I have found that stables and privies may be, in a great measure, deprived of smell by the frequent use of gypsum.

It seems needless to give evidence of this effect of gypsum, which cannot have escaped the notice of every observing farmer. They should remember, however, that it destroys the smell by the production of sulphate of ammonia, which, being retained in this manner, greatly increases the value of the manures.

It is proposed to collect additional facts with reference to this very useful article, and fully discuss its merits upon another occasion.

Soot from Chimneys.

The composition of wood soot, as determined by the late M. Braconnot, of Paris, is as follows:

| Ulmic or humic, and analo Azotic matter soluble in | gous water | to h | umus con- | | 30.0 |
|---|---------------|----------|-----------------|----|-------|
| taining ammonia - | | | - | | 20.0 |
| A bitter organic substance | | - | Mark . | - | 0.5 |
| Insoluble carbon | 7 | - | Ola io | - | 3.9 |
| Silica | 1146 | MA THE | N MARKE | - | 1.0 |
| Carbonate of lime - | 11896 | 40-40 | 75.48 | - | 14.7 |
| | | | | | trace |
| Phosphate of lime (contain | ing s | ome | iron) | 14 | 1.5 |
| Sulphate of lime | | 持續的問 | HAMIN | | 0.5 |
| Chloride of potassium - | fo ter | 12 - | 465 3 78 | | 0.4 |
| Acetate of potash - | 29 m. 10 | Artie [] | A 4 16 | - | 4.1 |
| Acetate of lime | n-Table | 1 170 1 | No. | 1 | 5.7 |
| Acetate of magnesia - | | 100 | | | 0.5 |
| Acetate of iron | () 平河 | 20-1 | - | - | trace |
| Acetate of ammonia - | 351 | to the | - F | - | 0.2 |
| Water | W-38 | 0.546 | 10 T 9 W | - | 12.5 |

As these results prove that all the constituents of soot are such as to enter into the composition of the plants, we can readily understand why it is so efficient as a manure. Coal soot differs from the above in being heavier, and in containing more nitrogen and ammonia, and is therefore worth more per bushel.

There is a considerable trade carried on in soot in Europe,

where it is carefully saved and applied to the soil.

A very common and beneficial mode of using it, is to apply 20 bushels to the acre upon young wheat and clover. In Flanders it is applied at the rate of 50 to 60 bushels to the acre of colewort, (a non-heading cabbage,) and besides furnishing plant-food, preserves the young plants from insects. In this connection it deserves the attention of our planters and others.

CHAP. XIII.