

Series. Indeed, all but two plants have been recorded from the last horizon. Thus the beds are the homotaxial equivalents of the Newcastle, Etruria, and Black Band horizons of North Staffordshire, the Hamstead Beds below 1,233 feet in South Staffordshire, the Coed-yr-allt Beds and Ruabon Marls of Denbighshire, the Ardwick Series and Beds above the Bradford Four Foot Coal in South Lancashire, the Lower Pennant Grit of South Wales, and the New Rock and Vobster Series of Somerset. The data with regard to Dover are too scanty for certainty, but they seem to indicate approximately the same horizon as the two other Kentish localities. The majority of species are also common to the highest zone, or the "Charbons Gras," in the Pas de Calais. The flora of these rocks, and of those on the same tectonic line, belongs to the lower of the two great Continental zones of the Upper Carboniferous—the Westphalian; and the higher zone, the Stephanian, is unrepresented in the Mendip-Artois series of basins. But, as this axis is followed from east to west, it appears that continuously higher horizons are met with.

CORRESPONDENCE.

HIPPONYX FROM THE WHITE CHALK.

SIR,—It may be of interest to note that a third specimen of *Hipponyx blackmorei* turned up almost immediately after the publication of my note in the GEOLOGICAL MAGAZINE for October. This was recognised by Dr. Rowe in the collection of Mr. J. R. Farmery, of Louth, who, with other of our friends, has been patiently working out the Chalk fauna of Lincolnshire. The specimen came from the *Holaster planus*-zone of Boswell; it is affixed to a specimen of *Micraster præcursor*, is slightly better preserved than the type, and has an oval form, thus showing a characteristic variation of growth. The age of this specimen is of especial interest. Mr. Farmery has generously given this rare fossil to the British Museum.

C. DAVIES SHERBORN.

FOREIGN FLINTS IN THE EAST COAST DRIFTS.

SIR,—Referring to Mr. Bullerwell's note on the number of flints in the old gravel-bed on the Northumberland coast, which appeared in the GEOLOGICAL MAGAZINE for November (p. 525), I can endorse what he says as to the probable existence in the bed of the North Sea of chalk deposits. In our Holderness drifts we find quite a large number of masses of black flint and pink flint, both of which are different from anything occurring in this county. Formerly their presence was easily accounted for in the drift as being derived from Denmark. A Danish geologist, however, informed us that there is no flint in Denmark. In addition to the flint we obtain scores of chalk fossils, from a different horizon, however, from anything that occurs *in situ* in the county. These include, principally, the flint casts of a small sea-urchin, resembling *Ananchytes ovatus* in general shape, and some

well-preserved belemnites of the *lancoelatus* type, both these fossils occurring literally in hundreds in the drift. We have recently obtained two specimens of black flint in which these particular belemnites are embedded, and as the sea-urchins are usually in black flint, it would seem that all three are derived from an outcrop somewhere in the North Sea. In our lowest drifts, that is those which were deposited by the first advance of the glacier, are a number of green-coated black flints similar to those occurring in the Eocene deposits. These had been probably lying on the floor of the sea a considerable time before being taken up by the glacier.

T. SHEPPARD, F.G.S.

HULL.

OBITUARY.

WILLIAM JEROME HARRISON, F.G.S.

BORN 1845.

DIED JUNE 6, 1908.

WE regret to record the death of W. J. Harrison, who did much to advance the progress of geological knowledge as an enthusiastic teacher and local worker in the neighbourhoods of Leicester and Birmingham, and also by means of bibliographic research.

Born at Hemsworth, near Doncaster, he early qualified as a science teacher, and ultimately wrote a number of elementary textbooks on natural science, chemistry, and physics. A fifth edition of his useful textbook of geology was issued in 1903, and he was author also of "Geology of the Counties of England and of North and South Wales," 1882. These works, as was the case with all his publications, were characterized by great care and accuracy.

For some years Mr. Harrison was Curator of the Leicester Town Museum. During this period, in 1874, he drew attention to his discovery of the Rhætic beds near Leicester, and in 1877 he issued "A Sketch of the Geology of Leicestershire and Rutland," reprinted from White's "History" and supplemented by twelve photographs.

In 1880 he removed to Birmingham, where he was appointed Chief Science Master under the Birmingham School Board. Here he devoted much attention to the Drift deposits, and published important bibliographies of Midland and Norfolk Glaciology, with brief notes of the contents of the papers, likewise a very full bibliography of Stonehenge and Avebury.

[A brief memoir of W. J. Harrison, with portrait and bibliography, to which we are much indebted, has been published in the *Naturalist* for September, 1908, by Mr. T. Sheppard.]

H. B. W.

MISCELLANEOUS.

WITH the approval of H.M. the King, a Royal Medal has been awarded by the Council of the Royal Society to Professor John Milne, F.R.S., F.G.S., for his researches and investigations in Earthquake Phenomena in this country and in Japan, during more than thirty years.
