

On the west of Market Harborough the lias clays are seen at Oxendon and Marston Trussel, and the escarpment of the ferruginous sands ranges above these places towards the eventful plains of Naseby heath, and thence by Walford, and near which it approaches and accompanies on the east the line of the Grand Union Canal, which enters and undermines that escarpment at Crick tunnel,—the tunnel being excavated in the subjacent lias clays beneath the marly sandstone which crowns the escarpment. Having passed the ridge, the canal traverses a denuded valley on the lias clays as far as its junction with the branch communicating with the Oxford Canal, which passes the same ridge under circumstances exactly similar at Braunston tunnel.

The breadth of the district of ferruginous sands in this part of its course, is very considerable; it is difficult however to state it correctly, on account of the very tortuous lines formed both by its superior and inferior junction, but if we reduce these to lines expressing their mean course, the distance between them will average about ten miles. The account given under the head “(a) Chemical and external characters” of the varieties presented by these beds in the midland counties, will sufficiently explain the structure of this tract.

Near the tunnels above mentioned at Crick and Braunston, the scarped edge of these beds forms a long level ridge of inconsiderable height; but near Daventry (about a mile west of which town the escarpment ranges) it becomes broken, and varied with loftier summits rising above the general surface of the platform.

Such are Burrow hill near Daventry, crowned with one of the most extensive ancient camps in the island; Arbury hill, similarly fortified and distinguished as a station in the trigonometrical survey;* this rises 804 feet above the level of the

depth,—it often forms low ridges of hills, and in some instances (as near Braunston) caps the escarpment.

* The accuracy of the astronomical observations made at Arbury has been called in question in the controversy respecting the measure of the meridional arc deduced from this survey. One writer, Captain Kater, has supposed that a deflection of the plum-line may have been produced by the attraction of some rock of greater density at no great depth beneath the surface, arguing to the probability of such a circumstance from the occurrence of the sienitic group of Charnwood forest, about 25 miles north of this hill. An exact knowledge, however, of the structure of this district, demonstrates that the probability is every way against this supposition. The lias and new red sandstone formations are in this quarter very regular, and cannot be together estimated at less than 1000 feet in thickness; and as nothing in any of the neighbouring denudations indicates the protrusion of any ridge of the older and elevated rock strata through this mass, there is every appearance that it would be necessary to sink to this depth before any such rock could be met with.