

Exeter Mine.

Specific gravity.....	1.288
Loss in coking.....	42.37
Total weight of coke.....	57.63—100.00
Moisture	12.10
Volatile matters.....	30.27
Carbon in coke.....	50.13
Ashes (red).....	7.50—100.00

Frost's Coal.

Specific gravity.....	1.2883
Loss in coking.....	46.37
Total weight of coke.....	53.63—100.00
Moisture	8.50
Volatile matters.....	37.87
Carbon in coke.....	46.53
Ashes (red).....	7.10—100.00

It is but just to add that these analyses were made from selected specimens of these coals, and may be taken as fairly representing that part of the seam affording the smith's coal. Barker's mine is two miles and a half north-east of Winchester, on the south-east quarter of section 22, township 14, range 12. The coal at this locality averages about thirty inches in thickness, and has a good slate roof. This seam of coal will yield about two and a half million tons to the square mile, and probably underlies as much as three townships, or one hundred and eight square miles in this county.

Clays.—The most extensive and valuable deposit of clays to be found in this portion of the State is that underlying the Exeter coal-seam. In the vicinity of Winchester, it is from ten to twelve feet in thickness, and is most readily procured from those localities where the overlying strata have been removed by erosion, and the clay has been subjected to atmospheric influences during the Drift period, which have had a favorable effect in rendering it fit for immediate use. The same effect may also be produced by throwing it out of the bed, and exposing it for several months to atmospheric influences. It sometimes appears as a regularly stratified clay shale, and again as an unstratified fire-clay. Its color is a light ashy-gray, inclining to yellow. It outcrops along the western borders of the coal-field, sometimes lying immediately under the Exeter coal, and at other localities separated from the coal by the steel-gray nodular limestone already noticed. It varies in thickness from three to twelve feet, and was found at every locality in this county where the base of the Coal Measures was exposed; and its near proximity to the coal adds materially to its value. It will afford an inexhaustible supply of material suitable for the manufacture of drain-tile, potter's ware, and fire-brick. The brown sub-soil clays upon the uplands every where furnish material suitable for the manufacture of common brick; and the sand necessary for the same purpose, and for mortar, is abundantly supplied from the beds of modified Drift in the valleys.