

closed clamps, it produces a fine porous charcoal, more effective as a disinfective and decoloring agent than powdered wood charcoal. Some trials go to prove that its decoloring power is even greater than that of powdered bone black.

This matter deserves the attention of sugar refiners and others requiring decoloring materials. The only difficulty in the way seems to be that owing to its fineness—it may too readily pass through the filters.

This condition, however, will be all the better for its use in absorbing ammonia and in deodorizing night soil, which will be noticed on a subsequent page.

SEDIMENT FROM FRESH WATER PONDS.

As information is often desired in reference to deposits of this kind, I present the results of an elaborate analysis performed by Dr. Piggot, of a sample from an old mill-pond on the Hampton estate of Jno. Ridgely, Esq. The pond had existed for about 70 years, and in its lower part the sediment had accumulated to the thickness of 10 feet. The dam having been destroyed by a freshet, its energetic owner determined to restore to his fields this material that had been washed from them.

Its composition is as follows :

Insoluble silica and silicates,	71.49
Silica, soluble in potash,	4.34
Oxide of iron,	9.26
Alumina,	2.32
Carbonate of lime,	35
Magnesia,	91
Soda and potash,	1.95
Phosphoric acid,	20
Sulphuric acid,	trace
Chlorine,	1.22
Humus and humic acid,	3.29
Other organic matters and water,	4.15

When I saw the place, more than a year since, the material was being taken out and spread over the adjacent ground about 2 feet thick, and a quantity of lime equal to about one-tenth its bulk was strewed over it. The intention was, after letting lie a year, to apply it to the adjacent fields. Although it contains several important elements of plants in suitable chemical and physical conditions, yet it will be necessary to apply it in very heavy doses to produce decisive effects upon the crops.

As the pond was surrounded with limestone, it is remarkable that so little lime should exist in the sediment.

Another sample, (somewhat analogous to the last,) was sent by Dr. E. H. Pierce, of Queen Anne's county, which contained