

other nebulous and clustering forms which are not miniatures of our galaxy?"

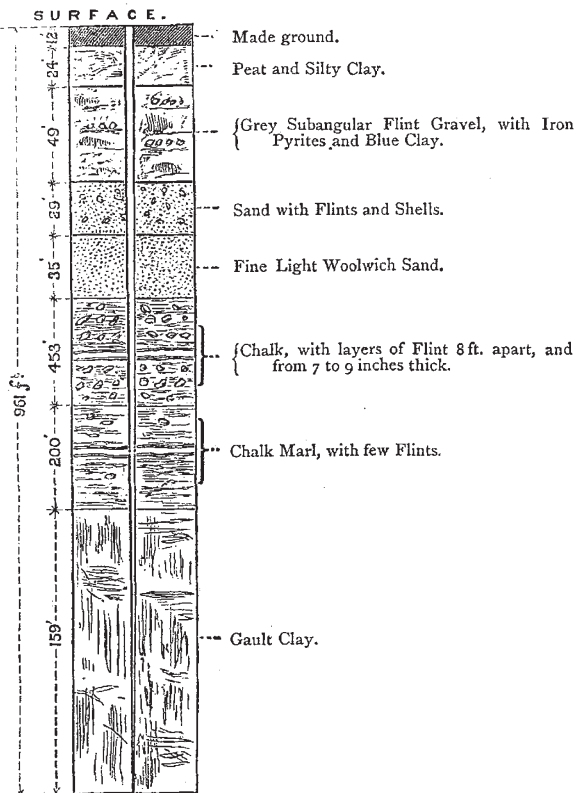
It will be seen that, while Sir John Herschel is quite ready (should the evidence require it) to adopt altogether new views about the nebulae, he is *not* ready to forego the grandeur of those noble views of the universe which he and his father have established, thereby earning the well-deserved gratitude of every lover of astronomy.

And then with regard to the *actual* form of our galaxy or Milky Way, the figure introduced shows that its apparent one as projected on the heavens may really be due to an arrangement differing both from the cloven disc or flattened ring, a point to which I shall return in a subsequent article.

RICHARD A. PROCTOR

THE CROSSNESS WELL-BORING

THIS boring, which was commenced by the Metropolitan Board of Works for the purpose of supplying the engines and dwelling-houses at Crossness with pure water, has, as may be seen from the accompanying diagram, reached a depth of 961 feet without piercing the Lower Greensand, where it was expected a good supply would be found.



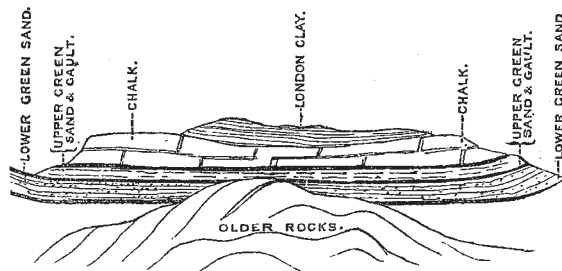
Section of Crossness Well-boring.

In consequence of the great difficulties attending the extraction of broken rods, &c., from the boring at that great depth, together with the uncertainty of the Lower Greensand being present, the boring has been discontinued. This is much to be regretted, as, if persevered with for a further depth of 40 or 50 feet, it would undoubtedly pass through the gault, which seldom exceeds 200 feet in thickness, 147 feet of which are now entered, and would thus add to the knowledge we at present possess of the substratum of London.

The chalk and gault clay at their outcrop to the north

and south of London are underlaid by the Lower Greensand, which is from 150 to 400 feet thick; this, if continuous, as are the chalk and gault, would give a water-bearing strata of great capacity.

But it has been proved that its continuity is broken; as at Harwich, where after boring 1,000 feet through chalk, some carboniferous slates were found, and at Kentish Town, where beneath chalk and gault were found red sandstone and clay, though whether they belong to the Old or New Red Sandstone group, could not be ascertained. Mr. W. Whitaker very reasonably supposes that there is an underground ridge of older rocks crossing the London basin, which was an island when the Greensand was deposited, as the accompanying sketch shows, thus accounting for its absence in the places above mentioned.



Section across London Basin, showing Probable Position of Ridge of Old Rocks.

If the Crossness boring were continued, and the Greensand were not found, the direction in which this ridge runs would be ascertained, and thus would be prevented much fruitless outlay to those contemplating well-boring; in addition to which, some important facts connected with the London water supply would be made known; further, it might decide the question as to the existence of the coal measures beneath London, at a practicable depth, which, it will be admitted, is a question of universal interest. Under these circumstances, surely Government aid ought to be invoked, as the Board of Works are unwilling to proceed with the boring on their own responsibility.

UTILISATION OF SEWAGE

THE British Association Committee on the Treatment and Utilisation of Sewage has requested us to state that a number of towns and private individuals have already sent in or promised subscriptions for defraying the expenses of the contemplated investigation referred to in the circular published in NATURE of the 2nd of December, and that a Special Meeting of the Committee will be held on the 15th of February next to decide what further steps are to be taken in furtherance of the object in view.

The Committee therefore requests that town and district authorities who have not yet replied to the circular will at their earliest convenience communicate with the Committee, and state what sum will be subscribed; or, if it be decided not to subscribe, what is the reason for declining.

Should the total amount subscribed be insufficient for adequately continuing the inquiry, it is the intention of the Committee to return the subscriptions received.

The following Towns and Districts have subscribed, or signified their disposition to do so:—Stoke-upon-Trent, Exeter, Plymouth, Devonport, Paisley, Coventry, Oxford, Maidstone, Torquay, Wakefield, Dewsbury, Hereford, West Hartlepool, Kendal, Weymouth, Enfield, Penzance, Balsall Heath, Bromley, Bridport, Malvern, Abingdon, Atherton, Toxteth Park, and Walton-on-the-Hill.