

which have been broken into pebbles for the construction of the one, have been ground into sand for the composition of the other. Directly over them, the middle portion of the pyramid is occupied by an enormous deposit of dark-colored bituminous schist, slightly micaceous, calcareous, or semi-calcareous, — here and there interlaced with veins of carbonate of lime, — here and there compact and highly siliceous, — and bearing in many places a mineralogical character difficult to be distinguished from that at one time deemed peculiar to the harder grauwacke schists. The Caithness flagstones, so extensively employed in paving the footways of our larger towns, are furnished by this immense middle tier or belt, and represent its general appearance. From its lowest to its highest beds it is charged with fossil fish and obscure vegetable impressions; and we find it represented in the Cromarty section by alternating bands of sandstones, stratified clays, and bituminous and nodular limestones, which form altogether a bed three hundred and fifty-five feet in thickness; nor does this bed lack its organisms, animal and vegetable, generically identical with those of Caithness. The apex of the pyramid is formed of red mouldering sandstones and mottled marls which exhibit their uppermost strata high over the eddies of the Pentland Frith, in the huge precipices of Dunnet-head, and which are partially represented in the Cromarty section by an unfossiliferous sandstone bed of unascertained thickness; but which can be traced for about eighty feet from the upper limestones and stratified clays of the middle member, until lost in overlying beds of sand and shingle.

I am particular, at the risk, I am afraid, of being tedious, in thus describing the Geology of this northern county, and of the Cromarty section, which represents and elucidates it. They illustrate more than the formations of two insulated