

lake and the sea is made of stiff calcareous clay associated with masses of conglomerate resting on plastic clay, that on watery mud, and that again on stiff calcareous clay. The sea-water appears to percolate through the highest deposits, meeting with checks in the conglomerates, and thus reaches the basin somewhat slowly, where it is evaporated to dryness by the summer heat and deposits its salt. Artificial channels have been made, to carry the flood-water from the land direct to the sea, so that it does not dilute the brine of the lake. The rainfall in the catchment-area round the lake is at the most only enough to supply 223 million gallons, and as the lake contains 480 million gallons when full, the balance of 257 million gallons must be derived from the sea. The lake is probably situated on what was an extensive arm of the sea at the close of the Cainozoic era. The salt-harvest begins in August, at the zenith of summer heat, and it is reported that a single heavy shower at that time of year suffices to ruin it. Observations are given on the density of the water, the plants and animals in the water, and the lake-shore deposits.

CORRESPONDENCE.

SHELLS FROM PORTLAND RUBBLE DRIFT.

SIR,—May I ask a few lines space to add to the list of Land and Fresh-water Shells from Portland Bill Rubble Drift recorded in my previous letter (GEOL. MAG., Dec. IV, Vol. I, 1894, p. 431).

After about three hours' work there on Feb. 21st last among the numerous shells of species already recorded, I found the following new species: *Helicella itala*, 2 specimens; *Limnæa truncatula* (dwarfed variety), 4 specimens. These identifications have been kindly endorsed by Mr. Edgar A. Smith, F.Z.S., of the Zoological Department, British Museum (Natural History).

On carefully going over the specimens with Mr. B. B. Woodward and Mr. A. Santer Kennard, two other species must be recorded, viz., *Helix*, sp. (protoconch of an indeterminable species), and *Hygromia rufescens* (Pennant). The relative abundance of the species, as found by me, is as under, adding previously recorded finds (GEOL. MAG., 1894, pp. 431, 432) to those of February 21 last (new records are in italics):—

<i>Helicella itala</i> (Linn.)	...	...	...	...	...	2 spec.
<i>Hygromia hispida</i> (Linn.)	...	...	...	...	...	1 "
<i>Hygromia rufescens</i> (Pennant)	...	...	...	...	...	10 "
<i>Vallonia pulchella</i> (Müll.)	...	...	...	...	...	5 "
<i>Helix</i> , sp.	...	...	...	...	...	1 "
<i>Pupa muscorum</i> (Linn.)	...	...	...	...	...	84 "
<i>Succinea oblonga</i> , Drap.	...	...	...	...	...	50 "
<i>Limnæa pereger</i> (Linn.)	...	...	...	...	...	22 "
<i>Limnæa truncatula</i> (Müll.)	...	...	...	...	...	16 "
<i>Pomatias reflexus</i> (Linn.) [= <i>Cyclostoma elegans</i> (Müll.)]	...	...	...	...	...	1 "
<i>Pisidium</i> , sp.	...	...	...	...	...	1 "

The numbers of Sir Joseph Prestwich's specimens are not stated, but the above table is probably the order of frequency of occurrence.

Mr. E. R. Sykes, F.L.S. (President Conchological Society), has found *L. truncatula* in a deposit on the east side of the Isle of Portland. He considers this latter deposit as comparatively recent, and derived from a marshy tract which still exists south of Southwell. If this be so the deposits are not synchronous, inasmuch as the geological conditions of the deposit at the Bill are well defined as of late Pleistocene age, not only from the stratigraphical evidence, but from the abundant occurrence of so characteristic a Pleistocene form as *S. oblonga*. Mr. Sykes (Proc. Dorset Field Club, vol. xvi, p. 171) records *L. truncatula* from the 'Bill' deposit. On referring to Prestwich's paper on the raised beaches (Q.J.G.S., vol. xlviii, 1892, p. 278) *L. truncatula* is determined from the occurrence of opercula only. Probably *Bythinia tentaculata* is meant, as it occurs also at Chesilton at the north-west of Portland, and is an operculate mollusc, whereas *Limnæa* is non-operculate (Reeve, "British Land and Fresh-water Mollusca," 1863, p. 154). This inadvertence may be a *lapsus calami*, either on the part of our author or of Dr. Gwyn Jeffreys, who generally determined doubtful or critical species for him.

Limnæa truncatula is therefore still a new record from this interesting Pleistocene deposit. R. ASHINGTON BULLEN.

AXELAND, SURREY.

THE CENOMANIAN OF BAHARIA OASIS, EGYPT.

SIR,—I have to thank Dr. Max Blanckenhorn for his letter in the GEOL. MAG., April, 1900, p. 192, disclaiming to have himself "discovered the existence of rocks of Cenomanian age in Baharia Oasis." As Dr. Blanckenhorn maintains that he cannot be held responsible for the abstract report which appeared in the *Zeitschrift für praktische Geologie*, I should like to point out that the copy of this abstract report was sent to the Survey by Dr. Blanckenhorn himself, and although it contained numerous corrections in ink of the type matter, the paragraph to which exception was taken, and which I quoted in my letter of December 7, 1899, was not in any way corrected or explained; I could therefore only come to one conclusion.

As I have already stated my opinion as to the age of the series of beds under discussion, both in my letter of December 7, 1899 (GEOL. MAG., January, 1900), and in a paper read before the Cairo Scientific Society in October, 1899, it is not necessary to discuss Dr. Blanckenhorn's assertion that I did not "know the meaning" of the fossils collected, especially as this has nothing to do with the question in dispute. Moreover, as the examination of these fossils has not yet been completed by the palæontologists of the British Museum, the exact horizon or horizons to which they should be referred cannot possibly be indicated with certainty.

CAIRO, April 14, 1900.

HUGH J. L. BEADNELL.