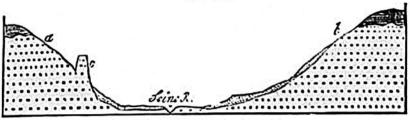
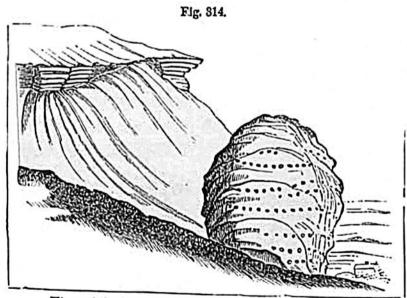
Fig. 818.



Section across Valley of Seine.

the surface, are from 2 to 4 miles apart, and they are often perfectly smooth and even, like the steepest of our downs in England; but at many points they are broken by one, two, or more ranges of vertical and even overhanging cliffs of bare white chalk with flints. At some points detached needles and pinnacles stand in the line of the cliffs, or in front of them, as at c, fig. 313. On the right bank of the Seine, at Andelys, one range, about 2 miles long, is seen varying from 50 to 100 feet in perpendicular height, and having its continuity broken by a number of dry valleys or coombs, in one of which occurs a detached rock or needle, called the Tête d'Homme (see figs. 314, 315). The top of this rock presents a precipitous face towards every point of the compass; its vertical height being more than 20 feet on the side of the downs, and 40 towards the Seine, the average diameter of the pillar being 36 feet. composition is the same as that of the larger cliffs in its neighborhood, namely, white chalk, having occasionally a crystalline texture like marble, with layers of flint in nodules and tabular masses. The flinty beds often project in relief 4 or 5 feet beyond the white chalk, which is gen-



View of the Tête d'Homme, Andelys, seen from above.

erally in a state of slow decomposition, either exfoliating or being covered with white powder, like the chalk cliffs on the English coast; and, as in them, this superficial powder contains in some cases common salt.

Other cliffs are situated on the right bank of the Seine, opposite Tournedos, between Andelys and Pont de l'Arche, where the precipices are from 50 to 80 feet high: several of their summits terminate in pin-