

# CORNELL ALUMNI NEWS

VOL. III.—No. 10.

ITHACA, N. Y., WEDNESDAY, NOVEMBER 28, 1900.

PRICE TEN CENTS.

## CORNELL'S HYDRAULIC LABORATORY.

### Its History and a Sketch of its Possibilities.

Extensive and novel additions to the Fall Creek hydraulic plant of Cornell University which are now well under way, will make the laboratory and combined works the largest and most important of the kind anywhere in existence. They will make possible a number of new experiments which the engineering faculty have not attempted in the past for lack of necessary room and equipment, and the completion of others which were brought to a premature end for the same reason.

The new building, which is to be five stories in height, is being constructed of stone of the same color as the rock walls of the gorge in which it stands. The style of architecture is Twelfth Century Florentine and every effort will be made to disturb the natural scenic beauty of Fall Creek gorge as little as possible. One feature of the new building which is attracting scientific men is a wide shaft running the entire height of the building, which will afford opportunity for extensive experiments in water jets.

Dr. E. A. Fuertes, director of the College of Civil Engineering and in charge of the hydraulic works, believes that the day is past for what have been known hitherto as classroom experiments in hydraulics and that no important designs can be wholly based upon the results of such experiments. He says:

"We have found and not in a few or unimportant cases, that it is not safe to use the results of experiments made on a small scale, or if the experiments do not reach the conditions which exist in actual practice. However interesting and necessary the labors of early experimenters may have been in this field, the improvements effected by them have served to demonstrate that the experiments upon which new theories of hydraulics have been based can be considered only as steps in the rational evolution of this difficult science. The purposes of the Cornell laboratory are to pass beyond tentative and disproportionate experimentation into the field of actual research under the natural conditions which the engineer actually meets in his professional life."

The evolution of the hydraulic laboratory system has been slow but none the less sure. The intention from the start has been to establish a rational system of laboratory work and to make the work go hand in hand with the theory of the classroom.

The first experimental apparatus was used by the Cornell engineering classes in 1873. There was no intention of making new discoveries. Experimental work on cements and losses under certain conditions of piping gave good results. It was simply a repetition of work already done by prominent scientists, but served the purpose of proving that this radical change of teaching methods might become a necessity.

The first difficulties were the inability to obtain adequate apparatus

and to convince the authorities of the University of the expediency of attaching to the college force, permanently, a corps of skilled mechanics, a step which was utterly without precedent up to that time. It took ten years of missionary effort to interest the trustees in this new departure in the methods of teaching engineering. In 1880 Dr. Fuertes was sent to Europe to visit engineering schools. He found a considerable number of models and other material for illustration were employed in the lower schools, but laboratory work for engineering students was frowned down as unworthy of a place in the curriculum. The director of the most important engineering school in France said with disgust when told of the new plan: "You are making mechanics, not engineers, in American schools. Go to our museums and you will see what engineers have planned. The artisans who made the structures you find there are not engineers—they are mechanics, trained elsewhere, and have nothing in common with us."

It was in June 1884 that an appropriation of \$11,000 was made for the construction of a hydraulic laboratory, and shortly afterward a respectable amount of equipment was obtained. It was several years later, however, that the trustees became really interested in the scheme. The director brought before them a long list of unanswered hydraulic questions, of an importance so manifest that they made a large appropriation. The peculiar location of the University with its abundance of nearby water-power made it possible to erect a hydraulic laboratory which could not be duplicated at any existing school without an expenditure of at least \$3,000,000. The power is furnished by Fall Creek which flows along the northern limit of the University lands through a deep ravine, in a westerly direction, and finally discharges its waters into Cayuga Lake. The Fall Creek watershed includes an area of about 120 square miles and has a mean annual rainfall of something less than forty inches.

A concrete dam, curving up stream, has been thrown across the gorge, to raise and collect the waters into a pool for storage purposes. The dam is 156 feet long and thirty feet high. A suitable spillway, capable of passing any possible flood without injury to the dam or the experimental canal, has been formed by stripping and blasting the rock at one end. There is an experimental canal 16 x 400 feet with a ten foot depth of water. The canal extends upstream for a distance of two hundred feet and is provided with six gates at the upper extremity, which permit the entrance of the water with a head of twenty feet. Provisions have been made for raising the dam ten feet whenever the step becomes necessary and thus to treble the present capacity of the impounded water, making a total of about 15,000,000 cubic feet. The enlargement of the works can be carried out at a minimum expense, or rather, with only the expense due to the actual additions to the laboratory. A 48-inch main supplies power downstream for the shops of the College of Mechanical Engineering, and for the University lighting and water plant.

*Continued on page 80.*

## COLLEGE ENTRANCE EXAMINATION BOARD.

### Arrangement for Joint Examination for Colleges of Middle States and Maryland—Statement from Dean White.

Dean White, of the University Faculty, has prepared for the ALUMNI NEWS the following statement of an important arrangement effecting Cornell entrance examinations:

The organization has just been completed of an important coöperative undertaking for the purpose of establishing joint college entrance examinations at various points in the Middle States, and eventually, it is hoped, throughout the country. The movement originated at a meeting of the "Association of Colleges and Preparatory Schools in the Middle States and Maryland," which was held at Trenton, N. J., in December, 1899. As a result of resolutions passed at this meeting urging the early establishment of a joint examination board, a call for a conference was issued, signed by the presidents of Columbia, Pennsylvania, Union and Cornell. In response to this call, a conference was held at Columbia University a few weeks later, attended by representatives of various colleges and secondary schools, a provisional board was organized and a committee was appointed to draft a constitution and submit a plan of organization. This plan was adopted at a later conference and was submitted to the various colleges which had participated in the movement, with the request that each college would take some action. At a final conference held in November, 1900, it was reported that the plan of organization had been accepted by the following colleges: Barnard, Bryn Mawr, Colgate University, Columbia, Cornell University, New York University, New York University, Pennsylvania University, Princeton University (except as to being represented on the board), Rutgers, Swarthmore, Union, Vassar, and the Woman's College of Baltimore. Informal assurances have been given that the certificates to be issued by the Board will be accepted by Haverford College, and probably by Johns Hopkins University.

The constitution provides that the Board shall contain a representative of each college or university participating in the movement, and shall include five representatives of secondary schools. For each subject in which an examination is held, a college teacher is to act as chief examiner, associated with an additional college teacher and one secondary school teacher. These examiners prepare the examination papers to be set, and all papers are to be submitted for final approval and revision to a committee consisting of the chief examiners and the five representatives of the secondary schools. A staff of special readers is also to be appointed to mark the examination books. The conference, moreover, approved of a series of definitions of uniform requirements for the following entrance subjects: English, History, Latin, Greek, French, German, Mathematics, Physics and Chemistry. These definitions were based chiefly upon

recommendations made by various educational organizations, such as the American Philological Association, the American Historical Association and various committees reporting to the National Educational Association.

The first set of examinations is to be held during the fourth week of June, 1901, at various places throughout the Middle States, and possibly elsewhere, if a sufficient number of applicants should make their desire known in season.

President Eliot, of Harvard University, was present at the Trenton meeting and cordially favored the plan. At his initiative the subject was brought up this fall at the conference of the New England College Association, and a large and influential committee was appointed to examine the whole question.

In so far as Cornell University is at present affected, these joint examinations would form an additional method of admission to the University. The University for the present will maintain its own local entrance examinations, but even in the case of institutions, like Cornell, admitting on certificate, such supplementary examinations as prove necessary could be taken at the various centers indicated, without the necessity of a preliminary journey to the site of the institution. This arrangement would undoubtedly meet the desire of various alumni, expressed from time to time in the columns of the ALUMNI NEWS, for local examinations in separate subjects required for admission to Cornell.

Among other benefits of the system may be mentioned the relief that would be experienced by many colleges from the necessity of holding miscellaneous examinations at various points. The schools would also be benefitted, inasmuch as students going to different institutions would not need to be specifically fitted to meet varying requirements, as the certificate issued by the joint examination board would be honored at any of the associated colleges in each of the subjects passed.

Dean H. S. White has been appointed to represent Cornell University on the board of management, and Professors C. E. Bennett and E. L. Nichols have been invited to act as chief examiners in Latin and Physics.

Further details regarding the development of this important organization will be communicated from time to time to the ALUMNI NEWS.

### Archaeological Institute Meeting.

The second general meeting of the members of the Archaeological Institute of America, will be held in Philadelphia, December 27, 28, and 29. Members will present papers and a discussion of each paper will follow. E. P. Andrews, curator of the Cornell Museum of Casts, has been invited to address the meeting. He will present a paper on "The Use of Color on the Parthenon and on its Architectural Sculpture."

The freshman class at West Point is the largest in the history of the Military Academy.

Professor J. H. Finley has been appointed to the newly established chair of politics at Princeton.

## EASY VICTORY FOR CORNELL.

Vermont Defeated by a Score of 42-0.

Cornell found Vermont an easy mark on Saturday afternoon and had little difficulty in piling up a score of 42 points to the visitors' 0. Five attempts for goals from touchdowns failed, or the score would have been even larger. The result was, however, not so much due to the strength of the Cornell team as to the weakness of the visitors, who completely went to pieces in the second half, allowing Cornell to make her touchdowns almost at will. In the first half Vermont displayed a strong defense, while Cornell did little creditable work. It was the middle of the half before Cornell worked the leather well down into the visitors' territory, only to lose it on downs on Vermont's 5-yard line. Vermont kicked to Schoellkopf on the forty yard line, and he by clever dodging and good head work carried the ball back for the first touchdown of the game. Cornell's second score resulted from a place kick from Vermont's 20-yard line. The ball had again been worked down to the visitors' 6-yard when Vermont braced and held for downs. Strait punted to Brewster who was tackled on an attempt at a fair catch, and Cross made a place kick from Vermont's 20-yard line.

In the second half Cornell took a wonderful brace, while the visitors seemed to go to pieces. Cornell kicked off, and on failing to gain with the guards back Vermont was forced to kick. The attempt was blocked, however, and like a flash three Cornell men were on the ball. From this point on the Vermont team seemed to be completely demoralized. There were many brilliant features in this half in the nature of long and sensational runs. For the second touchdown of the half Purcell made a dash around right end, and aided by good interference ran 70 yards for a score. He later made another touchdown after a 60-yard run. Otis played a good game, making end runs of from 20 to 40 yards and scoring two touchdowns in the second half, while Schoellkopf plunged through the line for steady gains of five and ten yards.

In the first half Cornell played with Starbuck, Alexander and Purcell on the side-lines, but, in the second half when Morrison injured his shoulder, Purcell took his place at right half. Finucane had Brewster's place at quarter when the second half opened, and later on Cross and Taussig gave way to Thomas and Dumauriac respectively at the ends, while Kilburn replaced Schoellkopf at fullback. Vorhis, Hunt and Davitt also replaced the regular 'Varsity men in this half. The game was no test of Cornell's offense as nothing but straight formations were used. The visitors used a form of the guards back play which the Ithacans found but little difficulty in breaking up.

The game started with Strait kicking off to Namack, who advanced the ball five yards. Morrison made ten yards around left end, followed by a gain of fifteen yards by Coffin. Cornell was then held for downs. After several short gains Vermont was forced to punt, the ball being secured by Brewster after he had fumbled. Successive short gains by Cornell advanced the ball to the five-yard line, where it was lost on a fumble.

Strait kicked to the 40-yard line. The ball was caught by

Schoellkopf who, aided by good interference, carried it back for a touchdown. Cross kicked the goal.

Through several short gains and a twenty yard run the ball was carried to the two yard line, where the visitors braced and held Cornell for downs. Vermont then kicked out of danger, Brewster making a free catch. He was tackled, however, thus allowing Cornell a place kick from the fifteen-yard line. The place kick by Cross was successful, making the score 11-0. The half closed with no further scoring.

The second half opened with Cornell kicking off. The visitors made no gains and were forced to kick. The ball was secured by Cornell and advanced 20 yards. This was followed by another long gain to the ten-yard line where the ball was lost on downs. Vermont, however, was soon forced to punt. The ball was blocked and on rolling behind the goal was secured by Cross for a touchdown. The try at goal failed. The next touchdown was made soon after through a long run by Schoellkopf, who showed much skill in dodging. After long gains through the line and around the ends, Purcell made another touchdown, and Cross again kicked the goal. Otis made the final touchdown, but the attempt at goal failed.

The line-up was as follows:

CORNELL.	VERMONT.
Taussig (Dumauriac) l. e.	Patterson
Whitney, (Davitt) l. t.	Waddell
Warner l. g.	Kingsland
Namack, (Vorhis) c.	Beckley
Dorner, (Hunt) r. g.	Parker
Lueder r. t.	Orton
Cross (Thomas) r. e.	Morse (C.) Robinson
Brewster (Finucane) q. b.	Robinson
Coffin (Otis) l. h. b.	Locker
Morrison (Purcell) r. h. b.	Welch (Dane)
Schoellkopf (Kilburn) f. b.	Strait

Summary: Referee, Mr. Evans of Williams; umpire, Mr. Bond of Syracuse; linesmen, Burns for Cornell and Butler for Vermont; length of halves, 20 and 25 minutes; touchdowns, Schoellkopf, 2; Purcell, 2; Otis, 2; Cross 1; goals from touchdowns, Cross, 2; goal from free kicks, Cross, 1. Score, Cornell, 42; Vermont, 0.

#### Outlook for the Thanksgiving Day Game.

The Cornell football eleven lines up at Franklin Field, Philadelphia, Thursday for a game with the University of Pennsylvania, which football experts say will be as hard fought as any gridiron battle of the year. Cornell goes into this game with a record for the year which has but one spot, the unfortunate defeat by Lafayette. To offset this there is the victory over Princeton on her own grounds. Pennsylvania suffered a serious defeat at the hands of Harvard, but otherwise has an unblemished record. The critics say that the two teams are evenly matched in backs, that Cornell excels in ends and quarterback, but are agreed that Pennsylvania has the strongest line. From the same source comes the news that Cornell will probably be strongest in offensive play and Pennsylvania in the defence. That the result will be close is generally believed.

Cornell's work since the walk-over game with the University of Vermont has been largely that of building up a defence against the Quaker guards-back formation. This defence will be similar to that used so successfully by Harvard—having the men strike the play before it gains momentum. The "scrubs" have worked hard to give the Varsity practice and the coaches are satisfied with the result. Secret practice on Monday and Tuesday was severe, but developed no unexpected weaknesses.

The team and substitutes left for

Philadelphia Tuesday evening and had light signal practice on Franklin Field Wednesday. They were accompanied by Coach Houghton and his assistants, Trainer Moakley and by a number of the most faithful "scrubs." Wednesday night the largest delegation of "rooters" Cornell has yet sent to an out-of-Ithaca football game left on special trains. The alumni residing in the vicinity of Philadelphia have responded nobly to the call made upon them to join the undergraduate cheering squad and the team will not lack that sort of support.

Cornell's line-up will be practically the same as against Lafayette and is as follows:

Taussig, left end; Lueder, left tackle; Warner, left guard; Namack, center; Hunt, right guard; Alexander, right tackle; Cross, right end; Brewster, quarterback; Purcell, left halfback; Morrison, right halfback; Starbuck, fullback.

The summary of statistics of the team shows the following: Class: 4 seniors, 3 sophomores, 2 juniors, 2 freshmen. Course: 4 Arts, 4 Mechanical Engineering, 1 Civil Engineering, 1 Electrical Engineering, 1 Veterinary. Residence: New York 5, Ohio 3, District of Columbia 1, New Jersey 1. Seven of the men have played on former Varsity teams. The averages are as follows: Weight, 176½; height 5 ft. 11½ inches; age 20 years. The average weight of line men is 181, of the backs, 157½ pounds.

The Pennsylvania line-up will be made from the following squad: Captain Hare, Teas, Wallace, McCloskey, Zimmerman, W. Gardiner, Davidson, Graves, J. Gardiner, Potter, McCracken, Hodge, Gilmore, L. Smith, Magee, Bennett, Horner, Woodley, Townsend, Mitchell, Corley, and Baird.

Coach Woodruff says he will play straight football in the Cornell game. Groves will probably do most of the kicking as his high punts give the Quaker ends time to get down under the ball. Woodruff thinks that, although most of the team are new men, he has more players who can consistently carry the ball than ever before.

#### Former Pennsylvania Games.

The Pennsylvania game is now considered the crowning event of the Cornell foot ball season, yet "Pennsy" was the last of the big four to play Cornell. This year will be the eighth time the team has gone to Philadelphia, and though the seven past games were won by the red and blue, the Cornell team goes this year undaunted by the long string of defeats. Cornell first encountered her greatest rival on November 18, 1893, during that unfortunate season when every prospect of Cornell football was discouraging. Pennsylvania won the first game by a score of 50 to 0.

The poor work of the year before seemed to spur the men on, and on November 17, 1894, Cornell again appeared at Philadelphia with a will that bespoke a way. This famous team was captained by "Pop" Warner and was coached by Marshall Newell of Harvard. The battle was a fierce one and only by the greatest efforts did Pennsy score a touchdown and win the game by the small score of 6 to 0.

The following season the time of the game was changed to Thanksgiving Day and for five years it has been the big event in Philadelphia college circles on that day. The

game of '95 was a disappointment. The men played a splendid game but seemed in poor physical condition, and were finally defeated by a score of 46 to 2.

The following year Cornell did better, making a score of 10 points while Pennsylvania made 32, but still there was more to be done.

November 25, 1897, goes down in Cornell football annals as marking the all but perfect Pennsylvania game. A crowd of twenty thousand people came out to see a walkover and saw Pennsy win by the margin of 4 to 0. This was the game in which Charlie Young was hero of the day. His punting was remarkable and he missed a goal from the field from Pennsylvania's fifteen yard line by only a couple of feet. The whole team did fine work that day. The line held so well that not one of about twenty punts was blocked.

Thanksgiving Day, '98, should have seen a Cornell victory. The day was cold, with snow and sleet falling. During the first half Cornell scored six points to Pennsy's 0, but the interval between the halves won the game for the Quakers. They were taken into warm quarters, all was done that could be for them, and they appeared on the field clad in dry suits, while Cornell was in a cold building with nothing to change to. The result was that Cornell, numbed with cold, finally succumbed. The score was 12 to 6. Charlie Young played another fine game after having only two weeks of practice.

The sad ending of last year's otherwise happy season is all too vivid in the minds of Cornell men. But there is hope and will still left at Cornell, and November 29, 1900, will witness a fierce struggle. Already about 500 students have decided to go to Philadelphia and support their team. Who can tell the outcome?

**VARSITY CAFE**, Cor. Huestis St. and Dryden K'd

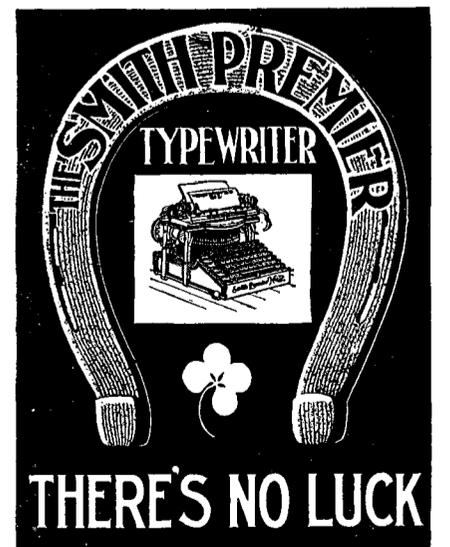
EUROPEAN PLAN.

JOHN J. SINSABAUGH, Proprietor.

QUICK LUNCHES

A SPECIALTY.

Phone 230.



**THERE'S NO LUCK**  
ABOUT THE POPULARITY OF  
THE SMITH PREMIER TYPEWRITER  
IT'S ALL MERITED.

OUR CATALOGUE, FREE, WILL TELL YOU WHY  
THE SMITH PREMIER TYPEWRITER CO.

SYRACUSE, N. Y., U. S. A.

THE ALUMNI.

*One purpose of THE ALUMNI NEWS is to keep Cornell men informed about one another. Every Cornell man, therefore, is invited to contribute to this column news concerning himself or any other student, and every contributor should remember that in sending news items he is conferring a favor upon other Cornellians.*

Ex-'72, Dr. Louis L. Seamon of New York is now on his way to China on special duty in connection with the Eastern troubles. During the Spanish war Dr. Seamon held the rank of surgeon-major and did much effective and valuable work with the American troops both in Porto Rico and in Cuba. After the treaty of peace with Spain was signed he went to the Philippines on a special mission and spent several months there with our soldiers. Last week he left for San Francisco. Though he may stay a short time in the Philippines, he intends to join the hospital ship Maine in Chinese waters. He will be absent several months and will probably visit a number of Chinese cities. Dr. Seamon has been in China three times already and is familiar with Chinese affairs. He has been studying for years the problem of feeding armies in tropical climates with rations so made up as to bring about the best results and keep the soldiers in the most robust health and at the topmost pitch of efficiency. He has published a number of papers on the proper food supply for armies, and at the International Medical Congress in Paris last summer he read a treatise on soldiers' rations in warm climates.

'73, B.S. Charles F. Wheelock of Albany addressed a recent meeting of the Tri-County Educational Council of Montgomery, Herkimer and Fulton Counties of New York, on the "New Syllabus" of the Regents. Principal George M. Davison, '92, of the Gloversville high school, was among the members in attendance.

'81, A.B. Romeyn B. Hough of Lowville, N. Y., has been awarded a gold medal by the forest and fisheries department of the Paris Exposition.

'85, B.S. Mrs. Anna Botsford Comstock gave a very interesting forty-five minutes talk in the assembly room at the Ithaca high school on the evening of November 20. "Nature Study" was the subject of the talk, and Mrs. Comstock spoke of its ideals and methods, showing the value of teaching by object lessons.

'87, B.L. Horace White was recently re-elected to the State Senate, this being the third time he has been elected from Syracuse to fill the office.

'88, C.E. James H. Edwards is the chief engineer in the structural engineering department of the American Bridge Company. His headquarters are at 7 West Twenty-second Street, New York City.

'89, Ph.B. Katherine Bates has been appointed instructor in English at Vassar.

'89, E.E. Lee Hamilton Parker recently arrived in Ithaca from Buenos Ayres, Argentine Republic, for a visit with his mother. Mr. Parker has been interested in the construction of electric railways for the past three years and expects to return soon to commence another contract which will require two more years to finish.

'91, M.M.E. August Julius Wiechardt has held the position of Professor of mechanic arts and electricity in the Mississippi Agricultural and Mechanical College for the past six years. For the first three years after graduation Mr. Wiechardt held a like position at the New Mexico Agricultural and Mechanical college.

'92, B.L. Professor Michael V. O'Shea of the University of Wisconsin recently addressed the Rochester Teacher's Association on the "Silent Forces that Shape Life and Character." Professor O'Shea has just brought out in Heath's Home and School Classics an edition of "The Wonderful Chair and the Tales it Told."

'93, A.B., '95, D.Sc. Elias J. Durand has reprinted as a neat pamphlet his thesis on "the Classification of the Fleshy Pezizineae with Reference to the Structural Characters Illustrating the Bases of their Division into Families." It first appeared in the Bulletin of the Torrey Botanical Club for September, 1900.

'93, M.M.E. Samuel Preston Edmonds is a lieutenant in the United States Revenue Cutter Service. His present address is care of the United States Cutter Service, Treasury Department, Washington, D. C.

'94, M.S. Russell H. Folwell is now assistant engineer for the Great Northern Railway at Minneapolis, Minn. For the past four years he has been engaged as designing engineer of steel grain elevators at Buffalo, New York and West Superior, Wisconsin.

'94, M.E. Charles H. Treat, who was Assistant Engineer in the Navy during the Spanish War, is at present Assistant Superintendent of the Mansfield Machine Works of Mansfield, Ohio. Mr. Treat has designed a number of engines of different types including a quadruple expansion engine, designed jointly with Mr. T. Hall, using a novel reheater. Mr. Treat has been largely occupied for the last three years in superintending work in the machine shops. His present address is 130 Marion Avenue, Mansfield, Ohio.

Ex-'95, H. C. Copeland is advertising manager of the Seattle Daily Star.

'95, C.E. David M. Rosser has been engaged by the United States government as head engineer to take charge of the paving and sewerage of the city of Havana, Cuba.

Ex-'96. Invitations have been issued for the marriage of John Reed Bowen, ex-'96, to Miss Florence Talbot of Chicago. The wedding is to take place on Saturday afternoon, November 24, at the Unity Church in Chicago.

'96, D.Sc. Martha Doan has been appointed to an assistantship in chemistry at Vassar.

'96, L.L.B. William H. Feiker has been nominated by the Republicans of Northampton, Mass., as their candidate for mayor. The nomination is practically equivalent to an election as Northampton is consistently Republican. Mr. Feiker has recently completed a term of service in the Massachusetts legislature.

'97, M.E. John Hulett is at present with the Exeter Machine Works of Pittston, Pennsylvania. Mr. Hulett was formerly with the Edison Electric Illuminating Company of Boston, Massachusetts. He is a junior member of the American Society of Mechanical Engineers and a member of the Bay State Society of Engineers.

'97, LL.B. Francis Alice Kellor, now a graduate student in Chicago University, is publishing a series of articles in the Chicago Sunday Tribune and other periodicals on social conditions in the southern states. Miss Kellor, who is studying for the Ph.D. degree, conducted a special investigation of the prisons of the South during the past summer, under the direction of the Federated Women's Clubs of Chicago.

'97, E.E. Charles T. Mordock, formerly western manager of the American Telephone and Telegraph Company with headquarters in Chicago, is now in the firm of Stone & Webster, electrical engineers, in Boston. His marriage to Miss Helen Bagley of Chicago will take place some time after the Christmas holidays.

'98, Ph.B.; Ex-'01, Law. Albert H. Clark was married to Miss Clara Hobart early in October. Mr. Clark is now practising law in Auburn, N. Y.

'98-'99, Fellow in History. Eloise Ellery has been appointed assistant in history in Vassar College.

'98, B.S. Mabel Mead is teaching German and History in the high school at Greeley, Col.

Ex-'99. J. Allen Haines is president of the firm of J. A. Haines & Company, manufacturers of telephones and supplies, with offices at 607 Stock Exchange Building, Chicago; and is the treasurer of the Bunnell Machinery Company in the same city. His permanent address is 18 Walton Place, Chicago. He was in Ithaca last week to attend the Hazeltine-Wait wedding.

'99, M.E. Lawrence I. Scott was in Ithaca for a few days last week on his way to New York.

'00, B.S. The announcement has been made of the marriage of Henry Hiram Tuller to Miss Renelcha Elderkin, which took place on October 20 in New York City.

Marriage.

HAZELTINE-WAIT.

The marriage of Miss Olga Athene Wait, daughter of Professor L. A. Wait, to Mr. Robert Henry Hazeltine, '00, was solemnized on Wednesday, November 21, at five o'clock in Sage Chapel. The maid of honor was Miss Hazeltine of Brooklyn, and the bridesmaids, Miss Julia Law and Miss Dorothy Cornell of Ithaca, Miss White and Miss Ripley of Brooklyn, Miss Breckenridge of Hamilton, Ont., and Miss Glendenning of Halifax, N. S. Miss Helen Schurman was flower girl. J. Allen Haines, '99, was best man and the ushers were Charles W. Wasson, '74, William K. Auchincloss, '99, Herbert B. Lee, '99, Charles B. Andrews, Princeton '98, Cornell '02, F. Ellis Jackson, '00, and Frederick Whiton of Brooklyn. The ceremony was performed by Rev. Dr. Babcock, Emeritus Professor of Architecture. After the service in the Chapel, a dinner was given at the house followed by a short reception to out of town guests. Mr. and Mrs. Hazeltine left Wednesday night for a two week's tour in New York, Lakewood, N. J., and Philadelphia, and will live at 727 Seneca St., South Bethlehem, Pa.

Obituary.

GUSTAVE OTTO BEUCK, '01.

Gustave Otto Beuck, '01, of the college of Civil Engineering, died Monday morning about 10 o'clock in the Infirmary. The disease which caused his death was spinal meningitis, brought on, it is believed, by a fall sustained about a month ago. On November 8 he was taken to the Infirmary, where his condition grew steadily worse. About two week ago, his mother and sister were summoned; they have been with him since.

Monday evening memorial services were held for him in Sage Chapel. The faculty and students of the college of Civil Engineering attended in a body. The services were conducted by Rev. U. G. B. Pierce, of the Unitarian church, who delivered an impressive sermon. President Schurman delivered a short eulogy; and the hymn, Nearer My God to Thee, was sung. The pallbearers were R. F. Proctor, H. S. Wilgus, G. E. J. Pistor, B. N. Bisbee, A. Adams, and E. B. Butchers, all members of the Senior class in the college of Civil Engineering.

Mr. Beuck was born October 3, 1879. He graduated from the high school of Davenport, Iowa, and entered the Cornell College of Civil Engineering in 1897. While here he has interested himself in many student activities. He was a member of the Association of Civil Engineers, the Gymnasium Club and the 'Varsity track team. He was a good all-around athlete. His record as a student is also exceedingly high; he stood near the head of his class. His fellow-students mourn the loss of a dear companion and a true friend.

Dixon's American Graphite Pencils

are recognized as the standard of excellence everywhere; they are used not only by the student while at college, but after graduation, by the Professor, Doctor, Lawyer or Business Man.

VERBUM SAT SAPIENTI.

PHOTO - ENGRAVING

OF ALL KINDS.

Half Tones  
And  
Zinc Etchings  
A Specialty.

ESTIMATES FURNISHED.

The Ithaca Publishing Co.

ITHACA, N. Y.

There are several Drug Stores in Ithaca but one of the best is

TODD'S, AURORA ST.

BARNARD & SISSON,

156 E. STATE ST.

FOR

"Those Military Sacks."

## CORNELL ALUMNI NEWS.

PUBLISHED EVERY WEDNESDAY DURING THE COLLEGE YEAR.

SUBSCRIPTION, \$2.00 PER YEAR.

PAYABLE IN ADVANCE.

SINGLE COPIES TEN CENTS.

Address all correspondence to

THE CORNELL ALUMNI NEWS,  
ITHACA, N. Y.  
Office, Morrill Hall, Campus.

## ALUMNI ADVISORS.

J. D. WARNER, '72,	G. J. TANSEY, '88,
C. S. FRANCIS, '77,	H. L. TAYLOR, '88,
J. C. BRANNER, '82,	P. HAGERMAN, '90,
E. W. HUFFCUT, '84,	A. B. TROWBRIDGE, '90,
C. H. HULL, '86,	D. F. HOY, '91,
F. V. COVILLE, '87,	L. E. WARE, '92,
	HERBERT B. LEE, '99.

## EXECUTIVE COMMITTEE OF ALUMNI ADVISORS.

C. H. HULL, '86,	A. B. TROWBRIDGE, '90,
	D. F. HOY, '91.

## EDITOR,

FREDERICK D. COLSON, '97.

ASSOCIATE EDITOR,

HERBERT C. HOWE, '93.

MANAGING EDITOR,

BENJAMIN R. ANDREWS, '01.

BUSINESS MANAGER,

FREDERICK WILLIS, '01.

## ASSISTANTS,

F. W. MEYSENBERG, '01,	M. M. WYVELL, '01,
G. B. FLUHRER, '01,	H. L. LEUPP, '02,
	RICHARDSON WEBSTER, '02.

Entered as second class mail matter at the post office, Ithaca, N. Y.

PRESS OF GREGORY &amp; APGAR, 122 S. TIOGA ST.

WEDNESDAY, NOVEMBER 28, 1900.

## TICKETS FOR THE GAME.

Tickets for the Cornell-Pennsylvania game may be secured in Philadelphia of H. V. Register, 238 Drexel Building, corresponding secretary of the Philadelphia Association of Cornell University, and at the Hotel Walton, Broad Street, where the Undergraduate Committee will have its headquarters.

## CROSS COUNTRY RUNNING.

We print elsewhere in this issue an article on cross country running and Cornell prospects in the Intercollegiate race Saturday. Cornell has already achieved high rank in this branch of sports and this year's team will do its best to maintain the record. Every alumnus in the vicinity of New York Saturday should go to Morris Park and cheer Captain Gallagher and his men to the finish.

## JOINT ENTRANCE EXAMINATIONS.

The organization of a joint board to conduct uniform college entrance examinations, as explained by Dean White in this issue, is a rational and sensible step. It only seems strange that the various universities have not agreed upon some such convenient scheme of common examinations long ago. The prominent part which Cornell has taken in this advance movement is gratifying. It is to be hoped that the plan will prove as practical in actual operation, as the details give one reason to expect.

## CHEERING AT PHILADELPHIA.

Inasmuch as the question of a new cheer for Cornell, which shall preserve intact the old slogan while adding something of bigger noise-making power, has been a very live question at Cornell recently, and inas-

much as many "old grads" seem to be dissatisfied with the dissatisfaction of the students, the ALUMNI NEWS would suggest that the Cornell section at the Thanksgiving game at Philadelphia, before the game begins, is a good time and place for older and younger Cornellians to get together on this question. There is nothing alarming or difficult about the "locomotive yell," as one might suppose from a recent communication from an alumnus in the *Cornell Sun*. It is to be mastered in about three or possibly four seconds by those who were here before its invention. We suggest that the cheering committee for the Pennsylvania game print the exact words and name of each of our present day slogans on slips of paper to be handed to the older alumni, and that a few practice cheers be given, just to get together, while waiting for the teams to appear.

## FAILURE AND SUCCESS IN VETERINARY EDUCATION.

We note in the papers announcement of the suspension of the veterinary school of Harvard. It had been running more than fifteen years, but of late apparently running down. It had no more students in its classes than years in its history. Hence its removal from the scene—at least pending the forthcoming of a liberal endowment, the hope of obtaining which, say the wicked, is the predisposing cause of this much advertised disease.

At any rate we shall frankly take this occasion of congratulating ourselves on the striking contrast presented by a school upon our own Campus, the New York State Veterinary College. This institution is now in its fifth year. It has registered 11, 16, 23, and 29 students at this point in each of the four years it has completed, and it registers at this present writing 41. This is the maximum of attendance as yet in American veterinary schools. This rapid and unbroken growth has been achieved, too, during a period when the attendance in all the other schools of the kind in this country was decreasing. Our fine showing has no doubt in large part been due to our splendid equipment. But we submit, as our judgment, that the growth of the New York State Veterinary College has been chiefly due to its standing at the head in its profession, and giving the very best veterinary medical education to be obtained anywhere. "There is always room at the top."

## CORNELL IN NEWSPAPER CONTROVERSY.

It will interest Cornellians to know that there has been a newspaper controversy raging about the presence of negroes in the University, and particularly about the withdrawal of a white Southern student because of their

presence. Northern papers have commended Cornell and scored the South; Southern papers have retaliated by solemnly warning Southern parents not to send their children to a University where they might be "co-educated with negroes." All this seems rather ridiculous. We are proud of standing on as broad a foundation as if we were located in Berlin or Heidelberg. We do not fear the censure of the South which we share equally with every great University of Europe, nor do we care to be applauded by the North for what is so much a matter of course.

But one thing we wish to commend. A student in the class of 1901, reading a long editorial in the New Orleans *Times-Democrat*, one of his home papers, which undertook to find varied and particularized fault with this University apropos of this matter, did forthwith sit down and pen a vigorous defence of his Alma Mater, and of his action as a Southerner in coming here for study. In printing this letter the *Times-Democrat* remarks:

"The *Times-Democrat* greatly admires the spirit of Mr. Putnam in championing the cause of his Alma Mater, as he does in the communication under notice; it is this loyal devotion of its sons which will hear nothing spoken to its discredit whether it be well or ill-founded, that is one of the prime factors in upbuilding a university and in making it a power in the land. And, in this respect, Cornell is singularly fortunate or singularly deserving, or both, for we have observed, not without gratification, and not alone in our own case but in other cases as well, that the famous institute of learning at Ithaca has never anything alleged to its detriment but straightway there steps out from the ranks of its sons a paladin of romance, some champion full-panoplied who takes up the gauntlet and makes a strenuous and doughty defense of his Alma Mater."

We trust that this sweeping commendation of the spirit and loyalty of Cornellians has been deserved in the past and will be deserved in the future. At any rate it puts well the principle which this paper has heretofore urged upon its alumni readers, of letting no lie about Cornell pass undenied.

As to the probability of Southern students being afraid to come to Cornell or other Northern institutions lest they may happen to meet a colored student on the Campus, we may perhaps be permitted to remark that there are now 113 Southerners in this University, 15 of them from the state of Texas alone, and that as long as education here continues to be more advanced, thorough and varied than in the South, we look to see no diminution in these numbers.

Two new papers, "The Columbia Law Review," edited by senior law students, and "The Bulletin," edited by students in the Teachers' College, are to be published this year at Columbia.

## Freaky Shoes

AT REASONABLE PRICES.

## Collins, Herron &amp; Vorhis.

## SPECIAL NOTICE.

We develop your plate and have negative ready in from 2 to 5 hours. Prints from these in as much more time.

When you have a rush job or a particular one come to us. We will have it ready on time and done right, at prices that will please you.

## VAN BUREN'S STUDIO,

1st Door East of P. O.

## OSBORN'S, NEAR THE POST OFFICE.

WASTE PAPER BASKETS, GREAT VARIETY. PRICES LOW.

FOUNTAIN PENS,

Every one warranted.

FRESH HOME MADE CANDY.

## CALL ON

## BROWN &amp; BARNARD

When in want of Something good to eat.

## H. H. MICHELSON

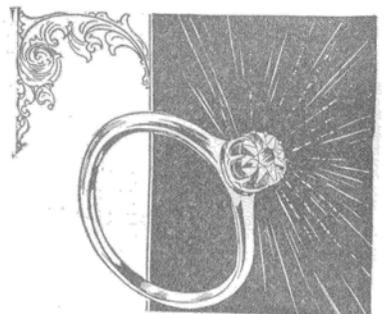
CUSTOM TAILOR,

103 North Tioga St. ITHACA, N. Y.  
Opposite County Clerk's Office.  
Telephone 69.

## WHITE &amp; BURDICK, Druggists and Apothecaries,

Opposite Post Office, ITHACA, N. Y.

ACCURACY AND PURITY.



A critical examination merely tends to enhance the value of the gems we show.

R. A. HEGGIE &amp; BRO.,

136 EAST STATE ST.

## H. Goldenburg,

## The University Tailor.

I make the BEST SUITS for the LEAST MONEY.

DRYDEN ROAD.

## LET US . . .

## . . . FIGURE,

On the cost of the most artistic catering for your next entertainment, no worry for yourself, less expense than you expect, perfect satisfaction.

GET MENU AND ESTIMATE AT THE

## ALBERGER Catering Establishment.

523 E. STATE ST.

**CORNELL CROSS COUNTRY CLUB.**

**Statistics of the Team which will Run at Morris Park on December 1.**

About six years ago, when Cornell was having a series of relay races with Pennsylvania, she suggested that Cornell send down a cross country team. Pennsylvania had a number of strong runners, and the victory was practically assured to her. Nevertheless, a cross country team went down on their own initiative, without trainer or manager, although they were represented by Guy Gundaker of Philadelphia, who now represents the Philadelphia alumni on the athletic council. In the morning occurred a Pennsylvania-Cornell football game, and in the afternoon the cross country races. The team was badly defeated.

The Athletic Council now determined to recognize cross country work, in the hope that this action would bring improvement. They placed it under the management of the track team. Since then the work of the club has steadily improved until, last year, it won the Intercollegiate meet in New York.

Although the club was disappointed this year in its hope of a dual meet with Syracuse University, it has been practicing faithfully for the Intercollegiate meet which will be held Saturday, December 1, in New York City, and in which the principal colleges of the East will take part. The running was done, at first, over the 5 1-4 mile course through Varna, but, after the first trials, the men were taken down to Percy Field. Here they run over a course which extends around the field outside of the club house and grand stands. As a result of the first trials, the following ten men were chosen: Berryman, Finch, Gallagher, McMeekan, Morrison, Riedel, Foster, Smith, Sweet, Taylor.

Last Saturday at 3:30 P. M. the final trials took place on Percy Field, in which all the men above mentioned, except Morrison, started. They ran 14 1-2 laps, or 6 1-4 miles. There was a ditch and 5-foot hedge which was taken at each lap. At the start, McMeekan took the lead, closely followed by the rest. As they crossed the obstacle at the end of the first lap, Gallagher gained the lead, which he retained, though the others were not far behind. At the second time around, Gallagher was a good distance ahead, followed by McMeekan, Smith, Berryman, and Sweet, the rest quite a way behind. Sweet and McMeekan began, at this point, steadily to gain. Gallagher, however, continued to increase his lead and finished easily in the first place, having more than lapped the last man. McMeekan crossed the line second, with Sweet about 30 yards behind him; the rest finishing in the following order: Smith, Finch, Berryman, Taylor, Riedel, Foster. The first six of these, together with Morrison, who was unable, through illness, to run, will make up the cross country team. The time was not announced, but was very satisfactory.

B. A. Gallagher, '01, is captain of the Cross Country Club. He prepared at the Ithaca High School, but did no running there. Indeed it was not until last year that he developed into a good runner. He was on last spring's track team, where he proved the best distance track man Cornell has ever had. At Syracuse he won

second place in the mile race and in the two-mile race, and reduced the Cornell record for the latter distance to 10:29. At the Interclass spring meet he again reduced it to 10:04. He entered the two-mile race at the Intercollegiate meet last spring, and, though he did not win, he ran in 11 seconds less than the Intercollegiate record of 10:04. At the Princeton meet, which was held in Elmira last spring, he got second place in the two-mile race. Gallagher has an unusual amount of endurance, and is especially noted for his grit.

David McMeekan, '03, a graduate of the Brooklyn Boys' High School, began his work as a runner here last year. He won the half-mile, mile, and two-mile races in the underclass games this fall. Last summer he won the half-mile championship in the junior class of the Amateur Athletic Union; his time was 2:02. He is well known for head work and may be counted on to run his best at the Intercollegiate meet.

A. J. Sweet, '01, prepared at the Utica Free Academy. He ran on the Cornell cross country team in the meet of the Amateur Athletic Union in 1898, and has been on every cross country team since; he was captain of last year's team. He got third place in last year's Intercollegiate cross country race. He is probably the most experienced man on the team, having run over the Morris Park course three times. He has been somewhat out of form recently, but will put up a good fight for first place.

The fourth man on the team is B. B. Smith, '04, who has come to Cornell from the Horace Mann School in New York City. He got second place in the half-mile of the New York Interscholastic championship last spring, and, this fall, was second in the mile and two-mile of the underclass games. For a new man he has shown up remarkably well. He is somewhat inexperienced, but has lots of endurance and is not lacking in speed. It may safely be asserted that he will push McMeekan and Sweet very hard.

J. C. Finch, '02, whose preparatory school was the Saratoga high school, did not do any running until his second year at Cornell. That year he won the fall handicap meet, breaking the team that vanquished Yale last the record for the course. He was on fall, and beat out Waldron, who is Yale's best man this year. Although he was somewhat out of shape on the day of the trials and did not do himself justice, his running time shows that he is well up with the rest.

W. G. Berryman, '03, and C. J. Morrison, '01, are virtually new men, though they did some running last fall. They have shown up well this year. Berryman came from the College of the City of New York, while Morrison entered up last year from Johns Hopkins University.

This is the team which will leave Thursday morning for New York. They will probably stop at the Murray Hill Hotel.

All alumni and all undergraduates who are in New York on Saturday, Dec. 1, are earnestly requested by the management to attend the meet at Morris Park. Hearty support of the team will materially strengthen Cornell's chances of winning the victory, and thus retaining the championship.

Dartmouth has adopted the honor system.

**Banquet of Alumni of Northeastern Pennsylvania.**

The Cornell alumni of Northeastern Pennsylvania met for their annual banquet in the Wyoming Valley Hotel in Wilkesbarre, Wednesday evening, November 21.

This is the first time the alumni have banquetted in Wilkesbarre, former meetings of the Association having been held in Scranton. After due consideration of the things prepared by mine host of the hotel, Rufus B. Howland, '72, president of the Association, called on a number of the alumni for toasts. Responses were made by Frank W. Cool of Pittston, G. B. Davidson, '84, of Scranton, B. W. Davis, '91, and Charles E. Rice, Jr., of Wilkesbarre and a number of others. James Gardner Sanderson read from manuscript his new Cornell story which is to appear in the January *Lippincott*.

Officers for the following year were elected as follows: President, Geo. B. Davidson, '84; treasurer, Harry L. French, '94; secretary, Frederick L. Brown, '82. It was decided to have the next banquet a year hence in Scranton and the officers above elected with Dr. H. L. Whitney and J. S. Pettebone, '93, were made a committee in charge of it. The remainder of the evening was spent telling stories, singing songs and having a general good time.

The alumni present were: Scranton—Geo. B. Davidson, James G. Sanderson, C. R. Sanderson, Jr., R. B. Williamson; Wilkesbarre—Samuel Grant, Geo. M. Carpenter and C. E. Rice, Jr.; Plymouth—Dr. H. L. Whitney and H. L. French; Kingston—D. M. Rosser, John H. Lance, B. W. Davis and R. B. Howland; Pittston—Frank W. Cool; Dorrance—J. S. Pettebone; Wyalusing—N. A. Wells; New York—C. O. Cummings.

**Cornell Men with the Solvay Co.**

The Solvay Process Co. of Syracuse has a great many Cornell men in the various departments of its business. A list, as complete as possible, follows: Engineering branches—E. N. Trump, ex-'81, general manager, B. N. Bump, '92, engineer of tests, W. S. Manning, Jr., '95, assistant civil engineer, E. A. Barnes, '99, assistant engineer of tests, Frank B. Klock, '99, in the engineering department, Louis W. Emerick, '91, electrical engineer, Allan McFarland, ex-'92, assistant manager of the soda ash department, Lyndon S. Tracy, '98, and A. T. Baldwin, ex-'93, in the manufacturing department, A. R. Gillis, '75, master mechanic, and Fred W. Field, '94, in the engineering department. Andrew H. Green, '92, is manager of the Detroit branch, where Rutger Green, '95, is also engaged.

In the chemistry department are H. A. Flint, Sp., assistant chief chemist, Horace G. Carrell, '97, D. A. Morton, '95, W. R. Knapp, '99, and Livingston M. Whitwell, '00.

The following alumni are registered in the Harvard Law School:

Third year: L. L. Lewis, '92, Ph. B.; F. P. Ufford, '96, Ph. B.

Second year: S. D. Inslee, '99, A. B.

First year: J. G. Rosenberg, '00, A. B.; E. B. McNutt, '99, A. B.

*Persons having copies of Vol. III, Nos. 1 and 2, September 26 and October 3, 1900, which they wish to dispose of, are asked to send them to the ALUMNI NEWS, Morrill Hall, Ithaca, N. Y.*



**THE CLASS PHOTOGRAPHER.**  
**DEALER IN KODAKS AND PHOTO SUPPLIES.**

**FOREST CITY STEAM LAUNDRY,**  
209 N. Aurora St. Best work in the city.  
Gloss or Domestic Finish.

Work called for and delivered. Phone 165-B

**LENT,**  
122 N. AURORA ST  
All the Latest College Songs and Marches.

**Bates' Binghamton Laundry.**  
University Branch  
with the Co-operative Student Agency.

C. A. MIDER, MANAGER.  
A. S. PETTY, W. H. CARRIER,  
F. W. FISHER, R. F. KIEB.  
We keep your clothing in repair. Fine gloss or the right domestic finish.  
Office, Corner Huestis Street and Dryden Road.

**GEO. GRIFFIN, MERCHANT TAILOR**  
Cor. State and Aurora Sts.  
Fall Styles now ready.

**CUT FLOWERS, DECORATIVE PLANTS, &c.**  
A large assortment of home grown and strictly first-class stock.  
**THE BOOL FLORAL CO.,**  
215 E. STATE ST. ITHACA, N. Y.

**The "Dutch Kitchen"**  
Cafe and Grill Room,  
ITHACA HOTEL.  
The only room of its kind in the city.  
Club or single breakfasts 6:30 to 10 A. M. 15c. to 65c.  
Noon Luncheon 12 to 2 P. M. - 35c.  
Table D'Hote Dinner (with wine) 6 to 8 P. M. 50c.  
A la Carte from 6:30 A. M. to 1 A. M. Everything in season at reasonable price.  
Music, Prof. Klein's Novelty Orchestra every evening.  
**KELLER & MYERS.**

**THE TOGGERY SHOPS,**  
138 E. STATE ST.—404 EDDY ST.  
Imported and Domestic Novelties in Fine Furnishing Goods and Hats.

Mail orders solicited. Merchandise forwarded on approval to all parts United States. Charges paid one way.

**HENRY H. ANGELL, ITHACA, N. Y.**

**SEARS HAND LAUNDRY,**  
121 North Aurora St.  
Telephone 204 K. ITHACA, N. Y.  
QUALITY NOT QUANTITY.

## CORNELL'S HYDRAULIC LABORATORY.

*Continued from page 75.*

The studies which have been carried on since the laboratory was erected have been numerous, valuable and interesting, and the work is advancing step by step as facilities for experimenting are increased. One of the studies taken up was upon the dragging and suspending power of running water at various stages of its saturation with sediment, and of the conditions which affect these two distinct actions of water in motion. Then came a study of the corrections to be made in the beds of streams to give them the most suitable and stable longitudinal profile. The laboratory will take up the mechanics of rivers, like the Mississippi, which build their minor beds higher than the bottom level of their major bed.

A study of the conditions affecting the straight portions and the degree of curvature of the beds of natural and artificial water courses, will be taken up with a view to securing permanence of channels and depths of water. The Fall Creek watershed is being closely studied to determine the coefficients of flood volume, proper length of dams and spillways, and height of floods over them, so as to perfect the formulæ for the delivery of watersheds, if this be possible. This study will extend over several seasons. Experiments will be made on the motion of water in open channels, in pipes, under ice and over weirs.

A series of studies will be made which will doubtless be of great value to the students of naval architecture. The effect of waves upon the speed of vessels will be given considerable attention. The effects of the form and conditions of the surface of vessels upon their speed, the motive power required and the ratios of velocities and resistances are a part of the tentative program. The resistance to the motion of boats in canals with reference to the ratio of their respective cross sections will be determined. Experiments on water jets will be entered into as soon as the new building is completed. There is a broad field for new work upon the forms of water-wheel buckets, fire protection, ratio of areas and forms of propellers, including water jet propulsion.

The uses of the laboratory are not restricted simply to the study of hydraulic questions. For example, on the sanitary side, the relations that should exist between the grade of a sewer, its size, and the volume of flushing water required to produce a given effect, are almost entirely unknown. Many additional investigations, bearing upon a better scientific foundation for engineering biology, upon the preservation of standards of purity in water supplies, and upon proofs to be furnished in order to improve the personnel and widen the powers of Boards of Health, are to be studied. In fact, the laboratory may be made to contribute to the development of the science of "Public Medicine," which is as yet an unoccupied field urgently demanding its rights as a social factor of great importance.

The Botanical Society of the University of Pennsylvania is using its influence with Congress to procure the passage of Senator Frye's joint resolution authorizing the government purchase of the Sequoia trees in California to prevent their destruction.

## Regarding the Yell.

The college daily recently received a communication regarding the yell from a prominent alumnus, which we reprint as of general interest:

"May I say a word relative to cheering at games, races and other events where the Cornell student and graduate body should lend aid to Cornell athletic teams. Whenever the Cornell teams are away from Ithaca, they must depend largely for support upon alumni cheering, led perhaps by a nucleus of faithful followers from Ithaca. Now the reason that the cheering doesn't sustain itself as it should is that the graduate discovers that recent Cornellians have been trying to improve a yell that can't be improved, that they have attempted variations of the good old yell 'Cornell, I yell, yell, yell, Cornell!' and after the alumnus has once or twice tried to join in the only yell he knows or wants to know he finds some of the younger cheerers doing stunts with 'locomotive yells' he never heard, and with other varieties of Cornell cheers as strange to him as those echoing from the enemy's side of the field. He subsides into silence, and the cheering grows less and less.

"Now why not recall that nine out of every ten alumni know one yell, 'Cornell, I yell, yell, yell, Cornell!' that they can yell it with the best of undergraduates; that they are tickled beyond measure to yell it; that it is a yell that can be yelled for hours at a time without too much exertion; that it is the University yell. Let's abandon 'locomotives' and other things and stick to one yell on all occasions, and let that yell be the one that grew out of triumphant victory over Yale and Harvard in Cornell's infancy; that rang out on Yale field in 1889 when Cornell accomplished the impossible and scored on a Yale football eleven, the first team to do the trick in three years; the yell rang in Yale's ears at New London when the 1893 Freshman crew gave Yale its first intimation of what was coming on the water; the yell that has shaken up Princeton frequently; the yell that helped Cornell at Henley; the yell that helped beat Harvard three times running on the water and Yale twice, the good old Cornell yell.

"Stick to that. Let every alumnus feel that when the signal for a cheer is given he knows what that cheer is going to be, and is willing to add to its volume.

"All together now, everybody from the class of 1869 to the class of 1904, and give down 'Cornell, I yell, yell, yell, Cornell!' for victory at Philadelphia on Thanksgiving day, and for victory at Poughkeepsie next June, and for a whole lot more victories wherever the carmelian and white is to be seen.

Yours for Cornell,  
LOUIE ERVILLE WARE, '92."

## Sage College Notes.

A reception by the Warden and students of the college to the members of the faculty and their families was held Thursday, Nov. 22. A very pleasant time was enjoyed by the many present.

The students' annual cotillion will be held Friday, Nov. 30.

Next Monday has been selected as the date on which all the class basketball teams will be chosen.

Dartmouth is trying to raise \$1,000,000 to commemorate in 1901 the centennial of the graduation of Daniel Webster.

## Books and Publications by Cornell Professors.

The annual record of publications made under the auspices of the University and by its officers, is printed as a supplement to President Schurman's annual report. The record occupies thirty pages of the report.

Notable among the publications made by the University are the following: Catalogue of the Willard Fiske Dante Collection, compiled by T. W. Koch; two new volumes of Cornell Studies in Classical Philology, edited by C. E. Bennett and G. P. Bristol; and the three magazines, The Journal of Physical Chemistry, The Philosophical Review, and the Physical Review.

Three hundred and thirty-five magazine articles by University officers are noted, together with sixty-six book reviews and a large number of pamphlets, bulletins, reports, etc.

The books published during the year by professors and instructors cover a wide field, embracing about every department of the University. The following, among others, are worthy of note: President J. G. Schurman's Report of the Philippine Commission, Professor J. W. Jenks' "The Trust Problem," Professor L. H. Bailey's Cyclopaedia of Horticulture, (two volumes), and Professor G. L. Burr's Introduction to Hallam's "Middle Ages." The introduction is critical and biographical.

In mathematics, the following works have come from the press during the year just past: Elements of Differential Calculus, 3rd edition, by Assistant Professor McMahon and V. A. Snyder; Plane Trigonometry, by D. A. Murray; and Analytic Geometry, 4th and 5th editions, by Assistant Professor J. H. Tanner and J. Allen, who was formerly an instructor at Cornell.

The publications on medicine and surgery are a revised edition of Kirke's "Handbook of Physiology" by C. F. Dana and W. Coleman; "Natural History of the Tic Douloureux," and "The Common Forms of Meningitis and their Recognition," by Professor C. L. Dana; "Treatise on Fractures and Dislocations," 3rd edition, by Professor L. A. Stimson, and a "Manual of Operative Surgery," by Professor Stimson and J. Rogers.

In the geological department, Professor R. S. Tarr has published the 9th and 10th editions of his "First Book of Physical Geography," "North America, with the United States and its Dependencies," and, in conjunction with F. M. McMurry, "Home Geography, and the Earth as a Whole." Dr. H. Ries published "The Clays of New York State."

Professor R. H. Thurston has brought out new editions of the "Manual of the Steam Engine," and "Materials of Engineering;" and Professor H. J. Ryan, H. H. Norris and G. L. Hoxie have issued "Electrical Machinery."

In the languages, Assistant Professor H. C. Elmer has edited "Plautus' Captivi," Professor W. T. Hewett has brought out two more volumes in McMillan's German Classics, and L. L. Forman a First Greek Book.

Professor G. F. Atkinson has published "Lessons in Botany," Professor J. E. Creighton "An Introductory Logic," Professor C. H. Hull "The Economic Writings of Sir William Petty," Professor J. H. Comstock and J. G. Needham "The Wings of Insects," and Assistant Professor Wm. Strunk, Jr., has edited a school edition of "The Last of the Mohicans."

## "Like your Mother used to make"

May be a matter of conjugal argument, but like what you used to wear at college is a sentiment that a man can cherish for his very own. In the matter of **DRESS AND NEGLIGEE SHIRTS**, if we ever had your measure we can make them for you still and mail you samples of material at any time. We are head-quarters for **CORNELL FLAGS** and have the only correct Carnelian shade which differs from all other reds and we now have dyed to order. All the popular sizes at **50c., 75c., \$1.00, \$1.50 and \$2.00** on hand and mailed at once without extra charge.

C. R. SHERWOOD, ITHACA, N. Y.



**COTRELL & LEONARD,**

472-4-6-8 BROADWAY,  
ALBANY, N. Y.

Makers of Caps and Gowns.

Correct outfits under the Intercollegiate System for those holding degrees from any American Institution. Illustrated bulletin, etc., on application.

**"Monarch" Dress Shirts with Patent Tabs prevent the bosom from bulging through the vest opening. Sold by Haberdashers at \$1.50, \$1.75, \$2.00. CLUETT, PEABODY & CO. MAKERS**

## THE ITHACA DEMOCRAT,

122 S. TIOGA ST.

WE ARE FINE LEADERS IN JOB PRINTING.

We Print Anything from a Visiting Card to a Full Size Poster.

WHEN IN NEED OF JOB PRINTING CALL AND GET PRICES

IT WILL PAY YOU.

**STEEL PENS**  
Samples for trial, 16 different numbers for all styles of writing, including the VERTICAL SYSTEM, sent prepaid on receipt of 10 cents.

## IS IT HARD?

That chair you study in? Well, we make Cushions to order; any size, any material. We do it quick, better and lower priced than ready-made Cushions.

**EMPIRE STATE HOUSEFURNISHING CO.**

Successor to the Bool Co.

Same old stand, just below Hotel.

**FORESTRY COLLEGE REPORT.**

**Second Annual Report of Cornell's Youngest College.**

The second annual report of the New York State College of Forestry at Cornell, which has been issued in pamphlet form, furnishes some interesting reading to those who find attraction in the study of trees and their uses and preservation.

Professor Fernow, director of the college, draws attention in the report to the fact that as the work of the college becomes known, there is an increasing number of inquires by letter from people who seek advice, and that as this involves considerable correspondence the demand may be met eventually by printed matter, although so far there has not been leisure to prepare this.

The college in its second year found it expedient to make an important change in its schedule, and the junior and senior classes were transferred for the entire spring term to the college forest in the Adirondacks, which was purchased for this purpose by the State. There they engage under the supervision of the director and the assistant professors almost wholly in practical work. This includes sowing and planting in the nursery and in the field, improvement cuttings and thinnings, measuring of trees and making yield tables. During this term in the woods the students also get a course in game preservation and a course in practical fish culture under an expert from the United States Fish Commission.

The trustees of Cornell came into possession of the property comprised in the college forest in March, 1899. The law under which the land was acquired provided that the University should have possession of it for thirty years and that the College of Forestry should conduct experiments in forestry in the interest of the State and for the advancement of the science of forestry, and that it might plant, raise, cut and sell timber with a view of obtaining knowledge concerning the use of forests and the production, harvesting and reproduction of wood crops from them.

In the planting that was done in the year a squad of woodchoppers, mostly French Canadians who had been cutting trees all winter, were employed, and soon they became as much interested in the setting out of new trees as they had been in the cutting of standing trees for logs. The report says that it was estimated that in the nurseries more than 1,500,000 seedlings went into winter with a fair prospect of surviving it.

The college has maintained so far only a crew of fifteen or twenty men at the college camp, but had collected a small quantity of logs and about 1,000 cords of stove wood which it expected to sell to the neighboring hotels and private camps.

"It has been the aim," the report says, "to bring together a crew of exceptionally good, reliable woodmen, who may become the stable nucleus of the logging crews, which will have to work with greater intelligence and care than is usual in order to secure the results which a forestry management is after."

Four of the fires with which the park has been visited were traced with reasonable certainty to lightning. Most were put out without serious damage to the reservation. One, however, was fought for more than a week before final extinction, and the work of overcoming it required 290

labor days. More than 900 acres were burned over.

Some of the fires, were undoubtedly due to the carelessness of hunters, campers and surveyors, with smudges, matches, etc. Dead trees with broken tops are believed to be a prolific source of danger from fire in a forest, not only in attracting lightning, but also in keeping and propagating fires. Fires under such circumstances do some of their damage by consuming the leaf mould and soil, and burning the roots of trees, which then in the next wind fall to the ground dead.

Professor Fernow describes one fire in an old pine barren adjoining a marsh usually under water, but in the year of the report dry. The fire was put out, as was believed, but after several days blazed up again and spread quickly.

"By evening, when the writer visited the place," Professor Fernow says, "the fire had entered the swamp, and nearly two miles of fire line were eating their way through the low shrubs and moss. An organized effort of the surveying force through the night in whipping the fire out was successful, except on a hardwood ridge on which a large number of fallen logs and stumps were blazing. This hill it was necessary to surround with a trench, which was at once commenced, additional help having arrived in the morning. Before, however, this trench had progressed far enough, the wind had again fanned the flames and all efforts to keep the fire confined were in vain. By evening it had again entered the marsh, progressing rapidly.

"Again the night was used to advantage, the dew and absence of wind being favorable to whip out the fire. During the night more than one hundred men had assembled, and it was hoped to end the battle, although by this time more than four to five miles of front had to be defended. The fire could not be held in check along the entire line, and broke over the lines of defence, eating its way across the marsh into the surrounding timber. The fourth day was spent in quenching single nuclei of fire to retard it, and in throwing up ditches. \* \* \* In the afternoon the fire ran with such fury through the young timber surrounding the marsh that the men, in places, had to run for their lives. That night, fortunately, a heavy thunderstorm with abundant rain quenched the fire, although even such a down-pour could not quite extinguish it at all points."

It was this fire that took more than a week to extinguish absolutely. The report includes a statement of the expenditure of the \$30,000 appropriation for the College of Forestry, and the director asks for more suitable habitation than the college has so far been able to secure.

**Word from Dr. Kann.**

Professor Nichols has received a dispatch from Dundee, Scotland, announcing the safe arrival there of Dr. Leopold Kann. Dr. Kann, who is a graduate of the University of Vienna, was during the year '98-'99 honorary fellow in Physics at Cornell University. He went with the Stein Arctic exploration party to Ellesmere Land, spending the winter of '99-'00 there. His purpose in visiting Arctic regions was to make scientific investigations in atmospheric electricity and earth magnetism.

**Yale's Place of Birth.**

On Saturday, November 10, the first of Yale's bi-centennial celebrations took place at Branford, seven miles from New Haven. The occasion was the unveiling of a monument commemorative of the founding of Yale College, 200 years ago. It was at Branford that the ten Connecticut clergymen met and each placed four volumes on a table, saying, "I give these books for the founding of a college in this colony."

The memorial to the act of these ten clergymen is in the shape of a solid block of granite that stands about 3 feet high and is 3 feet wide and 3 feet long. The names of the ten founders are inscribed on it, as well as the words they used in Parson Russell's humble home in Branford. President Hadley delivered the principal address at the memorial exercises. In his speech he said:

"Significant it is also that Yale was founded by a gift, not of money or land or buildings, but of books. A small gift it was compared with that magnificent foundation which a loyal son of Branford has recently established, and whose hospitality we today enjoy; but books they were, given by those who knew their value. Far be it from me to depreciate the importance of varied appliances in higher education and of methods of instruction which teach people to learn what is outside of the book covers, as well as what is within them. And yet, when all has been said for these new methods and varied appliances, the fact remains true that the man who knows how to use books is educated in a sense in which the man who does not know how to use books never can be. He has the key which unlocks the intellectual storehouses of the world. No training in other directions, however extensive, can take the place of any deficiency in this regard. From her foundation until now it is because Yale has clung to this truth that her men have won their best successes in the intellectual life of the nation."

Wesleyan's faculty has passed a rule that all tutoring must be done by official tutors.

THE  
**ATLANTIC**

MONTHLY

3 SERIALS IN

1901

**MARY JOHNSTON**

author of "To Have and To Hold" will bring out her third story,

**AUDREY**

in the *Atlantic* during 1901. This new story is said to be a distinct artistic advance even over her previous remarkable successes.

**SARAH ORNE JEWETT**

WILL CONTRIBUTE

**THE TORY LOVER**

This stirring American historical romance exhibits in a new field the rare qualities of Miss Jewett's art; and her theme, the fortunes of the Loyalists in 1777, has not hitherto been developed.

**KATE DOUGLAS WIGGIN**

WILL TELL

**Penelope's Irish**

**Experiences**

The final volume of the delightful "Penelope" Series will be brought out as a six-part serial in the *Atlantic*, beginning with the November (1900) number.

**SPECIAL INTRODUCTORY OFFER**

On receipt of 50 cents the publishers will send the *ATLANTIC* for three months to any *NEW* subscriber.

For more detailed announcements, send postal for new illustrated prospectus.

All new subscribers for 1901 enrolled before December 20th, 1900, will receive the November and December issues for 1900 free.

35 cents a copy. \$4.00 a year

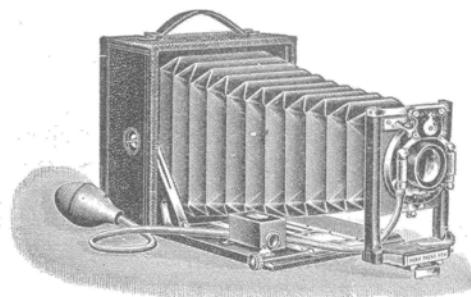
HOUGHTON, MIFFLIN & CO.

4 Park Street, Boston.

**PARK & HIGGINS,**  
MERCHANT TAILORS.

Give us a call and look our stock over.  
We can interest you.

406 EDDY ST.



**Pony**

**Premo**

No. 6.

The most successful camera of the season.

Have lens and shutter better than furnished with other hand cameras.

Catalogue on application.

**Premo Cameras**

PRICE, \$8.00 AND UPWARDS.

**ROCHESTER OPTICAL CO.**

SOUTH STREET, ROCHESTER, N. Y.

**J. MITCHELL MORRISON,**

**BRIGHT GOODS,  
CHOICE PATTERNS,  
POPULAR PRICES.**

**MERCHANT TAILOR.  
Honest Goods at  
Honest Prices.**

Phone 217 W.

124 NORTH AURORA ST.

**GLOVES**

**OF THE RIGHT SORT.**

**CORBIN & LYTTLE.**

# STUDENTS SHOULD GO TO **KELLY'S** FOR EVERYTHING IN THE LINE OF STUDENTS' SUPPLIES.

Furnishing Goods, Shoes, Hats and Caps, Hosiery, Neckwear, Shop Suits, Towels, etc. Spalding's Sporting Goods of every description, Foot Ball, Base Ball, Gym. Supplies. Outfitter to Varsity Foot Ball Team.

## Mathematical Department Notes.

There are five hundred and forty-nine students in the Mathematical Department during the fall session. When the afternoon classes are started in the winter there will be over six hundred students receiving instruction in mathematics.

Dr. Murray's Spherical Trigonometry has just been published by Longmans, Green & Co. as a companion volume to his Plane Trigonometry issued by the same firm last year. The volume is a most beautiful piece of book making and it is very clearly written as any one familiar with Dr. Murray's ability as a teacher would expect. The same publishing firm had previously published Dr. Murray's Differential Equations. These three books together with the Integral Calculus published by the American Book Company are the four mathematical text books that Dr. Murray has written since he came to Cornell. Dr. Murray is a graduate of Dalhousie College, where he was an instructor. Later he spent three years at Johns Hopkins University where he received the degree of Ph.D. He was assistant professor of mathematics in the University of the City of New York for a number of years. This is the seventh year of his connection with the Mathematical Department of Cornell.

The American Mathematical Society will hold its annual meeting at Cornell sometime next August. Professor Tanner is a member of the committee of the society having charge of the arrangements. The society holds its meetings here on the invitation of President Schurman.

The American Association for the Advancement of Science holds its annual meeting at Denver in August. Professor McMahon is the vice president of the section of mathematics and astronomy.

Dr. and Mrs. Hutchinson spent the summer vacation in Europe. The first part of the vacation was spent at the University of Göttingen where Dr. Hutchinson attended the lectures of Dr. Hilbert on the Calculus of Variations. Dr. and Mrs. Hutchinson spent the last part of their vacation traveling in Germany, Switzerland, and Holland.

There will be seven teachers on the mathematical staff of the summer school next year. The appointments already made are Professors Jones, Tanner and Wait, together with doctors Murray, Snyder, and Miller of Cornell, and Dr. Westfall, '95, (Leipzig, '98) of the University of Iowa.

## Interfraternity Golf.

The interfraternity golf tournament for the silver cup offered by Mr. Wyckoff was ended on November 20, Kappa Alpha winning the finals by a score of 4 up and 2 to play. Teams were entered from eight fraternities. In the first round, Kappa Alpha beat Phi Kappa Psi; Chi Phi beat Delta Kappa Epsilon; Chi Psi beat Delta Tau Delta; and Sigma Phi beat Delta Upsilon. In the semi-finals, Kappa Alpha beat Chi Phi, and Chi Psi beat Sigma Phi. It is hoped that the interest taken in this year's tournament indicates a more wide spread support for those of the future.

## Professor Morse Stephens and the Lowell Institute Lectures.

The Boston papers contain favorable notices of the series of lectures which Professor Morse Stephens of Cornell is delivering before the Lowell Institute in Boston on "The History of the English Administration in India." The course began Saturday, October 27, and is being given on successive Saturdays. The following is a list of the lectures:

I. Period of Clive, 1757-1772; The Period of Beginnings. II. Period of Warren Hastings, 1772-1785; The Period of the Definite Establishment of Systematic Government. III. Period of Cornwallis, 1785-1800; The Period of Organized Government. IV. Period of Wellesley, 1800-1828; The Period of Imperial Government. V. Period of Bentinck, 1828-1846; The Period of Orderly Development. VI. Period of Dalhousie, 1848-1858; The Period of Vigorous Activity. VII. India under the Crown; The Period of Reconstruction, 1858-1872. VIII. India under the Crown: The Present System of Administration.

## Saturday's Football Games.

Cornell 42, Univ. of Vermont 0.  
Cornell Freshmen 16, Penn. Freshmen 11.  
Yale 28, Harvard 0.  
Brown 6, Syracuse 6.  
Michigan 0, Ohio State 0.  
Wesleyan 17, Amherst 0.  
Lafayette 18, Lehigh 0.  
Union 11, Rutgers 0.  
Wisconsin 27, Illinois 0.  
Carlisle Indians 5, W. and J. 5.

## Cornell Freshmen Defeat Pennsylvania in Football.

The Cornell Freshman eleven defeated the Pennsylvania youngsters on Franklin Field, Philadelphia, last Saturday by a score of 16 to 11. The Cornell team put up a splendid game, making gains by straight playing, about the ends and through the line. Cornell's team was practically the same as that which defeated the sophomores a few days before in the underclass contest.

## Cornellian Announcement.

The 1902 Cornellian board announces that by virtue of the authority granted by the sophomore class, it will appoint as assistant business manager of the 1903 board that sophomore who secures second place in this year's business competition.

The places of business manager and assistant business manager on next year's board are still open to both old and new competitors, since no candidate has as yet gained a secure lead. New candidates should start work immediately, however.

The awards will be made strictly on the merits of the candidates, as shown by the amount of advertising obtained for the 1902 Cornellian. Information regarding the competition will be furnished on request by J. R. Patterson, 6 South Avenue, Ithaca.

Professor Hewett's German Reader, although issued only a year and a half ago, has already been adopted in more than fifty colleges and universities and in numerous preparatory schools.

Office, Bates Block  
Ithaca, N.Y.  
Phone.

*Allen L. Smith*  
Printer.

**FOOTE & CO.,**  
FLORISTS.

CUT FLOWERS A SPECIALTY.  
Green Houses 115 E. Green St.,  
105 Catherine St.  
STORE 314 E. STATE ST.

Combined in the  
**Northwestern**

Contract are the following

And other advantages:

Life Insurance for wife if you die,  
Endowment Insurance for yourself if you live,  
Annual Income till you die,  
Then Annual Income to wife till she dies,  
Then full face amount to children.

**VIRGIL D. MORSE,**

222 E. STATE ST.

Phone 220F.

**THE UNIVERSITY  
PREPARATORY SCHOOL.**

PREPARES FOR ALL  
COURSES IN

**CORNELL UNIVERSITY.**

Fall Term opened Thursday, Sept. 27.

**C. A. STILES, B. S.**

ITHACA, N. Y.

**CASCADILLA SCHOOL,**

ITHACA, N. Y.



Prepares for ALL colleges. Leading fitting school for Cornell. Small, carefully graded classes; instruction primarily for the individual; attendance strictly limited. Location commends itself to everyone familiar with the beauty and healthfulness of the Central Lake Region of the Empire State. Separate Recitation Building, admirably equipped. Residences beautiful and perfectly appointed homes; model new cottage for the younger boys. Unique Recreation Building (ILLUSTRATING THIS ADVERTISEMENT); Gymnasium; Athletic Field of thirteen acres on Cayuga Lake. Address

**C. V. PARSELL, A. M., Principal.**

**For Real Estate**

SALES RENTS LOANS

CALL ON

**GEORGE S. TARBELL, Attorney**

Trust Co. Building, ITHACA, N. Y.

**TEACHERS' AGENCIES.**

**The Albert Teachers' Agency,**

Central Music Hall, Chicago.

Fifteenth year. 3250 positions filled. Nearly 300 in '99. List of schools and colleges in which we fill positions sent free.

Address C. J. ALBERT, Manager.

We have unequaled facilities for placing teachers in every part of the country.

**WINSHIP**

**TEACHERS' AGENCY.**

3 Somerset St., Boston.

WESTERN OFFICE: Kansas City, Mo.

WM. F. JARVIS,

ALVIN F. PEASE.

**THE**

**Pratt Teachers' Agency**

Recommends college and normal graduates, specialists, and other teachers to colleges, schools, and families. Advises parents about schools.

**WM. O. PRATT, Manager**

70 Fifth Avenue, New York

**ITHACA HIGH SCHOOL.**

(Cornell's largest fitting School.)

Gets its students from England, Russia, Italy, Ireland, Brazil, Mexico, Canada, Cuba, twenty-eight states (28) and from twenty-one (21) counties in N. Y. State. Won 62 state and 9 Univ. scholarships in 7 yrs. Sends 40 to 60 students annually to Cornell. Tuition \$60 for 40 weeks including free books. Enter any time. Both sexes. Registration 650. Gymnasium. 7-acre athletic field. For catalog address

**F. D. BOYNTON, A. M., Principal.**

**The George H. Ford Company**

**M**anufacturers of Society  
**P**ins, Medals, Prizes,  
**T**rophies, College Emblems

**C**ollege Souvenirs in gold,  
**S**ilver, bronze, porcelain  
china and stone ware

**D**esigns and estimates furnished on application

**New Haven, Conn.**