

ON THE

ANCIENT GRAUWACKE ROCKS OF SCOTLAND.

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PART FIRST—HISTORICAL.

“FROM Portpatrick on the west coast, to St. Abb’s Head on the east,” says Dr. James Hutton, in his far-famed Theory of the Earth, “there is a tract of schistus mountains, in which the strata are generally much inclined, or approaching to the vertical situation; and in these inclined strata,” he adds, “geologists allege there is not to be found any vestige of organized body.” But the opinion can be “proved,” he further states, “to be erroneous.” He himself, indeed, though he had been occasionally employed in examining the rocks of this “south Alpine country of Scotland” for more than forty years, had failed to find in them any traces of the organic; but his distinguished friend Sir James Hall, when travelling, in the summer of 1792, between Noblehouse and Crook, had detected sea-shells in “an Alpine limestone” by the wayside, at Wrae Hill, in the parish of Broughton, and thus demonstrated, as the limestone is intercalated with the schistus rocks, the fossiliferous character of the deposit. Even geologists had not yet become palæontological; and we find Sir James, in a passage quoted in the “Theory,” describing the shells which he had detected simply as “forms of cockles.”