

tially accepted on the Continent as well as here. It is to be regretted that we have no better guide, and not much likelihood of any, so long as it is forgotten that the first requirement in any system is simplicity and obviousness. Systems founded on characteristics absent in most living shells, and in all fossil specimens, are opposed to common sense. Whatever value they may have, they are not practical.

With great hesitation I have adopted subgenera, reducing a good many accepted genera to that position. The concession is made to the belief entertained by many that subdivisions are useful.

The whole system of classification, then, which I have adopted here is not one of which I approve, but is perhaps the least objectionable I could find.

As regards general results, I cannot do better than repeat here the statements enunciated in 1880 (see Prelim. Report, p. 5, Journ. Linn. Soc. Lond., Zool., vol. xv. p. 88), which have been largely confirmed by subsequent writers:—

(1.) Depth is an important condition in connection with Molluscan life. That is to say, there really are shallow and deep water species and genera, though their bathymetric limits are not constant.

To some this may seem too self-evident and universally accepted a proposition to need statement. Such would indeed have been the case some years ago, but of late deep-sea dredgings have presented facts which have at least necessitated a revisal of many received opinions on this point. The result, it is true, has never really been doubtful, confirmed as it has further been by evidence gathered from other branches of Natural History. At the same time it is desirable to record here the witness on this matter of the Mollusca of the Challenger Expedition.

(2.) Temperature much more than mere depth seems an important condition in Molluscan life.

It is needless to speak here of other conditions, such as light, or food, or oxygen; because, though there are extreme differences in these respects, and though their influence must be very great, still their precise amount and the nature and direction of their effects are too little known to afford foundation for more than guessing.

Pressure seemed likely to form a very important condition among those which affect animal life; the enormous figures representing the square-inch amount of that pressure stirred men's imaginations, and their fancies were supported by the fact that rapid transference to the surface from even a moderate depth destroys life; but these impressions were removed by a remembrance of the laws of hydrostatic pressure, and by substituting a gradual for a rapid transference from deep water to the surface.

Temperature, however, remains as an undoubtedly important factor.

(3.) Great differences in respect of depth and temperature prove barriers to distribution, and so, by preventing the indiscriminate commingling of species, determine and preserve distinct geographical provinces.