

Mr. King. The last-named geologist has had the kindness to draw up for me the annexed diagram of the various beds which he has recently studied in detail.\*

The formations 3, 4, and 5, already described, p. 213, were evidently once continuous, for they may be followed for miles NW. and SE. without a break, and always in the same order. A valley or river channel was cut through them, probably during the gradual upheaval of the country, and the hollow became afterwards the receptacle of the comparatively modern freshwater beds, A, B, C, and D. They may well represent a silted up river-channel, which remained for a time in the state of a lake or mere, and in which the black peaty mass, B, accumulated by a very slow growth over the gravel of the river-bed A. In B, we find remains of some of the same plants which were enumerated as common in the ancient lignite in 3', such as the yellow water-lily and hornwort (p. 216), together with some fresh water shells which occur in the same fluvio-marine series 3'.

Fig. 34



*Paludina marginata* Michaud. (*P. minuta* Strickland.)  
*Hydrobia marginata*.†

The middle figure is of the natural size.

The only shell which I found not referable to a British species is the minute paludina, fig. 34, already alluded to, p. 164.

\* Mr. Prestwich has given a correct account of this section in a paper read to the British Association, Oxford, 1860. See *Geologist's Magazine*, vol. iv. 1861.

† This shell is said to have a sub-spiral operculum (not a concentric

one, as in *Paludina*), and therefore to be referable to the *Hydrobia*, a sub-genus of *Rissoa*. But this species is always associated with freshwater shells, while the *Rissoa* frequent marine and brackish waters.