

have much to recommend them—their compactness gives them one good qualification for a wheat soil. The quantity of peroxide of iron in them affords the faculty of absorbing and retaining matter from the atmosphere, and they are very favorably located as to market privileges. They are gently rolling and will not suffer from superfluous moisture. Soils having all of these qualifications, should not be abandoned to waste, suffered to be cut up by gullies, and allowed to remain in commons. With the proper manures and cultivation they will amply repay those who may apply them.

Their main deficiencies are lime and potash. These soils contain a very fair proportion of phosphoric acid and of magnesia, at least such a quantity of these constituents as would render it doubtful whether they should be applied; with lime and potash, on the other hand there is no doubt, the deficiency of these is well marked, and they should be supplied, a small quantity of crude potash, say fifty pounds to the acre, should be well mixed with compost and applied in the spring. Besides this, lime should be applied by the rules which I have given when speaking of that article.

The mode of treatment of this variety of soil, and of all soils, should vary as it is more or less compact; when it is compact, green crops, should be turned under and mixed thoroughly with the soil, when the soil is not stiff, then the green crops should be suffered to remain on the surface and coarse manure should not be ploughed under. When the soils are stiff and heavy they should be flushed up early in the fall, and be exposed to the full influence of the effects of alternate freezing and thawing during the winter, this will set free many constituents which may be present, but in a dormant or inoperative condition. Buckwheat should be sown on them at the proper time, so as to be in full blossom early in the autumn, and ploughed under or suffered to remain on the surface as the soils were more or less stiff and compact, this would not only improve the physical texture of these soils in rendering them more accessible to the atmospheric influences, but would also furnish carbonic acid to the water that might fall upon them, and enable it more thoroughly to dissolve their constituents. Buckwheat furnishes a large quantity of organic matter, which, when decomposed, will afford a large supply of carbonic acid, for whose particular uses and properties I refer to the section on carbon.

These soils commence some short distance above the Washington and Baltimore Railroad in Prince George's county, pass down through the neighborhood of Vansville, are found between the forest lands and the Anacostia river for some distance below Bladensburg. They are met with in some modification also in Anne Arundel county, between Davidsonville and the light soils which border on South river. These latter soils have nearly the same appearance and other physical characteristics, but differ chemically in containing a larger quantity of potash, perhaps sufficient;