

company, that comprises in its comparatively few lines of figures the result of every arithmetical calculation made by the firm during the twelvemonth — condenses, in a single page, the results of the naturalist's observations in his own peculiar department for many years. It marks at what periods the great families of the extinct fishes began, and when they ceased, and at what periods those great families arose which continue to exist in the present state of things. The facts are exceedingly curious. Some of the families are, we find, of comparatively brief standing, and occupy but small space in the record, — others sweep across well-nigh the whole geological scale. Some come into existence with the beginning of a system, and cease at its close, — others continue to exist throughout almost all the systems together. The salmon and herring families, though the species were different, lived in the ages of the Chalk, and ever since, throughout the periods of the Tertiary; while the cod and haddock family pertains, on the contrary, to but the existing scene of things. The *Cephalaspides* — that family to which the *Pterichthys* and *Coccosteus* belong — were restricted to a single system, the Old Red Sandstone; nor had its contemporaries the *Dipterians* — that family to which the *Osteolepis* and *Diplopterus* belong — a longer term; whereas the *Cœlacanthes*, — the family of the *Holoptychius*, *Glyptolepis*, and *Asterolepis*, — while it began as early, passed down to the times of the Chalk, — and the *Cestracions* — even a more ancient family still — continue to have their living representatives. It is held by the Dean of York that the fact of the Noachian Deluge may be made satisfactorily to account for all the geologic phenomena. Alas! No cataclysm, however great or general, could have produced diversities of style, each restricted to a determinate period, and which become more broadly apparent the more carefully we