York City.

Mildred Pye is working with her father at the Metropolitan Hospital, Welfare Island, New York City.

D. C. Mumford, who was instructor here last year in agricultural economics and farm management, is now at the University of Minnesota.

Lucille Tucker is teaching the kids to sew and cook in Newark High School, Newark, New York.

Julia B. Snyder has not strayed far from her alma mater; she is teaching home economics here in the Ithaca High School.

Amy Stanton is in Linesville, Pennsylvania, where she is furthering the cause of home economics in the village High School.

Katherine VanAlstyne is assistant manager of the Sunflower Tea Room, Jefferson Street, Syracuse, New York.

"Bob" Hamilton has joined the rest of the gang who are selling Purina feeds. His territory is the southwestern part of the State, with headquarters at 610 South Union Street, Olean, New York.

Winifred Elrod is head of the home economics department in Burkburnett High School, Burkburnett, Texas. At present she is preparing exhibits for the Texas-Oklahoma Fair. Her address is 314 Alice Avenue.

Helen Sterrett is a teacher of the arts and wiles of domecon in the Presbyterian School, Baltimore, Maryland.

Marion Bool is teaching domestic science in Barnesboro, Pennsylvania.

William J. "Bill" Allen, who received his Ph.D. last June, is now a professor of farm management in the University of Saskatwan, Saskatoon, Canada.

After finishing the general agriculture group in the winter course here last year, Norval Budd went up to Albion where he worked on the farm just purchased by Cuyler Paine '25. But after a taste of Cornell and the kind of farming a Cornell man does, he decided to come back for the four-

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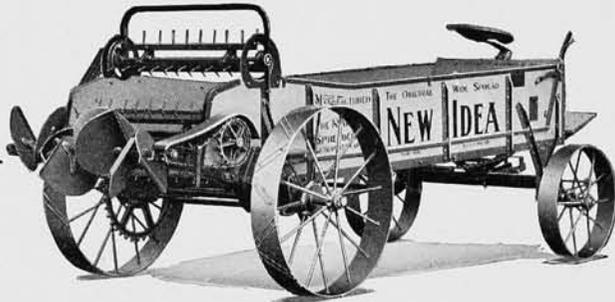
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year course. Now he may be seen with a little gray cap perched on the back of his head striding desperately up the hill in pursuit of an eight-o'clock. He's living at 217 Linden Avenue.

Janet Watson and Gardiner Bump have at last *announced* that engagement we have been looking for so long "Gard" was editor of the COUNTRYMAN last year. He is now taking graduate work and assisting in the forestry department. "Johnnie" is teaching home economics in Dimmock, Pennsylvania.

H. I. Fredrick is selling feed for the Purina Mills, in Troy, Pennsylvania.

Mary Humphrey is hostess in the Alice-Foote-McDougal Lunch Room, 47th Street, New York City.

Raymond A. Mearns is farming with his father at Dexter, New York. The name of the company is C. C. Mearns and Son. He is active in the Farm Bureau. Last summer an oat variety test was conducted on his farm which was rated as the best ever put on in the county.

"Judy" Fried writes from Conway, N. H.: "I've started on my first job—that of county club agent of Carroll County, N. H., one of the northern counties of the State—and within sight of the White Mountains. Ithaca climes seem mild to this weather—we are enjoying our first snow fall with all the nearer hills capped with snow—and the more distant peaks entirely put out of sight by a heavy storm. Mt. Washington has been covered for several weeks. She also expresses a longing to get back into the extension class discussions once in a while and thinks her training was not in vain having been called upon several times to make speeches. "Judy" seems to have sent the snow with her letter, for it snowed several inches in Ithaca soon after her letter arrived.

Mervyn Mossip married Miss Helen Miller in Sage Chapel on October 16. After an extensive trip through England the couple will make their home in South Africa.

According to his report when in Ithaca last, John E. Coykendall is very enthusiastic over the retail flower shop which he has recently purchased over in Auburn. The shop was formerly known as the Patrick Flower Shop.

Josephine E. Steves has recently accepted a position in the business of Harold D. Phelps of Rochester. She

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Miss Helen Bettis, who was president of Women's Self-Government Association last year, is now dietitian in Sage College.

J. W. Carncross is down at Rutgers this year doing special research work in agricultural economics. You can find him at 41 Jones Avenue, New Brunswick, New Jersey.

Ernest Kelly is working with the Bureau of Dairying of the United States Department of Agriculture. He reported for one of the committees at the Fourth Annual Convention of the International Association of Dairy and Milk Inspectors, which met during the National Dairy Show last month at Indianapolis.

"Dave" Haylett received his doctor's degree this September and sailed on October 12 on the *Adriatic* to his home in Cape Town, South Africa. He expects to be engaged in the fruit exporting business after his return.

The following girls from the class of '25 in home economics are teaching that and related subjects:

Mary A. Franz—Miss Geldner's School, Princeton, N. J.

Helen Green—Livingston Manor, N. Y.

Hulda Hamlin—King's Ferry, N. Y.

Florence Hershey—Cooperstown, N. Y.

Catherine Hillegas—Frances Scott Key School, Locust Point, Baltimore, Maryland.

Lucille Howe—Junior High School, Bethlehem, Pa.

Flora Lohr—Barnesboro, Pa.

Elizabeth Meach—Avon, N. Y.

Helen Rouse—New Brunswick, N. J.

Marion Schoonmaker—Highland, N. Y.

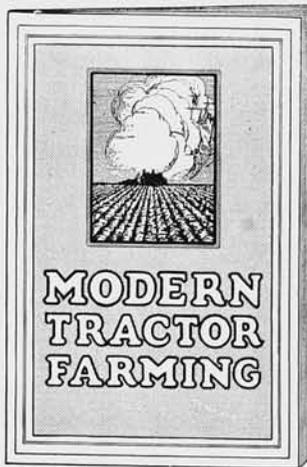
Ruth Belle Smith—Homer, N. Y.

Margaret Seeley—South Hampton, Long Island.

These notes were picked up too late to be classified.

Lyman S. Brewster '22 is now taking a law course in the University of Michigan.

'17—William Dexter Bennett is a dealer and breeder of Holstein cattle on a large farm at Philadelphia, New York. He represents the fifth direct generation of the Bennett family that has operated the same farm. He is very active in the Farm Bureau; he played on the Jefferson county Farm Bureau baseball team against the Oswego county team at their county fair at Mexico Point last summer. A corn variety test was also conducted on his farm during the past summer.



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To make it easy for farmers to obtain a broad view of this important development, this Company had a book prepared under the title "Modern Tractor Farming." The editors were instructed to make the presentation complete, accurate and impartial. Their findings are based upon quotations and statistics from the publications of the U. S. Dept. of Agriculture, the State Colleges and other recognized authorities. All examples shown are verified experiences of practical farmers.

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'08—Milton Lee is operating a large farm at Pillar Point, New York. His address is Dexter, New York. He has six children, three of whom are doing successful work in the Junior Project clubs. Lee sells about 150 Duroc Jersey pigs every year and is one of the few men in that locality who can be said to be growing alfalfa on a permanent and successful basis.

'06—While working as an assistant Farm Bureau agent in Jefferson county last summer, "Happy" Sadd '26 ran across Rollo VanDoren, who is operating a 175-acre grain farm with his father at Three Mile Bay, New York. He is a former president of the Jefferson County Farm Bureau.

'20—Alice VanOrder, who has been a stenographer in the farm practice department for the past four years was married on October 19 to Joseph A. Chisholm of Scranton. Her new address will be 929 Harrison avenue, Scranton, Pennsylvania.

'20—Donald Hoagland is now living at 400 North Michigan Avenue, Chicago, Illinois.

'15—Charles E. Young is farming and operating a roadside market at Theresa, New York. "Happy" Sadd ran across him at the Jefferson coun-

ty fair where Charlie was running a hot-dog stand.

'24—Janet Z. Kuntz was married to Samuel F. Crowther, a Penn. graduate, on October 17, and is living in Schenectady, N. Y. Mr. Crowther is an engineer for the Adirondack Power and Light Company.

'23—"Ken" Spear was camp adjutant this summer at the Boy Scout Camp, Pilot Knob, Lake George, N. Y. His regular work is machine designing for the General Electric Company at Schenectady, N. Y. He is married and has two children. His address is 25 Catherine Street.

Method of Delivering Market Milk in Some European Cities

(Continued from page 46)

that took on cans of milk at practically every station.

LONDON is equipped with many up-to date city plants, several of which I had the opportunity to visit. I found these well equipped with modern machinery, but of somewhat different type from that usually found in this country. Some of their equipment, however, was American made.

The one-man push cart is a common method of retail delivery in London and other English cities, milk being drawn either from a faucet at the bottom of the tank or delivered in bottles.

The large London dealers have well equipped chemical and bacteriological laboratories and appear to be doing excellent work. They showed me their bacteria counts, running back over a series of months, and these compared very well indeed with similar counts for milk in our larger cities.

One thing which especially interested me in London was the fact that one company making a specialty of homogenized milk was selling at retail approximately 10,000 quarts per day. They informed me that the demand for this milk was steadily increasing.

THE above is intended to give a few glimpses of some of the interesting things which I saw in connection with the methods of milk delivery in some of these countries which I visited. Naturally this is a difficult thing to do without the use of many more illustrations than can be included in an article of this sort.

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Costs of Packing Fruit in Western New York

(Continued from page 49)

of the cases. In Table 6 is shown the size of the packing crews and the family labor used in packing several kinds of fruit.

In calculating the costs of packing on the farms, the family labor was charged at the rate which the operator thought it was worth. As shown by the survey, labor is 90 per cent of the total packing costs on farms. Only 14 growers of the 55 giving records felt that buildings were used sufficiently to justify a building charge. It would seem that packing in the orchard over home made packing table reduces building, equipment, and other costs to a minimum.

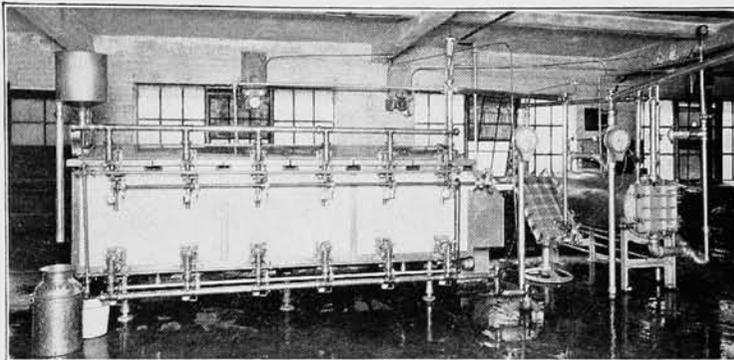
The Selection of Breeders for Egg Production

(Continued from page 51)

ords and the progeny test that this character can be determined. By a study of such records one will be surprised to learn how many of his best birds came from a certain male or a certain female. A bird that persistently stamps his or her egg laying qualities upon the offspring, shows that it is a pure bred for that quality and should be most highly valued as a breeder. Such a bird should be kept for breeding purposes as long as it lives and maintains its usefulness.

13. The last point is that a production breeder should consider the many fine points defining the breeds and varieties. Every breeder should aim to bring his birds up to some ideal of head, body, and plumage perfection. But he should attempt to perfect such qualities only after he has steadfastly fixed the thing for which he is primarily working, namely, the most profitable hen from the standpoint of production. Egg production, with all its complications of number, size, shape, and color, is a very difficult combination of characters to fix in a strain of birds, and requires years of careful breeding. Reasonably correct plumage and body characters are comparatively easy to secure until we get a high producing strain of birds. It would be foolish to discard birds just because of some minor breed defect which does not influence egg production and which could be corrected in a very short time. We should keep our eyes on the "bull's eye" and aim straight for production, assuming that we have started right by having a reasonably good quality of pure breed as our foundation.

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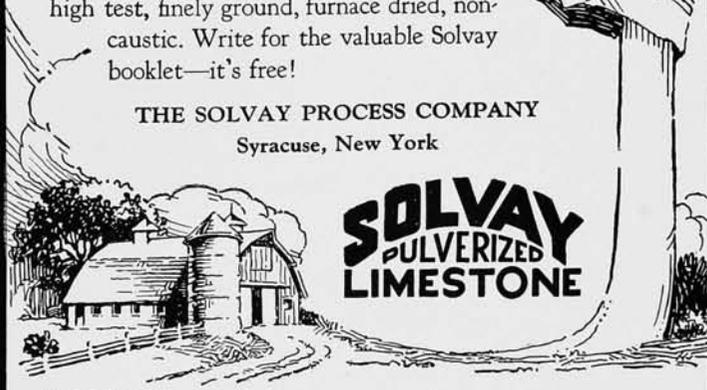
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the value of the book

**AG DANCE SUCCESSFULLY
PUT ON IN OLD ARMORY****Over Three Hundred Found Present
With Only Three Absences**

The first Ag Association dance of the year was held in the old armory on Friday, October 23. The party started off by one of the campus "mutts" trotting happily across the floor to the tune of *Yes Sir, She's My Baby*, and well nigh upsetting several couples.

There were two striking absences: one, some "Gloco" or "Stacomb," to make the footing more precarious, and the second, the mural decorations. There really was one other absence; that was of cooperation between the women and the men. Most of the women forgot their tickets, and it took a ticket per individual.

The chaperons of the dance were Professor and Mrs. Stocking, Mr. and Mrs. "Doc" Wright, and Mr. and Mrs. "Russ" Miller. "Howie" Dayton's six-piece orchestra supplied the motivation to harmonious movement of the pedal extremities of the males and females.

Merrills Dake, president of the Ag Association, felt, after talking with several of the dancers that the old armory is a more popular place to hold an ag dance than in the home economics building. A further proof of this is that there were over three hundred present, a number which could not be accommodated in the latter place.

Considering the affair as a whole, nearly every one agreed that it was one howling success, that the music was good, that the ratio of stags to completely equipped men was about right, that the chaperons were good dancers, and that it might well be repeated with the assurance of further support from the students.

**AG AND HOME EC COLLEGES
COMBINE CLASS ELECTIONS**

Elections of class officers and honor committee members were held on October 23. The classes in the Colleges of Agriculture and Home Economics combined in the elections so that officers of the Ag Association and the domecon society arranged for the nominating and balloting.

A. C. Bowdish was elected president of the senior class while Hortense Gerbureux will act as vice-president and Harold Hoyt as secretary-treasurer. "Bob" Zautner will head the junior class assisted by Grace Ware, vice-president, and "Lee" Blanding as secretary-treasurer. The junior honor committee representatives are "Gid" Britt and Mildred Davison. The second year class is represented by "Bill" Salisbury, with "Betty" Noble, vice-president, and "Ken" Wood, secretary-treasurer. The Sophomore honor committee-

man is A. G. Sharp. A. T. Ringrose leads the frosh with Louise Treat as vice-president, and J. C. Stephens, secretary-treasurer.

According to those in charge of the balloting the voting was characterized by a severe lack of it. Only 91 seniors of the 240 in the class availed themselves the privilege of voting.

**PRODUCTION POULTRY SHOW
SCHEDULED FOR DECEMBER**

The fourth annual New York State Production Poultry show will be held here at the College on the first three days of December.

This show attracts poultrymen from all over the State, and was one of the first shows to be started on a strictly production basis. Professor J. E. Rice, head of the poultry department here at the College, and responsible for the ideas back of the first show, says that better birds have been exhibited every year of the show, and that he expects this one will excel all the previous years in the number and quality of entries.

Entries will close on November 14 to allow time to complete arrangements for space allotments, etc. Anyone desiring information regarding the show should communicate with R. C. Ogle, secretary of the show at the poultry department of the College.

**KERMIS CONTEST CLOSES
ON FIRST OF DECEMBER**

The competition for *Kermis* plays is now open to students in agriculture and home economics. "Al" Van Schoick, acting manager, announced that the latest date on which the plays will be accepted is December 1. The prizes are 75 dollars for the best play and 25 dollars for the second.

He announces further that unless the plays are of a quality to be produced, no prize will be given. In this case a play which has been submitted in the countrywide competition, administered by the department of rural social organization, will be staged.

The plays may be of either one or three acts. In the former case, two will be produced.

NEW DOMECON BABIES

Pete and Jean are the two new domecon babies. Pete lives at the home economics apartment and Jean at the Lodge where they teach their numerous foster mothers the intricacies of proper baby care. Pete is a strong and cheerful youngster of three months with big blue eyes and light brown hair. Jean, who is the eight months old daughter of G. S. Frank, manager of purchases for the University, has blue eyes and a head of curly brown hair. The baby specialists at the college feel it is a great compliment to have Jean entrusted to their care.

**NEW OFFICERS CHOSEN
AT MEETING OF FORESTERS****Seventy-five Attend First Gathering
Which Precedes Steak Roast**

The Cornell foresters gathered for their first meeting of the year on Wednesday evening, October 7. Standing room was at a premium when the seventy-five out of one hundred and thirty members packed the club room.

Professor R. S. Hosmer gave the welcome address and in his typical manner made each man feel glad that he was present. The other members of the staff also gave short addresses. Then "Jim" Davis, who traveled in Europe this summer, discussed the forestry methods over there. He wondered if we were going to delay forestry until we reached the stage that Europe is now in. But the meeting was not complete until the husky members had mixed cider and doughnuts in an attempt to satisfy their hungry spots.

The annual fall steak roast was the next lively affair. This was held on Fall Creek near the rifle range on Thursday evening, October 15. Twenty-four pounds of seared and ash-covered steak, roasted on twigs held over the open fire, barely sufficed to appease their forty hungry appetites, which had been whetted by a brisk hike to the grounds.

The club meetings are held regularly every other Wednesday evening, and according to the president, Paul Logan, "All foresters will find that they cannot afford to miss any of them." The other officers of the Club are: Treasurer, Seth Jackson; Secretary, C. A. Vanderbrook.

**FARM BUREAU EXPERIMENTS
WITH JUNIOR COUNTY AGENTS**

During the past summer the Farm Bureau leaders in cooperation with the College tried an experiment which proved to be successful. They sent out men who have completed their junior year in the Ag College to act as assistant county agents. Accordingly, four men were selected who felt that they were interested in Farm Bureau work and who were considered good material by the state leaders of county agents. "Al" Blanchard worked out in Albany County; "Berry" Huckle performed in Niagara; "Red" Mereness in Steuben; and "Happy" Sadd was the assistant agent in Jefferson County.

The salaries of these men were paid from the extension funds of the College, while their local expenses were defrayed by the counties.

According to reports which have been made to Dr. C. E. Ladd, director of extension, all of these men were very successful in their summer's work.

THE CAMPUS COUNTRYMAN

Devoted to Neighborhood Happenings at the Top of "The Hill"

Published on the first of each month during the school year by THE CORNELL COUNTRYMAN, Inc. Contributions should be in the hands of the Editor by the fifteenth of the month previous to the date of issue. Say what you want and sign it, indicating whether you want your real name used, or another one.

T. E. LAMONT
Editor for this Issue
J. E. EHRLICH

H. W. BEERS R. E. ZAUTNER

Vol. VII November, 1925 No. 2

FARMER-TEACHERS

We have been talking about farm practice for several months as if it were a problem which directly concerned the students only.

We feel that unless the professors and teachers in a college of agriculture have learned from actual experience what farm work and farm life really means, they will not in the long run attract men who have this background.

The distinction between teachers of agriculture, who accurately know farm conditions, both past and present and those who do not, can be put in concrete form. When we hear students saying as they come out of a lecture, "That old boy has the cold dope," we feel sure that this particular professor has done some sweating on an actual farm. But when an eavesdropper hears, "By gosh, I'd like to see him try that on our farm, I'll bet he'd change his mind," he can take it as a pretty good indication that theoretical facts have crowded out their practical application in the mind of that teacher.

Even if the theories are sound, but fail in practical operation, the teacher loses the confidence of those students who are looking for material that they can apply on their own farms after they graduate. Broadly speaking, this group is largely picked from men who originally come from the farm, and the loss of their confidence is cumulative.

THE OPEN MIND

How often we hear one or both contestants in a little argument flare up and say, "Well I know that I'm right." How human it is to think that no one can be right but us. We hardly ever dream that our side may be wrong. We students especially are apt to give a very hasty review of a subject, and then act as though we would wager our last cent that our opinion is correct. We usually take the attitude that William Jennings

Bryan took, that there are two sides to every question. One side is white and the other is black, and we, of course, only see the white side. We do not think through questions before we give a biased opinion. After gathering a little superficial information on a subject, our mind is like a closed book.

Yet one of the chief characteristics of an educated man is that his mind is open to the truth until the evidence is all in. Do not think that we object to strong and vigorous opinions, or that we do not want to discuss a question until we have mastered it thoroughly. We don't. But we do want to keep our mind open to the facts until we have all the evidence. Then we put forth our arguments with all the force and with all the vigor that we possess.

COGNOMENS

What's in a name? Not much, unless it's a nickname. When our birth certificate claims us to be John Henry Perkins, it means little, but the fact that our friends refer to us as "Bingo" or "Ducky" is significant.

First, it signifies that we have been judged by our fellows, and have been accorded a place among them.

Secondly, it signifies that there is something about us that makes us fit subjects for the title bestowed. We may be short and fat, or tall and lank, or slow, or speedy; whatever it may be we have one merit or demerit that has earned us a name.

At any rate, nicknaming is an inseparable part of the good-fellowship that makes campus life what it is. We are all eligible to a sort of nobility of good fellows when we have been properly nicknamed. And high in the ranks of this nobility are our favorite profs!

Who does not know profs "Jimmy," "Hi," "Charlie," "Goody," "Doug," and three or four professor "Bill's"? Professorial dignity is rather enhanced than detracted from by these familiar appellations.

So, while in days of chivalry we might have advised an aspiring youth to work hard for his "Sir" and spurs, now we would enjoin him to be worthy of a nickname.

CONGRATULATIONS

Twenty-four schools of agriculture were represented at the National Dairy Show this year. We think Cornell might well take pardonable pride in seeing her team finish third in this large field. The western teams are given intensive preparation, a thing the eastern schools are unable to do on account of the scarcity of large herds. The South Dakota team, which finished second, traveled for a month through the west on a practice trip and hadn't seen their college until after the National. The coach and members of our team are to be commended for their splendid work. We feel sure the students echo our thoughts in this matter and appreciate the effort put forth for Cornell.

THIS 'ERE & THAT 'AIR

A Cent Or Two

The ancient minotaur was said to be half man and half bull. Some people think it was all bull. But the centaur was half man and half horse. Consider how valuable a team of these would be on the farm. Having a man's trunk, arms, and head they could groom and harness each other in the morning and be all ready to work. When sick they could tell us where the pain is; they could talk to the driver while going to town. But as they speak only Greek we should have to learn that first. The imagination glows at the uses to which they might be put. The young centauro-colds could be on hand to drive cows, close gates, and run back to the barn for clevises. Yes, besides our modern machinery what we need is a centaur, too.

A Social Hitch

We wonder if Professor "Doug" Fairbanks, from his recent work in designing special tractor hitches for farm implements, could not work out another type of hitch whereby a short man could gracefully hold the arm of a tall girl while escorting her across the street without standing on his tiptoes. Something in the nature of a differential leveling doohickie would probably fill the bill.

A Big Turnout

This college turns out both good and bad students. The difference is that the good ones take four years, but the bad ones are turned out much sooner.

Yuen Ren Chao, the Chinese philosopher, calls typesetters who cause misprints "typeupsetters." One of these typeupsetters on a country newspaper was faced by a rural mail carrier, red in the face and demanding satisfaction for an insult in the form of a clipping which he held in his shaking fingers. The surprised printer took it and read, "Next a vocal solo was sung by Mr. Bigs, our efficient litter carrier."

Upsetted

In the ag college we have two classes which it greatly needs. It is expected showed the *factors involved in success* H. A. Stevenson has resigned as su-

Last spring the faculty of the colhus extension professor, and consits a large number in the college of agri-'28 marride Roland Campbell Brill need a special file clerk to kep a list the ight different exhibits were well

A farm practice student reports a dairy so clean that the ice used in cooling milk had to be washed free from sawdust with scalding water. What chance have respectable bacteria to live in these scientific days?



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LIVESTOCK JUDGES PLACE AT NATIONAL DAIRY SHOW

"Bob" Mitchell Heads Dairy Division In Eastern States Show

The livestock judging team of the College finished a successful season by taking third place at the National Dairy Show at Indianapolis in fast competition in which twenty-four teams were entered. In the individual work, "Bill" Bishop '26 judged second in Ayrshires, "Happy" Sadd '26, seventh in Holsteins, and "Bob" Mitchell '26, third in the same breed. There were seventy-two men in the contest.

In preparation for the National, the team visited the State fair in which they gained a goodly share of the honors. At Springfield, in the Eastern States Exposition, "Bob" won the dairy cattle contest and "Happy" the beef, while "Bill" finished sixth in dairy after having been first in beef last year. The general team won second at this exposition while the dairy team finished fourth in a field of ten.

The other members of the team who visited the State Fair and Springfield were: Frank Rich '26, "Red" Mereness '26, "Gill" Gulbenkian '26, "Val" Carrere '26, "Van" Van Voris '26, and "Lyle" Arnold '27.

PHOTOGRAPH OF OLDEST FARMHOUSE WINS PRIZE

Professor J. E. Boyle, of the farm management department, recently awarded the prize of \$25 for a photograph of the oldest farm house in New York state to Mrs. Mary R. Downs of Southampton, N. Y.

The oldest farm house as revealed by the contest was built in Southampton, in 1684, and is still doing duty as a home after two centuries of service. The house is of stone, while the large time-darkened beams are hand-hewn and the nails used in its construction were fashioned by hand.

Seventy pictures were entered in the contest more than thirty of which were of farm houses built between 1700 and 1799.

TUBER TRAIN TO TOUR

A potato train will tour Allegheny, Steuben, Wyoming, and Livingston counties, over the Erie Railroad from November 9-19. It will make all-day stops in communities where potato projects have been carried on during the past summer. At each stop the boys will bring in their potatoes to be judged by Professor E. V. Hardenburg, of the vegetable gardening department. The winning exhibits at each stop will be taken on to the annual poultry and potato show at Alfred University on November 18-19, to compete in a sweepstakes contest.

H. B. Rogers '12, who is agricultural agent for the Erie Railroad, was largely responsible for getting the whole program started. In the spring, in cooperation with the Junior Project and Farm Bureau work-

ers he induced groups of bankers and business men to donate certified seed to the project workers.

The train will also carry specimens of potato packs picked up in the New York and Chicago markets, to illustrate the competition which our potatoes meet in the large markets. There will also be a series of charts to illustrate marketing conditions and problems. Professor M. P. Rasmussen will accompany the train during the first week of the trip and Professor V. B. Hart, on the second week. They will give lectures on marketing of potatoes at each point.

PROFESSOR O. JOHANNSEN RETURNS FROM ABROAD

Entomologist Back from Extensive Trip of Research

Professor O. A. Johannsen of the entomology department has been abroad for the past seven months seeking for counterparts of American insects in the European museums. He has now returned to the College.

By exhaustive searching and detailed examination Professor Johannsen proved that many of these American insects, heretofore thought extinct, were identical with specimens in the foreign collections, but are known in this country by different names and descriptions. This counter-parting of lost American insects with existing European specimens has always been one of the professor's contentions.

Professor Johannsen traveled through Austria, Hungary, Italy, France, Switzerland, Germany, Denmark, and England, visiting and studying at all the famous museums and entomological collections. Attendance at the International Entomological Congress, which was held at Zurich, was one of the chief objectives of the trip.

BLACK AND WHITE KITTEN TAKES LIKING TO FACULTY

On September 23, by a special meeting of the rural engineering department, it was decided that Professor B. B. Robb had claimed the attention of the wild black and white striped kitten which lived under his porch long enough. Professor McCurdy took action that night by enticing the little animal out. The skunk, however, liked the company of faculty members so well that he immediately wandered over and hung up his hat in Professor Whetzel's cellar.

This move was fatal. Some of the Forest Home kids let their dog into the cellar, and the end of that skunk was gradual and terrific.

GENEVA'S WORK OUTLINED

A Few Facts About the Station and Its Work is the title of an illustrated pamphlet recently made available by the Geneva Experiment Station staff. In this free bulletin, the principal activities of the Station are briefly described, showing what is being done in the way of research for the farmers of the State.

"RASS" TAKES SHORT REST FROM CHASING FIGURES

Finds That Much-abused Middlemen Are Hard-working Night Hawks

Assistant Professor M. P. Rasmussen was in town for a few days around October 18 as an intermission from his job of finding out the margin of profit and the actual cost of doing business of the jobbers and retailers on the New York City market. By this study, Professor Rasmussen and Larry Vaughn, who is helping him, hope to show just what services the much abused middleman is performing, and whether his margin of profit is too great or too small.

Upon the whole, he says that the retailers and jobbers are a group of hard working men who start work on the market at midnight and put in twelve to fourteen hours per day.

Nothing definite has been worked up from the material as yet, but from general observations it looks as if both of these groups of middlemen were doing business on a margin of one-half to one percent of their sales, Professor Rasmussen says. He also would say from his work thus far that the big items of expense are salaries of employees and rent.

Public Found Fickle

One of the difficulties these men encounter, as found by the study, is the fickleness of the consuming populace. Everything is bought on appearance and only in its season. They saw first class cauliflower which simply could not be sold merely because it was a little late in the season. Another problem is the handling of the surplus of poor stuff which always drags the general price level for that commodity down to a profitless figure.

With these observations as a basis for judgment, Professor Rasmussen said that the best way for the New York state growers to get a good price for their products is to put up only high class packs and keep their trash at home where it cannot influence the market.

EXTENSION MEN EXTEMPORIZE

The three leaders of extension activities at the Ag College have been out of town most of October conducting the Regional Directors' Meetings of the State Farm Bureau Federation. Director of Extension C. E. Ladd usually gave a talk on the "College As a Partner of the Farm Bureau," while county agent leader, Jay Coryell spoke on the actual work and the large tangible amount of good which the county agents are accomplishing. General secretary of the State Farm Bureau Federation, E. V. Underwood, told of the part played by the Federation in agricultural extension the purpose of bringing together the sion work. These meetings are for county agricultural workers in regional groups with the idea of exchanging ideas and experiences and working out a program for the coming year.

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CAMPUS FLORISTS MEET TO LAUNCH TERM WORK

Roger Clapp '27 Elected President for the Coming Year

The Cornell Florists Club held its first meeting of the term on October 14 in the floriculture building, when new members were welcomed and officers for the term were elected. Chairman "Bob" Danker called the meeting to order and by way of introduction recalled the conception of the club in 1890 when it was christened the Lazy Club. He said that as the years passed and work in floriculture became more specialized the name was changed and the club concerned itself with discussions of floricultural subjects.

Elections

"Bob" Danker introduced Professor E. A. White, head of the department of floriculture, who discussed the new greenhouses. Professor R. W. Curtis told of his recent trip to Washington in connection with the establishment of a new course in green making which is being given in the department of ornamental horticulture for the first time this term. Professor A. H. Nehrling talked about his summer's trip to Florida.

"Bob" Henn, grad., president of Pi Alpha Xi, national honorary floricultural fraternity, described the status of the fraternity and listed the requirements for election to it.

Balloting for officers resulted in the election of Roger Clapp '27, president; Miss E. M. Bodger, grad., vice-president, and G. Mann '27, secretary-treasurer.

The election was followed by an intense laboratory study of the reaction of taste buds and digestive tracts to apple juice and sinkers.

TRACTOR EGG-BEATER TESTED ON UNIVERSITY FARM LAND

A demonstration of a curious attachment for a Fordson tractor, known as a Universal Tiller, was given on the University farm and claimed the attention of both the faculty and the students of the Ag College during the week of October 12. Several different soil types were plowed, including stony soils, drained and undrained clay, medium heavy types, and corn stubble for oats and sod for corn. The object is to determine by comparison with ordinary methods on the same types of soil just what the specific effects of this once over tiller will be upon crop yields and the physical condition of the soil.

This plow has revolving knives, similar to the beater on a manure spreader, but in an upright position and longer. This attachment turns a three hundred revolutions per minute and is placed to the right of and at the end of the moldboard. It is designed to plow and fit the soil in one operation.

No more serious an incident happened during the demonstration than to Professor H. W. Riley of rural engineering, when he sat down on the

edge of the furrow, while waiting for the tractor, with its egg-beater attachment to come around. An agonized expression came over his face, but with sheer courage he pressed down firmly. Finally he said, "I have conquered it." Thus ended a bull-thistle.

ROUND UP CLUB OFFICERS PLAN EXTENSIVE PROGRAM

At the last meeting on October 19 of the Round-Up Club, the members of the judging team who went to the National Dairy Show, gave an interesting account of their experiences on the judging trips this fall. Professor "Charlie" Allen, coach of the team, also addressed the large gathering on the education and discipline received and the contacts with prominent men in the animal husbandry field which the members of the team made.

President "Happy" Sadd '26 outlined the list of speakers for the coming meetings. It included such well known men as C. T. Conklin, secretary of the Ayrshire Breeders' Association, A. A. Hartshorn, former president of the Holstein-Friesian Association of America, "Jimmie" Dodge of the famous Emmadine farms, Dr. K. J. Seulke, manager of the Jefferson Aberdeen-Angus farms of Maine, and Hugh Van Pelt, one of the early writers of judging manuals.

The meeting ended with the usual informal discussions and arguments sandwiched in between mouthfuls of sinkers, moistened with apple juice.

WINTER COURSE STUDENTS GET NEW POULTRY WORK

Special studies in poultry are being offered as a part of the regular short winter courses of the College of Agriculture. The work begins on November 4 and lasts through until February 12.

According to members of the staff, one of the features of the course is a trip to New York City to study and become familiar with the egg and poultry markets of the city. While on this trip the students will visit several large poultry farms to study different production methods, and to hear at first hand the experience of men who are really in the business.

Practice Plus Theory

Two kinds of courses are offered by the poultry department; one is for the person who is interested in poultry as a side line, and merely wishes to include it with other subjects, and the other is really a group of courses, all within the poultry department, and is designed for the person who desires to go into the poultry business. This is called the professional course, and requires, in addition to the study at Cornell, six months or more of practical experience with poultry.

The courses combine practice and theory, and while they teach the various branches of poultry keeping they give students opportunity to work on their own special problems.

WORK IN CHILD TRAINING NOW MAKING HEADWAY

Domeconers Teach And Are Taught in Behavior Laboratory

As a result of the success of the nursery school during the past two summer sessions, twenty-one youngsters under five years of age have been enrolled in the College of Home Economics, in connection with a nursery school which is now a part of the regular domecon curriculum. The rooms used by the children have been redecorated and fitted with child sized furniture, and equipment as playrooms, rest rooms, and dining room to take care of them from nine until three each day. Playground equipment has been put on the lawn beside the house and large porches will take care of outdoor play when the grass is too damp.

Students taking the child training courses will get experience in child training, care, and feeding in the school and it will serve as a laboratory for the study of child behavior. In addition it serves the purpose of providing a place where young children may form right habits of living, such as associations and normal reactions to other children, and play, eating, regularity, and hygiene.

MOUSE TRAPS BAITED FROM DAIRY SALES ROOM CHEESE

"What's the smallest piece of cheese I can get here?" asked a nervous customer as she stopped the other day at the familiar window of the East Roberts lunch room. In answer to the request, Mrs. Katharine Card, new sales lady for the room, produced a small, neatly wrapped portion of the commodity in question.

"That's just right! I wanted it to put on a mouse trap," said the customer as she paid the price and hurried away to prepare the last supper for her marauding rodents.

This is one of the more unusual purposes to which produce from the dairy sales room are put. The daily turnover in the lunch room at present has a value of from \$50 to \$75.

It seems that the greatest demand among patrons this year is for lunches and breakfasts. The standard lunch room "meal" consists of milk, crackers, and cheese. Butter sales are comparatively large.

DEAN BETTEN SUFFERS GREAT LOSS WHILE CONVALESCING

During August, Acting-dean Cornelius Betten was operated on at Clifton Springs Sanitarium for appendicitis. His recovery was very slow, and it was not until October 6, that he returned to the office for a half day. His convalescence had been none too soon, for on the following day he received word of his father's death, and departed the same day for Orange City, Iowa. It is hoped by his friends that on his return he will be able to resume his official duties.



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 Ask Dennis for an application,
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 Then let the doctor squint and thump,
 To try your lungs and test your pump.
 If all your inwards function true,
 They'll write a policy for you.
 So get insured already yet,
 For when some punk disease you get
 They will not take you on a bet.
 We'd hate to have our pretty kids
 Wear ragged shoes and leaky lids.
 We'd hate to have the hands we've kissed
 Hire out to scrub men's floors, I wist.
 We'd rather squeeze a bit, by gum
 To pay that yearly premium.
 Our guardian angels sometimes nap
 And let misfortunes strike a chap,
 But Angel Death of all the mob
 Is evermore upon the job.
 O let's insure, not wait but hurry
 And let the good Northwestern worry.
 Let's fix it so when death arrives
 To put a kibosh on our lives,
 And when they haul us out of town
 To bury us and tamp us down,
 Our widows left behind on earth
 Will get a darn sight more'n we're worth.

*Written and published by Bob Adams,
 Assistant Extension Professor, Vegetable
 Gardening, Cornell University
 Author of Rude Rural Rhymes*

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NOVEMBER 1-4

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RED HOT TIMES

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5 ACTS OF KEITH VAUDEVILLE

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CORNELL PROFS CONTRIBUTE TO RURAL REFERENCE BOOK

An event of unusual interest and importance in the rural field is the publication of *The Book of Rural Life* in ten volumes. It is dedicated "to all who live and love the rural life and who believe in its dignity and beauty." In the words of the publishers, "the fundamental idea behind *The Book of Rural Life* has been to produce an original publication of outstanding value and service in a field which heretofore has had no complete, authoritative, reference work."

Faculty Writes

The editor-in-chief is Mr. Edward M. Tuttle, formerly assistant professor of rural education at Cornell and editor of the Cornell Rural School Leaflet. New York is well represented in the new work. Besides the previous connection of the editor-in-chief with Cornell, we find that Director C. E. Ladd wrote the state article on New York; articles on farm management topics were prepared by Professors G. F. Warren, W. I. Myers, and F. A. Pearson; articles on rural education subjects were written by Professors G. A. Works, J. E. Butterworth, E. N. Ferriss and R. W. Stewart; articles on gardening and vegetables were contributed by Professors H. C. Thompson, R. M. Adams, E. V. Hardenburg, H. W. Schneck and Paul Work; Professor E. L. Palmer prepared numerous articles on natural

history topics and nature study; Mrs. R. G. Smith wrote on the home bureau and the rural home; Dr. L. H. Bailey contributed a short article on Rus; Mr. Russell Lord, former COUNTRYMAN editor, and now with *Farm and Fireside*, wrote on ag journalism.

FLOWER GARDENS CHANGED FROST SHORTENS SEASON

The flower garden south of the COUNTRYMAN office is closing a successful season that was materially shortened by the frost on October 9. Some replanting is done each fall under the direction of Miss Lua A. Minns, who has charge of the garden, and is being done this fall in the center beds instead of beds around the edge. Some work in naturalizing is being done near the big fence on the west side of the garden.

Miss Minns received several varieties of seed from Europe this summer which she is going to plant in the garden. She is trying to make the display more and more educational by placing labels on the different plantings. The garden is especially popular during the summer season when there are many visitors.

PROF RETURNS

Professor L. M. Massey of plant path has returned from his sabbatic leave, which he devoted to an investigation of diseases of ornamentals at the research laboratories of The Boyce-Thompson Institute of Yonkers.

SIX SCHOLARSHIPS GIVEN TO JUNIOR CLUB WORKERS

Five boys and one girl have received \$250 each as scholarships offered by the New York State Bankers' Association to members of the Junior Extension club in New York state.

The bankers' association says: "These scholarships are given as an incentive to better farming on the part of the young people enrolled in the junior clubs and sponsored by the State College of Agriculture."

Competition for these six cash scholarships was open to all regularly enrolled junior club members sixteen years of age or over, both boys and girls. The awards were made on a basis of the actual work done at home in raising crops or livestock, cooking, canning and sewing, and the grade attained in an examination.

The only conditions attached to the awards are that they shall be used to attend either the regular four-year or winter course at the college or any one of the six state secondary schools of agriculture.

HARDENBURG EYES POTATOES

On November 4-5, Professor E. V. Hardenburg, of the vegetable gardening department will judge the exhibit at the "Top of Michigan" potato show, at Gaylord, Michigan. He will also take part in the educational program by outlining the potato improvement program in New York.



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When you feed Purina Chows, you eliminate the guess. The very finest selected ingredients are carefully analyzed for quality in

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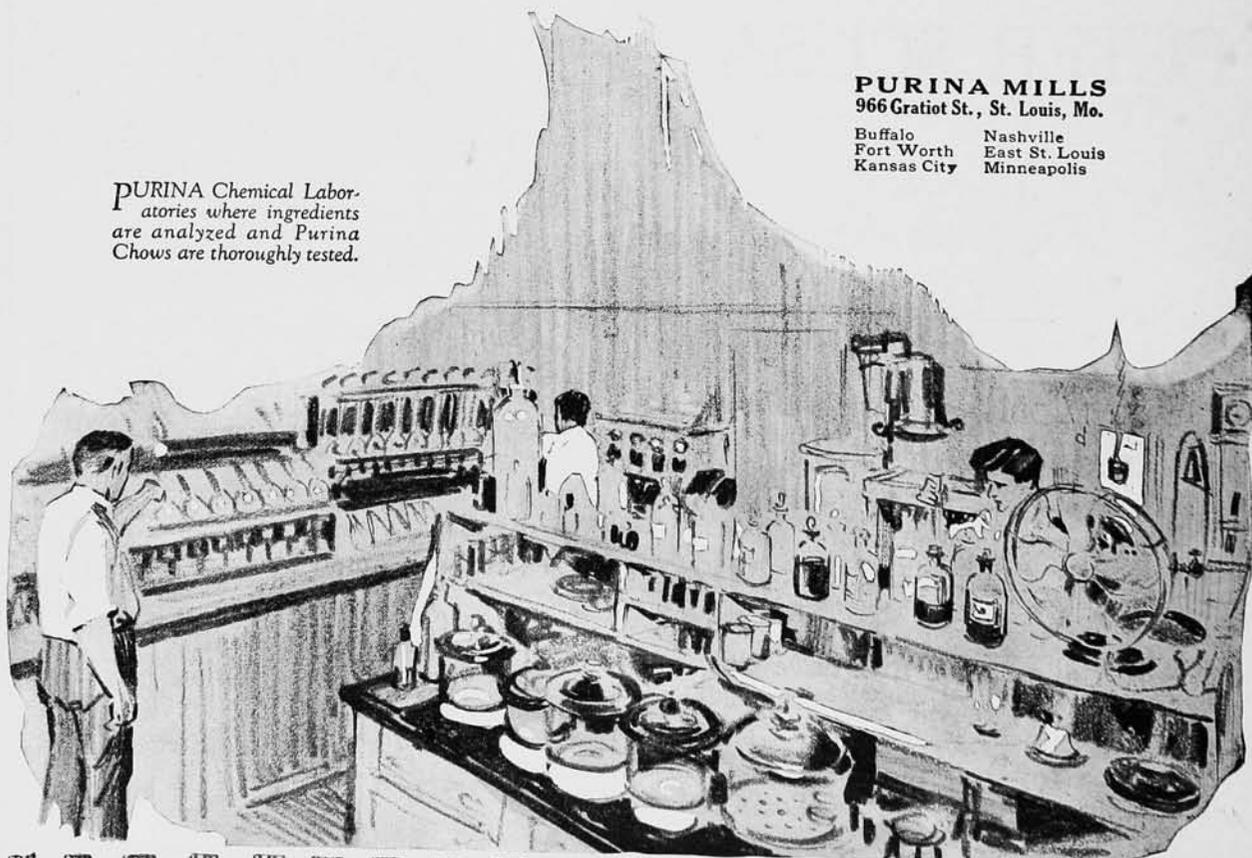
There's no guessing about Purina quality—or about Purina *results* either. The actual daily records and cost sheets of feeders from the

Atlantic to the Rockies bear witness to the unquestionable ability of Purina Chows to lower the cost of producing milk, eggs, pork and beef.

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The Cornell Countryman



DECEMBER

1925

Volume XXIII

Number 3



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This trademark is a symbol of quality which you will find on little motors that pump water or run household machinery, and on the big motors that irrigate vast farm sections and turn the wheels of American industries.

“A pint is a pound the world around,” and the woman who carries from the well to the house the water needed for the average farm family lifts several hundred pounds a day.

A pump driven by a G-E motor will do this job for a few cents a week, where electric service is available.

Farm surveys in a number of states show that the most used electric conveniences are those that make woman's work easier.

95-65B
GENERAL ELECTRIC

The MECHANICAL POWER AGE is only beginning on the Farm. The Agricultural Student will ride along with it, controlling the farm machines and power of To-morrow

EVEN the airplane is now being experimented with to aid agriculture. Out west, the orange groves have been sprayed by the airplane. Down south, an airplane has successfully done the work of many ground dusting machines in applying arsenate to kill the boll weevil in cotton.

These are extreme signs of the times. They are not everyday farming methods, but they serve to remind us of the *tremendous changes that are coming about in agriculture and that affect the prosperity of every man on his farm.*

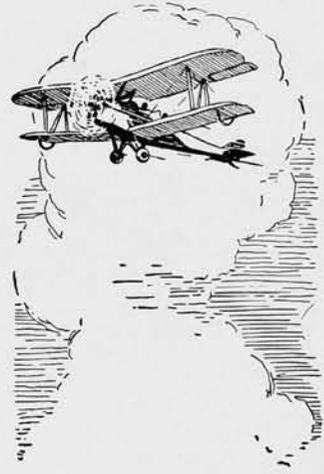
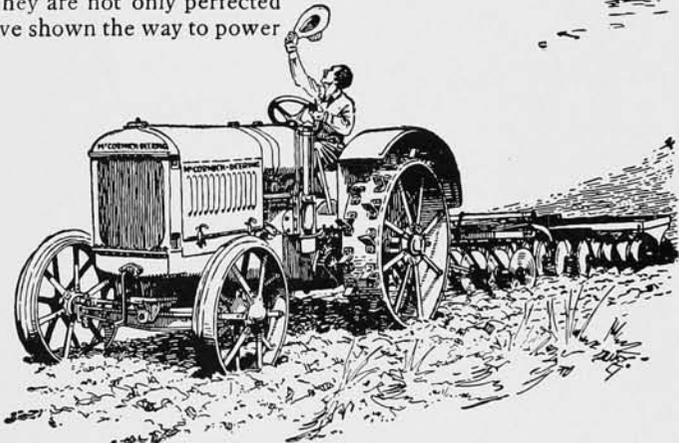
The mechanical power age is here. The owners of close to a million farms are letting brains and power farming equipment take over the work of hired hands, horses, and limited horse-drawn tools. They are seeing to it that one man doubles and triples his day's work. As a result, according to the Department of Agriculture, there were 109,000 fewer hired men on the farms in 1925 than in 1924. Millions are saved to the farmers in wages; yet production is greater than ever before. Producing costs are reduced and extra profits are the reward of farmers who have become power farmers.

McCormick-Deering machines seek always to be ahead of the times. It is the work of *International Harvester* inventors and engineers, trained in the field and helped by the experience of 94 years of farm equipment progress, to equip the farmer with time- and labor-saving, yield-increasing, money-making farm machines.

To-day the *McCormick-Deering* dealers are providing the farmer with 2 and 3-furrow plows, 2-row cultivators, 10-foot binders, harvester-threshers to cut and thresh at one operation, pickers to pick and husk the standing corn, big-scale hay-harvesting tools, and a long list of other efficient machines bearing the old dependable name, "*McCormick-Deering.*"

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4. Healthy flocks. High resistance to roup, white diarrhea, chicken pox and tuberculosis.
5. Low mortality of both grown birds and chicks.
6. More hatchable egg, larger hatches.
7. Strong, vigorous chicks that live and grow.
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Winter Near Lake Placid

The Cornell Countryman

A Journal of Country Life — Plant, Animal, Human

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How Bees Behave in Winter

By E. F. Phillips

INSECTS other than the honeybee which live through our New York winters as adults go into hibernation with the oncoming of cold weather. Other species of insects spend the cold winters as eggs, larvae, or pupae, and complete their development when warm weather comes again. Of the insects which are common in the state, the honeybee is the only one which lives an active adult life throughout the winter, and this is what makes the winter problem so serious for the beekeeper.

The story of how bees behave during the period of cold weather is so marvelous as to be of interest to others than beekeepers. It is possible but somewhat difficult to conceive of bees migrating as a colony to

warmer climates when cold weather comes on. The honeybee does not do this, but it is an interesting fact that the nearest relatives of our common honeybee, the giant bees of India and the Philippines, do migrate to the coast with the advent of the dry season, sometimes flying for a hundred miles as a vast swarm. Fortunately New York state honeybees do not thus fly away to escape the adversity of cold weather, for they might forget their old home the following spring and beekeeping as an industry would be impossible. Being devoid of the instinct to migrate and being unable to hibernate, there seems but one way out for bees, namely, to store food capable of the production of large amounts of heat and to gener-

ate heat throughout winter to keep the temperature of the hive within livable limits.

WHEN the temperature drops to 57° Fahrenheit, the bees, which have previously been scattered about the hive, mass themselves together into what the beekeeper calls the winter cluster. This critical temperature

without breaking or disturbing their cluster. From such observations it is seen that the bees between combs are not uniformly arranged and apparently they are arranged for the performance of separate functions.

THE outer rim of any one of the circles of bees between combs are all placed with their heads toward the inner part of the cluster, and when we look at a winter cluster from below or above we see no heads, but only tails of bees extending into the cold. Here the bees are arranged in numerous ranks, close together, evidently for a purpose. In the innermost parts of each circle the bees do not have this uniform arrangement, but when the temperature falls to about



Colonies of bees snugly packed for winter

is not especially low, yet it is the lowest temperature at which bees can perform their individual labor, and at lower temperature they must have the cooperation of their hive mates to keep warm. This cluster is formed on cells of the honeycomb which contain no honey, and each cell within the limits of the cluster is found to contain one motionless and apparently sleeping bee. Between the combs are other bees, which are the ones on which the cluster depends for the maintenance of heat in proper amounts for muscular activity.

The bees between combs are not all engaged on the same task. An examination of such a cluster without disturbance is not easy, yet ways have been devised for watching the bees

fifty degrees or lower we see individual bees going through all manner of contortions. Some move their abdomens from side to side, others move their legs almost constantly, and finally, if we watch carefully, we see bees fanning their wings rapidly for considerable periods. Beekeepers have long known that there is a humming noise emanating from bee-hives during cold weather, yet when the announcement was made some time ago that bees actually fan their wings within the winter cluster to keep warm, there were many who found this difficult to believe.

These two sets of bees have different functions, equally important to the maintenance of the colony. The excessive muscular activity of those

within the circle is the source of the heat of the cluster, as can be determined by placing a delicate thermometer beside the fanning or otherwise moving bees, when the temperature is immediately seen to rise. Muscular activity is a source of heat production to all animals, as we know from our own experience in winter.

THE outer ranks of bees also have an important function in the maintenance of proper temperatures, for it is their task to prevent the escape of the heat generated at such cost by their hive mates farther toward the center of the circle. The body of the bee is covered with finely branched hairs, and when the bees stand close together these hairs interlace, forming innumerable small dead air spaces, long known to be valuable for insulating purposes. The smaller and the more numerous these dead air spaces, the better is any insulating material, and bees produce these small air cavities in this manner in vast

numbers. Furthermore the bodies of the individual bees are completely penetrated by myriads of small air tubes, through which respiration takes place, and these are equally valuable as insulators when bees are placed in the manner indicated. That they are actually able to insulate their cluster to a remarkable degree is shown by the fact that a difference of 75° Fahrenheit has been found to occur between two points within a hive four and one-quarter inches apart, with nothing intervening but the bodies of living bees. There are few materials which have such remarkable insulating value.

THE ultimate source of the cluster heat is, of course, their food, honey. Honey consists essentially of supersaturated solution of three sugars, all of which are heat producing foods. During winter bees live almost exclusively on honey and from this food through muscular activity they keep up the temperature.

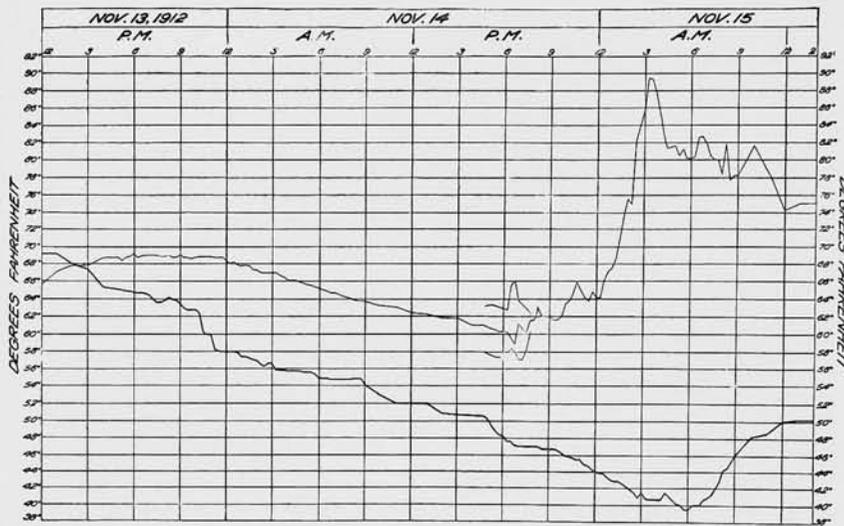
It must not be assumed that the temperature of the inside of the cluster is constant after heat production once gets under way, for this is not the case. As the temperature falls below the critical temperature, 57° Fahrenheit, a few bees begin muscular activity and the inner temperature is somewhat raised. As the outer temperature, that is, the temperature of the air immediately surrounding the bees, falls still lower, other bees begin heat production through muscular activity, and the temperature tends correspondingly to rise. In extreme cases there is a

tures within the cluster are constantly changing to meet the demands of the cluster.

IN EATING the honey which lies immediately adjacent to the cluster, the bees find it necessary for the whole cluster gradually to move, so that it may stay in contact with the food supply. Usually the movement of the cluster is upward, at least as long as honey remains above them, but if they reach the top of the hive and have used all the honey above them, they shift the direction of their slow winter movement, and

usually move toward the rear of the hive, if there is honey in that direction. If there is weather warm enough for the cluster to be broken, they may form it after the break at some entirely different part of the hive where there is honey available.

The accompanying diagram of hive temperature may seem formidable, yet it is merely a brief way of telling a story which would be exceedingly long if it



The outer temperature and the temperature of the center of a winter cluster of bees. The outer temperature is represented by the heavy lower line. Clustering occurred just after six o'clock on November 14. The short lines show temperatures on the edge of the cluster during its formation

severe draft on bees of the cluster for heat production and the insulating band on the margin must be correspondingly reduced, which causes the bees to work at a marked disadvantage. In general, the lower the temperature of the air immediately surrounding the cluster, the higher the temperature of the center of the cluster, but the bees never allow the inner temperature to rise above about 94° Fahrenheit, and if too much heat is generated, they simply loosen the insulating ranks and permit heated air to escape. When the outer temperature again rises to 57° or higher, the cluster is entirely abandoned, to be formed again when the temperature of the air surrounding them falls. Above the critical temperature the bees may either sit quietly about the hive, or if the weather outside is favorable for flights, they may fly from the hive until darkness comes on or until the weather again becomes chilly. Heat production and consequent tempera-

were all put into words. From the standpoint of the practical beekeeper, there is one part of this chart which is of vital importance, namely, the downward trend of the cluster temperature curve when the outer temperature is rising. This may be put in words as follows: bees work as long as muscular activity is essential, but cease such labor at the first opportunity. There is no non-essential muscular activity within the hive in winter, and in this way the bees conserve their strength so that they will be able to carry on the heavy work of rearing brood when spring comes.

THIS is not a discussion of wintering from the standpoint of beekeeping practice, yet there are certain essentials of wintering that should be quite clear from what has been given, and the record of cluster temperature is the basis on which all practical wintering of bees must rest. Suppose, for an extravagant example, that each hive were equipped

with a small furnace which would begin to give off heat as soon as the outer temperature fell below 57° Fahrenheit. In this case we know that the bees would not begin heat generation, for this activity is called forth by the temperatures of the air immediately surrounding them. Bees in a hive with such a small furnace would have an easy time in winter, and they would have their vitality so completely conserved that they would be capable of vast labors in spring brood-rearing and in the gathering of early nectar and pollen. Such a colony in a properly arranged furnace-heated hive would do great things the following spring, as we know from having tried certain comparable experiments.

But the beekeeper is unable to place such a furnace in each hive, both from inability to stand the expense of such equipment and from the standpoint of the nuisance involved from such labors on his part. What is the next best thing for him to do? Merely to place insulating material about the entire hive so that whatever heat is generated by the bees shall not quickly be lost, thus requiring far more heat production on their part. The beekeeper places insulation about a single hive or about a group of two, four, or more hives when he winters his bees outdoors, or he may place his entire apiary in a well constructed cellar, which is equivalent to placing insulation about the whole apiary at one operation, for heat is lost less rapidly from the hives in a good bee cellar than in unprotected hives outdoors.

A QUESTION of enormous practical importance has also been answered in the story of bee activity in winter. The beekeeper wants to place about his hives the right amount of insulation, and naturally asks how he may determine this amount. It has already been stated that when the temperature of the air immediately about the bees rises, they decrease or cease their heat production. It has also been stated that if the temperature rises to a point higher than 94° they loosen or break the cluster. These facts, when translated into beekeeping practice, mean that it is entirely impossible to place too much insulation about a hive in winter. This is the theoretical reply to the beekeeper, yet it was thought that there might be a slip somewhere in the theory, as has been known to occur elsewhere at times, so it was decided to test an absurd amount of packing about a hive, to see what the bees would give as their answer to this question of the beekeeper. A hive was arranged with sixteen inches of saw dust on all sides, top and bottom, an amount of insulation which no one had ever dreamed of giving. A colony was placed in this insulated hive in fall and its temperature and other activities watched throughout the winter. These bees formed no cluster until long after all the other bees of the apiary were busily engaged in heat production. Finally colder weather came and they did form a cluster for a time and generated heat, but the hive was so well insulated that the heat escaped with extreme slowness, and the hive tem-

perature quickly rose. This allowed the bees to break cluster, which they did, forming it definitely again only a few times during the entire winter, when there were cold waves of some magnitude. The bees sat about most of the time doing nothing, so far as the human observer could detect.

THE final answer came the following spring. The question might be asked whether this lazy life in winter had reduced their vigor, but in the spring these bees started their brood rearing with vim, and produced a great colony of bees for the harvest. There seems from this single experiment, as well as from the experience of beekeepers everywhere, with their numerous experiences, no danger from over-insulating bees in winter, which ought to be a great comfort to the practical beekeeper who wishes to be on the safe side.

An organization of insects which can carry on such activities throughout winter is certainly marvelous, capable of commanding our admiration and respect. They may not realize as man would the magnitude of their task, so they are never discouraged, and keep at heat production until they come successfully through the winter or until they die from wearing themselves out, as so frequently happens in poorly managed apiaries. When bees do die in winter from overwork, the beekeeper usually finds an excuse for their death, but naturally these excuses never include his own neglect, for beekeepers are human, if bees are not.



Measuring the Demand for Milk in New York City

By H. A. Ross

MILK marketing, from the producers' standpoint, no longer ends with the delivery of the milk to the country plant. Dairymen now want to know what happens to their product from the time it leaves the farm until the bottle of milk is delivered at the consumer's door. In fact, in order to find out the age, race, and economic status of the consumers, Philadelphia, Boston, and one or two other cities have made surveys tracing the milk down the throats of the children. What happens to it thereafter, the producers have left to doctors and nutrition experts.

This interest in milk marketing is not due to idle curiosity nor, to any great extent, to the desire of producers to enter the milk distributing business. It comes about through the growing knowledge that dairymen will produce plenty of milk for our cities if the price is high enough. The chief difficulty is to sell at fluid prices all the milk we now produce. For this reason, more and

more attention is being paid to the factors which influence the demand for milk. Measurement of these factors will do three things. First, it will give a sound foundation on which to base advertising campaigns intended to increase the consumption of milk. Second, it will give much needed information on the demand side of the market in selling milk to the dealers. Third, since the probable sales of milk under varying conditions can be foretold, it will permit a decrease in the amount of surplus milk now held in the city as insurance against shortage, thus narrowing the margin between retail and producer prices.

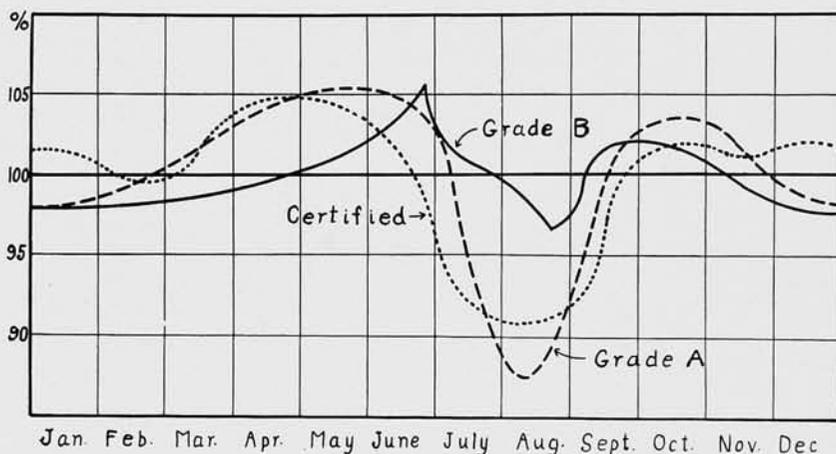
WITHIN the last few years, milk dealers have recognized that producers and distributors have many problems in common, and the old spirit of antagonism between the two groups is being gradually broken

down as mutual problems are attacked co-operatively. An instance of this is a study of the demand for dairy products which is now being made in New York City. The survey has a strong agricultural background, since it is being carried on by the New York State College of Agriculture and the United States Department of Agriculture. In spite of this, the six largest milk dealers in New York freely opened their books and gave out sales data that would have been guarded with the utmost jealousy a few years ago. From the great mass of figures covering the purchases of over a million families, have been gleaned a number of per-

National Dairy Council, has done splendid work in increasing the consumption of milk in a number of cities, but it must be admitted that the marriage license bureau is probably more effective, since children are the principal consumers of milk. The New York City birth rate does not indicate any immediate shortage of children, so a constantly growing market for milk can be expected.

SALES of milk vary with the season because of two opposing factors which affect demand. As temperature rises in the summer, more and more milk is consumed, but hot weather drives many people to the

mountains and seashore, and large numbers of the best customers are lost during July and August. For instance, sales of quarts of Grade B bottled milk rise slowly from the low point in January until the last of June. At this time schools close and the exodus from the city begins. Despite the fact that the temper-



Seasonal Variation in Retail Sales of Quarts of Bottled Milk in Greater New York—Average for the year = 100 per cent

manent facts concerning the demand for milk.

New York dairymen are fortunate in that they have a rapidly growing demand for their product. This long-time trend is the result of two factors: increasing per capita consumption and increasing city population. Since 1921, the average retail purchases of milk for a family have increased at the rate of about two per cent a year. The increase in per capita consumption for all milk shipped to New York, including that used for the manufacture of ice cream, is still greater, averaging about three per cent annually. Whether this per capita increase will continue, will depend largely on the buying power of city consumers and on the success of the various agencies which are attempting to persuade them that a larger proportion of their income should be spent for dairy products. One of these agencies, the

temperature continues to rise and the per capita consumption of those people remaining in the city is higher, the total sales fall off rapidly until the latter part of August. Schools reopen immediately following Labor Day, and families with children of school age return at that time. Sales continue to rise as others come back in September and October, but the weather is not as hot as in June, and sales do not reach so high a point. With the advent of cold weather, the demand diminishes to the end of the year.

A larger proportion of Grade A milk is consumed by children not of school age, and sales of this product differ from sales of Grade B, in that the vacation decrease begins a little earlier and lasts longer, because more of these consumers can ignore the closing and opening of school. Certified milk, which is very largely for baby consumption, shows this to a

still further degree. The vacation period for consumers of certified milk is longer than that for consumers of any other grade of milk.

RETAIL sales of heavy cream reach their peak about the first of June, when fresh berries are on the market, and before the vacation migration has begun. Sales at this time are over 40 per cent higher than they are in the low point during the latter part of August. With the return of vacationists, the sales of cream rise, but the berry season is past, and the high point in the autumn is still 17 per cent below the spring peak.

Buttermilk is a hot weather drink, the consumption being three times heavier in summer than in winter. Bulk milk for store and restaurant trade is also higher in summer than in winter, because this is consumed largely by adults, many of whom change from milk to tea or coffee when winter approaches.

In addition to these seasonal changes, the demand for milk fluctuates from day to day with changes in temperature, increasing with a rise and decreasing with a fall.

A sudden drop of fifteen or twenty degrees has a greater effect than a rise of an equal number of degrees. The effect on sales is least for those grades of milk which are consumed largely by children. Unfortunately, the production of milk in the country responds in an entirely different manner as temperature rises. A sudden hot spell invariably cuts the milk flow. When Henry Ford perfects his mechanical cow, he will undoubtedly have a thermostatic attachment which will automatically regulate the flow of synthetic milk, while the inefficient biological cow will continue to produce less milk at the time it is most needed.

THESE antiquated creatures insist on producing the same amount of milk on Sunday that they do on Mon-

day, even though city consumers prefer to vary their consumption of milk according to the day of the week. In a business district the purchases of milk may fall off one-half on Sunday and one-fourth on Saturday. In a residential district, however, Sunday sales ordinarily go up from one to eight per cent, while three times as much cream may be necessary to supply the Sunday demand.

The holiday demand is likewise variable. On the Fourth of July and Labor Day many people leave the city for a holiday, and the result is a decrease in the sales of milk. Passover and other religious holidays may also

which must go into lower grade products, is no small item.

Fluctuations in demand, due to temperature changes, can also be predicted with a considerable degree of accuracy, but only for very short periods, because of the uncertainty of the weather.

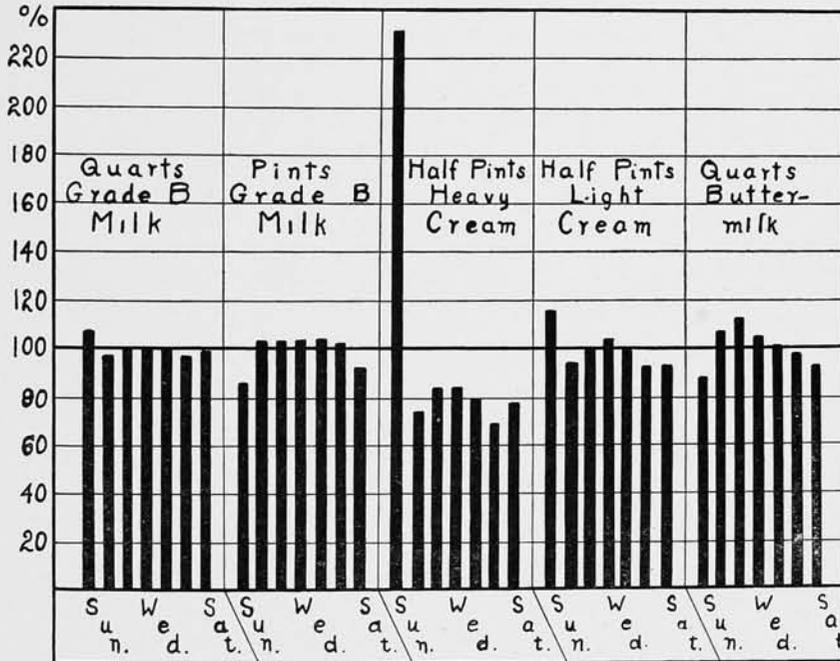
THIS demand study is throwing light on a much-argued question of price policy. For about nine years prior to 1916, the retail price of milk in New York was kept constant at nine cents a quart. Chicago, Philadelphia, and numerous other cities had similar uniform retail milk prices.

It was commonly believed that any increase in the retail price of milk would seriously cut consumption. To a certain extent milk dealers were correct in their belief regarding the fall in demand with a rise in milk prices, because when increasing costs of producing and distributing milk finally forced an advance in price, consumption did fall in most cities. This was largely the result of the consuming public having become accustomed

to an unchanging milk price. Consumers were accustomed to fluctuations in prices of meat, butter, and eggs, and rises in the prices of these commodities did not arouse public disapproval as did advances in the hitherto unchanging prices of milk, beer, bread, and street car fares.

IN RECENT years, as prices have become more stabilized, a number of cities have reverted to the old price system. New York, however, does not hesitate to increase or decrease the retail price of milk as market conditions warrant. New Yorkers have also become accustomed to an advance in the retail price in the fall, and a cut in the spring. The effect on consumption is very much less than is commonly thought. The average net effect of

(Continued on page 97)



Day-of-the-Week Variation in Retail Sales of Milk and Cream in a Residential Section of New York City—Average for the week = 100 per cent

decrease the consumption of milk very significantly. On the other hand, Thanksgiving and Christmas festivities may demand two or three times the normal amount of cream.

Variations in demand, due to seasons, days of the week, and holidays, are quite regular, and sales of milk and cream can be predicted with a fair degree of accuracy some time in advance of the actual demand. In this way, the amount of milk sent to New York, and even the amount bottled, can be adjusted to the probable demand. The advantages are obvious. More surplus milk can be held back in the country, and the saving in freight alone would run into hundreds of thousands of dollars annually for a city like New York. In addition, the loss due to bottling and subsequent dumping of unsold milk,

A Botanists' Expedition to Newfoundland

By K. M. Wiegand

ON A hot Sunday afternoon early in July last, a party of botanists set sail from Boston harbor on the steamship "Northland" for a summer of exploration in the far north country, Newfoundland. Fifteen years before, the senior members of the expedition had spent two summers there and had then determined, if possible, to complete a botanical survey of the island. They were particularly interested in the work because this region had previously received scant attention from botanists, yet during these two summers had developed some of the most interesting problems in plant distribution to be found anywhere in eastern North America. Various things arose, however, to interfere with a return to the island, and with the exception of one or two short visits by one of the party, no further work was done until this summer, when, thanks to our University Heckscher research fund and the Milton fund of Harvard University, everything worked out favorably to make another summer's work possible.

The party consisted of Professor Fernald of Harvard University, Mr. Long of the Philadelphia Academy of Natural Science, Mr. Ludlow Griscom of the American Museum of Natural History, Professor Pease of Amherst, the writer, and two assistants.

EARLY Monday morning we disembarked at Yarmouth for an all-day journey by rail across the barrens of southwestern Nova Scotia, where a flora was seen that reminded us of the pine barrens of New Jersey and the sandy stretches on Long Island and Cape Cod. After spending the night at Halifax, we traveled all the next day through the more mountainous and wooded sections of eastern Nova Scotia, passing along the shores of the beautiful Bras D'Or Lakes, and finally reaching North Sydney in time to take the steamer Kyle for Port au Basque, the port of entry at the southwest corner of Newfoundland. Cabot Strait is about 70 miles wide at this point, and is often a very turbulent piece of water. But fortune favored us this time, and though the boat was fearfully overcrowded, the water was smooth and the passage comfortable.

Newfoundland is often a surprise

to the visitor who arrives there for the first time. On the map of North America it appears as a small spot at the mouth of the St. Lawrence river, but it really is a country of considerable size, triangular in form, with sides approximately 300 miles long. In area it is nearly as large as New York state. Moreover, it is not a part of Canada, but is a separate British colony, with its own governor-general, currency, postage, and customs. It is, in fact, Great Britain's oldest colony.

EARLY in the morning, after our first view of the rugged rock-bound and mountain-flanked coast, we disembarked to see our rather voluminous baggage through the customs, preparatory to a trip of 150 miles by rail to Curling, on the west coast, where the mail steamers leave for northern Newfoundland and Labrador. This railway is interesting, as it is a narrow gauge road running a distance of about 500 miles along the coast and across the center of the island to the only city, St. John's, at the southeastern corner. Passenger trains leave the terminals every other day. The train itself is quite pretentious with baggage car, first and second class coaches, sleeping car, and diner.

NEWFOUNDLAND is a picturesque country. Although the interior consists of an alternation of spruce and fir forests, with immense stretches of caribou barrens and many fine lakes, the coast is rugged and generally rock-bound, with here and there deep fiords, sometimes several miles in length, which penetrate between the hills and form excellent harbors for ships of the deepest draught. There are no high mountains on the island. A long tableland known as the "long range" extends about three-fourths the length of the west coast. It is about 2,000 feet high, flat-topped, with steep sides. The summit is very barren and often snow-capped until July.

Being an island, Newfoundland is not rich in kinds of animal life, but caribou and hares abound, and the black bear is not uncommon. Ptarmigan, locally called "partridges," are found on the highlands. Salmon and brook trout are abundant in the streams. The island, like Ireland, is free from snakes of all kinds and all

species of amphibia. However, it is not free from winged insects. Everywhere in the wooded districts the black fly makes its presence known, often in such numbers as to render expeditions into the interior in summer very difficult. This pest does not disappear early in July as it does in the Adirondacks, but keeps on the job throughout the summer until frost.

THOUGH the minimum temperature reached in the winter is no lower than that often experienced in central New York, the winters are long, extending from early November until late May, and the summers are short and cool, although there are each summer a few rather warm days. Daylight in summer is several hours longer than at Ithaca, and plants apparently pass through their growing season more quickly.

Climatic and possibly other conditions, as for instance, limited glacial till, have been such that agricultural soils have been produced in very small quantity. Much bare rock is found, and if covered, the soil is usually largely composed of peat. The combination of short cool growing season and inappropriate soil has prevented Newfoundland from becoming an agricultural country.

About the only New York state crop to be grown successfully on the island is the potato, though wheat is grown in very limited quantity in a few localities toward the southern shore. On the island toward the north, nearly every family has a garden in which potatoes, turnips, and cabbage are grown. It is interesting to see beautiful potato gardens, practically free from blight and totally free from the potato beetle, thus insuring an almost perfect foliage and a very high yield of tubers which are often of large size. These gardens are sometimes on slopes with furrows down between the rows through the black soil for drainage.

THE primary industry in Newfoundland is fishing, although the exploiting of the fir and spruce timber of the interior, for paper pulp, mine props, and building lath, has begun in recent years, and lately has reached considerable proportions in certain localities. Because of these conditions, the scanty population of

the island is chiefly located in villages and hamlets close to the coast.

The cod is Newfoundland's chief output, although some other fish are caught in moderate quantities and lobster fishing is locally important. Whales were once abundant but are now seldom taken. Seals are still caught in numbers at the north where the skins are a necessary part of the winter clothing of the inhabitants. Seal-skin boots, devoid of hair, are worn by both men and women along the Straits of Belle Isle.

THE most characteristic feature of all the villages is the flats for drying codfish. These are extensive slat or pole platforms elevated from 3 to 8 feet above the ground. On these the dressed fish are spread out to dry. The cod is now caught principally in net traps let down to the bottom of the moderately deep water, where the fish occur in schools. The older methods of trawling and jigging are still used, however. The trawler baits each of his many hooks; the jigger, on the other hand, catches his fish by jerking his unbaited hook until a fish is accidentally caught. Though this would seem a slow process, he is not long in hooking a fish when they are abundant.

The fish are caught in enormous quantities and sold by the "quintal" or hundred weight. They are salted and dried and shipped to distant parts of the world, much of the catch going to the Mediterranean region and to South America. When the fishing is good the fisherman makes a fairly comfortable living, but the codfish is fickle and often deserts this or that portion of the coast or may be generally scarce. The income of the fisherman is therefore very uncertain and he is often threatened with hardships and famine. The fishing population of Newfoundland is now almost entirely of British descent. The people are friendly, hospitable, and sincere, and we greatly enjoyed our stay among them.

After leaving the customs at Port au Basque, our trip on the New-

foundland railway to Curling was uneventful. Here we boarded the mail steamer, "Home," for the last lap of our journey, a distance of 150 miles along the northwest coast to our destination at Flower's Cove. The mail steamer makes one trip weekly through the summer months, stopping at the various Newfoundland ports and also those along the southern coast of Labrador as far as Battle Harbor. On its way it discharges and takes on mail, freight, and passengers, this being done chiefly by lightering by motor and row boats, as docks are few.

Communication in northern Newfoundland is almost solely by boat in the summer, either by mail steamers or by private motor boats of which each well-to-do fishman owns at least one. In the winter, it is entirely by dogsled or man-back, as horses, wagons, and sleighs are extremely rare. Roads are almost entirely unknown at the north, and the automobile is yet to make its appearance. North and south Newfoundland are very different in this respect. In southern Newfoundland, both roads and automobiles are found in limited numbers, although the dogsled is absent. Several paved roads have been constructed in southern Newfoundland near the city of St. John's.

WE MADE our headquarters for the summer with a fisherman's family in the village of Flower's Cove. This town is the shire town, or county seat, of the northern province of Newfoundland. From this point as a center, we explored the coast and land lying back of it for a distance of 100 miles along the Straits of Belle Isle and the Gulf of St. Lawrence. Most of the land explored consisted of limestone barrens and peat bog land, with here and there scanty tree growth. These barrens are only slightly above sea level and are vast horizontal stretches covered with small or large broken fragments of rock, often giving the appearance of crushed stone for the highway. Where poorly drained, the rock is covered with peat barrens

surrounding innumerable small lakes and pools. These peat barrens, or tundras, as the botanist calls them, are often miles in extent.

The explorations were done by mail boat, motor boat, and on foot, but travel was so slow that our full program for the summer could not be completed. We visited the tablelands along the coast toward the southern end of our area several times. It was necessary to pack in on man-back and camp for several days to work that area. Caribou and bear are found on these tablelands, but they did not honor us with their presence.

Flower's Cove was not far from the headquarters of the Grenfell Mission to the deep-sea fishermen, and we became acquainted with many doctors, nurses, and teachers connected with this mission. One of the Grenfell hospitals is located at Flower's Cove.

THE time for college to open was fast approaching, and other duties were beginning to demand attention, so early in September we reluctantly packed our baggage and our collecting outfits and began our homeward journey, this time, however, by the way of southwestern Labrador and the north shore of the St. Lawrence to Quebec. We returned with a feeling that the summer had been eminently successful. Not only had we secured 13,000 plant specimens to distribute to scientific institutions, but we had added 12% of new names to our previous list of the island's flora. Many of these newly discovered plants, a few of which were entirely new to science, showed remarkable peculiarities of distribution, some of them being found elsewhere only in the Rocky Mountains or in Europe.

There is yet much work to be done in Newfoundland before nature has yielded up all her secrets there, and we are all looking forward to the time when we may go again and continue the study of this most interesting island flora.





Through Our Wide Windows



The Cornell Countryman

Founded 1903

Incorporated 1914

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Ithaca, New York

December, 1925

PROFESSOR Phillips's article on how bees behave in winter contains an object lesson from which all of us might well profit. He tells us that when the temperature drops below the point at which bees can perform their labor individually, they form a cluster to manufacture heat to keep them warm.

If human beings had more of this clustering instinct, perhaps we would be better off. When we see that we are not making a go of it individually, we would probably do well to cooperate with others to form a more efficient system, and to use to the best advantage our individual efforts for the benefit of the group.

Like the bees, we do well alone when the sunshine of prosperity beats warm upon us, and the clover fields of business just ooze with the honey of profits. But let the winter of bad times come, and it finds us unprepared to meet it, and unlike the bees, unwilling to cooperate to combat it.

The trouble with us is that we have an inborn sense of independence, which we are reluctant to give up, even though it is to our advantage to do

so. We want to live our lives in our own way, no matter if we succeed or fail. We are a little suspicious of our fellow men, and doubt their motives when they suggest cooperation.

Let us take a lesson from the bees. When necessity and good sense demand it, let us learn to cluster.

IS housekeeping a job for educated people? Must not the housekeeper give up her former work and aims and settle down to a life of drudgery?

That was the old idea, but today the woman looks upon housekeeping as a vocation with as much dignity and prestige as any other work, and is making a business of learning how to have better homes.

But why waste money and time on a college education if she intends to be only a housekeeper? Because a college course is essentially the best possible foundation for the vocation of home-making. It forms habits and associations which mean much in later life. It teaches her to use her mind, to meet problems squarely, to do her work systematically, and to develop good judgment.

The change from college days to practical life and to home-making should not require settling down. By continuing to investigate, to find new methods, to systematize her work, to look always for the reason for things, and to do them differently if the new way is better and easier, the so-called drudgery disappears, and she may find ample time for friendships and social life.

After all, college is not an institution separated, as many suppose, from home-making. Rather, it tends to establish a better home life, which may be of incalculable benefit, especially to the next generation.

THERE is beauty in the great open spaces, in the hills and trees and streams, but to one whose interests are agricultural, there is just as much beauty in the furrow-slice of this old earth's crust as in the other wonders of nature.

This ever-changing thing, the soil, holds for man at the same time both a challenge and a promise—the challenge of understanding its possibilities and intricacies, so that he may direct the man-soil partnership to success; and the promise of food and clothing and the building of a strong race of men.



Former Student Notes

'88

The superintendent of the Forsgate Farms at Jamesburg, N. J. is G. D. Brill.

'91

Jared Van Wagenen is one of our early graduates who is still in the farming game at Lawyersville, N. Y. He has a considerable reputation as a lecturer and writer and also is the president of the Schenectady County Farm Bureau.

'93

A fine herd of Ayrshire cattle is owned by Morgan Myers at Barneville, N. Y. The herd is maintained on a farm of 140 acres.

'98

B. F. Copley modestly writes that he was surprised to see his name mentioned in our former student notes. He adds that he has been given the honor of holding down the mayor's chair in the city of Wichita, Kansas, for the coming year. He is one of the city commissioners. Mr. Copley is one of our early short course students in dairy and is at present engaged in the ice cream and dairy business in Wichita.

Henry C. Arnold Jr. is operating one of his own farms of about 150 acres. He has over three hundred acres besides, that which he rents on a share basis. His address is Holcomb, N. Y.

'01

The secretary of the Schoharie Farm Bureau is O. E. Williamson who lives at R. D. 2, Schoharie, N. Y. He is farming in the Schoharie valley.

'02

Elnathan G. Phillips is selling all kinds of insurance in Holcomb, New York.

'04

George A. Bell is doing some an hus work in the remount service of the U. S. War Department, at Sacramento, California. Mail will reach him addressed in care of this department. Before the war, in which he served as a captain in the remount service of the U. S. Army, he spent five years as a livestock and poultry farmer at Rome, New York. In 1919 he investigated livestock conditions

well as a farmer at Eldridge, New York.

'06

Charles W. Mann is a pomologist in the Bureau of Plant Industry, U. S. Department of Agriculture. He is in charge of the fruit transportation and storage investigation, with headquarters at 314 Bradbury Building, Los Angeles, California.

The man directly responsible for the poultry division of the large Forsgate Farms at Jamesburg, N. J. is Clarence A. Cornell.

'07

The past president of the Albany County Farm Bureau is Anson H. Rowe who is now farming at Feura Bush, N. Y. He is also acting as land bank appraiser for that district.

Ralph Day is farming with his brother at Canandaigua, New York.

Frank Thayer is operating a dairy farm at Frewsburg, New York, and according to

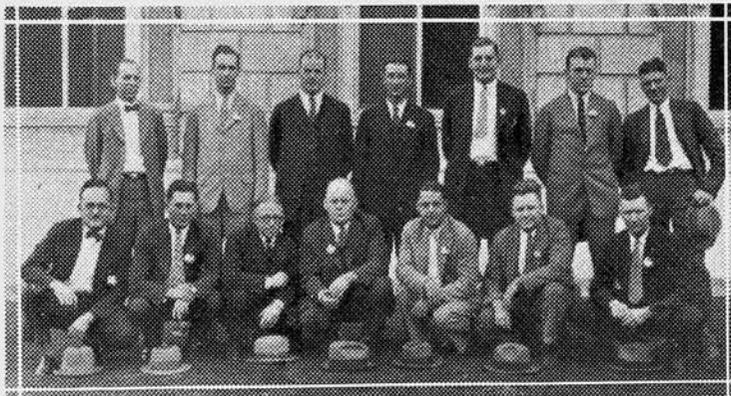
the reports which have drifted into Ithaca, he is really doing the job right.

'08

Charles R. Guernsey is a farmer living on R. D. 3, Schoharie, N. Y. He and his four sons are raising pure-bred Holsteins, sheep, bees, potatoes, and hay. There is also an orchard on the farm of considerable size.

'10

James T. Barrett is a professor of plant pathology and an associate director of the University of California Graduate School of Tropical Agriculture and Citrus Experiment Station at Riverside, California.



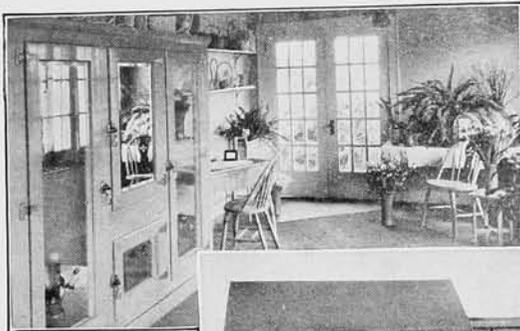
Standing L. to R.—J. W. Bowen '02; M. W. Enos '24; A. K. Strong '25; F. H. Glann '24; H. E. Luhrs '22; C. T. Hartman '22; H. A. Huschke '22. Kneeling L. to R.—W. E. Davis '14; H. I. Frederick '25; F. Kent Sp.; C. W. Nordgren '20; H. B. Davis '23; W. H. Hutchings '22; R. P. Hamilton '23.

One of the features of the annual convention of the salesmen of the Purina Mills, held at the Hotel Chase, St. Louis, Missouri, was the breakfast of the Cornell Purina Club. Fourteen of its nineteen members were present. Those who were absent are S. D. Wilkins '04, Ronald Colston '18, Forest Secor '11, C. D. Hewett '25, and V. V. Smyth Sp.

in Europe for the Federal Government.

'05

W. Robert Dunlop, "Guernsey Bob," former president of the Ag Association in '04-'05 and member of the COUNTRYMAN board, is a breeder and dealer in purebred Guernseys as



How This College Man Found the Secret of Making Money Pleasantly and Easily

THE year before he graduated, his father sold out his coffee business and retired.

But he wasn't the kind who could stay retired.

"Son" hadn't made up his mind what to do after graduation, so knowing how he liked flowers, Dad kind of concluded he would have a decision ready.

So he built this sassy little flower shop in one of the residential sections of Indianapolis.

Then he called us in to add the greenhouse, which he calls his "big glass show case".

Dropped in to see them not so long ago.

Say man, but there is just one of the nicest little gold mines I've bumped into in many a day.

A delightful business in every way, and growing every day.

How about it, don't you think your Dad would chip in on a proposition like that?

Write us. We'll give you all the facts you want, and then some.

More and more college men are taking up this flower business every year.

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New York
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Buffalo

Philadelphia
Kansas City
Montreal

Chicago
St. Louis
Greensboro

'11

George B. Birkhahn writes that another future Cornellian arrived on Columbus Day. The name of the new arrival is Paul Donald. George is living at 11 Mills Avenue, Middletown, N. Y.

Will and Mabel Gill have been farming, just a few miles outside of Medina, New York, ever since concluding their special course here.

Their fifty acres of apples, pears and peaches are among the tidiest of little orchards in Orleans county. They are mighty proud of their fruit, especially peaches, of which they've raised two unusually fine samples, one of whom is Ruth, aged twelve, the other Barbara, nine. Lately they have been handling furs, which they hope will prove both an interesting and profitable side line.

Thomas Bradlee is director of the agricultural extension work of the University of Vermont. His address is 69 North Prospect Street, Burlington, Vermont.

James Cochrane is farming at Ripley, New York. His address is Box 177. Grapes are his specialty but he finds time to serve as chairman of the Farm Bureau in his community.

'12

Alfred Atkinson who received his M.S. here in 1912 is now president of the Montana State College, at Bozeman, Montana.

Howard Henderson is with the Peterson Henderson Seed Company, at 35 Cortland Street, New York City.

Claude Emmons is a consulting lubrication engineer for the Texas Oil Company. His address is White Hall Building, 17 Battery Place, New York City.

H. K. Crofoot of Moravia, and Florence Crofoot '25, who is a student here, and James Crofoot '27 a student in electrical engineering, were recently called to their home in Little Falls, New York, by the death of their father.

'13

Charles E. Allred, who received his M.S. in ag ec here at Cornell in 1913, is now a professor of agricultural economics and farm economics at the experiment station of the University of Tennessee, at Knoxville.

Charles M. Wigren is farming at Frewsburg and is chairman of Farm Bureau in the Frewsburg community.

James Smart is farming at Lyons, New York.

H. Errol Coffin is a landscape architect with his brother Kenneth Coffin, a graduate of the Cornell College of Architecture, in the firm of Coffin and Coffin. His business address is 522 Fifth Avenue, New York City.

John S. Dorman is one of the few '13 men who are still unattached. He is operating his father's fruit farm at Geneva, New York. He is to be congratulated on maintaining his single blessedness.

J. S. Brown is with S. S. Brown & Co. in the wholesale butter and egg business. His business address is 149 Reade Street, New York City. Incidentally but important, he is married and has a couple of youngsters.

John G. Whinery, who has been with the Guaranty Trust Company for the past six years, resigned on September 1, to become associated

**Top Dressing
Talk No. 1**

with J. G. White and Company at 37 Wall Street, New York City.

Francis C. Smith resigned on December 1 as county agent in Essex county, where he has been for the last four years, to join the staff of the Equitable Life Insurance Company in New York City.

'14

Fayette H. Branch is a farm management demonstrator for the Massachusetts Ag College, at Amherst.

Charles Gifford is farming with his brother at Phelps, New York.

William A. "Bill" Hutchinson is manager of the State bulk station of the Standard Oil Company of Indiana. His headquarters are in Bay City, Michigan. Address mail in care of the company.

Harry D. Bauder is operating the Ashland Stock Farm and is one of the directors of the Farmers' and Mechanics' Bank at Fort Plains, New York. His address is Fort Plains.

G. S. Rose is covering western New York as a salesman for the Creamery Package Company of Chicago, Illinois. He is married and has two daughters. He is at home at 284 Thurston Road, Rochester, New York. During the past summer he took a short course in ice cream composition at Penn State.

'15

Mr. and Mrs. Charles H. Reader of 615 Crown Street, Brooklyn, have a son, Miles Meyer, born on June 28.

Andrew Travis is in the lumber and feed business, with the Straight Milling Company, at Canisteo, New York.

Arlyn W. Coffin is secretary of the Chamber of Commerce, Hoboken, New Jersey. His headquarters are at the corner of Newark Street and Lackawanna Plaza.

Harold M. Stanley is farming at Skaneateles, New York.

'16

Milton B. Porter is running the Beechwood Farm at R. D. 24, Ransomville, N. Y.

William L. Webster is managing the A. A. Post farm at Stanley, New York. He has one hundred acres in fruit.

Orley G. Bowen is a county agent at New Brunswick, New Jersey. His address is 335 George Street.

Leslie Brown, former basketball captain '15-'16, is with the Shepherd Crane and Hoist Company, at Montour Falls, New York.

Scrapping worn-out knowledge—

YEARS ago this statement—

"Ammonia must be transformed to nitrate form before it can be used as plant food"

was generally accepted. We know better now. Research has shown that practically all crops feed directly on nitrogen in ammonia form as well. Nitrification may occur, but it is not essential. This statement, too,

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is still often heard, but here again research has shown that young plants take up the ammonia nitrogen as rapidly as the nitrate nitrogen, *if not more so. (false)* Arcadian Sulphate of Ammonia furnishes nitrogen in ammonia form, which is directly and immediately available as plant food for the growing crop. There is no better or quicker acting nitrogenous fertilizer, especially for fruit and vegetables, where shipping quality and uniformity count for so much, than Arcadian Sulphate of Ammonia.

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James C. Corwith was elected chairman of the nominating committee of the New York State Farm Bureau Federation at the recent conference in Syracuse.

Dean Lighfoote is farming at Stanley, New York.

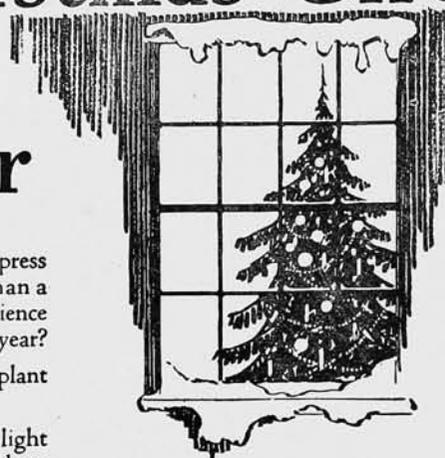
E. E. Honey, formerly an instructor in plant pathology at Cornell, was married to Amy Trowbridge this summer. Mr. Honey is teaching in Wash-

ington State College at Pullman, Wash.

M. P. "Shine" Moon is now at the University of Missouri, Columbia, where he has complete charge of the public health laboratory. He reports an unusual custom at that university. No one is allowed on the grass, not even the professors. Every offender receives a good paddling.

Rodolphus Kent, who has been a

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That's what a Colt Light plant will bring to your home.

Think of the difference good light will make to everyone. To be able to read in any room without hugging a feeble circle of light; and to feel that the eyes of every member of the family are insured against the weakness that is inevitable in badly lighted homes.

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*Write to the nearest branch for the new free book
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produce buyer for the Great Atlantic and Pacific Tea Company at Presque Isle, Me., for the past six years, has been transferred to the headquarters at Jersey City, N. J. He and his wife are now living at 7619 Colonial Road, Brooklyn. They have a daughter, Nancy Elizabeth, born on June 25 last.

"Fred" Schlichter is at present coaching the football and baseball

teams of the Yonkers High School. We understand he was married last November. Perhaps the success of his last year's football team was partly due to this increase of interest.

Waldo B. Cookingham is teaching agriculture in the Phelps High School and is operating a poultry farm on the side. His address is Phelps, N. Y.

'17

Kenneth T. Allan is teaching agri-

culture and is principal of the junior high school at Plainsfield, Vermont. He is married and has one child, Catherine Ellen.

Boyd Blodgett is farming at Fredonia, N. Y. He is married and has three children. He keeps up his connection with the College through the Farm Bureau. He is chairman in the Fredonia community.

Harold Regnault has purchased a farm of 130 acres at La Grangeville, N. Y. He is raising dairy and poultry products.

L. F. "Buddy" Whipple is running the home farm at Lebanon, New Hampshire.

F. K. Smith, who has been teaching school at Clinton, Oklahoma, is now taking graduate work in the entomology department at Cornell. His address is Forest Home, Ithaca, N. Y.

Seth Parsons owns his farm at Sharon Springs, N. Y. He is breeding Holstein cattle and raising alfalfa hay and White Leghorns. He has two children.

Joseph Robson is manager of the Hall Cooperative Association. He packs fruit and sells G. L. F. goods. His address is Hall, New York.

'18

J. A. Reynolds is teaching agriculture in Hammondsport, New York. He has a son, John Peabody, born in late October.

Lester Cooper is a flour and feed salesman at 207 Clinton Avenue, Cortland, New York. He is living on his home farm and managing it on the side.

A century old farm, known as The Hynd's Farm, is being worked by Homer Neville. The place is located at Hyndsville, N. Y.

Ray F. Steve is selling insurance and real estate in Pittsford, New York, as a permanent business. Temporarily, he is located in Buffalo, selling transportation to Florida.

R. H. Taylor is running a dairy of twenty-five Holsteins on his father's farm at Watertown, New York. He sells his milk to the Y. W. C. A. in Watertown, for which his herd constitutes the sole source of milk.

E. Herbert Smith was elected to a position of distinction at the recent conference of the New York State Farm Bureau Federation in Syracuse. He is now a member of the board of directors.

Harvey C. Aldridge is operating his own farm at Victor, New York, on

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Who is not rightfully proud of the "A's" that may appear on monthly or semester report sheets?

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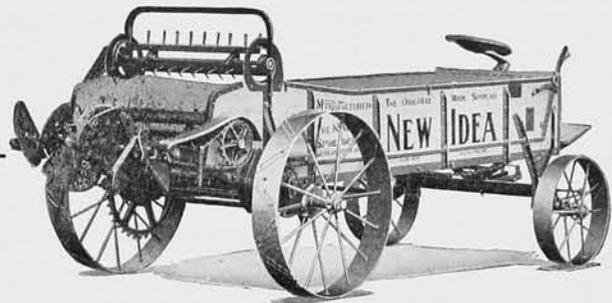


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WHEN you start dairying for yourself the feed bill will be an economic worry bigger than all others combined. A good measure of your success will depend upon cutting down this item to the profitable minimum. And with that in mind you'll be wanting the feed that furnishes the cheapest digestible, milk-making protein, in other words the most protein, of the right kind, per dollar.

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"About ninety per cent of the stuff written about 'The Variety of Proteins' is pure bunk. The feeder who has corn, oats, silage, alfalfa, clover and pea hays needs only one other feed—Corn Gluten Feed."

So declares one of our biggest authorities on feeding. He says that variety is a very simple thing—easy to understand by any farmer who knows his animals.

The purpose of variety is to make the ration more palatable. If there is any other virtue in variety, you get it in your alfalfa, clover and other leguminous roughage.

Feed your corn, oats, silage and clover hay—with Corn Gluten Feed. You will then make meat or milk at the lowest cost per 100 lbs. In proper combination you get the variety your animals want and the protein they need.

Beef cattle make cheaper gains on Corn Gluten Feed than on grain alone. Dairy cows almost double their yield with Corn Gluten Feed in their ration. This practical feed lot experience can not be changed by theories.

The price of corn does not change its analysis. Sell some of your corn and buy Corn Gluten Feed to supply the protein lacking in your grain. Tell us what you are feeding and we will suggest the right ration for you.

We want to help you get more out of your home grown feeds. Write us for advice on feeding. Get your supply of Corn Gluten Feed from your dealer or from any manufacturer.



Associated Corn Products Manufacturers

Feed Research Department
Hugh G. Van Pelt, Director

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No. 21

which he has a good herd of Holsteins.

Mary Blodgett is state supervisor of home economics education, at the Colorado Agricultural College, Fort Collins, Colorado.

'19

Frank App, who received his Ph.D. at Cornell in 1919, is now director of organization of the Federated Fruit and Vegetable Growers Inc., at 90 West Street, New York City.

Harold G. Soper is a very successful cabbage and fruit grower at R. D. 3, Geneva, New York.

Carl H. Schroeder is in charge of the poultry research and service department for the Larrow Milling Company at Detroit, Mich.

Howard Blair is farming at Macedon, New York.

Clarence Barnum is supervising advanced registry cow testing in New York state. His address is c/o H. H. Wing, New York State College of Agriculture, Ithaca, N. Y.

Julius Parsons is working with his father on the home farm, "Parsondale," at Sharon Springs, N. Y.

T. E. Loftus is operating a retail grocery store in Binghamton, New York. His address is 131 Schubert Street.

'20

Myron B. Bloy is conducting a retail flower business in Detroit. He is using some rather unique advertising material with good results. He opens his mail at 8901 E. Jefferson Ave., Detroit, Michigan.

It is with profound regret that we announce the recent loss of Rodney W. Pease, county agent in Ontario county. Infantile paralysis claimed the life of his six-year-old daughter during September.

A. H. Robertson is acting as secretary of the New York State Branch of the Society of American Bacteriologists. He was at Cornell November 7, for the annual fall meeting. His address is Geneva, N. Y.

Dr. W. H. Dye was a visitor in Ithaca during November. After receiving his doctor's degree in plant pathology, he entered the commercial field, and is now with the Niagara Sprayer Company of Middleport, N. Y., in the capacity of plant pathologist.

Orson Robson is a very successful fruit and cabbage grower at Hall, N. Y., as well as being president of the Ontario County Farm Bureau. He has made some cabbage selections



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in cooperation with Professor C. H. Myers, of the plant breeding department, which have turned out to be very worth while.

'21

Asa Cheney is working with his father on the home farm at Bemus Point, New York. He was married last spring but we haven't found out what the fair lady's name is. We wish he wouldn't keep it from us any longer.

Howard Warm, although farming at Frewsburg, New York, has so far disproved the farm management theory that a farmer must be married. He lives with his parents. The Farm Bureau claims a good portion of his time as he is chairman in the Ivory community.

Ruth A. Lee was married to Reverend E. M. Parrott on October 22 and is now living at the Iogues Farm, Lake George, N. Y.

"Ted" Buckley, a former "C" crew man, is married and living at Cambridge, N. Y. He is a partner in a coal and lumber concern in that place.

Lansing Vedder is farming on the Troy Road, Schenectady, N. Y. He is also vice-president of the Schenectady County Farm Bureau.

John Dickenson is head of a department in the Eastern States Farmers' Exchange, at 122 Chestnut St., Springfield, Mass.

One of the recent visitors to the campus was J. A. McConnell, who is now manager of the feed department of the Cooperative G. L. F. Exchange at Peoria, Illinois.

'22

Lee M. Downer is farming at Forestville, New York, and is chairman of the Farm Bureau in that community. He is living with his parents at present and is not married although his days are numbered; we hear that he is engaged.

Mr. and Mrs. E. B. Pratt announce the arrival of Norma Talbot on November 15, 1925. Mrs. Pratt was formerly Frances W. Talbot '22.

Mr. and Mrs. John Beeg announce the marriage of their daughter, Anne Marie, to Bayard H. Staplin on Nov. 11 at Syracuse, N. Y. After December 15 they will be at home at 345 Arlington St., Watertown, N. Y.

Merrill H. Moore, who has been located at Hale Orchards, Seymour, Conn., is now employed on a ranch known as the Leffingwell Rancho at East Whittier, California.



It's Better to Plant Trees in *Blasted* Holes

TREE-PLANTING with dynamite is the approved method among up-to-date farmers, ranchers and orchardists.

Better results are obtained when dynamite is used to prepare tree-holes for these reasons:

makes trees grow faster due to enlarged and better feeding area;
improves drainage conditions by eliminating stagnant water;
creates a water-absorbing sub-soil and makes the trees proof against drought;

brings about a year's earlier return on the investment in new orchards, and increases and improves future yields;

makes re-planting possible on old orchard locations without waiting to rest the land;

helps old trees to bear better fruit and live longer.

Du Pont dynamite is uniform in quality and dependable in action. The du Pont oval trade mark on cartridge and case makes identification certain.

You should have among your text books a copy of the "Farmers' Handbook of Explosives"—a 110-page, profusely illustrated book telling about the use of explosives on the farm. This book will help you in your studies. Send for your free copy today.

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EQUITABLE BLDG., NEW YORK, N. Y.



R. W. Freyschmidt went to Bradenton, Florida, in 1922, where he established an ice cream business. The first year he leased a plant, but the following year he built one of his own. He writes that he is married and has a business representing an investment of \$20,000. Evidently R. W. is on the high road to success and happiness.

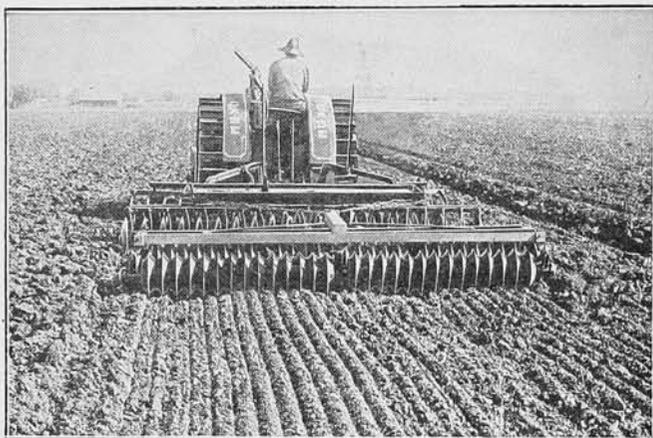
After farming it for two years at Tully, Robert Clark accepted a posi-

tion as assistant county agent in St. Lawrence county. His appointment was recently announced as county agent for Essex county, where he will assume his new duties on December first at Westport.

Martha Parrott is teaching and helping with the agricultural work in the Thessalonica Agricultural and Industrial Institute, Salonica, Greece.

'23

Dorothy Sullivan, now Mrs. Vernon



A Bigger, Better Farm

IN the crooked stick era, an acre of plowing took at least three or four days. The sulky plow cut it down to a day. Case tractor equipment makes an hour's work of it.

Case tractors, bought to save hired help or to do more timely work, are surprising hundreds of owners who find themselves able to farm more land and make more money.

This is due to the great capacity for work and sturdy dependability that is built into Case tractors. Every farmer who uses a Case has this opportunity for more profit.

Write for a copy of the new "Modern Tractor Farming" which tells how the tractor can be used to increase your earning capacity.

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Established 1842
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Case Farm Tractors, Steel Threshers, Harvester Threshers, Silo Fillers, Baling Presses, Steam Engines, Road Machinery, Grand Detour Plows and Disk Harrows.

G. Caldwell, is living at 144 Commonwealth Avenue, Buffalo, N. Y. She has a fifteen months old baby boy.

"Burt" Leffingwell, who was extension instructor in animal husbandry last year, is now helping his brother run a farm at Ashley Falls, Mass. A poultry plant is connected with the farm.

A son was born on October 23 to Mr. and Mrs. Philip Wakeley. Mrs.

Wakeley was Alice C. Carlson. Mr. Wakeley is connected with the U. S. Forest Service and is stationed at Bogalusa, La.

Donald B. Whitson is managing a feed store at Afton, N. Y., for the G. L. F. Exchange, Inc.

Milton T. Lewis is an instructor in plant breeding at Pennsylvania State College and lives at the Alpha Zeta Lodge, State College, Pa.

Dorothy Brennan spent the summer

traveling in California. Letters addressed to Rutherford, N. Y., will reach her.

Sihon W. Baker is now on the Bonalevo Farms which his father has recently purchased. The farm is at Batavia, N. Y., and consists of more than 600 acres with over 50 acres of bearing orchards. It is stocked with over 125 head of pure-bred Holsteins producing certified milk for Rochester, Syracuse, and Buffalo markets. Besides the milk business the farm is producing apples, cherries, pears, and hay.

Walter Dann is with the New Haven Gas and Electric Company in New Haven, Conn.

'24

John C. Hurlburt is manager of the Kraft Cheese factory at Milledgeville, Illinois.

George R. Kreisel has been working in New York City with the Pacific Egg Producers. He writes that his job is a cross between accounting and statistical work. His address is 113 Chester Avenue, Bloomfield, N. J. Just this evening we learned that George had been taken sick while driving his car last week end, Nov. 14, on a trip to Goshen, N. Y., to see "Mac" Makuen. We understand that he was taken to a local hospital for treatment. Any further information we obtain will be passed on in the January issue.

G. S. "Tim" Butts is taking the place of H. A. Stevenson, who in the agricultural text book department of the McMillan Publishing Company in New York City. "Tim" is supervisor of the home study courses given by the College. He is also taking graduate work.

Raymond L. Taylor was married on September 5 at Jamaica, N. Y., to Miss Francena R. Meyer, daughter of Mr. and Mrs. Henry V. C. Meyer of that place.

Ruth E. Miller is teaching homemaking in the High School at Phelps, N. Y.

Marjorie M. Dean was married in Battincare, Md., on June 24 to Harold F. Perry. They are now living at Boonville, N. Y.

"Joe" Boland is employed by the Agricultural School at Canton, N. Y.

Marian R. Salisbury is teaching homemaking in the high school at Trumansburg, N. Y., and living at the Hotel Tremaine there.

In a letter from Charles W. Skeele we read: "I am now with the Massa-

(Continued on page 102)

Measuring the Demand for Milk in New York City

(Continued from page 85)

the last twenty changes in retail milk prices is a trifle over one per cent for each one cent change. In other words, an advance of one cent a quart, which is quite an appreciable percentage change, has about the same effect on the consumption of milk as a decrease in temperature of fifteen degrees on a summer day. Within reasonable limits, therefore, the retail price of milk can be advanced without seriously curtailing consumption, whenever production conditions in the country justify an advance to the producers. In other words, there is little elasticity in the demand for milk, and low prices to producers are much more likely to result from dairymen producing too much milk than from the city decreasing its consumption. Conversely, high prices can be paid to producers whenever there is a shortage of milk in the country.

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can help

Registration for the second term begins February 5, 1926. A catalog of information will be sent on request to the secretary of the college at Ithaca, New York.

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238 College Avenue

ROUND UP CLUB JUDGES TOWNSENDVILLE DEBS

Chicken Dinner a la Bucket Brigade Is Gastronomic Success

While on a sheep inspection trip this fall, the members of an hus 13 were treated to a chicken dinner in the Townsenville, N. Y., church and were invited to return when the residents would have their eligible young ladies "on review."

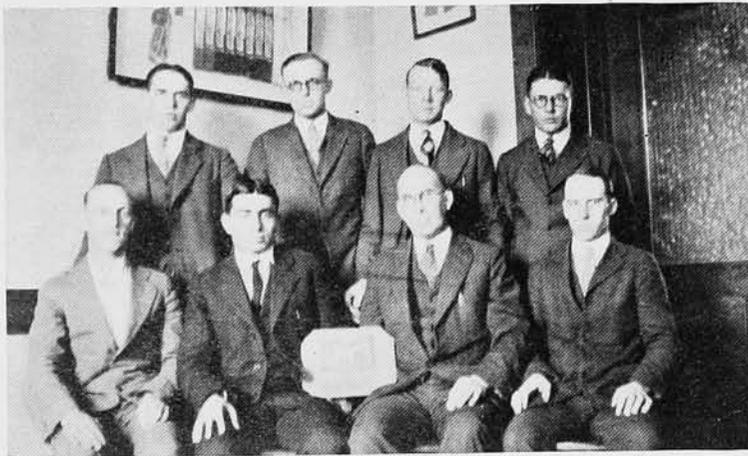
The members of the course reported such likely prospects that the meeting, on November 2, of the Round Up club was arranged to be held in the church. As a means of comparing the ability of the eligibles in the culinary art a banquet was also arranged at which Professor C. T. Conklin, secretary of the Ayrshire Breeders' Association of America, and Dr. C. E. Ladd, director of extension, were the guests of honor. Professor "Bob" Hinman ably acted as toastmaster for the gathering of sixty-five faculty members and students.

The comparing of the culinary ability was preceded by singing of the alma mater, after which "Little Bill" Bishopp '26 said grace. The courses of the banquet were served a la bucket brigade and the great speed thus attained hardly gave "Larry" Taylor '27 time to lead the singing of Cornell songs between the various stages of the filling-up process. In return for Professor Hinman's explanation as to why the meeting was held in Townsenville someone yelled "bring on the women." During the feeding period several members indulged in private contests which are usually considered tabooed in "high hat" circles.

Livestock History Presented

After a short speech by President "Happy" Sadd '26, Professor Hinman introduced the farm and home bureau agents of Seneca County. They were followed by Professor Conklin who pronounced the feed a "gastronomic success." Professor Conklin gave an interesting survey of the livestock history of the country, stating that the greatest development has been since the Civil War, which was followed by an increase in the nation's transportation facilities. He made three significant observations in the course of his speech. First, due to economic conditions the dairy cattle have the edge on general

livestock enterprises in the east because they return more human food per unit of food consumed; second, the tendency of the nation to consume young animals has revolutionized the meat production of the country; and third, there is a demand for the highly specialized animal in preference to the so-called dual purpose types.



The 1925 judging team of the an hus department. Upper row, L. to R.—"Bob" Mitchell '26; "Happy" Sadd '26; "Red" Mereness '26; E. Van Voris '26. Seated L. to R.—"Bill" Bishopp '26; "Gil" Gulbenkian '26; Professor C. Allen, Coach; Lyle Arnold '27

Dr. C. E. Ladd presented the members of the livestock judging team with the College shingle. Professor "Hy" Wing and several other men prominent in New York agriculture, spoke to the gathering.

SHORTHORN CLASS SMALLER: COALITION CLUB ORGANIZED

Registration of short course students this fall showed a marked decrease over registration in previous years according to figures in the office of the secretary of the Ag College. There are 130 students, about one-fifth of whom are former shorthorns. As in previous years the records show that a majority of the students are interested in the course in general agriculture. There are five Indians and several foreign students enrolled.

Shorthorn activities began on November 7 with a general meeting in Roberts assembly, where a coalition of the former short course clubs was effected. This results in the elimination of the six clubs which have existed in former years, and the substitution of one club for all short horns. At the organization meeting temporary officers were elected, and a program of songs and talks was concluded with the "passing of the ice cream cones." The club meets once each week.

STUDENTS SUBMIT PLAYS FOR ANNUAL KERMIS AWARDS

Eastman Stage Aspirants Compete For Place in Semi-Finals

Initial steps in the preparation of the annual student contributions to the Farmers' Week program have been taken in the closing of the Kermis play competition and the first elimination of Eastman Stage aspirants.

"Al" Van Schoick '27, acting manager of Kermis, this year explains that while in the past it has been customary to present only student written plays, this year it has been decided to enter these plays in competition with the state-wide rural life play contest conducted by the department of rural social organization in conjunction with state farmers organizations. Approximately forty plays have been submitted for the \$200 prize offered in the state wide contest.

Students in the Colleges of Agriculture and Home Economics were eligible to enter plays in the Kermis contest, in which a \$75 prize is offered for the best play and a \$25 prize for the second best. The awarding of the prizes rests with a faculty committee composed of Dr. R. P. Sibley, Dr. E. A. Bates, Professors L. A. Felton, B. L. Melvin, J. E. Rice and R. Roberts, who will judge all plays submitted. All manuscripts were due in the office of Acting-dean Cornelius Betten by noon of Dec. 1.

Speaking Squad Cut

The preliminary weeding of Eastman Stage speakers occurred on November 30 in Roberts assembly, where twelve contestants were selected to compete in the semi-final contest to be held December 14. Speeches for the first elimination were of three minutes' duration and there was no restriction as to subjects. All speeches in the semi-finals are to be on agricultural topics and must be confined to fifteen minutes. Students selected to compete in the final contest, which is an annual Farmers' Week event, and for which there is a first prize of \$100, will be given individual coaching by Professor G. A. Everett and G. E. Peabody of extension.

SPEAKERS SWAP STORIES AT FORESTER'S MEETING

Tree Tales and Hot Dogs Swallowed by Embryo Lumberjacks

"The foreman of a gang of Texas rangers had stationed two of the group at the far end of a large hollow tree which stretched across a stream to check up on the steers they were driving through the tree. The rangers checked 381 steers short and an investigation proved that the lost animals had strayed off in a hollow branch of the tree."

It was that which we heard a man, whom afterward proved to be Mr. C. W. Pedis, State Forester for the State Conservation Commission, tell when we happened to drop in on the forestry meeting on the evening of November 4. With such an auspicious introduction to the gathering we decided to remain and heard Mr. Pedis and Colonel J. C. Nicholls of the R. O. T. C. swap stories (?) of outdoor life until the eats committee filled them (and us) with hot dogs until the increased diameters of the members at the waistline crowded us for room until we were pushed out the door.

Before being thus removed we gathered from Paul Logan '26, president of the club, the information that the next meeting would be in the form of a report by Professor A. B. Recknagel on the Utilization Conference which the Empire State Wood Users Association held during the month at Syracuse.

STATE BANKER'S ASSOCIATION COMMITTEE MEETS IN ITHACA

The agricultural committee of the New York State Bankers' Association met on November 7 in Ithaca to consider ways in which the Association can be helpful to New York farmers. The meeting was arranged by Professor W. I. Myers of ag ec. Among the speakers were Director of Extension C. E. Ladd, Professors G. F. Warren and V. B. Hart of farm management, and Paul Young, junior club leader. Plans were formulated for helpful cooperation by the Bankers' Association in increasing credit facilities of the banks to farmers, in broadening the scope of the junior club work, and in distributing the farm account books prepared by the College of Agriculture.

COLLEGE DELEGATES MEET

The annual meeting of the representatives of the forty-eight land-grant colleges was held in Chicago, November 17-19 inclusive. The purpose of the conference was to discuss problems of administration of the extension, research, and resident instruction phases of agriculture, home economics, and engineering. The representatives from Cornell were Dr. R. W. Thatcher and Dr. C. E. Ladd from the Ag College, Professor Flora Rose and Professor Martha Van Rensselaer from domecon, and Dean D. S. Kimball from engineering.

'ZAT SO!

(From the COUNTRYMAN, Dec., 1905)

Mr. Henry Ford, a native of Michigan, has invented a farm automobile that he claims will cost only \$400, and will do the work of four horses, and can still be transformed into a stationary engine. Mr. Ford is a practical farmer, which gives us reason to believe that the invention may prove useful.

AG AND HOME EC COLLEGES ISSUE EIGHT BULLETINS

Among the new bulletins issued recently is one by the College of Home Economics on home sewing and another on health and personal appearance. The College of Agriculture has issued six other bulletins, one on hill-unit selection of potatoes, another on the manufacture of cottage and other soft cheeses in the home, the methods of testing and determining the relative values of milk, the storage scald of apples, the feeding of work horses, and bearded iris. Any of these may be obtained by writing to the publication office of the College of Agriculture.

MAX SCHLING LOAN FUND GIVEN TO FLORICULTURE

A new loan fund to aid worthy students in floriculture has recently been established through the generosity of Max Schling, a prominent retail florist in New York City. The many persons who visit New York to study Mr. Schling's methods, are required to pay a fee of \$50 for one week's observations. These fees Mr. Schling has agreed to turn over to Cornell as the "Max Schling Loan Fund." Its administration rests with the floriculture fraternity, Pi Alpha Xi, of which Mr. Schling is an honorary member.

PROF. MYERS ATTENDS MEET OF AGRONOMY SOCIETY

Professor C. H. Myers of the plant breeding department attended a meeting of the American Agronomy Society at Chicago on November 16 and 17. Professor Myers was appointed by the president of the Society to represent it in the organization committee for the International Congress of Plant Scientists, which is to be held in Ithaca, August 16 to 23. The meeting at Chicago was held to arrange a program for this congress.

MOVIE "CENSORED"

"Home Demonstration Work in the United States," a film produced under the Rockefeller Foundation was reviewed by members of the domecon faculty. The film will be presented in the Scandinavian and Mediterranean countries as educational propaganda.

FEDERATED HOME BUREAUS HOLD SIXTH ANNUAL MEET

Syracuse Gathering Listens to Profs at Three-day Convention

The Federated Home Bureaus of New York state convened at Syracuse on November 10 to 12. This was the sixth annual meeting of the Federation. A large delegation of farmers also attended the tenth annual meeting of the State Farm Bureau Federation at the same time.

Professor Anna Botsford Comstock, emeritus, addressed the gathering and discussed the efforts of Honolulu to bring peace to their part of the Pacific. Professor Comstock has a world-wide reputation in nature study and is well known as a traveler. Miss Martha Van Rensselaer, director of the College of Home Economics, Dr. C. E. Ladd, director of extension, and Professor Bristow Adams also represented the Colleges at the conference.

Owen D. Young, president of the General Electric Company, discussed at one of the sessions the practical possibilities of electricity on the farm. H. C. McKenzie spoke on remedies for the present tax situation.

The farmers were entertained by the rural women on the evening of November 10 in honor of the tenth birthday of the farm bureau organization. A new home bureau motion picture was shown for the first time, its reels showing home improvement in this and other states in the past twenty-five years.

CERTIFIED POTATO SEED TESTED IN SUNNY SOUTH

Seed samples are now being received at the College from members of the New York Seed Improvement Cooperative Association whose potatoes were among the ten thousand acres that were certified in this state last year. These samples are sent to Florida where they are planted in trial plots which are inspected early in the spring by Dr. Karl H. Fernow of plant pathology. In this way the quality of the seed is determined before planting time. This knowledge is of threefold value, according to Dr. Fernow, in that the grower is enabled to plant the best strains; he has opportunity to purchase if his own seed is unsatisfactory and if he has seed to sell the guarantee is an added recommendation of his stock.

COUNTY SOILS DESCRIBED

According to Professor H. O. Buckman of agronomy a bulletin dealing with the crops and soils of Tompkins county is to be published by the College of Agriculture at some time during the winter, the subject matter of which will be based on the work in soil surveying. A technical government survey of Tompkins county, written by Professor Buckman and Mr. Howe is already available for distribution. Professor Buckman states that the bulletin to be published will be of a practical nature.

STRAND

DECEMBER 3—5

PRETTY LADIES

and

5 ACTS OF VAUDEVILLE

DECEMBER 6—9

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in

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Christmas goods.

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binoculars, for instance, would
be appreciated. And they last a
lifetime.

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Sphinx Head

J. E. Frazer
M. C. Howard

Heb-Sa

Professor A. B. Recknagel
R. M. Chase
P. W. Hunter
F. B. MacKenzie
T. A. Parish
J. G. Weir

Helios

A. M. Boyce
H. J. Christensen
L. B. Foreman
K. S. Hart
W. S. Middaugh
F. C. Rich
C. W. Sadd
L. H. Steele
G. W. Sullivan, Jr.
C. R. Taylor
J. W. Willcox

**PROFS WRITE NEW BOOKS;
DAIRY TEXT IS RE-EDITED**

Practical Poultry Management by Professors James E. Rice and H. E. Botsford of the poultry department has been issued by John Wiley and Sons, Inc. of New York. Professor G. W. Herrick of the entomology department has also published a book entitled *Injurious Insects* while extension Professor R. A. Felton of rural social organization has written a

Christian in the Countryside. The former is printed by Henry Holt Company and the latter by the Methodist Book Concern, both of New York.

A new and revised edition of *The Technical Control of Dairy Products*, by Timothy Mojonnier and Professor H. C. Troy, of the dairy department will be out in December.

**RADIO RADIATES ROUND A
RUSTIC RURAL POPULACE**

Beginning December 14, and continuing every second Monday in the month, the extension department of the Ag College is to broadcast from WGY, Schenectady, N. Y., a series of lectures on marketing. The speakers are as follows: from the department of farm management, Professor V. B. Hart will talk this month on "How to Take a Farm Inventory;" Professor W. I. Myers speaks in January about "Some Principles of Successful Cooperation."

Professor M. P. Rasmussen will talk in February on "Potato Marketing;" Professor H. E. Ross of the dairy department lectures in March on "Factors Affecting the Demand for Milk," and in April Professor B. Spencer of farm management will discuss "Factors Affecting the Supply of Milk."

The poultry department is preparing a course which will be broadcasted by the announcer of WGY, as is the College of Home Economics, which is sending articles on home life to be read into the microphone on certain afternoons of the week.

Phi Kappa Phi

Dr. R. P. Sibley
W. E. Benning
H. M. Bull
V. L. Case
M. L. Dake
J. E. Frazer
V. H. Jonas
J. Marshall, Jr.
A. L. Mason
R. K. Mitchell
C. I. Sayles
A. Stone
A. V. Taft

Omicron Nu

B. E. Boyer
C. B. Culver
J. A. Gardiner
A. R. Jonas
J. B. Nundy
E. E. Parsons
M. L. P. Pierstaff
R. C. Pratt
H. B. Vrooman

**MYERS TAKING CENSUS
OF N. Y. COOPERATIVES**

A census of all farmer-owned business organizations, including those now extinct, is being undertaken by Professor W. I. Myers of ag ec. He plans thereby to make a study of the causes of success and failure. Professor Myers requests anyone knowing of a cooperative in the state which has not received his questionnaire to communicate with him.

Former Student Notes

(Continued from page 96)

Massachusetts Mutual Life Insurance Com-

Here is a list of Cornell Ag men who are Farm Bureau agents in New York State.

M. C. Hammond '19—

Binghamton

O. H. Chapin '18—Salamanca

K. E. Paine '23—Jamestown

R. H. Hewitt '13—Elmira

L. E. Allen '21—Plattsburgh

H. L. Vaughn '16—Cortland

A. L. Shepherd '09—

Poughkeepsie

R. F. Fricke '17—

70 W. Chippewa St.,

Buffalo

R. Clark '22—Westport

H. C. Morse '13—Gloversville

L. S. Kibby '22—Catskill

C. G. Bradt '22—Walton

J. C. Otis '12—Lowville

W. C. Stokoe '13—Mt. Morris

W. L. Norman '23—Wampsville

E. D. Merrill '21—

25 Exchange St., Rochester

C. M. Austin '13—Fonda

H. C. Odell '22—Mineola

pany at Syracuse, N. Y., and at the same time running my farm at Clockville, N. Y. Mrs. Skeele (Eva Springstead A. B. '25) is teaching school at Clockville."

Mr. and Mrs. Henry Arnold wish to announce the birth of a son, George Henry, on November 1, 1925, at Rushville, New York. "Hank" is at present managing his father's large general and dairy farm at Rushville.

"Howie" J. Pfeiffer was down to Ithaca recently to attend one of the football games with a party of friends. "Howie" is the flower gardener on the Schoellkopf estate at Lakeview, N. Y.

Arthur H. Brokaw is teaching vocational agriculture in the high school at Owego, N. Y., and lives at 377 Main Street.

'25

Ellen W. Wing is assisting Professor A. H. Wright, of the zoology department, and living at home, 121 Kelvin Place, Ithaca.

A. M. Fennell has a position as manager of the horticultural grounds and greenhouses at the University of Florida.

A. W. "Bill" Dunlap is in charge

of things of a gastronomical nature as steward of the Flamingo Hotel, at Miami Beach, Florida.

L. A. Muckle '16—Lockport

G. W. Bush '11—Court House, Utica

D. D. Ward '12—Court House, Syracuse

R. W. Pease '20—Canandaigua

C. C. Davis '22—Middletown

R. G. Palmer '16—Albion

F. B. Morris '22—Oswego

H. P. Beals '19—Cooperstown

J. D. King '12—Court House, Troy

T. C. Murray '12—Spring Valley

S. R. Farley '18—Canton

W. G. Meal '23—Schenectady

R. F. Pollard '15—Cobleskill

L. O. Bond '21—Watkins

L. C. Anderson '22—Romulus

W. S. Stemfle '20—Bath

E. S. Foster '25—Riverhead

N. H. Eason '23—Owego

E. N. Moot '22—Ithaca

F. M. Wigsten '22—Kingston

C. M. Slack '16—Ft. Edward

L. H. Woodward '16—Warsaw

C. B. Raymond '13—Penn Yan

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SMARTEST APPAREL FOR DAY OR NIGHT

YE EDITOR'S "WE"—

We are merely echoing the sentiment of the students interested in animal husbandry when we put ourselves on record as favoring the petition which has been circulating about the campus. The petition asks for a general introductory livestock course to include judging of the important types of farm animals.

A fellow in our entomology class, when asked what the pupal stadium is, replied without hesitation, "Why, that's the student cheering section."

We find it difficult to wholeheartedly agree with the statement we heard a professor recently make. He inferred the "A" man in college would be the "A" man after graduation no matter what business he entered. While this may be so for a large group, we are inclined to think that the deviation from the average is so great (due to work and outside activities while in college) that the statement holds but little significance.

A plan has been discussed whereby the several college livestock shows in the east and middle west similar to ours during Farmers' Week might be given an intercollegiate flavor. A prominent livestock judge would be selected by a representative committee to judge the shows on a percentage based on the fitting and showing. The college having the highest percent would win a trophy.

Elsewhere on these pages we notice a long list of elections to honorary societies upon the campus this fall. If election means that the initiate is set upon a pedestal as a reward for past performances, then the societies do more harm than good for they retard further achievement—the very thing they should encourage.

A farm boy comes to college;
He's bashful, gawky, and shy;
He plans to spend with caution,
And lay his pennies by.

He's going back, he says, to farm,
To the girl he left at home;
To co-eds, sprees, and dances
His fancy ne'er will roam.

His first formal is disastrous,—
His suspenders didn't hold;
Then skill with years develops
And he gets the stuff down cold.

He soon finds out that wild life
Is a science sure enough;
It conflicts with work and study,
But he doesn't want that stuff.

As a senior he's decided
Country life is too sedate;
The girl and farm wait patiently—
They must—for what a wait!!

Just because domecon was changed into the College of Home Economics which makes the girls ineligible for Eastman stage is no reason to believe that they will stop talking.

Far be it from us to belittle the winsomeness of New York maidens, but our desire to further the veritable renaissance which domecon has but recently embarked upon, prompts us to urge all of them, even though they may not feel in need of such counsel, to send for bulletin E 119, the first beauty discourse issued by the College of Home Economics.

I salt away a book a day on this infernal hill; my mind is crammed, with knowledge jammed, though cft against my will. If every word I've said and heard in any single day were put to press, 'twould make, I guess, a volume for display. If all the dope from lectures got on what is what and what is not were put with wisdom that I grab between my daily naps in lab, and every word on every quiz, and every problem worked—Gee Whiz! The book would grow to healthy size if I am right in my surmise. We might include what mental food I glean from book and text, and what from chalk and what from talk, and what from thinking next. And last the facts I pick and sort in writing up a long report. These are samples, just examples of study on the campus; the things profs dish (against our wish), with which they feed and tamp us.

And so you see the fact remains that every day I gain in brains enough to write a volume on, a volume that 'twould pay to con. My time is thus not idly spent; I'm glad I was to college sent.

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ANNUAL HARRIER RACE WON BY AGRICULTURAL ATHLETES

Ag Soccer Men Win Championship by Defeating Law

Ag College came back into prominence in intercollegiate athletics this fall by capturing two championships in the month of November.

Finishing the full quota of five runners among the first ten harriers to complete the course, the Ag cross country team carried off the intercollegiate championship in the annual run held November 21. Leading his running mate, H. H. Fuller '28, by only 20 seconds, J. D. Pond '28 of Agriculture broke the tape in 18 minutes and 53 seconds, considered excellent time for the three and one-eighth mile course.

Another one of his teammates, P. B. Catlin '28, crossed the line in third position, only two seconds back of Fuller. The remaining two runners representing Ag, M. J. Firey '28 and E. S. Tibbitts '27, finished in eighth and ninth positions. All of these runners will receive College shingles. Arts, Architecture, and M. E. finished in the order given. There were 66 men starting in the run.

Booters Boot Ball

Ag booters kicked through with the championship of the intercollegiate soccer league this year. On November 9 the team defeated Law for the University championship after a hard fought game which continued almost until darkness prohibited further play. The score of the game was 1 to 0. Previously, the booters defeated M. E. for the leadership of league I. A total of 5 games were won out of the six played.

The following men will receive shingles for their work. R. V. Lange '26, C. R. Taylor '26, A. W. Crosby '26, J. G. Weir '26, R. K. Danker '26, J. E. Frazer '26, R. L. Zentgraf '27, S. Abraham '27, H. P. Breitfeld '27, W. S. Salisbury '28, F. Fish '28, P. Purnasri '29, and F. H. C. Liu, Grad.

STUDENTS HOLD HUSKING BEE

On the evening of October 29 an unusual social event in the form of an old-fashioned husking-bee was held out in "Daddy" Tailby's barn, under the auspices of "Art" Pratt '26 and Olive Knight '26. The affair was unique among the social events of Cornell in that there were no stags present. Each of the twenty-four fellows who were present had an incentive to find a red ear right by his side. The committee in charge objected to possible stags "cutting in" every time they found a privilege giving rosy auditory organ of the maize.

EXTENSION MEN GATHER

On November 2 the second extension specialists' conference of the year was held in Caldwell Hall. The feature of the meeting was a talk by Dr. G. F. Warren, entitled *Farmers of 1940*. In this speech he emphasized

the idea that we should look at farming on the basis of the future rather than at the past five years. As the reason why he feels that agriculture is on the upward trend, he said that unless we have an increase in the number of people on farms, an increased demand for food because of a growing population will bring on the farm prosperity.

At the third meeting, on November 28, B. H. Crocheron '08, state director of extension in California, who was on a trip through the east, addressed the conference. He outlined the extension methods they have worked out in California.

KAMPUS KOLLOQUIALS

There have been received from 100 people, living in 23 states and 10 foreign countries, 1,475 volumes for the apiculture library being assembled by Professor E. F. Phillips.

Professors L. A. Maynard and "Bob" Hinman of an hus attended the International Livestock Show at Chicago. At a meeting of the American Society of Animal Production there Professor Maynard gave a paper and led a discussion on the mineral requirements of animals.

Doctor C. E. Ladd spoke on November 3 at a meeting of the Syracuse Kiwanis Club, entertaining thirty-five junior potato club members and their dads.

Doctor and Mrs. G. F. Warren entertained the graduate students and members of the ag ec department with a real old-fashioned get-acquainted party on October ninth at their Forest Home residence.

The campus has been graced by two new faces during the past month. A. W. Gibson, COUNTRYMAN alumni editor, announces the birth of Sally Ann on November 3. Professor R. A. Felton of rural social organization, reports that Robert Paul, arrived November 9, has not made the football team yet but has joined the cheering squad.

Professor E. S. Savage gave a talk at Troy, Pennsylvania November 12, on "Open Formulas. What They Are and What They Mean." He was at St. Lawrence University, Canton, N. Y., November 19 and 20, where he spoke on "Dairy Feeding Practice."

During National Honey Week, November 15 to 21, R. B. Willson of the apiculture department gave radio talks on bees and beekeeping from several broadcasting stations in the state.

Dr. D. S. Welsh, instructor in plant pathology, was married on September twenty-fourth to Miss Graham of Guelph, Ontario, Canada.

NEW ATTRACTIONS OFFERED AT DECEMBER BIRD SHOW

Poultry Certification Association Meets at a Dinner

With an increase of over 100 per cent over the entries of 1922, when 718 birds were entered, the fourth annual New York State Production Poultry Show held at the College, Dec. 1-3, was a success.

The members of the department made special efforts to obtain large attendances at the show and offered, besides the birds on exhibition, several additional attractions to visitors. The educational program included talks on selection and judging of birds and the 4-H club's judging contest. On the second day the meeting of the New York State Cooperative Poultry Certification Association was held, with a dinner. There was also a poultry exchange each day at which poultrymen were given a chance to buy and sell stock.

B. A. SUPERVISES PUBLICITY; ACCEPTS BUCKEYE INVITE

Professor Bristow Adams was in Syracuse, November 9 to 12, supervising the publicity for the sixth annual meeting of the State Federation of Home Bureaus. He was also chairman of the publicity committee for the Ithaca Community Chest. With the assistance of Dave Cook '24, vice-chairman of the committee, "B. A." directed all the advertising and general newspaper publicity in connection with the campaign. It has also been announced that he has accepted the invitation to judge the Ohio state newspapers at their annual convention in February, 1926. This will make the fourth time that Professor Adams has been judge for the Buckeye Publishers' Association.

PROF. EVERETT ENTERTAINS WITH DIALECTAL READINGS

The extension department held a party in domecon on November 28, the function of which was to bring together the old and the newer members of the department. Professor G. A. Everett read a number of French-Canadian poems in his inimitable style. His audience blithely washed them down with doughnuts and cider which rumor holds to have been mighty good going down. Prof Myers and his quartet furnished a number of taking selections. The meeting broke up to the tune of something akin to the Virginia Reel, while various couples gyrated across the floor in a dizzying intricateness of old fashioned steps.

PROF PLANS LEAVE

Professor G. W. Herrick of entomology plans to leave with his family next February for Europe where he will utilize his sabbatic leave in visiting entomological laboratories and entomologists in France, Italy, Switzerland, and possibly Germany and England.

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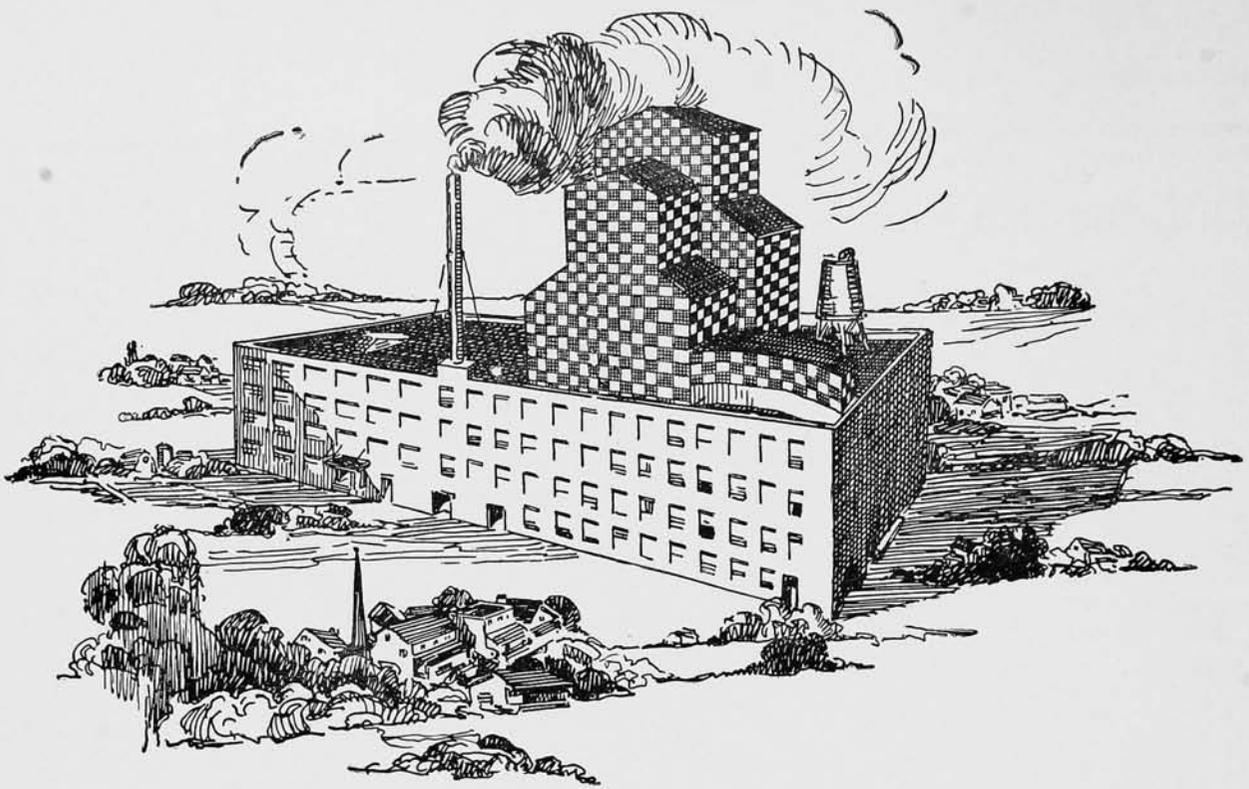


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The Cornell Countryman



JANUARY

1926

Volume XXIII

Number 4



The Corner Post

A fence is as strong as its corner post.

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In sections where farms are electrified you will also find the G-E Farm Book used as a guide. Ask your electric power company for a copy or write us at Schenectady, New York.

GENERAL ELECTRIC



Apply what this man said

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THE other day one of the great American leaders, a self-made man to whom other men listen with great respect, made two very simple statements that have an important bearing on farming.

First, he said: "One great problem before us is the need of reducing costs. Success comes to the man who makes anything as good as anybody else, but also makes it cheaper!"

Here he has hit on the farmer's biggest job. To-day the old methods, old-fashioned equipment, and slow muscle power that turned out a good day's work in 1913 are eating deep into farm economy. The profit is bound to be slim for the farmer who does not cut costs to the bone. He must adopt the faster, more productive methods that add to income, and so raise his family's standard of living.

The further advice of this man is: "I don't believe in Ben Franklin's maxim about saving pennies. If you watch the big things the pennies will take care of themselves."

This is a plea for the most practical kind of economy—a plea for *making* money rather than *saving* money. It comes from a man who began at the bottom of the ladder and built up a great business. If he had hung onto pennies, afraid to invest in money-making equipment, he never would have been heard of. In industry the old equipment is scrapped, no matter how costly, as soon as better, cost-reducing equipment comes on the market. In farming it must be the same.

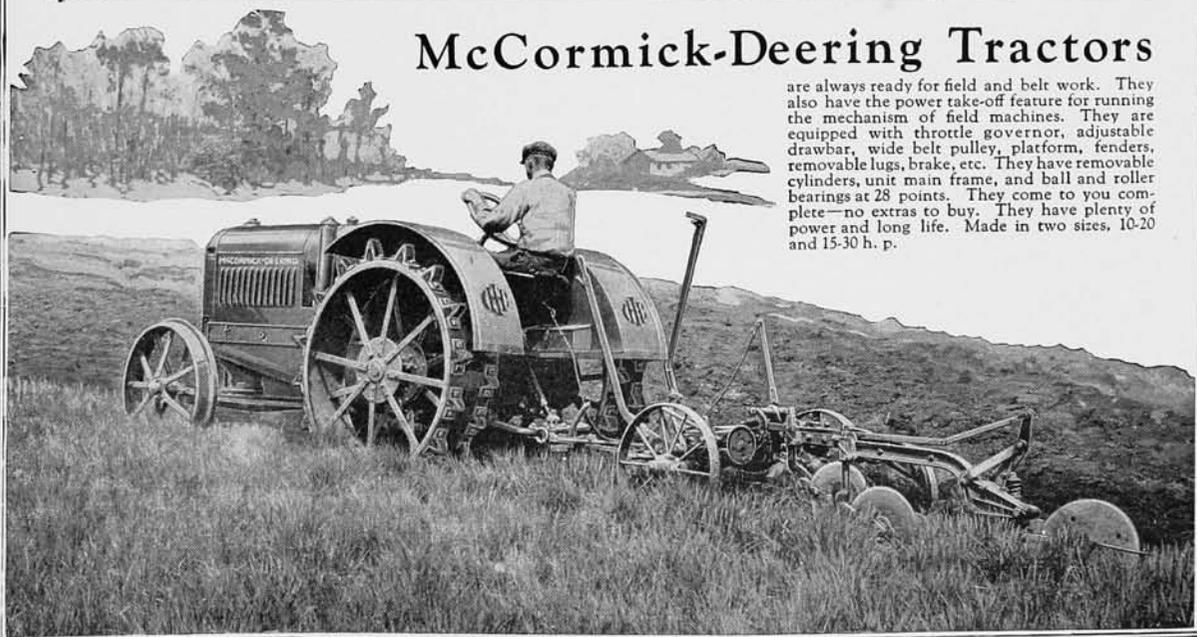
How profitable can you make farming? The question hinges largely on equipment. The methods of 1860 would force a family into poverty today. The methods of 1913, too, fall far short of the changed needs of today.

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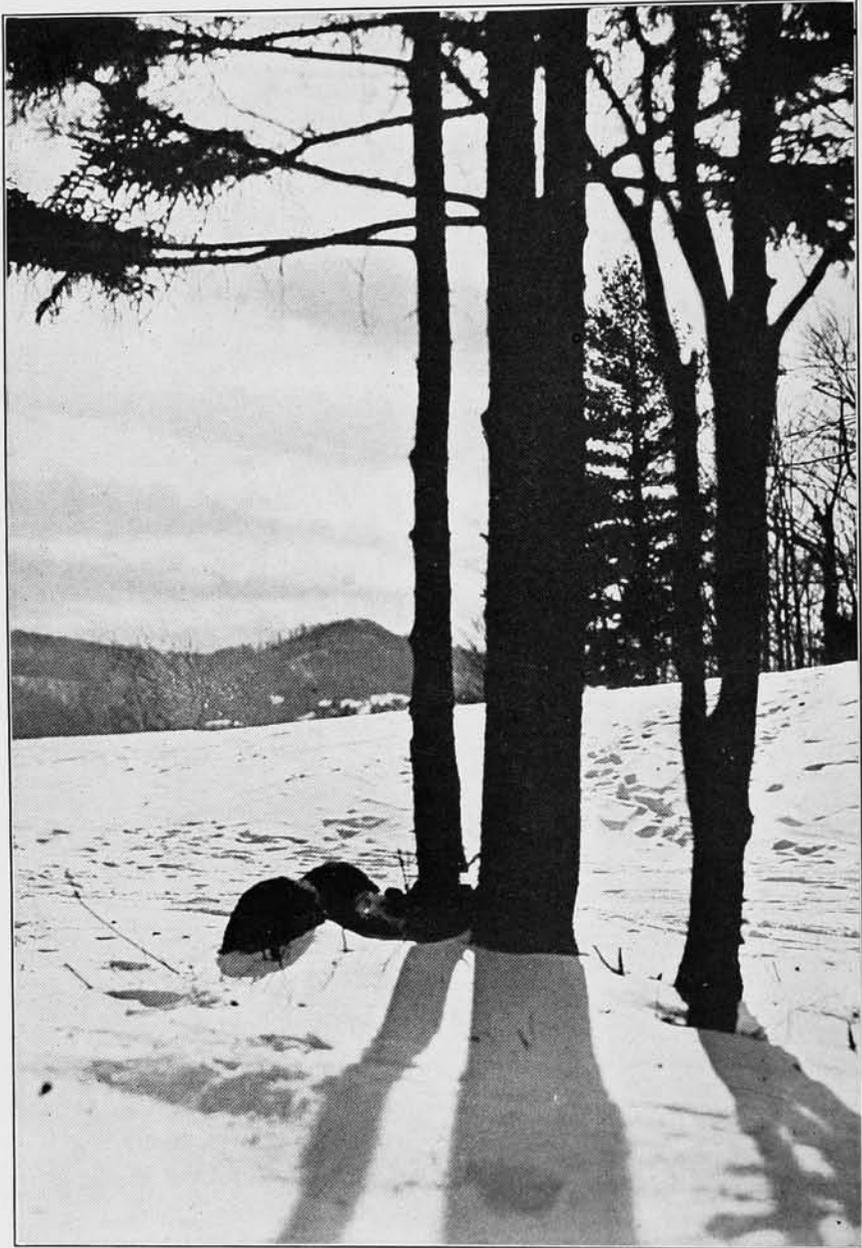
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By Nellie L. Perkins. Dr. Perkins is nationally recognized as an expert in child psychology. During the past two summers, she has been here conducting the nursery school which she describes in her article. This fall she left the Detroit Psychopathic Clinic to become a member of the Cornell faculty.		By A. L. Mason '26. This is a protest against our slumbering college spirit, which the Countryman and the Agricultural Association hope to awaken in the near future.	
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By Leland Spencer, assistant professor of agricultural economics and farm management. In this article, Professor Spencer gives some interesting results of marketing studies carried on by his department during the past three years.		By John H. Barron, extension professor of agronomy. Professor Barron was chosen as the first manager of the first New York state farm bureau at Binghamton in 1911, and is therefore well qualified to contrast its early stages with the present-day development.	
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Afternoon in January

The Cornell Countryman

A Journal of Country Life — Plant, Animal, Human

Volume XXIII

JANUARY, 1926

Number 4

A Modern Laboratory for Child Study

By Nellie L. Perkins

CORNELL now has a nursery school where little people ranging in age from two to four years are learning a great many things about the world they live in and are being encouraged to experiment and work relations out for themselves with the view to developing initiative, independence, and self-reliance.

All the furniture and equipment are especially planned as to size and form suitable for short legs and arms and interesting to two, three, and four year olds. With ten-inch toilets and eighteen-inch wash bowls, it is not only possible for youngsters to look after themselves without adult assistance, but the situation is attractive, interesting, and a challenge to experiment. Besides, if every other youngster in the school is trying things alone and refusing help, a very few—even toddlers—can resist keeping up with the procession. Their self-importance and personal integrity demand equal accomplishment. Tiny lockers, with a shelf for treasures, a place for the cap or hood, a special hook for coat and muffler, and another for "extras," with a place for rubbers and goloshes, present a simple and real problem in learning.

EACH locker bears a large red tag with a bright and colorful picture from Mother Goose, perhaps, or a drum with drum-sticks, a wooden soldier, or a favorite animal for identification. Such a change lends excitement and interest to what might otherwise be a dull bit of routine. This means of identification is used with all the equipment. Since it is important that children learn to appreciate ownership and property rights early in their contacts, possession with its obligations is stressed in each situation as the day's contacts bring it out. With blankets, cots, tooth brushes and combs, towels and wash cloths, all labelled in the same way, the children can always identify

their own things, and these are not shared but cared for, folded up, hung up, rinsed out as the case may be—whereas chosen toys, crayons, paste, and paint are shared either in taking turns or in group activities where each child assigns himself with the

"Spare the rod and spoil the child." Do you believe it? Expert psychologists do not. In this article Dr. Perkins tells some of the modern ways of dealing with age-old problems in the training of children, and how these ways are working out in actual practice here at Cornell.

consent of the other children—a definite place and part to play as a member of a group.

ORIENTATION in values and responsibility is further developed in the care of the equipment, dusting the chairs and tables, piling up the blocks in their special corner, setting the tables, washing the dishes, and watering the flowers; none of which is drudgery to three-year olds, but rather a jolly game where laughter and chatter do not interfere with concentration. Perseverance and dexterity are required, but there is an opportunity for running and skipping, and the whole situation lends itself to rivalry in accomplishment with the encouragement and approval of sympathetic teachers who appreciate little people's ambitions and at the same time their difficulties which grow out of short legs and arms that get tired so quickly and inexperience which is not appreciated by the youngster himself.

Accidents happen, of course, but they are not allowed to assume false values, and even accidents are used for their definite teaching values. Care has been taken to choose inex-

pensive, durable, well made furniture, china, and toys—the first step in ruling out unnecessary accidents, while incidentally reducing the emotional tension of the adults in charge. It is generally the by-products of accidents such as cost, trouble, pressure of time, with the consequent emotional upset, which interfere with the sane handling of situations which might otherwise come to be regarded as well arranged to teach values.

Taking all the necessary precautions, there will still be accidents. Even grown-ups make stupid mistakes sometimes, although some of them seem to forget these when checking up on children. Remembering this, an accident in the nursery school is treated in exactly the same way it would be treated were an adult responsible—namely, by repairing the damage done and setting things in order. A broken block is mended, sticky hands and mouths are washed, spilled paints or water are wiped up, broken glass or china is swept up and put in the ash can—tiny buckets, dust pans, brushes, and small soft scrub cloths help to make the chore easy and interesting. In fact one small boy of three found them so interesting that he dropped his dessert regularly for several days before the teacher discovered that it was not due to poor motor coordination, but rather the setting for an exciting way of getting attention and approval in an unusual way, perhaps—but not so to the child because it worked!

THERE are only two rules in the school, and these were never definitely formulated for the children. The first—everything must be put back in its place when no longer in use, and second—every task attempted must be completed. If the choice has been unwise, it brings its own consequences, and while help is introduced before the child is too fatigued to lose the value of the experience, he

is unconscious of this. This is only one of the places where a nice appreciation and fine balance and good judgment on the part of adults are required, the tendency being to help too much and rob the child of the thing in the experiment which has value for him, or leave him to something that is too big and therefore discouraging, making for a fear of failure which may cut off further attempts.

The children choose all their activities, and while there is no formal instruction, as this period should be given over largely to health habits, the games and stories which are chosen, building which is undertaken, the drawing, painting, pasting, and cutting attempted, all present their own problem and raise questions which require explanations and even further experiment. As simple and old as the situation appears to the adult, they are all still new and interesting to the child who has yet to gain all of his general information on a lower level and experience his first social contacts.

LABORED attempts to entertain children with expensive and complicated toys defeat their own purpose and only make for disappointment on both sides. Toys to be lasting in interest must lend themselves to many types of activities and allow for the "pretend" games as well as definite manipulation. Large building blocks, wagons, and old pots and pans are quite the most popular combination, with possibilities of villages, houses, stores, and fire engines requiring officers, policemen, and firemen. They give every youngster in the group a chance to do something important. Two-year olds are not so much interested in joining these large groups, but they imitate on the side in corners and out of the way places with tiny stoves, toy dishes, and a doll buggy. The boys are as interested in doll carriages as the girls, although they frequently vary their use by introducing balls, blocks, or toy animals in place of dolls.

FOOD habits also come in for training. With a mid-morning and afternoon feeding and a regular lunch at noon, there is plenty of opportunity to undo the so-called food idiosyncracies and bad habits said to be characteristic of the American child. Some of the most interesting problems have grown out of this situation, and very definite research to determine the best methods to get children to eat is being carried on.

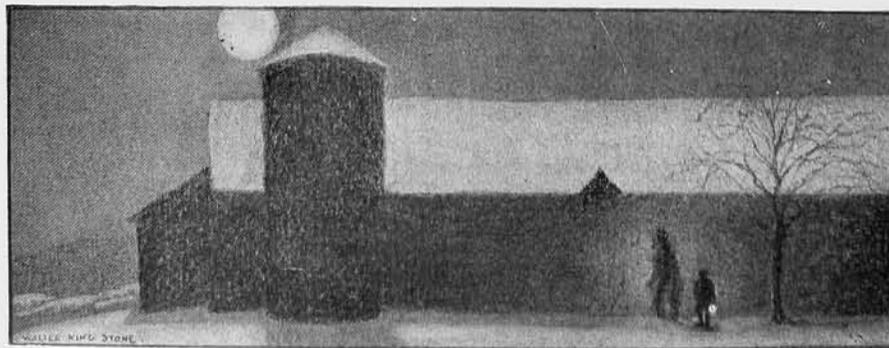
Small tables seating a teacher and three children easily make for sociability and good manners, for everyone knows everyone else and comes to the table happy after the morning's work and play. The teacher is more of an umpire than coach, for the children look after each other and try to set examples or outdo the "babies." Except being largely a silent participant, the teacher has little to do. When disagreement over "form" arises, her opinion may be asked, and at the end of the meal she makes the stars—which are awarded for clean plates and empty glasses. To see the basket of flowers in the center of the plate proved an objective without any suggestion from grown-ups. The common remarks of the children at the table such as "Tiny bites, baby," "drink your milk slowly" and "don't you know you don't get dessert at this school if you don't eat your dinner?" are of much more weight in getting the child on a special diet to eat than the urging, coaxing irritation or solicitude of an adult. Very often these reactions in the parents have precipitated the problem. Children are quick to sense the emotion in the situation, and if holding out gets them the attention they want or makes the mother anxious or brings them into family discussion, this behavior will continue to be indulged in for the satisfaction it brings.

THE out-of-door play with ladders, teeters, sand piles, wagons, and a convenient incline which offers a fine place to roll and coast, followed by a

good lunch, make for long afternoon naps. No child balks. The excitement of getting into pretty felt slippers, climbing three flights of stairs with a group of racers, and then hunting for their very own cots with bright colored blankets to wrap up in, put a new zest in "napping." The youngsters who do not want to sleep are told "just to rest." They frequently fall off to sleep with the suggestion of the other sound sleepers all around.

After the nap comes a glass of milk, getting back into day shoes, coats, and hats ready for the bus to go home. There is always the final search for the day's treasures to take home to mother and father. One three-year-old is papering his room with stars earned in the school, where he eats everything, although at home he refuses several vegetables, among them spinach. When the mother suggested that it would make him grow to a big man he quietly and correctly commented that his father never eats spinach, but is larger than the mother who has a fondness for it! At the nursery school this boy eats it to keep up with the other children—not to grow big.

AND while these twenty-two children are growing and playing and working, they are being studied and observed by the various members of the teaching staff. The nursery school was organized to serve as a laboratory for the senior students in home economics who are interested in child development and parent training. The children, all unconscious of their part in the scheme of things, are showing these students how humans learn values, social and otherwise. The emotional development of the child and the very important part environment and methods play in influencing the individual are also demonstrated in such a laboratory. These first-hand contacts are decidedly convincing, and form the basis of the discussion in conference and lecture periods where theories are being explained.



The New York Milk and Cream Supply

By Leland Spencer

NEW YORK CITY, together with a number of adjoining municipalities in New York and New Jersey, constitutes the world's largest market for fluid milk and cream. On an average day in October, 1925, about 3 1-3 million quarts of milk and 145 thousand quarts of cream and plain condensed milk were consumed in this market.

Although milk is bulky and perishable, it is shipped to New York regularly from stations over 400 miles away, most of which are in this state. These country milk plants which are the sources of New York's milk supply are approved by the New York City department of health.

The New York market obtains about 85 per cent of its supply of whole milk from New York state, and most of the remaining 15 per cent comes from ten adjacent counties in New Jersey, Pennsylvania, and Vermont. Since 1922 the New York State Department of Farms and Markets has compiled statistics annually, showing the amounts of milk handled by the country plants in the state and the uses made of it. Farmers' estimates of how the milk was disposed of on the farms have also been compiled by this department. These figures, together with the federal census of milk production in the New Jersey, Pennsylvania, and Vermont counties form the basis for a reasonably accurate estimate of the supply of milk available for shipment from this area to the New York market.

IN 1922 and 1923, about 12 per cent of the milk produced in these counties was used on the farms, about 20 per cent was consumed in towns and cities outside of the New York mar-

ket, about 15 per cent was handled by cheese factories and butter factories, and about 53 per cent was handled by milk-shipping stations and condenseries. Only the shipping stations and condenseries are capable of shipping milk to New York.

In Figure 1, the approximate daily volume of milk available for shipment from these country plants each month

The difference in prices is explained chiefly by differences in cost of shipping the various products from regions of low-cost production to New York. It is true that comparatively little milk is utilized in the lower classifications in the winter, when production costs are high, but it is also true that New York dairymen would be relatively more prosperous if a

larger proportion of the milk is produced in the winter months or the market grows so as to require a larger share of the summer production, depending upon outside sources, for part of the winter supply.

There is a gradual trend toward more winter dairying, particularly in the newer market-milk districts. This trend has been checked in recent years by the relatively low price of milk in the winter months. No doubt there will soon be a reaction to higher winter - milk prices. Moreover, there is some sentiment in favor of adopting some artificial price adjustment for the purpose of bringing about a marked increase in winter dairying.

Price plans intended to bring about a more uniform production of milk throughout the year have been adopted in several important fluid milk markets. In general, these price plans provide bonuses for those dairymen whose production is less variable than the average, and penalties for those whose production is more variable than the average. A price system of this sort would be more difficult to apply in the New York territory than in many others, because of the great variation in the conditions affecting production in different sections.

In some sections of this territory, the abundant pastures and limited

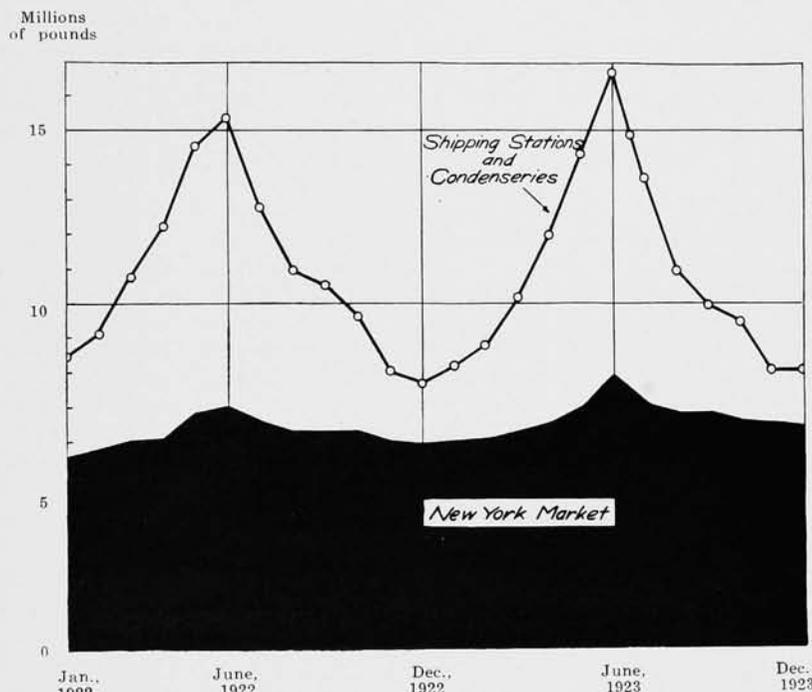


Figure 1. Average Daily Receipts of Milk at the New York Market and Average Daily Supply of Milk Available for Shipment from the Country Plants.

The market takes over 75 per cent of the available supply in November and December, but less than 50 per cent of the supply available in June.

in 1922 and 1923 is contrasted with the actual requirements of the New York market.

ON a yearly basis, about 60 per cent of the available supply is required for the fluid milk trade. The surplus milk is marketed in the form of cream and manufactured products, which yield a lower return than market milk. Taking the prices quoted by the Dairymen's League Cooperative Association as a basis for comparison, we find that during the last four years the average price per 100 pounds of milk used for different products was as follows:

Market milk	\$2.66
Market cream	2.08
Condensed milk	1.79
American cheese	1.45

crop land favor summer dairying, while in others the extensive acreage of land suited for crops and the limited amount of natural pastureland make winter dairying more profitable. Striking differences in the seasonal distribution of milk production in

train service to adjacent surplus-milk districts. There is now no great volume of surplus winter milk nearer to New York than Illinois and Canada. The freight rate on milk from Chicago to New York is 96 cents a forty-quart can, or more than double the rate

York farms, just disclosed by the agricultural census, increases the probability of such a shortage within the next few years.

Recently a large part of the New York cream supply has been furnished by the middle west and Canada. In the 12 months ending with April, 1925, about 172,000 forty-quart cans of cream were shipped to the New York market from the middle west. This amounted to one-seventh of the total receipts at the market. The shipments from the middle west were heaviest during the winter. In 1924, about 178,000 forty-quart cans of cream were shipped into New York state from Canada. Probably most of this cream also went to the New York market.

from the 200-mile zone. Shipments from Canada are subject to an import duty of 25 cents a can in addition to the freight. These extra charges give the dairymen of the present milk-shipping area considerable protection from outside competition.

THE freight rate on cream from Wisconsin to New York is about \$1.75 a can, and from Ontario, Canada, to New York, about \$1.15 a can, compared with the rate of 70 cents a can from Ogdensburg, New York. Canadian shipments are also subject to an import duty of \$2.00 a can. It should be borne in mind that one can of cream is the equivalent of about 10 cans of milk, and that the extra costs of shipping cream from the middle west and Canada to New York amount to comparatively little per hundred weight of milk. Competition from these outside sources is likely to keep the New York price for milk that is marketed as cream, close to its value for manufacturing. The growing market for fluid milk, however, is likely to provide a much more profitable outlet for the milk produced on New York farms.

The possibilities of increasing milk production in the present shipping area are almost unlimited. The rate of production depends to a very great

extent upon the prices that dairymen receive for their milk. The relation of the purchasing power of milk, that is, price corrected for changes in the general price level, to the rate of milk production, is shown in Figure 3.

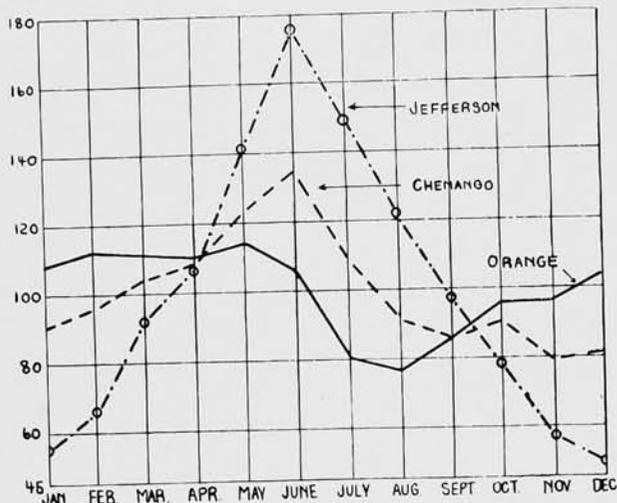


Figure 2. Seasonal Distribution of Milk Production in Three New York Dairy Counties.

Orange County is a typical winter-dairy section, Jefferson County is a typical summer-dairy section, and Chenango County has a combination of summer dairies and winter dairies.

three important dairy counties of New York state are illustrated in Figure 2.

It is obvious that any system of bonuses and penalties, if applied generally over the whole territory, would have very different effects upon the producers in various sections. Orange County and other winter-dairy districts would undoubtedly benefit, while Jefferson County and other summer-dairy districts would be severely penalized.

A MORE uniform production of milk in the territory as a whole would undoubtedly involve higher average costs of production. This disadvantage might be offset, however, by the more economical handling of the milk which would naturally result. The problem is a complicated one, but it is worthy of serious study.

The consumption of milk in the New York market has doubled since 1910, and there is little doubt but that the steady increase in demand will continue. Whether the increasing demand for market milk will be supplied entirely by the present milk-shipping area or to an increasing extent by new sources is a matter of real importance to New York dairymen.

Heretofore the supply has been increased mainly by extending milk

A SHORTAGE of milk in this territory in the winter months would undoubtedly be followed by an increase in price and a year or two later by a substantial increase in production. The decrease in the number of cows and young stock on New

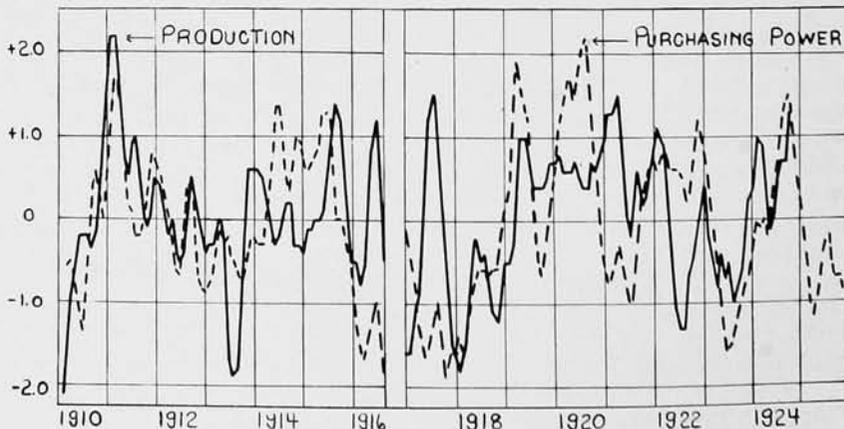


Figure 3. Relation of the purchasing power of milk to the rate of production in Broome and Chenango counties, New York.

The zero line represents normal purchasing power and production. Before 1917, changes in production lagged only one month behind changes in the purchasing power of milk. Since 1917, due to the more erratic course of prices and to the fact that the prices have not been announced in advance as formerly, the lag has increased to about 15 months.

The Development of Cow Testing

By H. H. Wing

FROM the time of the introduction of the dairy breeds of cattle, breeders have been concerned with the records of their cows, but for a long time there were no ready means of determining the fat content of milk and the only available means of determining the butter producing capacity of a cow was the laborious one of keeping the milk separate, and separating the cream and churning the butter from the individual cow.

As a matter of fact, information as to the relation of the fat content of the milk to its butter producing capacity was vague and much discussion was rampant concerning churnability, and other conditions of milk that were supposed to govern the amount of butter produced. These discussions make very curious reading at the present time. However, notwithstanding the difficulties, many breeders went systematically into the business of making records on their individual cows and many notable records were made, notably those of Alpha, Eurotas, Jersey Belle of Scituate, Bomba, Princess 2nd, and many others among the Jerseys and those of Netherland Queen, Clothilde, Aaggie 2nd Jewel, Colanthea, and others among the Holsteins.

In the fifteen years from 1875 to 1890 several thousand butter records of individual cows, mostly for periods of seven days, were made by actually churning the butter from the milk of the cow kept by itself.

FROM this there were several important results. First, cows came to be esteemed for their production as well as for their general conformation, color, or "fancy points," and this used as a basis for selection of breeding stock has without doubt been the prime factor in the improvement in dairy cattle that has been so marked in this country in the last fifty years.

Second, the making of individual records brought out striking differences in the capacity of individuals; differences that in most cases could not be ascribed to feed or any other external condition affecting the animal but must be inherent in the cow herself. This has led to a vast amount of study of all of the matters that we group under the collective term of

"heredity." The study has resulted in much that is of use but about which unfortunately we are still groping in the dark.

Third, the number and size of the records aroused public attention. At a time when a cow that could make a pound of butter in a day was highly esteemed by the general dairy farmer, enterprising breeders of pure bred cattle were making records of fourteen, fifteen, and even twenty pounds of butter in a week.

THIS led to much criticism in the public press and the statement was freely made that the cow did not live that could make three pounds of butter in a day. This incredulity led some of the breed associations, notably the American Jersey Cattle Club, to offer to send a capable disinterested person to supervise "officially" the record of any cow at the request of her owner.

The record of the cow Bomba (21 pounds 11½ ounces) so supervised in the autumn of 1882 did much to establish the authenticity of the records previously made and published. It was the first "official record." However, this system was cumbersome and expensive and was not generally adopted, so that private record making was continued. Previous records were frequently broken until the culmination was reached in the record of Princess 2nd of 46 pounds 12½ ounces, when public incredulity broke out afresh, not altogether because of the large amounts of the records but because many of them were made from surprisingly small amounts of milk. That of Princess 2nd was made from less than 300 pounds of milk, or a pound of butter from 6.5 pounds of milk, and there were others with a still less ratio of milk to butter, and this at a time when butter factories and the best private dairymen were requiring twenty to twenty-five pounds of milk to make a pound of butter.

TO show the lack of knowledge at this time of matters that are now well known, many breeders were not slow to claim as an advantage the fact that records were made from small amounts of milk because the product from their cows was not only "rich" but "churnable."

Thus matters stood when in July, 1890, the Wisconsin Agricultural Experiment Station published Bulletin No. 24 in which was described a new simple method for the accurate and rapid determination of the fat in milk. This is the method invented and perfected by Stephen Moulton Babcock, now universally employed and known as the Babcock Test. Its accuracy and adaptability was thoroughly demonstrated almost at once. It was now seen from the percentages of fat obtained, when milk from cows that were large butter producers was tested by the new method, that grave doubt would be thrown on many of the large butter records, especially those made from small amounts of milk. The champions of these records then came forward and attempted to discredit the Babcock Test, ridiculing the idea that it was possible to determine the butter value of milk merely by the use of chemicals on a minute quantity of milk in a small glass tube, one breeder going so far as to name his bull calf "Chemical Test" in derision.

AT THE World's Columbian Exposition at Chicago in 1893, a dairy demonstration and breed contest was held. The rules that were to govern the contest were the subject of much controversy by the partisans and opponents of the Babcock Test. It was finally decided that the award should be made on the basis of the amount of butter actually weighed, but that the fat should be determined in all the milk, in all of the butter, and in the waste products. The contest was supervised by a committee of four: Dr. S. M. Babcock of the University of Wisconsin, Professor Isaac P. Roberts of Cornell University, Dr. Henry P. Armsby of Pennsylvania State College, and Professor Melville A. Scoville of the University of Kentucky. Three breeds, 25 cows each, participated in the contest which continued for ninety days. At the end it was found that the weight of butter produced corresponded as closely as possible with the amount of fat in the milk as determined by the Babcock Test less the amount lost in the by-products. The Jerseys won the contest, but the accuracy of the Babcock Test as a means of determining the amount of butter that might be

produced from a given quantity of milk was so thoroughly demonstrated that it has never for a moment been questioned since.

Taking advantage of the results of the dairy test at the World's Columbian Exposition, the Holstein-Friesian Association of America at its annual meeting in 1894 instituted a system of advanced registry records based on the determinations of the fat in the milk by the Babcock Test and asked the agricultural colleges and experiment stations in the various states to furnish disinterested supervisors, prizes being offered for the animals that made the largest production.

FROM this has grown up what are now known as advanced registry official records and similar systems have been adopted and are now in use by all the other dairy breed associations.

At first few breeders offered their cows for record, but beginning about

1900 the advantages of the system began to be apparent and many more cows were tested each year until at the present time the fact that a cow has or has not an official record is a large factor in determining her value.

The system of making advanced registry records has proved easy of administration, comparatively inexpensive and reliable, for though there have been frauds attempted or perpetrated from time to time, they have not been so numerous or of such a character as to materially detract from the system as a whole.

The capacity of individual cows has been largely increased as is seen by the frequency with which records are broken; records of 24 pounds of fat in a week are now so common as to call for little comment and more than 100 cows have produced 1,000 pounds or more of fat in a year. Undoubtedly a considerable part of this increase is due to improved external conditions as feed, care, management,

and preparation; but some has also come through inherent capacity as proved by the large numbers of high producing daughters from certain sires and the frequency with which high production occurs in certain strains or lines of blood.

ONE unfortunate result that has arisen is the tendency to exploit the high producing animals commercially. Too often the making of a good record means the sale and disposal from the herd of the animal that should be retained. The making of records should mean to the owner the means of sorting his animals into those that are desirable and those that are less desirable, the first class to be retained and the others disposed of. Far too often the reverse is what actually occurs and the high producer is sold because she will bring a high, not to say inflated price. Then, the breeder wonders why his herd does not improve in average production.

"Hey, Joe!"

By A. L. Mason, '26

"ONCE in the dear dead days beyond recall," the bunch in our college had more enthusiasm and spirit than any other college on the hill. When the students in the Ag College wanted anything, they went after it with a bang that pushed the old ball over for a touchdown and the goal. If the other colleges in the University could get the Ag College to boost some campus activity, it was usually a success. They envied the way we pulled together and the good times we had.

Most of that enthusiasm has been taking a rest since the war, or for the past few years, at least. I maintain that this spirit has not died; it is only waiting for the chance to break out in that good old time form. And when it does, something is bound to happen. Every Ag student will open his sleepy eyes and suddenly realize what he has been missing.

SPIRIT is latent not only in the Ag College, but throughout the whole University. We seem afraid to show any emotion or fervor in our work. We are altogether too blasé and "high-hat." Formality may be all right in its place, but we seem to be drifting away from congeniality and friendliness, and are too cold and aloof.

I had occasion to visit the University of Missouri this past fall. Here I found what real spirit is. I guess westerners are naturally more friendly than we suspicious easterners, and are much more enthusiastic.

I WENT to a mass meeting of the students the night before the football game between the Missouri Tigers and the Ames Cyclone. Old grads with grey hair and with no hair at all, who had come back for the big game, were there. When the fervor was at its height, and the yells of old Mizzou were echoing across the plains, one of the old boys would jump up, rush to the platform, and with tears of gladness and joy in his eyes, tell in a ringing voice how the Tigers tore their way to victory in some game, long gone, but not forgotten.

Little thrills went all through me, and my blood tingled. It did me good to see people unafraid to give vent to their feelings. That mass meeting and the game the next day I shall never forget. I yelled like a fool for old Mizzou, although I knew not a soul on the team, in the college, or on the faculty.

THIS spirit is what puts things across at Missouri, and helps them to get something out of their college

life that we do not. They learn to cooperate and work together for the good of their college. Out there the members of the faculty and every Ag student belong to the Ag Club. Absence from meetings is punishable by paddling. Such an organization, with one hundred per cent backing, gets results.

I went to their annual Barnwarming Dance, which rivals our Junior Prom. They all worked like beavers for two weeks to decorate the gymnasium for the affair. Every Ag student was behind it, heart and soul.

At the dance, the men wore overalls, and the girls wore gingham dresses and socks. To get in every one had to go over a rail fence, through a window, and down a long slippery slide into a pile of straw. We were ready for anything after that. It was a whiz bang affair from start to finish. Only the Ag College could give such a dance. It was an achievement which the other colleges envied.

THERE is no reason why we can not have something just as good right here. I am sure we have the latent enthusiasm to put on such a party successfully.

In my freshman year we had an Ag barbecue in the judging pavilion.

(Continued on page 126)

Some Farm Bureau Contrasts and Results

By John H. Barron

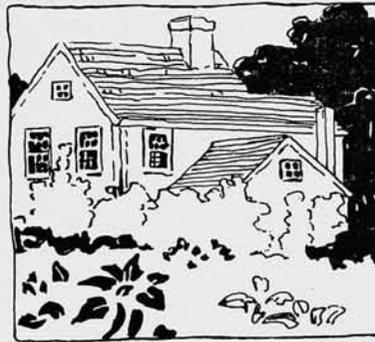
THE first farm bureau in the northern states was founded at Binghamton, New York, in March, 1911. Since then these organizations have assumed the proportions of a movement, and at the present time most of the better developed sections of the country have farm bureaus in each of the important agricultural counties. Because of the lapse of a rather long interval since the beginning of the system, and also because the plan has been put into operation over large areas, it may be worth while to contrast some of the ideas and concepts of the founders with the actual developments in New York state, and in addition to see what are some of the most outstanding results.

For many years previous to the founding of the first farm bureau, it had been recognized that the advancements in agriculture made by the colleges and experiment stations were not being used by farmers. This thought is emphasized again and again in the writings pertaining to the development of agricultural education at Cornell. Bulletins, meetings, articles printed in the farm papers, cooperative experiments, and the like were not securing the large scale hoped for adoption of recommended practices. This was disturbing to experiment stations. It should be noted that at this time the non-adoption of experiment station recommendations was not disquieting enough to farmers to be mentioned.

THE farm bureau at Binghamton was established by the cooperation on the one hand of the Binghamton Chamber of Commerce and the Lackawanna Railroad, the officers of which organizations thought that the farmer needed help, and that if he responded their organizations would be more prosperous, and on the other hand by the cooperation of the United States Department of Agriculture and the State College of Agriculture at Cornell. Then it seemed that there was an opportunity to try out the plan of giving the farmer the information that had been accumulated especially for his benefit. But he was suspicious. He had been "gold bricked" too often with plans emanating from the city. The new organization, while it doubtless had some merit, was too much in the nature of

an uplift movement to be successful with New York state farmers. It had aspects of something being projected from above rather than being developed with and for farmers.

THE farm bureau as it stands in New York state today has separated itself almost entirely from chambers of commerce, railroads, and other commercial bodies. While in some cases these organizations still cooperate, it is only in a minor way, and in such a manner that they have no influences on policy. The United States Department of Agriculture and



the state college of agriculture and experiment stations, those institutions that create and accumulate agricultural information, are still very active cooperators. They do not dictate policies nor programs, but they make suggestions on these matters after general and local studies of conditions, and act as discoverers, accumulators, and distributors of information called for by farmers.

The farmer has become an active participant in the farm bureau. He supports it by a membership fee. He controls the county organization, directs its policies and determines its county-wide and community programs. The farmer officers of the farm bureau choose and may discharge the county agent. They must, however, in choosing, elect a person endorsed by those in charge of agricultural extension teaching if they are to avail themselves of state and federal money for the conduct of the work.

THE money formerly coming from chambers of commerce, railroads, and similar bodies is now replaced by appropriations made by the county boards of supervisors. The deter-

mination of how this money and that coming from the membership fees shall be used lies in the hands of the officers of the farm bureau, the national and state moneys being used only partially to pay the salary of the farm bureau manager or county agent. The present county farm bureau thus is conducted by and for farmers, assisted through county appropriations and through cooperation with national and state extension agencies, which furnish some money and make available to farmers by various agencies, especially extension teachers, the information they call for.

IN THE beginning, the county agent was looked upon as an advisor whose function was to tell farmers how to farm. That idea is unworkable, and farmers so regarded it from the start. Now the county agent and farm bureau are largely true teaching institutions. They do not attempt to get their suggestions put into practice merely on the basis of an authoritative and autocratic say-so. Today the farmer individually, and also collectively, through committees representing geographical groups or groups of a particular interest, brings to the attention of the farm bureau and the county agent the need of specific information in any line. The demand is met by personal advice, by making available to those interested the accumulated information on the special topic, by printing in the local and farm bureau press articles prepared by specialists, by meetings in which specialists are teachers, by demonstrations conducted by specialists, and sometimes even by carefully planned experiments to get at new truth or to see how a general principle will apply in a given locality. The farmer is thus taught about his occupation and encouraged to apply such of the teachings as seem to him worth while. The farm bureau today is largely a service and self help institution, teaching people to help themselves through themselves, rather than through someone else.

THE demand for help and information by farmers has increased immensely since the farm bureau movement began. The calls by farmers in-

(Continued on page 128)



Through Our Wide Windows



The Cornell Countryman

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Ithaca, New York

January, 1926

ELSEWHERE in this issue you will find a protest for a better and more enthusiastic spirit in our College of Agriculture. This is no idle fancy. Not one of us has failed to see that in the past few years our enthusiasm for college activities has been dying.

This is most strikingly evident in our Ag assemblies, which are a sad failure. Last year a debate was held to decide if they should be abandoned. The usual small crowd was there—the few faithfuls who generally attend—and they voted down the proposition to dispense with the assemblies. This was done largely for sentimental reasons. They hated, as is only human, to see an institution perish. If the whole group of agricultural and home economics students had voted on the question, the assembly would no doubt have been dropped, by a large majority. But it would be better so than as it has been—an assembly for students who are not interested enough to attend.

We have a few Ag activities which still demand our ready support. And why? Because they hold our interest from year to year. One of these is

the Eastman Stage, which holds its place as the chief speaking stage in the university, because it is always well supported by Ag students.

The Kermis plays never fail to arouse the interest of our embryo actors and play-writers. Our college athletic teams are good because our young huskies gladly go out for them.

This shows that we still have a few common interests, which have survived in spite of the lassitude which they tell us always prevails in an institution when it grows up. It shows more—that we might have more common interests if all of us would only do our share. There is no reason in the world why we cannot revive the spirit of the old days, when our college had fewer students.

Now that we have grown up, we do not have to sit back and take our disinterestedness for granted. We *can* be the exception to the rule. We are going to prove it next term.

THE harbor of New York is a strange and fascinating sight. Many kinds of boats are lying at anchor or darting busily about. A huge liner majestically moves seaward, pulled by a tiny, insignificant, yet unbelievably powerful tug. Here is a huge coal barge, loaded until it seems so low in the water that a few big waves could wash over it and send it to the bottom. There is a large schooner, its masts stretching high into the air, awaiting a load which it may carry to the ends of the earth. Near Governor's Island a huge dredge tries valiantly to make an impression on the ever-changing sands beneath the waves. Cumbersome ferry boats, carrying loads of people to work or play, continually cross the water, while busy little tugs dart back and forth, always in a hurry. Over all, the gulls fly, in the wake of steamers, circling hither and yon, coming down for a brief rest on the surface of the water.

So are we all liners, ferry boats, schooners, or just tugs: all hurrying back and forth, doing so much, yet seeming to accomplish so little. Each holds his own important place in the scheme of things, and strange as it sometimes seems, is dependent on the others. Those of us who are liners would be quite useless, were it not for the others of us who are tugs or dredges. And we must take care lest we be caught just floating, for those that float may be rammed or washed on the rocks.



Former Student Notes

The following is a list of Cornell Home Economics women who are Home Bureau agents in New York state:

- Mrs. D. Bucknam '18—Owego
- F. E. White '20—Court House, Utica
- Mrs. F. M. Graham '21—Salamanca
- G. D. Williams '21—Auburn
- G. H. Smith '21—Herkimer
- M. K. Minturn '22—Canandaigua
- C. S. Walker '22—Wampsville
- S. Launt '22—Walton
- Mrs. L. R. Wardwell '22—Jamestown
- D. C. DeLany '23—Norwich
- B. Salisbury '23—Lockport
- L. A. Douque '24—Bath
- A. C. Rogers '24—Cortland
- M. E. Noff '24—Watkins
- J. Snow '25—Elmira

'01

"A Merry Christmas—A Happy New Year, and Every Success," is Professor Emeritus Isaac Phillips Roberts' message to Cornell this holiday season. Professor Roberts, whose name is uttered many times daily by students and professors on the hill-top campus, passed his ninety-second birthday on July 24, according to his son Roger Roberts '01 who sends us news of two generations of Roberts Cornellians. Except for eye trouble, which prevents reading, Professor Roberts retains his good health, and is able to do a great deal of outside work around the homes of his children. He divides his time between his daughter in Berkeley, California, and his son in Palo Alto, with whom he is spending this Christmas season. His greatest interest remains in the farm boy and in Cornell. His son Roger says that if nothing serious happens his father

should live to be a hundred. Roger is in the automobile business in Palo Alto, California.

'03

Arthur W. "Art" Cowell is a landscape architect at State College, Penn. He is head of the department at that institution. He is married and has two children, Jane, fourteen years old, and David, ten years of age.

'06

The soil survey work in California is in the hands of Charles Frederick Shaw, professor of soil technology at the University of California. Professor Shaw will receive mail at his office, 320 Hilgard Hall, University of California, or his residence, 968 Cragmont Avenue, Berkeley, California.

'08

C. F. Fish is the agricultural agent for the National Chautauqua County Bank at Jamestown N. Y.

'10

Nelson R. Peet is married and living at 175 Edgerton Street, Rochester, N. Y. He has four children. In January, 1924, he started his own nursery business under the name of the United Nurseries with his office at his home. He is also in charge of the Rochester office of the Federated Fruit and Vegetable Growers with G. F. Blades, a Michigan man, assisting.

As proprietor of the Franklin Hatchery, Freeman S. Jacoby is engaged with his brother in the production of superior blood tested chicks, in Columbus, Ohio. Jacoby has been head of the poultry department of Ohio State University. His present address is 251 West Norwich Avenue, Columbus, Ohio.

'11

We regret to publish the belated news of the death of Lucy B. Avery, wife of Frank W. Lathrop, on July 17, 1924. Frank is associate profes-

The following is a list of Cornell graduates in Junior Extension work in New York state:

- E. B. Fuller '15—Rochester
- A. Hoefler '16—Troy
- P. R. Young '16—Ithaca
- Miss M. Stevens '18—Ithaca
- W. J. Wright '19—Ithaca
- C. Johnson '20—Canandaigua
- E. G. Smith '21—Utica
- M. de Forest '21—Mt. Morris
- H. H. Tozier, Jr., '21—Poughkeepsie
- J. A. Lennox '21—Delhi
- F. E. Heinzelman '22—Syracuse
- Miss D. Powell '23—Mineola
- J. S. White '23—Mineola
- A. A. McKenzie '25—Warsaw

sor of agricultural education at the University of Minnesota. His address is University Farm, St. Paul.

Ray E. Deuel has been a farm bureau manager in Vermont, New Hampshire, and New York. At present he is farming at Manlius, N. Y. He is married and has four children, two of which are twins.

'13

Since leaving Cornell, Wesley H. Bronson has had quite a varied experience. He has engaged in high school teaching, extension service of Massachusetts Agricultural College, was in the navy from 1917 to 1919, was graduate student at Cornell and later at Harvard, and at present director of research for the New England Milk Producers' Association. His address is 38 Linden Street, Arlington Heights, Mass.

W. O. Whitcomb is State Grain Inspector and Seed Analyst at the Mon-



Here's A Way to Make Money After Graduation In Your Own College Town

TAKE this Flower Shop at Wellesley, Mass., for example. It is located handy by, just outside the college grounds. It wasn't so long ago that all there was to it was a plain little frame building, with some rather diminutive green-houses hitched to it.

Now the shop is a most attractive brick building, with up to date greenhouses, and this show house opening right off it.

You should see the way the college girls come here and buy flowers! Christmas and Easter week, the Western Union brings a private wire right into the shop, and has an operator on the job to take the Florist Telegraph Delivery orders that come from parents and friends, for flowers to the girls.

From one of his rose houses alone, this man took \$9,000 last year. Doesn't all this start you thinking? Man alive, where is there a business as healthy, fun-filled and profit yielding?

Just the kind that to-be-wife-of yours would like.

Had you ever stopped to think how many graduates are going into the greenhouse flower growing or shop business?

Hadn't we better start in getting acquainted so you can have the facts. Write us.

Ask us the hundred and one questions you have on your mind.

If interested write to the Manager of our Service Department, 30 E. 42nd Street, New York City, who will give it his personal attention.

Lord & Burnham Co.

Builders of Greenhouses and Conservatories

Eastern Factory
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Greensboro

tana State College in Bozeman, Montana. Whitcomb has chosen the "treasure" state to raise his seven-year-old daughter, and his son aged four. The Whitcombs reside at 309 South 5th Avenue, Bozeman, Montana.

'14

E. G. Broughan, who was formerly in the automobile accessory and farm lighting plant business at Wal-

ton, N. Y., started work as county agent in Green County, with headquarters at Catskill on January 1. He was county agent in Delaware County until three years ago.

Max F. Abell is married and has two children, Richard P. and Paul I. He received his Ph.D. at Cornell in '24 and is now connected with the Massachusetts Agricultural College at Amherst, Mass.

Ralph W. Green, who has been a leader of the cooperative marketing movement in the South, is now a professor in the North Carolina State College of Agriculture at Raleigh, N. C.

T. S. Kuo was appointed this fall as Co-dean with John H. Reisner '13 of the College of Agriculture and Forestry at the University of Nanking. He will be in charge of the instruction work, and will deal with Chinese agricultural problems. Dr. Kuo is considered one of the foremost Chinese agriculturists.

J. Sellman Woolen is farming at Lothian, Anne Arundel County, Md., and is specializing in fruit and poultry raising. We regret the loss of his wife on July 31, leaving three little girls and a boy.

'15

P. W. Tson is Dean of the College of Agriculture of the National South-eastern University in China.

Arthur W. Wilson has been for some time with the Thresher Service Inc., an advertising agency, of 130 Liberty Street, New York City. He resides at 1356 Evergreen Avenue, Plainfield, N. J.

J. H. Reisner is perhaps the foremost of that group of Cornell graduates who are performing such outstanding service to agriculture in China. As Dean of the College of Agriculture and Forestry at the University of Nanking, he has during his eleven years there built up a very strong faculty of Chinese and foreigners. In fact, Nanking ranks as one of China's strongest universities in agriculture. Mr. Reisner himself is regarded as the leading foreign adviser in China along agricultural lines, and in agricultural college work in particular. Mrs. Reisner (Bertha Betts '14) is at Nanking with him.

Dr. Karl John Seulke stopped on his way home from Chicago long enough to talk to a Round-Up Club meeting on Dec. 7, when he renewed some of his old acquaintances. Dr. Seulke is "practicing what he preached" while on the teaching staff in the an hus department. He owns a herd of Aberdeen-Angus beef-breeding stock on his 1,250 acre farm at Jefferson, Maine. Dr. Seulke reports that he had a very successful show herd this fall.

'16

Leslie G. Knapp is married and has one daughter. He is manager of a commercial orchard at Nassau, Delaware.

Louis A. Zimm has been discovered at 427 1/2 E. 52nd St., New York City, but we have been unable to find out what he is doing. How about it, Louis?

'17

F. Furman Betts has been for the past two years the southern sales agent for the John D. Emack Company of Philadelphia. His company manufactures "Olde Stoefeld" architectural slate roofs. His home address is 6325 Magnolia Avenue, Germantown, Pa.

Francis W. Reeve writes that he is raising potatoes and cauliflower on his own farm of about 210 acres. His address is 77 Sound Avenue, Riverhead, N. Y. His youngest child, Francis W., was born May 20.

E. Ellis Elwood is married and manages the Glensfoot Farm at Cherry Valley, N. Y.

T. H. Townsend, the former assistant editor of the *Dairymen's League News*, is now editing the *Waterville Times*.

Ivan H. Budd has a "fragrant" job now; he is secretary of the Wangler Budd Company, importers of essential oils and aromatic chemicals used as perfume bases. His address is 80 Forest Avenue, Caldwell, N. J.

Mr. and Mrs. Lyster M. Hetherington (Marion F. Kennedy) are living at 310 West First Street, Elmira, N. Y. He is teaching in the South Side High School there. They have a son, Richard Kennedy, born August 13.

George S. "Kep" Kephart is living at 248 Center Street, Bangor, Maine. He is a forester with the Orono Pulp and Paper Company.

Harold Macy has been since 1919 assistant professor of dairy bacteriology at the University of Minnesota. He was married in September, 1924. His address is 2176 Scudder Street, St. Paul, Minn., or the University Farm, St. Paul, Minn.

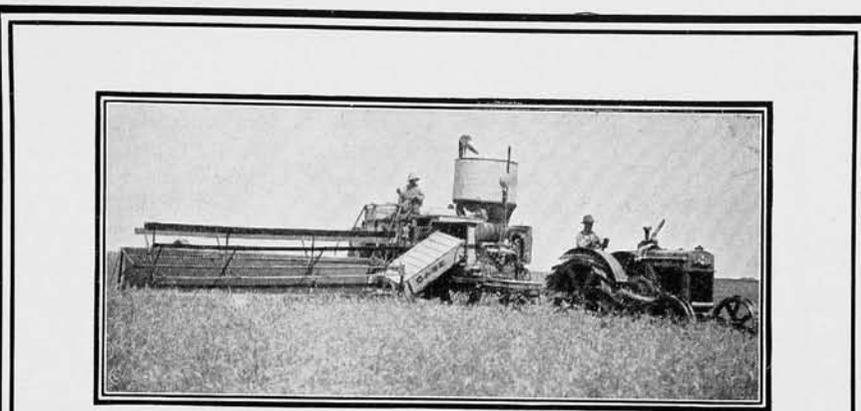
'18

Edgar L. "Ed" Forrester is married and has a three-year-old son. "Ed" farmed it for five years after graduation and now is a salesman living at 10 Brewster Street, Malone, N. Y.

A daughter was born on October 15 to Herbert M. Mapes and wife, Elizabeth Keeler. Their home is at 421 Seventh Avenue, Watervliet, N. Y.

'19

C. C. Chen is director of the agricultural experiment station of Tsing



What Does It Cost?

The test to apply to any farm crop or operation nowadays is—What does it cost? Don't guess. Know. The lower the cost, the greater your profit.

Where can you make a saving? According to U. S. D. A. Bulletin No. 1348, power and labor costs make up, on the average, about 60 per cent of the cost of producing farm crops.

Here is your chance. These costs are entirely under your control. Any saving in these items is a sure addition to your profits.

A Case tractor of the right size, and power farming machinery, will reduce these costs. You can speed up your work; get more done at less expense; raise better paying crops.

The Case is your tractor because it is well adapted to both drawbar and belt work; is a faithful worker, ready at all times; has a record for low cost of operation and upkeep, and lasts 50 per cent longer than the average tractor.

Write for *Modern Tractor Farming*, a 32 page book that tells how power and labor costs can be reduced.

J. I. Case Threshing Machine Company

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Established 1842

Dept. N75

Racine

Wisconsin

Case Farm Tractors, Steel Threshers, Harvester Threshers, Silo Fillers, Baling Presses, Steam Engines, Road Machinery, Grand Detour Plows and Disk Harrows.

Hua College, Peking, China. He has been the leader in the development of agricultural experiment work, which is comparatively new at Tsing Hua College.

Dorothy L. Chapman is teaching domestic science at the Penn Hall School for Girls, Chamberburg, Pa.

"Bill" Schlichter of 35 Radford St., Yonkers, N. Y., has been taking graduate work at Columbia University.

He also helped his brother, "Fred" '16, coach the local high school football team last fall.

'20

Ray DuBois has added politics to the list of his activities. He writes that during the last year he has served as deacon of his church and assessor for his town. He did most of the poultry culling in Ulster County last season, handling about 18,000 birds

during the process. Ray is still trap-
nesting and pedigreeing all of the
fowls in his own poultry plant; his
"high egg mark" for 1924-25, was
made by a biddy who laid 263 eggs
as her contribution to the season's
output. Ray is working up a herd of
purebred Holsteins. His twenty-five
cows are now all producing grade A
milk. Forest Glen, N. Y., is the ad-
dress.

Mr. and Mrs. Earl Harding of Al-
bion, N. Y., announce the birth of a
daughter, Joan Perry, on November
17. Earl is running a fruit and gen-
eral farm at Five Corners just north
of Albion.

Clarence Johnson was here in De-
cember for the conference of the
state's Junior Extension Workers. He
is the county club leader at Can-
andaigua, N. Y.

Willard R. Hine is a state forester
living at 1729 Audubon Street, New
Orleans, Louisiana. He was mar-
ried in April, 1925, to Marian Bur-
well.

Robert L. McNitt has resigned as
county club leader of Wyoming
County to go into commercial work.

Mr. and Mrs. D. S. Brown (Ruth
H. Nye) announce the advent of Don-
ald McLean on October 16, 1925. Mrs.
Brown is a former women's editor of
THE COUNTRYMAN.

'21

Mr. and Mrs. Paul A. Herbert an-
nounce the entrance of Paul Anthony,
Jr., to the stage of life. The young
gentleman was born on October 10,
and seems well pleased with his en-
vironment in general. Paul, Sr., is
with the forestry department of
Michigan Agricultural College. His
family headquarters are at 126
Charles Street, East Lansing, Michi-
gan.

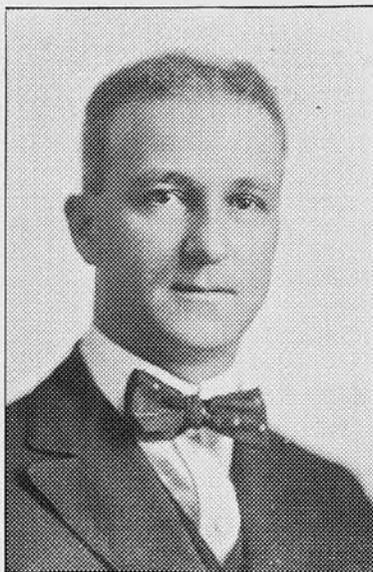
The Supervisor of Exhibits for the
New York State Health Department
at Albany is Gilbert M. Tucker, Jr.
His permanent address is Rockville
Farm, Glenwood, N. Y.

When Wilford F. Stoughton of
Sherburne was asked what his
achievements since leaving college
had been, he answered "wore out two
Fords!" "Bill" has been a pedagogue
since 1921; he has been and is teach-
ing agriculture in Sherburne high
school. Certainly not the least of
Bill's achievements was the wooing
and winning of Miss Alice Beecher
whom he married on June 30, 1924.

'22

R. L. Hahn writes from Mansfield
Center, Conn., that since graduation
he has been a teacher of vocational

Cornell University's work of fu-
ture famine prevention in China has
been established on a definite foot-
ing by Dr. H. H. Love '09 of the de-
partment of plant breeding, who has
just returned from a six months' sab-
batic leave in the Orient. His sur-
vey of the Chinese agricultural situ-
ation and selection of grain seeds will



be followed by Dr. C. H. Myers of
the same department who is prepared
to leave about January 1 for China.

Dr. Love went to China last March
to organize the work of famine pre-
vention which is the program of three
cooperating agencies. The means by
which the agencies hope to obviate
the danger of famine in China is by
improvement of the staple food
crops, developing better varieties for
the farmers' use, of wheat, rice, corn,
soy beans, and kaoliang. Besides a
survey of the needs of Chinese agri-
culture, Dr. Love has made thousands
of seed selections, in preparation for
the work of the coming year. Close
to 9,000 selections of wheat alone
were made all over China. The im-
mediate object is an attempt to pro-
duce maximum yield every year with
a minimum of effort. Almost every
available foot of land in eastern and
central China is under cultivation,
but the yields can be increased by the
application of scientific methods. The
plan is to develop strains of all chief
food crops which will be resistant to
drouth in some sections, and wind
and disease in others. The work is
being accomplished by enlisting the
cooperation of mission schools and
other organizations in east-central
China. Dr. Love had ample oppor-
tunity to study the domestic relations
of the land and reports an almost
discouraging preponderance of pov-

erty among the working classes
caused by extreme scarcity of food
and fuel. He has high hopes, how-
ever, of helping to relieving the situ-
ation after the work has been carried
on for several years.

agriculture at Sharon, Conn., that he
made a survey of prospective loca-
tions for departments of vocational
agriculture for the State Board of
Education of Connecticut, and that
since 1922 to the present he has
been a teacher in the vocational agri-
cultural school at Willimantic, Conn.
During the summers of '23 and '25 he
was a student for a master's degree
at Teacher's College, Columbia Uni-
versity. He married Elizabeth A.
Steer '12, and now has three children.

"Fritz" Eyre has entered the For-
est Service in Utah. His present ad-
dress is U. S. Forest Service, Salt
Lake City, Utah.

Charles "Charlie" Carter is farm-
ing at home at Marathon, N. Y., and
says he is a member of the great army
of "the unmarried."

L. S. Kibby resigned as county
agent in Green County on November
30. He is succeeded by E. G. Brou-
ghan of Walton, N. Y.

Lawrence B. Knapp's address is
changed from Nassau to Lewes, Dela-
ware.

Donald A. Howe is the owner and
manager of Spring Brook Poultry
Farms, located at Akron, N. Y.

'23

Homer L. Hurlbut and his wife
(formerly Alice Batty) announce the
birth of Beverly Jean on October 19,
1925. They are living at Interlaken,
N. Y.

A daughter, Etta Elizabeth, was
born to Mr. and Mrs. Leon C. Tyler
of St. James, L. I., on September 28.
Leon was a special student while at
Cornell.

H. G. Becker stopped at the
COUNTRYMAN office for a visit the
other day. He told us that he is still
farming at Gowanda. Thanks for
that three years' subscription, Mr.
Becker.

Have just completed the organiza-
tion of the Brookfield Forest Products
Co., Inc., for the purpose of reforest-
ing some of the waste land in the
southern part of Madison county.
There are four others connected with
me in the proposition: Henry Mor-
ganthau, Jr., the publisher of the
American Agriculturist; H. S. Pal-
mer, a graduate of Colgate; J. W.
Charlton, a Syracuse graduate; and

C. J. 'Peck' Peckham '24. I am president of the company and 'Peck' is vice-president. We have six Onondaga Indians on the tract now cutting wood. We expect to acquire about 2,500 acres of land."

In an interesting letter from Lloyd S. Passage, who lives at 716 Rugby Road, Brooklyn, N. Y., we read: "My job is that of assistant in the department of operations of the Munson Steamship Lines, located at 67 Wall Street, in this city of tears and bent mudguards. I am still selfishly, or unselfishly as you may, unhitched to any member of the 'unfair' sex, and therefore, unable to boast of any births, save my own."

In a letter dated December 10, from William "Bill" Norman, we read: "I am, however, planning to leave the Madison County Farm Bureau on January 1, to be connected with the Wallace C. Richardson Advertising Agency with headquarters located in New York City. They act as representatives for about fifteen of the leading farm papers such as *The American Agriculturist* and the *Pennsylvania Farmer*.

"Chil" Leonard has yielded to the call of the Middle West and has established himself in Minneapolis where he is instructing English in the University of Minnesota. "Chil" and his wife (Edith Parrott '23) are living at 723 Huron Street, South East Minneapolis, Minnesota.

Florence J. Foster was married to Albert J. Durkee, September 2, in the Congregational Church at Homer, N. Y. They are now living there at 16 Elm Avenue.

W. H. Mears is now connected with Dow Jones Company, publishers of the *Wall Street Journal*, *Financial News Bulletins*, and other publications. As a result of his new connection, "Bill" has changed his address from Brooklyn to 2769 Sedgwick Avenue, New York City.

Henry G. F. Hamann is an assistant marketing specialist of the Bureau of Economics, United States Department of Agriculture in their office at 102 Warren Street, New York City. He intends to make a trip to Petaluma and San Francisco to inspect the shipping points of eggs for the poultry producers of Central California. The inspection will be made through the cooperation of the State and Federal Government.

Hoyt S. Ackles is in partnership with his dad and brother on their farm. He says he is a scientific agri-

A 30-Year Experiment

Top Dressing
Talk No. 2

—and what it shows about buying fertilizers

STUDY the chart below. It gives, at a glance, the results of the 30-year field comparison of ammonia and nitrate nitrogen in the corn-oats-wheat-clover and timothy rotation at the Ohio Experiment Station at Wooster. (For detailed report see Ohio Bulletin No. 381.)

Average Annual Yield per Acre of the Fertilized Crops

		Bushels per acre		
		Corn	Oats	Wheat
<i>Unlimed Section—First 5-year period (1894-1888)</i>				
Plot 24	Sulphate of Ammonia.....	40.51	43.01	17.85
Plot 17	Nitrate of Soda.....	35.78	38.03	13.84*
<i>Unlimed Section—First 10-year period (1894-1903)</i>				
Plot 24	Sulphate of Ammonia	44.87	46.15	20.41
Plot 17	Nitrate of Soda.....	42.66	43.61	18.52*
<i>Unlimed Section—30-year average (1894-1923)</i>				
Plot 24	Sulphate of Ammonia.....	41.75	49.55	22.18
Plot 17	Nitrate of Soda.....	45.04	50.85	22.19*
<i>Unlimed Section—20-year average (1904-1923)</i>				
Plot 24	Sulphate of Ammonia.....	55.23	53.13	29.35
Plot 17	Nitrate of Soda.....	53.58	54.43	29.33*

*For the wheat crop, Plot 17 received 1/4 of its nitrogen in the form of 25 lbs. of dried blood.

Proof enough that Sulphate of Ammonia is all available, quick-acting, efficient!

Now—compare the current price per unit of nitrogen of Sulphate of Ammonia with that of any other nitrogenous fertilizer.

It's the fertilizer cost-per-bushel that counts!

ARCADIAN Sulphate of Ammonia

THE BARRETT COMPANY, AGRICULTURAL DEPARTMENT

New York, N. Y.

Atlanta, Georgia

Berkeley, Cal.

Medina, Ohio

Mail the coupon for further information

U-2

THE BARRETT COMPANY, 40 Rector St., New York, N. Y.

Please send me your free bulletins on Sulphate of Ammonia in relation to.....

.....

Name

Address

culturist (dirt farmer) and is the champion bachelor in his home section which is Marietta, N. Y., R. D. No. 1.

W. G. Meal, formerly the Schenectady county agricultural agent, has accepted a position as an instructor at Cornell Ag College, where he took up graduate work after December 15.

'24

I. H. "Irv" Rodwell, who instructed last year, is now selling life insurance in New York City for the New York Life Insurance Company. His address is Suite 608, 150 Broadway, New York.

Leon Packer left his position as teacher of agriculture at Union

COLT
LIGHT
IS
SUNLIGHT



They're expecting much from you . . . when you take charge

A SCIENTIFIC knowledge of balanced feeding—a chemical understanding of crop requirements—a thorough grasp of farm machinery. . . .

They'll look to you for that. But you can bring home, besides, something just as valuable. *The gift of home-making.*

One of the most essential necessities of farm life is that of proper lighting. The Colt Lighting and Cooking Plant provides light at a finger's touch. Light that never flickers, that never dims. Light that brings safety, that encourages recreation, that reduces housework.

The original cost of Colt Light is very small. It can

No other proposition offers as great an opportunity to the farm-trained man as selling the Colt Light Plant. Selling experience is unnecessary, for we will train you to make a success of this work. If you are over 25 years old and drive your own automobile, write our nearest office for full particulars.

be financed to spread over a period of months by all who own their own farms. You simply bury the generating tank in the yard. From it the gas is led by concealed piping to wherever outlets are required. With the large 200-lb. Colt Light Plant, you need only replace the Union Carbide on an average of two or three times a year. Union Carbide is quickly available at factory prices from one of 175 warehouses. Investigate Colt Light. Write today for booklet, "Daylight 24 hours a day."

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Rochester, N. Y. - - 31 Exchange St.
Chicago, Ill. - 1001 Monadnock Block
Kansas City, Mo. - 716 N. Y. Life Bldg.
Chattanooga, Tenn. - 6th and Market Sts.
San Francisco, Cal. - 8th and Brannan Sts.

COLT
TRADE MARK
LIGHT

hopes to hatch 6,000 chicks next spring. "Woods" says there are 1,400 apple trees on the farm. Professor "Jimmy" Rice and "Hank" Blewer '23 were among the fall visitors to the farm.

'25

S. B. Waterman, who pursued graduate work last year in the agronomy department of Cornell, is now at his home at 71 Forbes Avenue, Guelph, Ontario, Canada. He is teaching in the college there.

W. J. Garypie has recently accepted a position with the Everett B. Clark Seed Company, of Milford, Connecticut. His work will take him to Kansas, but he can be reached through the Connecticut office.

Z. H. Stoughton finds it advantageous to impart some of his knowledge of agriculture to students in the Perry Public Schools, where he is an instructor in the agricultural department. "Stought" entered into a partnership with cupid last August, and married Miss Alberta L. Hills of Newark Valley, N. Y. Mail for the Stoughtons should be directed to Perry.

Francis E. "Ty" Cobb is the president of a forestry school in North Dakota, which he has helped to re-establish at Bottineau. The school is a junior college. He is also state forester of North Dakota. His mail is addressed to Bottineau.

"Hey, Joe!"

(Continued from page 118)

Several dozen chickens and a couple of steers were roasted, and all kinds of good things from the farm were on the bill of fare. It required a lot of work, but was worth every bit of it. Every one, both professors and students, had a glorious time, because professorial dignity and student "high-hattedness" were thrust aside. That was the last barbecue and the last real Ag enthusiasm that I have seen.

NOW, just why all this talk about Ag spirit? Well, if plans materialize, we are going to have an Ag affair next term which will make every person in Ag and Domecon prick up his ears and take notice. We want the cooperation of each and every one of you when the time comes. Talk it up among your friends. Make suggestions for the big get-together. Get enthused about something for a change. You do not have to get on a wagon and yell, "Hay! hay! Farmer

Springs, N. Y., this fall, to take a similar position at Albion, N. Y. His address is 44 West Bank Street. He was married to Lois Fern Holroyd of Plymouth, Iowa, on July 15, 1925.

C. J. Perry is engaged with the A. C. Knight Co. of Pasadena, California. This concern deals in feed, fuel, and poultry supplies. Perry's address is 1512 Lincoln Avenue.

Charles J. Peckham is living at Suite 608, 150 Broadway, New York.

He is an agency organizer for the New York Life Insurance Company.

F. E. "Woods" Mather pops up with the information that he is manager of the Hollis Ridge Farm, Hollis, N. H. Then he springs the news that on June 8 he married Miss Cecilia Miller of Astoria, L. I. "Woods" left the University of New Hampshire last July to take up his new work. Hollis Ridge Farm housed 1,300 Rhode Island Red pullets last October, and it

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The business world today demands results—results that show a profit.

Dairy producers everywhere profit from using



because this efficient cleaning material "gets results" quickly yet at reasonable cost.

Dairy surfaces cleaned with Wyandotte are so sanitarily clean and sweet smelling as to give thorough protection to the quality and flavor of milk and milk products, thus preserving their financial worth.

Wyandotte Cleans Clean

Indian in circle

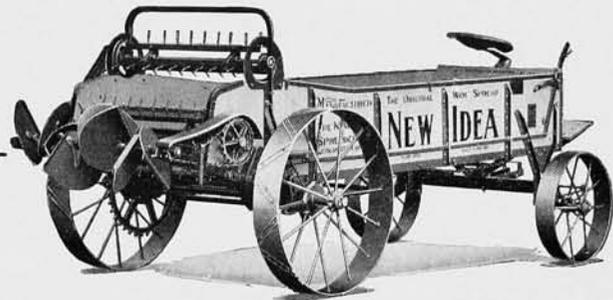


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Model 8, NEW IDEA Spreader

FOR THE BIG BUSINESS OF BETTER FARMING

New Idea Farm Equipment offers the best possible investment. It is thoroughly efficient—and can be depended upon for a long life of Trouble-Free Service.

THE NEW IDEA SPREADER COMPANY
COLDWATER, OHIO

The NEW IDEA Transplanter

A scientifically built machine for all kinds of transplanting, including Tobacco, Truck crops, Nursery stock, small Fruits, Bulbs, etc. Write for information.



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To you Ag students, the future "greats" of the world of agriculture, Crane Co. in this and succeeding advertisements, in a manner of speaking, presents its card. Realizing that the friendships formed at school are important and lasting, Crane is glad of the opportunity to bring before the men who will soon be agricultural experts, the name that has guided previous graduates in their choice of dependable and durable fixtures, valves, fittings, water softeners, and water systems, for farm use.

CRANE

Address all inquiries to Crane Co., Chicago

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CRANE EXPORT CORPORATION: NEW YORK, SAN FRANCISCO, SHANGHAI
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To the Students Who Specialize in Dairying

The principles governing the production and marketing of dairy products taught in lectures and laboratories are fundamental.

We apply the same principles to dairy apparatus design.

As an example consider the CP Glass Lined Pasteurized Milk Holder. It meets the strictest requirements. Connected up with any good heater and standard type cooler, it makes a real milk pasteurizing outfit. With it you can truthfully say, "Every Drop Pasteurized."

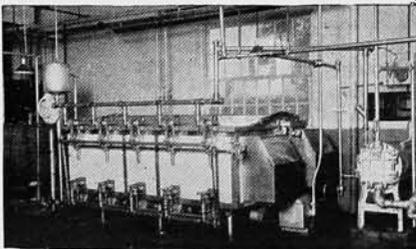
It is a superior machine for practical men at a practical price.

Bulletin 1081, going into details, will be sent for the asking.

The Creamery Package Mfg. Company

66 W. Kinzie St., Chicago, Ill.

Sales Branches in 16 Principal Cities



Reproduction of unretouched photograph showing CP Glass Lined Holder, 6,000 lbs. capacity per hour, installed at Aquidneck Dairymen's Ass'n., Newport, R. I.

Gray," to be a loyal Ag student. In the meantime, push Ag activities for all you are worth. Support your college and take an interest in its functions.

And above all, don't be so sophisticated. Come out of your shell, and call your classmate "Joe."

Some Farm Bureau Contrasts and Results

(Continued from page 119)

dividually, encouraged at times by questionnaires, and in groups, where they study the needs of a section or an agricultural industry, have done away with the fear that a great amount of agricultural information would be accumulated and prove of little use. To be sure, agriculture today, as always in the past, needs instruction on the great fundamental principles and practices underlying it, and has not yet fully utilized the available knowledge. But an ever-increasing proportion of farmers is using the best practices and eagerly looking forward to other advances.

The problem today is not so much as formerly that there is a large amount of unused information, but

rather that there will be something to give to the forwarding-looking. This situation has spurred on the experiment stations and colleges of agriculture to further efforts to discover new truth and to advance the knowledge of the industry still more. The danger is that insistent demands of farmers will lead teachers, in order that they may give out something, to make guesses and give wrong suggestions, rather than to wait until a secure foundation of fact is developed.

THE outstanding contrast of the present farm bureau with the early one is that the farmer has assumed the leading position. At first the farm bureau was organized outside of agriculture by others than farm people, and usually without their consultation, although for their benefit. Today the farm bureau is an organization of, by, and for farmers, in cooperation with state and national agricultural institutions, partially supported by local public money appropriated from county funds, and without close affiliation with other business institutions.

The assumption by the farmer of

Reap the Benefit

the First Year ~ and many Years Thereafter



Spread Solvay Pulverized Limestone! You'll find it the best investment you ever made. Big returns the first year, and for four or five years thereafter. Keep the soil sweet and productive. Easy to handle, in bulk or 100-lb. bags, safe to use, non-caustic, guaranteed high test. Learn all about LIME; write for the new Solvay Booklet, full of valuable information. It's FREE!

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LOCAL DEALERS

responsibility for the farm bureau has resulted in his becoming a better student than ever of his own problems. He has attempted to get knowledge to meet new situations, like men in other industries. The farm bureau, through its cooperating affiliations, is able to demand this knowledge. He has learned that specialists, maintained chiefly by state and federal institutions, can aid in working out solutions to individual and community questions. Committees of farmers now study the needs of sections, communities, and counties, and develop methods of attack and programs of work. Who can imagine many groups of farmers assembled on such an enterprise, before the development of the farm bureau idea?

THE latent abilities of many men for leadership have been brought out by this working together in a common cause, and material has been developed for carrying on business enterprises, as cooperatives, and for urging the needs of agriculture, wherever that may be necessary, before legislative bodies, business organizations, and the like. Largely through the county farm bureaus, agriculture is developing from within itself spokesmen and leaders who truly reflect farmer opinion and needs. To a greater extent than in the past, attempts to cure agricultural ills will not be left entirely in the hands of outsiders who think they know, or who may be self-seeking, but rather in the hands of those who are of the industry and can more truly represent it.

DURING the time it has been operating, the farm bureau system has had a great effect not only on farm practices, but also on the outlook of farm people, on their appreciation of their relationship to the whole scheme of social and economic organization, on their realization of the values of the great state and federal agricultural institutions, on their respect for each other, for the other fellow and his point of view, and on the ability of farmers to represent agriculture everywhere so that it may in the estimation of all assume the important place that it deserves. The development of this movement, largely under farmer leadership, is an active agent in bringing agriculture in the broad sense, including everything that pertains to country life and country living, the farm and all its enterprises, the church, the school, and the family, into its just and rightful heritage.

What Molly Did



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“AMENDS”

Miss N. H. Wright, '27

“FINDING A WAY OUT”

F. B. Wright, '22

FARMERS' WEEK

FRIDAY EVENING

FEBRUARY TWELFTH

AG ASSEMBLY IN ROBERTS FOLLOWED BY DOMECON HOP

Building Program Outlined by Dean During "Full-O-Pep" Meeting

The first and only ag assembly of the term was held in Roberts Hall on Tuesday evening, December 1. In accompaniment to a tune by the Melodians, the goodly crowd of ags and domeconers stamped their respective feet in anticipation of the struggle to come at the end of the evening.

In the absence of President Merrills Dake '26, Secretary "Bob" Mitchell '26 took charge of the meeting for a little formal business. The assembly decided that the majority of those present would support an ag banquet in the spring. It was also decided that in the future the ag class officers be done away with.

"Bob" then turned the chair, if there was one over to "Berry" Huckle '26, who had been in charge of arranging the assembly. "Berry" introduced Professor H. E. Botsford of the poultry department who led the singing.

A speech by Dean Cornelius Betten, in which he outlined the building program of the future ag college, was the next event on the program. He said that work on the task of clearing the site for the new plant industry building and library would probably start next summer if the outcome of this fall's bond issue is favorable. The remainder of the money to carry out the program will have to come from current state income, Dr. Betten said.

He explained the reason for the separation of Home Economics from Agriculture—that the two had subject matter sufficiently different to warrant this classification. Also it was felt that the women of the state should have an institution peculiarly their own. He emphasized also the importance of keeping the two colleges in close connection with each other.

Shadow Show Presented

He spoke of some additional financial help which we as a college were receiving, namely, from the International Education Board and from the Laura Spellman Rockefeller Fund.

Howard Beers '28 next came through with a violin solo after which Professor Botsford lead some more singing. While this was going on, the co-eds were, as "Berry" put it, "getting primed up for the next act." One of the songs lead by Professor Botsford was distinctive in that it was done entirely by gestures—the words and music being omitted. The effect was even better than with them, in opinion of the artistic critics present.

The play by the girls was a mystic wonder show in shadowland. Several dental and surgical operations were performed, usually with ultimate success, after reopening the pa-

tient several times to take out hammers and similar utensils which had been left inside through carelessness.

"Berry" and "Pop" Sheldon '26 said a few words urging the men to go out for ag athletics, then the crew adjourned to domecon for the "ras-sel." However, before the hop started a committee of ag men went through the library and collected any co-eds who might be trying to study, and brought them over to the dance. The struggle was strenuous and congested, but every one present felt that he had done his daily dozen and ruined his shoeshine in the bargain. Nevertheless, when they balanced the gains over against the losses they called it a fine party.

NINETEENTH FARMERS' WEEK TO BE HELD FEBRUARY 8-13

Secretary of Agriculture Jardine In- vited to Address Audience

Extensive plans are now being made for the Nineteenth Annual Farmers' Week to be given February 8-13. According to Professor R. H. Wheeler, Farmers' Week this year will be one of the best ever seen at Cornell. At this writing, great effort is being put forth to obtain the Secretary of Agriculture, Jardine to address the Farmers' Week audience. A number of men prominent at other universities have been secured to speak, and efforts are being made to increase their number.

A more balanced program for the whole week will be offered this year in order to get more people to remain until Saturday. Thus Friday will be as important as Wednesday or Thursday. The big Farmers' Week luncheon at the Drill Hall will be given on Friday this year instead of Wednesday as in previous year. The Home Makers' Conference will extend through Friday, and the Kermis plays will be given on Friday evening, the same as in other years. Professor Wheeler expects the programs will be available about the middle of January, and they may be obtained by sending a request to the mailing room in Robert's Hall.

P. L. O. INITIATES

Phi Lambda Omicron, honorary floriculture sorority, held an initiation in the floriculture building on Dec. 13, after which it adjourned to a banquet in Willard Straight Hall. Those initiated are Elizabeth Bodger, grad., Eleanor Irish, '28, Marion Lockwood '27, Verna Pye '27, Mrs. Harriet Roskelly, Lucille Smith '29 and Edna Wood '25. Hulda Hultzen '25, president of the sorority, gave an address of welcome, to which Eleanor Irish responded for the initiates. Isabel Schnapper '26 was toastmistress at the banquet.

WRIGHTS WRITE RIGHT ROLES FOR FARMERS' WEEK SHOW

R. E. Lab Turns Out a Love Story Domecon a "Pirates" Play

Manager "Al" Van Schoick '27, announces that the Kermis plays have been selected for the annual production which will be given in Bailey Hall during Farmers' Week on the evening of Friday, February 12.

The committee of judges, composed of Dr. R. P. Sibley, chairman, Professors G. A. Everett, R. A. Felton, J. E. Rice, and R. Roberts, finally selected two plays of the six submitted for student production. Norma H. Wright '27 won first prize of \$75 with her three-act play entitled *Amends*. A brief review will give some idea of the "pirate" tale to be given. Due to the death of his father, a dissatisfied farm lad is "bamboozled" into marrying a man-chaser by his wily step-mother, but soon leaves her for a life at sea. He returns fifteen years later to amend his past rashness and to find ultimate happiness in his home. The second prize play was written by F. B. "Doc" Wright '22, an instructor in the rural engineering department. It is a one-act love scene, entitled *Finding a Way Out*, in which the hero is helped through the many trials and tribulations of a college course by the home town minister. In return for this the hero allows the minister to marry him to "his girl in the old home town."

In the preliminary try-outs for the cast on December 9 and 10, 47 students were selected for the finals which were held on December 17. The rehearsals for the plays will be held throughout the month of January and will be under the direction of Albert E. Milliken '24, who handled the plays satisfactorily last year. The managerial Kermis competitions will open in January.

PROF. H. W. RILEY OF R. E. TO TRAVEL IN GAS BUGGY

Another professor will join the ranks of tin can tourists! At the close of the semester, Professor H. W. Riley will leave Ithaca in his special gasoline wagon for six months' sabbatic leave, accompanied by his fourteen-year-old son Manton. They plan to go south and then west around the rim of the United States visiting rural engineering departments and rural electric power developments, and studying farm machinery methods in different crop centers. Late in June, Professor Riley expects to attend the annual meeting of the American Society of Agricultural Engineers at Lake Tahoe, California. The conference will be followed by numerous inspection trips through California, observing irrigation projects and the like. The return trip will be made through the corn belt.

DR. SEULKE, FORMER PROF, ADDRESSES ROUND-UP CLUB

C. Sadd Says Livestock Show Animals Will Be Picked January 6

Dr. K. J. Seulke, a former professor in the animal husbandry department, addressed the members of the Round Up Club on the evening of December 7. Dr. Seulke was introduced by President "Happy" Sadd '26, who announced that the selections for animals to be shown during the Farmers' Week livestock show would be made the first meeting after the vacation on Wednesday, January sixth. Dr. Seulke is manager and owner of the Jefferson Aberdeen-Angus beef cattle farm of 1,250 acres at Jefferson, Maine. He stopped off in Ithaca on his return from the Chicago International Livestock Show.

The first remarks of Dr. Seulke were aimed at the misconception that many people have that beef-raising means anti-dairy cattle raising. Beef cattle can be raised in the East on farms ill-located for profitable dairying. The three causes of possible economical beef production in the East are: Less free range, high-priced land in the West, and high freight rates. The profits which the beef raiser makes in the East are dependent upon these three things: The economy of housing and equipment, use of home-grown feeds, especially good silage, clover, and alfalfa roughages, and the economy of labor.

Ex-President Talks

On the evening of December 14, the club held an extra meeting to hear Mr. A. A. Hartshorn, ex-president of the Holstein-Friesian Association of America, address them on *Type and Production*. Some general remarks brought out his ideas that a college education is not an end in itself but a means to an end—happiness and success. He criticized the type models which the Association has established because they are animals in show condition and therefore give the wrong impression to an inexperienced breeder who might try to keep his cows in that shape all the time. Any experienced cattle man knows that an animal which will remain in such high condition during a lactation period is not an efficient milk producer although she will remain nearer to the true type model during the period than the real "milky" type of Holstein.

Both meetings were followed with the usual exercise of the mandibles and open informal discussions regarding the speeches and the coming Farmers' Week show.

MYERS LEAVES FOR ORIENT

The plant improvement work in China started by Professor H. H. Love will be taken up by Professor C. H. Myers. Dr. Myers left for Paris about January 1. Here he will visit his family which has been abroad since the middle of July. He will also visit some of the educational institutions of Germany to see their botanical and genetic laboratories be-

fore sailing from Marseilles early in February. From France, Dr. Myers will go to the Philippines to visit the University of Manila. There he will be the guest of M. B. Mendiola '18 Ph.D., who is head of the Manila plant breeding department. About April 1 he will go to Nanking, China, to take up the plant improvement work which has been arranged cooperatively between the University of Nanking, Cornell University, and the International Educational Board. Dr. Myers plans on returning to Cornell about the middle of October by way of the Pacific Ocean.

AN HUS ANOMALIES

Mr. Colantha Aaggie Pontiac Lad and Mrs. Glista Hannah, both of the an hus department, wish to announce that they have made a record. It is a birth record and as the Mrs. tactfully put it, "It's a record for quality and size—not one of numbers." Glista Hannah, a purebred Holstein at the cattle barns gave birth to a 133-pound bull calf on December 10. This is the largest recorded weight of single births in the College herds.

For the first time in the history of the college a flock of Southdown sheep is being established.

Professor L. A. Maynard of the an hus department will study physiology and nutrition with Dr. L. B. Mendel at the laboratory of physiological chemistry at Yale next term. Professor Maynard has been given a sabbatic leave for the term.

The an hus department is to have a number of reels of film from the U. S. department of agriculture regarding phases of animal production to show here during Farmers' Week.

Professor E. S. Savage attended the meeting of the Superintendents of the State Institution Farms at Binghamton, December 9, and gave a talk on the economical feeding of dairy cows. He also attended the annual meeting of the Montgomery County Farm Bureau, December 5. His talk was entitled "Better Roughage and Peas, Oats, and Barley in the Dairy Ration."

Interest in the breeding of beef cattle in New York is growing. In the month of December the college sold 9 pure bred Herefords to A. H. Stiles of Glenfield, N. Y. This lot is the first breeding beef stock ever sold by the college.

A colony of rabbits has been recently added to the flocks and the herds of the an hus department. The University of Wisconsin gave them to Professor "Bob" Hinman and he turned them over to the department. They are the nucleus of a large colony of rabbits to be established and used for experimental purposes. At present an experiment is being carried on to determine the effects of alcohol on offspring, and in spite of the Volstead Act one rabbit is inhaling each day 100 c.c. of alcohol.

SEVEN STUDENTS SELECTED FOR EASTMAN STAGE FINAL

Annual Oratory Contest to Be Held in Bailey Hall Auditorium

Of the 12 students who tried out in the second stage of the Eastman public speaking contest, the following have been retained to take part in the final stage which will take place the Thursday night of Farmers' Week: H. T. Huckle '26, Miss M. M. Leaming '26, G. W. Sullivan '26, R. T. Termohlen '26, D. M. Dalrymple '27, and H. W. Beers '28. Miss Elizabeth Doren '26 has been retained as alternate. The judges for this second stage were Professor Bristow Adams, Professor G. W. Cavanaugh, and Professor J. E. Rice.

The Eastman Stage was founded 17 years ago by A. R. Eastman of Waterville for the purpose of encouraging leadership in rural affairs and leads to a prize of \$100 and one of \$25. The contest is open only to students in good standing in the College.

CORNELL TO BE REPRESENTED AT ROCHESTER FRUIT SHOW

Cornell will be represented at the fruit show of the New York State Horticultural Society, to be held in Rochester on January 13-15, by Professors R. B. Wilson of apiculture, "Bob" Adams of vegetable gardening, G. F. Warren of farm management, A. J. Heinicke of pomology, J. P. Porter from landscape art, and G. W. Herrick from entomology. These men will address the meeting at least once during the show.

The Geneva Experiment Station will also stage a variety exhibit and several educational displays of economic diseases and pests and their control.

CONTEST ABOUT DECIDED

Professor R. A. Felton of rural social organization, reports that while a final decision has not been reached in the state-wide play contest, the judges are nearly through reading them, and the chosen plays will soon go to Professor A. M. Drummond of the department of public speaking in the College of Arts and Sciences, who will criticize them from the standpoint of actability. The judges are representative of the State Farm Bureau, the State Home Bureau, the State Grange, and the Grange League Federation. A total of 43 plays were submitted.

STORK BRINGS POULTRYMEN

As Dr. C. K. Powell, on the staff of the poultry department put it, the poultry department has perfect team work. On the morning of the 13th of December, the stork delivered two future poultrymen. Loye Harvey, son of Dr. Powell, was born seven hours after and weighed two pounds less than Harold Eugene, son of H. E. Botsford, extension professor in poultry.

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WELCOME FARMERS! We welcome you with open arms. Farmers' Week is YOUR week. We are at your service at all times. The various student committees are only too willing to make your stay with us pleasant as well as profitable. The future advancement of agriculture depends upon the impression which the college and its graduates make upon you. If it is favorable, you encourage your children to come to Cornell and follow the profession of tilling the soil. If otherwise, you are apt to be indifferent to their remaining on the farm for you may see no chance for future success and happiness there. So don't forget you are our guests; make yourself at home wherever you choose to roam about the campus.

 R. O. T. C.

In view of the fact that the State College of Agriculture is indirectly responsible for the compulsory military training at Cornell, we do not think that the CAMPUS COUNTRYMAN is "off-side" when it takes cognizance of this drill requirement. It does seem incongruous to have our whole education made contingent upon military training. We think that abolition of the compulsory requirement by the university authorities would be in accord with a policy of progressive conservatism.

 UNDERCLASSMEN ONLY

Professor Bristow Adams' article in a recent issue of the COUNTRYMAN, entitled *Why Agricultural Journalism?*, contains a great deal of food for thought for underclassmen. His partial list of graduates who have become successful in the business and journalistic world is ample evidence that the technical training received is not merely a means of obtaining scholastic credit towards graduation. The training is largely technical, however, and must be supplemented with actual experience in the field. The COUNTRYMAN offers this valuable experience to all students who are interested in journalism or any of its branches. The publication is put out entirely by the students and the rewards are proportional to the endeavors of the individual. Immediately following the close of the term both the editorial and business boards will open competitions for underclassmen. If you are really interested, make it a point to get in touch with some member of the board before that time.

 STUDENT PROFS

The excessive growth of our college has resulted in a condition not in accord with the older methods of teaching. It has caused the use of student assistants and instructors. Ofttimes these men grade papers, re-

ports, etc., with no training other than one or possibly more courses in that subject. Still worse are insufficiently trained instructors. They have but little confidence in their own knowledge and the classes soon lose faith in their teachings. It results in dissatisfaction from start to finish. Possibly, in the future through increased financial support, institutions may be able to alleviate this situation.

The three processes through which the CAMPUS COUNTRYMAN passes are: inspiration, imagination, and perspiration (toting copy up and down Buffalo hill to the press).

 FRIENDS OR FACTS

An old grad dropped in the other day and began telling about his college days. He told almost entirely of profs and classmates he had known. When we thought it over it dawned upon us that the most of our college life is the friends we make. When we think of college in later days we will think of friends not facts. So let's make more of them while we have the chance.

 'GRATULATIONS

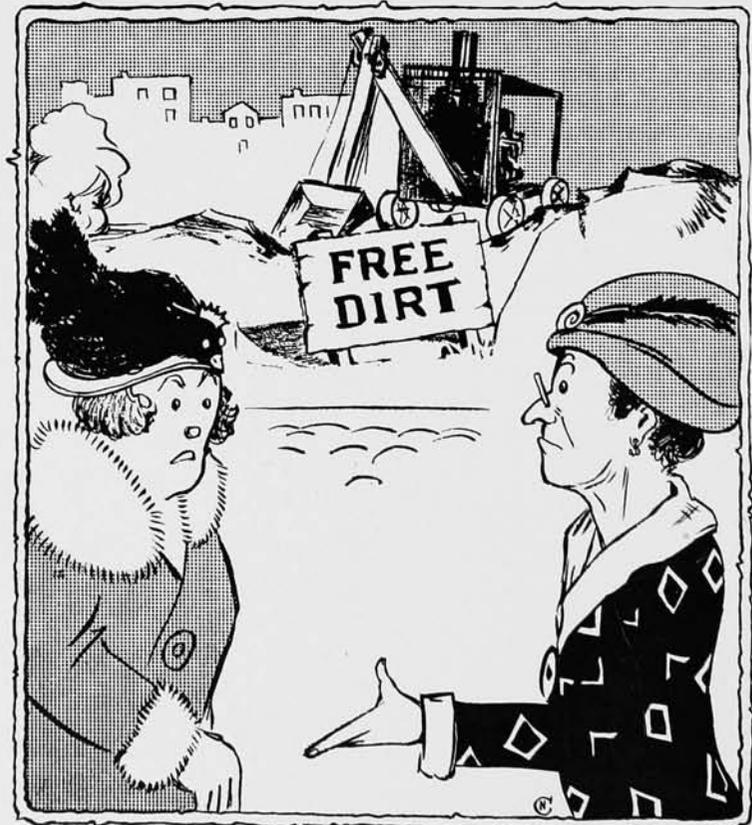
The increasing importance of agriculture, and the popularity of an hus work in particular is evidenced by the first written application ever received from a co-ed for permission to show an animal in the Student's Annual Farmers' Week Livestock Show.

 THIS 'ERE & THAT 'AIR

Our institution's biggest bane, the thing I've cursed and cursed in vain is that which everybody knows to be the root of campus woes. Nine-tenths of all my daily worry, three-fourths of all my total hurry, one-eighth of all my "darns" and "pshaws" I lay to this e'er present cause. Three times in every single week, a weary, fagged-out, last-night-sheik, with gaping yawn and heavy eyes I make my early morning rise, and don my duds in frenzied haste, peruse my tooth and shaving paste, and scamper off without a stop to fill my empty, gnawing crop. The chances are that I instead of getting up have lain in bed until there is no time to spare, I have to do things on a tear. I make the hill in five-five flat, and hanging up my coat and hat, I get to class at eight-thirteen, with visions of the college dean appearing in my muddled bean. It always was and will be thus, and that is why I make this fuss. I was made for morning sleep, and when I should be drinking deep of all the joys of blissful rest (alas! I ne'er will be so blest!) I cannot seem to make my pate get down to work and concentrate. I'll always be on hand to knock when you suggest an eight o'clock!

 Ignorance Is Bliss

Engineering student on hygiene prelim! "To free cows of t. b. they are dipped in a solution which kills the FLEAS that carry the t. b. germs.



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PROFESSOR W. A. STOCKING CONFINED BY LONG ILLNESS

The many friends of Professor W. A. Stocking, former head of the dairy department, and now professor of bacteriology, are sorry to learn of his extended illness at his home, 305 Parkway. Several weeks ago Professor Stocking was confined to his home with an attack of the grippe, but returned to the office for a day when he suffered a relapse, and has since been very ill with kidney and heart trouble. A recent blood test showed that no pus has formed in the blood. This is an encouraging indication so that his many friends may look for the professor's early recovery.

PROFS AND GRADS GATHER

Professors G. F. Warren, J. E. Boyle, V. B. Hart, E. G. Misner, W. I. Myers, H. A. Ross, M. P. Rasmussen, and L. Spencer, and a large number of graduate students attended the American Farm Economics Association meeting held December 28, 29, and 30 at New York City.

DOMECON FROSH PULL OUT

Home economics freshman separated from freshman in agriculture and began orientation at their own college with a tour of the building to see what activities were included in the home economics curriculum. After being divided into groups they visited

in turn the research laboratories, the practice apartment, the cafeteria kitchens, the costume shop, the Lodge and the Nursery School.

RURAL ENGINEERING PROFS ATTEND ANNUAL GATHERING

Professors H. W. Riley, B. B. Robb, F. L. Fairbanks, and F. G. Behrends of rural engineering, attended the annual meeting of the North Atlantic Section of the American Society of Agricultural Engineers, which occurred early in December at Hotel Van Curler in Schenectady. The delegates were taken on an inspection trip through the General Electric Works, and were entertained by a demonstration of high voltage discharges. They were also conducted through the laboratory of the late Dr. Steinmetz.

JUNIOR EXTENSION MEN GATHER TO MEET AND EAT

A dinner was given at the University Club on the evening of December 14 for the twenty junior extension leaders and their wives. Members of the extension faculty were present and after the dinner the group inspected Willard Straight Hall and later traveled to Dean Cornelius Betten's home for a social hour. Professor "Bob" Adams amused the gathering with several of his rural rhymes. The extension workers were at Ithaca to attend a conference of the department, which lasted throughout the week of December 13th.

AN HUS MEN ENJOY RIDE ON FEEDER SHEEP TRIP

Early on the morning of December 15, a large group of chilled and hungry students walked down to the lower railroad station (walked to save time, as they said), and spent the better part of the morning dozing away on the accommodation to Batavia. One of the boys remarked the train was very accommodating when it stopped several miles out past Trumansburg to discharge an over-industrious sleeper. The cause of the premature trip to Batavia was not the Christmas vacation "very special" early train to Chicago, but a field trip of Professor "Bob" Hinman's an hus 13 sheep course.

H. A. Needham Plays Host

The Batavia end of the trip was arranged by Mr. H. A. Needham, a practical farmer and business man of East Bethany, N. Y. Mr. Needham showed the "boys" every bit of old time country hospitality by starting off the tour with treating them (to bursting point) with sugar-cured ham sandwiches, cake, coffee, and McIntosh apples. During the afternoon autos carried the group about the country and the trip was so efficiently arranged that 3,500 feeder lambs were inspected. The boys made a study of the feeding, housing, purchasing, and selling problems of the feeder. On the return trip, penny ante and banker and broker were the order of the evening. Professor "Bob" Hinman as banker still has several loans to "realize."

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PRELIMS CUT ATTENDANCE AT FORESTRY CLUB MEET

The regular meeting of the Forestry Club was held December 9. The attendance was below normal, but there were enough present to hold down the officers' chairs and fifteen more. The cause of poor attendance was blamed not on the cold weather but on prelims. After a short business meeting which included plans for the Christmas party, the center of attraction and consequently the crowd moved from the club-room down to Room 210, where Professor J. G. Needham, with the aid of a large number of slides gave a very interesting talk on the Okefinokee Swamp. Then the crowd surged back upstairs. When each had armed himself with a cup of coffee and a handful of fig-newtons, all gathered around Professor A. B. Recknagel and the piano and stirred the air with bits of harmony, broken by mouthfuls of fig-newtons and the wails of a crippled uke. As the grub disappeared and the lusty throats became hoarse, the crowd slowly dwindled away.

VETS MEET IN JANUARY

The annual veterinary conference will be held on January 14-15 in the Veterinary College. The conference, as in past years, will consist in various discussions, readings of papers, and informal talks concerning technical and practical phases of veterinary science. On the evening of the

15th, Dr. P. A. Fish will be toastmaster at the banquet held in connection with the yearly gathering. Among the speakers, besides those of the College are: Dr. L. Vanes from the University of Nebraska who talks on the connection between avian tuberculosis and the bovine type; Dr. M. Dorset of the bureau of animal industry will discuss hog cholera, and Dr. W. A. Park of the Research Laboratory of New York City.

COLLEGE EXTENDS FEATURES TO R. E. AND EXTENSION

Among the new and special features of Farmers' Week this year will be the junior project potato contest. There will be an exhibit of specimens and prizes awarded.

Apropos the probable shortage of coal this winter, Professor F. H. Randolph of rural engineering will lecture in Caldwell Hall on "Furnaces, Fire, and Fuel." The department plans also to conduct a number of illustrated lectures on dairy barn ventilation, and cow stable floor construction. There will be laboratory demonstrations in the new laboratories of farm power transmission and "an old Ford engine as a farm power unit." Professor L. M. Roehl will give a series of lectures, immediately followed by practice periods on tool sharpening and the filing of hand, pruning, timber, and circular saws.

Professor C. B. Moore of rural ed addressed the Commercial Club of Mountain View, N. J., on Dec. 10.

INDIAN FARMERS' SCHOOL TO BE HELD FEBRUARY 8-13

Plans are now being formulated to bring to Ithaca approximately thirty-five Indian farmers from the six reservations in the state for the purpose of holding an Indian Farmers' School during Farmers' Week. Much of the material offered by the regular program in the way of lectures and demonstrations will find a place on the special program for the Indians. In addition, however, there will be a special series of lectures and a round table, dealing with crop and livestock problems on the reservations. The lectures will be given by Professors J. H. Barron, G. W. Peck, W. G. Krum, H. J. Metzgar, and C. R. Crosby, all of whom have extension projects in operation on Indian farms. The round table discussion will be led by some Indian farmer who has been successful as a project leader among his people.

Board Selected Students

During the week of December 13, Cornell Indian Boards met under the direction of William C. Hoag of Salamanca, who besides being president of the Indian Boards has lately been elected head of the Seneca Indian Nation. These boards selected the students for the short courses and supervise the general Indian extension program of the College. The Indian farmers will be guests at the annual American Indian Night at the Cosmopolitan Club, which will be held on Thursday of Farmers' Week.

this is to ask those who have not been to
farmers week at cornell
to come and learn and have a good time

those who come once are sure to come back
so there is no need to ask them to come once
more

the hosts are
the new york state college of agriculture
and the new york state college of home
economics

the place is
ithaca new york

the dates are
february eight to thirteen

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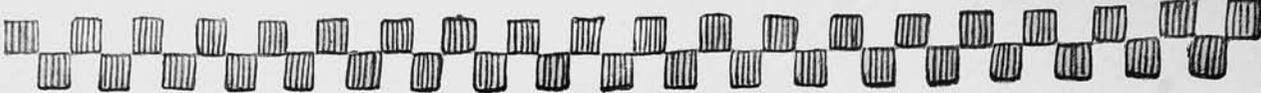


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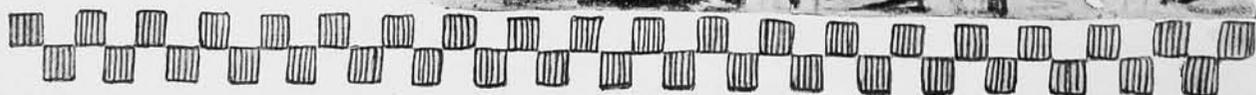
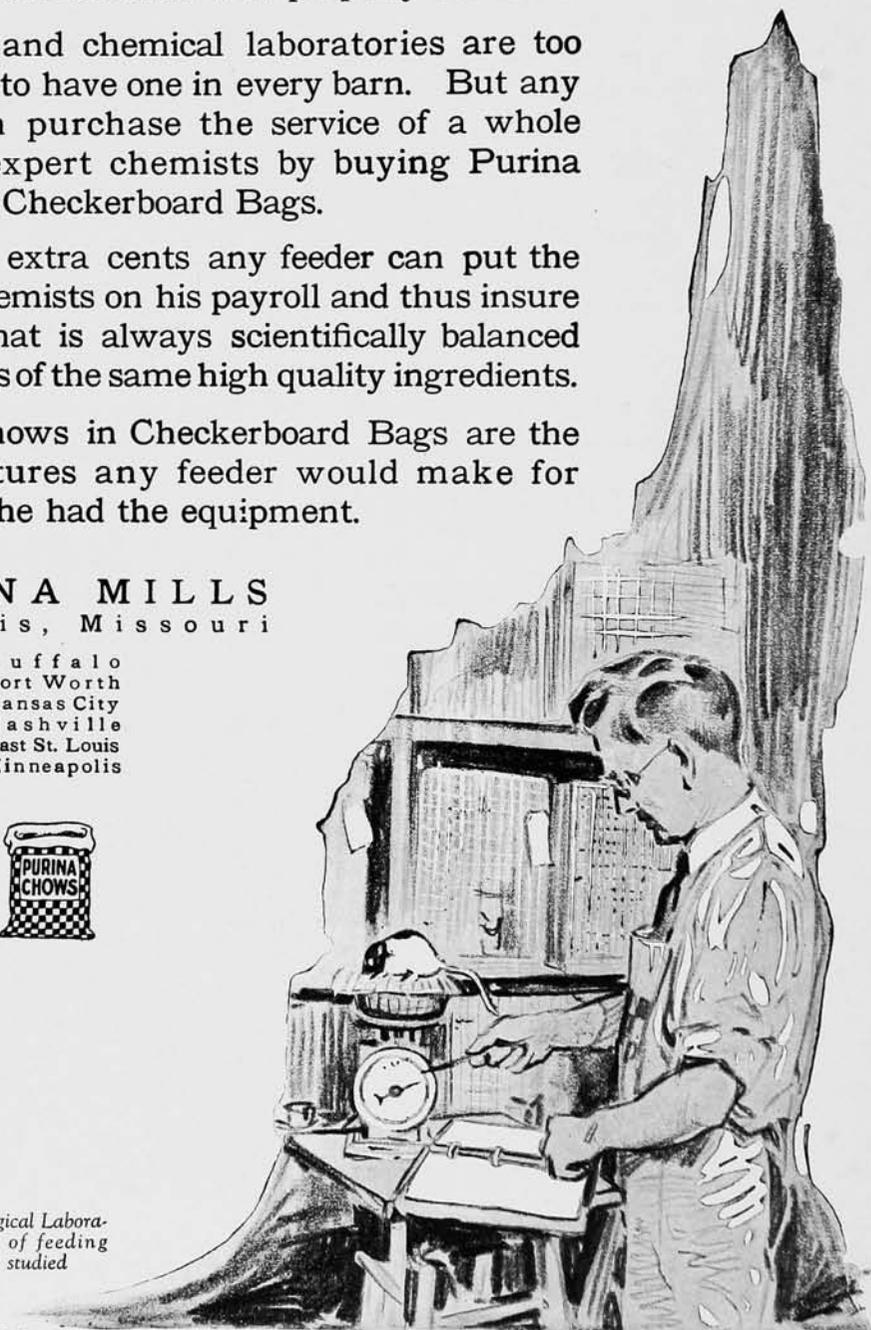
Purina Chows in Checkerboard Bags are the very mixtures any feeder would make for himself if he had the equipment.

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Section of Purina Biological Laboratories where the effect of feeding various feeding stuffs is studied



The Cornell Countryman

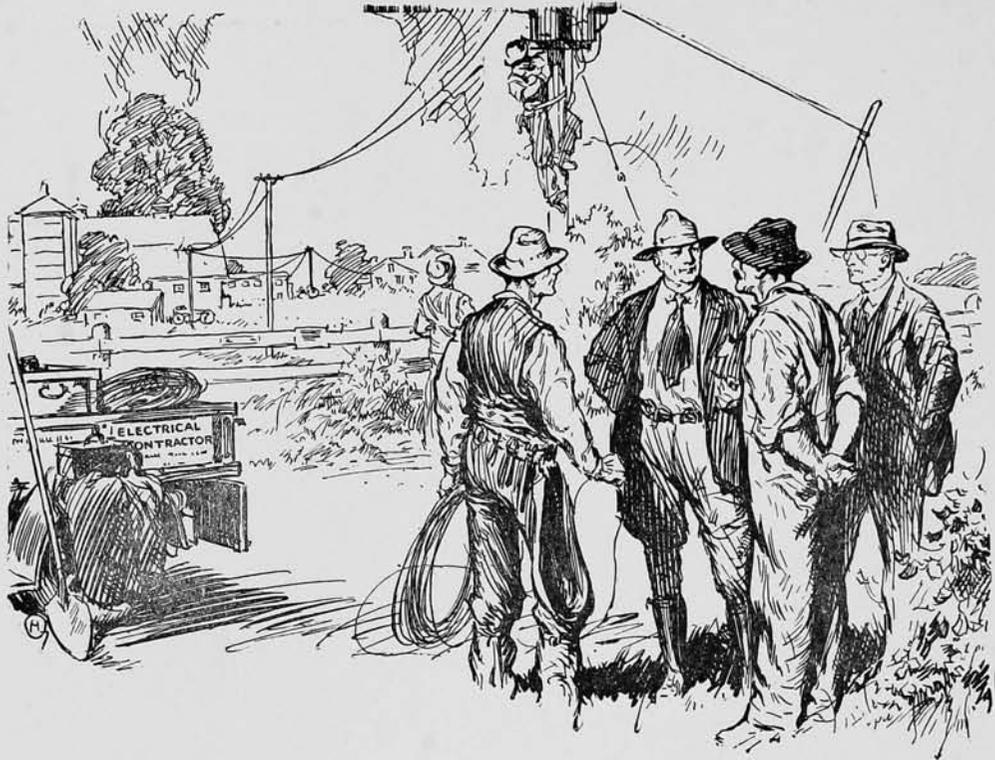


FEBRUARY

1926

Volume XXIII

Number 5



Team Work



Good business and good living have followed in the wake of electricity in industrial cities and suburbs all over the world.

In sections where farms are electrified you will find the G-E Farm Book used as a guide. Ask your electric power company for a copy or write us at Schenectady, N. Y.

Farmers in seventeen states, government agencies, and the electrical industry are building experimental lines to determine how electricity can be used with profit upon farms.

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The General Electric Company's share in co-operating with these representatives of the farmers and with the light and power industry is in keeping with the part this Company has played in the entire history of electrical development in the country.

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All Eyes On McCormick-Deering Primrose

The *Ball-Bearing* Cream Separator

GREAT changes are coming about in this world we live in. Everything is moving on or passing out. Men who stand still are losing ground. Things that have not kept pace with the times are being eclipsed by the *new and better*.

In the domain of the agricultural student the success of the McCormick-Deering Primrose Cream Separator is a good example. Here is a wonderfully designed, ultra-modern machine with outstanding improvements, which has been rewarded by a tremendous demand the nation over.

The success of the McCormick-Deering Primrose — both in *sales* and *popularity* — has been the most important “news” of the cream separator world of late years.

Ball Bearings have been the chief feature in this success. Ball Bearings have put the Primrose far in advance of any other type of separator. They have reduced friction almost to the vanishing point. They have made Primrose turn easier, run steadier, and last longer. Ball Bearings belong in the modern machine and the Primrose has them.

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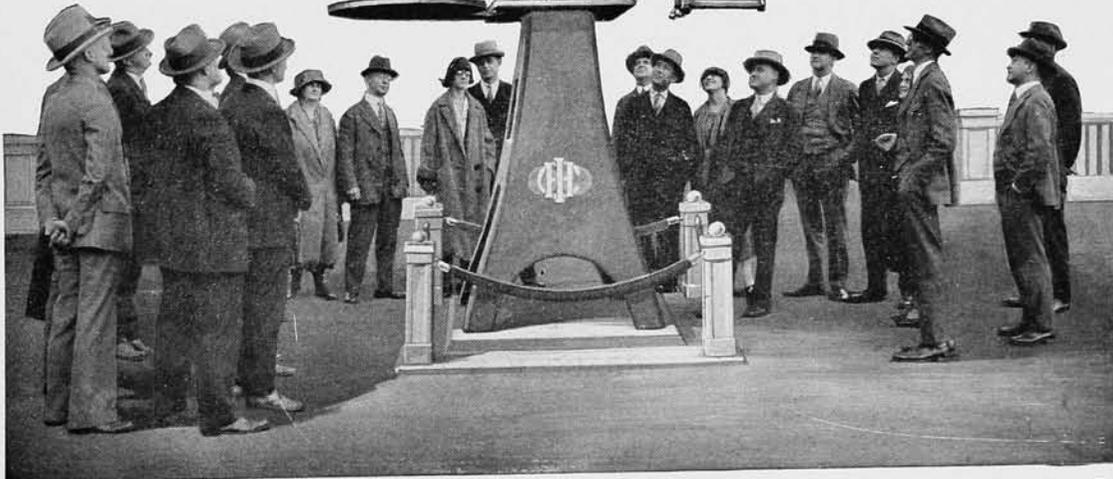
At Custer, Michigan, recently the McCormick-Deering dealer advertised and held a Primrose Service Day and had a factory expert on hand to give whatever help might be needed. Of 200 Primroses sold locally in the past ten years, only 11 were brought in needing repairs or adjustment. Of this number the biggest repair bill was 89 cents. Such a record speaks for itself.



12

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Skating is one of the greatest forms of exercise. The brisk air and the quick motion refresh the brain as well as the body. We have an assortment of skates beginning at a dollar a pair and ending with the skates attached to shoes. Drop in.

Gloves and Sweaters

We think that the most nearly perfect glove is the lined one. It is very warm. It fits. The leather outside protects your hands from the wind. Sweaters are light to carry and you are carrying them when you wear them. A good sweater is the least expensive in the end because it wears longer.

Cornell Co-op. Society

Barnes Hall

Ithaca, N. Y.

BETTER THAN EVER FUL-O-PEP CHICK STARTER NOW CONTAINS COD LIVER OIL AND COD LIVER MEAL

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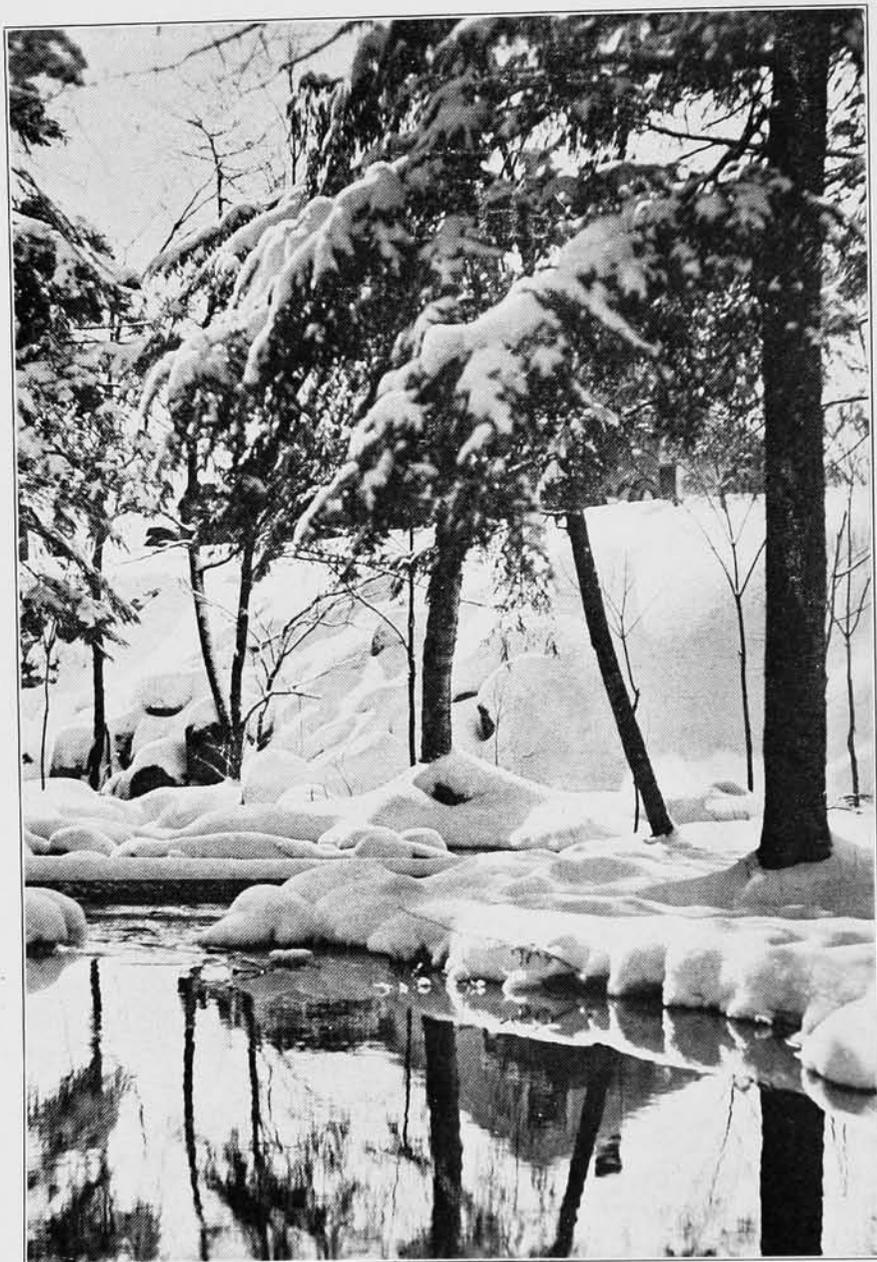
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Pools, like souls,
Reflect the things about them;
But in some pools, as in most souls,
Are reflections of deeper things
That make us wonder
From whence they came.

The Cornell Countryman

A Journal of Country Life — Plant, Animal, Human

Volume XXIII

FEBRUARY, 1926

Number 5

Farmers' Week, 1926

By Cornelius Betten

ONCE again the College extends its greeting to the guests of Farmers' Week and offers a varied program for their enjoyment. Those who have come to give Farmers' Week at Cornell a regular place on their year's calendar will recognize that the program is in the main cast along familiar lines and that this is so because the experience of the years has given some indication of what is both acceptable and feasible. But there is enough that will be new to the most regular attendant, and even the old topics will in their discussion show the results of added experience and of added experimentation.

The afternoon meetings in Bailey Hall will deal for the most part with the broader problems of policy in agriculture. On Tuesday, Director Thatcher speaks on "A national program for agriculture," and on the following day the State Commissioner of Farms and Markets, Judge Berne A. Pyrke, will discuss agricultural policy more directly from the standpoint of New York. Taxation problems affecting the farmer will be presented on Thursday by Professor Edwin R. A. Seligman of Columbia University, a leading authority in the field of taxation. The speaker for Friday is Mrs. Thomas B. Winter of Minneapolis, former national president of the Federation of Women's Clubs.

AS IS natural, the great majority of the sessions deal with specific farm problems. So numerous and varied are these offerings that it seems as if every farm and home problem is treated from some point of view. It is especially noticeable that purely technical matters do not wholly dominate the program. The problems of child training, recreation, scouting, the rural school, and the rural church are receiving proportionately more attention in succeeding years.

That there is an attempt to contribute not only concrete suggestions as to practice, but also an understanding of the basic nature of the processes with which the farmer deals, is evident from such titles as, "The economics of supply and demand" and "The physiology of the apple tree and its relation to orchard practices." The price studies presented by Pro-

Farmers' Week reflects the general purpose of the College of Agriculture, in that it makes available to farmers the facts and principles which underlie the activities of farm life, but it is concerned more with the *understanding* of the problems than with attempting to carry out their solutions. The program is predominantly educational, dealing with the broader questions of policy in agriculture, as well as with specific farm problems.

fessor Warren and others partake of this character. Still other titles suggest interesting side lines not closely related to agricultural practice. Such are "The history of wheat in New York," "Orange County in our agricultural history," "Governments as a biological phenomenon." It will be worth while to note the response received by these various types of materials.

FARMERS' WEEK is like certain other farmers' meetings and unlike still others in that it is predominantly educational. Farmers have set up for themselves agencies for the discussion of public policy affecting their own interests, and for organized effort to improve all aspects of life upon the farm. There is assuredly much in the program of Farmers' Week that bears upon these

problems, in fact, it all does, but we are at this time concerned quite as much or more with the understanding of the problems than with attempting to carry out the suggested appropriate solutions. In this respect Farmers' Week reflects the general purpose of the College. For it is the primary function of the College to investigate the facts and to discover the principles that underlie all the activities of farm life, to make these available to those who live on the farm, but not to attempt, as a college, to make application of this knowledge farther than is necessary to establish the principles involved.

While occasionally the College is criticized for not lending its support for or against specific political proposals and once in a while some one asks that Farmers' Week be made an opportunity for passing resolutions on political measures, there is happily a general understanding that the College can best serve farmers by scientific study of basic facts and principles on which practice may be based. Successful cooperation between the College and farmers lies in mutual understanding of what each is trying to accomplish so that the transition from investigation to practice may freely be made.

ALTHOUGH the very size of Farmers' Week may preclude the possibility, it would be desirable to have farmers themselves take a more active part in the proceedings. We should know even more directly than we do whether the program answers their needs, and their contributions to the subjects discussed would be most acceptable. Some of the smaller demonstrations and discussions already serve admirably in this respect. The better known of faculty members, at least, are kept busy enough with individual and group conferences, and question boxes are not uncommon, but these features might possibly be extended with profit.

Among the many busy committees of Farmers' Week might there not be opportunity for one organized to find out from our guests what in substance or in method has proved most helpful?

THE opportunities for informal and comfortable social contacts on the part of Farmers' Week visitors leave

something to be desired. A college community hardened to a daily round of lectures may not fully appreciate the tiring effect on outdoor folk of a day, or several days, of attendance on meetings with little opportunity for rest and relaxation. One slight improvement is hoped for by holding the Farmers' Week luncheon in the Drill Hall on Friday. The seating will

be by counties, thus affording a better chance for locating friends and neighbors. Unfortunately the Drill Hall is not available for this purpose on the days of largest attendance. As always, the College will entrust the comfort and convenience of the guests to a large degree to the students whose cooperation in this respect has been a marked feature of the week.

Heirloom Houses

By David S. Cook

WHEN not busy fighting Indians or felling trees or routing the British, the sturdy settlers of New York state were building houses that in many ways rival or even better the work of modern contractors.

The old mansion is covered with hand-made shingles, and looks fit to baffle many another winter's storm, after weathering them for close to two hundred and forty years. It stands four-square to the winds, with its lines as strong and rugged as

van Cook, a farmer, with sixty acres of land. This section, Wickapogue, was laid out in sixty-acre plots, and was from the first used for farming.

"In taking out the old chimney and brick oven, my father found in the chimney a brick bearing the date 1684. According to local history, there was a brick kiln in the west end of the settlement which turned out bricks on order. The rafters in the attic show that the roof at the back has been raised from one story.

"The beams are hand-hewed and the nails used in the timbers are hand-made."



This is probably the oldest farmhouse in New York State. It belongs to Mrs. Mary J. Downs, of Southampton, Long Island

Many houses built between 1680 and 1800 are still sheltering descendants of the men who hewed their timbers and laid their brick, and the period between then and the war of 1812 must have been a regular building boom, if we are to judge by the relative size of the population then and now.

Professor James E. Boyle, of the farm management department, has made public the results of a contest conducted to find the oldest farmhouse in New York state. It was a picture contest, and Mrs. Mary Jay Downs of Southampton, Suffolk County, Long Island, sent in the winning photograph, of a house erected in 1684.

the day when its first owners had their housewarming before the Revolutionary War was even dreamed of. A little time before the beams were hewn and the shingles were split for this house, the Dutch were taking fliers in Manhattan real estate at so many beads an acre, and John Smith and Pocahontas were considerably more than a legend. And the house still holds a warm welcome for the weary traveler at evening, while the fire-places spread a cheerful glow in its low-ceiled rooms.

Mrs. Downs wrote to Professor Boyle in sending a picture of her home to be entered in the contest, and said, "The house was bought by my grandfather in 1834, from Sulli-

THIS old house was old when Mrs. Downs' grandfather bought it; nearly a hundred and fifty years had passed since it had become the home of some enterprising adventurer from the Old World. To think that it is still sound after nearly another hundred years in the hands of the Downs family fills one with respect for those stout pioneers who built not only houses but a nation; who drove nails to stay two or three hundred years; and who mixed enough honesty with their mortar to make it last five or six lifetimes.

Built at practically the same time as the Downs house, the old Mabie house at Rotterdam Junction, Schenectady County, stands as another monument to the craftsmanship of the early colonial carpenters. Local historians disagree, as is always their privilege, on the date of the building of this house, but they all place it somewhere between 1680 and 1690.

THREE persons from different parts of New York state sent pictures of this house to Professor Boyle for entry in his contest, and one of them, a lady 81 years old, is a direct descendant of the man who built it.

The land on which the house stands was originally patented to Daniel J.

Van Antwerpen by Governor Andros. Van Antwerpen came to the fertile Mohawk Valley shortly after Hendrik Hudson and his crew sailed wonderingly up the river that has since borne his name. Somewhere in those early days when the history of the Empire State was in the making, he built this house for his daughter, perhaps the Katrina Van Tassel of the countryside, who was to be married to one Jan Mabie. She and her husband moved in as soon as the house was completed. Mabies have lived there ever since until the last twenty-five years, though the property is still in the hands of Jan's descendants.

The house is yet staunch and sturdy; built of stone without and heavily timbered within, it seems to laugh at the bustling weather of the twentieth century as a mere bagatelle after the old-fashioned winters of the seventeenth. The original timbers stretch across the ceiling of the downstairs rooms, and they are browned with the smoke from the open fireplace. The old home is truly mellowed with the passage of centuries which have touched it kindly.

THE old lady, past her eighty-first birthday, who wrote to Professor Boyle about this house, said it had been built for her great-grandmother, and that her grandmother, Jane Mabie, had been born there. This woman, Mrs. Sarah A. Veeder Hall, lives at Rexford, some sixteen miles from her old home, and says: "I have a few things in mind to tell about the old house. I must say I believe I am the only one left to tell it, and my mind seems clear yet, thanks to our good God.

"My grandfather was two years old at the time the Revolution started, and I have many of the things he made for use in the house after he was married. The house was the first built in the Mohawk Valley, and has never changed hands out of the family, as Miss Mabel Scrafford and Mrs. Edna Mabie Scrafford Franchere own it now." Truly the Dutch built well.

Two old houses in Columbia County were entered in the contest, and they were built in 1685 and 1686. The older one was originally an outpost of the Van Rensselaer Manor, and was built as a farmhouse. It has a wooden frame, making it rather easier than it otherwise would have been to install electric lights a few years ago. New clapboards have been added to

two feet high to tell that they were set there "A. D. 1713."

These houses all have stories to tell, stories too long for this space. Seventy-four pictures were mailed to Professor Boyle, and thirty-four of the houses portrayed were built before 1800. Thinking of the heavy toll that fire takes even now with all of civilization's devices to hold it in



The old Mabie house at Rotterdam Junction was built by an early Dutch settler about 240 years ago

the outside, but inside the walls have been left much as they were over two hundred years ago. Pictures of this house were sent in by A. B. Buchholz, of Hudson, and he sent a picture of another house built in 1686, which is also of frame construction.

ALL in all, Professor Boyle has gathered an imposing array of pictures, big and little, like the houses they represent, with this exception—some of the little pictures are of big houses, and vice versa. Some of the houses have the date of their erection chiseled in a big stone slab over the doorway—others have it painted where he who runs may read, and one old-timer carries embedded in its plastered walls wrought-iron figures

check, one marvels that there are still so many of them left. And the care and pains necessary to set up these homes in what was then a wilderness furnish still another source of inspiration for a generation which knows not the pinch of necessity that sent a man two hundred miles afoot for a log-chain.

SOME say houses have a spirit, which comes to them only after they have been lived in. Then they have the right to call themselves homes. Anyway, an old house has a human touch about it that time and children alone can give, and one wonders if the stalwart pioneer fathers had a vision of what their roof-trees would shelter before they crumbled.



Small Kitchen Equipment

By Ruth M. Kellogg

HOW many of you like to find your way into a good hardware or kitchen utensil department and then take your time to see what there is to see? Many of us are attracted by good equipment, and rightly so, as it is one of the means by which much time and human energy may be saved. This time we wish to talk about a few of the small articles of every-day use, since it is important that these tools be well chosen.

We may well begin with the paring knife. Every kitchen has at least one, but is it always a good one? Does it do its work well, hold a good edge, and wear for a considerable length of time? Do not expect to find a satisfactory paring knife for ten cents. There are paring knives on the market that sell for this price, but the good ones cost more. As to particular points about this knife, first of all, the blade must be a good quality steel. Although it is sometimes difficult to recognize this, there are a number of manufacturers whose name on the blade is a guarantee of quality. Stainless steel is highly desirable, as it never requires scouring, also both hands and fruit are much less darkened and discolored than when using ordinary steel.

SOME women have told us that their stainless steel knives do not hold an edge well. The trouble is that the quality of steel used in making the stainless knives varies as in those not stainless; consequently it again becomes a matter of getting a good quality of steel. Another requirement of a satisfactory paring knife is a secure joining of the steel and handle. In many of the cheap knives the steel is merely pushed back into the handle, and may pull out at some critical moment. Two or three good strong rivets in the wooden handle tell us that the steel is well secured. For the best joining of all, the steel extends through the wood to the end of the handle and is pounded down there. This joining holds the steel and handle firmly together and leaves no crack nor crevice along the handle to collect dirt.

Many women do not know that some paring knives come with slightly concave or in-curving blades. Practically all of the fruits and vegetables that need paring or peeling have curved surfaces, so this shape of

blade follows the contour of the product better than does a straight or convex edge. A slim blade reduces the effort needed in cutting, and a handle that feels comfortable to the hands, usually a wooden one, is desirable. If you have one of the patent knife sharpeners consisting of metal rings or wheels between which the knife is drawn, be careful in using it. Bear down lightly as you pull the knife through, otherwise you may find yourself equipped with a jagged edged and worn down blade.

ANOTHER article of frequent household use is the egg beater. If you are buying one of the wire whips, pass by those of heavier wire and select one that is made of light wire, unless you wish to use it for heavier work than beating eggs. The whip made of thin sharp wires will beat eggs more quickly than the heavy and dull whip, and also requires less energy on the part of the worker.

The dover type of egg beater is so widely used that many people think of it as the only type on the market. Here, too, there are some fine pieces of equipment and some very poor ones. How many of you have those that belong to the "skip-stop" variety? And what should you look for as you select a new one? This beater should always have the large wheel set in between the two small ones so that it stays in mesh and turns the beating parts every time you turn the wheel. This kind of construction prevents "skipping." Eight to ten cutting or beating parts, of course, beat eggs or whip cream much more quickly than do half that number, so another point to require is double beating parts. Remember, too, that there really are some beaters now on the market that have comfortable handles! Dover egg beaters can and should be put right in the dish water and washed thoroughly after use, then be dried as thoroughly afterwards.

THE can opener, except in homes where home canning and glass jars are the rule, sees rather frequent service, too. This tool should be a strong durable device with a handle that is comfortable to use. The cutting edge to be satisfactory must be made of good steel that can either be resharpened or renewed. The

can opener should be so made that it clings to the edge of the can instead of constantly traveling off toward the center. Also it should call for only a small amount of energy and preferably leave a smooth edge. There are some very good can openers now on the market which have all these qualifications. If you have many cans to open you are probably interested in a can opener that may be fastened to your table and cuts so easily that at first you almost doubt if it is really cutting.

Is there anyone who eats meat who doesn't like broiled steak or chops? Even if your stove is a kerosene stove or if you use a gas plate, such foods are not now denied you. There are at least two good broilers for such purposes now for sale; both have troughs for catching the juices as they escape from the meat.

THE copper wire dish cloths or mits have been in use for some time, and now we find many of the women using the copper wire dish mops that are made with wooden handles of convenient length. These are a great help when cleaning pots and pans, as they follow around the curving sides so easily; cleaning muffin tins is simple with one of these. They get inside glass fruit jars much more easily than your hand plus a dishcloth, and are also more effective when any of the contents stick to the jar.

A wide rubber plate scraper is now available; the makers call it a sink cleaner, but since the most of us prefer to collect the scraps in sink containers we do not particularly need a scraper in cleaning the sink. This scraper has no metal and is sufficiently wide and flexible to clean a considerable area at one time. It is fine for scraping plates and is also especially helpful in cleaning out mixing bowls, although perhaps it would do too thorough a job in the latter to suit your children if they are fond of "scraping the dish"!

Although this is not the time of year when people are so much interested in ice picks or chippers as they will be later, we want to finish with a word or two about this article. Again there are very useful ones and some very poor ones. One chipper that is often seen has three or four teeth, all so dull that if you succeed

(Continued on page 163)

Conditions Demand Better Grown Dairy Cows

By H. A. Hopper

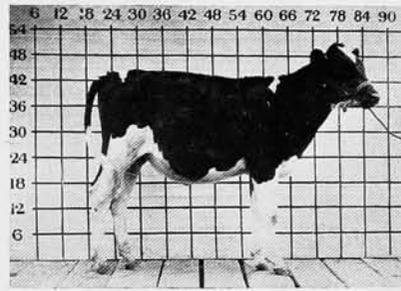
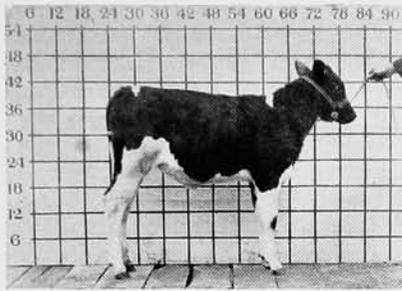
WHAT is your point of view with reference to methods of rearing dairy cows? On the answer to this question largely depends the future success of your dairy enterprise.

Common observation, even in this

and there is always that monstrous, that staggering question of health. Of these latter attributes, the grower knows full well, but the buyer is usually in the dark.

Unquestionably, some intensive

calf or heifer farms run as sort of a bovine orphan asylum have never gained much momentum. Wherever heifers are grown, it is the methods and practices used in their management that counts, providing they have the advantage of good heredity.



This shows a growing heifer, before and after a 120-day timothy hay ration. Her initial weight was 303 lbs.; final weight, 398 lbs.; total gain, 95 lbs.; average daily gain, 0.8 lbs.

decade which may well be characterized as one marked by high-pressure nutrition investigations, reveals the fact that very often the common practice and approved methods are hardly on speaking terms. It is difficult to establish in men's reasoning the idea that in rearing an animal one is making an investment for the future.

Some one has said that in rearing a heifer one is buying her on the installment plan. There is more to it than that. The larger conception in rearing calves and heifers should include not only the element of cost, but also the appreciation that here we have in the making a vigorous, healthful, long-lived individual. The materials put in at the beginning will be apparent at the end. Here lies the great responsibility. How can we meet it?

SOME of our statistically disposed friends say to buy your cows, and let the other fellow raise them. They will point to certain data showing that it costs more to raise a heifer than she will bring when sold. Therefore, the matter is settled; get your cow where she is cheapest. Let George do it, and take his word for the quality offered.

Such a doctrine is mischievous. The fact that one lot of heifers can be bought for less than another lot costs to raise, in itself, proves nothing. There are differences in breeding, development, and uniformity which can

milk producing farms can not raise heifers. They frequently send their better calves to the country to grow up as good cows should. Throughout the east there are coming to be recognized distinct producing and consuming areas for cows. In the producing regions, dairymen raise a few calves each year. On such farms milk is available for the young, and the stables furnish necessary warmth, light, and ventilation in connection with the mature herd. Much of the labor expended on them might otherwise be wasted time. Barn rent, bedding, and other costs are relatively small, but this additional return from the use of equipment already available adds to the income from the investment.

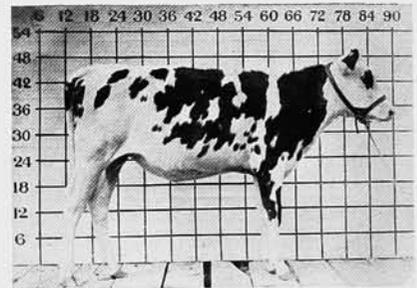
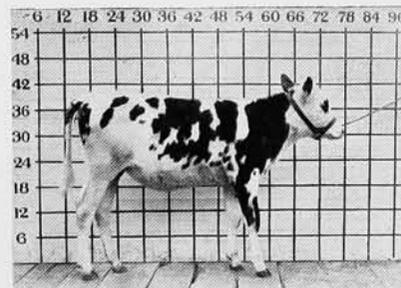
Someone must raise cows, and they will probably continue to come, as now, from farms where conditions, such as roughage and pasture, make their production possible. Specialized

THE matter of greatest economic importance in rearing heifers is not necessarily the cost, which most certainly should be watched, but rather the physiological durability of the finished product. If this factor is secured, initial cost is less important, as any excess due to extra attention in rearing will be absorbed during the life of the animal. In fact, the better methods suggested are likely to produce a better animal at less cost.

This is not the place to enter into a consideration of details in the rearing of calves. Keeping in mind our objective, namely, a promising physical specimen, let us consider three or four essentials in reaching the goal. We will need to proceed on the assumption that the calves are sound and well bred. Their subsequent development will be determined very greatly by the following:

Exercise—This implies voluntary rather than compulsory activity for calves four months or older. Given the opportunity, they usually take advantage of it. Growth of muscle and bone is correlated with activity. All the body functions, including digestion and assimilation, are accelerated thereby.

Exposure to sunshine—Sunshine has a marked effect on mineral assimilation, and consequently plays a part in skeleton growth. Young animals develop stronger bones when allowed access to sunlight. It is quite important to supply growing animals adequate amounts of mineral, but it



This heifer was fed alfalfa for 120 days. Her initial weight was 288 lbs.; final weight, 494 lbs.; total gain, 206 lbs.; average daily gain, 1.72 lbs. Compare with the gain made by the timothy-fed heifer

is more important to provide conditions for its effective assimilation. Exercise in the sunshine takes care of this.

Contrary to observed practice, growing heifers do not need to be pampered in cold weather. Close confinement in stables is not necessary. With a dry protected place to lie down, with a free run in a protected yard, and a full nutritious ration, they will thrive in the coldest weather. On the other hand, access to shade also must be provided in hot weather.

Variety in feeds—The more natural the conditions under which young animals are reared, the better. If the ration selected is also composed of natural foods, good results are assured. On farms where legume roughage and clean wholesome grains make up the ration, in addition to pasture, there are no vitamin deficiencies to worry about. Refined foods and cereal by-products of doubtful origin, the bane of modern human feeding, give no better results with young bovines. Every known factor for growth and efficient utilization of food may be secured if thought is given to the points mentioned above. There is safety and economy in variety of feeds.

Legume hays are most important—The first consideration in providing for the proper mineral nutrition of growing heifers is to feed legume roughage. No other method supplies calcium so well. If clover and alfalfa hays are cured so as to save the leaves and retain a deep green color, the mineral and protein content of the crop is largely retained. Legumes are not only cheap sources of protein and minerals, but also supply other factors which accelerate growth. In no other single feed can the feeder get so much nourishment highly adapted to his purpose as in legume roughage. Naturally, for this reason, it should be given first consideration in building the cow of the future.

A FEEDING trial was conducted during the summer of 1925 to compare alfalfa and timothy hays as roughages for growing heifers. The animals averaged from 4 to 5 months of age at the beginning, and were kept on feed for 120 days. The daily consumption of hay at first was small, but gradually increased so that the nutrients secured from roughage became a considerable factor in the ration.

As implied above, two lots were fed. One lot received timothy hay and about two pounds of grain a day, while the other lot received alfalfa hay, with an equal amount of the same kind of grain. All operations were on a practical basis such as any dairyman might follow. Roughage was consumed at will, as would be

the expected development in each case. The timothy lot made only 73.3% and 80.9% respectively of the expected normal gain. Typical individuals of each lot are shown in accompanying cuts.

THE general results indicate the high feeding value of legumes even for growing heifers of limited capacity for roughage. On the other hand, they suggest the need of selecting proper concentrates to go with low grade roughage if heifers are to make normal gains. Legumes produced not only a better heifer, but one at less cost.

Too high a percentage of dairy cows break under the stress of heavy production several years earlier than they should. Artificial surroundings

RESULTS OF 120-DAY TEST

	Group I Alfalfa	Group II Timothy
Total gain (pounds).....	656	500
Average gain (pounds).....	164	125
Average daily gain (pounds).....	1.37	1.04
Gain height at withers (inches).....	4.87	4.65
Hay per lb. gain (pounds).....	9.2	9.7
Grain per lb. gain (pounds).....	1.57	2.06
Cost per lb. gain (cents).....	12.4	14.12
Nutritive ratio	1 = 4	1 = 8.8

The group of growing heifers which was fed alfalfa made more substantial gains than the timothy group, and on the whole was more economical

the case in ordinary farm operations, with no attempt made to equalize the intake of protein. Each lot received an average of 2.15 pounds daily of a grain mixture composed of 300 pounds corn, 300 pounds oats, 300 pounds bran, and 100 pounds oil meal.

The results after 120 days are shown in the above table.

The alfalfa lot made better gains from the beginning, and on the whole they were more economical. Their increase in weight and height was normal for calves of similar age, being 96.5% and 91.9% respectively of

and the ravages of disease take a heavy toll. It is time to think of producing a cow that will wear longer. Rearing a calf is not only an opportunity, but a serious economic responsibility. The cost of replacements can be greatly reduced by growing cows better, by giving them an opportunity while young to develop strong vigorous bodies. A significant factor of control in this respect is the feeding and management early in life of which some of the major essentials have been mentioned in this discussion.



How to Burn Coal Economically in Domestic Furnaces

By F. H. Randolph

THE following rules have been developed after extensive study and research in burning different fuels in house-heating boilers. They apply to steam and hot water boilers, as well as to hot air furnaces.

In preparing the equipment for burning any kind of coal, see that the grates are in good order. Seal air leaks in the ash pit and around the clean-out doors; otherwise the dampers will not control the fire. Cover the steam and water pipes to prevent unnecessary radiation. Provide suitable clean-out tools for boiler flues. In mild weather, coal may be saved by not operating your furnace, but by using fireplaces, gas logs, and kerosene heaters. Reduce air leaks in the house by using weather strips and storm windows. In hot air furnaces, provide for re-circulating air by convenient slides in the pipes.

You may save the heat made by burning the fuel by not heating unused rooms. Let in the sunshine in the daytime, but pull down the shades early at night. Do not overheat the house—65 to 70 degrees should be ample. Get two thermometers—one for outside and one for indoors—and watch the weather.

SEMI-BITUMINOUS coal is higher in heat value and lower in price than anthracite. The purchaser actually gets almost twice the amount of heat for his money. There are several grades of smokeless semi-bituminous available in the eastern markets where anthracite is the customary fuel. When properly fired, and when the draft is properly regulated, these varieties can be burned without smoke, and will deposit very little soot in the furnace or chimney. Even with careless handling, considerable savings will result.

The medium and high volatile bituminous coals are well adapted for domestic use. In fact, they represent the bulk of the coal used for domestic fuel in many of the western states.

NO CHANGE in grates is needed to burn bituminous coal in furnaces heretofore using anthracite, except in the case of grates adapted to fine sizes of anthracite, where the air passages

are small and not easily cleaned. To burn high volatile coals without serious smoking may require a change in equipment.

On the other hand, it is possible to burn small size anthracite coal satisfactorily on grates having large openings such as those designed for bituminous coal. Two or three inches of ash maintained on the grates will prevent the fine coal from dropping into the ash pit. A screen of quarter-inch mesh, cut to fit the grate surface, is an effective way of assisting to prevent the loss. If a thin bed of ash is maintained over this screen, it may last a season.

Poor draft may be caused by a dirty chimney. A good way to clean a chimney is to wrap several bricks in burlap or an old piece of carpet, tie these securely together, and lower them down the chimney with a rope. Then disconnect the smoke pipe from the base of the chimney and shovel out the soot. Even if the chimney is not swept down by this method, it is always advisable to remove the soot from the base of the chimney and clean out the smoke pipe before the start of each heating season. Remember that soot is a better insulator than asbestos. You would not line the heating surface inside your boiler with asbestos, so you should not let soot accumulate in the flues.

IN BURNING bituminous, or soft, coal, keep the heating surfaces clean. Carry a deep fire, from 12 to 18 inches, and do not let the fire burn too low. For heating quickly, fire only a small amount of coal.

Study carefully the proper use of the three dampers. Usually it will be found that the pipe or flue damper should be open when firing fresh coal, and should be partly closed when the fire is well started; the ash pit damper should be open to start up the fire, open a little during the day, but shut at night; the check draft damper should be shut to start up the fire, open partly during the day and night as experience shows to be necessary.

When fresh coal is fired, admit air over the fire through the slide in the door until smoking ceases, and then

close the slide. Do not open the fire door to check the fire; learn to use the dampers to control the rate of burning. All air admitted above the fire in excess of that needed for combustion simply cools the heating surfaces which furnish the heat for the house.

When firing coal for a long run, or "banking" for the night, push the live coals back or to the side, and put a lot of fresh coal into the hole thus made; it will burn slowly and will keep a long time. If large cakes of coke are formed in the furnace, these should be broken up and the fire leveled.

Shake out the ashes when necessary but do not waste coals into the ash pit. The ash pit door should be closed while shaking. Do not let the ashes pile up under the grates. In this way grates "burn out;" they should last many years.

To avoid soft coal dust, the fuel should be well wet down before being put into the cellar, and the front of the pile kept moist with an occasional bucket or two of water.

IN BURNING small-size anthracite coal with coke, carry a deep bed of fuel, even above the level of the fire door. Shake the grate to remove ashes and lower the fuel bed, but stop when the first live coals appear. Spread a layer of anthracite over the entire grate and allow a few minutes for this fuel to ignite; next, fill the fire pot with coke, and allow this to burn until blue flames appear, then add another layer of anthracite.

After firing and seeing that the charge is ignited, check the draft to the desired point for slow burning. When banking the fire for the night, use less coke and more anthracite, but otherwise fire in the same manner.

Anthracite pea or buckwheat can often be used alone with success. This will happen when the draft is unusually good and the furnace is amply large. Small-size anthracite ignites slowly. It is best to fire one-half of the grate at a time, allowing the first half of the charge to ignite before adding the second half. Small sizes may be used in the fall and spring, if not in winter.



Through Our Wide Windows



The Cornell Countryman

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Incorporated 1914

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V. M. TYRRELL

Ithaca, New York

February, 1926

WHO'S WHO

ONCE in a while we get a little jolt which hurts our pride, but at the same time starts us thinking. For instance, we find that the editors of *Who's Who in America* have exploded one of our pet notions—our old great-men-from-the-farm theory.

In support of farming as a mode of life, we have long comforted ourselves by saying, "Look at all the nation's leaders, the former farm boys who now steer our ship of state and control our society. They were raised in farm homes; the farm is therefore the place for us to live and to rear our children."

Now we are told that of the men whose names are found in *Who's Who*, by far the greater number were born in towns and villages. Comparatively few were farm boys.

We might try to explain this by arguing that now a much greater part of our population is urban than in the early days when our tradition originated, so it is only natural that a correspondingly large number of our great men should come

from the towns. But this can not wholly account for the situation, and the fact remains that the farm boys are no longer the source of greatness that they once were.

Perhaps the reason for this is that the present farm home conditions are not as abreast of the times as they were several generations ago, and our children do not have an equal chance to make good. Perhaps we lack those character-building hardships and obstacles which made our forefathers real men; or perhaps—God forbid—the red blood of those rugged pioneer ancestors is thinning out, and the farmer as a class is degenerating.

However this may be, we still contend that the farm is the ideal place to rear a generation of leaders, and we have this consolation, that if our potential great men stay on the farm, they will probably never become great in the eyes of *Who's Who*, but still may be doing a great service in their own communities.

PARABLE OF THE PIOUS MAN

ONCE upon a time there was a pious man, who liked the summer because of the gentle breezes, the soft green grass, and the murmuring brooks, but he was sorry that the plowing, the cultivating, and the harvesting kept him from enjoying the beauties of nature.

He loved the winter, because he could let his cows dry up, and he could rest and read the good Book.

He had no pigs to care for, because his wife had hurt her back carrying swill. Wood-chopping time always found him with his annual attack of rheumatism, and he was glad his wife had saved her butter and egg money, so he could hire it done.

He could pray better than any man in town, and always drove his old car to church on Sunday, except when it would not run. Then he and his wife had to walk, because somehow or other he had not found time to break the colts, which in the course of years had grown into horses. After church, his wife always brought in the wood, to keep him from desecrating the Sabbath.

He never broke the Ten Commandments, always said grace before meals, prayed every night, and was at peace with the world.

Surely, this was a righteous man!



Former Student Notes

'99

Following lengthy experiments, Dr. William A. Hilton, who heads the Department of Zoology at Pomona College in Claremont, California, recently announced that hidden away in the human body is a minute compass-like organ, hitherto undiscovered, which gives the sense of location. Dr. Hilton says that the instinct which tells a seasoned hunter how to head for camp after a day in the woods and that which guides some through the winding streets of strange cities is traceable to this organism, which points the way as a compass needle points to the pole.

'07

William A. Lippincott reports that on January first his professional address changed from University Farm, Davis, California, to the College of Agriculture, Berkeley, California.

'08

W. H. Alderman, now of the department of horticulture at the University of Minnesota, presented two papers before the American Society of Horticultural Science, at Kansas City late in December.

'09

Frank Wurst is now managing his own dairy farm. It is said that he is still adding to his already large herd. His farm is located near Pawling, N. Y. His address is Pawling, N. Y.

On January 16 the beef cattle course men visited a number of steer feeders about Geneva, N. Y. They were shown about the country by "Tommie" Scoon, a former short course man of the College. The most interesting part of the trip was nearly missed when "Tommie" thought the men wouldn't be interested in seeing his farm because he was not feeding steers this year. He has 140 acres of his own and is operating 308 acres belonging to his father. The main crop on his farm is string beans, of which

he raises annually 70 acres. During the winter he feeds lambs and ships them when finished to New York City. He also is breeding Duroc-Jerseys, having obtained his foundation stock from the College. "Tommie" has one big advantage over many other sections of the state because the soil in that locality grows alfalfa hay without liming or inoculating the seed. He says that his wonderful place has been "taken from the soil," and that there is "profit in farming is just as in a grocery store. It's the man who has the will and knowledge to make use of his land to best advantage, who gets it." His address is Geneva, N. Y.

'11

Lindsley H. Evans is operating the Jersey Orchards at Morristown, New Jersey.

'12

Eugene C. Auchter, head of the department of horticulture at the University of Maryland, was recently elected president of the American Society of Horticultural Science. Dr. Auchter has conducted much valuable research, and presented several papers before the meeting of the Society in December.

'13

Martin R. Ensign, who was until recently professor of agricultural education at the University of Arkansas is now doing horticultural work at the University of Florida, at Gainesville.

'14

Harry H. Rosenberg and his brother, David H. '13, are operating the Bear Creek Orchards in the Rogue River Valley at Medford, Oregon. The orchards rank among the foremost pear orchards in the country.

H. Clyde Kandel is head of the poultry husbandry department at Pennsylvania State College. He is poultry editor of both *The National*

Stockman and Farmer and the *Pittsburgh Gazette-Times*, both of which are published in Pittsburgh. His residence is 329 Ridge Avenue, State College, Pennsylvania.

Ray Huey is an assistant statistician with the New York State Department of Farms and Markets, with headquarters at Albany, N. Y.

T. A. Baker, professor of animal husbandry at the University of Delaware, informs us that his newest daughter, Melissa, is now over six months old. His address is Newark, Delaware.

'15

Edwin C. Heinsohn is the Albany and Eastern New York representative of the Seymour Packing Company. He and his wife live at Delmar, N. Y., and have two little girls.

Lawrence Hollis is farming and acting as G. L. F. and I. H. Co. agents at Lacona, N. Y.

Charles P. Clark has the interest of the Farm Bureau at heart. He is farming at Skaneateles, New York, and lives on the county line between Cayuga and Onondaga. Recently he sent in a check for membership dues to the Cayuga county headquarters so that he could belong to both organizations.

E. L. Chase is the head of the G. L. F. field department with headquarters in the Ithaca Trust Company building at Ithaca, N. Y. He is living at the Y. M. C. A.

'16

L. M. Ripley is farming at Skaneateles, New York. He has been recently elected to the 1926 Board of Directors of the Cayuga County Farm Bureau, to represent the Dairy-men's League.

Edward E. Ludwig is associated with the E. C. Ludwig Floral Company of Pittsburgh, Pennsylvania. The company has opened a new store



J. W. DAVIS
The Cucumber King

The Money Making Secret of J. W. Davis' Success

DOUBTLESS you already know of him.

If you don't, he is the Cucumber King.

Grows cucumbers in greenhouses.

Acres and acres covered with greenhouses, growing "painless cucumbers" as he jokingly calls them.

Just a few years ago, I sat in the twilight beside his open fire.

He is a modest man and it's hard to get him to loosen up. But few of us can withstand the influence of an open fire.

So he told me about how he started with a little old fashioned greenhouse and used to peddle the vegetables and flowers about town.

For several years, he and his brother worked like dogs, and had no more at the end of the year.

Then one day he took some of his meagre savings out of the ginger jar, and took a trip to see how other greenhouse men made all the money he had heard they made.

He came back with a new vision.

Sold out to his brother, interested a man with some money, and built one of our big iron frame houses for growing just cucumbers.

That was about 12 years ago.

Now, although still a young man, he owns four big ranges of greenhouses in different parts of the country.

Spends his winters in Florida and all that sort of thing.

There's money in growing greenhouse cucumbers.

If J. W. Davis can become a millionaire at it, why can't you?

Start small. Grow big.

Here's something to get right into after graduation.

Start making money the first year.

Write us asking all the questions you want to.

You can't ask too many for us.

Tell your Dad about it.

Get Mother interested.

Let's put this thing over together.

If interested write to the Manager of our Service Department, Ulmer Building, Cleveland, Ohio, who will give it his personal attention.

Lord & Burnham Co.

in the Union Trust Company building, and Ludwig is in charge of it. His home address is 1441 Severn Street, E. E., Pittsburgh.

'17

Walter B. Balch was married on August 8 to Miss Katharine Hudson of Harvey, Ill. They are now living in Manhattan, Kansas, where Balch is teaching in the Kansas State College of Agriculture.

John C. C. Gardiner, manager of baseball in 1917, was married in the Church of St. Matthew and St. Timothy in New York on January 30 to Miss Helen F. Lockett, daughter of Dr. and Mrs. William H. Lockett.

Walter G. Cowan is sales manager of the Chicago office of the Certain-teed Products Corporation, located in the Straus Building at 310 South Michigan Avenue.

Paul R. Chappell, an ex-aviation lieutenant, is now farming at Cayuga, New York, R. D. 1.

F. P. Cullinan, associate professor of pomology at Purdue University, Lafayette, Indiana, presented a paper on pruning of peach trees at the annual convention of the American Society of Horticultural Science.

W. B. Eastman is farming at Belleville, N. Y.

B. J. Rogers is farming at Winthrop, N. Y. His farm is mainly devoted to dairying.

The legal profession has claimed another good ag grad in the person of Harold H. Widney. Widney writes that he is practicing in Denver, Colorado. He lives at 1368 Gaylord St., Denver, Colo.

Mr. and Mrs. Olin C. Krum announce the birth of a son, Warren Eugene, born on January 3. Mr. Krum is poultry extension specialist at the Colorado State Agricultural College, Fort Collins, Colorado.

'18

Benjamin Aborn, 2d, is associated with his father in the firm of Aborn & Chapman, 77 Front Street, New York, green coffee experts and commission merchants. Aborn lives at 653 Park Avenue, East Orange, N. J.

Sidney S. Warner, who has been with the White Motor Company for the past seven years, has been transferred from the Cleveland office to Columbus, Ohio, where the company has opened a new branch. His temporary address in Columbus is P. O. Box 341.

Charles R. Inglee is operating a 360-acre cranberry farm at Riverhead, N. Y., and also acting as a local agent for the Mutual Life Insurance Company of New York. He and his wife announce the arrival of their third youngster, Lillian Sherrill on April 22, 1925.

'19

Roger G. Eastman was married last September to Miss Lucia Overton, Simmons '22, of Belleville, N. Y., where they are now living.

A son was born on January 9 to Mr. and Mrs. Robert W. Scollon (Helen G. Bool '19). They live in Barnesboro, Pa.

Holbrook Working and his wife, Helen Rider '20, are now living at 1739 Waverly Street, Palo Alto, California. They have a son, John Webster, born on July 9, 1925. Working is in the Food Research Institute at Leland Stanford University.

Edith J. Pippey is manager of the

restaurant maintained by Trinity Episcopal Church of Pittsburgh, Pennsylvania, on Sixth Avenue in that city. For two years prior to taking this position she was manager of the lunch room for girls operated by the Brick Presbyterian Church in New York.

A. F. Lockwood is principal and agricultural teacher at the Belleville High School, Belleville, N. Y.

Mrs. William W. Frank (Marian R. Priestley) writes that she is applying her education by helping her husband in operating the Fair Dry Goods Company, Inc., at Appleton, Wisconsin, where they live at 417 North Durkee Street. She bemoans the fact that the Chicago papers don't carry much Cornell news, and that when she mentions that she is a Cornell graduate, it is frequently taken to mean that she attended Cornell College, in Iowa.

'20

Abraham Coan was married on last July 11 to Miss Elsie M. Stevens B.S. Drexel Institute '23, of Philadelphia. They are living at Hickory, Washington County, Pennsylvania.

Mr. and Mrs. Vernon W. Wagner of 2155 East Twenty-third Street, Brooklyn, have a daughter, Wilma Anita, born July 13 last.

Everett W. Lins is sales manager of the American Fruit Growers Inc., of Miami, Florida. His address is P. O. Box 1868.

Esther De Graff is in charge of the Home Economics Department in the High School at Sunbury, Pa. Her address is 119 Fairmount Avenue.

Katherine E. Crowley is teaching home economics in Rochester, N. Y., and living at 99 Washington Street, Canandaigua, N. Y.

T. K. "Tommie" Chamberlain is director of the United States Bureau of Fisheries Biological Station at Fairport, Iowa. He was married on October 14, 1922, to Miss Evelyn Taggart of Newbury, Vt. They have a son, James Hale, and a daughter, Elinor Ruth.

Mr. and Mrs. M. A. Darling (Evelina P. Bowman '20) have a third son, Herbert E., born on August 18. They live at 85 Riverview Avenue, Waltham, Massachusetts.

'21

Ralph P. Thompson is engaged in citrus culture and real estate work at Winter Haven, Fla. He and his wife have a daughter, Agnes Jean, born on October 18, 1925. Their address is P. O., Box 818.



Why Good Equipment Pays

ONE of the most significant facts in industrial history is the shrinkage of manual labor. Three times as many miles of roads were built in 1920 as in 1910, with 65,000 fewer common laborers.

Farming, too, is getting away from hand work. In 1910 the tractor was almost unknown. In 1923 and '24 a quarter of a million tractors were needed to supply the demand. Modern machines and methods have too many and too obvious advantages to be denied.

Into this newer, better development, Case tractors and power farming machinery fit like a hand in a glove. Every Case machine is designed and built to increase the working capacity of its users, to take the drudgery out of farm work, to make farming a more dignified, pleasant and profitable occupation.

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Case Farm Tractors, Steel Threshers, Harvester Threshers, Silo Fillers, Baling Presses, Steam Engines, Road Machinery, Grand Detour Plows and Disk Harrows.

T. H. Shen, who has been doing graduate work in the department of plant breeding, is on his way to China where he will join Dr. C. H. Myers and will assist the latter in the work at Nanking University.

Agnes Fowler is assistant dietitian at Barnard College. She lives at 607 West 116th Street, New York.

John E. Connolly and another Cornell man whom he does not name, to-

gether with two Ohio State men, are now living together at 9614 Clifton Boulevard, Cleveland, Ohio. Connolly is horticulturist in Ohio for the Niagara Sprayer Company of Middleport, New York.

R. L. Webster, formerly a professor in entomology at the State Agricultural College at Fargo, N. D., has gone to Washington State Agricul-

tural College at Pullman, Wash., as a professor in entomology.

'22

Marian K. Minturn and Robert E. Britt have announced their engagement. After graduation in September '21, Bob worked for the rural engineering department until the following March when he and his father bought a farm at Holcomb, New York. Marian spent a year as assistant home demonstration agent in Monroe county and in the fall of '23 became home bureau manager in Ontario county. Holcomb is not a large town; so in case you did not know it we will tell you: it is in Ontario county, six miles from the home bureau headquarters in Canandaigua.

Richard H. Peabody is the manager of Childs' Restaurant in St. Louis, Missouri. His address is 804 Washington Ave.

Donald E. (Tex) Marshall and his wife have a daughter, Jean Wilson, born on November 12 last at Canea, Crete, Greece. Marshall and partner are the authorized Ford dealers in Crete and are also engaged in installing farm and electrical equipment. His letter, dated December 16, stated that the indications were that they would have a hot and sunny Christmas with the thermometer at about 90 in the shade. They expect to return to the United States in the spring.

Roger B. Corbett was recently appointed agricultural economist of the Rhode Island Agricultural Experiment Station. He can be reached through the Rhode Island State College at Kingston, Rhode Island.

B. H. Staplin is field representative for the G. L. F. in six northern New York counties. The only place there's any chance of finding him is at 345 Arlington Street, Watertown, New York.

Claude Kezer is farming at Mesina, N. Y. He is running a dairy farm of pure bred Guernseys.

'23

Malcolm E. Smith is engaged in apple storage research under the supervision of Pennsylvania State College, at Canton, Pennsylvania. He was married on June 25 to Miss Helene Clarke '23, Rochester, with A. S. Foster '23, acting as best man at the ceremony.

Frank C. Baldwin is studying at the University of Pennsylvania for a master's degree in education, and preparing himself to teach in a boys' preparatory school. His address is

6401 North Seventh Street, Oak Lane, Pennsylvania.

Francis M. Porch is assistant retort foreman of the Georgia Creosoting Company, at Brunswick, Georgia. He is taking a practical course of work prescribed by the company to prepare him to become a salesman of creosoting products. His address is 413 Wolf Street.

Dorothy C. DeLany is now on her second year as manager of the Chenango County Home Bureau at Norwich, N. Y.

We regret to announce the death of Helen Elizabeth Brown '23, at her home in Ithaca, January 25, 1926, following a prolonged illness.

Francis I. Righter is working for the Pioneer Mill Company as a section overseer on its sugar cane plantation at Lahaina, Maui, Hawaii. He recently went there from Cuba, where he had been doing similar work for the United Fruit Company.

Carl Shiebler is married to Lillian Bacon '23 and is operating a cash crop farm at Canandaigua, N. Y. He also has a flock of breeding ewes.

Gertrude Mathewson is in the publications and information service of the College of Home Economics at Cornell. Her address is 514 Wyckoff Road.

'24

Margaret E. Kelly is assistant dietitian at the Buffalo City Hospital. Her address is 462 Grider Street.

Carroll C. Griminger writes that she is teaching biology to 170 wiggling freshmen at the school in Cortland. She says that she rather enjoys it except when the ghost of examination rears its head. Her address is 70 Central Avenue.

Bernhard Z. Eidam owns a poultry plant at Osbornville, New Jersey.

Emma G. Kuchler is with the Consumers' Cooperative Cafeteria at 154 Nassau Street, New York, and lives at 919 Main Street, New Rochelle.

Mr. and Mrs. Wilber T. Archibald (Marjorie Dickson '23) are making their home at Bovina Center, N. Y. During the week Archibald teaches science in the Delaware Academy at Delhi, N. Y., while Mrs. Archibald teaches English in the high school at Fleischmann's.

Marvin A. Clark is a member of the extension staff of the New Jersey

State Experiment Station and is working at present in Monmouth County. His address is 22 Hudson Street, Freehold, New Jersey.

Mildred Neff manages the Home Bureau of Schuyler County. Her home address is 321 South Franklin Street, Watkins, N. Y.

A. Elizabeth Beal is teacher and librarian in the Stamford Seminary and High School at Stamford, N. Y.

George Callister, who is with the Potash Importing Company of America, gave a talk on the major trends in our agronomic program January 23 before an agronomy seminary at the New York State College of Agriculture.

Marguerite Pigott is temporarily acting as hostess at the Alice Foote MacDougal Coffee House on West Forty-seventh Street, N. Y., and living at the Hotel Schuyler Arms, 305 West Ninety-eighth Street. She writes that she hopes to work into the dietetics department when a new shop is opened, but that she is finding the work at present quite fascinating because of the many prominent people she meets.

Edwin R. Harris has been ill for the last four months at his home, Raycliff Farms, Gasport, N. Y.

Kenneth C. Lawrence is putting in his second year as teacher of agriculture in the Sinclairville, N. Y., high school. He says that he has twenty-five boys in his class, that he leads the school orchestra, and helps to coach athletics. His mail address is Ellington, N. Y.

John S. (Si) Crossman is now extension news editor and assistant editor of publications at Michigan State College, East Lansing, Michigan. His address is Campus Apartments.

George A. Knaysi received appointment during January to the position of instructor in dairy industry here at Cornell.

Robert Francis Smith was married on January 12 to Miss Florence Kent of Auburn. They will reside in North Chili, New York, where Mr. Smith has a position.

'25

Fannie B. Miller is the supervisor of rural schools in Cecil county, Maryland. She has forty-three one-room schools and ten two-room rural schools under her supervision. She lives at 102 Delaware Avenue, Elkton, Maryland.

Marion E. Schoonmaker is teaching homemaking in the High School at Highland.

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Lewice L. Sovocol is taking graduate work and doing research in economics at Michigan State College. His address is 533 Grove Street, East Lansing, Michigan.

Helen M. Sterrett is the dietitian at the Presbyterian Graduate School, Baltimore, Maryland. Her address is 216 Ridgewood Road, Roland Park.

David F. Davis, Jr., is assistant production manager with the W. G. Mennen Company in Newark, N. J.

His mail address is 44 West Ninetieth Street, New York.

Claude L. Brownell was married at St. Petersburg, Florida, on December 24 to Marjorie H. Probasco '24. Their address is now 134 Sixth Avenue North, St. Petersburg.

Home Economics is the subject that Eleanor Baker teaches in the James Street Junior High at Eastwood, N. Y. 301 West Colvin Street, Syracuse, is her home address.

"Bill" Gaige is taking the East to the West. He has just accepted a position with the Clark Seed Co. of Green Bay, Wisconsin. "Bill" was formerly connected with a canning business in Rochester, N. Y. His address is c/o Clark Seed Co., Green Bay, Wis.

"Sam" Dorrance is studying gladiolus from the ground up under William H. Purple, alias "Gladiolus Bill" in Canandaigua. Mr. Purple is one of the leading gladioli growers of the country, having eighteen acres of them last summer. His home in Canandaigua is 169 Chapin Street.

The engagement of Marion Bool to Edward Kirby, who graduated from the engineering college in '25, has recently been announced. Marion is now on the staff of the Barnsboro High School, at Barnsboro, Penna.

Mr. and Mrs. Will A. Shorb announce the engagement of their daughter, Dorothy L. Shorb A.B. '26 to Paul R. Needham. Paul is now a member of the ag faculty at Cornell, in the entomology department. Miss Shorb's home is in Decatur, Illinois.

Bessie M. Tuttle is an academic teacher in the Girls' Vocational School at Orange, N. J. Her address is 481 Conover Terrace.

Edmeston, N. Y., now numbers among its inhabitants "Gus" Vrooman, who is engaged in imparting agricultural education to the youths of that community. For some reason or another Gus adds the information that he does not expect to get married within twenty-five or thirty years! Gus, were you despondent when you wrote that?

R. G. "Max" Maxwell is part of an hus now. He is instructing under Professor C. L. Allen. His address is 135 Blair Street, Ithaca, N. Y.

Marion E. Covert and Edward T. Brown, a Cornell engineering senior, were married in Auburn, September 27, 1925.

Lyle "Socks" Sisson is farming with his father at Sherburne, N. Y. He was married to Miss Martha Kendrick of Sherburne on October 17.

On October 16 the engagement of Hulda V. Hultzen to J. R. Greeley ('25 Arts), was announced. Miss Hultzen's home address is 86 West Main Street, Norwich, N. Y.

J. Courtney is the resident auditor for the Southern Hotel at Columbus, Ohio. He may be addressed at the hotel.

Lard - Autos and Wyandotte

The cargo of a ship recently docking at Copenhagen, Denmark, was entirely composed of leaf lard, automobiles, and Wyandotte cleaning powder.

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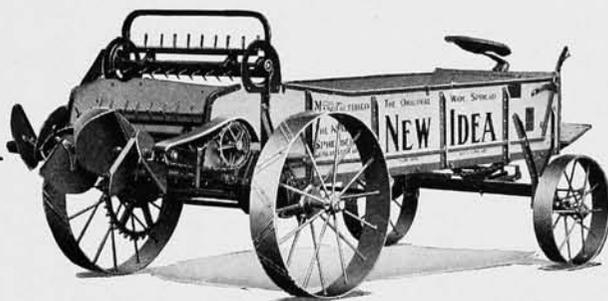
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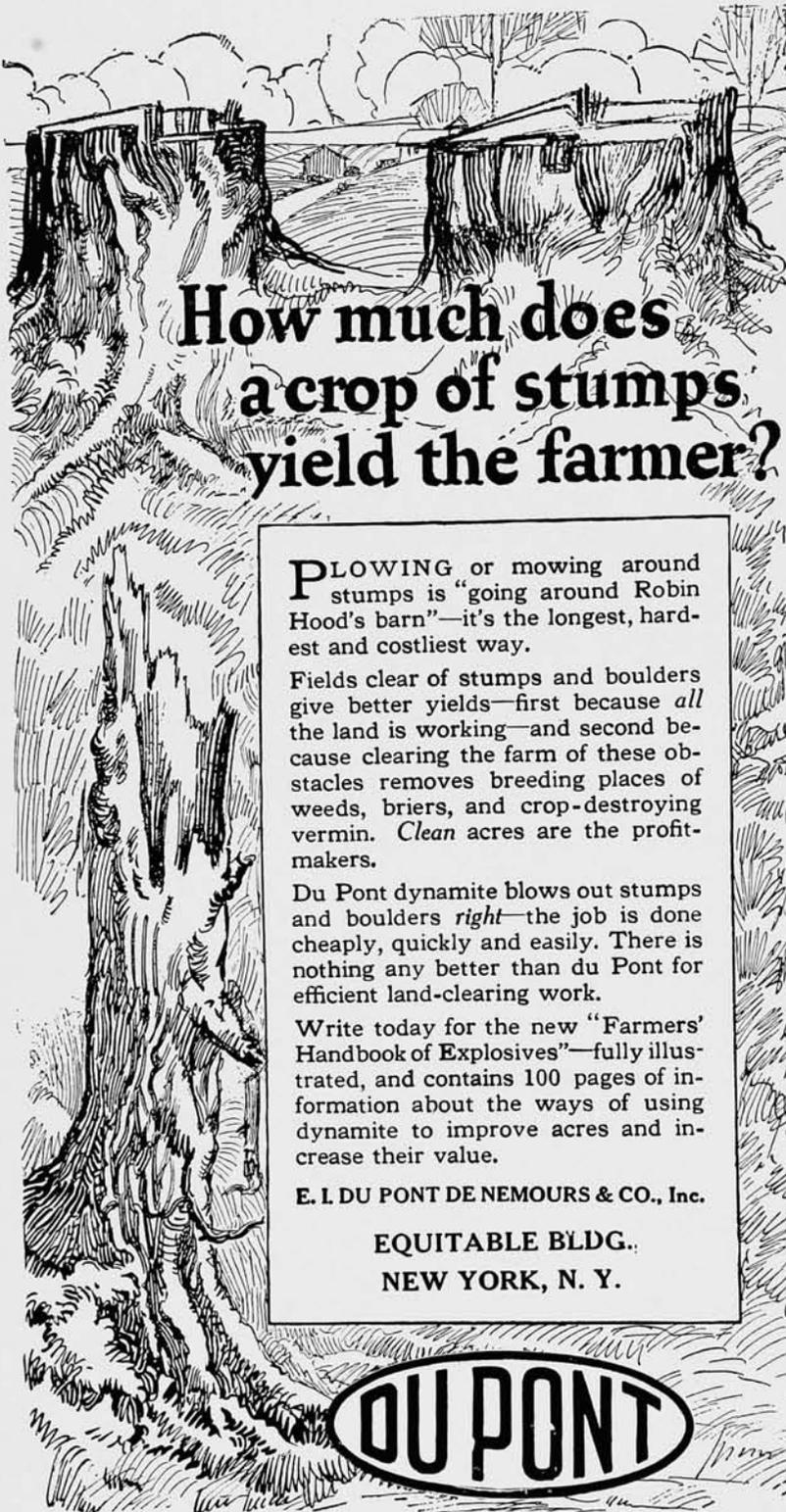
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DU PONT

Elizabeth Hamlin is teaching home economics in the vocational school at King Ferry, N. Y.

Frederick Eaton, formerly an assistant in the botany department at Cornell, is now professor of botany and physiology in the newly organized Connecticut College of Pharmacy at New Haven.

Mary A. Quick was married to

Francis S. Widrig '24 on October 30. Both are teaching in the Detroit schools and living at 61 Hague Avenue, Detroit, Michigan.

Sid Henderson has been down at Pawling, N. Y., ever since completing the general agriculture course here last winter. He is running Manumit Farm where dairy cows and poultry are the specialties. Last

September he was married to Miss Ruth Gordon of Philadelphia. Miss Gordon was a student at the Cornell Summer Session during the past summer.

Elizabeth Meach is teaching in Buffalo. Her address is 155 Goulding Avenue.

Wendell Webber is doing clerical work for the New York Telephone Company, at Paterson, New Jersey.

J. M. "Jack" Crandall is the first of the hotel management graduates to obtain a position as manager of a hotel. He superintended the purchasing of the equipment and supplies for the new Colgate Inn at Hamilton, N. Y., and is now manager of the place. The Inn was built by Colgate alumni.

G. B. "G. B." Webber is instructor in the meteorology department at the College and is also taking graduate work. Last summer he tried out various selling schemes for a book concern.

W. R. Needham is assistant manager of the Hillsboro Club, at Hillsboro Pt., Florida.

Al Olsen is juggling figures as auditor in the Hotel Niagara, at Niagara Falls, New York.

H. J. Marchand is floor manager at the Copley Plaza, in Boston, Massachusetts.

J. M. Dockery is assistant manager of the Hotel Raleigh, at Waco, Texas.

H. E. "Ren" Reynolds is room clerk in the Bethlehem Hotel at Bethlehem, Pennsylvania.

Dorothy (Dot) Weaver is a reporter on the Philadelphia "Evening Public Ledger." She is living at the College Club, 1300 Spruce Street, Philadelphia, Pa.

Helen E. Watkins is the nutrition specialist of the Public Health Nursing Association at Rochester, N. Y. Her address is 1085 Clinton Avenue, South.

Since September Alice R. Parker has been an associate instructor in home economics at Western Maryland College, Westminster, Md.

Henry P. Powell spent two months last summer in the Pocono Mountains of Pennsylvania, helping to make a forest working plan for the Pocono Lake Preserve, a 2,000-acre tract which is owned by the Friends. His address now is Box 284, Riverhead, N. Y.

Lucy Marsh is now dietitian at the Methodist Welfare School, Herkimer, N. Y.

These Notes Arrived Too Late to Be Classified According to Their Class Number

'12—C. S. Wright tells us in a letter that his address has been changed to 9 Beacon Street, Danvers, Mass. He says he is teaching ornamental horticulture at the Essex County Agricultural School. He recently had the pleasure of a chat with Professor A. W. Gilbert, formerly in the department of plant breeding at Cornell and now Commissioner of Agriculture for the State of Massachusetts. Wright is married and has one girl eleven years old.

'13—Fred C. Shaw is superintendent of the Langwater Farm at North Easton, Mass. He and his wife have two daughters, Sara and Lydia.

'16—Albert Schaffle is junior counselor and director of the vocational guidance department in the public schools of Wilmington, Delaware. He is also taking graduate work in educational administration at the University of Pennsylvania. He took his A. M. degree there last June and is now working for his Ph.D. degree. His address in Wilmington is 305 Woodside Avenue, Hillcrest.

'16—J. Tansley Hohmann is still New England representative of the Vulcanite Portland Cement Company. His address is 74 South Quaker Lane, West Hartford, Conn.

'17—Simon D. Shoulkin, who received the degree of D. V. M. from Ohio State University in 1920, is assistant state veterinarian of South Carolina. His address is Allendale, S. C.

'18—Benjamin F. Tarley is president of B. F. Tarley and Company, Inc., of the General Roofing Company, Inc., of Brooklyn, N. Y. He and Mrs. Tarley announce the birth of a son, Arthur J., on June 28 last. They live at 2364 Sixty-fourth Street.

'19—Dr. and Mrs. Walter D. Way (Hilda Greenawalt) have a son, Walter D., Jr., born on September 16. Way is a practicing veterinarian in Westport, Essex County, N. Y.

'19—John L. Buys and his wife (Kathryn L. Slingerland) have a son, Norman Slingerland, born on May 21 last. They live at 15 Harrison Street, Canton, N. Y. Buys is professor of biology in St. Lawrence University.

'19—Norman T. Newton is a fellow in landscape architecture at the American Academy in Rome. He recently returned there after a four months' trip through France, England, Belgium, and Switzerland. He is now

How efficient a fertilizer is Sulphate of Ammonia?

Top Dressing
Talk No. 3

THE work of Dr. J. C. Lipman, Prof. A. W. Blair and others at the New Jersey Experiment Station, answers this question.

Read the figures for yourself. They are the averages of 15 years' scientific work on regular 1/20 acre field plots.

Yields of dry matter per acre in pounds

Year	Crop	Sulphate of Ammonia 11 B Limed	Nitrate of Soda 9 B Limed
1908	Corn —lbs. grain	2951	2730
1909	Oats — " "	289	222
1910	" — " "	1750	1400
1911	Wheat — " "	1700	1550
1912	Timothy— " hay	2400	2850
1913	Corn — " grain	2550	1975
1914	Oats — " "	500	300
1915	Wheat — " "	1600	1280
1916	Timothy— " hay	4080	3480
1917	" — " "	3540	3060
1918	Corn — " grain	2714	2316
1919	Oats — " "	720	440
1920	Barley — " "	1360	1244
1921	Timothy— " hay	3620	2960
1922	" — " "	4680	5040

12 year total dry matter 61,185 lbs. **55,213 lbs.**

Sulphate of Ammonia was applied at the rate of 240 pounds per acre, and nitrate of soda 320 pounds per acre, the amounts of nitrogen being the same in each case.

Sulphate of Ammonia
Nitrate of Soda

Relative Efficiency
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77

Compiled from following sources:

- First 5 year period—Bulletin No. 260, N. J. Agr. Expt. Stations, pp. 14 & 15
- Second " " —Soil Science, Vol. IX, No. 5, pp. 374 and 375
- Third " " —Soil Science, Vol. XIX, No. 1, pp. 59 and 60

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in his last year of the fellowship which expires October 1, 1926. His address is Academia Americana, Rome (29), Italy.

'21—Lillian F. Brotherhood is professor of geology and head of that department at the College of St. Elizabeth, Convent Station, N. J.

'22—O. Bailey Foote was married in Brooklyn, N. Y., on October 24, to

Miss Helen M. Henjes. They are now living at 765 Excelsior Avenue, Oakland, California, where Foote is manager of the Oakland Branch of the Jensen Creamery Machine Company.

'23—We recently received an interesting note from Howard L. Laib. It was written from 250 West 85th Street, N. Y. City, and was worded as follows: "If it's news you want

It Will Pay You to Learn to Blast

WRITE now for a free copy of "Land Development with Hercules Dynamite". While you are still at college, learn how to use dynamite economically and effectively to blast ditches, to blow out stumps and boulders, to plant trees, and to sub-soil. This is a practical handbook and is well worth keeping for reference. Sign and mail the coupon below—now.

Please send me a copy of "Land Development with Hercules Dynamite".

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AG AND HOME EC COLLEGES INCREASE NEWS CIRCULATION

Prof. Bristow Adams Explains Value of Regular News Service

During 1925 the actual circulation of news items issued by the College of Agriculture and the College of Home Economics to the daily and weekly papers of the state amounted to 204,089,868, as compared with 185,933,222 during 1924. This means a gain of 18,156,646, or about a million and a half greater circulation for each month in the year.

This figure of circulation is arrived at by adding up the circulations of the individual papers in which items from the colleges have appeared, and the circulation is accepted as a fair basis of measurement, instead of a calculation of the number of inches occupied by the items. It can be readily seen, for example, that two inches of space in a newspaper of large circulation is worth more than twenty inches in one of relatively small circulation.

During the year 1925 the number of separate clippings seen at the college was 57,710, as compared with 65,000 in 1924. This is a smaller number of separate clippings than in the previous year, but with a larger total circulation. This may indicate that more material was used in daily papers than during the previous year. Each clipping represents an average circulation of 3,356.

The two main values of a regular news service for a college, for a farm or home bureau, or for any other agricultural organization, according to Professor Bristow Adams, is that it brings to the attention of the people, in a medium which every one reads, a constant record of what the institution is currently accomplishing. In the second place, it furnishes a further means of extending knowledge, the gathering and dissemination of which is paid for by the people, to those who are able to profit by it. In other words, it is an additional channel for extension. The more such methods are used the more likely are the persons, who are served, to be in sympathy with the organization which acquaints them of what it is doing.

WARREN WANTS RECORDS OF N. Y. STATE FARMS

Agriculture has gone through good periods and bad periods in the past. It will have prosperous periods and distressed periods in the future. A very large number of New York farm families have gone on generation after generation taking the weather as it comes, and taking economic conditions as they come, preferring to remain farmers regardless of temporary conditions.

Professor G. F. Warren of the farm management department says that the State College of Agriculture desires to obtain a record of the farms in each county which have remained continuously in the same family for three, four, five, or more generations by being passed from father or mother to son or daughter.

—here goes. Mr. and Mrs. Howard L. Laib '23, in the Kermis cast of "The Meddlers," announce (declare—cry out—etc.), the birth of a 6½ pound boy—Howard, Jr., on January 22, at the Polyclinic Hospital in N. Y. City. The family will soon return to their orchard farm at Red Hook, N. Y. That's all—Oh!—"Go thou and do likewise." Best regards to all and Davy." Sorry, "Howie", we're not

married and as for returning to the farm that's all o. k. in the spring, but just now Junior Week is only a few days off.

'23—J. "Johnny" Vandewort, Jr., a former cross country "C" man here, is on the staff of the poultry department of the agricultural college of the University of Illinois. His address is 703 Indiana Avenue, Urbana, Illinois.

**GRADUATE STUDENTS MEET
INFORMALLY IN NEW UNION**

**Dean R. A. Emerson Expresses Views
on Forming a Grad Club**

A meeting for all graduate students in the University was held in Willard Straight Hall during the week of January 17, at which plans for a grad student organization were discussed, and an informal organization was formed, headed by a committee that will arrange for future meetings. P. R. Burkholder, assistant and graduate student in the department of Botany, was elected chairman of the new organization, which will confine itself almost entirely to promoting social activity among the grads by holding social meetings occasionally.

Dr. R. A. Emerson, Dean of the Graduate School, talked to those present at the meeting, outlining briefly his ideas as to the advisability of forming a grad club such as was proposed, stating that such a club would be worth while so long as members get enough out of it to keep it going without outside stimulation. Dr. Emerson expressed himself as being strongly against hiring a hall and having professors speak at the meetings, stating that he thought that such a policy would be the quickest way to kill the organization.

About seventy-five men grads attended the meeting, which assumed the nature of a smoker and informal get together. Mr. Burkholder was chairman for the evening. Some group singing aroused the gathering to a state of enthusiasm, which was kindled still higher by the antics of an impromptu quartette that showed plenty of talent as an entertaining body.

Expenses of the meeting were met by passing the hat and encouraging all present to pitch pennies (and larger coins) into it. It was decided that this method of financing meetings would be the most practical procedure in the event of future meetings, which many grads look forward to with pleasure.

Small Kitchen Equipment

(Continued from page 148)

in breaking off some ice you rather worry it off instead of sharply chipping it. A very much better tool is the one that has six teeth or points, all so sharp that the chipping of the ice is easily done.

A man knows that good equipment pays in his work; it is as true for household work, where it yields returns as before indicated in a saving of time and energy, both items of moment in the busy housekeeper's day. Also good equipment contributes to her happiness and so in turn to family happiness.

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For Feeders of Dairy Cows and Beef Cattle

Every state fair and livestock show conducts a feeding contest. The premium list is the book of rules. Every contestant must pay an entry fee or stall rent and also buy his feed.

Most of these fairs and shows are commercial enterprises and they are expected to earn a profit. They are supported by all agricultural colleges and livestock associations because they help the farmer, and feeder.

We thoroughly believe in rewarding feeders for their skill in getting the utmost out of their feeding materials. They should be encouraged in every way possible, therefore we have launched the greatest feeders' contest of all—

122 Cash Prizes—\$15,000.00

14 Prizes for Cow Testing Associations	\$3,000.00
14 Prizes for Individual Dairy Herds	2,100.00
7 Prizes for Championship Cows	1,000.00
14 Prizes for Beef Cattle Feeders	2,500.00
12 Prizes for supervisors or verifiers	2,650.00
24 Prizes for herd managers	1,250.00
37 Prizes for co-operating feed dealers	2,500.00
122 Prizes, totaling	\$15,000.00

Every feeder of six or more dairy cows, or forty or more beef cattle is urged to enter this contest. You can feed anything you like just so the grain ration contains 25% or more of Corn Gluten Feed—the protein feed that makes meat or milk at the lowest cost.

You should enter your college herds. The members of your animal husbandry classes should become certifying supervisors for other feeders. This will be valuable experience in your college course and may earn the supervisors prizes.

This contest starts April 1 and ends September 30, 1926. The simple rules and conditions are given in detail in our Bulletin No. 4. This bulletin and our new book, "The Gospel of Good Feeding" will be mailed free. Write for them Now.

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NINETEENTH FARMERS' WEEK PROGRAM STARTS ON FEB. 8

Dr. Warren to Discuss Farm Prices As One of the High Points

The fuse is lit and Farmers' Week is all set to go off with its nineteenth annual bang, which, it is promised, will be "bigger and better than ever" this year. The big week begins on Monday, Feb. 8, with a program of lectures beginning at nine and ending at five. While organized in much the same way that previous Farmers' Weeks have been planned there are several high spots in this year's program that will give farmers a chance to bring themselves abreast of the times.

Dr. G. F. Warren, head of farm management, will talk at eleven o'clock on Tuesday, Wednesday, Thursday, and Friday, the second to fifth days inclusive, on prices and problems of agriculture. Dr. R. W. Thatcher, director of experiment stations, will speak at two o'clock on Tuesday; State Commissioner of Agriculture, Berne A. Pyrke, will talk on Wednesday at two o'clock, and Professor Edwin R. A. Seligman of the department of economics at Columbia will lecture on taxation problems on Thursday at two o'clock.

The College of Home Economics, in cooperating with the College of Agriculture will feature a child training institute which Dr. Nellie Perkins will direct. The nursery school, which was instituted this year by the donors, will be "at home" from time to time during the week, when guests will be allowed to inspect it.

Among the conferences to be held in conjunction with Farmers' Week will be a three-day gathering of Grange masters and lecturers who will be addressed by Jennie Buell, editor of the lecturer's page in the *National Grange Monthly*, and other prominent speakers.

Evening Entertainments

Evenings will be devoted to special entertainments which will include a University orchestra concert in Bailey Hall on Tuesday evening, an old fashioned singing school on Wednesday evening, the annual Eastman Stage contest on Thursday night, and presentation of the two Kermis plays on Friday night.

A get-together luncheon for Farmers' Week guests will occur in the drill hall Friday noon. This is the second year that such an affair has been held, and the experience of last year has taught that the old armory is too small for that type of party. It is estimated that over 750 visitors attended the lunch last year.

Roberts assembly will serve as a theatre on Wednesday and Thursday nights, when *The Balanced Diet*, a home talent play produced by the Morris Chapel community and coached by Mrs. Agnes Giles, with *The Exile*, produced by the Lake Ridge

KERMIS CASTS SELECTED FOR FINAL PRODUCTION

Eastman Stage Contestants Preening Their Feathers for the Cackle

Casts for the two winning Kermis plays have been selected from the fifty students who entered the competition for the coveted roles, and the dramas are being whipped into shape for their presentation on Friday night of Farmers' Week.

Those selected to appear in *Finding a Way Out* by F. B. "Doc" Wright

'22, are Laura E. Griswold '28, Corinne Messing '28, "Abe" Cruickshank '27, and W. F. Carty, a short course student.

The nine characters who will appear in *Amends*, written by Norma Wright '27, are Lois White '26, "Kay" Smith '28, F. R. Smith '27, "Ken" Kilpatrick '26, "Lee" Blanding '27, "Al" Clark '28, Harold (Went) Wentworth '27, Meade Summers '26, and Harold Dorn '29.

The plays are being coached by A. E. Milliken '24.

A competition for manager of Kermis is now under way and will be decided on the night of presentation. The competitors at present are "Ernie" Nohle '28, "Babe" Blewer '28, and "Al" Clark '28.

The six embryo orators who survived the Eastman Stage semi-finals are earnestly rehearsing in anticipation of Thursday night of Farmers' Week when the fate of another hundred and twenty dollars will be decided. The speakers, in the order of their appearance on the stage are: George (Sully) Sullivan '26, who will explain *How a City Chap Looks at the Country*, H. W. (Howie) Beers '28, who will discourse on *The Grange and Its Community*, "Tommy" Termohlen '26 talking on *The Farmer and the Soil*, "Dan" Dalrymple '27, who discusses cooperation from a new viewpoint, "Berry" Huckle '26, who will center his remarks on *Farm Labor*, and Miss M. M. Leaming '26, who will tell of *Junior Extension*.

DOLLIES DISPLAYED

A collection of dolls dressed in historical costumes is on exhibit in the home economics building. Costumes represent periods from the fifteenth century to the present day. The dolls were dressed by Home Ec students.



Old timers will remember this scene. "Daddy" Tailby is driving the team bought in 1907. Farm management is in the background

community and coached by Mrs. Olive Van Nest, will be given.

As in past years the railroads of the state are cooperating in offering fare and a half to visitors from the state.

FORMER DEAN L. H. BAILEY RECEIVES NOTABLE HONOR

Dr. Liberty Hyde Bailey, now professor emeritus, and dean of the College of Agriculture from 1903 until 1913, was honored with the presidency of the American Association for the Advancement of Science at the annual meeting of that society which was held in Kansas City, December 28 to January 2. Dr. Bailey thus becomes executive head of an affiliation of scientific societies of both North and South America, but to which scientists from all parts of the world belong.

Dr. Bailey, who is still referred to on the campus as "dean" has done much to shape the history and future of the College of Agriculture, particularly by his service in obtaining the nucleus for the present group of ag campus buildings.

While Dr. Bailey is now chiefly concerned with editorial work he still finds time for scientific work, which is mainly research with palm trees.

CORNELL TEAM LEADS IN POULTRY JUDGING CONTEST

H. M. Summers Wins Silver Medal at Madison Square Garden

The Eastern Section National Inter-Collegiate Poultry Judging Contest was held at the New Madison Square Garden, New York City, on January 8. The following colleges and universities competed in the contest: Connecticut Agr. College, New Jersey Agr. College, Massachusetts Agr. College, Cornell University, North Carolina State College of Agr., Penn State College, and West Virginia University. The men in charge of the team from Cornell were: D. R. Marble '26, and G. O. Hall of the poultry department.

The contest consisted of three parts, a written examination covering the American Standard of Perfection, the judging of four classes of five birds each of R. I. Red Cockerels, Barred Rock Pullets, White Wyandotte Hens, and S. C. White Leghorn Cockerels for exhibition and the judging of four classes of five birds each of R. I. Red Hens, Barred Rock Hens, White Wyandotte Hens, and S. C. White Leghorn Hens for production. The placings of the exhibition classes were made by Mr. Newton Cosh, of Vine-land, N. J., and Mr. J. P. Quinn, of the U. S. Dept. of Agriculture, and the awards of the students based on their placings. The placings of the production classes were based on the number of eggs produced from Nov. 1, 1924, to Oct. 31, 1925.

Cornell Rates First

When the returns had all been tabulated it was found that the teams ranked in the following order for total scores:

Cornell University	1661.6
North Carolina	1640.0
West Virginia	1577.2
New Jersey	1536.4
Connecticut	1469.4
Pennsylvania	1460.6
Massachusetts	1301.2

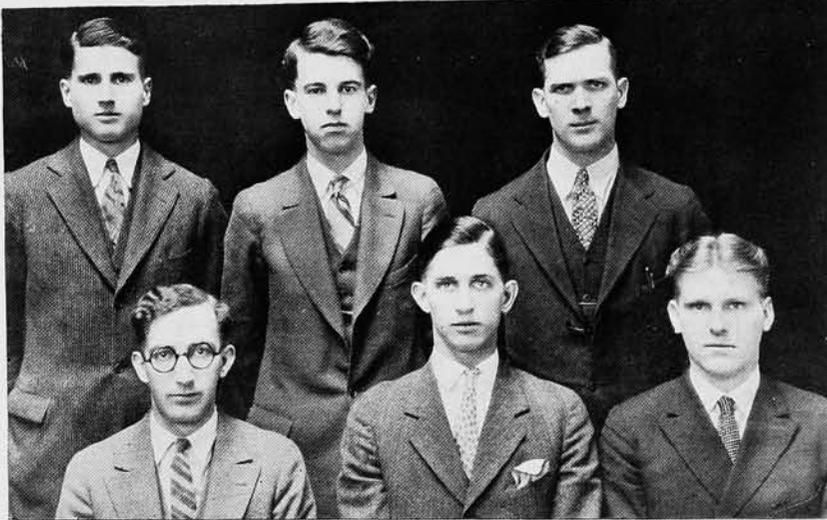
The cups won by the team composed of H. M. Summers '26, G. P. Rhodes '27, R. S. Whitehead '27, and A. L. Lane '28 were the grand sweepstake, standard sweepstake, standard Barred Rock, and the standard Leghorn prizes. H. M. Summers won the silver medal standard judging cup.

There were two grand sweepstakes cups awarded, one by the Madison Square Garden Show Management, which becomes the permanent prop-

erty of Cornell University, and the second cup which was given by the American Association of Instructors and Investigators in Poultry Husbandry to be kept permanently by the college winning it first for the third time. At the present time Cornell has won the cup twice, Connecticut Agr. College twice, and Penn. State, Massachusetts, and New Jersey, each have won it once.

The cups were awarded at a banquet in the dining room of the Times Square Hotel, by Dr. Kaupp, Chairman of the Awards Committee.

During the last three years, Cornell University has won first place twice and second place once, winning first in 1924, second in 1925 and first in 1926.



The Poultry Judging team of the College of Agriculture
 Upper row—G. P. Rhodes '27, R. S. Whitehead '27, G. O. Hall, Coach.
 Bottom row—D. R. Marble '26, Ass't Coach, H. M. Summers '26, A. L. Lane '28

SEED SELECTION PLANNED; DR. H. H. LOVE TO SPEAK

The department of plant breeding is planning a number of new features for Farmers' Week, not the least interesting of which is the corn seed contest. Members of the New York State Cooperative Seed Improvement Association will send seed samples which are to be judged, both as a contest and for the purpose of selection. A number of lectures of special interest to members of the Association has also been arranged, and will cover observations by the members of the department during the past season. Professor A. C. Fraser is to talk on his work with seed germination of roses, which is a very serious problem to many growers. Dr. H. H. Love, but recently returned from China, will give a general lecture in Bailey Hall on the agricultural situation in China, and Cornell's contribution to the new development there. There will be the usual lectures on cereal crops, and the characteristics of foreign and domestic grown clover and alfalfa seed.

ROUND-UP CLUB ENTERTAINS WITH "EDUCATIONAL" PLAYS

Students Scrubbing Animals for the Livestock Show

The faculty and student committees of the animal husbandry department are planning a full week's educational program for the College's guests during Farmers' Week.

Chairman "Happy" Sadd '26 and vice-chairman "Bill" Bishopp '26 are assisted by several student committees. "Bob" Mitchell '26 is directing the entertainment and promises an inviting program of movies and slides each noon with the feature being a short, humorous, educational play under the auspices of the Round-Up club by the courtesy of the Purina

Feed Mills. "Heine" Luhrs '23 is presenting the play for the company, the title of which is "Joe Guess Wins \$1,000."

The information committee is headed by "Ray" Bender '27 while the cafeteria in the basement is directed by "Lee" Blanding '27. This year, as formerly, the Round-Up club is cooperating with Sedowa in running the cafeteria. "Jean" Gardiner is doing the actual work in the "feeding" operations.

Close to one hundred cows, horses, sheep, and hogs will be shown by students in the

Livestock Show on Thursday afternoon. This annual affair always draws a large number of spectators and this year will prove that the patronage is justified if the scrubbing and rubbing going on at the barns every day means anything. "Lyle" Arnold '27 and "Max" Maxwell '25 are directing the work of the show committee.

Judging System Changed

This year the system of judging the contestants will be changed slightly so that the show record and condition of the animal previous to assignment is taken into account in awarding the prizes, which consist of ribbons to class winners and silver cups to grand championships.

"Ernie" Nohle '28 has charge of the publicity for the department's activities and is putting to shame the advertising campaigns of the large national concerns as far as results may be concerned.

A conference of vocational agricultural teachers of the high schools of the Ithaca district was held at the College of Agriculture on January 9.

KERMIS

PRESENTS

“AMENDS”

Miss N. H. Wright, '27

Pirate life on the rolling deep contends with an old, broken love affair



“FINDING A WAY OUT”

F. B. (Doc) Wright, '22

Which shows how a collegiate girl treats a modern proposal



BAILEY HALL

FRIDAY EVENING

FEBRUARY TWELFTH

AG ALUMNI BANQUET SPREAD IN DRILL HALL

"B. A." Referees Highbrow Debate on Doubtful Topic

The annual banquet of the Ag College alumni will occur, as usual, on Wednesday of Farmers' Week. The program for the affair will be opened by President Livingston Farrand, who has consented to say a few words to the returned alumni. After President Farrand's talk Dr. Cornelius Betten, acting dean of the College of Agriculture, will deliver the address of the evening. Dr. C. E. Ladd, director of extension, will follow Dr. Betten calling to the attention of the alumni their responsibility to their own state's agriculture. Upon the conclusion of the speeches a feature debate on a subject that has not as yet been divulged will be held with Professor Martha Van Rensselaer and Mr. Jared Van Wagenen, Jr. '91, defending the issue and with Professors G. F. Warren, Jr. '03 and J. G. Needham '98, attacking. Professor "B. A." Adams is to "referee" the debate.

Reports from J. B. Kirkland '18, secretary of the Ag Alumni, indicate that a great deal of interest is being shown in the banquet.

JARED VAN WAGENEN HEAD OF STUDENT COMMITTEES

Ten student committees will assist in the running of Farmers' Week machinery. Each committee is composed of from fifteen to twenty students in ag. Jared (Van) Van Wagenen '26 is general chairman of all the committees, with "Chuck" House '27 acting as assistant general chairman. A list of the committees with their chairmen and sub-chairmen follows: Registration, chairman "Al" Stone '26, sub-chairman, Louise M. Russell '26; Information, "Dupe" Du Pree '26, and Lois Faber '26; Ventilation, Meade Summers '26 and Hortense Gerbereux '26; Rooming, "Bob" Danker '26 and Barbara Cone '26; News Service, "Al" Mason '26 and "Katy" Doyle '26; Attendance, "Al" Kurdt '26 and Alice Shoemaker '27; Guide, "Ted" Wright '26 and Mary Wickes '26; Checking, "Johnny" Marshall '26 and Grace Ware '27; Arrangements, "Walt" Benning '26, and Mary McCue '26. A committee representing the College of Home Economics is chaired by Iva Pasco '26.

MINISTERS AND LAYMEN TO DISCUSS RURAL CHURCH

The department of rural social organization in cooperation with other organizations is putting on two interesting programs during Farmers' Week. The first is a conference for town and country ministers and laymen. C. J. Hewitt of Northwestern University, the chief speaker, will give several talks on rural church administration. Other subjects to be considered are community and federated churches, extension programs, and programs of religious education. The second is something brand new, a girl scout institute. It is planned for girl scout leaders, those who

seek to become leaders, and all those interested in young girls. Some of the speakers are Miss S. L. Arnold, Girl Scout National President, Dr. E. K. Adams, National Girl Scout Educational Secretary, and Dr. B. C. Cady, Girl Scout Naturalist. The program is to cover organization of troops, demonstration of formations, games, singing, folk dancing, etc., and the relation of the Girl Scout to the farm, the school, and the home.



St. Murphius

PROFS' PRANKS

Professor "Freddy" Behrends of rural engineering will take sabbatic leave beginning July 1. He will spend it at Columbia.

Professor Bristow Adams of the College of Agriculture addressed the meeting of the American Association of Schools and Departments of Journalism and of the American Association of Teachers of Journalism at Columbia University during the holidays. Professor Adams' topic was "University Extension in Journalism."

Professor Mary Henry of the department of foods and nutrition will be on sabbatic leave the second term of this year. Professor Helen Monsch of the same department, who has been on leave this term, expects to return in February.

Professor H. H. Whetzel, of plant path, is back from a five week trip to Bermuda where he went in company with Dr. Fred Seaver of the New York Botanical Gardens, the main object of their trip being to collect fungus specimens.

Professors "Bob" Hinman, H. A. Hopper, and "Hi" Wing of an husband attended the joint meeting of the New York State Breeders' Association and the New York State Dairymen's Association held at Syracuse, January 5, where Professor Wing spoke on present-day dairy problems.

"OIL PAINTING" OF MURPHIUS DISPLAYED IN FERNOW HALL

Campus Reporter Gets "Cold Dope" on Patron Saint of Foresters

In our meanderings about the campus in search of news we dropped into the forestry building for a shin heat. Now, being naturally inquisitive, we began to snoop about the place. We had a happy thought. Who was this patron saint the foresters talk about? We never could quite get the "cold dope" on him. Further sleuthing in the upper regions of the building brought to light this story of the origin of Murphius, the patron saint of Cornell foresters.

On an Easter trip to a lumbering camp the budding foresters found that the evenings would be more pleasant if they could have some music—a mandolin, or a guitar. They hunted all over the town but to no avail—until they struck the undertaker. He dealt in musical instruments as a sideline.

In his palatial establishment they found something else that pleased them—a nice little dog that the owners had loved so much that he had stuffed it to keep its memory ever fresh in his undertaking mind. He told them of its life and death and finished with the remark:

Students See Art

"Aw! That ain't nothing! If yuh want to see a real masterpiece of the undertaker's art, come on up stairs with me."

So they went. Hanging on the wall was Murphius. Murphius was a peach—probably is yet. For genuine masculine pulchritude Murphius had it all over his sex. In fact Murphius was very well preserved considering all that he had been through. He had no father, and no mother, and no sisters, and no brethren, no nothing—till the undertaker took him in.

By that time he had breathed his last and another American citizen was lost to the nation. Nobody seemed to want to pay the funeral expenses so the undertaker decided to keep him for a pet. After a great many injections of embalming fluid, Murphius "kept" all right.

Search Ceases

When the forestry students saw Murphius they knew at once that their search for a saint was at an end. Several times during their stay in Galeton they visited him and a number of excellent photographs were taken—all of which show his extremely natural beauty to great advantage.

Upon their return to Cornell, one of the students in architecture "faked" the photograph into an oil painting that looks ages and ages old. He has a halo of phosphorescent paint that lights up beautifully in a darkened room. The above cut is a reproduction of the "oil painting" of Murphius which hangs in the rooms of the Forestry club. At opportune times in the year "Murph" writes to the foresters, the letters being post-marked *Heaven-Eternity*, or comes in spirit to a club meeting.

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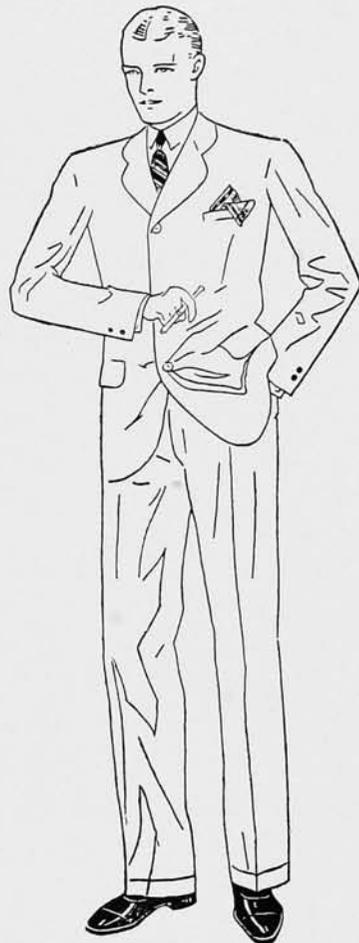
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HOMEMAKERS' CONFERENCE TO BE HELD FEBRUARY 8-13

The eighteenth annual Homemakers' Conference will be held at the College of Home Economics during Farmers' Week, February 8 to 13. Mrs. Thomas G. Winter, ex-president of the general Federation of Women's Clubs and Miss Sarah Louise Arnold, president-emerita of Simmon's College and national president of the Girl Scouts will be among the principal speakers. A child training institute, consisting of a series of related lectures on child training, care, and feeding will be part of the program. Many other lectures, demonstrations and exhibits are planned and the meeting promises to be of considerable interest throughout.

SHORTHORNS TO SPEAK

Short course students with forensic and elocutionary propensities will display their wares on February 8 of Farmers' Week, when there will be the annual prize speaking contest and debate. Two speakers have been selected by elimination to take part in the debate. The preliminaries have been taken care of by the Short Course club, which has been meeting regularly every Tuesday night. "Cal" Russell '26 is working with the shorthorns this year. The faculty advisory committee for shorthorns is composed of Professors E. S. Savage, dairy; H. E. Botsford, poultry; J. Oskamp, pomology; W. E. Ayres, dairy, and G. E. Peabody, extension.

The death of Charles Edward Hunn ends a life of service that has left its impress. Associated with the horticultural department for thirty-one years, Mr. Hunn saw and influenced the changes that have made the department what it now is.

Can we do less than say, "Well done, thou good and faithful servant?"

COUNTRYMAN COMPETITIONS TO BE OPENED IN FEBRUARY

During the week following Farmers' Week the CORNELL COUNTRYMAN will open business and editorial competitions to underclassmen in the College of Agriculture. Competitors will have opportunity for practical work in journalism, as well as some office experience. Competitors who are in good standing in the University are eligible to election, which may lead to the position of editor or business manager in their senior year.

O. N. DEMONSTRATES

Omicron Nu will demonstrate electrical equipment in the preparation of waffles, cinnamon toast, and tea for Farmers' Week guests. The demonstration will include showing how the cost of operating the different pieces of equipment may be figured by a woman in her own home. This will be in addition to the candy counter which Omicron Nu has run during previous Farmers' Weeks.

GRANGERS TO MEET 3 DAYS AT CORNELL

Grange masters and lecturers from all New York state will attend a three-day conference at the nineteenth annual Farmers' Week of the College of Agriculture. The three days are February 9, 10, and 11. S. L. Strivings, master of the state grange, will preside, and other prominent speakers on the program are Jennie Buell, editor of the lecturers' page in the "National Grange Monthly"; Fannie R. Buchanan, of Camden, New Jersey; Mrs. Ruth Sawyer Durand, novelist and teller of stories; and J. Horace MacFarland, writer on country life subjects.

AN HUS CHANGES CUSTOM

An unusual feature of the an hus department's Farmers' Week program is that they have departed from the customary practice of engaging a professor to judge the animals in the Students' Livestock Show. This year Peter MacKenzie, a practical showman and fitter of show animals, who is connected with the agricultural college at Penn State, will place the animals.

Not to be outdone by the farm management department, the department has scheduled a professor to quote statistics on breeding questions. The man selected to fill the bill is Professor John W. Gowen, professor of experimental biology at the University of Maine.

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YE EDITORS "WE"—

It is an old journalistic adage that an editorial should be as long as the editor's pencil. This month we have a rather short pencil, and many things upon which to discourse. Here goes!

The other day some one told us of a novel practice followed by a student club in a middle western college of agriculture. This club, it seems, has a habit of "cussing" and discussing in open meeting the various courses inflicted upon students at that institution. An instructor is notified that at a certain meeting his course is to be considered. He is invited to participate, and to defend himself if necessary. At first glance such action seems a bit radical, but why isn't it a pretty good thing for both student and teacher?

We realize the part that students play in making Farmers' Week a success if we but stop to consider that there are approximately 100 students active on special committees that are concerned with the welfare of visitors. Then, too, a large part of the week's entertainment is student-provided; for instance, the orchestra concert, Kermis, Eastman Stage, and the shorthorn speeches.

The passing of another term with its wonted funeral procession of examinations has brought to our attention certain differences between the Colleges of Agriculture and Arts. In

particular we have been effectively reminded of the fact that examinations in ag subjects are non-exemptible, while an ag student registered in an arts course can exempt it. But we suppose that examinations have a virtue in their training, for, to use a flowery phrase, life is largely a succession of examinations.

The increased use of "true-false" examinations on the Ag Campus meets with our approval. In such an examination the student, who either knows or does not know the correct answer, is penalized for guessing. There is no "beating around the bush," and as Dr. Ben D. Wood of Columbia points out, this examination tests knowledge rather than reasoning power.

The fact that only six plays were submitted in the Kermis contest this year may or may not mean anything. We wonder if it is not due largely to the widespread aversion of ag students to the subject of English and methods of expression. We wish the college could boast of a larger percentage of potential playwrights.

How many of the faculty are you really acquainted with, or how many of the faculty know you? If you can't count up a goodly number you are missing a lot. Why not think those courses through in relation to your past experiences or your future plans and then talk it over with the instructors. They will meet you more

than half way, and you will profit from the discussion and from their friendship.

When e'er we speak of Farmers' Week or turn to it our thought we call to mind a certain kind of things it's always brought. Of course the crowd, 'twill be allowed, of farmers and their wives comes first of all that we recall; they come by fours and fives including grads, now mas and dads, that look the campus o'er, and marvel here and marvel there at things not seen before. But with the throng there comes along a special type of weather; a foot of snow, a raw, cold blow that even pierces leather. It's quite a sight, the ground all white and drifts up to your neck; the weather god, with snow-cloud shod, keeps spilling more, by heck! If Farmers' Week would only seek some more of warmth and shine and meet success, well you may guess I'd spout a different line! But, love o'Mike, I sure don't like this doggone fickle clime; I swear by Nick I'm gonna kick if things don't change this time!

Oh! Only to be a campus stenog with no eight or twelve o'clocks, no prelims, no reports, and no FINALS, would create a grand and glorious feeling.

Regardless of the success or failure of the Kermis plays this year, no one can deny that they are all "Wright."

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H. V. Miles, 08

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Strand Theatre

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CONSTANCE TALMADGE
in
"HER SISTER FROM PARIS"

FEBRUARY 4-6—

GLEN HUNTER in
"THE PINCH HITTER"

and
FIVE ACTS OF VAUDEVILLE

FEBRUARY 7-10—

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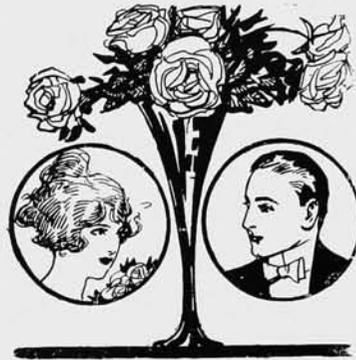
Crescent Theatre

FEBRUARY 3-6—

THOMAS MEIGHAN in
"IRISH LUCK"

FEBRUARY 7-10—

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TWENTY YEARS AGO

(From the COUNTRYMAN for Feb., 1906)

The College of Agriculture has an enrollment of 237 in the Winter Course and 223 regulars and specials, making a total of 490.

Dairy short course students have work in the dairy building, the old dairy building, the judging pavilion, Sibley Dome, and the Library lecture room.

Professor and Mrs. James E. Rice were blessed with a baby boy, born January 5.

A handbook of information and advice for short course students has been published by the Ag Association in conjunction with the University Christian Association.

**U. S. RECLAMATION POLICY
OUTLINED TO FORESTRY CLUB**

At a meeting of the Forestry Club on Jan. 15, Mr. F. H. Newell of the United States Reclamation Service outlined the government's reclamation policy. Mr. Newell, who was associated with Governor Pinchot of Pennsylvania and President "Teddy"

Roosevelt in the initiation of this policy, has been intimately connected with the construction of many Department of the Interior projects, including reservoirs, canals, and tunnels. He has served for several years in different capacities with the government reclamation service, and is the author of several books on irrigation engineering and allied subjects.

Doughnuts and coffee finished up the meeting, at which it was decided to postpone election of officers until the first meeting of the new term. Plans were completed at the meeting for conducting the Forestry Club Cafeteria during Farmers' Week. "Bill" Walling '27 has charge of arrangements for the cafeteria.

**GRUB GRABBING STATIONS
DURING FARMERS' WEEK**

Domecon Cafeteria,
(Home Economics Building)

Lunch Room
(Basement of Roberts Hall)

Forestry Club Cafeteria
(4th floor of Fernow Hall)

Round Up Club Cafeteria
(Basement of An Hus Building)

Willard Straight
(The New Union Building on
the Arts College Campus)

**GLISTA ERNESTINE
117999**

Born November 12, 1908
Died December 10, 1924

Life Time Performance

13 Living Offspring
20206 Pounds Milk
7372 Pounds Fat
9215 Pounds Butter

Best Year's Record

23341 Pounds Milk
1042 Pounds Butter

Best Seven-Day Record

838.3 Pounds Milk
35.96 Pounds Butter

The animal husbandry department's final tribute to Glista Ernestine, the bovine who did more to make the department known throughout the country than the remainder of the college herd combined, is the placing of her mounted head in the lobby of the department's building with the above inscription framed and hanging underneath.

**FUTURE HENMEN "DO BIG CITY"
WHILE INSPECTING MARKETS**

Fifteen students in poultry marketing 31 spent January 4, 5 and 6 in New York City "doing the big town" under the supervision of C. K. Powell, instructor of the course. At the same time the short-course students in poultry made similar visits with F. E. Andrews as a guide.

Look at Your Feet!

others do

Smart Styes in Florsheim and
Thayer Shoes

for

Young Men

Many New Models in
Red Cross and Arch Rest for
Young Ladies

WE FIT FEET RIGHT
THAT'S OUR BUSINESS

* * *

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I have a full line of Fall and Winter Samples to select from—Domestic and Imported.

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Full dress suits and Tuxedos for hire
Cleaning, Pressing and Repairing Neatly Done
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FOR MEN

NEW SPRING LINE



50c — 75c — \$1.00

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SHOE STORE

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Largest Implement Dealers

in

Tompkins County



Make Our Store Your Headquarters

While Attending

Farmers' Week



Special Displays of Great Interest

this is to ask those who have not been to
farmers week at cornell
to come and learn and have a good time

those who come once are sure to come back
so there is no need to ask them to come once
more

the hosts are
the new york state college of agriculture
and the new york state college of home
economics

the place is
ithaca new york

the dates are
february eight to thirteen

A 30 year course in livestock feeding

THE Purina Mills organization believes in continual study. We've actually been studying livestock feeding for over a quarter of a century.

We've been through our practical training too. We've tested hundreds of rations in the feed lot. We've worked with thousands of farmers and dairymen. We've helped them weigh their milk and keep records of their feed costs. We've maintained our own chemical and research laboratories. At the present time we have over one hundred agricultural college graduates in our employ, and are continually hiring more.

The other day a farmer was asked why he fed Purina Chows instead of mixing his own rations. Think his answer over.

"When I feed Purina Chows, I start in at a point it has taken Purina Mills 30 long years to reach!"

PURINA MILLS
St. Louis, Missouri

Buffalo
Fort Worth
Kansas City



Nashville
East St. Louis
Minneapolis



Carrying Away the Screenings
Several carloads of screenings leave the Purina Mills every week. All grains going into Purina Chows are carefully cleaned so that the feeder is assured the highest feeding value when he buys his feeds in Checkerboard bags.



The Cornell Countryman

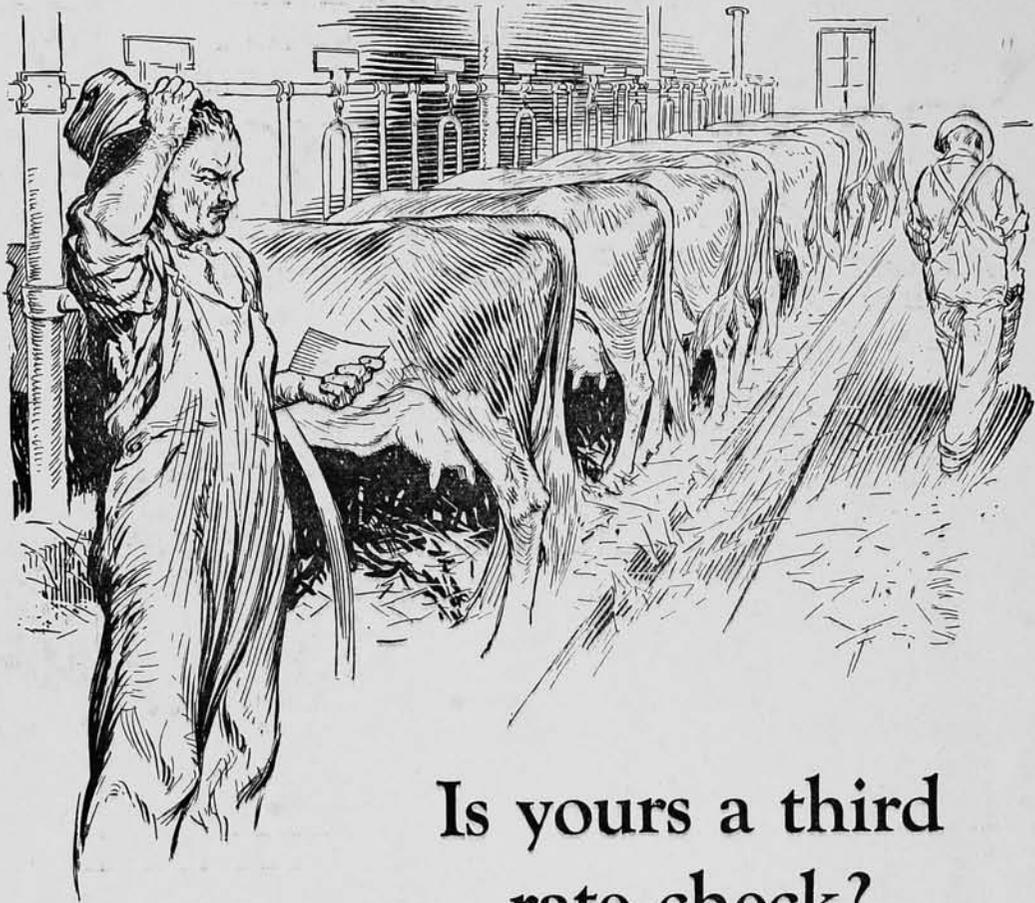


MARCH

1926

Volume XXIII

Number 6



Is yours a third rate check?



You will find this monogram on motors, MAZDA lamps and other electric products that are used in modern dairies.

In sections where farms are electrified you will also find the G-E Farm Book used as a guide. Ask your electric power company for a copy or write us at Schenectady, New York.

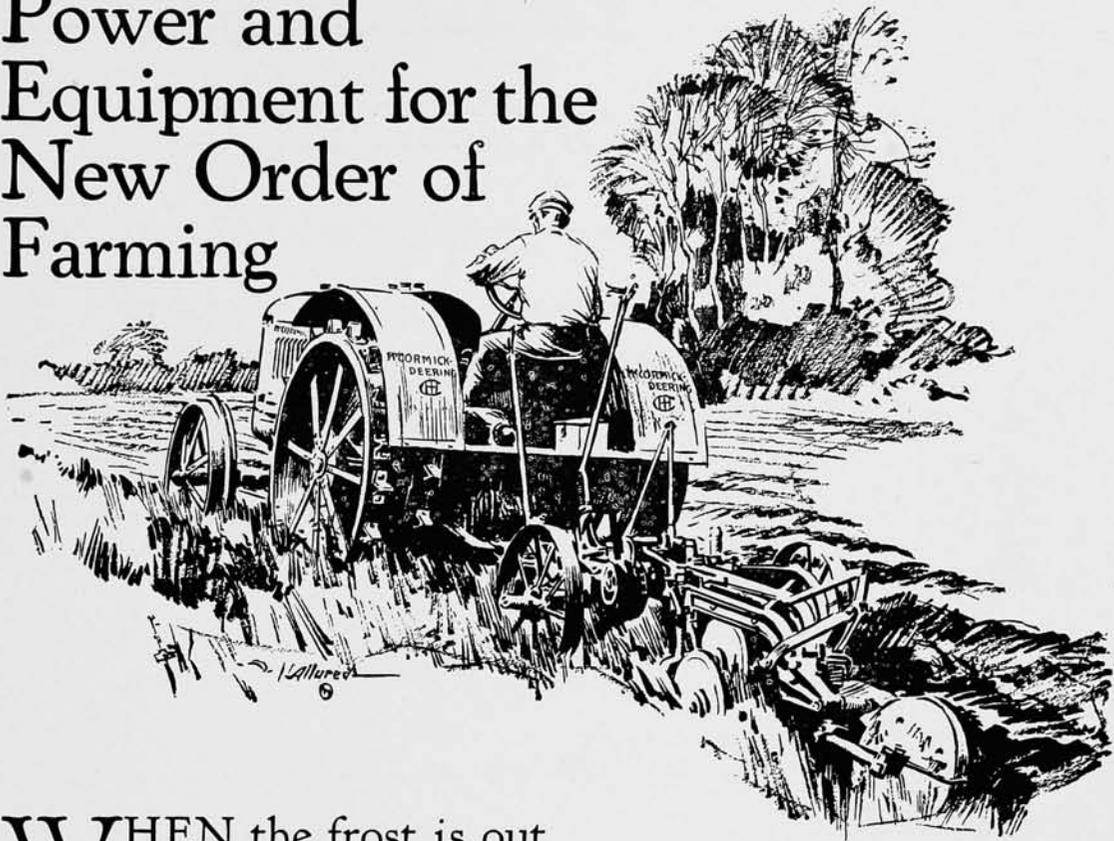
A national dairy paper quotes a farmer who says that too many men go to the labor and expense of *producing good milk*—and then take a third-rate product to the creamery.

This farmer has a cooling tank and uses it. On many modern dairy farms, electricity runs the cooling plant, milks the cows, separates the cream.

It insures to the farmer the best price obtainable for the quality he turns out.

GENERAL ELECTRIC

Power and Equipment for the New Order of Farming



WHEN the frost is out of the ground and the cooped-up energies of boys and men are let loose on the fields—see that the home farm is equipped for a year of *labor-saving, time-saving, profitable, and interesting* power farming.

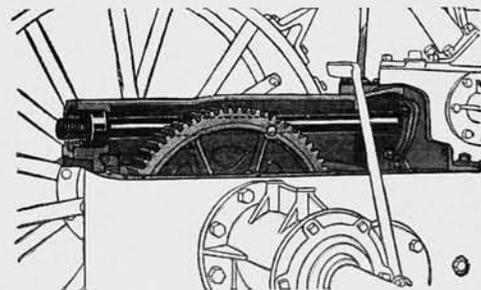
Experience proves that farming of that description begins at the store of the McCormick-Deering dealer.



INTERNATIONAL HARVESTER COMPANY
606 So. Michigan Ave. OF AMERICA Chicago, Illinois
(Incorporated)

Do You Know About the ORIGINAL POWER TAKE-OFF?

Besides the belt and drawbar, McCormick-Deering Tractors (10-20 and 15-30 h. p.) have a third power source—the power take-off, for running the mechanism of binders, corn pickers, etc., direct from the tractor engine. This handy, properly located, properly protected, power take-off always runs the same speed whether the tractor is in high or low. Can be operated when the tractor is standing still, so a pulled machine can be cleared if clogged. It is gear driven. It runs at uniform speed. It can be used the same as the belt pulley. The McCormick-Deering is the ORIGINAL triple-power tractor.



THE POWER TAKE-OFF

McCORMICK-DEERING

A KODAK ON THE FARM

You may buy now because of anticipated pleasure. Taking the old homestead, familiar trees and glens may be what you have in mind but there is the business side too. In selling cattle, horses and farm products a picture is better than many words. The Co-op. sells the Kodaks.

Cornell Co-op. Society

Barnes Hall

Ithaca, N. Y.

DO YOU KNOW WHAT THE COD LIVER MEAL AND OIL DO IN FUL-O-PEP CHICK STARTER?

In most cases, these new invigorating ingredients reduce chick mortality to an insignificant percentage. No longer need you expect to lose chicks because of diarrhea, or constipation. No longer must you regard leg-weakness or toe-picking as unavoidable chick ailments.

Cod Liver Oil, which has already proved its effectiveness in preventing rickets, is aided by the Cod Liver Meal. These, blended with the good oatmeal and other ingredients of Ful-O-Pep Chick Starter, give chicks a healthy digestion. Every mouthful of this mash gives the chick a proper balance of just the things it needs.

The results are (1) decreased mortality; (2) a better digestive condition; (3) smoother, tighter feathers; (4) stronger bones; (5) more rapid growth.

The Quaker Oats Company

CHICAGO, U. S. A.

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Lower Fall, Fillmore Glen

The Cornell Countryman

A Journal of Country Life — Plant, Animal, Human

Volume XXIII

MARCH, 1926

Number 6

The Outlook for Apple Growing

By Joseph Oskamp

BECAUSE of the large loss in the number of bearing apple trees in the United States, which showed a decline from 151,322,840 in 1910 to 115,309,165 in 1920, short crops and high prices are often forecast. This decrease amounts to practically one-third of the bearing trees surviving, and the recent census of 1925, complete figures for which are not yet available, will probably show a further decrease of 5 to 10 per cent.

But large fluctuations in the total number of apple trees of bearing age has little relation to the production of commercial apples. Commercial production is the real factor, and therein lies the fallacy of this argument. There are thousands of apple trees that yield scarcely anything. There are thousands of bushels of fruit from neglected trees too poor to pay the cost of transportation, which therefore never finds its way out of the locality in which it was produced. It is the fruit from the cared-for orchard that actually enters commercial channels and constitutes the market supply. The yield and the quality of fruit from such orchards is improving rather than otherwise, and it is the neglected and unproductive trees that have died out and that account in a large measure for the decline shown by the census. In other words, the number of bushels of apples entering the commercial markets does not appear to be decreasing, in

spite of the decline in the number of trees.

THUS, although the number of bearing trees has been drastically reduced by age, disease, and neglect, apple production has slightly increased. It would look as if the

in 1920 the normal production was approximately 1.8 bushels. The use of apples is, therefore, decreasing, in relation to the population. In years when bumper crops are general in the recognized apple sections, there appears to be more than enough fruit to supply the demand at a price that will return the grower a profit.

There are at least three things which may explain, in part, the present situation.

First, a larger proportion of the apple acreage is commercial than ever before. Orchards may be said to be especially well cared for, as a rule, in intensive fruit sections. Consequently, there is an increased yield from a reduced number of trees. The number of young trees planted during the last planting boom was not ex-

ceedingly large, yet most of these trees went into the irrigated sections of the west, where they come into bearing at about half the usual age and where the acre production is almost double that in other sections. From the number of bearing trees and the number of young trees planted in recent years, one could scarcely have forecast such a large production as the present one. Had these trees been generally scattered in the non-irrigated fruit sections, it seems quite certain that the present annual production would not have been so large as it is today.

Second, the great improvement in cold-storage facilities has resulted



A SEVENTY-FIVE-YEAR-OLD ORCHARD IN WESTERN NEW YORK

This orchard of Greening and Baldwin trees has not yet reached a declining point in production. Probably nowhere are natural conditions more favorable for the growth of apple trees to so vigorous an old age

slight rise in production might be easily and profitably taken care of by the increase in population. Nevertheless, the trend of apple prices over a period of years, as compiled by the department of agricultural economics and farm management of the College of Agriculture, shows that, according to the 1913 price level, apple prices have been declining since 1890 at the rate of about one per cent a year. There seems only one obvious explanation of this condition, and that is that the rate of consumption must be decreasing; and such is true. In 1890 the normal production was approximately 2.2 bushels of apples for each person in the United States, whereas

in a much larger proportion of the crop being made available over a longer period. This is quite satisfactory and desirable from the standpoint of alleviating a glut at harvest time, yet in years of heavy production it but serves to lengthen the period of heavy supply. The rapid development of transportation and refrigerator car service has had a similar effect.

Third, and probably the most important factor bearing on this problem is the competition that has risen between the apple and other fruits. The growth of the citrus-fruit industry has been phenomenal. Today there are 43,000,000 boxes of oranges and grapefruit to appease the hunger of the fruit-loving consumer. Add to this 50,000,000 bunches of bananas, and the wonder grows that the apple has maintained its position so well under such competition. While apple production is increasing less than one-half as fast as the population, orange production is increasing three and one-half times as fast as the population. A people may increase its total consumption of fruit somewhat, but the limit is probably soon reached.

THE outlook is thus not entirely optimistic, although for the long future the New York apple grower need have little to fear, for he is in a relatively strong position. Conditions in this state are exceptionally favorable, not only for the longevity of the trees and the production of good fruit, but also for the marketing of the crop after it has been grown. The problems of transportation and marketing, nowadays, are of no small moment. Other sections that cannot grow and market their apples so

cheaply, will have to make their adjustments. Under present conditions, whenever the principal apple-producing sections of the United States "hit" together, prices will probably be unsatisfactory. Competition is apt to be keen in the future, but not so much with the fancy boxed fruit as with the barreled apples from such intensive developments as the Shenandoah-

fruit regions, too, because it has usually been carried on as a specialty on the general farm. Under such conditions, labor and costs are distributed; the farm meets the current expenses, leaving the orchard to show a profit in good years. Also, the ownership of the land is fairly constant, with little speculative value; the communities are of an enduring nature; and the agriculture is thoroughly stable.

It may be said that for persons unequipped for farming, to plant an apple orchard as a speculation does not appear attractive at this time. Although there is at the present moment a tendency toward advancing prices, there seems little doubt but that we are in the midst of a bigger period of general deflation. To start out in the orchard business and pay current prices for equipment, labor, and the like on a declining

market, would, in a few years, leave one with an enterprise that could be duplicated for a great deal less money. However, those who are already well established in farming, and who are favorably situated for fruit growing, would in all probability make no mistake in setting out new plantings of apple trees or in extending their old ones at the present time. Moreover, the census data show that an unusually small number of young trees have been planted in this country in the past few years. For the man, then, who knows how to grow fruit, who will give proper attention to choosing a suitable location and a soil well adapted to growing apples, and who, without incurring excessive expense, gives good care to the trees after they are set, the results of conservative planting are likely to prove profitable.



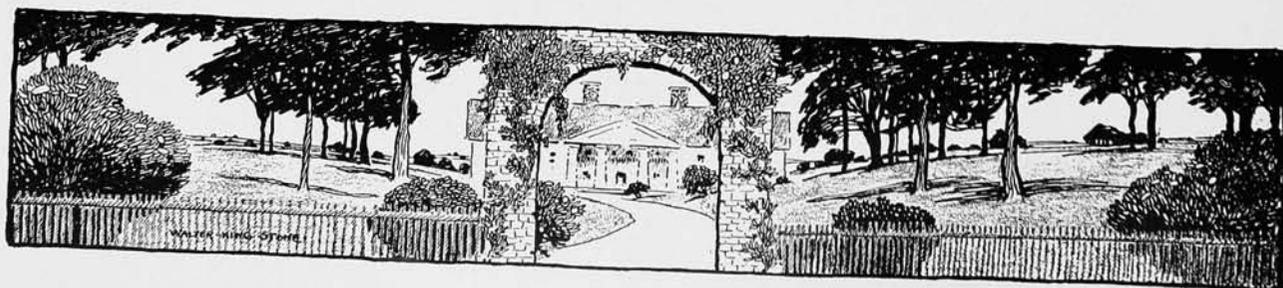
A WELL-CARED-FOR YOUNG ORCHARD IN NEW YORK STATE

It is necessary to have young trees such as these coming on if future production is maintained. The rate of planting has been declining in the last ten years or so

Cumberland section, where the orchards have not yet come into full maturity. New York state is in an advantageous position to meet such competition.

IT should be remembered that the results of many years have amply demonstrated that the apple business in New York state can survive periods of depression and low prices. Probably nowhere in the world are the natural conditions more favorable for the growth of apple trees to so vigorous an old age. Many New York orchards are in the prime of productive vigor when forty-five years old. This has made for comparative stability in an otherwise unstable branch of farming. Needless to say, market facilities in this state are unexcelled.

The apple industry in this state is more permanent than in many other



Some Principles of Successful Cooperation

By W. I. Myers

CONTRARY to common opinion, cooperative business is not a recent invention. There are, in New York, cooperative farm fire insurance companies that have rounded out nearly three-quarters of a century of continuous successful operation. At the present time, about nine-tenths of the farm fire insurance in the state is carried in cooperative companies. The annual volume of business of the Dairymen's League Cooperative Association is approximately seventy million dollars. In addition, a large amount of milk is sold through smaller cooperative associations. New York farmers are purchasing about eight million dollars of feed, seed, and fertilizer annually through their cooperative buying association, the G. L. F. Exchange. The aggregate value of mortgage loans obtained by New York farmers through their cooperative credit association, the Federal Land Bank, exceeds seventeen million dollars. The cooperative wool, fruit, and seed potato selling associations are important factors in the marketing of those products. And in addition to these larger state-wide associations, the aggregate annual volume of business of the many small local cooperatives is very large.

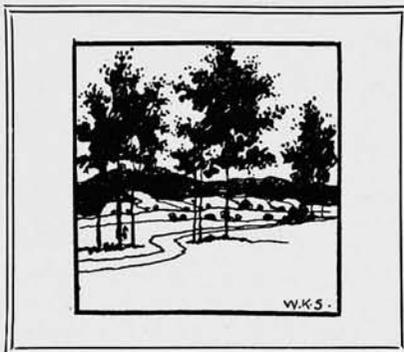
A better understanding of the possibilities and limitations of cooperative business will help in avoiding mistakes which, in the past, have hindered the progress of sound cooperative effort. The cooperative movement is one of the most hopeful tendencies of the times; but it is not a cure-all for all the ills of agriculture. If properly directed, cooperative organizations have great possibilities for good. If improperly directed, the resulting failures will bring cooperation into disrepute and delay its sound development.

COOPERATIVE marketing is business, and a cooperative organization must follow sound business principles if it is to succeed. Cooperation is not a substitute for business judgment. Business mistakes made by a cooperative association are just as serious as those made by other business organizations.

In considering the formation of a cooperative business and in studying those already in operation, there are

several important principles that should be kept clearly in mind.

First, is there a real need for this cooperative association? Well-meaning enthusiasts have had a tendency to assume that because somebody somewhere succeeded by cooperation, everybody everywhere would succeed by the same process. Competitive marketing sometimes works well and sometimes works badly. The best opportunity for cooperative action is where competition works badly. For



example, where there is one large buyer and many scattered farmers, as in the marketing of milk and canning crops, there is the greatest need for cooperative action. Where there is keen competition among buyers for a product, a cooperative association will find it difficult to compete unless it is able to furnish an important service, such as better grading, that is not available from existing agencies.

Cooperative marketing has little to offer those producers who are located so near cities that they can sell their products advantageously direct to retailers or consumers. Under such conditions, no additional marketing agency is usually needed.

SECOND, a cooperative organization must be an efficient business unit. Whatever the agency, there are certain marketing functions that must be performed. Displacing middlemen does not eliminate the work that they do. A sound cooperative association should perform the necessary functions more efficiently than other organizations.

In order to operate an efficient marketing organization, an adequate volume of business is necessary. Every business has overhead expenses for salaries, building upkeep, and similar expenses that do not in-

crease or decrease much with variations in the volume of business handled. With a very small volume of business, these costs may be prohibitive. One of the most effective ways of keeping overhead costs down is by a volume of business large enough to give maximum use of its facilities.

In order to operate an efficient marketing business the investment in buildings must be kept proportional to the business handled. New organizations should rent buildings, if possible, until their stability is assured and their needs known. A mistake in buying real estate is not so easily corrected as a mistake in hiring a manager. The best solution of the real estate problem is through economical well-planned buildings, efficiently utilized by a large volume of business.

There are many other important factors in the operation of an efficient marketing business, but insufficient volume and unwise investment in real estate have probably been responsible for more failures of cooperatives than all other factors combined. Business studies of the marketing of farm products are needed to point out the important factors affecting efficient marketing if further serious mistakes are to be avoided.

THIRD, a cooperative business should have a sound financial organization; that is, it should be financed largely by members. Most cooperative associations have started business with insufficient capital. This is a serious handicap which should be corrected as rapidly as is possible. It is unwise to finance any organization largely on capital borrowed from non-members.

If the members of a cooperative do not have confidence enough in their organization to put their own money into it, how can they expect others to do so? Every cooperative association should plan to have at least half of its permanent capital provided by members. The larger the proportion of the capital of a cooperative furnished by members, the stronger its financial structure and the better its chances of success. If this requirement cannot be met in starting, definite plans should be made for deductions from returns to

members to build up their investment in their organization.

Financing a cooperative entirely by deductions from returns to members, puts a very heavy burden on a new organization. Therefore, it is highly desirable that members should make their capital contributions in advance.

FOURTH, a cooperative business should keep its members informed as to its financial condition and its problems. The members of a cooperative corporation are its owners. They are entitled to accurate and complete information in regard to their association. Every cooperative business should furnish its members with a balance sheet and an operating statement at least once a year. The directors and the members of every cooperative association must learn how to analyze these financial statements in order to understand clearly its financial condition and the results of its operations.

The balance sheet shows the actual financial condition of the organization. A comparison of two or more balance sheets shows whether it is

improving its financial condition or going backward, and how fast. The operating statement shows the income and expenditures during the year. An analysis of this with comparisons with other years will show changes in efficiency of operation. The operating statement furnishes the information for the preparation of a budget for the next year's operations. A careful budget is essential to efficient operation in any business, cooperative or other.

Efficient management is essential to every business organization. In a cooperative association this involves team-work between an intelligent, informed membership; a capable, businesslike board of directors; and loyal, efficient employees.

FIFTH, a cooperative business should select the form of organization best adapted to its needs. There is no one type of cooperative organization best adapted to all regions and all commodities. The cooperative laws of New York and of most other states are broad enough to permit the formation of almost any type of organization. The centralized type

seems to be most satisfactory for commodities like milk and tobacco in which bargaining power is important. In general, the federated type has proven most satisfactory for apples, citrus fruits, and potatoes. The capital stock form of cooperative is adapted to organizations such as cooperative buying associations, with a relatively large investment in permanent capital. The non-stock type seems to be satisfactory for bargaining associations with small capital needs. Each cooperative should try to work out a plan of organization best adapted to its particular needs.

Mistakes have been made by cooperative organizations. However, these mistakes are not inherent in cooperation as a form of business organization. They have been business mistakes that are almost inevitable in any new enterprise. The fact that these mistakes have been found out and corrected is cause for optimism, not for pessimism. Unknown and unsuspected, they were dangerous. Now that they have been found out and corrected, there is a better chance for the success of the cooperative movement than ever before.

Professionalism

By G. F. Britt, '27

IF THERE is one thing which ag students lack more than any other, that thing is a professional attitude toward their ordinary undergraduate work. By a professional attitude is meant a real definite purpose, a desire to reach a specific goal, and effort directed toward that end. If we do not know where we are going, how in the world can we ever get there? Too many of us come to college and drift with the current, taking courses here and there, and all the time thinking that by some miraculous process we will be turned out at the end of four years, **educated**.

Let us think of all knowledge as cones resting on a common plane as a base. All the known facts in any one field are represented by one cone. The bases of these cones merge at different levels. In perspective, then, the picture will be similar to our childhood notion of the Rocky Mountains. Next, we shall assume that the individual starts accumulating his knowledge at the level of the base plane. During his training in the grades and in high school he gets

knowledge which is fundamental, that is, making up a small part near the base of nearly all the separate cones in the field. Take for example, arithmetic, which is fundamental to all higher mathematics, chemistry, physics, economics.

NOW if the individual comes to a school in technical agriculture and continues the same practice of taking only work which is fundamental, during his four years in college, he has nothing organized or connected when he leaves. In reality, he does not continue to take work which is fundamental, but merely skips about taking a course in first this department then in another, his individual knowledge in any particular field being represented by a little cone. In proportion as his courses have been scattered, and his purpose vague, these cones will be far apart and unrelated, and the individual without a background or perspective, will be lost somewhere among them, not knowing on which he shall build the foundation for his life work.

Contrast this individual with the

person who has a definite purpose in mind when he comes to college, and keeps that purpose uppermost during his whole course. At the end of his four years, again thinking in terms of the cones, instead of the many small and scattered cones, he will have one great substantial one made out of the many courses he has taken. It will have a strong and ever-widening base. It will be taller than the many cones of our other student. It will be pointing in one direction, and above all you will find the individual right on top, ever widening his cone as he sees the bearing of other fields upon his own, and ever building higher on this strong foundation.

WHAT is there that makes the difference in students? Why do some drive through their work cheerfully, satisfied that they are getting what they want, while others wander and drift, without any idea of where they are going or what they are going to do? In other words, how does a boy get this definiteness of purpose, this professional attitude?

(Continued on page 196)

Solving the Wood Utilization Problem

By A. B. Recknagle

IN November, 1924, there was held in Washington the National Conference on Utilization of Forest Products, called by the late Secretary Wallace of the department of agriculture. Twelve months later, on November 12, 1925, there was held at Syracuse, in the New York State College of Forestry, a state-wide wood utilization conference, designed to make effective for the Empire State the good work begun at Washington the previous year.

This conference was called by the Empire State Forest Products Association, in cooperation with the college authorities. It was largely attended and characterized by a seriousness of purpose befitting the gravity of our wood utilization problem.

At the close of the day session, a select committee was chosen to carry on the work started at the conference. The work of the committee was to be in research, and in the collection and clarification of facts and their application to practice through demonstration of their usefulness to all concerned. New York was the first state thus to organize for better wood utilization.

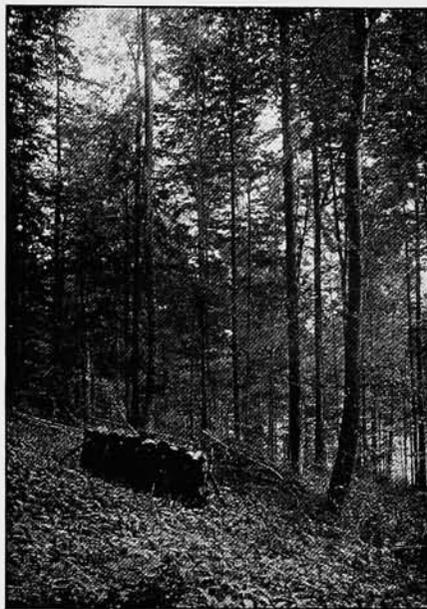
THIS committee held its initial meeting in Albany on January 19, which resulted in the decision to invite to sit with them men of practical experience in logging, milling, and conversion processes, from whom practical suggestions for the saving of wastes and for closer utilization may be had; and with a state-wide campaign of education to induce operators, producers, dealers, and builders to adjust their gradings and their processes by mutual consent along lines that will give relief to the situation.

After careful discussion, the committee decided to make, as closely as possible, a survey of New York state forest resources, utilizing all existing agencies, each member to submit his suggestions for this to the secretary, before the next meeting in April. It approved the suggestions that the small woodlot be developed by education of the owners thereof and by informing them of improved methods of operating and marketing the products of the woodlot; and that a study be made of existing milling practice, especially in respect to salvaging short lengths now wasted.

It was also agreed that the com-

mittee must mobilize the existing agencies that can be of assistance in the problems of economy of utilization.

THE latest census of our state's timber resources was made in war time and published in the August, 1920, issue of *New York Forestry*.



This showed total standing timber of approximately 26 billion board feet and 121 million cords. This was a careful and conscientious attempt to ascertain New York's timber resources, and it was aided by war time psychology, with its willingness to help in time of national need.

Just what the machinery of the new timber census will be has not been decided, but it is evident that it must involve field work to check by actual woods measurements the reports submitted on the schedules. It is likely that the first step will be to perfect field methods during the coming summer by putting out a small crew in the western part of the state. Our knowledge of this part is particularly inadequate. It is a region of woodlots, and since the woodlots of the state aggregate 4,000,000 acres, they are the crux of the problem of growing and using wood.

At the same time, with an inventory of timber resources, it is planned to make a survey of the requirements of the various industries in the state, with a view to determining possible

profitable outlets for material that at present has no market.

It will be realized how needful this is from the fact that the last report on the wood-using industries of New York was made in 1921.

NEW YORK is not much of a timber producing state, but it is a tremendous user of wood—about three billion board feet of lumber every year.

New York state has more wood-using industrial establishments than any one other commonwealth, according to the latest available figures of the bureau of census. Of the more than 29,000 of these establishments throughout the country, 4,776, or 16 per cent, are located in the Empire State. These plants furnish employment directly to 137,545 persons, of whom 118,845 are wage earners. Many more thousands find employment indirectly through their operation. The capital invested is approximately \$280,000,000. Each year upwards of \$135,000,000 is spent for raw materials, and the aggregate value of the products turned out by these establishments is \$275,000,000.

IN other words, the forest products of New York state are valued at one-thirteenth of the total for the United States, and the capital invested is about one-eleventh of the total.

Unfortunately, the Empire State has only one-fiftieth of the standing timber in the country, so the wood-using industries of the state have to import their raw material to the value of nearly one hundred million dollars annually, on which the freight bill alone is about fifty-five millions. If the forest land of the state were made truly productive, much of this raw material could be home grown with greater prosperity all around.

This work of encouraging and developing economies in the utilization of wood is a new departure of the Empire State Forest Products Association. To the great credit of its far-seeing officers and directors, it was enabled to take the lead in this important activity. "To make one tree do the work of two," is just as truly conservation as to make two trees grow where but one grew before. With the support of the people of the state, this movement can succeed. The first

(Continued on page 197)



Through Our Wide Windows



The Cornell Countryman

Founded 1903

Incorporated 1914

One of the Agricultural College Magazines, Associated. Finances are controlled by an incorporated board of professional and business men of which J. B. Taylor is president. Published monthly from October to June. The subscription rate is a dollar a year; single copies fifteen cents; advertising rates on application.

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Ithaca, New York

March, 1926

AT LAST that evasive old fellow, Ag Spirit, seems to be showing signs of life, and gives promise of being his old self again, after all these years of seclusion. Every one is talking about him, and wondering just what will become of him. Of course, some are a little pessimistic and cynical about his health, but a few pessimists we always have with us, and they serve a good purpose, too, for they increase the determination of the optimists to do still greater things.

But the optimists seem to have the upper hand, and they are planning a bright future of social activities for the Ag College. The first affair will be the Ag-Domecon banquet, in Willard Straight Hall on March 9. With Professor Bristow Adams as toastmaster, and President Livingston Farrand, acting Dean Cornelius Betten, and Professor Martha Van Rensselaer as the speakers, the banquet offers a program unequalled in recent years. No student should miss it, and it is expected that few will.

The next event will be the Ag April Fools' dance, which will probably be the biggest thing

that has happened in the College for many years. Every organization in the Ag College and the College of Home Economics is working to make this a rip-roaring success, and to show the whole university what good hosts they can be.

There are rumors of beauty and popularity contests, grand parades, and other such things that the Ag campus has almost forgotten. And then the dance—why, that dance is going to be one of the most different you ever saw, with overalls and gingham dresses and—but go and see for yourself!

NEXT to October, we like March best of all the months of the year, because March is a month of change and of promise. Then comes the great struggle between Spring and Winter, and at last the victory of glorious Spring, but not without a stiff combat, for Winter is loathe to yield his throne to the new monarch of the seasons.

Ever since when we were little and used to tap a few maple trees all our own and boil down the sap on the kitchen stove, we have loved March, with its winds and snow flurries, interspersed with balmy days and sunshine. Then all nature begins to awaken from its long sleep, and everywhere can be seen promises of the beauties to come.

One who is inclined to philosophize a bit now and then can scarcely help wondering what is back of all this change, and if he is at all human, he will be a better man for having lived in March.

WITH this issue, the senior members of our present board make their final bow, and yield their places to the new board, which will make its debut with the April number.

Those who have been chosen to carry on the good work are: editor, R. E. Zautner '27, of Albany; business manager, R. Clapp '27, of Grand Gorge; managing editor, G. F. Britt '27, of Holcomb; circulation manager, C. F. Blewer '28, of Newark Valley; women's editor, Miss N. H. Wright '27, of Baldwinsville; Campus Countryman editor, H. W. Beers '28, of Auburn; former student note editor, T. E. La Mont '27, of Albion; assistant business manager, V. O. Linderman '27, of Allegany; advertising manager, C. I. Bowman '27, of Lowville; assistant advertising manager, Miss V. M. Tyrrell, of Nichols. A. W. Gibson '17 will continue as alumni editor, and Birge Kinne '16 will be alumni assistant manager.



Former Student Notes

'81

Charles E. Foster is traveling over New York and Pennsylvania territory for Reed and Carnrick, originators of the Glandular Products, calling on physicians. His home address is Whitney Farm, Almond, N. Y.

'91

Ray T. Hazeltine, who is living at 109 Pine Street, Jamestown, has been a railway mail clerk since 1903.

'93

Ross C. Bayne is a dry goods merchant in New York City. His address is 321 W. 94th St.

'92

Fred E. Ford is fruit farming at Elba, New York.

Thomas Brill is living at Cortland, N. Y., where he is a farmer and cattle dealer.

'94

Augustus N. Lushington is a veterinarian at Lynchburg, Virginia. He is living at 1005 Fifth Ave. of that city.

George Kemp is residing at the Friar's Club, 110 W. 48th Street, New York City.

'95

Elizabeth Christian is a teacher residing at 1210 Kemble St., Utica, N. Y.

'96

Henry Clay Irish is living at Webster Groves, Mo., R. F. D. No. 6. He is the supervisor of the school gardens and a member of the board of education of St. Louis, Mo.

'98

George A. Bull is operating a dairy farm at Woodville, N. Y.

Leonard Harrison is farming at West Winfield, N. Y. He is raising pure-bred Holsteins. Last fall he showed some cattle at the State Fair at Syracuse.

Dear Alumni:

This is the last time we'll have to sit down before the typewriter and puzzle out some notes we took several weeks previous on some former students we met since the last issue of the COUNTRYMAN. With the next issue the new board takes charge of the paper and this task will fall on other shoulders. We say task advisedly because at times it does become a task to get enough notes which are worthy of publication—notes that really tell something. We appreciate the help which alumni, professors, and students have given us in gathering these notes and only hope they will continue to support us. There is, however, room for greater cooperation with the alumni. We know how it goes. We all intend to do many things but keep putting them off until they slip our minds and consequently we never do them. Now—right now—get out your pen and tell us about yourself so that your classmates will know if you're married, if so, to whom, how many kids are in the family, how the crops grew last year, how many acres of alfalfa you plan to put down this summer, and above all how your alumni friends are holding their own. Better yet, tell them to write to us themselves and give us the information first hand. We'll appreciate it and so will your classmates.

Au Revoir,
Former Student Editor.

'99

William H. Hodges is a cotton planter and oil operator at Elm Grove, Louisiana.

'00

P. L. Husted is a nurseryman living at Blauvelt, N. Y.

'01

We doff our hat to the owner and manager of the Anislie Apartment Hotel, the Chalelaine Ladies Hotel and much other property in Chicago. He is Martin A. Howell, Jr., residing at 1062 Anislie Street, Chicago, Ill.

'02

Clarence O. Lewis is a truck gardener living at 542 Locust Street, Lockport, N. Y.

'04

William D. Wheelock is farming at Kennedy, N. Y.

Edward H. Russell is a horticulturist on Route 4, Syracuse.

'05

J. E. Hasbrouck, Jr., is a farmer and merchant at Modena, N. Y. He is the manager of the J. E. Hasbrouck Company, which deals in coal, flour, feed and hardware. The farm is 250 acres, most of which is devoted to fruit growing, but some Holsteins are kept as a side issue.

Fred Johnson is engaged in fruit growing in Westfield. His address is Box 53.

Guy M. Wilcox is working a farm at New Hartford.

Maxwell E. Corotis is a real estate broker in Columbus, Ohio. His address is 16 East Broad St.

'06

Homer N. Lathrop is farming at Homer, N. Y., and is specializing in purebred Holstein cattle.

'07

Gordon Hutchins is a farmer on the well known Punkatasset farm at Concord, Mass.

Austin D. Hights is residing at New Lebanon Center, New York, where he is engaged in farming and the insurance business.

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LIGHT

John B. Horn is a milk dealer in Wilkes-Barre, Pa., living at 16 Orchard Street.

'08

Walter G. Depew is a kraut manufacturer and is president of the Canandaigua Kraut Co. Inc. His home address is 53 Cathrine St., Canandaigua, N. Y.

Charles H. Chase, Jr., is in the nursery business in Rochester, N. Y. He lives at 76 Richmond St.

Harry B. Chase is an orange grower in California. His address is 1323 Lemon St., Riverside.

Irving B. Burdick is farming at Cuyler, Cortland County.

Homer C. Teall is superintendent of production in the Nizer Ice Cream Co. His address is 819 West Sixth St., Cincinnati, Ohio.

Burner G. Bown, of Fairport, is doing general farming, but is specializing in dairying.

Willis A. Buck is a general farmer at Phelps, N. Y.

'09

J. Westervelt Clarke is operating a farm of 102 acres at Milton-on-Hudson, N. Y. He raises apples, cherries, peaches, and pears exclusively.

J. Andrew Cohill is a farmer of Hancock, Md. He is a member of the National Apple Shippers Association. He ships the well known "Andy's Dandy" apples and peaches.

Leland Kreidler is living at R. D. No. 2, Arkport, N. Y., where he is engaged in general farming operations.

C. Edgar Thomas is a nurseryman on the Pine Woods Farm at Delmar, Del. He is a grower of general nursery stock, especially strawberries.

Stuart A. Cody is managing a poultry farm at Penn Yan.

Waldo F. H. Bucklin is general manager of the Bucklin Lumber Company and Bucklin Development Company at Vancouver, Canada.

'10

Fruit growing is the occupation of Howard Allen Hopkins, living on the River Road, Youngstown, N. Y.

Horace B. Cowgill is an agronomist of the Bureau of Plant Industry in the Federal Building, Fort Smith, Arkansas.

W. H. Chandler, Jr., is a fruit grower and shipper at Lakeland, Florida.

Mr. and Mrs. B. Frank W. Thorpe are residing at Route 4, Clearwater, Florida. He is developing property that he intends to sell for small home sites.

'11

Earl Pursel Bundy is a millwright living at 831 Liberty Street, Painesville, Ohio.

Earl B. Clark is farming at North Norwich, N. Y.

James G. Cochrane, Jr., is working a grape farm at Ripley, New York.

Claudius C. Cole is an inspector in the N. Y. State Department of Farms and Markets. His address is 76 Garden Street, Seneca Falls, N. Y.

Mary Turnbull Wanmaker, the proud mother of two little girls, one eight, the other two, is now residing at 158 Union Street, Hamburg, N. Y.

Arthur C. Bolles is farming at Comack, N. Y.

David E. Brundage, Sr., is a dairy farmer at Wallkill, N. Y. He has a

number of registered Holstein-Friesian cattle.

H. E. Morris is operating several general farms near West Winfield, N. Y.

'12

De Witt C. Brown is salesman for the Burrough's Adding Machine Co. His address is St. Johnsville, N. Y.

Roy F. Leader is farming at R. D. 1, Marietta, N. Y.

O. W. Dynes is an Associate Professor in Agronomy in the University of Tennessee at Knoxville, Tennessee.

C. Henry B. Brackett is running the Old Town Nurseries Inc. on Pleasant St., South Natick, Mass.

D. Alexander Dewey is a bank teller at Utica, and is living at 1514 Genesee Street.

David E. Copeland is running a general store at Argyle, New York.

S. N. Stimson, who is farming near Spencer, N. Y., was a visitor at the College during Farmers' Week. He is breeding Ayrshires and helping to eradicate T. B. in Tioga County, besides doing some extension work for the an hus department during the winter.

Mrs. Jean Kane Browne (Jean Kane Foulke) is farming on the Bala Farm, R. D. 6, West Chester, Pa.

Henry R. Cates is connected with the Hartford Fire Insurance Co. located in Atlanta, Ga.

C. V. Ford is the postmaster at Clyde, N. Y.

Ira A. Hatch is certainly anxious to get away from us. He is the farm manager and instructor of the Agricultural Institute at Allahabad, India. Address c/o Sam Higginsbottom.

We are glad to hear that S. R. Heffron obtained a B. S. from the Ohio State University in 1917. At present he is the county agricultural agent for Madison County. His home is in London, Ohio.

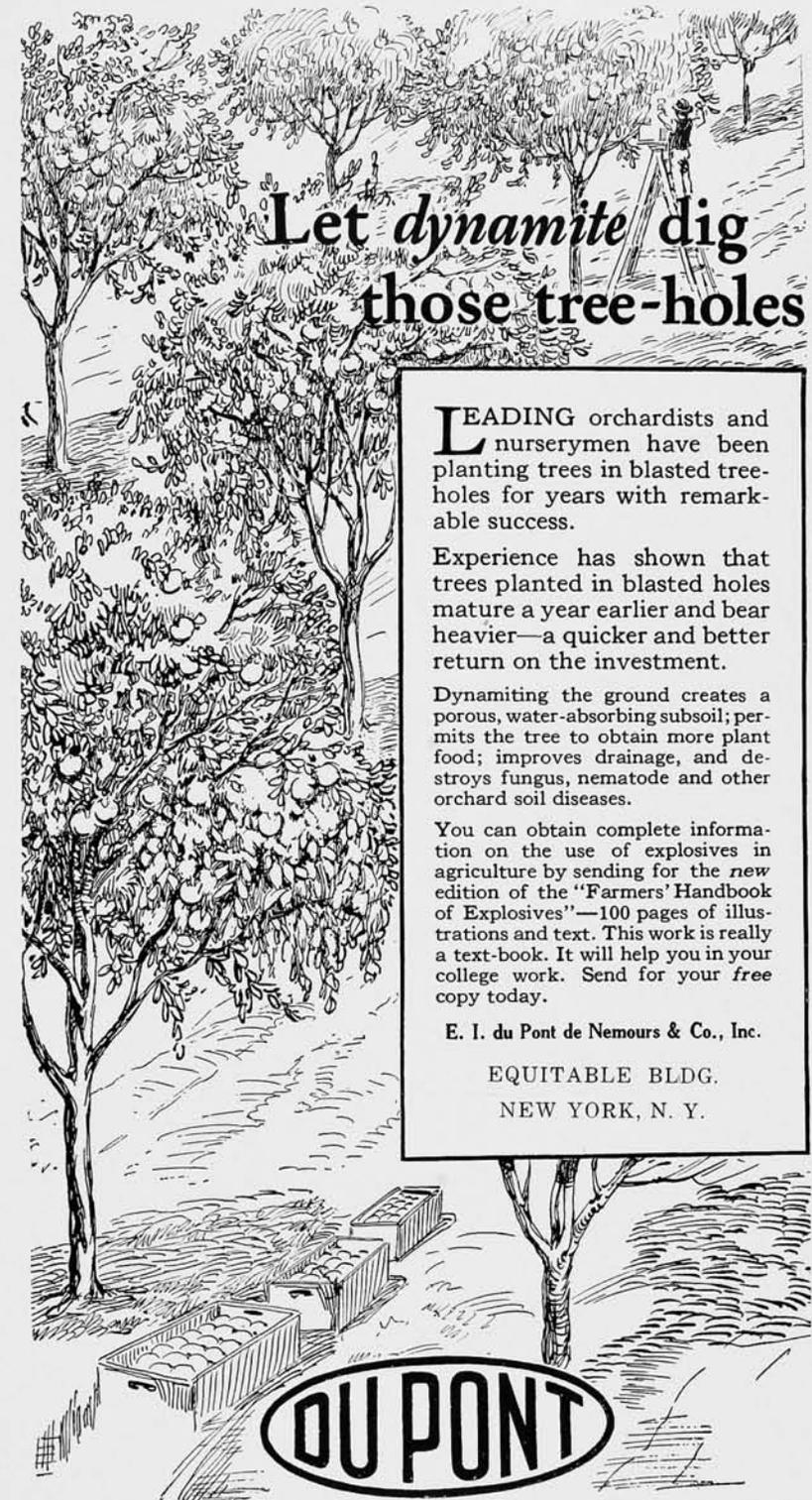
H. P. Kysor is a traveling salesman residing at Machias, N. Y.

George H. Hocker is a farmer at Milanville, Pa.

Mr. and Mrs. John Edwin Turlington are living at Gainesville, Fla. He is a professor of agronomy in the College of Agriculture, University of Florida.

'13

Claude Robinson is operating three farms near Richfield Springs, N. Y. He is married to a daughter of Mr. C. Mason of that place. Claude is a breeder of purebred Holsteins and Guernsey cattle.



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Selden S. Craw is farming at Chili, N. Y.

Harry M. Fuess is farming at Waterville, N. Y.

Robert A. Cadby is manufacturing storage batteries. His address is 372 Central Avenue, East Orange, New Jersey.

Franz E. Geldenhuis is chief of the Division of Agricultural Economics of the Department of Agriculture in

South Africa. His headquarters are in the Union Buildings, Pretoria.

Heibel B. Bloch is a merchant at Pittsburgh, Pa. His address is 210 Flowers Ave.

Oliver Smith died on December 8 last at Chevy Chase, Md. He was born in New York in 1875, and spent most of his boyhood near Ithaca, his parents having a home near Taughan-nock Falls. He secured his early edu-

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cation in Ithaca and then went to Columbia, graduating in 1901. For several years thereafter, he was in South America for W. R. Grace & Company and while there became impressed with the possibilities of Chilean nitrates for fertilizer. He came back to the United States and located at Wilmington, N. C., where he established a business which later became one of the important nuclei of

the American fertilizer industry. Some time later he retired and purchased a large farm near Easton, Md. In order to operate it efficiently, he decided to secure agricultural training and entered the College of Agriculture in 1911. In 1913 he graduated with the degree of B. S. During the War he was called to a responsible position with the United States Department of Agriculture. At the time

of his death he was engaged in business in Washington. Besides his wife, he is survived by a daughter, Dorothy Smith, and three brothers, Augustus, Arthur, and Henry, all of New York.

Irvin F. Braisted is operating a farm at Westport, Essex County, N. Y.

Denton Kenyon is a farmer living at Owasco.

'14

Garret L. DuBois is working for the Dairymen's League Cooperative Ass'n Inc. His address is 55 Bonn Place, Weehawken, N. J.

J. John Pollock is with the "House of Tre-Jur," manufacturers of perfumes and toilet articles, in Brooklyn, N. Y. He writes that he and his wife are the proud parents of a daughter, Julia Livingston, who is a year old now. They live at 1362 Ocean Avenue, Brooklyn.

Mrs. C. W. Webb (Susan Boute-cou) is a housewife living at Clifton Springs, N. Y.

Joseph Stanley Clark is a U. S. government veterinary inspector enforcing the Virus-Serum Control law of 1913. He is inspecting and testing the manufacture of serums and viruses used in animals. His address is Box 347, Grenada, Miss.

'15

Mrs. Elizabeth James (Browning, Amy Elizabeth) is the mother of three children. She resides at East Aurora, N. Y.

Charles S. Brewster is a partner in the Hodgen-Brewster Milling Co., manufacturing a complete line of poultry and dairy feeds, at Portland, Oregon. He is living at Milwaukie, Oregon.

Raymond G. Kennedy has charge of a stable of hunters at Derby, N. Y., that he is training for the show ring.

Mark D. Clapsattle is a merchant at Lockport, and is living at 243 Genesee Street.

Edward F. Baum is an accountant at Oakland, Cal. His permanent forwarding address is 155 Winslow Avenue, Buffalo, N. Y.

Mrs. Arthur G. Bierma is living at 104 Bedford Ave., Buffalo, N. Y.

William C. Litchfield is residing in Ellicottville, N. Y., where he is engaged in the retail farm implement and hardware business.

Sara T. Jackson is teaching household and industrial art in the State Normal School at Brockport, N. Y. Her address is 59 South Avenue.

Paul W. Wing, who is connected with the sales department of the D. H. Burrell and Co., was a visitor here during Farmers' Week. He is now living at 45 Alexander, Little Falls, N. Y.

Charles Aubry has moved from Caldwell, N. J., to 64 Edgemont Rd., Montclair, N. J. He is engaged in the florist business at 600 Bloomfield Ave.

C. B. Hutchinson, formerly professor of plant breeding here, returned to the United States about the middle of February, and after a short stay in Ithaca, is traveling to various parts of the country. While in the United States he can be reached at 512 University Avenue, Ithaca. Professor Hutchinson has been in Europe with Dean Mann under the auspices of the International Education Board. They are conducting a fact-finding survey of agricultural conditions in Europe with a view of finding out the possibilities for help by American agriculture and cooperation between the agricultural institutions in both continents by exchange professors. Professor Hutchinson is making this visit to the United States to secure additional American scientific workers to aid in the present undertaking.

'16

A. F. Corbin is teaching agriculture in the Indian Normal School at Pembroke, N. C.

Wayne W. Coe is business manager for the Morningside Hospital in Portland, Oregon. His address is 516 Selling Bldg.

Edgar D. Lewis has combined two occupations into one. He is both teacher and farmer of Barryville, N. Y.

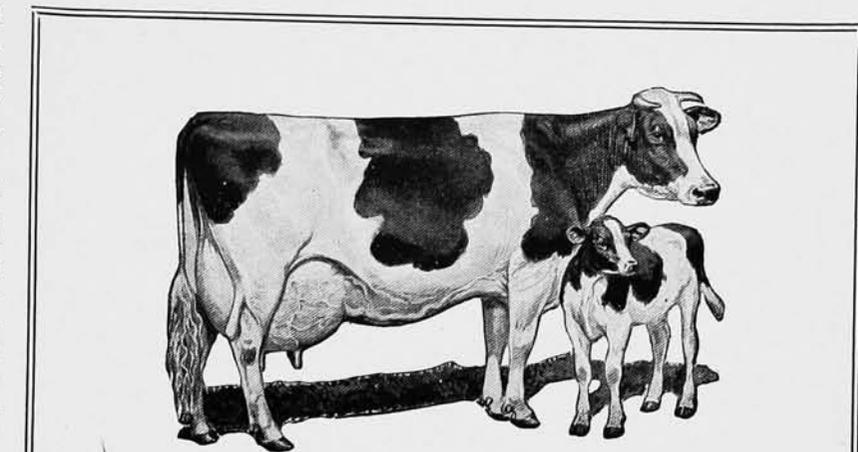
C. R. Galbreath is running a farm in Street, Md.

Joseph Albert Sirois is a professor in the agricultural college, Sainte-Anne de la Pocatiere, Quebec, Canada.

Melvin F. Bennett is superintendent of the poultry plant on the Bedford Farm, Katonah, N. Y.

Gilbert M. Montgomery is sales representative of Hoopes, Brother & Thomas Company, The West Chester Nurseries, covering territory adjacent to the main line of the Pennsylvania Railroad near Philadelphia. His work consists largely of landscape designing. He and his wife moved into a new house on Spencer Road, Devon, Pa., on November 30 last.

Thomas F. Luther is engaged in the wholesale lumber business under the name of T. C. Luther & Son at 11



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None but Holsteins have yielded such large amounts of butter fat per year as proved by tests supervised by agricultural colleges.

One hundred and four Holsteins have produced from 1000 lbs. to 1350 lbs. of butter fat in one year under these tests. Of all other cows of the United States twenty-seven have reached the 1000 lb. mark.

More farmers own Holsteins because experience has shown the Holstein is the Cow that makes the Dollars.

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HOLSTEIN FRIESIAN
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Madison Avenue, Saratoga Springs, N. Y.

Carl C. Loth's occupations are certainly diversified enough. He is operating a hotel, a theatre, and a farm in Waynesboro, Va.

Robert S. Henderson is an executive of the Boy Scouts of America. His address is 33 Thrift Building, Reading, Pa.

'17

David B. Buffum is farming at Washington, Conn.

We have a registered nurse among our numbers in the person of Mary Greenbaum residing at 1719 Moreland Ave., Baltimore, Md.

Claude S. Hyman is the branch manager for a manufacturer of cotton and mercerized sewing threads.

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His address is 6201 Glenwood Avenue, Apt. No. 3, Chicago, Ill.

John B. West, after returning from the war, is managing his large farm near Canajoharie, Montgomery County, N. Y.

Earle Atwood Jones is a farmer living at Waitsfield, Vt.

William A. Hoffman is now at the School of Hygiene and Public Health at John Hopkins University. His ad-

dress is 615 North Wolfe Street, Baltimore, Md.

'18

Last May Katherine Etz gave up her position as assistant librarian of the Federal Reserve Bank in New York. She is now reference librarian with the Metropolitan Life Insurance Company. Her address is 130 West Sixteenth Street, New York.

Kenneth F. Coffin and his wife,

Norma De Vany have a daughter, Phyllis Jean, born on June 4, 1925. They live at 601 West 192nd Street, New York City.

Anna L. Graeffe is living at 255 McDonough St., Brooklyn, N. Y. She is a partner in a gift shop in the city.

Arthur F. Derrick is a brick manufacturer living at Memphis, N. Y.

Charles B. Hazzard is a teacher of physical education at Hope Farm, Verbank, N. Y. He is also in charge of the poultry department and beekeeping at the farm.

'19

Edith H. Church announces that she is farming. Her address is R. D. 5, Ithaca, N. Y.

Mary Ellen Donahue is teaching in New York City. Her address is 410 West End Avenue.

'20

Mrs. Clara I. Thomas is a landscape architect. Her address is 18 Ware Street, Cambridge, Mass.

The agent for the I. H. C. and the G. L. F. for Oswego County is Lawrence W. Hollis at Lacona, N. Y. Mr. Hollis is also engaged in dairy farming.

Howard Crandall, who runs a market garden up on West Hill, just out of Ithaca, was elected secretary of the New York State Vegetable Growers' Association at its annual meeting on January 19 and 20 at Rochester.

M. G. Beck is managing Director of Extension, C. E. Ladd's farm at Freeville, N. Y. The farm is largely devoted to dairying and the raising of White Leghorns.

R. L. "Bob" McNitt has migrated to the University of Minnesota where he has entered upon a graduate course in agricultural cooperative marketing. Bob has been occupying his time hitherto by carrying on junior extension in Wyoming County. He was around for Farmers' Week.

Mr. and Mrs. Herbert Kahler (formerly Thera Emerson) announce the birth of a daughter, Lois Ann, early in December. Dr. Kahler and his wife, are living in Pasadena, California, where the former is doing research work at the University of Southern California as professor of physics.

'21

Milton P. Royce and Ruth S. Van Kirk '22 were married in Sage Chapel on January 31. The ceremony was the first Sunday wedding ever performed there. There are now living at "Weedywold," the farm home of



"How did your crops turn out this year, Ezra?"

"Well, I didn't get quite so good a yield as I expected, but then, I didn't expect I would."



When you use and rely on *CP* apparatus for manufacturing and processing dairy products, you have a right to expect good results; you won't be disappointed.

The *CP* Line includes machinery for the manufacture of butter and cheese, for pasteurizing and bottling milk and for making ice cream. Also refrigerating machinery. Our aim is to serve the mechanical and special needs of the dairy industry. Thirteen factories and sixteen sales offices with warehouses enable us to do it well all over the U. S. A.

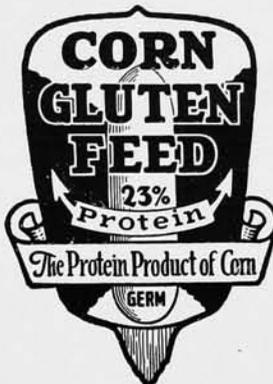
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**The Creamery Package
Mfg. Company**

66 West Kinzie St., Chicago, Ill.

Sales Branches Everywhere

**Some
Very
Good
Reasons
Why**



**Should
Be
in
Every
Ration**

This famous protein product of corn is composed wholly of the gluten and bran of sound, whole corn. There is less than 8 pounds of bran in each 100 pounds. The Mass. Experiment Station says corn bran is equal to wheat bran.

Corn Gluten Feed is safe in any quantity. Many feeders have fed it straight as a substitute for corn. One ton contains the protein, vitamins and mineral salts of nearly four tons of whole corn.

Feed Corn Gluten Feed with your corn, oats and barley. Your leguminous roughages will supply all the protein "variety" the animal wants or needs. This has been fully demonstrated by practical feed lot experience.

Our \$15,000.00 Prize Contest

On April 1 our Prize Contest will start and the following prizes will be awarded and paid to good feeders:

14 Prizes for Cow Testing Associations	\$ 3,000.00
14 Prizes for Individual Dairy Herds	2,100.00
7 Prizes for Championship Cows	1,000.00
14 Prizes for Beef Cattle Feeders	2,500.00
12 Prizes for supervisors or verifiers	2,650.00
24 Prizes for herd managers	1,250.00
37 Prizes for co-operating feed dealers	2,500.00

122 Prizes, totaling \$15,000.00

Every feeder of six or more dairy cows, or forty or more beef cattle is invited to enter this contest. The rules are few and simple and no entry fee is charged. The contest will end September 30, 1926.

This is a big educational program of a great basic industry. It will be conducted on the highest possible plane and is entitled to the same support given to state fairs and livestock shows.

The rules and conditions are fully given in our Bulletin No. 4. Write for it today.

Associated Corn Products Manufacturers

Feed Research Department

Hugh G. Van Pelt, Director

208 South La Salle St., Chicago, Ill.

No. 31

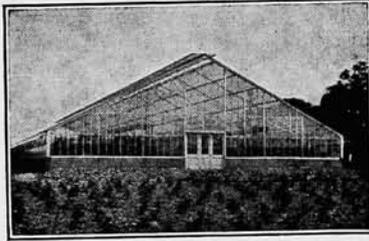
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Flumes, Gutters, Silos, Roofing, Siding, Etc.

Apollo-Keystone Copper Steel galvanized gives unequalled service, above or below the ground.

APOLLO is the highest quality galvanized product manufactured. When Copper Steel is used it assures maximum rust-resistance. Time and weather prove it lasts longest. Sold by weight by leading dealers. KEYSTONE quality is also unequalled for Roofing Tin Plates. Send for booklets. AMERICAN SHEET AND TIN PLATE COMPANY, Pittsburgh, Pa.



The Secret of How This Graduate Made a Five Figure Income In Five Years



LIVED in Newark, Ohio.

His folks wanted him to go into some business around home.

Wasn't a thing in the town that he wanted to drudge along in.

Figured that having spent four years at college, he didn't exactly cotton to tying himself down to "just a job."

Neither did he want to go into his father's old business.

So you see, it was the same old story so many of you college fellows have to have sooner or later.

Being a red blooded, two fisted kind of a fellow, with lots of pep and go, he wanted to get into something where he wouldn't have to keep all bottled up.

Looked around a lot during his college days, and finally decided he would build some greenhouses and grow lettuce and tomatoes.

From the very start he made money.

That was 12 or so years ago.

Now he and his Dad have a fine residence on top of a hill, and from their porch now look down on acres and acres of greenhouse-covered fields of lettuce and tomatoes.

Both of them are having the time of their life.

If Carl Weiant of Newark, Ohio can do all this, so can you.

We'll build you the greenhouses and help you in every little detail of getting started.

Write us. Let's get the idea working and plans started.

If interested write to the Manager of our Service Department, Ulmer Building, Cleveland, Ohio; who will give it his personal attention.

Lord & Burnham Co.

Royce in the Inlet Valley south of Ithaca. Prior to the marriage, the bride had been teaching in Newark, N. J.

Harry Dolph worked for Professor Riley of the engineering department for a while and now is on his own farm at Gainesville, N. Y., carrying out Professor Riley's experiments there.

'22

Lee M. Downer of Forestville, Chautauqua Co., is farming in the grape belt of the state. This is his third year at general farming.

Sterling H. Emerson was granted a traveling fellowship in Europe a short time ago by the International Education Board. After graduating from Cornell he secured a master's degree

at the University of Michigan and was subsequently appointed assistant research professor. After receiving the traveling fellowship he spent some time in Denmark and Sweden, until he was taken seriously ill a short time ago in Copenhagen, and was obliged to remain on his back for three months. He is now at the Sanatorium Schalzalp, at Damos Platz, Switzerland, and is well on the way to recovery. He had planned to return to the United States during the spring, but owing to this illness, he has been obliged to defer his return until the fall.

'23

Gertrude B. Dean is living at 1307 N. Cayuga St., Ithaca, N. Y.

Katharine Cohen is doing landscape architecture in New York City. Address her mail in care of Mrs. Edgar Hendicks, 225 West 86th St.

James Larrabee has changed his farming operations from Cortland to the vicinity of Elmira Heights, N. Y. Box 52 will reach him.

Arnold H. Bronner is a florist working with his father. His address is 101 W. Main Street, Ilion, N. Y.

While selling apples and ice cream cones at the Student Livestock Show during Farmers' Week, we ran across H. L. Stallman whose permanent address is Niverville, N. Y., where he has a general farm under cultivation. He is also doing C. T. A. work in Oneida County for Mr. G. W. Tailby of the animal husbandry department of the College of Agriculture. About March 1 he will start a new field of testing work in Greene County.

Florence L. Becker is studying for an M.S. degree at Cornell, taking her major work in nutrition and her minor work in biochemistry. She is living at 422 Eddy Street.

Raymond W. Donahue is still a chemist and bacteriologist for the Mohawk Condensed Milk Company, and is located in Corry, Pa. His address is 180 Wright Street.

'24

Lucy V. Lacy is an assistant in nutrition work at the Pennsylvania State Normal School, Bloomsburg, Pa.

Dorothy M. Van Wirt is making a study of merchandising in the training class of R. H. Macy & Company in New York. She lives at 46 Orchard Street, Jamaica, Long Island.

Lillian E. Rabe is a teacher in the Biology Department of the Bay Ridge High School in Brooklyn, New York. She lives at Apartment 10, The Ab-

Exit the Greasy Spoon

The "greasy spoon" restaurant represents a type of cleanliness that is unprofitable, that is not sweet smelling, and that is unpleasant and greasy to the touch—a so-called cleanliness that is not clean.

Such unsatisfactory conditions are now being replaced with the sweet smelling, greaseless, truly clean cleanliness which results from using



Surfaces washed with Wyandotte are not only clean to the eye but to the touch as well. Restaurant operators, dairymen and creamerymen, and business men of all kinds, find that Wyandotte cleans clean at a reasonable cost.

Wyandotte Cleans Clean

Indian in circle



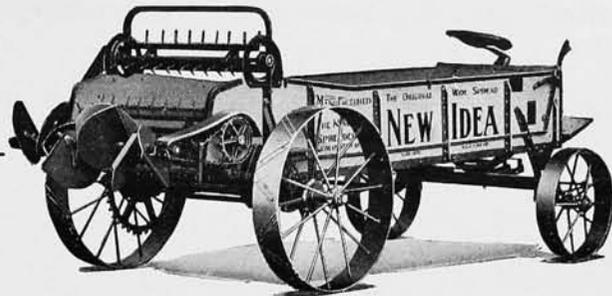
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Model 8, NEW IDEA Spreader

FOR THE BIG BUSINESS OF BETTER FARMING

New Idea Farm Equipment offers the best possible investment. It is thoroughly efficient—and can be depended upon for a long life of Trouble-Free Service.

THE NEW IDEA SPREADER COMPANY
COLDWATER, OHIO

The NEW IDEA Transplanter

A scientifically built machine for all kinds of transplanting, including Tobacco, Truck crops, Nursery stock, small Fruits, Bulbs, etc. Write for information.



. . . CRANE VALVES . . .

Take your gym shower home

Nothing quite like those needles of alternating warmth and chill of the gym shower to invigorate a man after a workout, is there? And there is no need for you Aggies to forego the convenience of running water on the farm when you leave college. It is an established fact that with the installation of Crane water systems, water is one-third cheaper on the farm than in the average city. Crane water softeners will solve your hard water difficulties. Crane valves, fittings and piping end plumbing troubles. Your next vacation is a good time to plan for that water system on your farm.

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bott, 287 East Eighteenth Street, Brooklyn.

The marriage of Lawrence W. Corbett to Helen M. Ives, Arts '23 of Albany, N. Y., on February 1 in Sage Chapel was quite a Cornellian affair. Dorothy Fessenden '25 was maid of honor, and Roger Corbett '22 was best man at the ceremony, while the ushers were Thurston Corbett '26, Irving Rodwell '24, Whiton Powell '24, and Wesley Pietz '27. Corbett is connected with the Conrad Pyle Rose Growers at West Grove, Pa., a suburb of Philadelphia, where they will reside. Probably the Corbett family has more Cornell degrees in its possession than any other group. L. C. Corbett '90 is senior horticulturist in the U. S. D. A. at Washington, D. C. He lives at 535 Cedar Street, Tacoma Park, D. C. A daughter, F. L. Corbett is married to C. E. Warne, Arts '20, who is a professor in economics at the University of Denver, Denver, Colorado. The family has a total of twelve degrees including those obtained by marriages.

'25

Gene Borda is slowly recovering from a severe attack of appendicitis. He is now employed by the Heinz Pickle Co. of Philadelphia to super-

intend their experimental pickle farm. He may have the honor of discovering the 58th variety. His address is 21 Market Street, Salem, N. J.

J. Edgar Hyatt is teaching animal husbandry at the Emerson School in Gary, Ind. He has seven classes daily and over one hundred pupils. The department he is with includes a school park with several breeds of poultry, ducks, geese, some pheasants, and other birds, and also an array of foxes, raccoons, squirrels, skunks, 'possums, and bears. His address is 617 Delaware Street.

Anne J. Snitow is teaching biology in the Washington Irving High School in New York and playing evenings with the Lenox Hill Players in "'Tis a Pity" by John Ford. She lives at 510 West 152nd Street.

Grant Hansel, a member of last year's Kermis cast, will be found at East Winfield, N. Y., where he busies himself with the operation of a general farm of 165 acres. Grant has 25 acres of alfalfa and a barn full of 30 purebred Shorthorns. His entries walked off with 12 first prizes at the Herkimer fair where Professor "Charlie" Allen judged last year. He says that he shows everything but babies at the fairs. Grant attended

the Student Livestock Show this year during Farmers' Week where he held a bunch of cider apple twigs in his hand. He intends to graft them into his orchard. He says there is money in them around East Winfield.

'27

Eldrieda T. Hoch has left domecon to reside at Edgewater Park, New Jersey, as Mrs. Charles Linder Pope, M.E. '26. The marriage took place on January 16.

Professionalism

(Continued from page 184)

One way to find the answers to some of these questions is to look about for some individuals who fit in one or the other of these groups. The

Opportunities for the Young Man

who knows modern farming methods are unparalleled in the South. Here exist the basic conditions for successful farming. Long growing season. Productive soil plentiful rainfall. Good markets. Knowledge of agriculture and energy can mould these resources into money-making products and valuable property. A thirty-dollar an acre farm in Virginia was turned into a \$150 an acre property by proper farming methods. Special opportunities for the young man of small means to start on a farm of his own—Why not become a farm owner, an independent worker, and reap the rewards of your agricultural knowledge and ambition? Write and let me point the way. W. E. Price, General Immigration Agent, Room 692, Southern Railway System, Washington, D. C.

The New York State College of Agriculture

is the largest in the United States
New York ranks seventh among all States
in value of agricultural products
although it is only twenty-ninth in area
and has the largest urban population

But it has good farmers and good markets
Agricultural economists say that farming
is now due for a cycle of prosperity

Those who know how to farm, and how to market
what they produce, will be most likely to
profit by the new conditions

Consider a college education at the
New York State College of Agriculture
at Cornell University, Ithaca, New York

students who are most likely to be caught drifting are those who have entered with little or no farm experience. Perhaps a representative of this group spent a summer on a farm and the lure of the great open spaces and the fresh air appealed to him. He saw only the rosy side of farming. Later he learned in college that he could not be a successful farmer without several years of painful and embarrassing experience. He is most apt to find this out either actually on a farm in the summer, while completing his farm practice requirement, or in anticipation of such a summer's work. Many of these boys, on making this discovery, change to some other course. It is wise that they should. The pity is that it usually takes them from one to four years to find out that they are misfits in agriculture.

CONTRAST them again with the farm boy who comes here with pretty definite ideas as to what he is going to do when he gets out. His mind may change some, and undoubtedly will, but not radically. It merely means a shifting the center of gravity of his cone of knowledge. He knows before he starts that he is interested in agriculture, and the chances are he has his mind pretty well made up as to the particular phase in which he will specialize.

There is only one way in which the city boy can have the same opportunity to decide upon the permanentness of his interest in agriculture; without the wastefulness of the trial and error process, now in vogue. This method is to change our present farm practice requirement from a graduation to an entrance requirement.

If one year of farm experience were a pre-requisite for entrance in the Ag College, it would undoubtedly keep out some students, but it would tend to keep out those who have seen only the novelist's side of agriculture, who are in for a disillusionment, and who will become discouraged and transfer to some more attractive field, or else remain a permanent misfit. If agriculture is not what a student wants, the earlier he finds it out, the better for himself and for the college. If after this year of actual experience he still feels that he is interested enough to continue, the experience he has gained while actually on the farm will be invaluable to him as a background for his college work in agriculture. He will be able to aim his mental rifle

and will have enough enthusiasm to drive the lead home for a bull's-eye.

Solving the Wood Utilization Problem

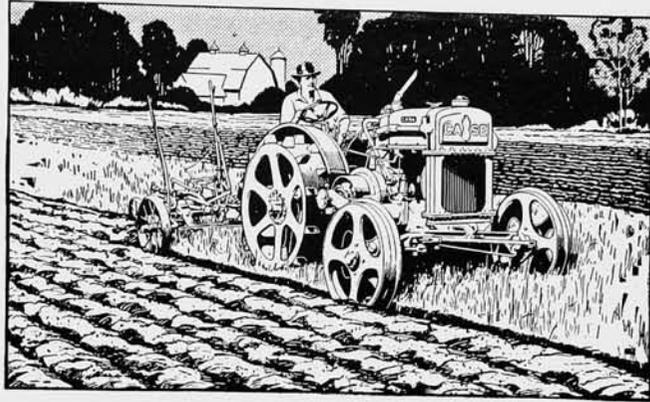
(Continued from page 185)

thing is to find out what we have, then proceed to use it wisely. This is the task to which the state committee on wood utilization stands pledged. This is a task in which every good cit-

izen of the state can help, and must help if it is to succeed.

IT IS with this work as Fred Plummer wrote long years ago of the ranger's task:

"The Forest Ranger's motto stands Protect, increase, restore To help home-builders with the land And bring content on every hand Now and forevermore!"



Home-made Good Times

WHENEVER a farmer gets a net selling price for his products that is higher than the total cost of production, times are good for him.

But no individual farmer can make much change in selling prices. Nor, on the other hand, can he greatly reduce such production costs as interest, taxes, rent, insurance, etc.

He can, however, make a reduction, oftentimes a big one, in power and labor costs. When a thinking farmer finds out that these items make up, on the average, sixty per cent of crop production costs, he takes immediate steps to cut down this expense.*

This opportunity to reduce, at once and greatly, his power and labor costs is here offered to every farmer. Case tractors and power farming machinery make possible the better methods which alone can assure, to many farmers, a dependable margin of profit under the present conditions.

Write us for suggestion on how to reduce your power and labor costs.

* See U. S. D. A. Bulletin No. 1348

J. I. Case Threshing Machine Co.

Incorporated Established 1842

Dept. Q-75 Racine Wisconsin.

Manufacturers of

Case Farm Tractors, Steel Threshers, Combines, Silo Fillers, Baling Presses, Steam Engines, Road Machinery, Grand Detour Plows and Disk Harrows.



"Say it with Flowers"

Flowers are always an acceptable gift,
for Birthdays, or Anniversaries

Order Early for
EASTER
April 4th

Rejoice with flowers, blooming plants, corsage
bouquets, basket arrangements, and cut flowers

The Bool Floral Co., Inc.

215 E. State St.

Flower Fone 2758

Flowers by wire—anywhere—anytime

Strand Theatre

March 11 - 13

His Supreme Moment

and

Five Acts of Vaudeville

❖ ❖ ❖

March 14 - 17

The Grand Duchess

and

The Waiter

❖ ❖ ❖

Coming—The Bat



MICHAELS-STERN
CLOTHES

Buttrick & Frawley, Inc.

New as the Season

Spring Clothes

Get acquainted with the new things for Spring wear.
Our present stock of Suits and Topcoats stands out
most conspicuously—in quality—in style—in work-
manship—and in real value.

BOSTONIAN SHOES

BERG HATS

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EAGLE SHIRTS

DUTCHESS TROUSERS

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OPENING GUN TO BE FIRED IN "AG SPIRIT" CAMPAIGN

Ag-Domecon Banquet to Be Spread in Willard Straight Memorial

"Got your ticket yet, Mac?" "Ticket for what?" Bang! Down swept six pasteboard venders upon poor Mac for not knowing that the Ag Banquet will be held in Willard Straight Hall on March 9. By the time the farm management boys pulled the six over-efficient ticket sellers off the unfortunate Mac, he was only too willing to fork up the small sum necessary to partake of the great feed which is promised to those lucky enough to get a ticket before they are all sold.

Everything is being arranged by committees so that this banquet will be the opening gun in the spring campaign to blow up the old ag spirit which has been covered under a mad rush of prelims, shows, contests, University affairs and the like for the past several years. It seems that the last bit of real ag enthusiasm was laid to rest after the barbecue held in the animal husbandry judging pavilion in the fall of 1922.

"B. A." Will Toast

President Merrills Dake '26 of the Ag Association appointed several committees to carry on the actual work in insuring the banquet's success. The committee on arrangements is composed of "Al" Crosby '26 and Jean Gardiner '26. The speakers of the evening will be the President of the University, Livingston Farrand, Dean of the College, Cornelius Betten and a prof from amongst our lower campus friends, Professor W. K. Stone. It was with great difficulty that the speakers' committee was persuaded from continually patting itself on the back and endangering their spinal column when they had succeeded in getting our well known toastmaster to fill the bill that night. Professor "B. A." Adams is the prize. The committee is composed of Gid Britt '27 and Helen Bull '26. The other groups directly concerned are "Pete" Ham '26 and "B" Boyer '26 on the ticket committee and "Al" Stone '26 with Grace McBride '26 on the publicity committee.

ANNUAL CANNERS' SCHOOL IS HELD AT THE COLLEGE

The third annual extension school for canners' field men was held February 16 to 19 at the College. The school was started in 1924 at the request of the large commercial canners in this state, in order that their field men might be better equipped for their duties. Numerous lectures were given by specialists at Cornell and at the Geneva Experiment Station. Among the Cornell instructors were Professors A. J. Heinicke, H. C. Thompson,

F. O. Underwood, O. F. Curtis, R. A. Emerson, Paul Work, and Mr. A. L. Pierstorff. The three men from Geneva, L. K. Jones, Hugh Glasgow, and C. B. Sayre, all associates in research, are employed by the state in pursuance of a special bill passed by the legislature last year to provide for the study of canning crops. A banquet for all attending the school was held on Wednesday evening, February 17, by the Association of New York State Canners.

COLLEGE OF AGRICULTURE SUSTAINS A GREAT LOSS

Professor William A. Stocking Dies Early in February

Following an illness of over three months, Professor William A. Stocking of the dairy department of the College of Agriculture and former head of the dairy department, died at his home in Ithaca on February 3.

Professor Stocking resigned as head of the dairy department in June, 1923, and since that time had taken up work in dairy bacteriology. In 1906 he was appointed assistant professor in dairy bacteriology and three years later was made full professor, and at the same time was appointed as head of the dairy department, when Professor R. A. Pearson left to become State Commissioner of Agriculture. During 1913 and 1914, and after the resignation of former Dean Liberty Hyde Bailey, Professor Stocking was acting director of the College.

Member of Many Societies

He was a member of the Society of American Bacteriology, The American Science Association, and New York Dairyman's Association, being president of the last two each for two years. In 1924 Professor Stocking represented Cornell University and the United States Department of Agriculture at the International Dairy Congress and Expositions at Milan, Italy.

Dean Cornelius Betten said in part, "In the death of Professor Stocking, the State College of Agriculture sustains a great loss. Professor Stocking was a member of that earlier group that gave strength and character to a vigorously growing institution. To his special credit must be placed the development of dairy industry as a large and strong unit in the college organization. The completing of the fine new dairy building seemed a fitting climax to Professor Stocking's great contributions in administration and organization and he certainly had earned the opportunity to devote his remaining time to research in dairy bacteriology—his field of special scientific interest. He will be sadly missed among his old associates and most of all perhaps because of the kindly spirit that pervaded all his relationships."

KERMIS PLAYS WELL TAKEN BY ENTHUSIASTIC AUDIENCE

Sentiment and Booze Are Featured by Student Actors

The climax of Farmers' Week activities was reached on the evening of Friday, February 12, with the presentation in Bailey Hall of the annual Kermis plays. The tuneful instruments of the Women's Mandolin Club soothed the impatient audience between the acts.

Finding a Way Out, by F. B. "Doc" Wright '22, was the first play in the order of presentation. The scene of this play was in a farm home and Dick Carrick, well impersonated by Lincoln E. Cruickshank '27, decided that he wants to go to college. With the consent of his parents, played by Corrine G. Messing '28, and William F. Carty W. C., he works his way through the four year course and wins coveted honors. When he returns home for his last vacation, his boyhood sweetheart, which part was admirably filled by Laura Griswold '28, promises to be his wife; the two embrace, much to the envy of the audience, and they live happily ever after.

Kay Smith Stars

The first prize play, *Amends*, by Norma H. Wright '27, was a comparatively blood-curdling and heart-rending story, the moral of which might be "getting drunk is not the best way out of a dilemma" or "a woman will have her way." Harold Wentworth '27, as Bob Ross, acted the young man's part well, his nagging stepmother, Mrs. Ross, was Lois White '26, and the clinging vine, Mary, whose heart is set on Bob, was most perfectly acted by Kay E. Smith '28. The two women pester Bob nearly to death. In desperation he decides to leave town with Jim Hartnett, the ne'er-do-well, while both are under the influence of drink.

One spectator remarked that he never saw a more complete drunkard, either on or off the stage, than H. Meade Summers '26 as Jim. They tell the Deacon, Leo R. Blanding '27, that Bob and Mary have become engaged and leave him to herald the news about town.

Bob Makes Amends

Ten years later in a South American seaport both Jim and Bob appear, Jim a drunken sailor, the other a first mate. Bob decides to return to the old home town and make amends to Mary, the clinging vine. He finds that Mary has remained single, and now that her anger at Bob's trick has abated, she welcomes him back. They decide to try and live happily thereafter. G. Kenneth Kilpatrick '26 was a rather accomplished barkeep, while Harold Dorn '29, Favor R. Smith '27, and J. Albert Clark '28, were three most desperate and salty drunken sailors. Sedowa and Omicron Nu ushered.

G. W. SULLIVAN WINS FIRST PRIZE ON EASTMAN STAGE

"Dan" Dalrymple Takes Second Place in a Hard Fought Contest

Thursday evening of Farmers' Week marked the passing into history of the seventeenth annual Eastman Stage contest. Nearly two thousand visitors and Cornellians heard Dean Cornelius Betten describe the purposes of the Stage, and introduce the speakers.

G. W. Sullivan, jr., '26, was the first to speak, and was the recipient of the first prize of one hundred dollars. His vivid description of the poverty and want in the slums of New York City, the need for a steady flow of pure, wholesome milk, and his powerful appeal to the dairymen of this State that they fail not in their great responsibility to humanity, won the hearts of all his audience, and earned the speaker the much coveted honor.

D. M. "Dan" Dalrymple '27 finished second. Through a clever, homely introduction he swung into the threadbare topic of cooperation, and to the delight of everyone, presented his subject in a live and interesting manner. He appealed to his audience that farmers embarking upon a cooperative venture should have a clear understanding of the problems to be encountered, and should beware of an incorrect interpretation of the successes of others.

4 Mor Squeekers

Miss M. M. Leaming '26, in speaking on *The Third Leg* emphasized the significance of junior project work as being combined with the farm and home bureaus to form the great trinity of rural America of today.

H. T. Huckle '26 discussed the problem of farm labor, emphasizing the importance of human relations between farmer and hired man. R. T. Termohlen '26 talked on the wonder and importance of the farmers' partnership with the soil, stressing the duty of every tiller of the soil to pass on to his children a well-kept fertile farm. H. W. Beers '28 stressed the importance of the Grange as a factor in the rural community. He pointed out that if the Grange was losing its influence in the community the fault lay with the individual members rather than with the organization.

The judges of the contest were H. E. Babcock, manager of the G. L. F. Exchange, E. S. Hopson, former president of the Farm Bureau in Herkimer County, and H. R. Talmage of Riverhead, Long Island.

The members of Heb-sa and Helios acted as ushers, and Professor H. D. Smith, university organist, played a number of selections on the organ.

DOMECON DEMONSTRATES

Over three hundred Farmers' Week visitors saw the demonstration of electrical equipment given by Omicron Nu in the Domecon building, throughout the week. Waffles, coffee, and cinnamon toast were made on electrical cooking apparatus and sold to the visitors for nominal sums which

cleared an appreciable sum for the society. The students showed the use and cost of each piece of equipment that they used in the demonstration.

The money taken in from the demonstration together with the profits from the candy counter in the home economics building which Omicron Nu has managed for the past few years is used to support a scholarship for students in the College of Home Economics.

PLANT BREEDING DEPARTMENT GRATIFIED OVER SEED SHOW

Many of the Winners Were Regular and Short Course Students

The plant breeding department ran a competitive seed show in connection with Farmers' Week activities, the purpose of which was to show the farmer the possibility of producing good seed on the farms in this state. Entries were limited to varieties of corn, oats, barley, wheat, and rye recommended by the department and grown by the exhibitor or under his contract. The judging was based fifty percent on appearance, and fifty percent on the field and bin inspection records made by the department for members of the New York Seed Improvement Association. Twenty-seven of the fifty members of the Association exhibited a total of thirty-seven entries. Among the winners were several former regular and short course students.

The plant breeding department was highly gratified at the response to this innovation and at the high quality of the seed grains shown. It is hoped that the show will partake of the nature of an annual Farmers' Week event.

The judges of the contest were Professors H. H. Love and R. G. Wiggins, both members of the plant breeding department.

RATS NEED VITAMINES

That oatmeal and milk are better rations for members of "genus Homo" than toast and coffee was effectively demonstrated during Farmers' Week by the home economics exhibit of white rats, shown on the top floor of Domecon. The rats that had been fed toast and coffee were much smaller and less vigorous than the more fortunate rodents who fared on oatmeal and milk.

The roomful of rats served to demonstrate several facts with regard to nutrition. One rat whose diet contained none of the vitamins carried by lemons, oranges, and tomatoes, passed on to his "happy hunting grounds" before the week was over, and his tombstone was a warning to the parents and children who visited it.

Rats who had not been fed lettuce were afflicted with bad colds as a result of their reduced vitality, and in that particular pen the rat mortality was high. But while these rats pined away their brothers who ate lettuce frisked and thrived.

CURRY COMBS AND CLIPPERS LAID ASIDE TILL NEXT YEAR

Students' Livestock Show Rivalled Only by the International

On Thursday afternoon of Farmers' Week the intense excitement in the College herds and energy spent upon the animals was brought to an end with the annual Students' Livestock Show in the animal husbandry judging pavilion. Once more the students could lay up their curry combs, their brushes, clippers, and talcum powder to cover stains on white animals until the time arrives to fit the animals for next year's show.

After all scrubbing and rubbing had ceased late in the afternoon it was found that many had shared in the honors of the day. The greatest honor of the day fell to the lot of a winter course student, C. Hagenow, who fitted and admirably showed the College's champion Guernsey, Triple Query. He won grand championship on the bovine. The others who won first in dairy cattle classes follow: Aged bulls, F. R. Smith '27; Junior bulls, R. E. Zautner '27; Aged Holstein cows, M. Davis w. c.; Junior Holsteins, Miss E. MacAllister '26; Ayrshire cows, S. Stabler '29; Jersey cows, G. K. Kilpatrick '26; Guernsey cows, C. Hagenow w. c.; Holstein calves, Class II, Miss E. MacAllister '26; and Holstein calves, Class 12, A. Furrer w. c.

Judged on Fitting

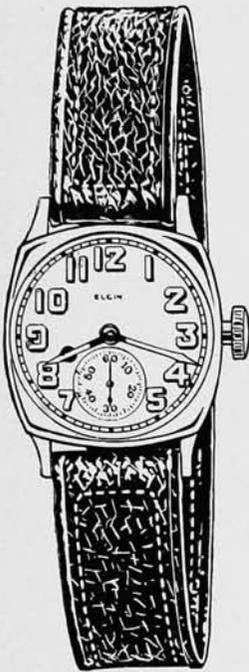
The beef cattle classes were won by C. Sadd '26 and G. Cowles sp. with the latter winning grand championship. The sheep classes were won by D. Hill sp. and L. Arnold '27 with the former winning grand championship. The horse classes, consisting of Percheron and Belgians, were won by S. Leonard '27 and K. Stoodly w. c. The grand championship was won by the latter showman.

The animals were judged by P. C. MacKenzie, a practical showman and fitter of animals, who is connected with the Penn State College. The animals were placed on their fitting and showing and not on the individual herself. A great deal of credit for the showing made is due to the coaches who gave help and advice to the would-be showmen.

FORESTERS ELECT MEN

The officers for the coming term which were elected at a recent meeting of the Foresters Club are: President, Seth Jackson '26; vice-president, W. H. Walling '27; secretary, E. C. Abbe '28, and treasurer, J. D. Pond '28. The coming visit of the forester of the United States Government, Colonel W. B. Greeley, to speak before the club, was reported at the meeting. Colonel Greeley is connected with the United States Foresters Service and is considered one of the foremost foresters in the country.

Professor E. V. Hardenburg of vegetable gardening was on the Farmers' Week Program at Ohio State University on February 3 and 4.



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H. V. Miles, '08

AG OVERALL HOP PLANNED AS CAMPUS PEP PROVOKER

Big Ag Banquet to Be Followed Up With Rustic Shin-dig

On Sunday afternoon, February 21, the second step was taken, or which is more logical, was begun to be taken in this new idea of putting the ag college back on the map of University activities. The first thing will be the Ag Banquet, March 9, which will be followed along about the end of the month with a real ag dance—no fooling. According to the committees which were appointed at the afternoon session only sod-busters dressed in regulation overalls of standard size and make will be allowed to escort (nice word escort is—like to write it) a fair doughbuster into the dance palace. The old armory will probably be the scene of the squabble if the proper authorities who rule over such palatial establishments can be convinced that it will be for the good of America's future food supply to allow the some-day-to-be-farmers and potential farm wives to work off some excess enthusiasm before the spring vacation.

Committees Named

Some twenty odd seniors and juniors met in the COUNTRYMAN office and under the temporary chairmanship of "Al" Mason '26 elected "Pete" Ham '26 permanent chairman of the affair. The enthusiasm of the group carried them along at a fast rate (as all ag men travel) and not before long the following committees had been elected: Finance, Chairman, Jared Van Wagenen 3d '26, M. L. Dake '26, Fred Miner '27, and "Pete" Ham '26; Publicity, Chairman, A. C. Bowdish '26, H. W. Beers '28, and F. B. McKenzie '26; Decorations, Chairman, "Al" Mason '26; Stunts, Chairman, Meade Summers '26 and Judson Genung '26, and Refreshments, "Walt" Bovard '26. "Johnnie" Marshall '26 acted as secretary of the meeting. As explained this is only a skeleton group which will reach out into the various clubs and organizations on the ag campus and seek help and support from them. It's going to be an ag affair given for the University and if things keep going, or which is more likely, gain in speed the University is going to be treated to something unusual before many more new moons.

THREE HUNDRED ALUMNI FEAST IN SAVINGS BANK

The annual alumni banquet of the Colleges of Agriculture and Home Economics was held on Wednesday, February 10, in the new Savings Bank Building.

The first thing on the program was of course the eats. There is no need to say more about this phase of the meeting than that over three hundred people went away filled.

After the feed the annual business meeting of the association took place. It was unanimously agreed that alumni of the various high schools of the state who are also alumni of Cornell, be encouraged to get a picture of the administrative group of buildings of

the College of Agriculture into their local school. This picture of the Roberts group was taken by J. B. Kirkland '18, who is secretary treasurer of the Association, in carrying out the plan decided upon at last year's meeting, namely, the distribution of such a picture throughout the state. "Joe" Hurley '15, was elected president for the coming year to succeed L. W. Crittenden.

The business was soon over and the speeches began. The first was an address of welcome by President Farrant, followed by Dr. C. E. Ladd, director of the extension service, who spoke of the obligation of alumni to their community. Dean Betten outlined for the group some of the current problems of the College. Next came the big event of the evening in which Miss Martha Van Rensselaer and Jared Van Wagenen defended the positive, and Dr. J. G. Needham and Dr. G. F. Warren attacked the negative of the question, *Resolved, That Home Economics Should Be a Part of Every Man's Education*. Many almost credulous reasons were advanced on both sides. Professor "B. A." Adams acted as referee and prevented any slugging in the clinches. The decision was given by the audience in the form of applause for that side, which each person felt deep down in his sub-conscious self, deserved the victory. The negative won the debate.

The banquet had to be held downtown, "Kirk" says, because the group is too large to be accommodated in Risley. Next year the officers hope to find some place on the hill for the meeting.

WINTER BLOSSOMS SHOWN AT EXHIBIT OF POLLINATION

Apple blossoms in February were shown on a miniature tree in the pomology Farmers' Week exhibit. The twig had been placed in the green house until the blossoms were forced, and then placed in the miniature screen cage with a bee hive, to show how pollination experiments are conducted.

The effect of cross pollination on the McIntosh was clearly demonstrated. The self-pollinated fifteen-year-old tree yielded only two bushels while the cross pollinated tree of the same age gave fifteen bushels.

The apples of other states were shown as well as a classified grouping of the important varieties of New York. One of the out of state varieties to attract a lot of attention was the large and handsome Golden Delicious from Washington.

PROFS PRANKS

Professor Paul Work attended a meeting of the New York State Vegetable Gardeners' Association in Albany February 17. Professor Work addressed the meeting on "Exhibiting Vegetables."

Professor M. F. Barrus, head of plant path extension, is in Porto Rico, where he will be until April 1. He is studying diseases of coffee.

CROTTY WINS SHORTHORN PRIZE SPEAKING CONTEST

Negative Wins Debate by Contending "Cooperation, Not Legislation"

The short-horn prize speaking contest and debate held sway Monday evening of Farmers' Week, February 8. Professor J. L. Stone, emeritus of farm practice, presided. The first speaker was W. R. Crotty who discussed *Agriculture Education*. He said that education was for complete living and he believed that the short course was fulfilling this idea. Mr. Crotty was later awarded the ten-dollar gold piece, a gift of the extension department. The next speaker was R. H. Seydell of Belgium who talked on *The Agriculture of Belgium*. A. C. Stearns was the last speaker and he discussed *The Farmer and His Problems*.

The judges were Cuyler Paine '25 of Albion, Orleans County; Mrs. H. C. Miller, Waterford, Saratoga County; Mr. Don Schutts, Arkport, Steuben County.

Botsford Leads Songs

The negative side won the winter course debate on the topic: *Resolved, That the United States Government Should Establish a Federal Trade Commission With Power to Pay a Bounty on Agricultural Exports Sufficient to Bring the Price of Farm Products in the United States Up to the World Price Level Plus the Tariff*. The main arguments of the negative were that the farmer needs co-operation, not legislation, and that his condition is improving due to the influence of supply and demand.

The negative speakers were A. E. Snyder, leader, S. W. Peake, C. A. Travis, and Miss M. Boyle, alternate. The affirmative consisted of R. H. McIntyre, leader, Miss E. R. Viele, D. Hill, and F. W. Janssen, alternate.

The judges were Mr. Bruess, Hamburg, Erie County; Mrs. McOmber, Albion, Orleans County; and Professor E. S. Guthrie, Forest Home.

While the judges were awarding the decision, Professor H. E. Botsford, of the poultry department, led the audience in some lively songs.

ARIZONA RATTLERS PLAY FOR RURAL SCHOOL SHOW

A live snake exhibit was the center of attraction at the Farmers' Week rural school display held in Fernow Hall. A cased-in pair of Arizona rattlesnakes furnished music for the exhibit while a collection of ring snakes, water snakes, milk snakes, salamanders, lizards, and turtles squirmed and writhed for the benefit of visitors.

The walls of the exhibit room were lined with the work of grade school children throughout the state. Collections of winter twigs, wild flowers, and bird lists, together with illustrated stories of the "Fire That Jack Built" were typical of the exhibits.

The exhibits were judged, so that the walls were liberally plastered with blue, red, and white ribbon awards for the children that entered the prize-winners.

 YE EDITORS WE

Hurray! We knew it could be done and that someone would soon start the ball a-rolling. Old ag spirit revived! Well, we should smile. "Looks like old times," remarked one of the older members of the faculty when he heard what was up. With the Ag Banquet scheduled for March 9 in Willard Straight Hall and a tentative date of April 1 set for a real honest-to-goodness ag shin-dig, where the sod-busters dressed in overalls and blue shirts will guide the fair farmerettes over the barn floor, the upper campus will come out of its make believe "high-hatness" and once more become Farmer Jones and Mary Jane. It is too bad that the ag spirit has been allowed to sink so low. This attempt, to make the ag students feel their vest buttons strain when someone mentions the ag college, will get results if everyone gets behind the idea, enters into the thing with all they can give and boosts the AG COLLEGE and its ACTIVITIES.

With the death of Professor William A. Stocking, the University circle loses a valuable friend and leader, who devoted the last twenty years of his life to the advancement of dairy science and the extension of the influence of the College in state agriculture. We feel a sincere personal loss in the professor's death and are certain that the faculty and students do

likewise. Professor Stocking will long be remembered by all and will be an inspiration to us to carry on the work which he has so faithfully performed.

Authors and actors of Kermis this year are to be congratulated. While some puritanical minds felt that there was too much "drunk" in *Amends*, we think most of those who saw the plays this year will concede that the scene was more dramatic and vivid than most amateur plays, particularly rural life plays. Playwriters too often avoid the "seamy side" of life for the sake of what seems to us to be a pseudo-morality.

Many have been the complaints in the past concerning final examinations. But unfortunately they have been voiced for the most part by students. It is only rarely that a member of the faculty steps forth to champion such an affair as Professor J. G. Needham has.

At the close of the last semester, Professor Needham announced to his students in biology 7 that since the form of an allotted time for a final must be adhered to by a ruling of the College, he would devote that period to a lecture in the hope that the last meeting of the class might be both pleasant and beneficial to all.

It is encouraging to have a member of the faculty interest himself sufficiently in the mechanism of our educational system to initiate something constructive to replace that which has become outworn.

 THIS 'ERE & THAT 'AIR

Tobogganning is quite a sport when done on proper slides, or when confined to safe and short premeditated glides, but I have seen some sliding done that wasn't quite so nice; some sliding that was hardly fun,—I've done it once or twice! But banged up shins, and wounded knees, and gashes in my pants are almost always, if you please, results of such advance. It's all because the streets and walks of this old college town, in spite of sundry level balks, are mostly up and down, and when the winter weather reigns they have an icy glaze that's oft the cause of aches and pains, and thickens with the days. It's on these inclined walks and streets that we, all unprepared, are apt to take with haste hard seats we would not else have dared. Positions that we thus assume are quite undignified; they stimulate dark looks of gloom; they're hard on tender hide! And so, old ashes do your stuff, for we would fall no more; we've had of sliding quite enough, unless by Beebe's shore.

The Domecon rat exhibit held during Farmers' Week hit some of us in a particularly weak spot. The rush and push of campus life tends to make most students careless with regard to eating habits. Probably, however, our greatest gastronomic sin is eating too rapidly rather than our neglect of proper nutritive elements.

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But electric service for the farmer, in addition to generating stations, requires long transmission lines—sub-stations and transformers, poles and power lines, to be set up and kept in good repair; and, always, day and night, a sufficient reserve of power to meet all needs and reach the most distant consumer on the line. All this represents an investment of money for which wages must be paid whether the current is in use or not.

You cannot get electric service by the truckload. If electric service is to come to you, it must be sold in such quantity and at such a price as will pay the cost of its delivery, as well as the cost of producing it.

How electric service can be sold in such quantity and at such a price as will be mutually beneficial to farmers and electric light and power companies is one of the problems now being studied by fifteen state committees working with the national committee. The Committee on the Relation of Electricity to Agricul-

ture is composed of economists and engineers representing the United States Departments of Agriculture, Commerce and the Interior, American Farm Bureau Federation, National Grange, American Society of Agricultural Engineers, Farm Lighting Manufacturing Association and the National Electric Light Association.

If you are interested in this work, write for a booklet describing it.

NATIONAL ELECTRIC LIGHT ASSOCIATION

29 West 39th Street, New York City

The Cornell Countryman



APRIL

1926

Volume XXIII

Number 7



The Ox Woman

On an East Indian farm, where the crop is tea, a wooden plow turns up the rich black soil. A woman drives, another woman pulls—and a black ox pulls beside her.

The American field is plowed by a tractor; the farm home has many conveniences. But the farm woman of America often works as hard as her Oriental sister. She toils at the wash-tub, she carries water, she churns by hand—all tasks which electricity can do for her at small cost, in half the time.

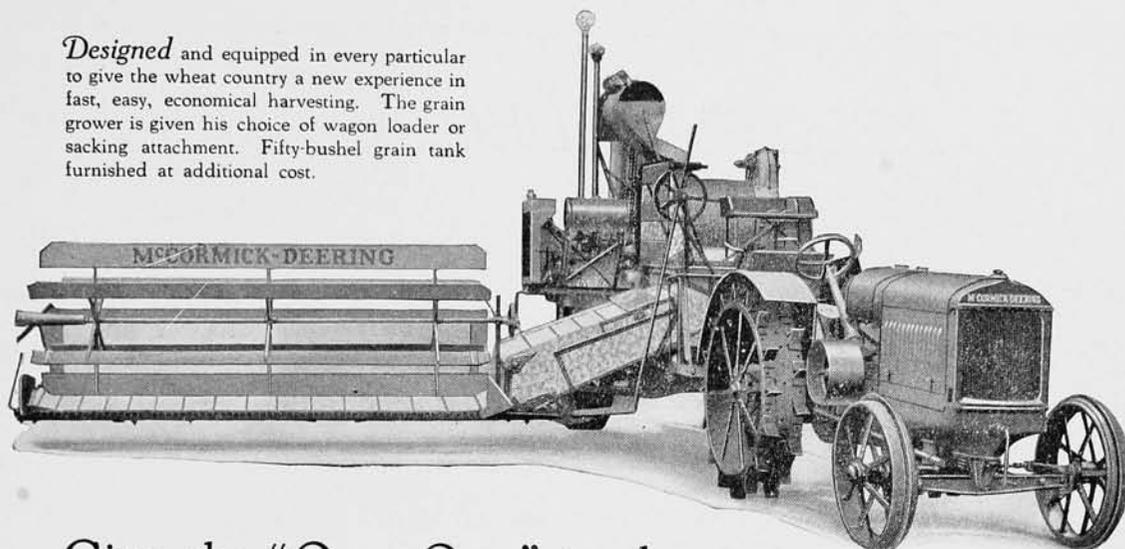


Washing, cleaning, and pumping are the three main tasks which electricity does for the farm woman. But electric light, the electric iron, electric milkers and separators and a dozen other devices, are also making life easier on the farm.

It is the aim of all modern communities to release woman from all such drudgery. The farm communities that have studied this subject and used electricity to its fullest extent have realized working and living conditions beyond their fondest dreams.

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McCormick-Deering Harvester-Thresher

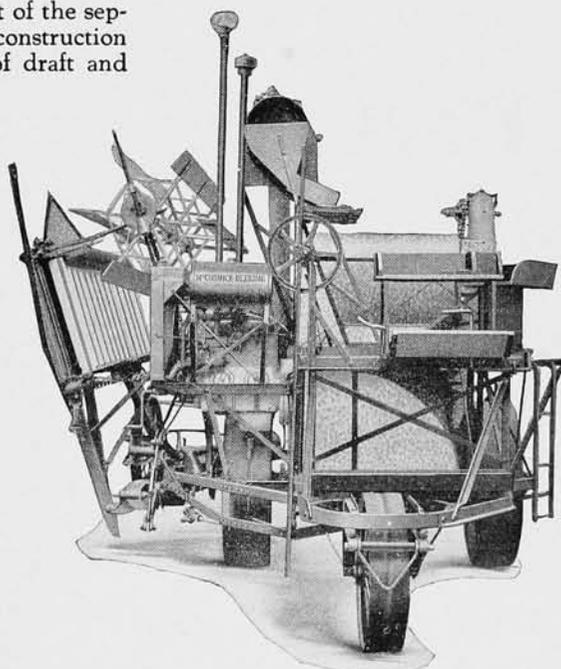
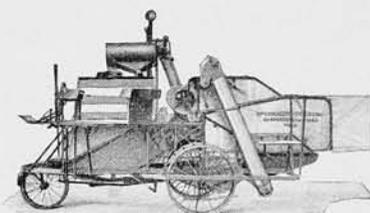
Illustrations on this page give a general view of the new prairie type harvester-thresher produced by the International Harvester Company. This model retains the popular qualities that have been developed during twelve years of McCormick and Deering harvester-thresher experience and embodies in addition a number of new features.

This machine follows the standard practice of stationary thresher manufacture in that 80 to 90 per cent of the separation takes place at the cylinder—a unique construction in harvester-threshers. Unusual lightness of draft and easy running qualities are effected through the use of self-aligning ball bearings at many points. The folding platform is described and shown below. A 2-man outfit of 12-foot cut.

International Harvester provides, for the Northwest a *hillside* harvester-thresher, and for the prairies a 10-foot machine, to be operated by power take-off from the tractor.

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(Incorporated)

At the right, the front view of the machine, showing the easy-transport feature. The platform is shown folded back and drawn up close to the side of the thresher. In this position the machine measures only 12 feet 6 inches in width, narrow enough for any ordinary bridge or the average gate. The platform wheel is arranged to swivel like a caster, so that it swings into line and follows when the machine moves ahead.



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There are many recommended to you at this time of the year. Especially this is true if you are a senior. We publish each year a list of Agricultural books which are recommended. Ask for a copy.

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Volume XXIII

APRIL, 1926

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Utilization of Soil Surveys in New York State

By F. B. Howe

ACCORDING to the nature of requests for soil survey reports received from residents of New York state and also from people residing outside of the state, there is some misconception concerning the relation of soil surveys to utilitarian purposes. Apparently this misunderstanding comes from the lack of a standardized use of the term "Soil Survey."

One cannot better attempt to evaluate a soil survey than to regard it as doing for soils what Gray did for our native plants and the U. S. Geological Survey is doing for topography. In the typical case, whether in botany, geology, or soils, the surveyor is first concerned with the purely scientific aspects of the work. The primary duty of a soil surveyor is to collect data relative to the characteristics of soils, and to leave to others to find specific utilities based upon his findings. By all good precedent this procedure is justified and correct.

IN working out a program leading to specific utilitarian results based upon the soil survey of the state, the department of agronomy cooperates with the U. S. Department of Agriculture in the identification and mapping of soils in the state. The results of such work are published as Soil Survey reports by the Federal Government. The only contribution the state offers in this work is a share in the expense of the field work. The expense of putting out a Soil Survey report is met entirely by the U. S. Department of Agriculture. Since the state does not contribute

towards the expense of publishing the soil survey report, no copies are available for distribution, other than those offered gratuitously by the United States senators and representatives in Congress from the district in which the area surveyed is located. Owing to the technical character of

studies by professionally trained men in soils and crops tends to eliminate many inconsistencies in the adaptation of crops to soil types which have previously never been understood. Also such studies by crop specialists reinforced by laboratory and field investigations conducted on the various soil types has

permitted a more practical significance to be attached to experimental and investigational work. As an illustration of the practical value of crop surveys supplementary to soil surveys, an instance is related in connection with the soil and crop survey of Wayne county, which has just been completed, and will be published soon. The soil survey showed that there were certain soils in the county that



A Typical Farming Area in Southern New York

the soil survey reports published by the Federal Government, it is within the province of the state to provide "follow up reports" based upon the soil survey, which will be of positive value in solving some of the soil and crop problems on the farm. These bulletins will be designated as *Soil and Crop Management* studies for the respective counties.

IN order to obtain specific data relative to the adaptation of crops to certain soil types, crop yields, acreages, and fertilizer practice, etc., to serve as a basis for recommendations in the *Soil and Crop Management* bulletins, crop specialists visit typical soil areas previously classified by the soil survey, and by personal interviews and observation establish correlations between the soil types and their crop characteristics. Such

contained sufficient calcareous material in the soil profile to produce effervescence freely upon addition of dilute hydrochloric acid. Another group of soils having rather similar general characteristics did not show any lime in the soil profile when tested, and naturally the conclusion was drawn that the latter soil was in need of lime. In fact, such conclusions in regard to this particular soil have been quite universally accepted. As a result of a crop survey conducted on these respective soils, the crop specialists found that the soil devoid of lime as indicated by field tests, was capable, under judicious management, of raising fair to good crops of clover without liming. The practical value of this information is at once apparent. Other similar cases may be cited where crop studies on particular soil types have brought about an explan-

ation for practicing certain methods of crop selection and fertilization entirely out of harmony with the theoretical.

There are many by-products of soil survey work that can be utilized for drawing conclusions not necessarily concerned with purely scientific matters. The first and most obvious use of soil survey reports is by the farmer who is on the land, producing crops from the soils of his own farm. The use of Federal soil survey reports by farmers is not as general nor the results as satisfactory as one might wish. This is due to two major reasons—first, the farmer does not interpret a soil survey map with facility; and second, the detail of the mapping does not permit of the separation of as many variations in soil conditions which he knows exists on his farm. The first of these difficulties can only be remedied by a statewide educational movement regarding soil conditions, the dissemination of information concerning soil survey classification, and follow-up studies based on soil survey classification which will have practical application and arouse the farmers' interest. The second will always be before us, but with a better conception of soil classification and soil differences the farmer can more readily understand the limitations of soil maps and the import of those minor variations on his own farm.

THE soil surveys are of very great value to the prospective purchaser of land, the newcomer to our state who is not familiar with the soils of the region and who often needs unbiased and honest information regarding the character of farm lands offered him. This source of informa-

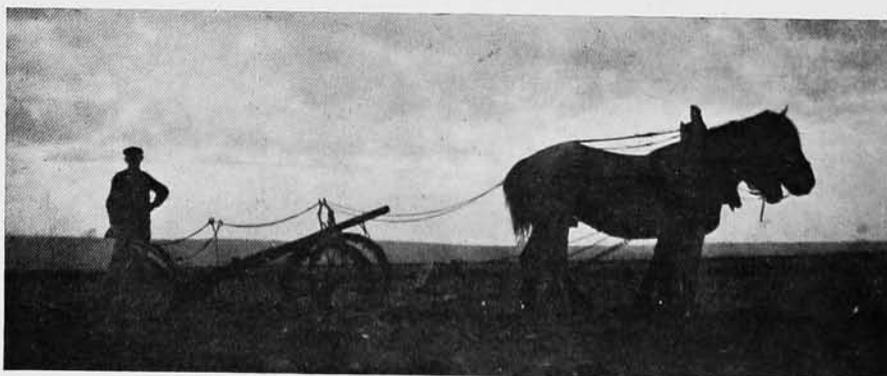
tion is made use of considerably by the more up-to-date, progressive class of farmers seeking farm land. Also the city dweller who has a desire to buy a country place avails himself of this information very generally. The wider use of the soil survey by prospective purchasers of farm land should be encouraged. Many unfortunate experiences in the selection of land unsuitable for satisfactory crop production could be eliminated if the newcomer to our state would avail himself of this service.

An illustration of the value of soil surveys in this connection came to my attention recently. A farmer residing in Iowa wrote to the College requesting a soil map of Madison County. He said he was considering the purchase of a certain piece of land located in this county. The supply of Madison County reports was exhausted, so we were unable to send him a map, but requested him to give us definite information relative to the location of the land in question, and we would refer to our soil map and give him the information he desired. He answered giving the location of the land. Upon referring to the soil map, one could see that two types of soil were found on this farm, one called Volusia silt loam and the other classified according to our present nomenclature as Honeoye silt loam. Every student of soils knows the wide difference in the value of these two soils. It only remained for the farmer to decide for himself after receiving a description of these two soils whether or not he could afford to purchase this farm, after considering the relative acreage of the soils which differ so widely in crop adaptation and agricultural value.

The wide range in adaptability and value of the land in New York state tends to emphasize the necessity for having accurate data relative to the character of the soils. A complete inventory of the soil resources of the state is the ultimate aim embodied in the soil survey. Such data are fundamental to the formulation of any practical plan leading to the more efficient utilization of the land in the state.

THE accompanying cut is a winter view of a typical farming area in the southern part of New York state. The soils on the high hill land belong mainly to the Volusia, Canfield, and Lordstown series. These soils are derived from the weathering and alteration of glacial material composed mostly of shale rock, which abound in the plateau region of southern New York. The soils are low in lime, and mostly shallow in depth. The Volusia and Canfield have compact subsoils and therefore have a tendency to be poorly drained. The Lordstown exhibits better drainage characteristics than the Volusia or Canfield soils.

The valley soils represent altered glacial material which was transported long distances from the north by ice and water. In many cases a portion of the transported material was limestone. Owing to the influence of the glacial water which was most responsible for the deposition of the original soil material, the valley soils are complex in character varying in texture from clays to coarse gravels. The Dunkirk, Groton, and Palmyra are the prominent valley soils carrying lime. Where no lime is found, the valley soils are usually correlated with the Chenango, and Wooster series.



Alfalfa Rapidly Becoming Important New York Crop

By L. A. Dalton

PROBABLY no crop has ever been grown by New York farmers that received the widespread interest that alfalfa is receiving at the present time. The acreage of alfalfa has increased remarkably during the last twenty-five years. The following figures show this rapid growth:

Year	Acres
1900	5,000
1910	35,000
1920	120,000
1925	208,000

There are several reasons for this rapid expansion in the acreage of alfalfa. (1) The high cost of protein concentrated feeds for milk production. (2) The relatively high labor income from growing alfalfa as a cash crop. (3) The soil improvement qualities. (4) Improved methods of production enable many to grow alfalfa, who had failed before.

Every dairyman knows what the percentage of protein means when obtained in mixed feed. At the same time there are hundreds of dairymen who little appreciate what alfalfa will do toward eliminating some of their purchased protein or increasing the production of milk. Alfalfa will produce on an average about 575 pounds of crude protein to the acre or nearly 8 times as much as timothy. In addition to being high in protein, alfalfa is also very high in calcium and some of the vitamins. The calcium, which is very essential in bone development, found in alfalfa is in a form that is readily assimilated. The vitamins are thought to be especially valuable in facilitating assimilation of certain food nutrients. Specifically, as a feed

1. Alfalfa reduces the amount of protein necessary to purchase in the grain.
2. Alfalfa is highly palatable.
3. It furnishes calcium in the

best form for growth and production.

4. It is rich in vitamins that control growth and general health.
5. It furnishes elements essential to regularity of breeding.
6. It insures growth, production, and reproduction the essential life cycle in profitable animal husbandry.

It may, therefore, rightly be termed not only a prime essential in good farming, but the cornerstone in profitable feeding.



Proper Attention to the Factors of Drainage, Liming, Fertilizers, Inoculation, and Hardy Seed Varieties Will Insure a Stand of Alfalfa As That Pictured Above

The following figures show the comparative composition of alfalfa and other common roughages in digestible crude protein:

Roughage	Crude Protein
Alfalfa	10.6%
Red Clover	7.6%
Timothy	3.0%
Corn Stover	2.2%

COST accounts kept by farmers over a period of 8 years (1914-1922) show that alfalfa produced a labor income of 89 cents per hour. This was greater than the labor income per hour for wheat, which gave a labor income of 33 cents per hour, buckwheat 5 cents, beans 20 cents, cabbage 49 cents, and potatoes 49 cents. Owing to the fact that alfalfa is so desirable for the dairy cow, and to the fact that dairying is the principal agricultural industry of New

York and New England states, it would seem that there would be a good demand for alfalfa hay for a long time to come. When productivity and ability to gather nitrogen from the air are considered, alfalfa is unsurpassed as a crop to grow for the purpose of solving the nitrogen problem. The atmosphere is approximately 80 per cent nitrogen. If the alfalfa is inoculated, and it must be for economical production, it will draw on the large supply of free nitrogen and make a large amount of

it available for succeeding crops when the alfalfa is fed on the farm and the resultant manure returned to the land. Even though the alfalfa is sold from the farm it is a well-known fact that an alfalfa sod will greatly increase the yield of the crop that follows. In Seneca County in 1924 John Yerkes of Romulus had a field of wheat, a part of which followed a three-year alfalfa sod, and the remainder followed a three-year timothy sod. The wheat after alfalfa

produced 34 bushels to the acre and the wheat after timothy produced 22 bushels to the acre, an increase of 12 bushels to the acre. At Ithaca alfalfa land produced 51 bushels of wheat to the acre, and timothy land produced 36 bushels to the acre, an increase of 15 bushels of wheat to the acre. These results are very significant considering the high price of wheat and the fact that it cost but very little more to get it.

Every farmer knows that nitrogen is the most expensive element when purchased in a mixed fertilizer. A ton of mixed fertilizer having a formula of 2 percent of ammonia will contain only about 33 pounds of nitrogen, while a ton of alfalfa contains about 47 pounds of nitrogen. In other words, a 3-ton crop of alfalfa will contain as much nitrogen as 4½ tons of 2-8-10 mixed fertilizer.

HUNDREDS of farmers in New York are successfully growing alfalfa today who had thought it impossible to grow in the past. This has been due to improved methods of production. The most essential factors for success with alfalfa are as follows: (1) drainage, (2) lime, (3) acid phosphate, (4) inoculation, and (5) hardy seed. Of course, there are other things such as: proper time of seeding, good seed bed, and the like, that might be included, which will enhance the chances for success, but they are less important than those first mentioned. Drainage is probably the most important and is the one factor which the farmer cannot often economically control. A deep, well-drained soil is of prime importance and is a prerequisite that should be observed to the letter. All the other factors can be controlled and

with the work properly done alfalfa production is a rather simple matter. If the soil is not naturally well supplied with lime, liming material must be applied. A successful catch of alfalfa will pay for a very liberal application and yet return a good labor income. Acid phosphate is essential for practically all crops and an application of 400—500 pounds to the acre for alfalfa is just the fertilizer needed and the only fertilizer required. Some soils are naturally inoculated for alfalfa, but most soils are not. Alfalfa will turn pale and die on soils not well supplied with nitrogen if inoculation is not done.

VERY frequently failure with alfalfa can be directly laid to seed which is not adapted to New York state's climatic conditions. Our winters are usually quite severe and seed

produced in warm climates is not adapted here. It usually comes up well, but after the first or second winter most of the plants have died out. Hardy seed is very essential and successful crops of alfalfa should be more completely insured by using it. If these five points are strictly observed and proper measures taken to meet them, it will be found that alfalfa is easy to grow.

It hardly seems possible to overdo the production of alfalfa in New York. One thing is sure, as yet we are far from the saturation point. In view of the large acreage of land that will successfully grow alfalfa, and the large outlet, through the dairy cow, for all that might be produced, it would not seem at all unreasonable to say that New York should produce at least 300,000 and possibly 500,000 acres of alfalfa.

Two Zoologists in the Southwest

By A. H. Wright

WE WENT to Texas by train. We loitered along the way. The best of the anticipation before arrival was the help everyone gave us. In Washington friends entertained us, we browsed in the Library of Congress for books on Texan botany, zoology, and geology, sought pertinent books at second hand book stores, worked at the U. S. National Museum on plants, frogs, and reptiles, received letters of introduction to botanists and entomologists in the southwest, and in general completed our preparation and equipment for the seven months in store for us.

We stopped at New Orleans to see the moving spirit of the Southern Biological Supply Company, Mr. Percy Viosca, Jr., who to my mind has more first-hand field experience on animals in the south than almost any man of my acquaintance. Our stay was too short, but sometime we will visit Louisiana again.

We went to have a rest, a change, to add to our collection of photographs from life of all the frogs, lizards, snakes, and turtles of the U. S. A. That meant we must find, catch and keep them alive. What fun to devise ways and means of capturing them and what interesting pets to share home with us, whether it be tent, auto, hotel, private residence or ranch house!

We have for twenty years been trying to learn the life stories of the 60 or 65 kinds of frogs in the U. S. A. Texas had many species we did not know thoroughly, and we hoped to camp at Helotes near San Antonio, Texas. This little hamlet is the type locality of several animals in which we were interested. By introduction and good fortune we fell into the kind hands of Misses E. D. Schulz and Emma Gutzeit, who secured for us a ranch house on Mr. and Mrs. Chas. Gutzeit's ranch on Helotes Creek. The personal attention and interest Mr. and Mrs. T. B. Rayburn gave our photographic problems we will always appreciate, and the fine times and volunteer help the three naturalists—Roy D. Quillan and Albert J. Kirn of San Antonio and Mr. R. D. Camp of Brownsville, Texas—gave us, we will always gratefully remember. Our expedition was in part supported by a grant from the Heckscher Foundation for the Advancement of Research founded by August Heckscher at Cornell University.

FROM these headquarters we took trips long and short over south and central Texas, particularly to points where the San Antonio Weather Bureau recorded rain. Waiting for spring was waiting for rain. Very little came before July 1. No crops for the farmers, no forage for the

cattlemen, few frogs and flowers for us. We had to roam far and wide, but it was delightful. For some of the fun of our trip we cull a few unvarnished and hasty notes from our diaries.

We fished: March 17, 1925.—It took us two hours to go. Forty-five minutes at the Guadalupe River! Fishing in the rapids. Excitement over sunfishes and three different kinds of darters, log-perch, the largest one. The rush home in one hour five minutes. Twenty-five miles, ten miles over rough road to photograph them alive, twenty minutes to take the pictures before friends came for a camp party. Fish die within ten minutes after pictures are taken. Made us think of the story "Turtle Eggs for Agassiz!" How true that is of all scientific collecting of forms that change or perish soon! One is all keyed up with hopes to catch—the hopes rising with forms appearing, are dashed with forms lost. Then come the questions: "How can they be kept best, or how can they be photographed best to show their fine points and beauties that fade so soon? A regular art gallery must be set up, and this in temporary form has so many shortcomings. The board is not steady or not level or not shaded to the proper degree.

We found frogs: March 23-30.—Trip to Beeville. A trip to San An-

tonio, March 23, told us that the Corpus Christi section had rain, so we hurried back to camp and started out at 6 o'clock to go as far as we could that night. After 19 miles of good roads came dirt road and it was bad just after the rain. The ruts were deep and that night they seemed to go criss-cross along the road, so bounce-bump we went on our way, our tin can on the side rattling, our load in the car shifting from place to place. But we kept on till 1 o'clock when we pulled into a public camp at Karnes City. Three miles beyond the next morning we struck good road which was so welcome, as those 45 miles of rough dirt were still fresh in our minds and in our backs. We collected lots of plants and when we reached Beeville it looked like good frog country, so we stopped. That night proved our expectations true and before we left we had the life story of one frog and parts of the stories of four more.

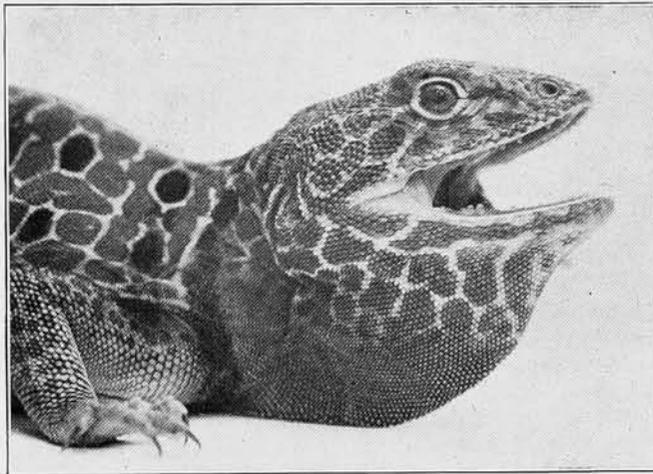
April 12—The night of April 12 came a shower, not a hard rain, it is true, but a shower lasting a half hour perhaps. At this our hopes of "spring" and frogs bounded up. Our nightly listenings at each pool and our auto trips of forty or fifty miles or more until midnight were renewed. Once more April 13 we heard a robber frog "barking" and this morning B—— has gone to the hill to gather the last bulletin on this very interesting frog.

MAY 28—Comfort had a two to three-inch rain in the afternoon, but we heard about it May 29 in the afternoon. We hurried out there—we got Couch's spadefoot, croaking and breeding. What I want to write here is of the terrific speed with which Couch's spadefoot develops. It is well they do, too, as they lay in temporary roadside pools and pools in low places in fields. The eggs laid—it must be the night of May 28—had not only hatched, but the tadpoles were almost grown to maturity by June 3. The ponds will be dried up in a week unless rain comes again. All the spadefoots of this corner of the country must have bred in these two pools, which are a seething mass of tadpoles.

June 4—Have had two showers at Helotes, and worked the results to

their utmost. Got Canyon or spotted toad *Bufo punctatus* eggs in Helotes Creek in gorge about camp and again at Manock's crossing. Got spadefoot toads, *Bufo compactilis* at Leon Creek and photographed their tadpoles, and right at Gutzeit ranch took nebulous toads, *Bufo valliceps*, croaking and breeding, and have now finished this series. Took flashlights of croaking toads until 1 o'clock at night.

WE chased lizards: June 14—Roma, Texas. Drove beyond Roma, hoping for sight of the reticulated boomer. At last we saw one run into a clump beside the road. I watched by the roadside while B——



A Reticulated Boomer, the Sixth in All Collections of the World

went beyond with the gun. He lost one firing pin and while looking for another, the lizard ran to another clump. In this clump B—— had a good chance to shoot him. But, alas, the second pin slipped! Then the lizard ran into the hole. B—— cut down a lot of the bush with a saw and botany pick, and this scared out the lizard. As he ran, we ran as fast as we could. B—— saw him run down a hole, we put strainer over one hole and cloth in end of other hole. After cutting down the bush, B—— dug out the hole. We had about despaired and thought our beast had slipped out when he slipped out of the loose dirt from under the botany pick and went back to the first clump, then ran east, and back again to the clump where we had cut, but not pulled out the brush. While the lizard was under the sheltering branch B—— got a bag and stuck it in the hole. The lizard went to the hole, tried to run in and sat there and panted. He was as tired as we were. He tried two or three times to go around the cloth, apparently puzzled by it. The bush

was thorny and we couldn't grab him. He ran into the other entrance of the hole. We covered this hole with a strainer and then pulled away the cut brush, then covered the big hole with the fish net and I tried to guard this and grab him when he came out. B—— poked in the smaller entrance. Out came the lizard, but I didn't see him until the net moved near the edge. As I grabbed in that place he slipped under the saw that was holding down the edge, and away he dashed. We dashed, too, and saw him go into another hole. How our hearts sank. Another bush cut and the net over the hole and the poking sent the lizard out and as he reached the edge of the seine we both grabbed and had him. This was the sixth reticulated boomer in all collections of the world, and one which brought us a thousand miles to catch. It was a long, hard, hot noon-day job, but worth it. When we came back to Ringgold Barracks the oil men at the hotel said we don't need to ask, "Have you caught him?" A resident commented, "You don't mean to say you came a thousand miles to catch that."

We caught snakes: April 5—Gorge near Helotes Post Office. Tore down the bluff to get a Graham's Snake, but we got him. First saw him in the brush. Then under a large flat stone. We cleared away brush and leaves around it, had "decks" ready for action, but before we could lift the stone away he slipped under a ledge and then up into a crevice. We had to have him, that "striped snake," so away we tugged at overlying plant growth, dirt and rocks, and finally could jar the big rock he was behind. Then one poked up from below and the other from the top. The dirt moved a little and there was his head. We caught him, and must take his portrait.

MARCH 16—Went up Helotes creek turning logs and stones with my botany pick. Something black disappeared under a flat stone. It was a large stone, but I turned it over. The snake was a racer, a beauty. Ever after when we went by that stone we wondered how one pair of hands ever raised it and at the

(Continued on page 221)

The Development of Milk Fat Tests

By H. C. Troy

WHEN cities in this country became so large that consumers could no longer obtain their milk supply directly from milk producers, the need for a method for determining the composition of milk and detecting adulterations became apparent. But the demand for such a method did not become insistent until the factory system for the manufacture of butter and cheese was introduced. This system developed in this country during the years between 1850 and 1870. Previous to that time, all butter and cheese were made at the homes of the milk producers.

When the milk from several farms was pooled at a central plant and made into butter or cheese it was soon learned that the amount of these products that could be made from equal volumes of milk from different herds frequently varied widely. This fact taught both the producer and the manufacturer that there was a real need for a rapid, simple method for determining the composition of milk and especially the fat content.

At that time the science of chemistry had developed to a point where a number of trained workers in the universities and agricultural colleges were investigating chemical problems relating to foods and agriculture. In 1855 Adams, an English chemist, published a method for determining the percentage of fat in milk. He weighed a small amount of the milk, dried it on filter paper and extracted the fat from the dry substance with ethyl ether. The ether was evaporated, the dry fat weighed, and the percentage in the milk calculated.

In 1888 Rose published a wet extraction method. He added ammonia and alcohol to a known weight of the milk, then extracted the fat with ethyl and petroleum ethers. The ethers were then evaporated and the dried fat was weighed and the percentage calculated as in the Adam's method.

These methods, or modifications of them, are the most accurate that we have at present for determining the percentage of fat in milk and other dairy products. They serve well for investigational work and in food control laboratories where the number of samples to be analyzed is not

large, where skillful chemists are available, and where results do not have to be obtained in a short time. But their general application to the needs of the industry in the production and manufacturing fields involved too great an expense. Therefore the demand continued for a simple, rapid test that could be made by an operator who was not a trained chemist.

European tests: Several rapid methods were developed by chemists in Europe. The earliest, known as Marchand's lactobutyrometer, was invented in 1877. A measured quan-

Dr. S. M. Babcock of the Wisconsin Agricultural Experiment Station, published in 1890 the test for determining the per cent of fat in milk. The test now bears his name and has become the standard test the country over. The inventor's contribution to the dairy industry is far greater than any honor it can bestow upon him for the test was given free to the public and fulfilled an urgent demand for such a test.

tity of milk was placed in a long glass tube graduated at the upper end. Acetic acid was added, then ether to dissolve the fat. After heating gently the fat collected in the graduated part of the tube and its volume was read by means of the graduations. The method was displaced later by more accurate ones, but special interest is attached to it because the principles of adding an acid to destroy the solids not fat and of reading the volume of fat in a graduated glass tube was employed and now is used in the successful simple, rapid tests.

IN 1886, de Laval, a Swedish inventor, brought out a test called the de Laval lactocrite. He dissolved the casein in a definite volume of milk by mixing it with acetic acid, containing five per cent sulphuric acid. An aliquot of this mixture was placed in a graduated capillary tube and centrifuged at high speed to separate the fat from the remainder of the liquid. The amount of fat was then read on the graduations. This method is of

special interest because it appears to be the first test that employed centrifugal force to collect the fat and used sulphuric acid to assist in dissolving the solids not fat. All successful tests brought out later were improvements upon the principles employed in Marchand's lactobutyrometer test and the de Laval lactocrite test.

FJORD in Denmark developed a method in which glass tubes containing a measured volume of milk were centrifuged for 45 minutes. The compact layer of cream was then measured and the fat estimated by means of a chart devised by the inventor. This test continued to be used in Denmark until very recently.

In 1889 Lindstrom put out an efficient centrifugal method for estimating the fat. It consisted of special graduated tubes for holding the milk and dissolving fluid and for reading the collected fat. Pipettes for measuring the milk and a high speed centrifuge were also provided. At first the same mixture of acids was used to dissolve the solids not fat as were used in the de Laval lactocrite test. Later sulphuric acid alone was used. The main difference between this method and other centrifugal methods is that the fat is allowed to cool before the volume in the graduated tube is read. This test is generally used at present in Sweden, Norway and Finland. It compares favorably with the best methods now in use, but the high speed of the centrifuge disk, 5,600 revolutions per minute, requires a more expensive centrifuge.

In 1892 Gerber, in Switzerland, developed a successful test which is the only one used in the greater part of Europe and in continental countries. Tests of milk can be completed by this method in less than seven minutes which makes it at least twice as quick as any other method yet developed. Its speed and accuracy makes the test deservedly popular and its use in North America has been increasing rapidly recently.

In making the Gerber fat test, ten cubic centimeters of sulphuric acid, eleven cubic centimeters of milk, and one cubic centimeter of amyl alcohol are placed in a special test bottle and well mixed. The bottle is centrifuged for four minutes and the percentage of fat is read by means of graduations on the neck of the bottle.

A few other tests varying more or less in detail from those described above were developed in Europe. They were not practical enough to come into general use and space does not permit a description of them here.

TESTS developed in the United States: Although the demand for a rapid milk fat test had existed for several years and was constantly growing, no satisfactory test was devised in the United States prior to 1888. The Federal Land Grant Act of that year enabled the different states to increase their staff of workers and one of the first problems attacked by the chemists was the development of a rapid method for determining the percentage of fat in milk. A number of tests were brought out between 1888 and 1891.

In July, 1888, F. G. Short of the Wisconsin Agricultural Experiment Station published a method in which a measured quantity of milk was treated with an alkali in a test bottle having a narrow graduated neck. An acid was then added and the mixture held at the boiling temperature for several hours. The percentage of free fat was then read on the graduated neck of the bottle.

Professors Failyer and Willard of the Kansas Agricultural Experiment Station also brought out a test in 1888. A measured quantity of milk in a graduated tube was treated with hydrochloric acid to destroy the solids not fat. Gasoline was added to dissolve the fat and collect it in the graduated tube. The gasoline was then evaporated and the percentage of fat read by means of the graduations on the tube.

Professor C. L. Parsons of the New Hampshire Agricultural Experiment Station also developed a test in 1888. Alcohol and an alkali were used to destroy the solids not fat. The fat was extracted with gasoline and a measured quantity of the solution was evaporated. The dried fat was measured in a scale and the percentage calculated.

In February, 1890, Professor George E. Patrick of the Iowa Agricultural Experiment Station published a test. A measured quantity of milk was placed in a flask having a slender graduated neck. A mixture of acetic, sulphuric and hydrochloric acids was added to destroy the solids not fat. The flask with its contents were heated to the boiling point for ten or fifteen minutes. The percentage of fat was then read in the graduated part of the neck.

C. B. Cochran of the Pennsylvania

State Board of Health developed a test in which the milk solids not fat were decomposed with acetic and sulphuric acids and heat. The liberated fat was dissolved and collected by adding ether. The ether was evaporated and the fat transferred to a flask having a graduated neck in which the volume of fat was measured.

In 1889, H. Leffmann and W. Bearn devised a test in which 15 cc. of milk were placed in a test bottle, 3 cc. of a mixture of amyl alcohol and hydrochloric acid were added and mixed with the milk. The bottle was filled to the base of the neck with sulphuric acid and shaken vigorously. Finally a mixture of sulphuric acid and water was added until the bottle neck was nearly full. The bottle was centrifuged for less than two min-



utes when the percentage of fat could be read on the graduated neck. The Gerber test developed three years later in Switzerland was very similar to the Leffmann and Bearn's test.

The Babcock test: Dr. S. M. Babcock of the Wisconsin Agricultural Experiment Station published in bulletin No. 24, July, 1890, the test that bears his name. It was so simple, rapid and accurate that it soon displaced all other tests developed in the United States. It is based on the fact that strong sulphuric acid will dissolve milk solids not fat and leave the fat free. Centrifugal force and water are used to collect and wash the free fat.

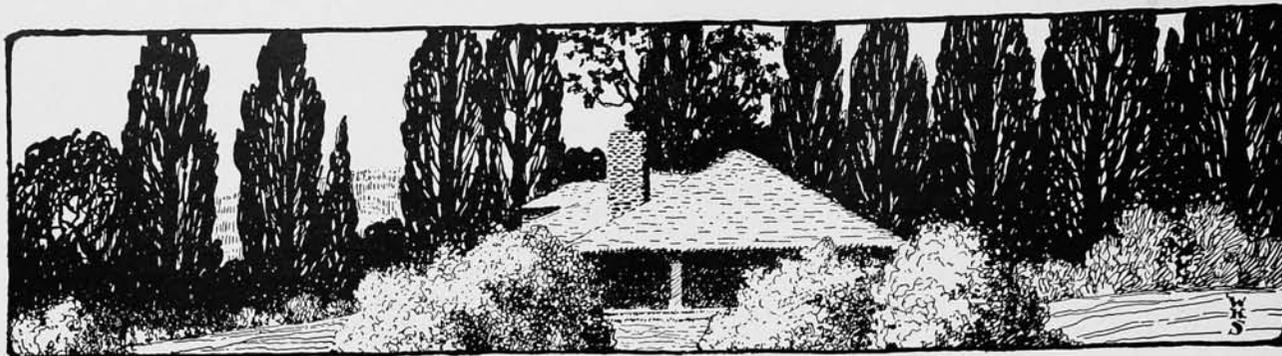
In making a test 17.5 cc. of the milk are placed in a small bottle that has a long slender graduated neck. Then 17.5 cc. of sulphuric acid (specific gravity 1.82) are added and mixed with the milk. The bottle is

centrifuged for five minutes, hot water is added to wash the fat and the bottle again centrifuged for two minutes. Hot water is again added until the bottle is filled nearly to the upper graduations on the neck, whirled in the centrifuge for one minute, and the fat percentage is then read on the graduations. The test is so simple that it can be made by a person having little special training.

From this review it is seen that the development of a practical milk fat test covered a period of twelve or fifteen years and that a number of investigators contributed useful facts. Marchand, in 1877, was the first to use a graduated glass tube to measure the fat after treating the milk with acetic acid. Next de Laval, in 1886, first used centrifugal force in a graduated glass tube after treating the milk with acetic and sulphuric acids. Babcock in 1890 discovered that sulphuric acid alone, when used at the proper concentration and temperature, would free the fat. He then worked out the details of the method, applying centrifugal force to collect the fat as formerly used by de Laval, and a graduated glass tube to measure the fat as earlier applied by Marchand. The test was developed by Dr. Babcock from facts discovered during extensive experiments carried out by a keen, scientifically trained mind, intensely and industriously applied to the solution of the problem. The inventor's contribution to the dairy industry is far greater than any honor it can bestow upon him for the test was given free to the public when a fortune could have been made by marketing it privately.

The most recent improvement in milk fat tests was developed in 1917 by J. J. Majonnier of Chicago, Ill. He modified the Rose-Gottlieb method so that milk fat and solids tests can be completed with chemical accuracy in about thirty minutes. It is used extensively and to great economical advantage in plants manufacturing large amounts of dairy products where accurate standardization of the product is essential. This test is not adapted to the needs of the milk producer.

The development of tests for milk constituents and the percents of such has been a great saving of time and energy for both the producer and the dealer, besides eliminating the formerly frequently bitter disputes between the two. Perhaps the greatest benefit has been derived by the unknowing consumer who has had the quality and condition of his dairy foods raised to a considerable degree.



Through Our Wide Windows



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Ithaca, New York

April, 1926

WHEN we want a bridge built, do we hire a philosopher? When we are sick, do we seek a lawyer's counsel? When we want to run the agriculture of our state, do we get men from every walk of life but farming? Certainly not. Neither do we get these men to direct our agricultural education. Yet that is exactly what will happen to our New York agricultural administration and education; our State Colleges of Agriculture, Veterinary Medicine, Home Economics, Forestry, the extension activities of these institutions, and even the local farm bureaus, if the recommendations of the legislative committee to consolidate the state departments is carried out. Under these recommendations the agricultural education will be under the supervision of the State Board of Regents which is composed of men from every profession but farming.

When we are sick we'll get a doctor. When we want a bushel of potatoes we'll get the farmer to raise them. When we want to teach farm boys how to grow better crops and better livestock and cleaner milk we'll get some one with a farm

background—someone who knows how to plow the land and harvest the crops, breed better stock and produce clean milk under practical conditions. We want agricultural education as well as administration directed by those who understand it.

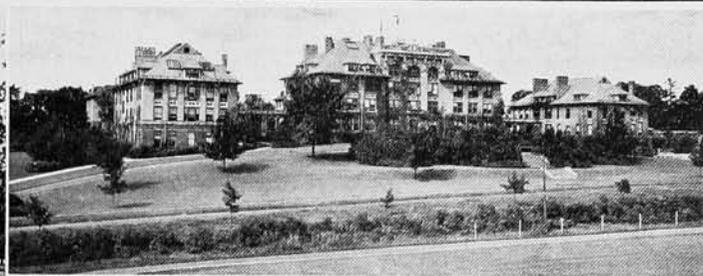
SOMEONE recently remarked that the student is under a severe handicap who comes to college out of a pair of overalls and with imaginary hayseed still tickling his back. We for one are inclined to doubt it. Perhaps our ag spirit has been lost during the last few years in the mad rush to overcome this handicap. At any rate our college enthusiasm was taking its last gasps when someone noticing how the thing was suffering decided to kill or cure it. The ag banquet was a success so far as spirit revival was concerned but the financial costs were even greater than the charge for the feed. The ag's April fool hop will, we hope, make the thing self-sustaining again. To have activities constantly supported by artificial enthusiasm is worse than a total lack of the spirit.

Aggies, it is up to you. Do you want a downright good time in an unsophisticated atmosphere? The Hicks' Hop will provide the makin's. If you don't want ag spirit don't come. Continue on with your humdrum life of prelims and reports. We'll take time to bury forever the half century old ag spirit, regretting we had helped to prolong its suffering this long.

DURING our early frosh months we often saw a heavy prancing team of bays pass by hitched to what appeared to be a prosperous farmer's wagon. One day we summoned courage enough to "hook" a ride on this wagon, called THE CORNELL COUNTRYMAN. After a great deal of puffing and panting, we managed to climb aboard.

Curiosity prompted us to crawl forward to the driver's seat. Lo, and behold! The driver was none other than the editor. He spoke. We spoke. Soon we were acquainted. We watched him make the up and down grades with the least effort for the team. After considerable practice, the editor deemed us capable of taking complete control of the paper. This is our first attempt.

We feel the tension of responsibility, and brace our feet against the dash lest we lose control, while resolving to do our best in keeping the paper in the center of the road of usefulness, service, and prosperity.



Former Student Notes

'94

W. G. Comstock, former short course student, is farming at Clinton, N. Y.

'01

George H. West is farming at Wellsboro, New York.

'07

Spencer C. Walker is helping to supply Auburn, N. Y., with milk and also running a general farm. His address is Box 303, Auburn, N. Y.

'08

Orren F. Ross is taking care of 70 head of purebred Holsteins at Rosedale Farm, the family homestead, at Lowville, N. Y.

'09

Ernest L. Baker is getting his doctor's degree at Columbia this year and has been giving various psychological tests to New York school children. His address is Teachers' College, Columbia University.

'12

Harry Embleton is now head of the poultry department of the University of Arizona, located at Tucson.

Raymond G. Fish, winter course student, is farming at Hempstead, Long Island.

Maynard L. Smith is now farming near Elmira. Mail will reach him at Elmira, N. Y., R. F. D. No. 1.

O. W. Smith, who has been absent from his place in the Secretary's office for over a month, due to a lingering illness has recovered sufficiently and is once more back at his desk in Roberts. His absence was especially felt during registration week when it became necessary to enlist the services of Professor King of the Farm Practice Department to assist in the filing of the many registrations. His address is 304 College Avenue, Ithaca.

Dr. Raymond A. Pearson '94, who has been president of the Iowa State College of Agriculture since 1912, has recently become the president of the University of Maryland. Dr. Pearson took his dairy work at Cornell under Professor Wing who was then head of what are now known as the poultry, an hus, and dairy departments. At this time the dairy building at the north end of Goldwin Smith had not been erected, and dairy work was carried on in a building where Bailey Hall now stands.

After graduation Dr. Pearson became assistant chief of the Dairy Division of the U. S. Department of Agriculture. During 1902 and 1903 he was manager of the Walker-Gordon Laboratory Co. in New York and Philadelphia. When the department of dairy industry was formed at Cornell it was logical that Dean Bailey should choose Dr. Pearson as its first head.

In 1908, owing to his very enthusiastic and successful administration, and his state-wide acquaintance and interest in dairying, he was chosen by Governor Hughes as Commissioner of Agriculture for N. Y. State. Due to his efficient work at Albany he was selected as president of Iowa Agriculture College in 1912.

While president of Iowa, Dr. Pearson was drawn into government service. He was assistant secretary of the U. S. Department of Agriculture during 1917-18, and was a member of the government food products commission to visit the Allies during the fall of 1918.

'13

Glenn L. Wallace is teaching agriculture in the high school at Avon, New York.

L. D. (Shorty) Greene, Agricultural Agent, is now employed as milk agent for the New York, Ontario and Western Railway Company. He recently expressed himself as being well satisfied with his new position. His address is 8 King Street, Middletown, N. Y.

'14

E. G. "Ted" Bishop was recently named City Clerk and Tax Assessor in Coral Gables, Florida. Ted was formerly manager of the bond and mortgage department of the Coral Gables Corporation. Mail should be sent to him at the City Hall of Coral Gables, Fla.

Mr. and Mrs. R. H. Cross announce the arrival of R. H. Cross, Jr., on January 17 at Crouse Irving Hospital in Syracuse, N. Y. Cross is running a 250-acre farm at Fayetteville, N. Y., where he has 40 head of accredited Holstein cattle, all of which he raised on the farm. He is growing large quantities of alfalfa.

Arnold E. Davis is farming at Livonia, N. Y., and specializes in pure bred Holsteins. His special crops are cabbage, potatoes, and wheat.

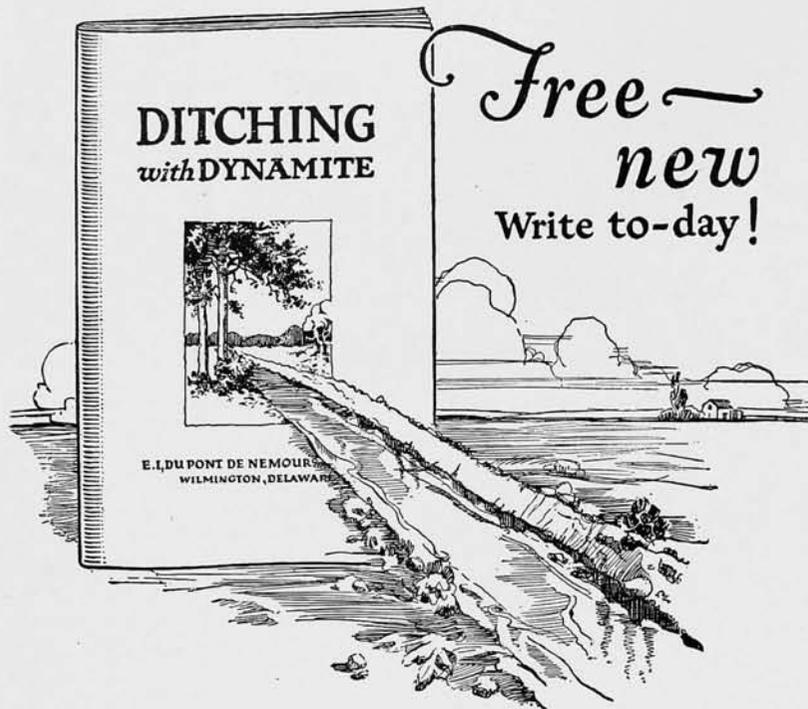
Harold Denmark is farming at Van Etten, New York.

'15

Lamotte P. Breese is a dairy farmer and milk dealer on R. F. D. No. 2, Elmira, New York. He is also president of the Chemung Valley Holstein Breeders' Association.

Floyd Degolyer is a lumberman on Route 3, near Gloversville, New York.

We wish to extend our sympathy to Harry S. Gabriel and wife, Ellen Wigsten, in the loss of their eight and one-half months' old daughter on March 10 due to erysipelas. Mr.



HERE is a new book that will help you in your college work. Within its 36 pages you will find information on blasting ditches based on the practical experiences of drainage engineers and explosives experts.

"Ditching with Dynamite" illustrates and describes successes obtained by ditch-blasters in many parts of the country; gives complete data on the kind and quantity of explosives required for various types of ditches. When a drainage problem arises for solution, you will find its solution, in many cases, in the adoption of dynamite. Know what can be done with dynamite to improve drainage conditions.

There's a free copy of "Ditching with Dynamite" reserved for you. Write today!

E. I. DU PONT DE NEMOURS & CO., INC.

Equitable Building,

New York, N. Y.



Gabriel is teaching vocational agriculture in the high school at Horseheads, N. Y.

Thomas D. Hall is vice-principal of the school and experiment station at Glen, South Africa. The School of Agriculture serves the entire Orange Free State and is only fifteen miles from the capital, Bloemfontein. Formerly, Hall and his wife (Helen Bennett) were at Potchepstroom, where

he was the chemist of the agricultural school and experiment station, chairman of the Northwestern Branch of the Public Servants Association, and president of the Technical Officers' Association.

Among the visitors during Farmers' Week were Tommy Thompson '24 and Frank Fielding '15. "Tommy" is still in the nursery business at Great Barrington, Mass. Frank was

recently promoted to the general managership of the Earp Thomas Culture Corporation of New York. His address is 2954 Marion Ave., New York.

Carlton King is now living at 304 Glen Street, Glens Falls, New York.

'16

Roy Bird spent a couple of months in Ithaca during the winter. On February 1st he started on his new position as one of the foresters for the International Paper Company. While he was not sure of the exact character of the immediate work, he will in all probability start the inventory of the New York State property of that company. The location of his future residence has not been definitely decided, though it will be in one of the Adirondack towns, probably Tupper Lake. Another item of interest in this connection is that on December 23 a daughter, Margaret, was born.

Waldo B. ("Cookie") Cookingham is now teaching agriculture in Phelps High School and in addition is running a poultry farm.

George Hale Harrison was recently married to Clara Adella Frame of Dover, Delaware. George is actively engaged with his father in handling one of the largest nurseries in the East located near Berlin, Maryland. The new couple are now living at Berlin.

Though the present address of Lewis R. Hart is 126 Linden Avenue, Ithaca, New York, he spends most of the year at Salt Lake City, Utah. "Lew" is the sales manager of the Federated Fruit and Vegetable Growers of America, selling fruits and vegetables from cooperative marketing associations in the mountain states. In the spring and summer he sells peaches and strawberries in the south-eastern states.

Revere J. Moore recently announced his engagement to Miss Margaret A. Cruikshank, daughter of Mr. and Mrs. F. R. Cruikshank of Scarsdale, New York. They expect to be married April 17, after which they will go to China. Moore is with Standard Oil Company in Shanghai, China. He is now visiting his parents in Ramsey, New Jersey, though his future address will be 11 Canton Road, Shanghai.

Allyn Hoffman is secretary and manager of the Hoffman Nurseries at Elmira, New York. His address is 921 Hoffman Street, Elmira, N. Y.

Harold Tenny now owns a farm in Little Britain, Orange County. He

continues, however, to manage a farm in Plattekill, Ulster County, so that his interests are somewhat numerous.

Louis A. Zimm, M.F., on January 1st, accepted a position with the American Forest Products Company of 292 Madison Avenue.

'17

Herbert L. Beecher is farming at Livonia, N. Y. He raises hot house lambs, certified seed potatoes, and cabbage. He recently cooperated with the department of vegetable gardening in conducting tests on blue sprouts.

The marriage of Edward Frey to Miss Roberta Louise Sheridan took place on December 29 at Berkeley, California. The writer has lost track of Eddie's address and would appreciate a note from any one who knows what it is. His last address, so far as we know, was Fresno, Cal., but apparently he is no longer there.

Edward C. Trumbull is a rural school teacher at St. Johnsville. His address is R. F. D. No. 2, St. Johnsville, N. Y.

John Wigsten is a milk dealer handling A grade at Horseheads, New York.

'18

Tracy B. Augur is now employed by the city of Dearborn, Michigan, as a landscape architect and aids in helping to make this famous city more beautiful.

William Boshart is keeping the home farm going at Lowville, N. Y.

Arthur Hoffman is now farming at Elmira, New York, on R. F. D. No. 2.

Beatrice Hollenbeck is teaching in Candor, N. Y.

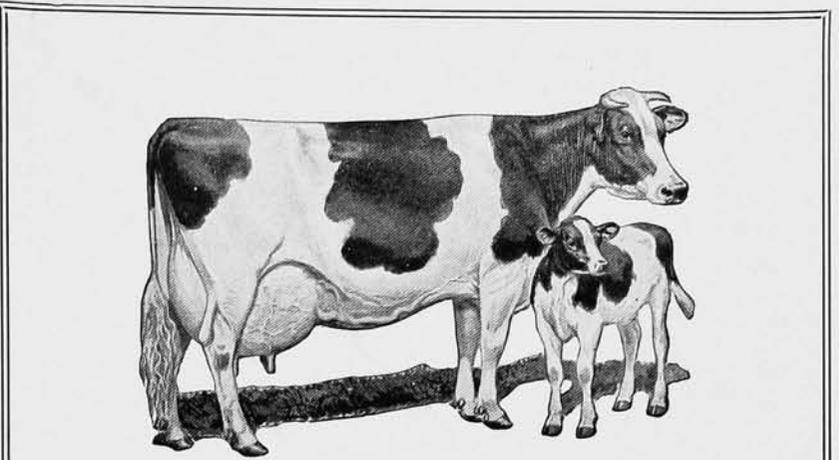
'19

Donald Tunis Ball is living on his 87-acre farm at Chittenango, New York, where he divides his time between general dairy work and raising alfalfa.

Cuthbert Fraser, formerly secretary of the National Standard Parts Association, a trade organization for manufacturers and jobbers of automotive replacement parts, has returned to Buffalo, New York, as office manager of the King Manufacturing Company. The King Company manufacturers automotive replacement parts, radio sets, and cream separators. His new address is 355 Linden Avenue, Buffalo, New York.

Jack M. Larson has left the agricultural field and gone into the motion picture business in Springfield, Ore.

H. A. (Steve) Stevenson is now employed by the MacMillan Publish-



Holsteins For Profit

Holstein Supremacy in the production of milk and butter fat is further proved by the records that have been made under Agricultural College supervision. Of 131 purebred dairy cows in the United States that have produced 1,000 pounds or more of butter fat in one year, **104 are Holstein cows.**

All other breeds total only 27. Whether under official test or in the cow testing associations, you will find the Holstein making the largest records and with more representatives among the high producers.

The Holstein cow is "the Cow That Makes the Dollars" for American dairymen. Holstein popularity in successful dairy centers is based on that profit.

Write us for further facts on Holsteins.

The Extension Service
HOLSTEIN FRIESIAN
ASSOCIATION of AMERICA

230 East Ohio St., Chicago, Ill.

ing Co. at 60 Fifth Avenue, New York. He is the head of the agricultural book department.

'20

Edison M. Collins is farming at Barnweld, N. Y.

James Cusick, who received his Doctor's degree in dairy chemistry here in 1919, visited the University on March 1. He is now a chemist for the Atlantic and Pacific Tea Co., and

specializes in the chemistry of canned foods. His home address is Brockport, L. I.

Alberta Dent has left her position as dietitian at Highland Hospital, Rochester, and is taking graduate work in nutrition.

"Archie" Robertson, who for several years has been associated with Dr. Breed of the New York Agricultural Experiment Station at Geneva



cents per day
for lights, cooking and ironing

THE letter which we are reprinting below is typical of hundreds which we are continually receiving from satisfied Colt Light users. It offers convincing proof of the real economy of Colt Light:

Columbus, N. J.
Feb. 26, 1926.

J. B. Colt Company
Gentlemen:

"My Colt Light Plant over a period of eight years has cost me an average of $9\frac{1}{3}$ cents per day for operation.

"I have full service from 12 lights in my home and barns. My wife enjoys the great convenience of the Colt Hot Plate for cooking, and she finds it twice as quick and easy to iron with the Colt Iron.

"Our Colt Plant has always given us complete satisfaction. We only

refill it three times a year with Union Carbide—the rest of the time we don't even have to touch it."

Very truly yours,
(Signed) E. Wilbert Bullock

More than 145,000 American farmers have installed Colt service in their homes during the past 26 years. Colt Plants are very low in price. They may be paid for on liberal terms by those who own their farms.

Investigate Colt Light—now! Learn for yourself what a comfort it means for the whole family. Write for our free booklet, "Safest and Best by Test." No obligation, of course—but get in touch with us today.

J. B. COLT COMPANY

New York - - - 30 E. 42nd St.
Rochester, N. Y. - - 31 Exchange St.
Chicago, Ill. - 1001 Monadnock Block
Kansas City, Mo., 716 N. Y. Life Bldg.
Chattanooga, Tenn., 6th & Market Sts.
San Francisco, Cal., 8th & Brannan Sts.

COLT
TRADE MARK
LIGHT

The sale of Colt Plants offers a great opportunity for the ambitious farm-trained man. Write our nearest office for full particulars.

as an assistant bacteriologist, has accepted a position as Dairy Bacteriologist at the Vermont State Experiment Station. This is a new position at the Vermont Station and Archie expects to establish a strong department. While at Geneva, he wrote several bulletins and was also secretary of the New York State Branch of the Society of American Bacteriologists. He assumed his new duties

February 1. His address is Burlington, Vermont, in care of the State Agricultural Experiment Station.

Willard Folts Stanton was married September 1, 1925, to Miss Ruth C. Ketchum. He lives at Moravia, New York, R. F. D. No. 7, and is farming.

C. W. Ten Eick is still in Florida. He breaks out in print quite frequently now, his most recent article

being "Matchless Money" published in the November 7, 1925, issue of the "Florida Grower."

Henry Veghte is a milk dealer in Amsterdam, New York.

R. M. Volkert, M.F., is now located in Philadelphia. His address is Apartment 204, Drexel Court, Drexel Hill, Pa. Bob is with the Union Lumber Company, manufacturers of California redwood. He writes that Kurt Mayer '20 lives just a short distance from him. Incidentally, Kurt and Walker Smith '20 were visitors in Ithaca last fall.

'21

H. B. Bosworth has since last summer been with the Los Alamos Ranch School at Otowi, New Mexico. Bosworth writes that he has charge of all of the outdoor activities of the school; that he teaches mathematics and has an intensely interesting time in exploring little known country and in working with the boys in the school. One of these days he hopes to have a "Dude Ranch" of his own.

Stanley Dann is doing general farming near Horseheads, N. Y. His address is R. F. D. No. 2, Horseheads, N. Y.

Helen H. Glasier is assisting in the public library in Buffalo, New York. Her home is 228 Herman Street, Buffalo.

Harold C. Grinnell is running a farm at Broadalbin, New York.

R. B. Mead has risen to the position of District Sales Manager of the Syracuse Washing Machine Company and now has a considerable force of employees to occupy his time. His address is 203 County Street, Taunton, Mass.

O. M. Watkins, teacher of agriculture at Geneva, New York, was selected by Commissioner Sullivan of the State Department of Education as a member of the Regents' committee for high school comprehension examinations for seniors in agriculture.

'22

Ardella Farnsworth is teaching school at Wadhams, New York.

R. J. "Bob" Howard made his annual visit to civilization when he returned to Farmers' Week. "Bob" is inveigling the lacteal fluid from the bonnie bossies in the wilds about Sherburne. "Bob" is still on the lookout for a comely cavewoman to help him with his labors.

Llewellyn V. Turner is teacher of agriculture and principal of the high school in Wyoming, N. Y.

We regret to announce the death of Loren S. Kibby at Ogdensburg, N. Y., on March 6. Kibby was formerly the county agent of Greene County at Catskill, New York. We wish to extend our sympathy to all those who were near and dear to him.

'23

A. E. "Ace" Ray recently left his job as salesman for the Park and Pollard Feed Co. to enter the advertising game with the *American Agriculturist*.

Mrs. W. Henry Hutchings, formerly Esther Davis, can be reached at Webster Groves, Missouri.

Two Zoologists in the Southwest

(Continued from page 213)

same time snatched the snake. It was the rare ornate racer.

July 18—Went to Huedo tanks, east of El Paso with Col. M. L. Crimmins and Mrs. R. B. Alves. The Colonel was showing Miss Leary how to noose a lizard. As she snatched up the noose the lizard slipped out and was thrown fifteen feet into a bush beside me. The bush moved; I grabbed the movement. Imagine my surprise when I found it was not a lizard but the rare ornate racer I had in hand. He must have moved when prey landed in the bush. I put him in a cheese cloth bag and put it on my belt where I often carry my live game. But alas, I did not tie it on, and in my climbings, it slipped from my belt. "Never mind," say my friends, "we will catch you one some other time." (Sure enough they did, and sent me three alive.)

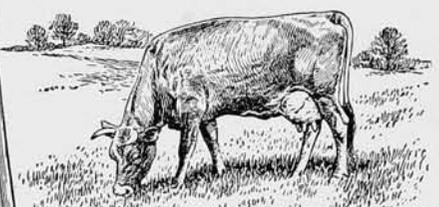
WE left San Antonio, July 1—Our course led from Devil's and Pecos Rivers to Davis Mountains where we hoped to join the Texas University Geological Summer School in the Big Bend country. They had to postpone their trip, and we went onward to El Paso. We zigzagged up and down New Mexico, finally leaving that state at Lordsburg. We visited Pinaleno, Dagoon, Huachaca, and Santa Rita Mountains in Arizona. From Phoenix we went to Ajo, Yuma, Colorado Desert and Pomona College, Claremont. Thence we turned eastward to Mohave Desert to Las Vegas, Nevada, and then across northern Arizona and New Mexico into the Panhandle of Texas. We hurried through Oklahoma, Arkansas, Tennessee, Missouri, Illinois, Indiana, Ohio and New York. In all we covered 18,000 miles—15,000 of it in a trusty Ford.

Mrs. Wright's notes give these pictures of us as we left El Paso, and as



The Gospel of Good Feeding

This Book Says—



"Cows Need More Than Grass"

Your juicy spring pasture is good feed but it is not enough to produce a full flow of milk and maintain the condition of your cows at the same time. The Minnesota Cow Testing Associations have proved the truth of this:

Farmers owning 700 cows fed nothing but grass during spring and summer. Farmers owning 300 cows fed a grain mixture with pasture. They were all fed alike during the winter. The records for one year show the following amazing results:

	Pasture Only	Grain and Pasture
Number of cows	700	300
Butterfat per cow	238 lbs.	302 lbs.
Cost of feed per cow	\$41.87	\$49.85

The cows which had grain every day during the year produced 64 pounds of butterfat per cow more than those that had pasture alone. It is true that their feed cost was slightly more than pasture, but let's see about the net profit:

To 64 lbs. extra butterfat at 40c	\$25.60
Less grain, per cow for pasture	7.48
Extra profit each grain fed cow	\$18.12

You can duplicate this success and get these extra profits from your cows by giving them a Corn Gluten Feed ration when they go on pasture. They will stay fresh longer, and go into next winter in better condition.

This Valuable Book—Free

"The Gospel of Good Feeding" is a new book of 64 pages. It does away with guess work. It gives you the best of practical feed lot experience. It deals in a fair way with the 50 best known feeding materials and tells you why Corn Gluten Feed always makes a better ration.

Write today for your free copy of this book

Associated Corn Products Manufacturers
Feed Research Department
 Hugh G. Van Pelt, Director
 208 South La Salle St., Chicago, Ill.

No. 36





Apollo

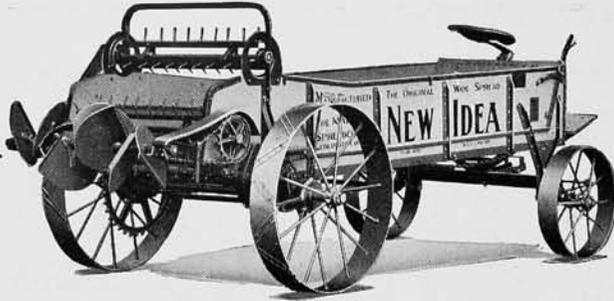
Quality—Service

Roofing Products

Why build to burn? Use Galvanized Roofing for farm buildings—and Tin Roofs for homes.

APOLLO-KEYSTONE Galvanized Sheets not only last longest for Roofing and Siding, but are specially adapted for Culverts, Tanks, Silos, Spouting, and all exposed sheet metal work. KEYSTONE Copper Steel Roofing Tin Plates also give unequalled service. Sold by leading metal merchants. Look for the Keystone included in brands. Write for our latest booklets.

AMERICAN SHEET AND TIN PLATE COMPANY, Pittsburgh, Pa.



Model 8, NEW IDEA Spreader

FOR THE BIG BUSINESS OF BETTER FARMING

New Idea Farm Equipment offers the best possible investment. It is thoroughly efficient—and can be depended upon for a long life of Trouble-Free Service.

THE NEW IDEA SPREADER COMPANY
COLDWATER, OHIO

The NEW IDEA Transplanter

A scientifically built machine for all kinds of transplanting, including Tobacco, Truck crops, Nursery stock, small Fruits, Bulbs, etc. Write for information.



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There is now practically no human activity that is not served by some Crane product. The growth implied in this widespread use suggests the recognition of Crane standards of quality and service.

If the need is for a small sink faucet or a giant city-water-main valve, a bathtub for a bungalow or a complete plumbing and heating system for a skyscraper, the 71-year reputation of the Crane name insures dependable, economical quality. In the widest range of types and sizes, Crane materials are offered at prices within the reach of all.

Whether you want to see an automatic water system for your father's farm, or merely ask a question about it for a class paper, you are invited to visit the nearest Crane Exhibit Rooms. Information may there be had on any of the 30,000 Crane items.

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Overalls Not Needed

When a dairy utensil goes to work it does not need overalls.

A dairy utensil when working efficiently contains no unrinsed grease or chemical film on its metal surface. A dairy utensil containing such an unrinsed grease or chemical film is indeed a costly worker.

For over a quarter of a century



has constantly increased its number of users because it is free rinsing, and because it leaves no unrinsed grease or chemical film—no overalls—on washed dairy surfaces to contaminate milk or milk products.

Wyandotte Sanitary Cleaner and Cleanser is a greaseless, sudsless cleaning material that leaves all washed surfaces sanitarily clean and sweet smelling. Nor does Wyandotte contain anything harmful to washed surfaces or to the hands of the washer.

Wyandotte Cleans Clean

Indian in circle



in every package

THE J. B. FORD COMPANY

Sole Mnfrs.

Wyandotte

Mich.

we came into Ithaca. "On the back of our car we had a large chuck box, filled, not with food as its proper load is, but with books, vials, and photographic plates. But even with that library behind us, we couldn't have our two latest additions, *Van Denburgh's Reptiles of the Pacific Coast* so far away, so they must ride at my feet. The precious plains-rattlesnake rode in a box on the side of the car, sunk deep under another box. The back seat was filled with cameras and camera equipment. The bedding roll, large because it contained a mattress pad, rode between the back and front seat. And under it and at the ends were our chief shelters for our pets. And this particular time we had a box of little modest horned toads, *Phrynosoma modesta*. Alas, the cover came off the box and they disappeared somewhere into the load. Two separate boxes of lizards, a box of small snakes, beautiful little orange-banded Sonoras were too precious to be trusted out of sight, so they must be held or stood on the seat between us—a difficult arrangement of course if one had to leap out quickly after more game or to push the car in the sand. We were hardly conscious of the turtles that were riding on the side of the car until we came out from the restaurant in Alamogordo, and found a group of men gathered around our car. One man said to us, "There's a rat in there. I've walked all around the car and he's right in there"—pointing to the running board. Surely enough the noise was "right in there" but our turtle passengers were the culprits. We felt like a new edition of *The Old Woman Who Lived in the Shoe* for we had so many good pets we didn't know what to do. So we stopped at the hotel in Alamogordo and had a siege of photography and descriptions from life before we went on our way.

A FRIEND in El Paso dubbed our car "Scientific Henry," but by the time we had it well loaded on our return, a man at a garage in Indiana remarked, "Well, I didn't know whether it was a Ford or a pack mule." Had you seen us driving into Ithaca last September, I think pack mule would have expressed what came to your mind. A plant press was riding on the front fender, the running board on one side was carrying a large box of preserved specimens (the box often mistaken for a fireless cooker), two five gallon cans of water and gasoline, a fish can, two pails, a large seine, a box with a gila monster in



A Big Problem Solved

The farmer's big problem is to insure a margin between production costs and net selling prices—in other words, to make money.

In Bulletin No. 1348, the U. S. Dept. of Agriculture points out clearly *the only way the farmer himself can go about doing this*—by reducing the high average cost of power and labor (now sixty per cent of total production costs.)

Power and labor costs can be reduced, and greatly, but in only one way—by better farming methods, made possible by better equipment, especially of labor saving machines.

Case tractors, threshers, combines and other power farming machines have enabled thousands of farmers to solve this problem; *to reduce their power and labor costs to the minimum; to make money.*

J. I. Case Threshing Machine Company

Incorporated Established 1842
Dept. R-75 Racine Wisconsin

Case Farm Tractors, Steel Threshers, Harvester Threshers, Silo Fillers, Baling Presses, Steam Engines, Road Machinery, Grand Detour Plows and Disk Harrows.

it, a rattlesnake and other snudries. We may have looked as if we should have been in a prairie schooner with all our worldly goods, but we were happy for we hand-captured and brought home 1,000 small animals and taken 1,500 pictures."

We will not pretend to give our impressions of the big southwest. We found fine, rugged characters, warm hearts, courageous spirits, enterpris-

ing leaders, ambitious youth, and experienced councillors—all set to the huge task of conquest of desert distances and arid areas. Here lie agricultural opportunity, mining, and oil possibilities, engineering tasks, and courageous ventures worthy of appeal to any resourceful, hardworking young man or woman who wants to grow into rugged American characters.

After the La Grippe

Take

Cod Liver Oil---plain---flavored with Malt
or emulsion

Pine Tar and Honey for that cough

The Hill Drug Store

C. W. Daniels

328 College Avenue



*Each season we surpass all
previous showings of Brown &
Brown custom built clothes*

Brown & Brown Spring Suits and Topcoats

A distinguished exhibit of new spring suits and topcoats now assembled— notable for their graceful lines, rich fabrics and better tailoring. A fascinating array of exclusive fabrics in this season's preferred colorings.

Custom built

Ready-to-wear

Brown & Brown

142 East State Street

CLOTHING, HABERDASHERY AND HATS

AG CAMPUS PEP ERUPTION SCHEDULED FOR APRIL ONE

Denim Trousers and Gingham Dresses to Usher in Old Spirit

The care-worn, spirit-seeking students of the hill-top campus have completed deep-laid plans for a grand bacchanalia to be held on April 1 in the Old Armory.

The old time mountain of ag-college spirit, which has resembled an extinct volcano for several college generations has within the past few weeks been bubbling up through the crust of diverse interests, until University psychologists predict a fresh eruption of the slumbering giant.

Suspicious geyser like outbursts have occurred at intervals during the last month, and fumaroles of pep have begun to steam on various parts of the ag campus.

Sociologists have marvelled at the sudden reappearance of "group consciousness" on the part of ag students. The rural social organizations department will

have research workers on hand to study the April riot, and as a result of their study they will probably publish a list of precepts to be followed by dead groups that wish to revive.

Authorities tell us that the fracas is to be the most sensible April-fool stunt ever run off in the collegiate world. Overalls for the gents and gingham dresses for their fair partners will impress upon all present that the farmer and home-maker element of the campus is behind it all.

An important consideration in connection with the dance is that admission is not restricted to ag students. Its promoters inform us that it is an all-university affair, but that it is being run by the aggies through their agricultural association.

Students in other colleges are showing an obvious interest in the promised outbreak of spirit, and it is expected that lawyers, doctors, engineers, and poets will don their denims and partake of the fun along with the ags and domeconers.

A fact to be noted carefully by the gentlemen who attend is that a fine of \$1.00 is to be imposed by the chap-

erones upon any couple who arrive at the ballroom in a taxi. The committee on arrangements suggests that the proper conveyance in which to arrive is either wheelbarrow, jinriksha, or buggy. In case these are unobtainable "shank's horses" will do equally well.

A committee on nomenclature has chosen to refer to the anticipated event as the "Hick's Hop." They are looking forward with expectant grins to the mardi-gras like galaxy of pseudo-Reubens and their feigned rural costumes.

OLYMPIAN MUSIC OBTAINED FOR BIG FARMERS' FROLIC

University Students Renting Suits for Use at Informal Ball

The old drill hall will become a combined "arm-ory" and "leg-ory" on the night of April 1 when the long looked for farmers' ball will take place in that edifice.

The ag pep doctors have insured the success of the undertaking by securing the famous "Isle o' Blues" orchestra for the occasion. This orchestra, which hibernates at Colgate, spent last summer sounding syncopations in gay Paris. They have refused an invitation to play for an "all-gods hop" to be given by Jupiter and Juno in their Olympic ballroom, solely to accommodate the local dance fans on that gala night.

The music of the "Isle o' Blues" instruments will be mellowed and further beautified by an environment of hay bales and corn shocks that will lend a distinctly non-urban aspect to the



An atmosphere of unhampered congeniality and absolute informality will be carefully cultivated and encouraged, as a stimulus to the resurrection of the spirit that will assuredly awake from its prolonged slumber.

STUDENTS IN MARKETING FORM PERMANENT GROUP

Students interested primarily in farm marketing held an informal get-together on March 5, when plans for future meetings were laid.

Professor H. A. Ross presided and helped lead the discussion. Professor G. F. Warren talked on marketing conditions, concluding with the prediction that future enrollment in marketing courses will be greater.

After the speaking a permanent chairman was elected, and directed to appoint a committee to help him in the work of arranging future meetings of the group. L. P. "Pete" Ham '26, chairman, appointed I. F. Hall and W. "Pete" Powell, grads, and A. Kurtz '26, R. K. "Bob" Mitchell '26, and G. F. "Gid" Britt '27 to serve on the committee.

whole affair.

In the intervals between dances there will be exhibitions given by famous clog dancers, and other varieties of entertainers.

The promoters of the promised struggle assure us that the whole evening will be a great centrifugal pep machine that will whirl a feeling of life and spirit into everyone there, and will completely renovate and reorganize the mentality of the whole ag campus.

A special invitation is given to all who cannot dance, or those who have despaired of ever learning how. It is promised that such individuals will be wholly unable to keep their feet at rest, but will find those organs irresistibly irritated to the point of performing a graceful hay-mow charleston that will rival the antics of a Greenwich Village beauty.

The committee behind the dance wishes particularly to impress upon those who plan to attend that the specified uniforms for the evening are overalls for the men and gingham dresses for the girls.

INCENDIARIES DISCOVERED AT FORESTRY CLUB MEET

Frolicing Foresters Confine Fires to Cigars and Cigarettes

The Forestry Club held a smoker on March 3, with its newly elected president, Seth Jackson, in the chair. After a short business meeting Professor Recknagel gave an informal report of his recent trip to New York where he attended the convention of the American Paper and Pulp Association as well as the annual meeting of the New York Section of the Society of American Foresters. From the reports the food is still of a very good quality in the big town. Professor W. K. Stone of the College of Architecture followed Professor Recknagel with some New England stories, told to the tune of a roaring fire in the fireplace. Professor Stone is well known on the campus as a humorist and story teller and only those who have heard him realize what a pleasant evening the Forestry Club enjoyed. Occasional outbursts of music were rendered by the Club's own "Male Order" quartette. The evening passed so rapidly that the members were scarcely ready for the call to eat, though they soon fell in line for the coffee and doughnuts. It was voted that this was one of the best meetings held so far. More like it are being planned.

AG-DOMECON AFFAIR HELD IN WILLARD STRAIGHT HALL

One hundred sixty students and professors partook of the twenty-seventh ag-domecon banquet, held in Willard Straight Memorial Hall on March 9.

Professor "B. A." Bristow Adams '00 was referee-toastmaster for the program of professional wit that made up the after-dinner entertainment. "B. A." introduced director Martha Van Rensselaer '00, Acting-Dean Cornelius Betten '00 and President Livingston Farrand as his three "bosses," and Professor G. F. Warren as a formidable colleague to be handled carefully.

Dean Betten, as first speaker, called attention to the present meeting of the state legislature, stating that the money for the long wished for plant industries building may or may not be forthcoming. This building, when completed, is to house five ag college departments.

Professor Van Rensselaer followed Dean Betten. She recalled an alleged dream in which she awoke from a ten year Rip Van Winkle sleep to find that the whole University had become concerned with home economics, and that all departments were shaping their instruction around problems of the home.

Professor Warren followed Professor Van Rensselaer's vision with a bit of history, referring to the period "just after the glacial age" when the ag college was in the embryo stage and home economics was yet no more than an idea.

President Farrand indulged in some playful criticisms of the preced-

AG "C" MEN

(Junior Smoker Awards)

Bardwell, E. T.
Bowdish, A. C.
Bissell, N. F.
Brigden, J. K.
Bright, T. M.
Coykendall, J. E.
Davis, D. F.
Dayton, H. L.
Dupree, W. J.
Fratt, N. O.
Frazer, J. E.
Higley, P. I.
Houghton, C. E.
Jennings, C. A.
Krouse, D. H.
Lange, R. V.
Mann, E. G.
Mueser, R. E.
Munns, R. B.
Rice, P. K.
Termohlen, R. T.
Vanderbrook, C. A.
Werly, C. M.
Wright, B. F.

ing speakers. He finished by congratulating ag and domecon upon the success of their function.

Music for the evening was furnished by a trio from the Ithaca Conservatory of Music. The floriculture students were responsible for the table decorations, while several hotel managers did their stuff as waiters.

Group singing, lead by Professor H. E. Botsford of poultry, the gifted ag assembly song leader, made the lapses between courses seem less tedious than they might have been.

CAMPUS COLLOQUIALS

A fifteen months leave of absence is in order for Professor W. W. Fisk of dairy industry. Professor Fisk leaves on April 1 when he will become consulting agent for the General Ice Cream Company, working in western New York territory. He will return to the College on June 30, 1927.

Professors G. W. Herrick and G. R. Crosby of entomology are among those on sabbatic leave this term. Dr. Herrick is visiting experiment stations and museums in Europe, while Dr. Crosby is "researching" in the Old World. They expect to return to Cornell next fall.

Dr. E. V. Hardenburg of veg gardening was a speaker before the potato section of the Ohio State Vegetable Growers' Association during Farmers' Week at Ohio State University on February 3rd.

The Ninth Annual Poultry Breeding and Judging School is to be held this year on June 28 to July 3 inclusive at the College.

Dr. A. L. Grant, who left her position as instructor in botany last February, is now head of the botany department at Huguenot College, Wellington, South Africa.

RUSSIAN SCHOOL TO BENEFIT BY DOMECON PHILANTHROPY

Club Establishes Annual Scholarship for Home Ec Senior

At a March meeting of the Home Economics Club the organization pledged itself to provide household tools and machinery for an agricultural school in Russia.

The club was addressed by Mrs. H. B. Davis who is an interested supporter of the school. She told how in two and one-half years it grew from ten boys under a peasant leader to over one hundred children, nearly all orphans and formerly homeless.

At first a dilapidated house took the place of a campus, but now the school is housed in repaired quarters, where crops are grown on four hundred acres of ground. The girls in the colony do all the cooking, sewing, cleaning, washing, and other household work for the group.

The lack of equipment has been a great handicap, so by giving its support the Home Economics Club hopes to aid them in their work and introduce American standards and methods to a group which has known practically no home life.

An annual scholarship of fifty dollars for a senior woman in home economics, has been established as a further philanthropic move by the Club.

DOMECON RADIO PROGRAM HEARD ROUND THE WORLD

News of Domecon radio talks has gone at least half way around the world, according to a clipping recently received from an Australian newspaper. The *Morning Herald* of Sydney, Australia, in an account of the college's use of radio, added that women in new South Wales also have an opportunity to hear lectures on food, clothing, and health by radio.

The college is continuing the talks started a year ago and plans to broadcast this year on subjects dealing with many phases of home life. The talks are scheduled on the program from WGY every Monday and Thursday afternoon at 2:40 o'clock. Letters about the talks have been received from all parts of New York state, and a number of listeners have written from Vermont, Connecticut, Massachusetts, New Jersey, and as far south as Georgia.

OLD SMOKE STACK TOTTERS AS LITTLE TRACTOR CHUGS

March 12 saw the funeral of the old heating plant smoke stack that pointed its bricks into the air just north of the Poultry building. A charge of dynamite and a guy-wire pull given by a tractor served as sufficient stimulus for the complete demolition of the structure which was witnessed by a crowd of over a hundred. The old stack had been unused since the erection of the big new heating plant about three years ago. The chimney crumpled from the bottom up, until the upper rim finally yielded and left nothing but a heap of bricks.



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ROUND-UP BOYS GATHER TO HEAR GOODY GOODMAN

Annual Banquet for An Hus Fans
Held in Varna Hall

On the 8th of March the Round Up Club held the second last meeting of the term. Jimmy Dodge of the famous Emmadine Farms was scheduled to speak but last minute arrangements provided Professor "Goodie" Goodman of the local rural engineering department as the speaker of the evening. His talk was based on extensive mid-winter experiments in barn ventilation which Professor "Doug" Fairbanks and himself have made in the field. A bulletin will soon be published on the results of the work.

At a short spirited business meeting preceding the talk, during which the present officers gave their annual reports, the officers for the forthcoming year were elected. Their names follow: President, "Lee" Blanding '27; Vice-president, Harold Cowles, sp.; Secretary, Lyle Arnold '27, and Treasurer, "A" Clark '28. "Lee" Blanding was also elected toastmaster for the annual Round Up banquet which was given on March 22 at the church in Varna. Professor L. P. Wilson of the College of Law was the principal speaker and managed by a line of jokes to hold the attention of the banquetters who were already held down by the amount of victuals stored away during the previous hour.

REQUESTS FOR BULLETINS KEEP STAFF ON THE MOVE

More evidence of the services of various kinds rendered by the college: a woman who has been blind for thirteen years recently wrote a five-page letter to the State College of Agriculture and asked for bulletins to help her beautify her home.

Another request which came recently to the College inquired about poultry bulletins, and was written from the state penitentiary at Auburn. The writer wanted bulletins which would enable him to make a fresh start in life later on.

Of the hundreds of requests which come to the College every day, about one hundred a day have to be opened and read before they can be routed to the proper department or person who is able to supply the needed information or help.

Many are addressed to the dean, and request such services as planning dairy barns, working out crop rotations, analyzing farm businesses, determining costs of production, how to run an ailing gasoline engine, or how to lay out a drainage system.

INCUBATOR ITEM

The poultry department is busy with breeding season activities. According to the salesman in the poultry building the department had over twenty thousand eggs in incubation by the middle of March. On the particular Saturday morning when we obtained this information the sales room had found a market for seventy-five dozen eggs before eleven o'clock.

OMICRON NU

Jane Lay
Helen Paine
Beatrice Pringle
Grace Ware

PROFS PRANKS

Miss Martha Van Rensselaer '00 spoke March 18th at a mass meeting of the American Women's Association at Madison Square, New York City, representing the professional women of New York State. From March 2 to 5 she was in Washington attending a Conference of State Extension Leaders, chosen as best representing that group from their state. On her way back from Washington, she addressed the Mt. Vernon League of Women Voters in New York City.

Professor G. A. Works, of the rural education department, left early in March to make a study of library facilities in the United States in cooperation with the American Library Association. His present trip will take him through Chicago, Minnesota, Oregon, and California. Before returning in May, Professor Works will assist as special advisor to the Bureau of Education in a survey of the schools of Utah.

Professor J. E. Butterworth will also have charge of a part of the survey in Utah. He will be absent from Cornell for three weeks in April to make a study of the school buildings in Utah.

Professors R. M. Stewart and Cora Binzel attended a regional conference called by the Federal Board for Vocational Education at Washington, March 8-13.

Professor Paul Kruse, of rural education, will attend during the first week in April a meeting of the New York Literacy Test Commission, whose function is to develop tests of literacy for new voters.

Professor and Mrs. J. H. Comstock are spending the winter at Mentone, France. They expect to return to Ithaca during April.

GIRLS CHOOSE TASSELS

The breach between Ag and Domecon will be further emphasized at graduation time this June, when the home economics seniors will blossom forth with blue-green tassels on their commencement caps. The new hues replace the corn color that has been the traditional tassel for students in the College of Agriculture. One ag student made a rather mean remark when he suggested that the green was probably chosen as a symbol for the youth of the fair young college, while the blue, he thinks, might be taken as symbolic of the girls' grief at the separation of the colleges.

DEAN A. R. MANN WRITES OF NORTH EUROPEAN TOUR

President Farrand Receives Letter
Describing Winter Journey

Dean A. R. Mann, who is still traveling in Europe, recently wrote to President Farrand from Riga, Latvia. A quotation from his letter follows:

"I am in the midst of a very rapid swing through Denmark, Norway, Sweden, Finland, Esthonia, Latvia, Poland, Czechoslovakia, etc.

"This north country is simply superb this winter. The cold has been exceptionally severe and the snow is very deep. I had to cross the Baltic Sea from Stockholm to Abo, Finland, a boat run normally of 14 hours. It took us 36 1/2. The sea is frozen tight from Stockholm north. By constant use of ice-breakers and heavy traffic, a narrow channel has been kept open. It freezes after each boat and retards traffic. We had an ice-breaker ahead most of the time. The edge of the unbroken ice is 30-40 inches thick and there is a cover of 18-24 inches of snow. The sea is full of islands, now great snow heaps from which the coniferous forests project. It was a capital journey over this frozen expanse. The first night out, in a dense fog, we rammed a merchant ship, tearing a big hole in her bow and a smaller hole in our own plates. Fortunately, both were high up. Because of the ice there are no waves so there was little risk in proceeding. Second night, in the fog, we were slammed against an ice-breaker in trying to pass where the channel was too narrow. The constant fog from 4 p. m. to 10 a. m. was a great handicap."

Flys from Finland

"Having gotten in to Finland, I was up against it to get out again, as I needed to come down the eastern Baltic side. The Gulf of Finland was frozen completely. A channel had been kept open across to Reval until about two weeks ago, when it also frozen up. My alternatives were to return to Stockholm and make a long southern circuit, requiring 4 to 5 days; or go via Petrograd, a somewhat uncertain and little used route; or to fly. So I flew across the 45 miles of the frozen Gulf of Finland. It was a most interesting experience. We left Helsingfors at 5 p. m. of a clear, bright winter evening and reached the other side in about 30 minutes. Meanwhile fog had settled down at Reval so that the pilot could not quite locate his station. He made a comfortable landing on the ice and coursed around on it for a while. By use of a few pistol shots, the attendants from the station soon located him and brought us "home."

SCOUTS PRACTICE

Girl scouts have found the rural engineering labs a convenient place to practice household mechanics. A group of scouts spent two afternoons in the labs during the second week of March where they practiced putting up shelves, handling wrenches, and doing various odd jobs in preparation for proficiency tests.

The Wisteria Garden

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- cider and doughnuts
- suspenders and calico
- isle-o-blues orchestra
- yourself

The Old Armory

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CAMPUS CHATS

We take this opportunity of expressing to Professor James E. Rice our profound regret and sympathies on the loss of Mrs. Rice, who passed away on February 18. Surely we are voicing the feelings of Cornellians the country over in bearing with him at this time of sorrow.

Tennyson's statement that "the old order changeth, yielding place to new" is nowadays only partly true; orders change all right, but they change before they get old. Today the "young order changeth yielding place to younger." For instance, agricultural colleges are practically new institutions, but a definite change in their character is already taking place. Professor Whetzel suggests that agricultural colleges are rapidly becoming schools of biological science. Whether that is or is not the trend, it is obvious that here on the ag campus our college is assuming some new functions and changing its methods of performing the functions that carry over from recent years. But this change is natural and timely; it parallels the changing conditions and standards of rural life, the changing of the nation's whole economic system to a "tempered" capitalism, and generally changing social and moral standards. It's all-fired interesting to be an undergraduate and watch the wheels go around!

Recently we were discussing with one of the professors the desirability of compulsory military drill for students in the University. He made the remark that, even though the value of drill from a physical, moral, or intellectual standpoint may be negligible, the very fact that students dislike the course is reason enough for obliging them to submit to it. For, argued the professor, to be obliged to do that which one dislikes is good training for life. This is certainly convincing reasoning! We offer a better suggestion. Let us require that each student in the University devote an afternoon a week during his freshman and sophomore years to sweeping and keeping trim the walks about the campus. This will be admirable preparation for life (since most students have a peculiar dislike for such occupation), and has the added advantage of performing a valuable service to the community.

One group that still strives for the old spirit is the Agassiz Club. This group is guided by the precepts of the great scientist and naturalist for whom the club is named, Louis Agassiz. In their explorations among the great truths, and the wonders and the beauties of nature on Sunday hikes and occasional evening talks they find that fellowship which was once and can still be the spirit of ag, and which must always underlie the fullest appreciation of what agriculture means. Agassiz welcomes all who are in accord with its purposes.

THIS 'ERE & THAT 'AIR

C'mon, you Aggies! Get in step; let's resume our old-time pep! The hand of Bacchus points with scorn to see a group so spirit-shorn. We're like a bunch of puppet dolls, or like a flock of sheep in stalls that say "ma-ma" whene'er they're punched, or holler "bah" before they've lunched. Our heads are only light in specks, they sit so heavy on our necks; while few and fleeting are the grins that drop our firm-set jaws and chins. Our eyes are dull, they have no glow; they're always on the ground below. We drag our feet along like lead, we wonder why we feel so dead, and think that life is pretty flat. (I guess it is, for us, at that!) Why can't we rise above this stuff; won't we ever get enough? We ought to brighten up a bit (these "cemetery looks" don't fit), and show our colleagues on the hill that we have got some spirit still. Now here's one thing we'd better do;—we'd better get tickets for two and get some domeconer gals, (you know they make delightful pals), and head for that "barnwarmin'" dance, (B'gosh, now, buddies, here's our chance). And when that dance is in the past, let's make the peppy spirit last!

The poultry department advocates the "removal of cracks" when grading eggs for market. Another Humpty-Dumpty wise crack!

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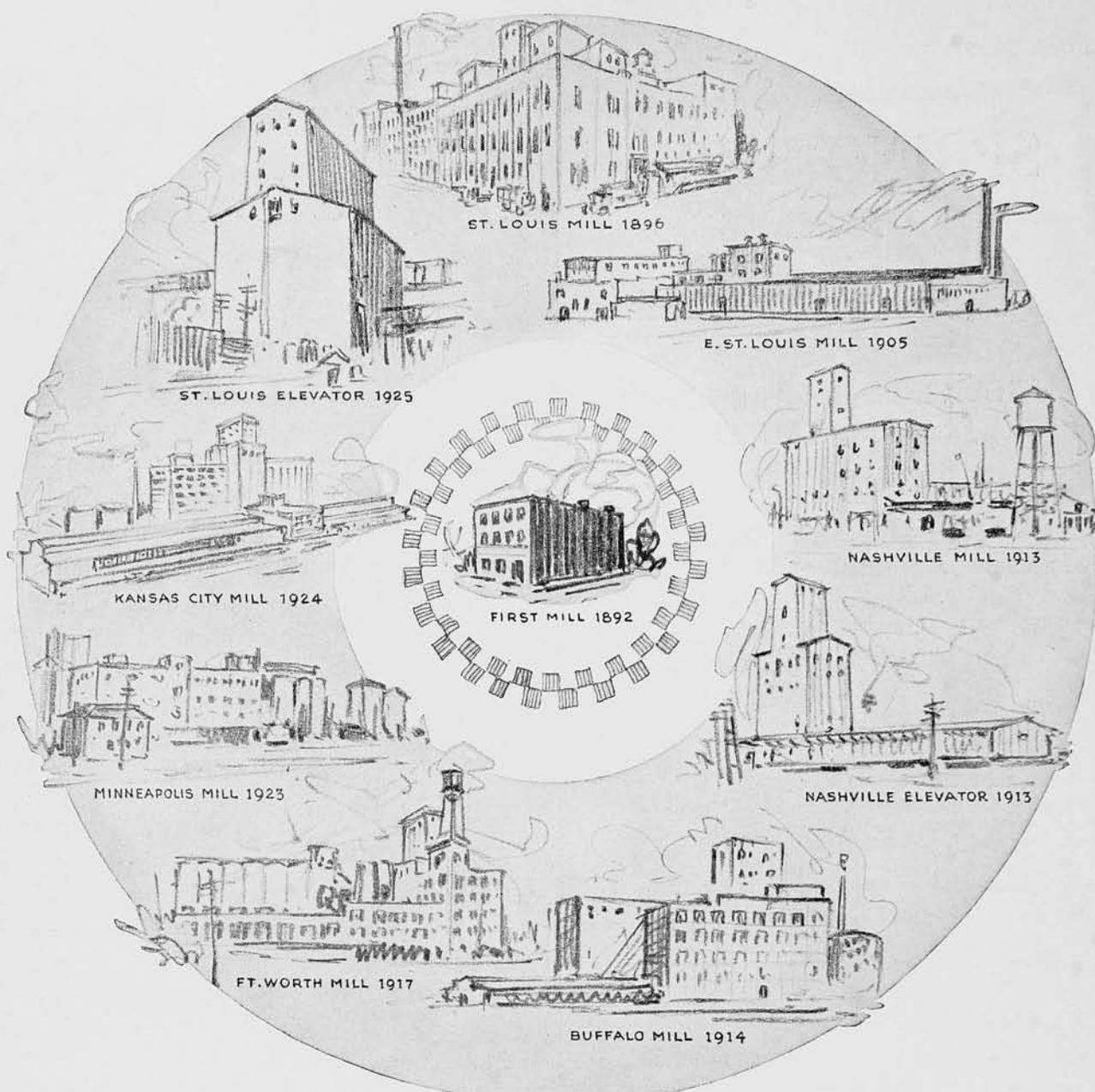
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is the largest in the United States
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1926

Volume XXIII

Number 8



The good provider

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* * *

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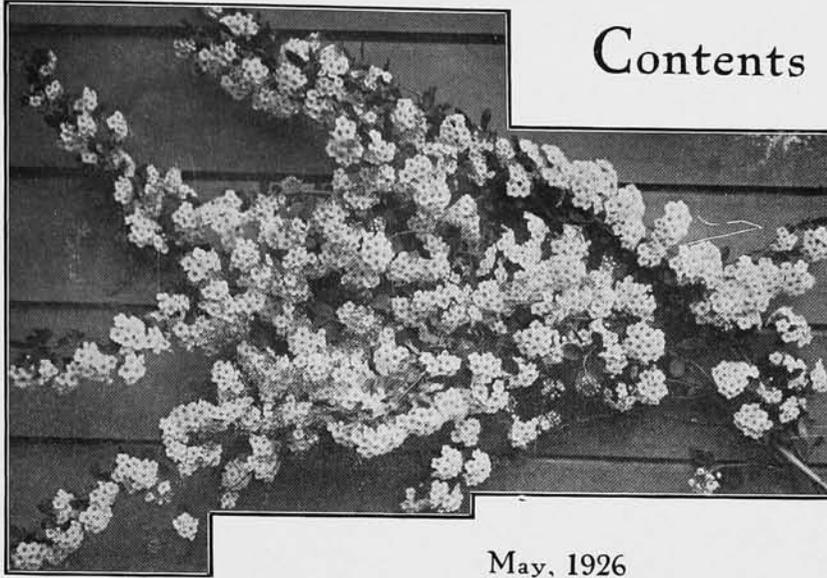
Growth must be swift and certain, when you feed this nourishing mash. And you get not just BIG birds, but big, capable birds that lay more eggs and better eggs because they are better birds.

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The Quaker Oats Company

Chicago, U. S. A.

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The Swan on Still St. Mary's Lake Float Double, Swan and Shadow!

—Wordsworth

The Cornell Countryman

A Journal of Country Life — Plant, Animal, Human

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The Old Order Changeth in Vegetable Production

By Paul Work

THE daily papers can hardly be trusted to yield a correct picture of American agriculture. Hardly a day passes without the appearance of news or syndicate stories on the problem of the surplus, with King Corn in the foreground. It is strange what silence King Wheat maintains just now, after the furor of two years ago.

The daily papers have little to say about the vegetable industry of our country. Perhaps, like King Wheat, King Vegetable is too comfortable to indulge in noise-making. Consumption is increasing, suburban real estate is selling well and, altogether, most of the vegetable men seem reasonably content. At any rate, the vegetable growers are producing about a billion and a third of our eleven billions of crop value, taking rank alongside of the better known monarchs, Wheat, Cotton and Hay. Corn alone is far in the lead.

THREE prime causes have perhaps been dominant in building the consumption of vegetable food to its present high level. First comes the general recognition of the goodness and of the dietetic value of vegetable food, together with the adoption of better balanced rations for the American family. In the second place, transportation has made vegetables available in all places and at all seasons. Thirdly, business and industrial prosperity have provided the public with the means to purchase not only necessities, but also delicacies, and luxuries of food. Moreover, increased use, economies in production,

and keener competition have served to forestall any general increase in prices and most of the vegetables that were less generally used ten years ago are now cheaper than ever.

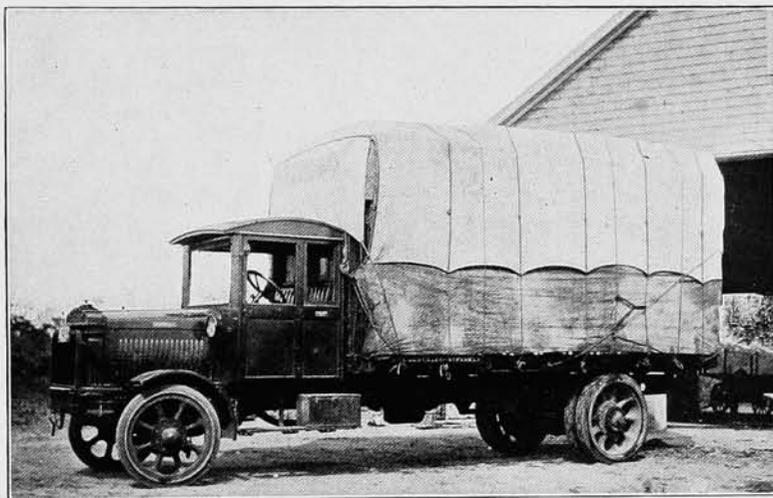
While consumption has thus marvelously increased, the methods of production of vegetables has been in a state of rapid flux. Corn, wheat, and pork are produced in ways not

last chapter in the history of many an intensive vegetable district.

SO completely was the old style market garden governed by the labor and manure situation that the increase in industrial wages and the passing of the stable might have appeared well nigh fatal. However, change follows change and the one shortage has been met by the use of motor driven machinery and the other by the planting of green crops and the purchase of commercial fertilizers. Either of these tendencies is sufficient to necessitate the use of more land; the former requires wider spacing and the latter calls for alternate use of fields for market and manurial crops. Fifteen years ago the time and cost of hauling to market limited local vegetable production to

the areas near the cities, but now come the motor truck and the concrete ribbon extending the three hour radius from twelve or fifteen to sixty or seventy-five miles. Multiplying the radius of vegetable production by five increases the available area for production twenty-five times.

TRANSPORTATION has greatly increased the number of farmers who can grow vegetables to advantage. While some market gardeners have moved to larger and more distant farms, many general, dairy, and meat farmers have taken up vegetable crops. Potatoes and cabbage have long been produced alongside forage, grain, and milk, but now important dairy sections are growing peas or cauliflower for shipment or corn,



The cost of marketing is at a minimum when conducted on a present-day basis.

radically different from the methods and conditions of 1910, save perhaps for the introduction of power traction. Up to that time the vegetable trade was ruled by the products of the nearby gardens, seldom more than ten or fifteen miles removed from the market, and characterized by small areas of high priced land, by intensive cropping plans with close planting and succession and intercropping, by the use of great quantities of stable manure, and by the dominance of man-power in the labor situation. The high cost and scarcity of labor, the decline of the manure supply, the development of transportation, and the demand for suburban lots are rapidly banishing the old fashioned market garden and the real estate booms of the past two years have written the

peas, or tomatoes for canning, and hundreds of isolated farms are growing the single vegetable crop that does best under their conditions. On the other hand, this infiltration is held in check by the increasing intensity of competition. Unbiased observers hold that the vegetable grower is more of a business man than the average farmer, and vegetable production along with other influences is carrying the business viewpoint to the general farm, with resultant ability and willingness to find out what crop is profitable and to discard the ones that do not pay.

THE same token that admits to the daily market the products of a farm sixty miles away also permits



The Market Wagon of 1908

the outflow of vegetables by truck to points as far away as two hundred miles. Syracuse gardeners find strangers from Albany or Buffalo in the adjoining stall cutting prices to get rid of a load, but they also find the same men buying for distant sale and so helping to maintain prices on other products. Thus vegetable markets are being in some degree stabilized. Moreover, these trucks stop at the way stations and Syracuse grown vegetables are found in Freeville and Groton as well as Ithaca, Cortland and Binghamton.

Transportation by rail has not been so radically transformed in its equipment and methods as highway transportation, but its utilization has clearly developed. There have been changes in refrigeration, in routing and diversion customs and in train service that have helped to a great extent. Figures on carlot movements do not show very clear trends and it is doubtful if the total has increased greatly in ten years, in spite of large increases in certain crops. It is true that the carlot movement of lettuce, cauliflower, celery, asparagus, cantaloupes, and spinach are recording steep upward curves, while the great bulk crops of potatoes, sweet potatoes, onions and the like are rather staple and have found their approximate level with consumption increas-

ing only with population. Possibly the motor truck has increased the proportion of city supply grown within 100 miles while it has decreased the proportion grown within 15 miles.

Regardless of what balance is finally reached between crops grown within the motor zone of a market and the crops grown for rail shipment, the distant sections profoundly affect nearby producers, not only by what they actually forward, but by their potential competition. New York muckland lettuce men are adjusting their business to meet western Iceberg competition. They are doing it largely by better grading, packing and selling.

THE changes thus depicted in vegetable production have been registered in an entirely different attitude toward land. We possess suitable vegetable acreage to feed perhaps five countries like ours, for these crops replace crops of lower acre-value as fast as markets are found. As a result, competition is keen, costs must be kept low, products must be of high market quality. Instead of nearness to market being the limiting factor, the adaptation of a crop to conditions of climate and soil dominates. Celery, lettuce, and onions are grown on the muck lands, asparagus on the lighter soils, potatoes and cabbage on medium types and so on. Even among the muck lands climate shapes the cropping scheme. Indiana, Ohio, and Southern Michigan are growers of onions and celery, but their summer days and nights are too warm to be most favorable for Big Boston lettuce which thrives better in Western New York. Tennessee sends early summer tomatoes north and Wisconsin sends winter potatoes south. Lettuce, cantaloupes, and cauliflower come from the far west. In fact, practically every state is now a vegetable state. Nevada has 700 acres of cantaloupes. The lines of transportation now criss-cross in all directions as distinguished from the outstanding north and south movement of twenty years ago.

The greenhouse vegetable industry is undergoing drastic readjustment. Western lettuce undermines the main crop of the glass range and the tomato, which is difficult to transport with high quality, is in the ascendent. Even so, there is question as to the future of the glass house vegetable business and the cost of construction is such that the man with pre-war investment is at a decided advantage.

INSTITUTION service for the vegetable industry has redoubled sev-

eral times during the past fifteen years. In 1910 there were about six vegetable specialists on horticultural or vegetable staffs of the colleges and stations and of the national and state departments of agriculture. The number now reaches well over a hundred and the yearly demand for well trained men is not fully met. Further, the attention to vegetable problems in other departments has increased. Vegetable services in agricultural economics, genetics, plant pathology, entomology, and botany now employ many specialized workers. In one state station, vegetable work is now the major activity and there are six or eight outlying branch stations for research in our field, one being our own Long Island farm at Riverhead.

Service in the institutions is more and more taking the form of study of the underlying factors in production and marketing on the theory that the grower needs new knowledge to help him solve his own problems rather than sharply defined formulae of procedure.

Perhaps the most extensive service development has been along marketing lines. Crop reporting, market news, inspection service, and aid toward better grading and packing are employing large forces of trained men under the leadership of the dynamic and progressive Bureau of Agricultural Economics, and the progress is little short of marvelous. The service of institutions is being used by growers. Through bulletins, trade papers, and extension service, findings are carried to the farm. Casual ob-



The Forerunner of the Modern Truck

ervation is sufficient to prove that their influence reaches to the operations of the field and so to the bank account.

ORGANIZATION of vegetable growers has progressed spontaneously, and in ways that have grown out of highly varied and special needs. The Vegetable Growers' Association of America has for eighteen years
(Continued on page 253)

The Farm Shop at Cornell

By L. M. Roehl

THE old rural blacksmiths are rapidly disappearing and few young men are learning the trade. Harnesses are no longer made by the local harness makers, but at the factories instead. Automobiles and tractors are used so extensively that men do not find it profitable to run a saddlery in the rural communities. Few young men are establishing themselves as local harness fixers. They can do better, or at least think they can, in other lines of work. Carpenters' wages are so high that the skilled labor cost of having construction or repair work done on farms makes it good business for farmers to do some of such work themselves.

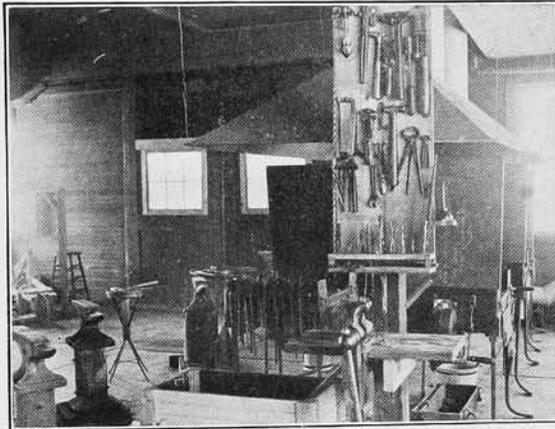
Thus the farmers of today have had thrust upon them much of the work which a decade ago could more profitably be hired done. Those who have no mechanical inclination or ability farm under a much greater handicap than similar men of a decade ago.

It is the purpose of the farm shop courses of the rural engineering department at Cornell to qualify those who take the courses to do the ordinary construction and repair work arising on the farms of New York state. The aim is to help the boys to meet the situation which has arisen by the passing of the rural smith and harness maker. To this end a farm shop has been established in the department of rural engineering. The shop is part of one of the rural engineering buildings. It is 40 feet wide and 48 feet long. There is an outside door at one end which is 9 feet wide and 9 feet 6 inches high for the passage of machinery, vehicles and farm appliances. There are three triple windows at each side and two double windows at one end thus providing ample light for work at any point on the floor.

The shop is equipped with only such tools as farmers find profitable to have for their repair and construction work. The idea being held that if the men who are learning to do the work should use such tools and machines as are used in machine shops and cabinet makers' shops instead of those used on farms the courses will train for the trades and industries but not for farming. Of course, on

entering the shop one will get the impression that the tool outlay is far beyond what a farmer can afford or profitably use. Close observation will reveal, however, that there is merely a duplication of farm hand tools to accommodate a large group of students in the shop at one time.

EFFORT is made to have the kinds of work identical with those which farmers desire to do in pursuing their mode of life. Hence there are two courses offered: one dealing with carpentry and work which is closely allied to it such as saw filing, tool



A View of the Farm Shop

grinding, handle fitting, painting, etc., and the other dealing with harness repairing, rope work, soldering and cold and hot metal work.

There are many problems and jobs arising in each line of work and the limited time devoted to the work allows only a few of the outstanding ones in each kind to be mastered by those who take the work. In each case mastery of tool processes is the background for the work. The following jobs are suggestive of those which make up the work in the courses:

Carpentry:

- A. Construct a farm workbench.
- B. Lay out a rafter for a building of given span and pitch.
- C. Make out the bill of material for a garage, farm shop or poultry house.

Saw Filing:

- A. Joint, file, and set a hand rip saw.
- B. Joint, file, and set a hand cross cut saw.

C. Gum, joint, file, and set a timber saw.

D. Gum, joint, file, and set a circular cordwood saw.

Tool grinding:

A. Grind a plane bit, wood chisel, axe, scythe, butcher knife, twist drill, draw shave, shears, mowing machine sickle, and ensilage cutter blades.

B. File an auger bit.

Handle fitting:

A. Fit handles in hammer, hatchet, axe, fork, spade, or shovel.

Harness repairing:

A. Take harness apart and do the necessary repair work including making harness thread and sewing straps, breechings, traces, tugs, and other parts; making and applying new leather pieces to replace worn parts; applying repair parts such as hame staples, hame clips, concord clips, cockeyes, etc.

B. Cleaning, oiling harness.

C. Assembling harness.

Soldering:

A. Operate a blow torch and tin a soldering copper.

B. Solder or mend tin and galvanize containers such as milk pails, milk cans, wash tubs, etc.

Cold metalworking:

A. Do such cold metalworking jobs as arise in the repairing of farm machinery; the jobs to give opportunity for practice in cold metalworking tool operations, viz., measuring, hacksawing, drilling, filing, using taps and dies, etc.

Hot metalworking:

A. Do such hot metal working as arises in the repairing of farm machinery; the jobs to give opportunity for practice in all hot metalworking tool operations, viz., bending, straightening, drawing out, upsetting, forging, and welding.

B. Shape and temper coldchisels, punches, centerpunches, mattocks, grubhoes, pickaxes, etc.

(Continued on page 253)

What Can the College Graduate do for his Grange?

By Jennie Buell

THERE are, of course, graduates and graduates of every college.

There is the young man who goes to college avowedly in order to make his coming career more profitable for himself financially and socially. This aim guides him throughout his four years at college; he sees nothing attractive that does not contribute to that end. He finishes, as he entered, bent on promotion and accumulation for himself alone. This college graduate is

not likely to be drawn, on any account, into Grange membership. If, perchance, he should suspect that the Grange might aid his own advancement, he will not long remain active in it. For, throughout the more than half century of Grange history, it has been clearly demonstrated that no one long maintains allegiance to this organization who has not come to see in it something more than opportu-

nity for self-aggrandizement. Driftwood he may become, indeed, sluggishly moving for a time along the edge of the stream, but sooner or later permanently lodged by some slight obstruction or by a sudden shift of the stream's course.

Contrasted with such a graduate, is the one who went to college because it meant to him preparation for taking part in the world's work as such, and as distinguished from his own individual career. If he did not have this social vision and sense of obligation to the state or community which made his education possible, he acquired appreciation of them before he graduated. When such a college graduate enters a community where there is a Grange and becomes a member of it, far-reaching opportunities open before him.

The college graduate who has a sense of personal debt and duty, because of what he has received from his college, will find in the Grange an organization responsive to his inclination. Here he will discover a group of people—rural-minded for the most part

—who will this year celebrate the sixtieth anniversary of the founding of a fraternal organization built solidly upon the theory that "the farmer is of more consequence than the farm and should be first improved." He will read in its "Declaration of Purposes" such sentences as these which exhibit its broad, human and patriotic aims:

"United by the strong and faithful tie of agriculture, we mutually re-

"We shall avoid litigation as much as possible by arbitration in the Grange. We shall constantly strive to secure entire harmony, good will, vital brotherhood among ourselves, and to make our Order perpetual. We shall earnestly endeavor to suppress personal, local, sectional, and National prejudices, all unhealthy rivalry, all selfish ambition. Faithful adherence to these principles will insure our mental, moral, social and material advancement."

"We propose meeting together, talking together, working together, buying together, selling together, and, in general, acting together for our mutual protection and advancement, as occasion may require."

"We shall advance the cause of education among ourselves, and for our children, by all just means within our power."

In the document from which the

above quotations are made the graduate of the highest college or university in the land may find justification for membership in the Grange, provided his rural affiliations are such as to make him eligible to belong. To the graduate who is public-spirited and socially-minded, it presents a challenge to the best that is within him. In fact, here is a challenge to "education" itself as we commonly think of the term. Here is an organization which assumes the rank of an educational institution by mapping out a course of continuous education and training for its members. It would not dismiss them from its ranks of students after any four year course. It holds that education and such educational methods as it uses are good for life, reaching from parents to children and children's children. Moreover, its instructions go hand in hand with daily toil, the practical reinforcing and proving the theoretical; the environs and observations of country life enriching and making stronger one's attachments for art and beauty.



In the local hall each Grange begins its service of "developing a better and higher manhood and womanhood."

solve to labor for the good of our Order, our country and mankind."

"We shall endeavor to advance our cause by laboring to develop a better and higher manhood and womanhood among ourselves. To enhance the comforts and attractions of our homes, and strengthen our attachments to our pursuits. To foster mutual understanding and cooperation. To maintain inviolate our laws, and to emulate each other in labor, to hasten the good time coming. To reduce our expenses, both individual and corporate. To buy less and produce more, in order to make our farms self-sustaining. To diversify our crops and crop no more than we can cultivate. To condense the weight of our exports, selling less in the bushel and more on hoof and in fleece; less in lint and more in warp and woof. To systematize our work, and calculate intelligently on probabilities. To discountenance the credit system, the mortgage system, the fashion system, and every other system tending to prodigality and bankruptcy."

Where does the college graduate fit into the scheme of an organization with the vision and the accomplishments of the Grange? Obviously he will discern much to appreciate and commend as years of contact with it pass. But, even more obviously at first, he will recognize where in his "education of the schools" offers advantage over this "school out of school." What then, can he, because of his college education, do to help the Grange?

FIRST of all, perhaps, on account of missing his accustomed library facilities, he will begin his help with books. Most of us who have not had college privileges do not have library habits. We would not know how to use a large, fine library. We have little notion of its vast resources and helpfulness. We read few books. Their cost makes them seem as luxuries if we must buy them as individuals. Most of our local stores offer only an indifferent selection. If the town or community buys a library, it is soon read and the enthusiasm which procured it does not renew it.

The graduate, trained and accustomed to use a library, can do much to encourage the use of books among members of the Grange. He may be instrumental in making libraries accessible. If he is ingenious and persistent, he will devise ways by which to accomplish these ends. The local library, if there is one, or the county, or state, or his own college library will endeavor to assist him.

2. His acquaintance with sources of material for topics assigned in the Grange program can be most helpful to the lecturer of his Grange.

3. If the graduate comes from an agricultural college, and is not bumpous with what he has learned, he can give valuable information daily among the men and women with whom he affiliates in the Grange.

4. If the graduate who joins a Grange chances to be from a home economics college, there are endless interesting ways in which she may help or take leadership among Grange girls and women—ways in which they are eager to follow.

5. If, mayhap, he was an athlete in college, he can render the admir-

ing youngsters any amount of welcomed "dope" and instruction.

6. If the graduate had practice in dramatics at college, here is another phase of rural recreation in which he can lend efficient aid. He will find a ready reception for this skill and experience.

7. If the graduate was so fortunate as to have training in speaking and debating in the classroom and college societies, such ability will add greatly to his usefulness in the Grange. His influence and assistance will go far towards making of the Grange a real forum for the threshing out of problems and questions of community and public concern. Here, also, he can usually aid in improvement of parliamentary practices.

8. If, after a time, leadership or an officer's part falls to the graduate, he can increase his service to his Grange by the same brand of faithful, conscientious discharge of his duties that far less advantaged men have given to these positions all through the history of the Grange.

9. Above and through all, the college graduate will render his finest contribution to his Grange by his courteous mindfulness of others through cooperating with the Grange at large in its service of "developing a better and higher manhood and womanhood."

IN concluding these suggestions as to what the college graduate can do for his Grange, may I not raise a few questions as to what the Grange may mean to him, the college graduate himself? Is the gain all one-sided? Is the college graduate the only one who gives when he affiliates with the Grange? Is not the friction of his mind, trained in the schools, against the rugged souls skilled in combat with strenuous experiences, worth quite as much to him as to them? Are not his social graces given a finer, more genuine edge, by adaptation to the frank—sometimes blunt—**realness** of unvarnished country folk? Of what avail is his classroom philosophy if it will not ring true when tested by these men and women who have met actuality face to face? Does not the fact that the college in which he himself has been trained is maintained in

part by these very people, make it morally his duty to show appreciation and make some return for what he has received? Is there not here, too, the opportunity to offset what was disappointing in his college life—knowledge of low aims, sometimes, under high advantage; of wasted hours; of occasional mercenary or brutal teaching—to offset these by contact with many truly appreciative people who are striving to utilize their margins of time for worthy purposes, and struggling to give their children better schooling than they themselves have had?

IT may be a surprise to the college graduate, when he has joined the Grange, to find that among its members are other college graduates whose diplomas bear date of his babyhood days. It may gratify him to discover that in the membership is here or there a man known as the "Cherry king," or "potato prince," or "Big Bean Booster," because of the huge yields of his fields; or who is nationally known for originating the most popular grape, or orange, or muskmelon; or who has bred the highest egg producing hen; or the cow who holds the world record for milk production. It is wholesome for anyone to understand that "world's records" are not confined to the athletic field.

He finds that the roots of much that is permanent are back among the homes of these fellow Grange brothers and sisters. He comes to feel that these people, their homes and their rural occupations are among the stabilizing factors which have supported and fed his university. They are a very part of it. They are often, indeed, utilizing many of its resources in their homes and in the Grange, in ways he had not guessed.

Moreover, in the Grange forum our college graduate member finds a fresher breath and a welcome for a freer expression of honest opinion and conviction than he sometimes found in the classroom. The frankness with which he hears vital questions discussed may fan in him smoldering resentment at usages and popular sentiments which he has not dared elsewhere to express. He comes, among other experiences, thus into a new respect for that freedom of speech guaranteed to all by our nation's founders.



A Study of Holstein Records

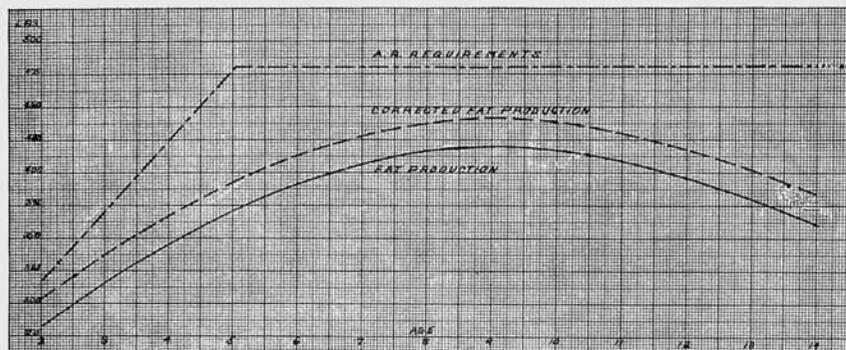
By R. K. Mitchell, C. W. Sadd, and G. H. Cowles

THE records studied were those of the Holstein Herd at Cornell University which are the oldest, the most complete, and the most comparable of any records that are available. In 1874 when Professor I. P. Roberts came here from Iowa his first step to improve the herd was the purchase of a purebred Holstein bull. Although the milk records date back to 1874, a systematic method of re-

for the record of a cow with only a four months' lactation period or under a seven months' gestation period would be of little value. Three hundred and eleven normal lactation periods were selected which were at least thirty-nine weeks long and which included a gestation period of seven months or more. The records were then classified and arranged by six months' intervals according to

six, and eight-year old classes. The weekly records for each class were averaged and Curve II plotted shows the trend of production throughout the year. From this curve index numbers were figured and the percentage production for the last five weeks determined for each class. These percentages varied but slightly for the different classes, the average production for the last five weeks being twenty-five pounds. Adding twenty-five pounds to the fat production curve gave the corrected fat production curve, which is relatively the amount that would be produced if the animals milked for fifty-two instead of ceasing to milk at forty-seven weeks. Upon first glance even the corrected fat curve appears rather low as compared with the advanced registry requirements, but it must be remembered that this contains all the records of all the animals since the herd was founded thirty-four years ago. As a rule only a few of the better animals are selected from a herd to make advanced registry Records.

Curve I



cording was not devised until 1889 when Professor H. H. Wing started complete records of milk production. In 1891, a year after Professor Babcock of Wisconsin invented the Babcock test to determine the percentage of fat, the records of the amount of fat produced were begun, and are complete up to the present time. No where else are there for study complete records on a whole herd for thirty-four years or records that have been made by cows that were of similar breeding and kept in similar environment. These records follow the building of a herd starting with old Glista, a great granddaughter of a heifer imported by Professor Roberts, and deal only with animals of direct descendance on the maternal side from this foundation cow.

THE purpose of this study was to investigate: first, the effect of age upon production, second, to examine the method by which the advance registry requirements for fat are determined, and thirdly, to determine the weekly trend of production throughout the lactation period.

In order to make the figures as typical as possible the records must first be examined and only those that are of normal lactations were used,

age from two years to fourteen years as: two years, two years and six months, three years, etc. Then the records for the different classes were averaged and arranged in Table I according to age.

The most significant fact from this table is the relative short productive life of a dairy animal. One notices that there are seventy-two, two-year olds while there are only six eight-year olds, which indicates that less than ten percent of the animals reached maturity and maximum production.

From the above table the figures for average fat production were plotted to form the fat production curve shown in Curve I by the solid line. Then the advance registry requirements for fat were plotted for the different ages to compare with this. Comparison was, however, impossible as the advance registry requirements are on a fifty-two week production basis, while the actual production basis, while the actual production averaged only a forty-seven week lactation period. This necessitated correcting the actual production to a fifty-two week basis. To make this correction ten animals with normal gestation periods and a fifty-two week production period were taken from each of the two, four,

IT IS the opinion of many breeders that the opportune time for an animal to make a record is at five years of age. It may be the opportune time for the animal, but it is the most difficult for the animal to meet re-

TABLE I

Class	No. in Class	Aver. Production	
		Milk	Fat
2 yrs.	72	7942	291.1
2 yrs. 6 mos.	29	8340	293.9
3 yrs.	33	9391	319.6
3 yrs. 6 mos.	24	9329	326.8
4 yrs.	24	10561	375.8
4 yrs. 6 mos.	19	10748	378.9
5 yrs.	18	11428	402.8
5 yrs. 6 mos.	14	10657	363.8
6 yrs.	13	10836	369.3
6 yrs. 6 mos.	12	12796	457.99
7 yrs.	11	11325	391.3
7 yrs. 6 mos.	10	12338	440.0
8 yrs.	6	12708	445.7
8 yrs. 6 mos.	4	11176	376.8
9 yrs.	3	12766	428.9
9 yrs. 6 mos.	5	12474	436.5
10 yrs.	6	13689	480.3
10 yrs. 6 mos.	1	11592	400.6
11 yrs.	3	12225	427.3
11 yrs. 6 mos.	2	11433	422.0

quirements, for this is the period of greatest difference between advance registry requirements and actual pro-

duction. The Holstein-Friesian Association bases their requirements on the theory that a two-year old producing three hundred and eighteen pounds of fat will increase her production at the rate of .1479 pounds per day until she is five years of age, at which time she is expected to have reached maximum production, which she should maintain through the rest of her productive life. As a matter of fact the easiest time for an animal to meet requirements is at two years of age or then not until she is

TABLE II

Index Numbers for Milk Production

Week	2 yrs.	4 yrs.	6 yrs.
1	103.5	160.0	149.5
4	114.0	173.5	171.0
8	107.5	158.3	164.5
12	102.5	143.0	153.5
16	98.0	133.0	145.0
20	93.3	124.0	138.5
24	88.4	116.5	132.0
28	83.9	111.3	125.0
32	79.3	106.0	116.8
36	74.5	100.6	106.0
40	70.0	94.5	94.1
44	65.5	84.5	82.5
48	60.3	69.0	70.2
52	55.6	53.5	57.2

seven to nine. However, the latter period is not practical as she may not be as an efficient producer and also less than ten percent of the animals reach that age. Animal production cannot be expected to change by a simple numerical ratio illustrated by a straight line, but in a curve rapidly increasing from the first lactation, little change during middle age, and with a rather rapid decline in advanced age.

IN MAKING the correction for fat from forty-seven to fifty-two weeks, index numbers were used which were obtained from the Curve II, showing the trend of production through the lactation period. As a matter of interest, curves for the weekly production of milk were also computed. Many people have often wondered if

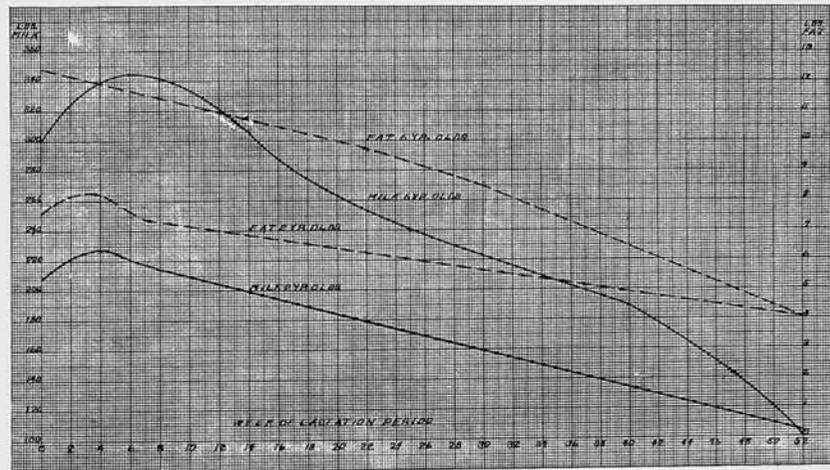
future production during a lactation period could be forecasted. The index numbers were used in an attempt to do this. On the milk production curve two hundred pounds of milk per week was taken as the base index number of one hundred, and every variation of two pounds in the production per week changed the index number by one unit, as: two hundred and two pounds per week would be represented by the index 101. With the index numbers in Table II an attempt can be made to forecast production.

An example of the use of Table II would be to forecast the production of a four-year old in the fortieth week of her lactation period if she was producing three hundred pounds in the tenth week of her lactation period. The index for the tenth week for a four-year old is 150.5 and for the fortieth week is 94.5. Then 94.5 divided by 150.5 times 300 pounds will give the approximate production

tage of fat which is relatively high at freshening drops quite markedly for a few weeks and then maintains an even rate throughout the lactation period until about the fortieth week when it starts an upward trend reaching about the same level at which it started. Holstein cows may be expected to give a half of a percent richer milk at the beginning and at the end of the lactation period than they do during the major part. As the amount of fat produced by two-year olds varies more or less directly with the milk produced, they are more subject to forcing than six-year olds which have quite a variation in milk flow without any considerable change in the amount of fat produced. These curves further indicate that although the production for different ages begin at different levels they all end at relatively the same place.

In a study of this nature no attempt was made to deduct any arbi-

Curve II



in the fortieth week which would be 188 pounds. In actual practice this is of little value for a single individual, but considering ten or fifteen animals the error is small.

BESIDES the index numbers derived from Curve II, one may also find other interesting facts. The percen-

try conclusions since they necessitate cooperative work of trained geneticists, statisticians, and animal husbandmen. This is only an investigation of the three problems stated in the second paragraph. A detailed study of the curves and tables will throw considerable light on each of these questions.





Through Our Wide Windows



The Cornell Countryman

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Incorporated 1914

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Ithaca, New York

May, 1926

THE Barnyard Ball was a success. Everyone got behind it in a splendid fashion and helped to put the affair across. The committee is to be congratulated on the arrangements made. Why not continue the dance as an annual institution? A group of Juniors and underclassmen appointed by the present committee or the President of the Ag Association would eliminate the inertia of the students' willingness to start the Ag spirit rolling next fall.

THEODORE ROOSEVELT said, "Our civilization rests at the bottom on the wholesomeness, the attractiveness, and the completeness, as well as the prosperity, of life in the country." That the farm and country homes produce some of our best citizens is an established fact. That they are playing a big part in the training of foster children for good citizenship is probably not so well known. Recently we came into contact with an organization, the State Charities Aid Association of New York City, which is devoting considerable effort in

this work of placing homeless children in farm and country homes. We have had some experience in both city and rural homes and can appreciate the advantages of the latter. What better service could a good many farmers render than by taking a youngster into their home for the summer, if not longer, and opening his eyes to nature—the greatest teacher and trainer of all?

THE senior Ag societies have cooperated with the COUNTRYMAN in furnishing an insignia in the form of a plow which is worn on the pocket of the senior blazer. Foresters, botanists, plant path seniors as well as an hus men wear them not because they all will earn their living with the plow but because they are in the *Ag College*—and are proud of it.

FORTUNATE is the farmer who has had foresight enough to adhere to a sane policy of raising sufficient replacement stock for his herds and flocks. The horse and cattle cycle is on the upward trend. Sound young teams are scarce in the east while the supply of dairy heifers has decreased markedly. Extracts from *Farm Economics*, No. 31, of the College of Agriculture, are pertinent to the question. "From 1920 to 1925, the number of dairy cows in the United States decreased 10 per cent—dairy heifers decreased 19 percent in 5 years. The number was too large, but is now too small to maintain the present number of dairy cows.—Apparently there will be a shortage of dairy cows until dairy calves not yet born become cows. This indicates a shortage for 2 to 4 years." In relation to the horse situation we quote also. "The farmer who is so situated that he can raise horses to advantage should keep good mares and apparently might moderately increase his breeding. Most farmers in New York state find it more profitable to buy horses than to raise them. Such persons will doubtless find it profitable to dispose of old animals and obtain young ones while they are cheap."

The farmer who has endeavored to have surplus stock for sale at the peak of price cycles usually finds himself near the bottom of the financial heap over a long series of years. A uniform policy of livestock replacement by the individual farmer will help to iron out the great creases in the livestock price cycles.



Former Student Notes

'68

G. Willard Platt, a member of the pioneer class which graduated from the University in the year of its foundation, has written to the College of Agriculture requesting that several bulletins be forwarded to him. Fifty-eight years after graduation, Mr. Platt finds that his Alma Mater can still be of service. He is living in Red Hook, N. Y., and desired bulletins upon gardening and general farming.

'12

Mrs. Jean Kane Foulke, who is farming on the Bala Farm, R. D. 6, West Chester, Pa., has dropped the name Browne and it was incorrectly used in our March issue.

'13

W. C. Stokoe finds considerable to do in his work as Farm Bureau agent of Livingston Co. He has recently been taking samples of soil to find the sections best suited for growing alfalfa.

Norman Steve is in the coal business in East Rochester. Norm is doing pretty well, as is shown by his recent outlay for a dandy new automobile.

'14

Lew Harvey is farming and teaching school at Marathon in the Texas Valley community.

Carl W. Strauss has moved from Longmont, Colorado, to Malvern, Arkansas, where he is forester for the Malvern Lumber Company. The concern was started in 1880 by his father and manufactures yellow pine and hardwood lumber. It has its own timber land of about 45,000 acres in the central part of Arkansas, near the Ozark Mountains.

'15

James B. Clark opened a retail flower shop at 125 South Fair Oaks Avenue, Pasadena, California, last

LET'S HAVE THEM, BOYS

We wish to thank the following for the Former Student Notes that they sent us during the past month: R. J. Clark '22 of Westport, R. H. Hewitt '13 of Elmira, H. C. Morse '15 of Gloversville, W. C. Stokoe '12 of Mt. Morris, and D. D. Ward '12 of Syracuse.

We hope this is a hint to other alumni. We and your classmates surely would appreciate notes about you and your Cornell friends.

year. He is still busy as a florist and nurseryman, specializing in chrysanthemums.

'16

Mr. and Mrs. C. W. Carrick announce the birth of a daughter, Grace Ann, on April 4, 1926. The new arrival weighed eight and one-half pounds.

On April 17, Revere J. Moore was married to Miss Margaret Cruikshank of Scarsdale, New York. Moore is connected with the Standard Oil Company of Shanghai, China, and he and his bride will sail for there soon.

Mr. and Mrs. F. Grant Schleicher announce the birth of a daughter, Ruth Carolyn. The exact date is not known but the news was contained in a letter received last March. They live at 42-40 S. 160th Street, Flushing, Long Island.

'17

Mr. and Mrs. John E. Houck (Ruth H. Smith '16) announce the birth of a son. With "Jack" Jr. now six and Ruth aged four and a half, he makes the third youngster in the family. Their address is R. D. No. 1, Chipewawa, Ontario, Canada.

Robert Bentley Stevens died Mar. 13, 1926, in Cleveland, Ohio, follow-

ing a brief illness of scarlet fever. Mr. Stevens was born in Ithaca. During the war he was a member of the U. S. Navy, enlisting Dec. 7, 1917. He was employed in newspaper work on the Ithaca Daily Journal and the Ithaca Daily News, on the Syracuse Post Standard, Syracuse American, and the Cleveland Plain Dealer. He was assistant sports editor on the latter, a position he took six months ago.

A. W. Gibson, our Alumni editor, has been in the University Infirmary since March 31 on which day he underwent an operation for appendicitis. He had a setback about the middle of April in the form of an attack of pleurisy, but is much better now and we hope to see him around the campus again soon.

'18

P. A. Hopkins is farming with his father, where they produce certified milk. His address is Pittsford, N. Y.

A son, Joseph Brackin, was born to Mr. and Mrs. J. B. Kirkland, April 5, 1926. Mr. Kirkland, an instructor in the extension department, and Mrs. Kirkland, formerly Eleanor Miller George '21, are living on the Ellis Hollow Road, Ithaca, N. Y.

Mark Owens, who has been with the Standard Oil Company in Japan for the past seven years, returned to Cornell for a visit to the forestry department about the middle of April. He confided to Professor Guise that he had been married on January 30 to Miss Gertrude May Adams. Mr. and Mrs. Owens will be at home to their friends at Soto Hama, Moji, Japan.

Mr. and Mrs. George H. Russell (Miss Gretel Schenck '23) announce the birth of a daughter on April 13, at the City Hospital. They live at 122 Roberts Place, Ithaca, N. Y.

Bryam C. Tiffany, who was working for the federal and state inspec-



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tion service until about a year and a half ago, is now working with the Merchants Dispatch Transportation Service on the New York Central.

'20

Harold A. DuBois is at Forrest Glen, where he is concentrating on poultry, specifically White Leghorns and Rhode Island Reds. He also keeps purebred Holsteins.

J. G. Gee has accepted the responsibilities of a professorship at the University of Florida. As an added responsibility he and Mrs. Gee recently announced the arrival of a son, Thomas Gibbs, who had an eight pound start in life.

Kurt Mayer is now in charge of the bond department of the Jesup and LaMont Company of 26 Broadway,

New York. He assumed his new duties about the first of February.

'21

Alfred "Al" Herzig is now with the Pacific Lumber Co. His address is Scotia, California.

Richard B. Mihalko, who has been doing shipping point inspection work under the United States and State Departments of Farms and Markets since last October, became assistant county agent in Orleans County on April 1. "Dick" up to last fall was working a dairy farm in partnership with his brother at Hobart, N. Y. We learn indirectly that "Dick" expects to be married soon to Miss Violet Tripp '21 of Glen Falls, N. Y.

'22

Jack F. Herriott and Mrs. Herriott (Stella Fall '22) announce the birth of a son, John Nathan, on April 10. Herriott is an instructor in the farm management department.

Henry Shultheis, of College Point Long Island, was married March 20, 1926, at the First Presbyterian Church at Ithaca, to Miss Ruth Turner of this city. The new couple are now residing in Ithaca, where the groom is a landscape architect with Bryant Fleming Co. of Ithaca.

Louis A. Zehner, editor of the COUNTRYMAN in 1921-22 is assistant county agent for Onondaga County. His headquarters is 415 Glenwood Avenue, Syracuse, N. Y.

L. C. "Jim" Hurd of Holley has been touring the country looking for a quiet place to visit on his honeymoon. He has been visiting C. D. "Charlie" Richman '25 in St. Petersburg, Florida, for several weeks, having his last real vacation, for "Jim" is soon to take unto himself a wife. Her name is Miss Elizabeth Brent, and she comes from Festus, Missouri. Anyone indorsed by "L. C.", we'll guarantee sight unseen.

'23

Hortense Black is teaching Home Economics in the High School at Wayland, N. Y.

George J. Durkee recently returned by steamer from an extensive trip to San Francisco, and he has settled down to running a general farm near Avon, N. Y.

Mrs. Edith Geneva Partridge of Ithaca, and Raymond A. Newell, of Oxford, were married in Waverly, February 27, 1926. Mr. Newell took

a 1925-26 Winter course at Cornell. The couple are residing in Ithaca.

W. C. Wilcox is living at Barton, N. Y., where he has been in partnership with his father on their 140-acre dairy farm. After the '23 winter course he worked for 7 months under Prof. H. W. Riley in the Rural Engineering department, and after '24 winter course he worked on a muck farm.

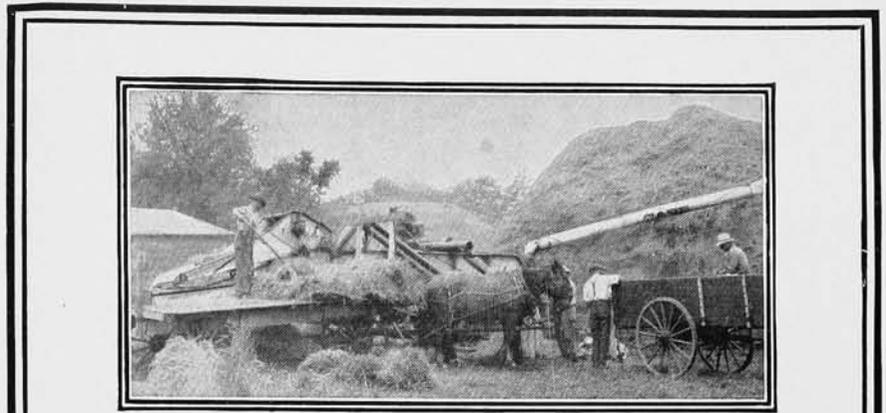
Arthur J. Powers was married August 15 to Miss Margaret Breed of Washingtonville, N. Y. The ceremony was performed at Storm King Arms, Cornwall, N. Y. The couple are now living at 546 Eighty-first Street, Brooklyn, N. Y., where Art is in charge of the Brooklyn laboratory of the Borden Farm Products Company, Inc.

Through Phillip Wakeley a little news has come from J. A. Groenewald. While it is not possible to do more than give a few abstracts from the material sent us, it is of interest to know that he is busily engaged with the Forest Service of British South Africa. His headquarters are at Pietersburg, South Africa, a moderate sized city which is located between the two forest districts that Groenewald helps to control. Having a Ford to run around in, he manages to keep close touch on all of the management operations in his district. Apparently he is very happy and making decided progress in his work. The following postscript to his letter is extremely interesting.

"I meant to tell you how plentiful game is here—recently some fellows shot, near our northern plantation, three large lions inside of 15 minutes, from a Ford car. Grass is very rank and comes up to my shoulder when on horseback, so there is an element of excitement in surveying here when you connect the tall grass with the numerous lions, to say nothing of snakes."

'24

David S. Cook is Organizing Director of the Journalist's Division of the College Men's Tour for 1926. To quote from his bulletin, "This tour offers an unusual opportunity for practice in special writing in rich fields where the choicest subjects assist the journalist's pen." In other words, it is a tour through Europe arranged for writers who would turn the trip into money by writing about it. The whole trip will cover seventy-four days beginning June 19, and returning to New York, August 31.



Thirty Profits, or—

The man who said, "Opportunity knocks once at every man's door," forgot farmers. Opportunity knocks at every farmer's door thirty times—once at each harvest for thirty years, the average working life.

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*See U. S. D. A. Bulletin No. 1348.

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Stanley B. Harris is a general farmer and dairyman in business with C. C. Beers of Glens Falls, N. Y. His address is R. F. D. No. 1, Glens Falls, N. Y.

"Lois" Douque has been having quite a vacation we would say. After spending a couple of weeks at Havana, Cuba, she progressed northward, and visited friends at Key West, Miami, and St. Augustine, Florida. From there she stopped at

Washington and Baltimore on her return home. She is now home bureau agent in Steuben County. "Loie" was Women's Editor of the COUNTRYMAN during 1923-24.

Arlene Haynes is teaching at Smithfield Flats, N. Y. Mail will reach her at that address.

J. E. Knott, now instructor in vegetable gardening at Cornell has accepted the position of assistant pro-

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fessor of horticulture at Penn State. He assumed his new duties about April 1.

William McMillan is assistant sales manager of the G. L. F. in Ithaca.

A recent letter from W. B. MacMillan states that he is teaching logging and lumbering, also helping in mensuration and research at the Department of Forestry of the Pennsylvania State College. He states that

he is still single but apparently from the tone of his letter is not averse to making a change.

Florence Opie "Opie" is spending the winter in Florida.

Mr. and Mrs. Lyman A. Page of Greene, N. Y., now have a three months' old daughter, Cornelia, to help occupy their time. They became her proud parents on November 2, 1925.

R. E. "Bob" Wendt is back in Ithaca, and has registered in the Law School for the regular course in that college.

Charles N. Abbey, due to his efficient work as assistant county agent in Orleans County, has been selected as Farm Bureau manager for Cattaraugus County with headquarters at Salamanca. "Chuck" did special work with crops and poultry in Orleans County. He assumed his new position the middle of April.

Sadye F. Adelson is a health and nutrition worker for the Community Health Center of Philadelphia, Pa. She lives at 2002 Spruce Street.

P. T. Dix Arnold is with the Palmer Corporation of Chicago in charge of its experimental farm near Sarasota, Florida. His mail address is Box 212 H, Route No. 1, Sarasota.

Richard Smith Baker of Ithaca, was married on March 27, 1926, to Miss Delphine Charles of Warsaw, N. Y. The wedding took place at the home of the bride.

Alfred A. Doppel is now extension forester for the State of Connecticut. His headquarters is the Storrs Agricultural Experiment Station, Storrs, Conn.

Lyman A. Page is in charge of the commission seed department of the Page Seed Company at Green, N. Y.

Edward Willim, Jr., is engaged in junior project work in New Castle County, Delaware, with headquarters at the University of Delaware, in Newark. He was married on January 27 last to Miss Christine E. Kirby of Smyrna, Delaware.

'25

Lloyd Bump is at present with the Cuba, New York, Cheese factory. He was formerly located in Abbots, New York, where he did similar work. Lloyd was recently married to Miss Cole of Rushford, and the new couple are staying with the bride's father, Harry Cole, while preparing their new home in Cuba.

Anna Helen Dickson is living at home this year. Her address is Bovina Center, New York.

A. A. Doppel, who took his Master's degree last fall, was recently appointed Extension Forester for the State of Connecticut. Doppel started upon his new work in January of this year after spending most of the fall and early winter in the Catskill

Mountains. His address will be Storrs Agricultural Experiment Station, Storrs, Conn.

W. E. Dunham, who did graduate work here last term, is now teaching the courses in bee-keeping in the department of zoology and entomology at the Ohio State University, Columbus, Ohio.

Charlotte Hopkins ("Hopie") has the position of head dietitian in Grant Hospital, Columbus, Ohio. Formerly she was administrative Dietitian in Jones Hospital, Boston, Mass.

A. L. MacKinney accepted an appointment as field assistant at the Southern Forest Experiment Station, effective February 15 of this year. MacKinney has been with Mr. Dana at the Northeastern Forest Experiment Station at Amherst since last June.

J. T. McNair is now married and is operating his father's farm at Dansville, N. Y.

J. Alex Munro, who had been doing graduate work here, has gone to the North Dakota Agricultural College at Fargo, where he is teaching entomology and apiculture.

Charles "Chuck" Newton is teaching in South Byron, New York.

Alice Parker is teaching at Westminster, Maryland.

Hoke S. Palmer was one of the speakers at the conference of poultry extension specialists at Washington, D. C., which was held from March 3 to 6 inclusive. Hoke's talk on *The Future of Culling* was straight from the shoulder and brought forth a fine response from the delegates. He is now poultry extension specialist at the University of Delaware.

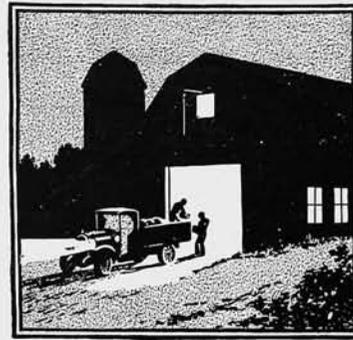
Hardick Smith holds a position in the Electrical Testing Laboratory, New York City.

A. K. "Al" Strong has given up his position as salesman for the Purina Mills to take a job in Hartford, Connecticut, with the Ford Sales Agency in that city. "Al" is pretty familiar with Henry Ford's "crates of bolts."

Ross H. Baisden is studying for an M.S. degree at the school of business, Columbia University. He is busy at night as mail and information clerk at the Hotel Pennsylvania. His home address is 1105 Amsterdam Avenue, New York.

David F. Davis, Jr., captain of the

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baseball team last year, was married on January 4, at Binghamton, N. Y., to Miss Dorothy E. Lacey, daughter of Mr. and Mrs. Winfield W. Lacey of that city. They spent their honeymoon visiting France.

William J. Garypie is employed by the Everett B. Clark Seed Company of Milford, Conn., and is stationed at its branch production house at Greeley, Colorado. He is engaged in

experimental work with seed beans. His address in Greeley is 810 Twelfth Street.

H. P. Howell has been with the Princeton Nurseries at Kingston, N. J., and is selling ornamental nursery stock. He recently announced his engagement.

Anne E. Barrett is a dietitian at the Memorial Hospital in Morristown, New Jersey.

Mrs. Ellis R. Lake ever since March 28 of last year. Her home is at 510 South Avenue, Syracuse.

Raymond Newell, one of this year's winter poultry course students, not only absorbed a considerable amount of information from various members of the poultry department, but he also took as his wife the poultry librarian, formerly Mrs. E. G. Partridge. Fortunately for the library, she has consented to remain in charge for a time, while Ray is working on the poultry farm of Professor W. I. Myers at Estes.

Gladys Watts was married on February 22 to Ernest Frane. The couple is now living at 294 Alexander Street, Rochester.

Miss Marjorie D. Van Ordor, has announced her engagement to Lester C. Kienzele, a 1925 Union graduate.

R. T. "Tommy" Termohlen is working for the Loudon Co. in the barn construction department. He is located in Albany.

'27

F. N. "Nate" Dean, who transferred to Ohio University last fall, was in town the week-end of March twenty-seventh. "Nate" is all enthused about the cornfed maidens of the Buckeye State.

A. H. "Shorty" Delong is away, 'way up in the frozen North near Hudson Falls, where he has purchased a dairy, and is running his own milk route in Glen Falls. "Shorty" always did seem like an enterprising young business man.

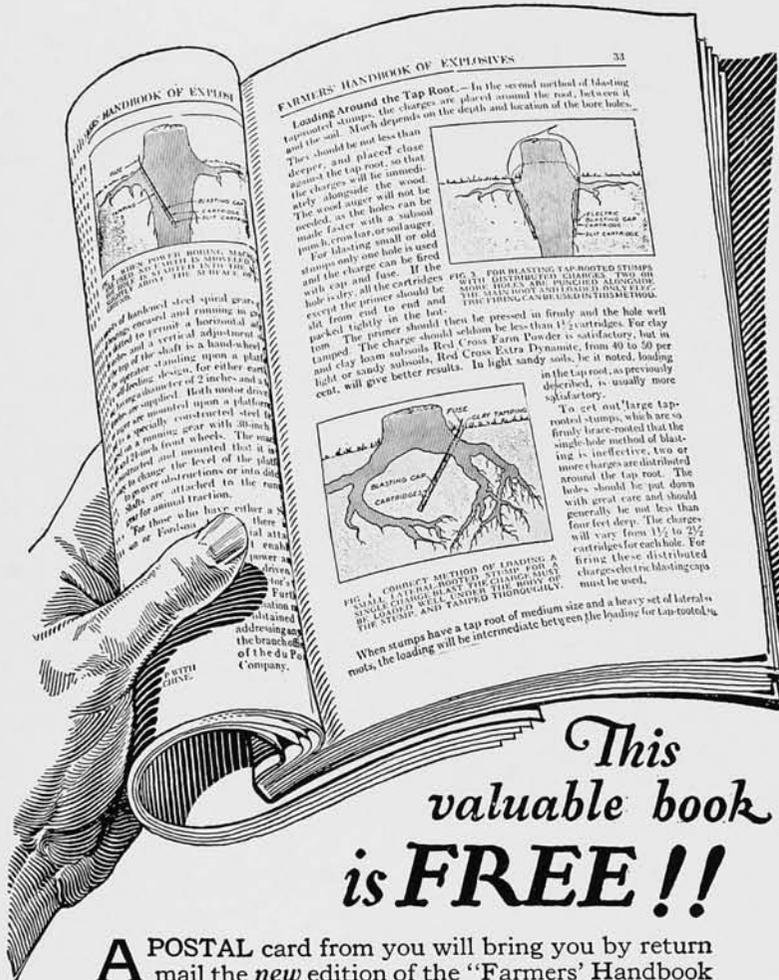
'28

J. H. "Jim" Walkley has taken leave of absence until February, 1927, to do a little sheepherding with his brother.

COOPERATIVE HEN COLLERS TAKE BIRDS AT \$0.0695 COST

Professor H. E. Botsford says that thirty-six farm bureaus in New York state cooperated with the State College of Agriculture during the summer of 1925 in the employment of persons to cull poultry.

The persons recommended for this work by the poultry department are those who have successfully completed the work at the Cornell Judging School and who, in addition, have enough experience and judgment to cull flocks of hens with success. Paid culling is a service supplied by the farm bureau and the State College at cost, and enables the poultry keeper



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E. I. DU PONT DE NEMOURS & CO., Inc. Equitable Building, New York, N. Y.



Jack Crandall blew back for the Barnyard Ball along with the Isle o' Blues orchestra. He is managing the Colgate Inn at Colgate and would be glad to see grads and undergrads who happen by that way.

F. M. Porch was appointed last February as sales representative in Indiana, Ohio, and Kentucky, for the American Creosoting Company. Porch is living at the Y. M. C. A., Louisville, Ky.

Louise Stanton attended the National Association for vocational education at Cleveland, in February. She is now teaching home economics at Linesville, Pa.

Clayton Whipple is an athletic coach and instructor of agriculture at the Marion High School, Marion, N. Y. Mail will reach him by addressing P. O. Box 284, Marion, N. Y.

'26

Dorothy Louis has been known as

to have his flock culled at a minimum expense of time and money. The farm bureau hires a man for the work based on the number of individual applications received from poultrymen of the county.

During July, August, and September, 1925, the paid cullers handled 234,650 birds, an average of 6,518 to the county. The number culled out was 62,417, or 26.6 per cent of the birds handled. This is at the rate of 1,734 a county. The cost is based on a certain rate, such as one and one-half cents or two cents a bird handled. From this charge the wages and expenses of the culler are paid. The total cost to the cooperators in 1925 was \$4,231.39 in 35 counties, or an average of \$120.90 a county. Dividing this cost among the birds actually culled out of the flock, it shows a cost for each cull removed of .0695.

**VEGETABLE GARDENING PROF
DISCUSSES TOMATO GROWING**

**Crop Usually Pays for Fertilizer Up
to 1,600 Lbs. Per Acre**

Assistant Professor F. O. Underwood of the vegetable gardening department says that the tomato requires a long season to mature a full crop so that anything a grower can do to hasten the maturity of the crop means a larger yield. The kind and amount of fertilizer used play an important part in producing maximum yields, although the value of using well-grown plants, getting them set out at the proper time, as well as soil and weather conditions, may not be neglected.

The majority of growers in the state now use some fertilizer and this is essential to the best results. The kind and amount used to the acre varies according to section where grown.

Where a grower is applying manure liberally (twelve to twenty tons to the acre) either to the tomato crop or on the preceding crop in the rotation, there is evidence that the nitrogen and potash supply of the crop is probably satisfied. Additional phosphorus usually pays, as manure is known to be normally deficient in this element. Phosphorus tends to increase fruit and seed parts of plants which probably accounts for increased yields and early maturity of the tomatoes, which usually follows where such material is used. Acid phosphate is the best source to use and if applied at the rate of 500 to 1,000 pounds per acre, supplementing the manure, good yields will be secured at a minimum expense.

When They Go On Grass? —What Then?



Grass Alone Won't Make Milk

Very soon your cows will go to fresh pasture. They like it and it stimulates them. It is good as far it goes, but they cannot eat enough to maintain their condition and their full flow of milk on grass alone.

In 100 pounds of average pasture grass there is 3.7 pounds of digestible protein, but only 15.9 pounds of total digestible feed. That is not enough. Your cows would have to eat 170 to 190 pounds of grass a day. They cannot graze or hold 100 pounds.

The Voice of Authority

By Prof. W. J. Fraser, Illinois Experiment Station: "It would require 30 acres of pasture to support an ordinary cow. To graze this area she would have to travel 30 miles a day and have a muzzle two feet wide."

By Prof. Hooper, Kentucky Experiment Station: "I clipped 100 pounds of bluegrass and it filled three gunny sacks." A cow cannot hold this much grass.

Your cows will go right on making milk, but they will not make it all out of grass. They will draw protein, fat and mineral matter from their own bodies to fill the milk pail. They will get poor, exhaust themselves, become unprofitable and go dry weeks or months before they should.

Give your cows a balanced grain mixture with their grass. Feed three to eight pounds daily per cow according to yield. Grass is laxative, therefore you should avoid laxative concentrates. The following ration is one of the best you can feed:

Corn Gluten Feed 300 pounds; ground corn 300 pounds; ground oats 200 pounds; wheat bran 200 pounds. Start this ration when cows go to pasture and they will go through the summer and into the fall—in fine condition and full production.

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"The Gospel of Good Feeding" is a brand new book of 64 pages. It gives you the newest ideas on feeding. It will help you to make more money—day in and day out—summer and winter. It contains 28 rations for dairy cows, steers, hogs, sheep and poultry.

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Feed Research Department
Hugh G. Van Pelt, Director
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No. 38



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COPPER STEEL**



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Transporting, processing and manufacturing this raw material adds much more to its value.

The dairy products industry is highly technical. Agricultural colleges contribute to its personnel much of the technically trained supervision. Many '26 graduates will enter this field. We wish them all success.

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To supply the demand for *CP* products there are fourteen *CP* factories. Sixteen sales branches render service everywhere in the U. S. A.

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 - 2—OLD FASHIONED FAVORITES—DELPHINIUMS, FOX GLOVES, C. BELLS, LILY OF VALLEY, DOUBLE HOLLYHOCKS, HEPTACAS, and all the old-time garden BORDER FAVORITES, were any 12, Now Special, any 15 for \$1.00 or 100 for \$5.00. Order any you want—we have them.
 - 3—BIG GERANIUMS, all colors, 12 for \$1.50; BIG CANNAS, all colors, 12 for \$1.50.
 - 4—FANCY DAHLIAS—12 for \$1.00; GOLD MEDAL GLADIOLI 100 for \$4.00.
 - 5—SPLENDID 3 year old H. T. ROSES such as COLUMBIA, OPHELIA and 40 others—12 for \$6.00; 100 for \$45.00.
 - 6—L. I. VEGETABLE PLANTS—100 for \$1.50; 1,000 for \$10, assorted. Cabbage, Lettuce, Egg, Tomato, Celery, etc.
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**LAST CHANCE TO OBTAIN
CORNELL PEDIGREED CHIX**

**Breed Improvement Project Puts
Limit on Chicks Sold to a Breeder**

The poultry department of the State College of Agriculture announces that any breeders wishing to get chicks from their high line pedigreed stock should order them immediately as the supply is beginning to run short. A few more orders can be taken for the May 12 hatch and some for May 19 and 26.

The prices at which the College is releasing these chicks are:

15 Chicks	\$8.00
25 "	13.00
50 "	25.00
100 "	45.00

The eggs used for hatching are carefully selected; being white, two ounces or more in weight, and of proper shape and strong shell texture. This is one of the poultry department's breed improvement projects and it therefore limits the number of chicks sold to any one breeder.

The Farm Shop at Cornell

(Continued from page 239)

In the shop courses it is aimed to teach how to do the ordinary con-

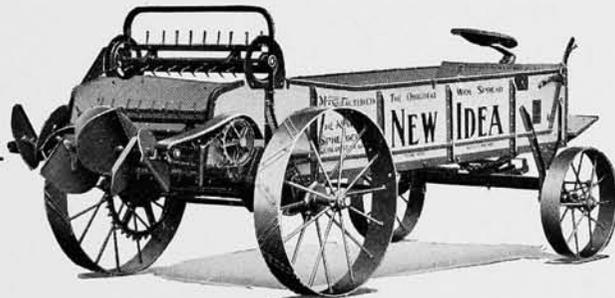
struction and repair work which arises on the farms of New York state with such tools as farmers can profitably own.

The Old Order Changeth in Vegetable Production

(Continued from page 238)

functioned chiefly in holding an annual meeting which has been an important clearing house for a representative group of growers, chiefly northern and eastern, but under the present program the building of a compact national body has been begun through the affiliation of state and local associations. There are now eight live state vegetable growers' associations of which New York's is the oldest and perhaps the most active. It in turn is formed by the federation of twelve local groups. Horticultural societies in some states lend mild service to the vegetable interests, but the tendency is toward the formation of independent bodies.

In summary, it is clear that the vegetable industry is highly plastic. Conditions of production and selling are fast changing and both the growers and their servants are freely adjusting themselves to new circumstances, more from the sheer necessities of the struggle for existence than for any other reason.



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Dairy products of any kind are easily harmed by bad odors. To protect their quality and worth washed dairy surfaces should be odorless.



not only leaves all washed surfaces odorless but it also sweetens stale places—thus leaving Wyandotte cleaned areas in a sweet smelling, sanitary condition.

Furthermore, the ease, the quickness, and the economy with which this sweet smelling Wyandotte cleanliness can be secured results in profit for users of this effective dairy cleaner.

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GLOBE-WERNICKE filing cabinets are both flexible and durable. A stock cabinet in both steel and wood for every possible requirement.

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That's always in our mind at this store. We know that people like to see a business prosper that considers the customer's return.

If we can get that idea over to you, and if you find that this is that kind of a store, we'll never have to be anxious about our success in it.

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HABERDASHERS

CLOTHIERS

HATTERS

DOMECON BOYS TO OPEN "HOTEL EZRA CORNELL"

Elaborate Program Is Planned for
Affair on May 7 and 8

Hotel managers will spring into the limelight on May 7 and 8 when, according to a word from the third floor of domecon, they will stage a formal "hotel opening," when one of the buildings on the campus will become a temporary "Hotel Ezra Cornell." The building to be surprised in this way will be converted from its present use into a regular hotel with kitchens, pantries, engine room, lobbies, dining room, a ball room, and bedrooms.

The students in the course of hotel administration have planned this event because of their feeling that they should come into closer contact with men actually in the hotel game. Invitations to the opening have been sent to hotel men throughout the state, and to the parents and friends of the students. Arrangements have been made for special transportation from New York, as well as from Albany and intermediate points.

On Friday, May 7, visitors will be entertained by inspection tours around the University, including visits to the classes and labs used by the hotel students. Friday evening is set aside for a formal banquet and dance. The music for the evening has been obtained through the courtesy of the Hotel Roosevelt in New York City, which has arranged for the presence of Ben Bernie and his orchestra.

Saturday morning there will be more inspection trips, while the Navy lacrosse game, the Dartmouth baseball game, and the dual Yale track meet will be extra drawing cards on that afternoon.

All the work in connection with rearranging the building and carrying out the opening, even to the purchasing and cooking of the food for the Friday night banquet, will be done by the students themselves.

SCIENTISTS TO CONVENE HERE DURING SUMMER

In view of the plans of local botanists and plant scientists the usual quiet period that follows summer school will not be in evidence this year. The campus is to be the scene of the Fourth International Congress of Plant Sciences, which will bring prominent scientists from all parts of the world to Ithaca during the week of August 16 to 23.

Plans for the convention are rapidly taking form, the program is ready for the press, and a great deal of interest is being shown in the Congress, which is to offer the first opportunity ever arranged in the United States for a conference of all those engaged professionally in plant work.

The congress will be divided into

about a dozen sections, each of which will hold four invitational morning programs, which will occupy a little more than one-fourth of the available program time. Nine of the sections thus far authorized are in charge of local ag college professors, who are acting as secretaries of these sections.

The president and presiding chairman for the Congress is former Dean Liberty Hyde Bailey. Chairmen of the various sections are to be chosen from among the visitors from foreign countries.

In addition to the formal sectional programs there will be ample provision for informal round table discussions, non commercial exhibits, excursions to neighboring regions, and inspection tours.

General inquiries concerning the Congress should be addressed to B. M. Duggar, Missouri Botanical Garden, St. Louis, Mo.

CORRESPONDENCE COURSES BECOMING VERY POPULAR

Over a hundred persons are enrolled in the correspondence courses in farm management, prices and cooperative marketing, according to word from the ag ec department.

The ages of those enrolled varies from 16 to 55, including farmers of mature years, and their sons who have yet to attain their majority.

Records show that approximately 80 percent of those enrolled are over the age of thirty. Some of those registered have had college courses, while some others have never had any schooling since leaving the fifth grade.

NEW SCHEME IS DEvised TO HELP JUDGE ACTING

A new score card that has recently been devised by the rural social organization department for the judging of dramatic work will be used in the selection of winning groups of rural actors in an inter-county contest that will be decided at Cazenovia on May 7.

In this contest the groups that compete will be those that have been selected after trials in their respective counties. The work in the individual counties is under the supervision of the home demonstration agents, who are working with the aid of local judges. It is expected that the new score card will greatly simplify the task of making accurate verdicts.

The two winners of the Cazenovia contest will be awarded prizes of theatrical equipment, the first prize being a make-up kit, and the second prize a set-up curtain. Professor A. M. Drummond of the department of public speaking in the College of Arts will be chairman of the judges who make the final selection.

HICK'S HOP A BIG SUCCESS AG SPIRIT MUCH EVIDENCED

Overalled Mob Does Haymow Prance
As Barnyard Zoo Looks On

Three hundred and fifty ticket buyers participated in the big "revelation" otherwise known as the Hick's Hop, held on April first in the old Armory, where "a good time was had by all."

In the center of the armory floor the members of the "Isle o' Blues" orchestra, dressed in the correct informal attire, established their headquarters, and dispensed melody for the dancing.

At one end of the ballroom a small delegation of honest-to-goodness chickens tried hard to view the festivities with equanimity. One white leghorn gentleman succeeded in developing quite a "Charleston crow" before the night was over.

Near the chicken coop was a pair of sheep that did not seem to be particularly perturbed by the antics of the dancers. After observing the party for a time, and condescendingly amusing all visitors the lambs quietly lay down to rest and ruminate.

Reg'lar good cider and the kind of doughnuts that "mother used to make" were eaten with avidity by the aggies and their guests. A rural effect was given by the corn shock decorations that concealed the natural landscape of the gym.

Singing, lecturing, and magical acts entertained the couples during intervals when the orchestra was inactive. The electrician in charge of lighting created frequent twilight effects, replacing the lunar orb with a spotlight that searched out the best dancers, and never succeeded in finding them.

Costumes were all of the overall type, although all sorts and varieties of out-of-the-ordinary garb were present, even to silk hats.

Genus equus figured in the evening's program when Spark Plug assumed the role of motivating influence for buggies and hayracks that seemed to be acceptable taxis.

EDITORS AND AGENTS MEET FOR ANNUAL CONFERENCE

Home demonstration agents, assistant agents, and county clothing leaders met at the College of Home Economics the week of April 12 for their annual spring conference. Among the speakers on the program were Dean Cornelius Betten, Dr. C. E. Ladd, director of the extension service, Miss Alice Blinn, formerly in charge of home economics publications and now research editor of the "Delineator," and Mrs. Maud Sperry Turner, better known as Celia Caroline Cole, editor of the Beauty Department of the same magazine.

AG ATHLETES ARE DOWNED IN BASKETBALL AND TRACK

Lack of Material Handicaps Crew Baseball Outlook Good

A review of Ag athletics for the college year reveals the fact that the indoor season has been a succession of Waterloos for the farmer representatives. After winding up a successful outdoor season last fall by defeating Law for the University soccer championship, Ag waded into intercollegiate basketball with a confidence that proved somewhat misplaced. The hoopsters pulled in with a fifth place in the league after winning three games and losing four. They rolled up 98 points to their opponent's 103.

Indoor track was another stumbling block. In the intercollegiate relay race held at the time of the Michigan-Cornell track meet on March 27, the Mechanical Engineers nosed out Agriculture for a first place after running a race that track fans say would have done justice to the varsity. This was a reversal of the outcome of last year's relay, when Ag captured first after making up a heavy handicap on the last lap.

With the reappearance of outdoor activities attention has switched to the intercollegiate rowing lineup. Hopes that the general stock of ag athletics were due for an immediate rise have been squelched somewhat by the lack of material. The outlook for baseball is somewhat better. If all goes as the ag fans hope it to, the ball nine and crew will donate two more cups to the collection in the "libe" case.

SPRING PRACTICE BEGINS FOR CATTLE JUDGING TEAM

Candidates for next fall's livestock judging team have started "spring practice" in the form of week-end trips to leading dairy farms in the state. Over 20 students are in the competition, several students having fallen in step with the members of the an hus 27 class in judging.

Two judging teams to represent Cornell at the Eastern States Exposition in Springfield, Massachusetts, next fall, will be selected from these individuals at the end of this term. As in previous years one team of three members will judge dairy cattle, while another of five members will judge general livestock. After the Springfield contest one team will be selected to judge at the National Dairy Show.

STUDENTS CUT CLASSES

Twenty odd students in floriculture gleefully cut classes the week before Easter in order to stretch the one week's vacation into two. They scattered to the four winds, going as far east as New York and as far west as Chicago, spending the week in retail flower shops, where they gained practical experience in handling pre-Easter trade.

20 YEARS AGO

(From the COUNTRYMAN, May, 1906)

Professor Wing's office is now directly under the Treasurer's office in Morrill Hall; Professor Pearson is on the first floor of Stimson Hall at the west end, in the old faculty room; Professor Rice has moved up to the Poultry Building.

The Agricultural Buildings have a large force at work on them. The manufacturing part of the Dairy building is nearly completed. The main building has the outer and inner walls carried above the first story.

Professor John Craig, who recently returned from a three weeks' trip in the South, has described his journey before the Lazy Club.

Work on the University Farm has commenced. The investigations concerning timothy will be continued.

PROFS PRANKS

Professor H. C. Thompson of veg gardening quietly slipped away recently and came back with a broad smile. It seems that he passed his language exams at Ohio State, where he is nearing a doctorate. According to the rest of the veg gardening force the professor is quite a linguist, but the Ohio people are hard-boiled, and they wanted to know.

Professor E. S. Savage of an hus left on April 14 for a several days' swing through Pennsylvania. He went first to "Philly," where he investigated the relationship of the Philadelphia milk market to the feed situation in that state. His itinerary included a two day visit at Penn State.

Professor Dwight Sanderson, who is spending his sabbatic leave in Europe, recently sent a number of books on rural and village life to the ag library. Those which have arrived deal primarily with conditions in France, but a number by German authors are expected in the near future.

Professor B. B. Robb of rural engineering radioed a speech on "How Electricity Can Make Farm Work Easier" from WGY, Schenectady, on April 21.

Professor L. H. MacDaniels became the proud father of a daughter, Carolyne Rudd, who graced the University community on April 9.

Professor L. A. Maynard of an hus, who is on sabbatic leave at Yale, returned to his campus haunts for Easter vacation.

ORPHAN SCHOOL IS HELPED BY LOCAL CAMPUS PEOPLE

Paul Yashin Returns After 15 Years, Taking American Methods

Ag campus influence is extending to a new quarter as the result of unofficial aid extended by a group of professors and students to the John Reed colony for orphan children in Russia.

Donations to the extent of over six hundred dollars are being invested in a set of machinery and equipment for use by the 100 orphans at the school. The Home Economics Club has given \$125 for supplies, many of which have already been shipped.

The school is to be under the directorship of Paul Yashin, who came to this country from Russia 15 years ago, and who sailed from New York on his return trip on April 21. While in America, Yashin devoted his time to studying American agriculture and in becoming proficient in modern farming practices. For the past seven years, Mr. Yashin has been at Cornell, where he has had most of his training.

Local friends of the project have concentrated on three objectives, namely, the buying of farm tools for the spring work on the farm, the equipping of the kitchen for the girls, and the sending of useful articles to the whole colony.

The orphans in the school are all children whose parents died in the great famine of 1921, and who now face the problem of self-support. It is hoped that the continued aid of their American friends, under the leadership of Mr. Yashin, will do much to improve conditions now existing in the colony.

SOFT-BALL BUG INFECTS PLANT PATH DEPARTMENT

The plant path department has recently become interested in a new pathogene, the "soft-ball bug," which has infected members of that department as well as the department of farm management. The effects of the infection were first evidenced on April 14, when the members of the two departments assembled in the ag quadrangle where they indulged in a game of soft ball in which the farm management staff took the inside track from the start, triumphing over their opponents by a score of 9 to 2.

SAVAGE JUDGES

A slight admonition for campus livestock enthusiasts accompanied Professor E. S. Savage's mention of a Cobleskill agricultural livestock show held during April. Professor Savage, who spoke on *Spring and Summer Feeding*, and later judged the fitting contest, says that the students at Cobleskill had their animals cleaner and in better shape than the local an hus men had their animals that were shown during Farmers' Week. However, Professor Savage concedes, the animals were not as well shown at Cobleskill as at Cornell.



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of
Recreation**

A man's clothes are, perhaps, under closer observation than he may at first think, but you can take absolute pride in your clothes if we make them. Custom tailored to your measure.

I. V. DELL
Merchant Tailor

213 Dryden Road

Ithaca, N. Y.

**Notice How Many Cornell Men
Wear Baxter Clothing**

Of course, all Cornell men do not wear Baxter's Clothing but it is a fact that a large percentage do. There is a reason for such popularity and that reason is that Baxter's Clothing, Tailored in the College Shops at Fashion Park is meeting the requirements of the best dressed College men of today—Correct Style—Good Tailoring and the finest of Imported and Domestic Woolens.

Our better clothes are
TAILORED AT FASHION PARK

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FASHION PARK CLOTHIERS



*We are Representatives in Ithaca for
Whitehouse and
Hardy Shoes*

FORESTERS HEAR GREELEY TALK AT SPECIAL MEETING

President Farrand Speaks to Club on Forestry Problems

The Forestry Club held a special meeting on March 25 for the purpose of giving all foresters a chance to hear Colonel William B. Greeley, head of the United States Forest Service.

Colonel Greeley talked on the development of the Forest Service since its beginning over twenty years ago. He told how public opinion had changed in the last few years with regard to the use of National Forests. Formerly these forests were considered preserves set aside for future use, while now they are looked upon as supplies to be used carefully and conservatively.

In the course of his talk Colonel Greeley told of the opportunities for trained foresters in the Forest Service, as well as in private enterprises.

President Farrand supplemented Colonel Greeley's talk with an interesting discussion. Several of the professors of the department were at the meeting, which adjourned after the cocoa and cake had been served.

PRACTICAL BULLETIN ISSUED BY COLLEGE ON SOIL SURVEY

The first practical bulletin of the soil survey type to be issued by the college has just come off the press, bearing the number E 121. This bulletin, written by F. B. Howe, soil surveyor of the college, is a sequel to the technical soil survey bulletin of Tompkins County recently compiled by Mr. Howe and H. O. Buckman, professor of agronomy, with H. G. Lewis of the Federal Soil Survey. The bulletin, which contains over 60 pages, is packed with information regarding the needs of the soil of Tompkins County, together with recommendations for the solution of definite farm problems concerning crop rotations, fertilization, liming, etc. It is the first of a series of such bulletins that will deal with various counties in the State.

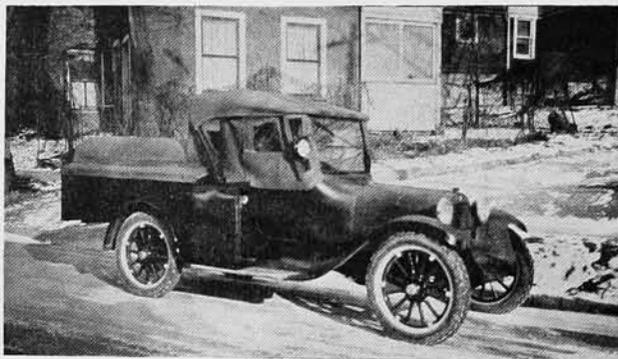
SAVAGE IS RE-ELECTED

At the third annual meeting of the College Feed Conference Board, held in New York City on Feb. 26-27, Professor E. S. Savage of an hus was re-elected secretary of the organization. This board is composed of feed experts from thirteen east Atlantic and seaboard states. The object of the board, as stated by Professor Savage, is to suggest and approve open formulas for farm feeds.

Ten graduate students in advanced farm management sacrificed their Easter vacations to the cause of science, and under the supervision of Professor E. G. Misner of ag ec, they spent the week in Chenango county

where they were busy obtaining dairy farm management records bearing on the cost of milk production.

This is the fifth year since the first trip of the kind was taken. The results of the first year's research are published in Cornell bulletin 451, and the results for the second and third trips have been accepted for publication and, according to Professor Misner, will be out soon. The surveys are made in cooperation with the United States Department of Agriculture.



TOO MUCH IS ENOUGH

Most people can't squeeze blood out of a stone because most stones don't have blood. Following the same line of logic it is easy to arrive at the conclusion that most people don't work 35 days in one month simply because most months don't include 35 days.

But in spite of this seeming obstacle "Bert" Jennings of rural engineering, has accomplished the feat of working 35 days in a 31-day month, and has backed up his claim to that effect with convincing evidence. His report for the month, when footed, shows the total number of days spent in regular discharge of duties to be 35. The department is proud of this feat, and challenges any other department on the hill to "beat Bert."

RURAL LIFE PLAY AWARDS ANNOUNCED BY R. S. O. DEP'T

Results of the rural life play contest conducted last fall under the auspices of the department of rural social organization were given out by the department on April 14.

This contest, which was carried on with the cooperation of the New York State Home and Farm Bureau Federations, the New York State Grange, and the Grange League Federation, was open to amateur writers who submitted plays on rural life themes.

The west and middle west captured most of the honors, first prize going to Grace Kiner of Marseilles, Illinois. Her play is called "Wedding Clothes." The other prizes went to writers in Iowa, Pennsylvania, Oregon, and California. A total of 40 plays were submitted.

Dr. Paul Work of veg gardening has written a new book, *The Tomato*, which has recently been published by Orange Judd Company.

PROFESSOR TAKES TOUR OF SOUTH AND SOUTHWEST

Riley of Rural Engineering Takes Son in Self-Made Vehicle

The motor vehicle pictured at the left is one in which Professor H. W. Riley, head of the department of rural engineering, with his fourteen year old son, is rolling over a good share of "America First." The contraption is an innovation in the tourist equipment line, and Professor Riley asserts that in spite of its resemblance to an undertaker's wagon there is nothing dead about it. The car's only relation to undertaking, he assures us, is its relation to the entire trip, which is quite an undertaking in itself.

The picture shows the final result of a careful assemblage of parts from various "standard bred" automobiles, a result that can be characterized with the phrase "Body by Riley." There are beds for the two tourists tucked under the canvas which is seen to cover the rear, and which can on occasion be elevated to the level of the car top. Ample storage space is provided in cupboards under the bed, and on the running board boxes, which sport nifty parking lights.

Riley and Son sent the picture from Florida which state they were about to leave as they started westward. The car is to be their headquarters until next fall, when Professor Riley will return to the campus to reassume his teaching duties.

DOMECON HEAD IS HONORED BY WOMEN'S ASSOCIATION

Miss Martha Van Rensselaer has been chosen by the American Women's Association of New York City as the honorary member of the association from New York state. She was one of the speakers at a recent mass meeting of business and professional women held by the Association at Madison Square Garden, New York City, and attended by thousands of women. The association is organized to represent the interests of women in business and the professions, and is raising funds to erect a hotel to afford its membership comfortable living and professional contacts at the same time.

FACULTY MEMBERS IN N. Y.

Twelve members of the home economics faculty attended the annual meeting of the New York State Home Economics Association in New York City, April 5 and 6. Professor Martha Van Rensselaer spoke on how home economics interests in the state may work together. A discussion was led by Miss Claribel Nye, associate state home demonstration leader.

A conference of the members of the southern district of the Association will be held at the College on April 23rd and 24th.

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CAMPUS CHATS

Our critical appetite for flaws in the ag college has become conscious of what seems to us a relative underinflation of the department of rural sociology organization. Work in rural sociology is becoming increasingly important as the problems of rural people become more apparent. We have cultivated a habit of attributing farm troubles to the low price of hay and wheat; we are tremendously concerned with "labor-incomes"; etc., etc. But such a one-track philosophy neglects the social consideration that not only farmers, but the whole nation seems to be neglecting. It is significant to note that, in so far as size goes, the department of rural social organization is to the department of ag economics and farm management about as one is to seven. Is this ratio compatible with the ratio of importance?

Clothes make the man—a well known proverb which refuses to divulge just what they make him. On April 1, along with Deacon Hawkins' buggy on the railroad station roof, the grand institution known as the ag association staged a hop in the Old Armory, which was planned to revive the old ag spirit. The dance didn't accomplish this aim, it more than accomplished it by means of old clothes and informalities. Even the spirits of the late J. Barleycorn were displaced and precipitated out by the

ancient and honorable ag spirit which wasn't as dead as some folks would make it out to be. Now that this spirit (ag) has been pried out of pupation the problem arises of how to keep it rolling along. Old clothes and informalities revived it, why not give them a chance to keep it going? Gentle reader, don't get the idea that we have any particular grudge against the Amalgamated Clothing Workers, we haven't, but why not drop the stiff collars—it can't bring the spirit any closer to *rigor mortis* than it was prior to April 1st?

We noticed, the other day, one of our acquaintances who will graduate from Arts this June standing on the corner gazing curiously at Roberts Hall.

We hailed him thus: "Why that inquisitive look, ol' timer?"

He answered, "Well, I've never been in that building, and I want to give it a surprise before I graduate!"

We wonder how many Cornellians might truthfully say the same thing about Roberts Hall, or some other equally important building on the campus.

Has any one seen the albino robin yet this spring? For three successive summers this white-breasted red breast has been a familiar figure on the ag quadrangle. Has he failed us this year?

Once more the COUNTRYMAN office is surrounded by floriculture field trips—a sure harbinger of spring!

THIS 'ERE & THAT 'AIR

It takes a quantity of feeds to satisfy our human needs. It takes both protein feeds and fats (they've proved all this on Home Ec rats), with carbohydrate foodstuffs too to fit us for the work we do. And when a human being dines he has to have his vitamins or he will fail and pine away, and only hasten Judgment day. So when we feel the hunger pangs we get to work and sink our fangs in some substantial form of food which, when we have completely chewed, begins to build our bones afresh, and renovate our brains and flesh. Now, here's one gastronomic fact,—although we've got our stomachs packed we never leave the festive board until within our paunch is stored some kind of cheap and sweet dessert that makes us mentally inert. But while with such unfailing zeal we take dessert at every meal, we let the biggest feast of all, the feast we'll oftenest recall, slip by with nary pie nor cake to finish off the meal we make. By "biggest feast" I mean just this,—our college life of woe and bliss, our four-years long intensive glut of education "all else but." We overload our "mental" crops with "mental" spuds and "mental" chops, and then we leave without dessert. Now, while this brings no special hurt, it seems to me that we should try to take some courses on the fly for just the broadening effect that we so carelessly reject.

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Volume XXIII
 Joseph C. Mituae



Apply what this man said

—and farming will pay better and be more fun, too

THE other day one of the great American leaders, a self-made man to whom other men listen with great respect, made two very simple statements that have an important bearing on farming.

First, he said: "One great problem before us is the need of reducing costs. Success comes to the man who makes anything as good as anybody else, but also makes it cheaper!"

Here he has hit on the farmer's biggest job. To-day the old methods, old-fashioned equipment, and slow muscle power that turned out a good day's work in 1913 are eating deep into farm economy. The profit is bound to be slim for the farmer who does not cut costs to the bone. He must adopt the faster, more productive methods that add to income, and so raise his family's standard of living.

The further advice of this man is: "I don't believe in Ben Franklin's maxim about saving pennies. If you watch the big things the pennies will take care of themselves."

This is a plea for the most practical kind of economy—a plea for *making* money rather than *saving* money. It comes from a man who began at the bottom of the ladder and built up a great business. If he had hung onto pennies, afraid to invest in money-making equipment, he never would have been heard of. In industry the old equipment is scrapped, no matter how costly, as soon as better, cost-reducing equipment comes on the market. In farming it *must* be the same.

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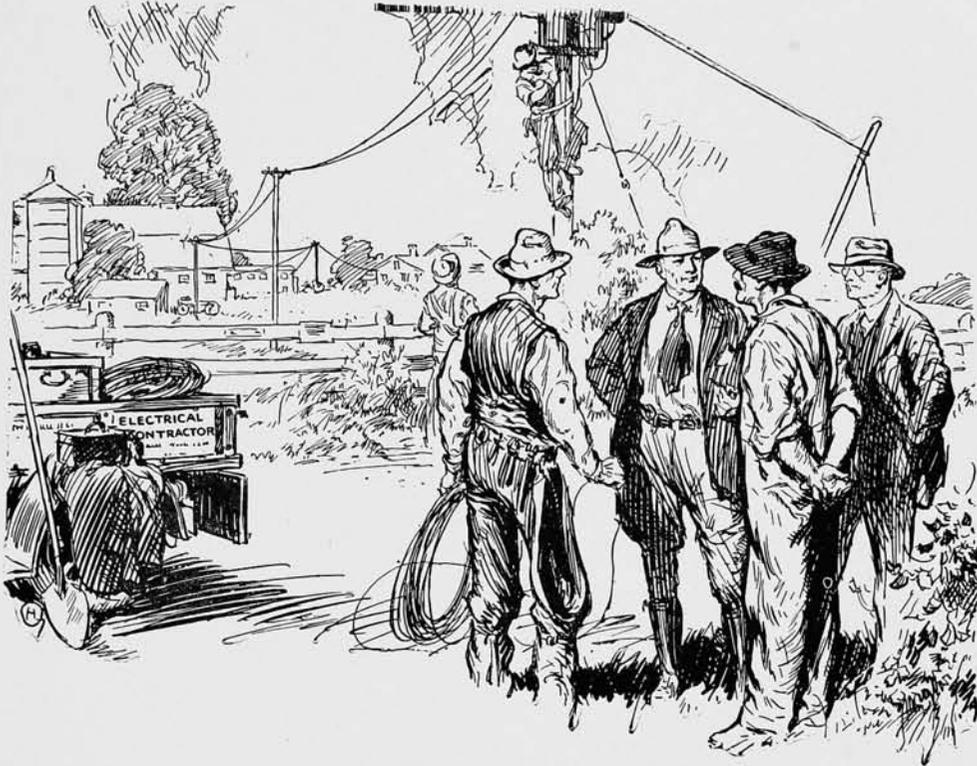
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Pulpit Rock, Buttermilk Glen

The Cornell Countryman

A Journal of Country Life — Plant, Animal, Human

Volume XXIII

JUNE, 1926

Number 9

International Congress of Plant Sciences

Fourth International Botanical Congress

By H. H. Whetzel

DURING the last decade and a half many important advances in the various plant sciences have been made by workers in all parts of the world, but no organized meeting of these workers has been held since the Third International Botanical Congress at Brussels in 1910. The American Research Societies in the Plant Sciences felt the need of such a Congress and under their auspices and with their hearty cooperation plans were laid for a Congress to be held at Cornell University from August sixteenth to twenty-third this year. Through the courtesy of numerous plant science journals in many parts of the world and through the opportunities provided at scientific gatherings, brief announcements have been made inviting participation in the Congress. Through the State Department at Washington an invitation to send delegates has been extended to every country in the world. In addition invitations have been sent to all institutions, at home and abroad, where there are workers in plant science to lend their support to this Congress. Furthermore, so far as lists are available, a circular letter and a preliminary announcement have been mailed to individuals. Should this article come to the attention of any investigators or teachers, who have not received a notice of the Congress, the writer wishes to extend to them a cordial invitation to participate in the Congress for everyone is welcome.

INFORMATION regarding details of plans and programs may be had by addressing the chairman of the executive committee, Dr. B. M. Duggar, National Research Council, Washington, D. C. Matters pertaining to local arrangements and accommodations are in the hands of the writer in Ithaca.

The Congress will bring together a widely representative international gathering of leaders for the presentation and consideration of numerous

important developments in plant research. The interval of sixteen years since the last Congress has witnessed the development of a new generation of productive plant scientists most of whom have had little or no opportunity of personal acquaintance. It is hoped that the Congress will establish profitable contacts among the many investigators and educators to prepare the way for a rapid, coordinated, and sympathetic advance of our knowledge of plants. Local plans are progressing quite rapidly and preparations are being made for the reception and accommodation of at least a thousand delegates and visitors. All those attending the Congress will be housed in University

Willard Straight Hall, the latest addition to the buildings on the campus, will be the center of activities during the Fourth International Botanical Congress. An office will be maintained by the executive committee in the new Union building beginning about June fifteenth to aid delegates engaging their reservations by mail or in person.

buildings as the summer school will be ended when the Congress meets and the University dormitories will be available. As an additional aid to delegates planning their reservations by mail or in person there will be an office maintained by the executive committee in Willard Straight Hall beginning about the middle of June.

The first day of the Congress will be occupied with registration and the assignment of rooms. In the evening L. H. Bailey, the President of the Congress, will open the first session. The address of welcome will be given by President Farrand. Secretary of Agriculture Jardine will also give a short talk and after the session there will be a general reception in Willard Straight Hall. For purposes of pro-

gram the Congress will be divided into thirteen sections representative of the thirteen main fields in plant science. Each section will be presided over by a chairman from overseas selected for his eminence in that particular branch of plant research.

The formal programs of the sections will consist entirely of invitation papers by men chosen because of prominence in their respective fields. The afternoons will be reserved for round table or informal discussions which, for the most part, will be arranged after the Congress actually convenes. There will also be opportunity for the sections to make local excursions for within easy reach are fresh water marshes and lakes, salt springs, marl ponds, peat bogs, and extensive ravines in which grow a rich and diversified flora. The Ithaca region is exceptionally rich in algae, fungi, mosses, liverworts, ferns, and seed plants, many of which will be of interest to our visitors. Special excursions for those interested in the applied fields of plant sciences are also contemplated. Two evenings will be devoted to public addresses by speakers of international fame. On Tuesday evening, August seventeenth, there will be a field picnic supper for all delegates and visitors at Enfield Glen.

THE week-end will be devoted to excursions and on Sunday, August twenty-second, there will be an excursion to visit the wonders of Niagara Falls largely for the benefit of those from abroad. The last day of the Congress will be devoted to business meetings and a few last round table discussions after which the Congress will close. After the Congress, Dr. George D. Fuller of the University of Chicago will conduct a transcontinental botanical and sightseeing trip for about twenty of the visiting scientists with the Yellowstone National Park as the chief objective but including many other places of historic, botanical, and general interest.

Something New on Cultivation of Vegetables

By H. C. Thompson

THERE seems to be a common belief among farmers and popular agricultural writers that the main benefit derived from cultivation is moisture conservation through the maintenance of a soil mulch. At any rate emphasis is placed on the soil mulch. Results of many experiments with corn and a few with other crops do not justify this belief, but, on the other hand, show quite clearly that weed control is the main benefit derived from cultivation. Experiments carried on at Ithaca during the past six years indicate that this is true of the cultivation of vegetables. These experiments were conducted with beets, carrots, onions, cabbage, celery and tomatoes. In order to determine the value of a soil mulch one set of three plats, with each crop, was cultivated once a week and a corresponding set of three plats was not cultivated at all but the weeds were kept under control by scraping them off at the surface of the soil with a sharp hoe. The weeds were eliminated as a factor in both the cultivated and scraped plats so that the comparison of yields of these two treatments is a measure of the value of the soil mulch. To determine the effects of weed growth on yield and other factors three plats of beets were allowed to grow up to weeds every year.

THE effect on yield of the soil mulch due to cultivation is shown by the comparison of the cultivated and scraped plats. The average increase in yield, due to the soil mulch was 2.7 per cent for carrots; 4.25 per cent for beets; 7.7 per cent for onions; no increase at all for cabbage; 24.0 per cent for celery; 1.6 and 1.1 per cent respectively for trained and untrained tomatoes. The difference in yield between the cultivated and scraped plats was not significant except in the case of celery where the cultivated plat produced the highest

yield every year. With the other crops the cultivated plats produced the larger yield some years and a lower yield in other years. The difference was usually small and not significant. For example in only three years was the difference in yield between the cultivated and scraped plats of carrots greater than 5 per

cent increased 650 per cent by keeping down weeds, whereas the soil mulch increased the yield only 4.25 per cent. In 1920 the yield of carrots was increased over 900 per cent by keeping weeds under control, while the soil mulch increased the yield only 2.7 per cent during the six years. Even with tomatoes in 1920 a very weak growth of weeds cut the yield in half as compared to the treatments where the weeds were eliminated.

These data indicate that the benefits of the soil mulch have been greatly overemphasized, especially for sandy loam soils such as was used in these experiments. On the other hand, the importance of keeping weeds under control is underemphasized. Even a small growth of weeds has a marked depressing effect on growth of

vegetable crops. Our aim in cultivation should be to get rid of the weeds and this should be done before they become well established.

WRITERS of popular articles on cultivation usually emphasize the value of the soil mulch in conserving moisture. Various experimenters have shown that the mulch conserves much less moisture than is commonly believed, and that under some conditions, it does not conserve moisture at all. In our experiments soil samples were taken approximately every two weeks during the growing seasons 1921 to 1925 and the percentage of moisture determined. In four years out of five the samples were taken to the depth of 30 inches and in the fifth year to the depth of 18 inches. The results show that the cultivated plats averaged higher for the season in 30 comparisons out of 39, but the differences were small in most cases. The fact that the soil mulch resulted in loss of moisture in 7 instances and neither loss nor gain in the other 2 comparisons is of some significance. It indicates that under some conditions, stirring the soil may be harmful from the standpoint of moisture.



A large percentage of the root system of celery is confined to a radius of 6 to 8 inches of the plant

cent and in one of these it was in favor of the scraped plats. With beets in only three years was the difference of any significance and in two of these the cultivated plats were ahead, while in the third the scraped plats produced the higher yield. The cultivated plats of onions produced the higher yield three years out of six, and the scraped plats two years, while the two were equal one year. With cabbage the difference in yield was significant in only four years and in two of these the cultivated plats were ahead and in the other two the scraped were ahead. The cultivated plats of celery outyielded the scraped plats every year by 18 to 26 per cent, with significant odds of over 10,000 to 1. This means that the odds are 10,000 to 1 against a difference as great as this being due to chance alone. We assume that it was due to treatment. The cultivated and scraped plats of tomatoes produced practically the same yields in three years, and in two of these the scraped plats outyielded the cultivated.

When we consider the effects of weed growth on yield the story is different. The yield of beets was in-

This is especially true when the soil is stirred soon after a light rain. The stirring always hastens the drying of the surface. Indeed this is the only advantage derived from cultivation, as far as moisture conservation is concerned. When cultivation takes place before the water has had time to become distributed, all that reached the soil from a light rain might be lost through evaporation from the cultivated surface. Under such conditions plants growing on an uncultivated area would get more benefit from the rain than those growing on a cultivated area. Whether or not the soil mulch conserves moisture depends upon (1) the moisture content of the soil; (2) the ratio of water loss from the surface, due to the stirring, to that conserved below the mulch due to checking the movement of water to the surface; and (3) the rapidity of drying of the surface. The rapidity of drying mainly depends upon the humidity of the air and the velocity of the wind. When the surface dries quickly after a rain cultivation may be of little or no value, since a dry compact layer of soil is nearly as effective in checking the movement of water to the surface as a dry loose layer.

EVEN when the moisture content for the season averaged higher in the cultivated than in the scraped plats it did not always follow that the yield was higher on the former. Loss of moisture due to cultivation following a light rain might account for this, especially if this occurred during a critical period in the growth of the crop. In about one-third of the comparisons the cultivated soil reached a lower moisture content than the scraped soil.

It is often stated that cultivation of the soil increases the absorption and retention of heat, but in these experiments it resulted in lowering the temperature, although the difference between the cultivated and scraped plats was not great in most instances. The temperature of the soil averaged higher in the scraped than in the cultivated plats at the depths of 3 and 6 inches regardless of the moisture

content. However, the difference in moisture content of the soil under the two treatments was slight under most conditions. The influence of the higher moisture content apparently was offset by other factors affecting the temperature, since water has a higher specific heat than soil and since the temperature was higher in the scraped than in the cultivated plats, even when the moisture was higher in the latter.

ANOTHER advantage often claimed for cultivation is increase in nitrate formation due to better aeration, more moisture, higher temperature, etc. It has already been pointed out that the temperature was not

ery plant has a rather restricted root system, whereas cabbage, for example, has a very widespread system. The roots of celery tend to turn down after growing out a few inches while many roots of the cabbage, and of the other plants studied, run almost horizontally and within an inch or two of the surface—in the centers between the rows as well as near the plants. Because of this fact, more roots would be destroyed in cultivating cabbage and most of the other crops, than would be the case in cultivating celery. Any good effects of cultivation due to moisture conservation, aeration, etc., might be offset by injury done to the roots. It is perfectly evident to

anyone who has studied the root systems of these crops, that it is impossible to cultivate most of them after they reach considerable size, without destroying many roots. The problem then is to determine whether or not the good accomplished is more than sufficient to offset the injurious effects of root pruning.

After studying the experimental results it seems perfectly safe to say that weed control is

the most important benefit derived from cultivation. The best time to destroy weeds is before they have become established and it is not necessary to destroy many roots if cultivation is properly done at the right time. During the latter part of the growing season cultivation may do more harm than good, especially if weeds are not troublesome.

THE deeper the cultivation the greater the injury to the roots. In addition to this, the drying out of the soil together with the destruction of roots by cultivation makes it impossible for the plants to get nutrients from the cultivated surface, which is usually the richest layer of soil. On most vegetable soils, if we cultivate enough to keep weeds under control we need not worry much about the soil mulch. When there are no weeds and a mulch is already formed, cultivation is more likely to do harm than good, yet many growers keep the cultivators going under such condi-

(Continued on page 276)



Cultivation of beets at this stage of development would destroy most of these roots

higher but lower in the cultivated plats. In 1925, the only year nitrates were determined, the moisture averaged higher in the cultivated plats of all crops, although the difference was small in the onion, tomato and celery plats. There was no consistent difference in the quantity of nitrates formed in the soil to the depth of 18 inches under the two treatments, except in the uncropped area where the cultivated plat averaged higher. Cultivation did not appear to have had any appreciable influence on nitrification. On a heavy soil the results probably would have been different, for stirring the surface has a greater effect on aeration and moisture conservation on such a soil than on a sandy loam.

It is interesting to consider why cultivation as compared to scraping off the weeds, consistently increased the yield of celery and did not show any consistent gains on the other crops. One possible explanation is based on the difference in the root systems of the several crops. The cel-

Farmers of the Future

By D. S. Cook

THE Alumni Association of the New York State College of Agriculture is actively continuing its program intended to interest the boys and girls of the state in higher education.

One feature of this program is being furthered by a new photograph of the administration buildings of the college. The association is giving its members an opportunity to place this picture in the preparatory schools from which they were graduated before they came to Cornell. The officers and members of the executive committee, acting through the secretary-treasurer of the organization, J. B. Kirkland, of Ithaca, N. Y., had this picture taken last fall by John P. Troy, photographer to the University. "J. P.," as he is known to every-

one who has attended Cornell during recent years, enjoys an enviable reputation for taking pictures, and his work in this instance measures up to standard.

The accompanying reproduction, though reduced in size from the original (which is about two by three feet), gives a fair idea of what the picture looks like, and speaks for itself. Further than that, the Alumni Association hopes that it will speak for Cornell and the State College of Agriculture. The association firmly believes in the future of agriculture in New York state, and has no qualms about urging the "up-and-coming" country youngsters to study farming.

THE people must be fed, and better farmers must do it. The past four or five years of low prices are no criterion of the future, but the really successful farmers of the coming generation must have more education than did correspondingly successful men in the past. The time is coming when a bachelor's degree from college will mean no more in the eyes of the world than did a high school diploma

a few short decades ago. A college education will be the accepted instead of the unusual thing, and business competition will become just that much keener. And by business, we include farming, for the farming of the future will be in every sense a specialized business—the building up of natural resources and their manufacture into raw food-products.

The boy who wants to stay on the farm, then, wants to be prepared to

State what it is today. New York, though the twenty-ninth state in area, stood seventh among the states in total value of farm crops in 1925. This means that, with the population of the big eastern centers constantly increasing, there is a very real future in New York state farming. And the alumni of the college of agriculture want the right kind of people to get that benefit.

The previously mentioned picture to be placed in high schools is only one of several means being used by Cornell alumni to place before the youth of the state the ideal of a better rounded-out and more useful life. Graduates of the college of agriculture have in the past, in a conservative branch of life, maintained a conservative attitude toward their fellow-workers.

Steadily holding to a high standard of practices, lending a hand to community enterprises wherever they were needed, the college has had great cause for being proud of them and their efforts.

These alumni, these younger farmers who must eventually take the burden of the agriculture of tomorrow, have kept modestly in the background. There have been exceptions, as there are to all rules, but for the most part they have avoided the limelight and preferred to help others do the leading.

THIS was all well. "Ye shall know them by their works," was a good motto, and farmers are among the most difficult persons to convince by any other means than results. But after such a length of time that sons of graduates have also been graduated, and are also taking their places as agricultural citizens, it seems that the college and their alumni need no longer hide their light under the proverbial bushel.

In fact, there seems a definite responsibility on the shoulders of those who have seen this light to at
(Continued on page 276)



This picture tells your school where you went. Let it inspire others

play the game to a winning finish. The way to get this preparation is at a college, and Cornell has an agricultural college that will fit him well for his task.

Farming is one of the few home industries which have survived in the press of industrialization—it is one of the few forms of occupation where a man with limited means can still be an entrepreneur, which means that he can go fishing when he doggoned well pleases, provided the hay is all in. For the man with a real liking for life, liberty, and the pursuit of happiness; the capacity to work and a willingness to exercise that capacity; and a love of the soil and growing things, farming still offers the same advantages that it offered our Pilgrim forefathers, who came here because of an over-powering desire to mind their own business.

THE alumni of the college at Ithaca do not believe in indiscriminately urging farmers' sons to study agriculture. But they do want the agriculture of the state to be carried on by descendants of the line of men and women who have made the Empire

Becoming Colors in Clothing

By D. H. Wetherbee

WHO of you do not wish to express your most charming personality? Not until it is realized that the colors in costumes express personality does one begin seriously to take sufficient care in selecting the right colors for one's clothing. Colors not only give the first impression but a lasting one. Psychologically, color affects the wearer and the wearer's associates. Doctors are beginning to recognize the effect colors have on the health of their patients. Attractive costumes depend on the careful selection of right colors, textiles and constructive lines but most perhaps on color. It should be the desire and duty of each one to select colors which bring out her best points. To do justice to ourselves, we should study and classify our own type. Then apply our knowledge of color so as to accent the most attractive characteristics of this type, or to diminish or conceal any unattractive characteristics.

There are very few set rules in dress that can be infallibly laid down. Each individual becomes a special problem, and in the use of color, particularly, there are so many possibilities that the exceptions under each rule would be so numerous as to make the rule futile. All I can hope to do in this article is to point out a few characteristics in making color choices that should be considered and what effect color has upon these characteristics.

IN ALL cases extreme types should be particularly careful in the selection of colors for their clothing. In considering the build of the figure, there are three general classifications, the thin, the medium and the stout types. This latter type confronts the most difficult problems in color choices. Some colors have a tendency to advance and increase the apparent size of the wearer. Other colors have a tendency to recede and so make their wearer appear smaller. Colors that tend to make the figure appear larger should be avoided by stout women. The warm colors—the colors in which the reds and yellows predominate—are such colors. Very brilliant colors or extremely dark or light colors should not be worn by stout women because the contrasts these colors make with the usual background accentuate the contour of the figure. A stout person could

more becomingly wear cool colors—the colors in which blue or green predominate—because these colors recede, giving a person wearing them an apparently smaller size. Purple or grays will also give this effect and are a good choice for stout people if becoming to the natural coloring. Dull colors are preferable to brilliant colors for stout people for the reason that it makes them less conspicuous. Middle tone values, that is, values half way between white and black, are the best choice for stout people because they make the outline of the figure less obvious. The old idea of black always making a person look smaller has been questioned. Against very light backgrounds it may even make them look larger. Because warm, brilliant colors and extreme light and dark colors advance stout people should avoid them, while the thin types may becomingly incline toward them. The fundamental reason for all this is to bring the extreme types to appear nearer the medium or ideal proportion. The medium figure need not be so concerned about colors as they affect her figure. She may wear any colors that are becoming without any thought of their effect upon her apparent size.

THE natural coloring of the individual as given by the hair, skin, and eyes is very important. It is difficult to make a definite classification for the average person is a combination of several types. Generally speaking, we distinguish between the blond, brunette, medium, auburn and gray types. Cold countries or northern races such as the Anglo-Saxon and Teuton produce more of the blond types. The blond with golden or reddish glints in the hair would be classified as the warm blond. The cool blond, sometimes called the ashen blond, has greenish tones throughout the hair. Of course there are gradations between all types. Usually we think of the blond as having light fair skin and blue or gray eyes. There are blonds with brown eyes, but usually we associate brown eyes with the darker types. As a whole a blond is a warm type so if she wishes to dress so as to emphasize the coloring of her hair it can be done by the law of contrast which would suggest dark and cool color. Remembering that the blond is a warm light and bright type she would wear cool, dark and

dull colors so as to bring out or accentuate her natural coloring. Usually blue looks well on this type because it forces the golden coloring in the hair; also if the eyes are blue, bluish gray or gray, blue tends to make them appear bluer. Eyes take on the environment colors or we might say reflect the surrounding colors. People with gray or hazel eyes have more opportunity to change their apparent coloring by wearing lighter or darker, cooler or warmer colors than do those who have decided blue, black or brown eyes. The blond type having usually a fair complexion finds fewer colors trying to her skin.

THE Latin races, or people in warmer climates, typify the brunette type—the type with dark hair, dark eyes, creamy colored skin grading to the rich deep olive. There are many varieties of brunettes; they range from brunettes with cold blue black hair, fair skin, brown or black eyes to brunettes with dark warm colored hair, dark skin and dark eyes. Classifying brunettes generally we would call their coloring cold and dark, so if they wish to bring out their coloring by contrast they would wear warm colors, light values. This type can wear brighter colors than other types.

The medium type person is really a mixture of the blond and brunette with medium colored hair, neither light nor dark. This type is very common in this country, doubtless due to the mixture of races. Some medium types may appear to be either a warm or cool type according to which phase of their own color scheme is brought out by the colors selected.

The Auburn types many times try to match their hair and wear entire outfits of brown. This often gives a monotonous result. By the use of a well studied contrasting color scheme the charm of their rich coloring may be enhanced. These types have decidedly warm colorings whether the hair be dark, medium or light in value. With knowledge of the effects of contrast such types would choose cool colors, contrasting values and dull rather than bright colors. The complexion should be a serious consideration with this type. The problem is easily solved in the case of the exquisite peach bloom complexion brown eyed auburn type. Those with blue eyes, freckled or sallow skin, how-

difficulties and must experiment to find the solution.

THERE are two distinct gray types; the one with the gray hair, sometimes is called "pepper and salt" color or iron gray is a cold type; the one with gray hair that has the warm yellow or brownish tones is the warm gray type. If it is desired that the hair appear light the dark colors may be used. If it is desired that the hair appear dark the use of light colors tends to produce this effect. Different stages of gray demand different color schemes. There is nothing more beautiful than pure white hair. If you are so fortunate as to possess such hair wear dark colors to intensify its whiteness. This white haired type needs to give much consideration to colors affecting the complexion. Often it has lost its fresh colorful look and everything should be done to recover it. Rich colorings in

the hair many times may be enhanced by a repetition of that coloring somewhere in the costume.

Fair skin is not harmed much by colors. Every color seems to be becoming to it. Dark, sallow or yellowish skin requires much more study. No one wishes to wear colors that will make the skin look sallow, yellow or extremely dark. Purple and some blues should be avoided therefore for the sallow type complexion. If the skin is dark and a lighter effect is desired darker colors should be worn. The best way to do in all cases is to experiment by placing colors near the face and see what effect they really have upon it. Often colors least expected to be becoming may be worn, especially if relieved at the neck by white, cream or other neutralizing tone. This often improves the effect of colors on people who have difficult skins with which to deal.

Colors will express personalities.

A forceful, vivacious person will many times choose more striking colors than the retiring demure person, whose preference will run toward cool grayed colors. If you belong to one of these extreme types you will find contrast often gives a more becoming effect. Some colors give a youthful appearance while others make the same person look much older. Any person needs different colors at different times depending on health conditions, temperamental moods, environment, age, sunny or dull days, indoor or outdoor backgrounds. All of these conditions affect the color of an individual.

A COLOR that looks well today may not be as becoming tomorrow. One needs to be ever watchful therefore to adapt clothing to these changing conditions if she wishes to be becomingly dressed.

(Continued on page 277)

Long Range Weather Forecasting

By G. B. Webber

THE problem of a long range weather forecast is one which has been foremost in the mind of all classes of people for a long, long time. There have been countless proverbs produced in every land dealing with the weather and ways of forecasting weather conditions for months in advance. Some of these sayings are ingenious, others imaginative, and still others are pure nonsense.

About 1750 this saying appeared: "A wet summer almost always precedes a cold, stormy winter, because evaporation absorbs the heat of the earth." There is very ingenious reasoning back of this proverb, and it is worthy of consideration even today. But when we read in the Shepherd's Almanac for 1676: "If the sun shines on St. Paul's day (Jan. 25), it betokens a good year; if rain or snow, indifferent; if misty, it predicts a great dearth; if thunder and great winds, death of people that year," we are led to wonder if there is any reasoning back of it at all. Likewise, when we read in the works of such a scholar as Francis Bacon that "A serene autumn denotes a windy winter, a windy winter a rainy spring, a rainy spring a serene summer, and a serene summer a windy autumn," we question if such is not just a product of the imagination. And such proverbs

as "If on Christmas night the wine ferments heavily in the barrel, a good wine year is to follow," seem like pure nonsense.

ALL of these old time proverbs are attempts to make long range forecasts on the basis of very limited observation and correlation. They are not scientific, nor would we expect them to be, yet they dominate, to an unrealized extent, our present day thinking in regard to the weather. There are few papers in the country that do not carry an article on groundhog day about the probability of the continuance of winter. Likewise, on St. Swithen's day, there is much speculation about the weather of the next forty days. Few of us see a caterpillar in the fall of the year without making a mental observation on the probability of a mild winter. Many persons place a great deal of confidence in these observations, but they are of little general value.

More recently, especially within the last decade, the attention of scientists has been turned to the possibility of forecasting weather over long periods on the basis of really scientific data. Correlations of weather conditions with a certain date are practically useless, as most of the almanacs show. Our old time metaphysical proverbs have failed us

entirely, and now our eyes are turned to the rapidly accumulating sunspot data as the most reasonable basis for a truly scientific weather forecast, both over short and long time periods.

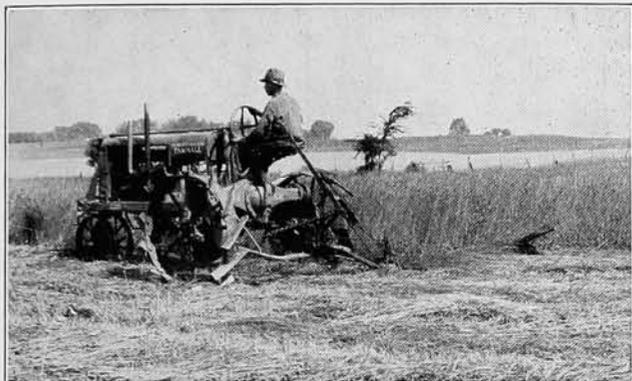
IT HAS been common knowledge for some time that there are spots on the sun which vary in number. At eleven-year intervals, we know that there is a recurrence of sunspot maxima. About 25 years ago the brilliant thought was conceived that the amount of radiant energy emitted by the sun might vary with the occurrence of these maxima and minima periods, a minima of sunspots producing a maxima of output. Intricate pieces of apparatus were constructed to measure the solar output, and observation stations were established in various places of the world where conditions were the most favorable for the observation of any variation which might exist. The most promising station was located in Chile, at a high elevation, in order to reduce to a minimum the effect of clouds, dust, and to have as thin a layer of atmosphere above the instruments as possible, since even pure air intercepts some of the sun's rays. Several other stations were also established, and data has been collected at these stations over a period of

(Continued on page 276)

A New General-Purpose Tractor Being Developed

By I. H. C.

IN RECENT years there has been an insistent demand for a tractor that could be utilized in doing the big jobs of planting and cultivating, especially in producing such important row crops as corn and cotton, as well as performing the various other



This machine enables one man to cut 20 to 25 acres of hay per day

jobs that ordinary modern-day tractors are doing so well on hundreds of thousands of farms today with great savings in time and labor and reduction in production costs.

To meet this demand, a general-purpose tractor has been developed by the International Harvester Company. It is a real all-purpose tractor. It not only supplies an abundance of power for plowing, listing, disking, culti-packing, harrowing, harvesting, etc., the same as any other good tractor; but it is so constructed that it supplies power also for planting and cultivating, operations which heretofore have helped to create a jam of extra work on numerous farms—a veritable bottle neck—at a time when so many important things must be done. With this machine, cultivation can be done more quickly and more thoroughly, and more time made available for other work, particularly for harvesting grain and hay crops on corn belt farms.

The tractor is a proved machine. It has been in the process of development for ten years. During the past two years, it has been in limited production; for the manufacturers wanted to subject it to all sorts of tests in different parts of the country before they sent it out in quantities. The 200-acre Deems farm near Burlington, Iowa, where two of these outfits have been in use two full seasons and have brought about the elimination of horses with a considerable saving in production costs, is a notable example

of an efficient farm on which the tractor does a variety of work. Roy Murphy, manager of this very interesting farm, is very enthusiastic about the tractor and says it is the most versatile farm machine he has ever seen. In Texas also, where the first of these machines were shipped in quantities, the mule is being eliminated on many cotton plantations.

In construction, it differs quite radically in certain respects from other tractors. Its rear axle is built high with a clearance of 30 inches above ground, and the rear drive wheels, which are 42 inches in diameter, are wide apart (74 inches between centers of wheels). This means that the axle is high enough to clear corn or cotton as well as is done by the ordinary riding cultivator, and the wheels are far enough apart to straddle two rows and thus cultivate two rows at a time. The cultivator is placed in front where the operator can carefully watch his work and is guided by the steering wheel. The front wheels, which are 25 inches in diameter, are close together and run between the rows.

Steering is very easy and is accomplished through a long horizontal shaft connected by spur gears to a vertical shaft fastened to the short front axle. In making short turns, a brake works automatically on the inside rear wheel and the outfit then turns on that wheel as a pivot, the turning radius being only $7\frac{1}{2}$ feet. This is a great advantage in cultivating row crops because it permits short turns at the ends of rows. The operator sits high where he is free of dust and where he has a good view ahead.

Cultivation can be done in low, intermediate, or high speed (2, 3, or 4 miles respectively), depending on the

condition of the crop. Working two rows at a time, one man can cultivate from 15 to 25 acres a day with it, and thereby replace two or three men and four to six horses. As a labor, time, and money saver in this single important farm operation, the machine deserves the serious consideration of every farmer who majors in row crops. When he uses this efficient machine, he is not likely to slight the job of cultivating; in wet seasons, particularly, when weeds grow so fast, he can take advantage of the few periods when cultivation is possible and speed up his work and so finish the job. Timeliness and thoroughness of cultivation will result in better and increased crops and accordingly increased profits.

THE tractor also fills a real need in planting. With it, either two or four rows may be planted at one time. In planting corn or cotton two rows at a time, it easily covers 20 to 30 acres a day. This is two or three times as much as can be done with a team. If four rows are planted, this acreage can be practically doubled. The easy steering and control make it possible to plant straight rows with remarkable facility. Where checking is done, the steady even power and the straight forward travel of the tractor results in a better cross check than can be obtained with animal power.

The tractor fits in wonderfully as a time and labor saver in making hay. A special mower with a 7-foot cut, operated by power taken directly



By working two rows at a time, one man can cultivate 15 to 25 acres a day with this outfit

from the tractor engine by a power take-off device, enables one man to cut 20 to 25 acres a day, replacing two to three men and four to six

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Through Our Wide Windows



The Cornell Countryman

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Ithaca, New York

June, 1926

CUSTOM decrees that we call the attention of the June graduates to their duty to the college, the state, and the country. You are the alumni of tomorrow. Upon you and your accomplishments depends the future of your ag college. We hope your attitude in life will be as that expressed by Angela Morgan when she says:

Work!
 Thank God for the swing of it,
 For the clamoring, hammering ring of it,
 Passion of labor daily hurled
 On the mighty anvils of the world
 Oh, what is so fierce as the flame of it?
 And what is so huge as the aim of it?
 Thundering on through dearth and doubt,
 Calling the plan of the Maker out.
 Work, the Titan; Work, the friend,
 Shaping the earth to a glorious end,
 Draining the swamps and blasting the hills,
 Doing whatever the Spirit wills—
 Rending a continent apart,

To answer the dream of the Master heart.
 Thank God for a world where none may shirk,
 Thank God for the splendor of work!

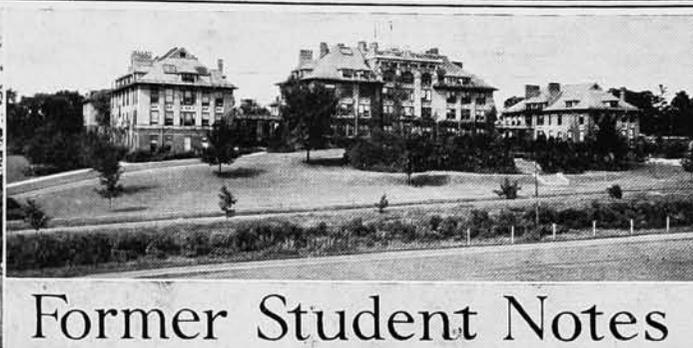
"IT is not sufficient answer to the farmer's complaint to refer him sternly to the rigid functioning of the law of supply and demand and to the doctrine of the survival of the fittest; because in reply he will contend that in other respects for reasons which seemed valid to Congress, we have not scrupled to interfere, through acts of government and otherwise, with the untrammled workings of that law and that doctrine, and he will and does claim that we either adhere to them strictly all round or give him the effective advantage of dispensations similar to those which have been granted in the case of other callings," says Mr. O. H. Kahn in a recent address, which to our way of reasoning, is ninety-nine and forty-four hundredths percent true.

AT THE recent Ag Association elections the following officers were elected for next year:

President.....	H. W. Stout '27
Vice-President	M. L. Leaming '27
Secretary	A. V. Vickers '27
Treasurer	H. Wentworth '27
Athletic Director	A. J. Van Schoick '27
Assistant Director	E. Nohle '28

Under the leadership of M. L. Dake '26, the Association has had a successful year. The old ag spirit has returned and we can confidently look forward to a continuation of the present success next fall. At the same elections the College Honor Committee was selected for 1926-27. It is as follows: G. F. Britt '27, Chairman; M. E. Davison '27; C. Shoemaker '27; R. E. Zautner '27; A. G. Sharp '28; C. Vanderbrook '28; J. Seeley '28; G. W. Hedden '29, and J. H. Palmer '29.

WE are glad to announce the election of A. W. Hostek '29 of Winfield, W. P. Bullock '29 of Yonkers, F. W. Ruzicka '29 of Chatham, N. J., and Miss L. E. Griswold '28 of Mount Morris to the editorial staff of the COUNTRYMAN. Also, J. S. Putnam '28 of Dryden and R. F. Fetherolf, of Binghamton, were elected to the business board.



Former Student Notes

'06

Wilfred G. Brierly has been at the University of Minnesota for the last thirteen years and is now professor of horticulture in the College of Agriculture. He lives at 2222 Langford Avenue, St. Paul.

'12

Carl G. Aamodt is now associated with the Accredited Hatchery Association, Petaluma, California.

Miss Mary Wheeler is employed in the laboratory of the State Board of Health at Albany and she is planning a three months trip to the west with Miss Hester Austin '16, serologist with the Health Bureau Laboratory of the University of Rochester. Their trip is to be made in a Ford sedan and will include Cleveland, Columbus, Indianapolis, Kansas City, Pueblo, Colorado Springs, Pikes Peak, Grand Canyon, Los Angeles, Yosemite, San Francisco, and Yellowstone Park.

'13

J. H. Reisner, Dean of the College of Agriculture and Forestry at the University of Nanking, was invited to go to Corea to spend two weeks to advise in connection with the agricultural work that is being planned by certain of the foreign agencies carrying on work in Corea.

'16

Franklin H. Thomas is just getting around again after an operation which was followed by an attack of peritonitis. His address is 115 Kenmore Road, Upper Darby, Pa.

F. M. Tibbitts began work on May 17th as business manager of the *American Girl*, the official publication of the Girl Scouts. His new address is 670 Lexington Avenue, New York City. For the past four years Mr. Tibbitts has been associated with the *Dairymen's League News*, first as Chicago representative and for the past year and a half as business manager.

W. S. STEMPFLE STARTS BALL

ROLLING IN STEUBEN COUNTY

William S. Stempfle '20 has been doing some excellent work as farm bureau manager in Steuben County. He has drawn the dealers and farmers together in that county, and has developed one of the finest spirits of cooperation between the farmers and the dealers that has ever been seen in the state.

This spring "Bill" organized a group of 100 Steuben county farmers, and took them down to New York City to study that market first hand. The growers saw their own products handled and sold, as well as those from competing areas. They met and talked with the men who deal in these commodities and found out where they were weak in their marketing program. They found to their surprise that the western New York spud was not first class when compared with potatoes from Long Island and Maine.

The party spent two days studying the New York market, and were entertained at a luncheon by the J. C. Penny Co. The whole program was so well arranged by "Bill" Stempfle that it went off without a hitch. This is the first trip of its kind ever taken by a county group of farmers in the United States, and "Bill" is to be congratulated in taking the initiative in such an important step as giving the farmer an opportunity to see how to improve the quality and pack of his goods in order to meet consumption demands.

"Bill" has started a number of potato schools in Steuben county, and has had many men from the College come there to help them raise better spuds. He has also done some fine work in the eradication of tuberculosis. Steuben and Essex counties now head the list in the elimination of tuberculosis.

'17

Thomas Bregger, who for the last three years has had charge of the corn investigational work of the Department of Agriculture of Argentina, will return to Cornell late in the summer to continue his graduate studies.

Dunbar M. Hinrichs is assistant secretary of the General Exchange Insurance Corporation, a subsidiary of the General Motors Corporation. He has been with the concern since he left the Army in 1919. He is married and has two children, a boy and a girl. His address is 250 West Fifty-seventh Street, New York.

Mr. and Mrs. M. G. Hanson (May E. Niedeck) have a son born April 25. They are now located at Morton, Pa., but after June 1 will live at 206 South Hill Terrace, Ithaca.

H. Strycker Mills is located on the Long Island Vegetable Research Farm, a branch station of Cornell, which is trying to solve the Long Island vegetable growers' problems. They are working with fertilizers, cover crops, green manures, and are experimenting with such crops as potatoes, tomatoes, asparagus, cauliflower, etc. Mr. Mills is working with varieties of vegetables and selecting types suited to their special conditions. Last year he got especially good results from his sweet corn, muskmelon, and tomato experiments, and he is trying to duplicate those results this year. He is also trying to develop a non-suckering Long Island Beauty sweet corn. His address is Riverhead, N. Y.

'18

Mildred M. Stevens is assistant state club leader of boys' and girls' clubs in New York state, with headquarters here in the Ag College. She lives at 116 Delaware Ave., Ithaca.

O. H. Chapin resigned his position as farm bureau manager in Cattaraugus county the middle of April, and was succeeded by Charles N. Abbey,



Summer Work

The U. S. D. A. has made it plain that there is a real job for someone, in every locality, to check up on crop production costs. They say the average cost of power and labor on farms is 60 per cent of the total.

If that is true of the community where you spend the summer, you, with your training, can do your farmer friends the biggest kind of a favor.

Show them what power and labor is actually costing them. Take your figures right from their own operations. Show them how completely power and labor costs are under their own control, and how best to go about reducing them. Here is a real constructive job that no one but a trained man can do effectively.

It may be, too, that the U. S. D. A. will appreciate receiving your figures. They welcome accurate information from reliable sources.

J. I. Case Threshing Machine Company

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*Case Farm Tractors, Steel Threshers, Combines,
Silo Fillers, Baling Presses, Steam Engines,
Road Machinery, Grand Detour
Plows and Disk Harrows.*

NOTE—Our plows and harrows are NOT the Case plows and harrows made by the J. I. Case Plow Works Co.

formerly assistant county agent in Orleans county. Mr. Chapin is now with the Purina Mills Co. and is located at Walton, N. Y.

'19

Miss Effie Riley, who has been president of the Cornell Womens' Club of Rochester, N. Y., recently obtained her Masters' degree at Columbia University. She is teaching science at Charlotte High School at present and

her address is 356 Winton Road North, Rochester, N. Y.

'20

The city of Los Angeles, Calif., has four up to date and complete automobile service stations known as "Perley Auto Services," of which James J. Perley is president. He writes that any Cornellians visiting the city will receive a cordial welcome from him and that he will present

them with a helpful road map "free." His address is 960 Edgecliff Drive, Los Angeles.

Minna Roese is doing dietetic work at the Sanitarium at Dansville, New York.

Mr. and Mrs. J. T. VanDoren of 510 Curtis St., Watertown, N. Y., are pleased to announce the birth of a daughter, Clara Eone VanDoren.

'21

Florence G. Beck is teaching foods and managing the cafeteria in the new Lincoln Junior High School at Trenton, N. J. Her address is 110 Spring Street.

Harry Buck is living at 63 Rowley Street, Rochester, N. Y. At present Harry is working in the advertising department of the Hickey Freeman Clothing Company at Rochester.

Dwight D. Decker juggled his letters so as to remain standing at the end of a spelling bee recently held by the Kiwanis club of Owego, N. Y.—another advantage of a college education. Decker, owner of the Ahwaga Hotel in Owego, has recently let his Island farm on shares to two young Danish farmers.

Leonard K. Elmhirst who, since his graduation from Cornell, has spent some time in India as director of a school for rural reconstruction is now the director of a new type of school called Dartington Hall, located at Totnes, England. While at Cornell he was president of the Cosmopolitan Club and an Eastman Stage speaker. His wife was formerly Mrs. Willard Straight.

Ruth Newman, who is now Mrs. D. M. Van Horn, is teaching in the Rochester Continuation School. Her address is 649 Thurston Road.

Walter "Sponge" Simonds is selling life insurance in and around Rochester, N. Y. He married Miss Lillian Northrup of Ithaca, September 20, 1923. They have a son, Richard Northrup Simonds, born December 2, 1924, who helps liven up their home at 109 Hillside Avenue, Rochester, N. Y. Congratulations "Sponge."

'22

Mr. and Mrs. F. Ward Aber of Hammondsport, N. Y., are the proud parents of a bouncing baby daughter whom they have named Barbara Brittain.

Adrian F. Blume is the vegetable gardener at the State Homeopathic Hospital at Allentown, Pa.

Edward "Ed" Giddings is now a salesman for the American Cyanamid

Company. His address is Baldwinville, New York.

Katherine Harris and Sally Merritt attended the American Dietetic Association Convention held at the Edgewater Beach Hotel, Chicago, last fall. Miss Merritt has resigned her position at the Grant Hospital at Columbus, Ohio, and at present is at home in Hartsdale, N. Y. She is engaged to Mr. Henry Gully and if all goes well will be married this fall.

Donald E. Marshall has returned to the United States after spending the past two years in Greece. His address is now 14 Remsen Street, Brooklyn, New York.

Elizabeth Pratt is the leading lady in a company which is now presenting "Applesauce," in southern cities. Last fall she was with a stock company in New London, Conn. Her home address is 28 Pine Street, Wellesley Hills, Mass.

Gladys Purdy, who has been at home for the past year because of ill health has recovered and expects to resume teaching in the fall of 1926 at Roslyn Heights, Long Island.

George West is doing research on public marketing for the Bureau of Municipal Research at Rochester, N. Y.

'23

Horace Bird has been transferred from the Detroit branch of the Merchants Despatch to the South Bend branch in Indiana. His address in South Bend is 702 Marietta Street.

Miss Marion Fish is teaching in Monroe High School, Rochester, N. Y. For the past two years she has acted as secretary of the Rochester Cornell Womens' Club. Last October she was sent as the club's delegate to the Cornell Alumni Corporation convention at Detroit.

Wright Johnson is now manager of the Owego Cooperative Feed Store. He assumed this position last February. His address is Ahwaga Hotel, Owego, New York.

'24

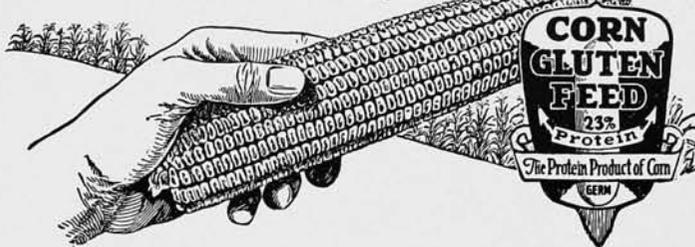
Miss Hortense Black has accepted the position as teacher of homemaking at Wayland, N. Y., for the year 1926-27.

Miss Adele Dean, now Mrs. Allen Mogenson, is living at 792 Garson Avenue, Rochester, N. Y.

Miss Madeline Heine has been teaching in Addison, N. Y. She expects to return next year to private life in her home town, Elmira, N. Y.

W. H. Heywood is pushing a pointed plow on farm fields at Stafford, N. Y.

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Something New on Cultivation of Vegetables

(Continued from page 266)

tions. Every cultivation after a mulch is formed, results in deepening the mulch and in destroying more and still more roots, thereby lessening the chance for a good crop. We should cultivate whenever weeds are troublesome, and we should use the type of implement which is most effective in weed destruction. More use of the light-harrow-type of cultivator or even of the scraper type, and less use of the shovel or "gonger" cultivator would be better for the crop. The main thing in cultivation is to consider what we wish to accomplish and then to do the job in the most efficient way and at the right time. When nothing is to be accomplished take a vacation and give the roots a chance.

Farmers of the Future

(Continued from page 268)

least show others where its benefits can be obtained. Leadership in community affairs should not be shunned. Though modesty has its place, it can be overdone, and agriculture today sounds a very real call to those who are able and willing to help farmers present a united and intelligent front to the rest of the country.

Cornell's alumni can do this, and it is their duty to answer the summons. Further, their places must be filled some time; and only by training the coming generations in the way they themselves have been schooled can this be done. Let every loyal Cornellian, then, do what he can to let high school pupils in his neighborhood know of the advantages offered by the State College of Agriculture. Whether this involves personal talks, the use of bulletins, the gift of a picture of the college to a high school, a subscription to *The Countryman*, or a trip to Farmers' Week, every real alumnus is depended on to do his part for his community and for the future of agriculture.

Long Range Weather Forecasting

(Continued from page 270)

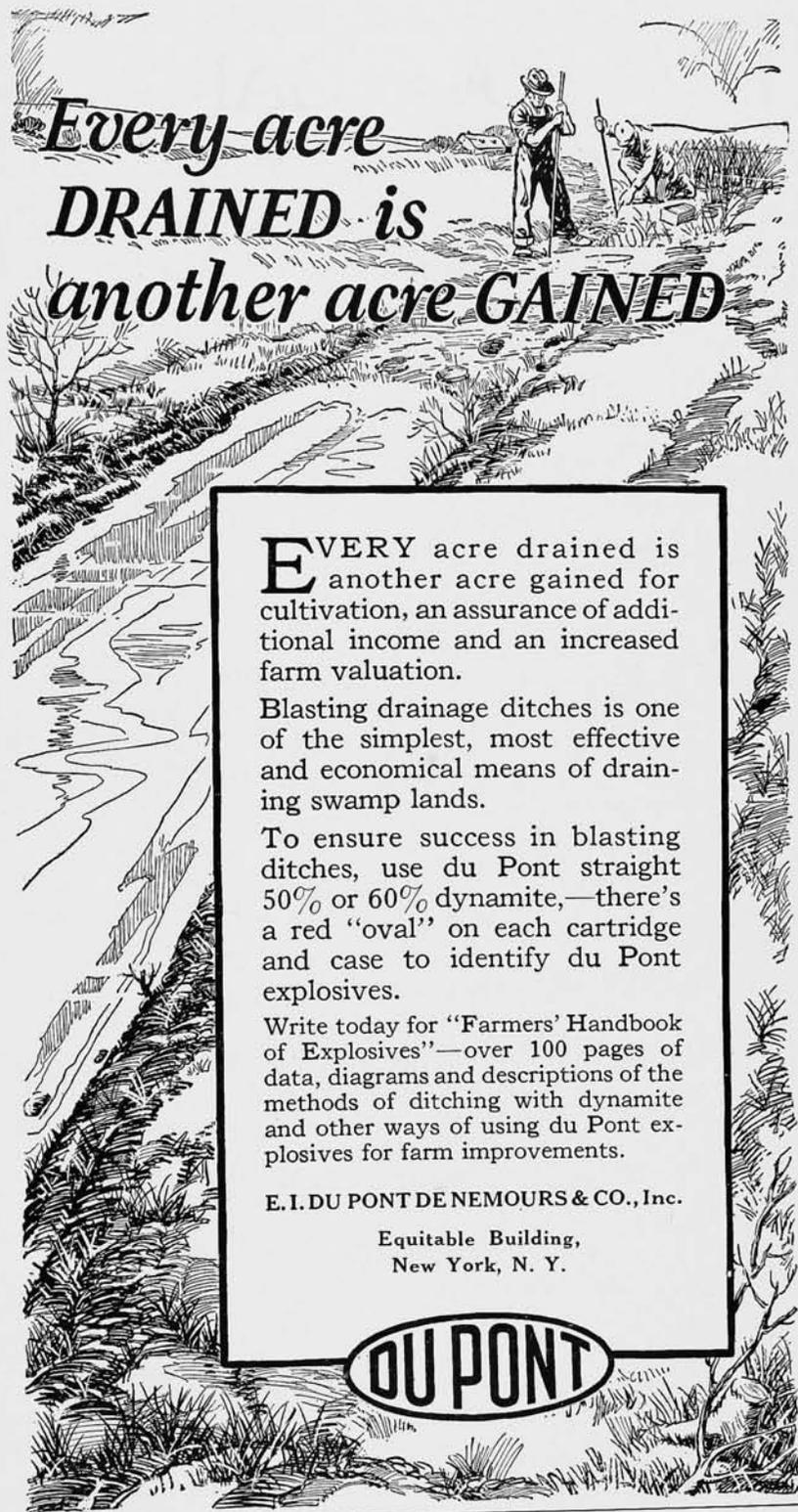
about twenty years. Examination of these data seems to reveal a very small variation in solar radiation, but staff officials of the Weather Bureau are inclined to think that the variation is too small to be the cause of our weather changes, and are frank in minimizing the importance of these variations.

What, then, is the source of our long range weather forecasts? C. G. Abbot and H. H. Clayton, who are the central figures in the uphill battle to obtain these sunspot data, are not issuing any forecasts, at least not in this country. And the forecasts are not coming from the Weather Bureau, because the data are not sufficiently integrated to warrant their sanction.

THE sources of these forecasts are private individuals who are taking this sunspot data, correlating it with other physical phenomena such as ocean temperatures, and attempting to make a forecast on the basis of these correlations. If forecasts of this sort produce results, we have no right to condemn them, even though they do not agree with our scientific theories. Rather, we should encourage them, since even a reasonably reliable forecast would be of inestimable value to mankind. But so far, they have not proven themselves.

A long range forecast appeared in one of the leading agricultural papers last fall, and undoubtedly it also appeared in many other papers, predicting an extremely cold winter, and even giving the dates when these cold waves might be expected. But the forecast utterly failed, at least in this section of the country. Another point, the forecast was so very general that it would not admit of a specific application to a limited region. Certainly the whole of the United States cannot be in the grip of a cold wave at one time. These waves, as the name implies, travel across the country at intervals, and while one section of the country is in the midst of a cold wave, another section may be enjoying temperatures which are decidedly above normal. Thus, the forecast is bound to be true in some sections of the country, and it must fail in others.

OUR conclusion must be that this method of forecasting long time weather changes on the basis of sunspot variations is at present not of much value, and its outlook is poor. It really shows but little advance over the almanac. And we say this with humility, realizing that even though one of the primary motives of these pseudo scientific forecasters may be a desire to be in the public eye, still they are also attempting to be of service to mankind. It is possible, but improbable that a method of long time forecasting may come from a layman. It is infinitely more likely that the men who are giving their lives to a study of long time forecasting of weather will at least lay the



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another acre GAINED

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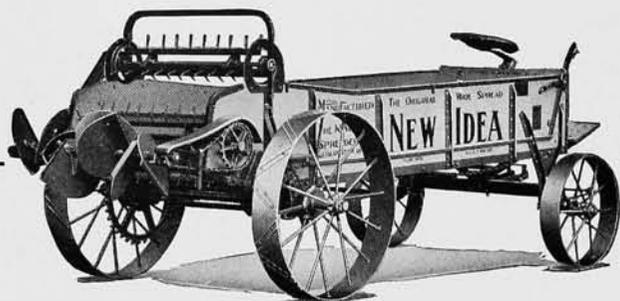
cornerstone for a system, a real scientific forecast system that will not involve caterpillars and metaphysics.

It is generally considered, and openly expressed by leaders in the field, that at the present time there is no scientific method by which the weather may be forecasted for more than four or five days in advance. Such methods as do exist are considered to be makeshifts.

Becoming Colors in Clothing

(Continued from page 270)

Daylight and artificial light make a great change in color, in both people and fabrics. It is well to choose evening clothes under artificial light. Do not buy clothes to be worn in daylight at night; it sometimes proves disastrous. Always when shopping have a sample of materials you wish



Model 8, NEW IDEA Spreader

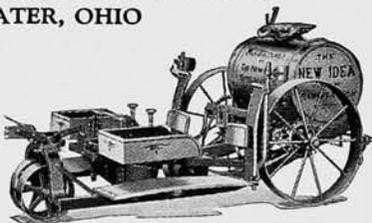
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to harmonize or match. Colors look different when surrounded by other colors. Colors that might have looked well in youth may look absurd at middle age. Remember your own coloring changes from time to time.

Textures affect colors. Cotton and wool absorb light, silks and velvets reflect light, dull fabrics appear darker than shiny materials. The modern tendency toward dull textures such as crepes and flannels is good. Transparent materials like georgette are useful in bringing about unity by the mingling of one color with another thus modifying it and even producing another color. Color is so influenced by texture that texture can not be ignored in a real study of becoming colors. The texture of the skin can be entirely changed by the use of wrong texture or color on surfaced material, especially where the complexion is not smooth and transparent. Stout people should avoid stiff or glossy material or much lace frills or superfluous fullness.

A COLOR scheme may be too varied. If two or more colors are used together there must be a dominant color for a keynote. The other colors must be relatively subordinate to it, in order to preserve unity and

If you want to get the
most out of farming---

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most satisfaction
most enjoyment

use the time when farm work is light
to help you when farm work is heavy.

One of the best ways to do this is to take
The Winter Short Course
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at Cornell University

It runs from the early part of November to
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And it is not too early to plan for it now.

not detract from the general scheme. These relative amounts of color are very important in the complete effect. A charming effect may be obtained by a large amount of one color and a very little of another, while if these same colors were reversed as to amount the effect might be quite inharmonious. For example a blue dress with small trimmings of red may be excellent; a red dress with small trimmings of blue may be hideous.

Just a bit of color in an accessory may make or ruin the color effect of a gown. Over decoration is likely to destroy unity. Do not be guided too strongly by tradition. Neither let the fashion mode rule your common sense. It is better to be well dressed than merely fashionably dressed.

To use colors harmoniously one must either have an instinctive appreciation of color, which few people possess; or an understanding of what color is and what color does and this all people may acquire. It is because the vast majority lack this fundamental knowledge of color that we are surrounded by such inharmonious color schemes. Intelligent use of color helps develop color sense. Every woman who desires to be becomingly dressed should seek to acquire a fundamental knowledge of color and to develop her imagination along these lines. Such training makes for good taste and good taste is an excellent substitute for money.

A New General Purpose Tractor Being Developed

(Continued from page 271)

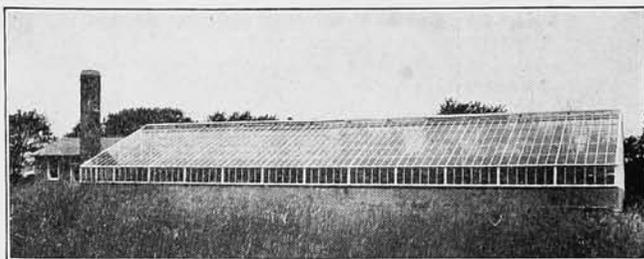
horses. When an additional mower is attached, two men can cut 40 to 50 acres a day. After cutting, it can be used to pull tedder, side delivery rake, hay loader, and to do the hauling. There is no need for other kinds of power for haying when this is on the job.

WITH its power take-off attachment, the tractor is well adapted for pulling the tractor binder and corn picker. In plowing, it will pull two bottoms and under average conditions it will plow 7 to 8 acres a day, equivalent to the work of two men and seven or eight horses. It will also bed up or list more than 20 acres a day, doing the work of two to three men and six to eight horses. With its belt pulley, too, it is able to do numerous belt jobs.

The engine has incorporated in its design some features worthy of mention. It is of the standard four-cyl-

inder valve-in-head type, operates on kerosene economically, has removable cylinders and high-tension magneto with impulse starter. The two-bearing crankshaft runs on high-grade ball bearings. The cylinders are cast separately. Should a cylinder become scored or worn, a new one can be easily put in its place. The speed of the engine is kept practically uniform by the throttle governor

which regulates the fuel to the load. The transmission has three forward speeds and one reverse. The transmission gears are enclosed in a dust-proof housing and run in an oil bath. The air that is used by the engine passes through an oil cleaner to remove dust and dirt. It is, in truth, an unusual triple-power tractor, and with it the horseless farm has come into being.



A Money Making Business For You After Graduation Days

JUST listen to this instance. E. I. Hiscox, of East Patchogue, Long Island, is a college man who worked for years in a New York office.

Always he chafed at being tied down to a desk.

Always he wanted to be free to do things that meant sunshine and flowers; health and happiness.

He saw men with seemingly little money build a greenhouse.

He saw one house grow to many.

He saw their owners always strong and well, and getting an abundance of wholesome joy out of life.

So he mortgaged his home, borrowed all he could, and built his first house 40 ft. x 150 ft.

Didn't know a thing about greenhouse growing.

But he found out, and made that first house pay the first year.

He has three now. Three of our finest iron frame houses, growing carnations.

If you like flowers and are not afraid to get some dirt on your hands, here's a contentment-filled, money-making business for you.

Let's get acquainted. Let's start by your writing us asking the questions that right now are popping into your mind.

Here may be the answer to what to do after graduation, to make money and have your share of life's pleasures.

If interested write to the Manager of our Service Dept., 30 East 42nd St., New York City, who will give your letter his personal attention.

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There are Suits made of cool porous wool or worsted. And they're wool or worsted because such fabrics hold their shape and take fine tailoring

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HATS HERE

You may like the trim sailor or the swagger Panama, or a Leghorn. They are all here in the best shapes.

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INSTITUTION MANAGERS METAMORPHOSE RISLEY

Formal Opening of the "Ezra Cornell" Is Quite Some Affair

Ithaca's most modern hotel opened and closed on the night of May 7. The "Ezra Cornell" had been located on the site which is now occupied by Prudence Risley Hall. The main lobby of the hotel has since been converted into a large drawing room, the music room and the reading room have been transformed into small lounges, and the bridal suite and other bed rooms are now parts of a modern girls' dormitory. On the closing night the hotel was decorated in a color scheme of red and gold with palms and potted plants as the natural decorations.

Prominent hotel managers from all over the country visited the hostelry and it was with regret that they viewed the passing of such an establishment. The visitors were the guests of the management at a sumptuous banquet prepared in their honor. After the dinner was served, a ball was held in the main ballroom or what is now Risley Court. The decorations were distinctly Moorish as well as the illumination which was from Moorish lanterns hung about the dance floor and from spot lights playing from the balconies. The music was furnished by a ten-piece orchestra imported for the occasion from the Roof Garden of the Sagamore Hotel in Rochester.

Immediately after the dance was over, work on transforming the hotel into a women's dormitory began and the equipment was scrapped and sold. The Waldorf-Astoria of New York City was the fortunate receiver of all uniforms and personal equipment of the staff. The staff of the hotel has entered the hotel management department of Cornell University en masse.

The hotel managers are proud that they have demonstrated to the men actually in the game that hotel management can be taught and also of the fact that in this function every man in the course had a part.

NEW PLANT GENUS FOUND NEAR TAUGHANNOCK FALLS

Botanists Busy at Study of Fossils Embedded in Rock Debris

We are informed that great things are being accomplished in the botany department towards closing the gaps in certain periods of plant history. Mr. Arnold in charge of the research work in plant fossils, has recently obtained some well preserved specimens at Taughannock Falls. They are found in a narrow strip of rock strata ninety feet above the bottom of the gorge. Early in spring part of this rock strata, cracked by the frost, fell to the bottom of the gorge. The fossils were found in the debris.

In order to facilitate study, the petrified stems are cut up into very thin strips by an electrical saw which is specially constructed for this purpose. Pieces can be cut as fine as one millimeter in thickness. These strips are then mounted, and photographed under high-powered microscopes.

As a result of the find at Taughannock, a new genus of plants has already been discovered, and is being studied. Amateur collectors are requested to bring in any plant fossils they may pick up, to the botany office for examination.

DEPARTMENTAL EXHIBITS ARE PLANNED FOR FAIR

State Show to Have Good Displays from Ag College

Plans for the exhibit of the College of Agriculture at this year's State Fair are being completed, and several departments of the College have their exhibits lined up, according to Professor R. H. Wheeler, who has charge of the displays.

At least six departments will have separate exhibits. An hus is planning to show the difference between leguminous and non-leguminous roughages, in addition to a cow culling demonstration, where four cows from Testing Associations will be witness for the College.

Rural engineering will present some new dope on barn ventilation, accumulated by "Doug" Fairbanks and "Goody" Goodman in their recent researches. The "medium of presentation" will be four model barns in which there will be tell-tale smoke currents to illustrate the ventilation.

The "King White Pine" exhibit which was featured by the forestry department during Farmers' Week will be repeated at the Syracuse fair. The State Conservation Commission is aiding the department in exhibiting factors in blister rust control.

The exhibit of the plant breeding department will be much the same as in former years, namely, a display of the advocated varieties of wheat, corn, oats, barley, and rye. The poultry department will probably re-

HELIOS

Ray Bender
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C. I. Bowman
H. P. Breitfeld
J. A. Brill
G. F. Britt
Roger Clapp
Frederick Coville
L. E. Cruickshank
W. E. Jordan
D. J. McKinlay
S. W. Warren

peat its last year's exhibit of the violet ray and cod liver oil methods of rickets prevention.

The pomology department will show what the department is doing in the way of improving fruit growing practices.

A horse pulling dynamometer contest, like that held here during Farmers' Week, will be a feature of the college exhibits next fall. Prizes for this are being given by the Horse Association of America.

CLOSING DATE FOR KERMIS TO BE EARLIER NEXT FALL

Merits of Contest Are Discussed by Professor Rice

The last date on which plays will be accepted for the Kermis competition is November 15. Any play received between now and that date is eligible, according to a statement by "Al" Van Schoick, manager of Kermis. "Van" suggests that prospective playwrights start early so as to get the benefit of professional criticism by members of the faculty and the judges.

As to the importance and the value of the contest, we prefer to let the "Father of Kermis," Professor "Jim-mie" Rice, speak:

"The greatest need of the American farmer is leadership, a leadership trained to write and speak authoritatively of agriculture. The Cornell Kermis and the Eastman Stage offer important opportunities for special training along these lines. They offer opportunity for training both in composition and in public speaking. In addition to this Kermis offers excellent opportunity for training in the social field, an important need in rural life. So important is this need that every student who expects to farm is justified in devoting sometime to the courses and competitions in public speaking and dramatics.

"Now is the time to start thinking and writing in preparation for next year's events. We should have many more plays written than have been submitted in the past.

"The plays submitted for Kermis should be entertaining, but of even more importance they must be wholesome and in keeping with the high character of American farm life."

JAMBOREE FOR BOY SCOUTS OF CENTRAL N. Y. IS HELD

Upper Alumni Guests See Games and Visit Sage Chapel

The University was the host to 400 Boy Scouts and officials over the week-end of May 7. These boys assembled in Ithaca for their annual Jamboree or inter-council competition which is an important part of the scout work of Central New York. In reality the Jamboree was a two-day camp on Upper Alumni in which nine Boy Scout Councils were represented including Cayuga, Steuben, Elmira, Syracuse, Ithaca, Rochester, Finger Lakes, Fair Play, and Susquehanna.

The rally began with a large camp-fire on Friday night though most of the competitions were held on the following morning. The Ithaca Council Troop, under the leadership of Professor Cope of the forestry department, won first place by winning the First Aid race, Morse signaling, wall scaling, and the nature study contests. The Rochester council placed second, winning the semaphore signaling and the fire by friction contests. In all cases these contests were judged on speed and accuracy. This requires several judges who, for the most part were University men. Captains Kane, Gibson, and Curley of the R. O. T. C. judged several of the events while Drs. Britton, Showacre, and Smiley of the hygiene department judged the first aid. Dr. Palmer of the Rural Education department was also a prominent official at the meet.

On Saturday afternoon the scouts were the guests of the A. A. at the track meet with Penn, the baseball game with Dartmouth, and the lacrosse game with Navy. From the looks on their faces the boys seemed to enjoy the games fully as much as the students. At five o'clock the Grand Parade started and ended up in the Jamboree Banquet at the Savings Bank Restaurant.

A special Sunday morning service was held at Sage Chapel in which the Boy Scouts took part. The Jamboree officially ended immediately after the church service and the Scouts left for their home towns.

PACK PRIZE PLUCKED BY FORESTRY SENIOR

The Charles Lathrop Pack Foundation Forestry Prize was awarded to J. J. Willie '26 for his essay "Our Daily Need of Wood."

The Pack Foundation Forestry Prize was established in 1924 by C. L. Pack of Lakewood, N. J., and consists of an annual prize of \$50 to the professional forestry student who submits the best 2,500 word essay on some phase of forestry.

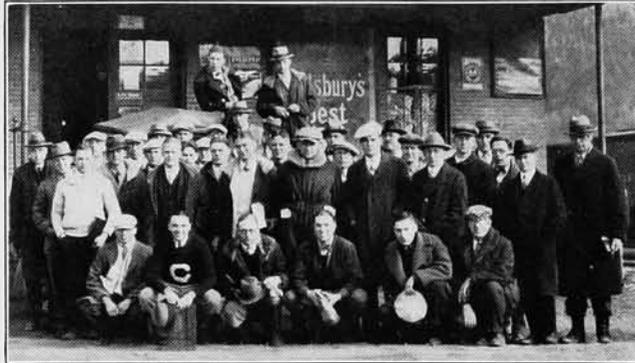
Other students who took part in the competition were: D. Den Uyl, grad., "Forest Fire Prevention"; M. C. Howard '26, "The Forest School Room";

W. C. Palmer '26, "The Treasure Hidden in Your Woodlot"; J. D. Pond '28, Blister Rust and the Farmer; W. H. Walling '27, "Opportunity in the Lake States."

The committee that judged the essays consisted of Professors R. S. Hosmer, Bristow Adams, and G. A. Everett.

WORD FROM MYERS

In letters received by Professor H. H. Love we are able to get infor-



The Family Is Photographed

mation about Professor C. H. Myers of the plant breeding department who is now in China. In his latest letter, received the first of May, Dr. Myers stated that he arrived at the University of Nanking on March 24 and had started his lecture work on plant improvement. In a previous letter he stated that he visited a number of plant breeding and botanical institutions in France, Belgium, and Holland.

"DOC" BATES PLANS TOUR FOR INDIAN FARM FAMILIES

An Indian farmers' tour has been planned by E. A. Bates to visit Geneva and the College here at Ithaca from June 4 to 6 inclusive. The farmers will motor down with their wives to take part in the extension program which will be offered then. Various subjects of a general agricultural nature will be discussed, including poultry, animal husbandry, and crops. This tour, as well as the others of a similar nature which occur from time to time, are under the direction of the Cornell Indian Boards, which annually select young men from the reservations to take the short course here.

NEW INFORMATION READY FOR JUNE HEN SCHOOL

The annual Poultry Judging School will be held this year from June 28 to July 3 inclusive. Much new information has been secured during the past year relative to judging by external characters, and it is expected by Professor H. E. Botsford that this will add greatly to the interest of the School. Students are being drawn from all parts of the United States, and the scope of the work is increasing proportionately.

MARKETING CLASS TRAVELS TO BATH FOR EDUCATION

Kraut Factories and Hotels Visited by Rampant Students

At six o'clock on Tuesday, April 20, fifty-five marketing students took an all-day tour of the Finger Lakes region. The trip was managed by Professor M. P. Rassmussen in connection with his course in marketing 142.

They covered two hundred miles on the trip and made six stops. Two big busses furnished the transportation, and were the scenes of lively times when the party got restless while in motion.

The first stop was at the kraut factory and produce dealers' establishments at Seneca Castle in Ontario county. They made Penn Yan by noon where they demonstrated Cornell appetites for the benefit of the hotel keeper. Next in Hammondsport, they visited a grape warehouse, in Bath, a bean warehouse. In Wallace they looked over a co-operative potato shipping warehouse and had their organization outlined by the manager. In Avoca a dealer's potato warehouse was inspected. Next they came back and ate at a hotel in Bath, after which the president of the Steuben County Farm Bureau, Mr. Johnson told of the work his organization had been doing to improve the quality of their potatoes.

Coming home everyone sang or attempted to sing until his voice gave way and he fell asleep in spite of the commotion. The gang arrived back at College Avenue at 11:00 p. m., with everybody tired and everybody happy.

HOME ECONOMICS CLUB PLANS SENIOR BANQUET

A regular meeting of the Home Economics Club was held April 29, at which it was decided to affiliate with the state Association of Home Economics. Jane Lay '27 was appointed chairman of the new membership committee. The aim of the organization is to get into closer contact with leaders in home economics through conferences before and after graduation.

A report of the John Ried colony work was given by Victoria Jonas. One hundred dollars was given by the club for utensils and equipment for the colony in Russia. The equipment was selected by Miss Kellogg.

The alumni of the college are having a dinner for the seniors on Friday night of commencement week in Room 245. The seniors were asked to give their pictures and history while at Cornell to place in the Home Economics Stunt Book.

Dr. L. L. Van Slyke of the Geneva Experiment Station recently completed a series of four lectures on the casein and protein of milk. These lectures are a summary of his thirty-five years of work at the station along these lines.



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CAMPUS CHATS

Why is it that when a new literary venture, such as the *Columns* is launched no ag students have part in it? Why is it that only students in the Arts College are sufficiently concerned over matters of the spirit and the mind to attempt the establishment of a channel for original and untrammelled expression? Is it because the students in Goldwin-Smith have any deeper inherent attachment to those higher things which tinge our lives with beauty, real religion, and love? Or is it merely that their course of study is so much more stimulative of thought and self-expression? We doubt if it is the former. It is unquestionably true that a course in soils or farm management offers slight opportunity for originality or the appreciation of beauty. Yet that seems all the more reason why ag students should want a chance to profit by cultural courses of a less obvious practical value. We are the last to suggest that the blame for their not taking them rests with the students themselves. We believe that the explanation lies rather with the system which of necessity forces students in technical courses to pursue them almost to the exclusion of the others.

Will the man who left a costly smooth gold compact in veg gardening 2 lab on Thursday afternoon, April 29, kindly drop into the COUNTRYMAN office some time in the near

future? The only lady in the class doesn't claim it. We'd like to return it to him and get his photo for the *Market Gardener's Journal*.

Dr. Robert P. Sibley has been appointed secretary of the College of Arts and Sciences. During his period of office as secretary of the College of Agriculture, Dr. Sibley has made a campus-wide circle of friends who will miss his presence in Roberts Hall. But since Dr. Sibley is to leave, we are glad that he is going no further than Goldwin-Smith.

THE TOWN JOKER

Bide Appleby he sez to me
A spell ago, he sez, sez he,
"What was it that you give your
horse
The time it had the botts?" O'
course
That bein' sort o' in my line
I sez, "I give him turpentine."

It run along fer quite a spell,
A month or mebbe more an'—well
One evenin' Bide come into town
An' hitched his team an' settled
down
In Perkins' store against a sack—
His face was long's a wagon track!

"What was it, Hi," he sez t' me,
"You give your horse for botts?" sez
he;

"Jist turpentine," I sez, an' Bide
Sez, "So did I, but my horse died!"
"Well, so did mine," I sez, an' cussed
'F I didn't think them boys would
bust!

THIS 'ERE & THAT 'AIR

I'll be darned if I see need for doubling and re-doubling speed. I like to go about so fast, and when a certain time is past I never seem to have regret, or stamp around in frenzied fret e'en though some other modern goof has gone ahead and shown me hoof in doing some quite simple job, like fixing up a loose door knob, or writing up a term report or winning at some outdoor sport. And when some million dollar cuss goes whizzin' past in some big bus as if he had one minute left until of life he was bereft I smile unto myself and think, ol' boy, your cheek would be as pink, your pocketbook would be as fat if you was less like some tomcat that streaks across a nice green lawn, is seen one moment, then is gone. This flying 'round like headless hens and doing jobs by nines and tens won't get as much as he who strives to do his jobs by fours and fives. Oh, I can nearly always tell the man that gets his work done well. He'll neither fly nor mope and as for carelessness,—"no soap." He picks a steady, even gait, and, with a smile and step sedate, he finishes whate'er his task, with still some time to rest and bask.

Amateur rain guessers on the campus received a severe setback to their abilities when the weather vane on the roof of Roberts Hall was removed for repairs.

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