

the *Orthoceratites* led a predacious life in the Silurian seas. Their organisation indicates that they preyed upon other animals, pursuing them into the deepest abysses, and strangling them in the embrace of their long arms. The *Trilobites*, a remarkable group of Crustacea, possessing simple and reticulated compound eyes, also highly characterise this period (Figs. 17 to 20); presenting at one period or other of their existence 1,677 species, 224 of which are met with in Great Britain and Ireland, as we are taught by the "*Thesaurus Siluricus*."\* Add to this a sun, struggling to penetrate the dense atmosphere of the primitive world, and yielding a dim and imperfect light to the first created beings as they left the hand of the Creator, organisms often rudimentary, but at other times sufficiently advanced to indicate a progress towards more perfect creations. Such is the picture which the artist has attempted to portray.

The elaborate and highly valuable "*Thesaurus Siluricus*" contains the names of 8,997 species of fossil remains, but it probably does not tell us of one-tenth part of the Silurian life still lying buried in rocks of that age in various parts of the world. A rich field is here offered to the geological explorer.†

#### LOWER SILURIAN.

The Silurian rocks have been estimated by Sir Roderick Murchison to occupy, altogether, an area of about 7,600 square miles in England and Wales, 18,420 square miles in Scotland, and nearly 7,000 square miles in Ireland. Thus, as regards the British Isles, the Silurian rocks rise to the surface over nearly 33,000 square miles.

The Silurian rocks have been traced from Cumberland to the Land's End, at the southern extremity of England. They lie at the base of the southern Highlands of Scotland, from the North Channel to the North Sea, and they range along the entire western coast of that country. In a westerly direction they extended to the sea, where the mountains of Wales—the Alps of the great chain—would stand out in bold relief, some of them facing the sea, others in detached groups; some clothed with a stunted vegetation, others naked and desolate; all of them wild and picturesque. But an interest surpassing all others belongs to these mountains. They are amongst the most ancient sedimentary rocks which exist on our globe, a page of the

\* "*The Flora and Fauna of the Silurian Period*," by John T. Bigsby, M.A., F.G.S. 4to, 1868.

† Ibid, p. vi.