

oolite skirts on the south and west, about two miles distant from it, proceeding westwards, by Blakesly to Culworth (the exact line of junction being however in this part of its course frequently obscure): hence it trends to the south, forming the summit of the range of hills which skirt the valley of the Cherwell about five miles distant from the course of that river, which it approaches still nearer at Aynhoe.\*

III. *Course through Oxfordshire.* Having thus traced the inferior edge of this oolitic system into Oxfordshire, as we have previously done its upper edge, we shall in the next place trace both the edges through that county, which will on many accounts form a convenient division. Resuming then our account of the upper beds on the borders of Buckinghamshire and Oxfordshire, whither we have already pursued them, we find the same blue and shelly beds which we had noticed at Buckingham, worked at Marsh Gibbon, Ambrosden, and Merton, † forming a very low swelling ground on the north of Otmoor, and separated by a tolerably thick bed of clay from the great oolite; at Bletchingdon about three miles on the east of Merton, a rock appearing to possess similar characters with the forest marble has been worked for tomb-stones, &c. The pillars in the inner quadrangle of St. John's college Oxford, are from these quarries, and the chimney-pieces in some of the neighbouring villas built in Charles the Second's time, appear

\* The residence of the author of this article in this part of the country has enabled him to trace this portion of the course of the oolites more in the detail. Culworth village stands on a brow formed of the subjacent sandy strata, against which the oolite here appears to terminate abruptly, ranging immediately on the south of the village: hence, the line of junction ranges south, passing just above the brook on the east of Thorpe Mandeville church, where the whole summit of the hill is occupied by the subjacent sand. There is however a subsided mass of the oolite immediately at the foot of the hill on the north-east of the church; and about five miles to the north of this place and of the general line of junction, there is another subsided mass, near Woodford, half a mile east-south-east of the village; the beds here dip under an angle of  $30^{\circ}$  to the south, and are worked as limestone quarries. Proceeding south, the oolite attains the brow of the escarpment looking down on Marston St. Lawrence, on which the villages of Gretworth and Farthinghoe are built; thence continuing above the Spa at Astrop, to Aynhoe. Strictly speaking, the beds which have been here denominated oolite, are, at their line of junction with the sands, rather to be considered as referable to the fuller's earth rock of the neighbourhood of Bath (that which stands at the head of the next section) with which they closely agree in their characters and fossils.

† Mr. Smith has extended the colour of the clunch clay over this ridge; and the same error is committed in most copies of Mr. Greenough's Map; but the dotted lines placed to direct the artist who coloured the maps, indicate it, though they have not been attended to. The lines drawn to indicate the course of the forest marble in this part of Mr. Smith's Map, are purely imaginary.