New York Agricultural Experiment Station.

(These series of frequent reports are intended to inform the public of progress at the Station rather than to give complete results.)

BULLETIN (NO. CXVI OLD SERIES) NO. I NEW SERIES.

N. Y. AGRICULTURAL EXPERIMENT STATION. [Geneva, N. Y., July 18, 1885.]

On June 20, there was received at the Station a sample of fertilizer for analysis, with the following endorsement:

Brand of Fertilizers: Mason's High Grade Potash Fertilizer.
Name and address of manufacturer: Mason's High Grade Potash Fertilizers, Binghamton, N. Y.
Name and address of dealer from whose stock this sample is taken: George S. Ellis, Levanna, N. Y.
Date of taking this sample: June 18, 1885.
Selling price per ton or hundred: Wholesale price per ton, $22.50; $30.00 retail.
Actual weight of package opened: 350 lbs.
Copy of all the printing upon the bag or package:

MASON’S HIGH GRADE POTASH FERTILIZER, MANUFACTURED AT
BINGHAMTON, N. Y.

ANALYSIS.

Potash equivalent in Sulphate .................. 15
Lime ........................................ 21
Magnesia ................................... 6
Chloride Sodium ................................ 5
Phosphoric Acid, available Salts ............... 3
Ammonia, Salts of ................................ 6
Vegetable Mold ............................... 10
Moisture ..................................... 27
Undetermined Elements ....................... 7

100

J. G. ORTON, Chemist.

The Station analysis of the above sample gave the following results:

<table>
<thead>
<tr>
<th></th>
<th>Per. Cent.</th>
<th>Lbs. Per Ton.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric acid, soluble</td>
<td>tr.</td>
<td></td>
</tr>
<tr>
<td>&quot; &quot; reverted</td>
<td>0.18</td>
<td>3.60</td>
</tr>
<tr>
<td>&quot; &quot; insoluble</td>
<td>0.43</td>
<td>8.60</td>
</tr>
<tr>
<td>Potash</td>
<td>0.005</td>
<td>0.10</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>0.20</td>
<td>4.00</td>
</tr>
<tr>
<td>&quot; equivalent to ammonia</td>
<td>0.24</td>
<td>4.80</td>
</tr>
<tr>
<td>Lime</td>
<td>7.15</td>
<td>143.00</td>
</tr>
<tr>
<td>Moisture</td>
<td>28.21</td>
<td>564.20</td>
</tr>
</tbody>
</table>

An analysis made June 27 by Dr. F. A. Genth for the Pennsylvania Board of Agriculture gave the following results:

<table>
<thead>
<tr>
<th></th>
<th>Per Cent.</th>
<th>Lbs. Per Ton.</th>
<th>Value.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soluble phosphoric acid</td>
<td>none</td>
<td>13.2</td>
<td>1.19</td>
</tr>
<tr>
<td>Reverted</td>
<td>0.66</td>
<td>14.0</td>
<td>0.56</td>
</tr>
<tr>
<td>Insoluble</td>
<td>0.70</td>
<td>2.8</td>
<td>0.14</td>
</tr>
<tr>
<td>Potash</td>
<td>0.14</td>
<td>22.8</td>
<td>4.10</td>
</tr>
</tbody>
</table>

Comparative commercial value per ton .................... $ 5.99
Selling price per ton at point of selection ........... 35.00

We will give the manufacturer the benefit of the advertisement by republishing his circular, which reads as below:

MASON’S HIGH GRADE POTASH FERTILIZER FOR ALL CROPS.

The only fertilizer in the world manufactured from wood. Manufactured at Binghamton, N. Y.

SOME REASONS WHY FARMERS SHOULD USE MASON’S POTASH FERTILIZER.

This is the only Fertilizer in the world produced from wood. A few years ago you would not have thought that the paper you read could ever have been
manufactured from wood, but it is, and is conceded by all printers one of the best and most durable papers ever used. Now, we call the farmers’ attention for a few moments to hard wood ashes. We ask them if they are a good fertilizer. Their answer is they are one of the best they ever used. If we could only get enough of them we would want no other fertilizer for our crops, as they say that the ashes is good for all crops, especially for wheat.

Now, we are placing before the farmers a fertilizer five times better than hard wood ashes, and at a low price, so all farmers can use it. Now, what we call the attention of the farmers to is this: Their good judgment will teach them that a fertilizer produced from the tree, containing fifteen per cent. potash would be natural for the soil to retain it as it is vegetable matter, and once grown from the soil. Now, think of year after year how you have robbed your land of all that has grown upon it, and put nothing back to feed it. You will agree with us if we tell you that all crops require more or less potash. The potato requires potash, as that itself when burnt the ashes is from 5 to 10 per cent. potash—the wheat the same. You feed any crop what it likes, natural food, and it will thrive. The same as your pig in the pen. If you feed him all the corn and milk he wants he will grow fat, but if you give him something that he does not like, he will not eat, and for weeks you can see no difference. It is just so with your crops. Feed them what they like, they will grow, and potash is natural food for them. Now, we have placed before you one of nature’s own fertilizers, adapted to all crops, soils and climates. Our aim is to keep this a high grade, make it better in quality instead of less. As our judgment is that it will become very popular with the farmers and as they use it in large quantities, it enables us to sell at a small margin, and give them the benefit.

We have already spent large sums of money in chemistry, and keep a chemist with us, so as to keep up the standard of our fertilizer.

We have also studied the nature, not only what is valuable to feed the straw, but the Kernel as well. Farmers are well aware that they often get a growth of straw, and think they are going to have a large crop, but there is something lacking to feed the kernel, and the crop is a failure. We claim that potash produced from wood is the only natural food in the world to feed the kernel. One trial will convince every farmer that they should use no other brand but Mason’s High Grade Potash Fertilizer on all crops. Remember, this is the only fertilizer in the world produced from wood.

Farmers should take an interest in this fertilizer as our aim is to give them value received for every dollar we receive from them. Some reasons why the farmers should give Mason’s High Grade Fertilizer their attention. First—Because it costs but thirty dollars per ton at retail. Second—It is more bulky, free from sand and worthless material. Third—Because common sense will teach one that vegetable matter is better for their land than mineral as in the vegetable its nature is to grow; the mineral is not soluble. The ammonia produced from wood, its nature is to stay in the soil; the ammonia produced from the animal, its nature is to escape in the air.

For crops in general use from 250 to 300 lbs. per acre.
Analysis of Mason's High Grade Potash Fertilizer.

Potash, equivalent in Sulphate.......................... 15
Lime.................................................................. 21
Magnesia............................................................. 6
Chloride Sodium .................................................. 5
Phosphoric Acid, available Salts.............................. 3
Ammonia, Salts of................................................ 6
Vegetable Mold.................................................... 10
Moisture ................................................................ 27
Undetermined Elements......................................... 7

J. G. ORTON, Chemist.


Address P. O. Box 123, Binghamton, N. Y., office 69 Court St., Binghamton, N. Y.

FOR SALE BY

Comment is unnecessary. At the same figures of valuation our analysis shows a commercial value of $1.52 a ton : Prof. Genth’s analysis $5.99 a ton. The selling price in New York is given as $30.00 a ton; in Pennsylvania as $35.00 a ton.

E. LEWIS STURTEVANT, Director.