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REVISION OF THE LAND SNAILS OF THE PALEO-ZOIC ERA, WITH DESCRIPTIONS OF NEW SPECIES.

By J. W. DAWSON, LL.D., F.R.S.

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The Gasteropods as a class occur as early as the Upper Cambrian, but all the earlier known types are marine. That portion of the group distinguished by the possession of air saes instead of gills (Pulmonifera) has not hitherto been found in any formation older than the Carboniferous, and only four Carboniferous species have been described. In the present paper I propose to state some additional facts respecting the species already known, to discuss their affinities, and to describe two additional species, making six in all from the Paleozoic rocks, including one from the Erian or Devonian. For reasons to be mentioned in the sequel, I do not admit the genus Paleorbis founded, by some German naturalists, on fossils which I believe to be tubes of Annelids.

It may be useful to premise that of the two leading subdivisions of the group of Pulmonifera, the Operculate and Inoperculate, the first has been traced no farther back than the Eocenc. The second, or Inoperculate division, includes some genera that are aquatic and some that are terrestrial. Of the aquatic genera no representatives are known in formations older than the Wealden and Purbeck, and these only in Europe. The terrestrial group or the family of the *Helicidæ*, which, singularly enough, is that which diverges farthest from the You IX.