

even now they cause the greatest perplexity and occasion endless disputes among systematic palæontologists about the arbitrary limits of species.

An excellent example of this is furnished by the celebrated and very variable fresh-water snail from the Stuben Valley, near Steinheim, in Württemberg, which has been described sometimes as *Paludina*, sometimes as *Valvata*, and sometimes as *Planorbis multiformis*. The snow-white shells of these small snails constitute more than half of the mass of the tertiary limestone hills, and in this one locality show such an astonishing variety of forms, that the most divergent extremes might be referred to at least twenty entirely different species. But all these extreme forms are united by such innumerable intermediate forms, and they lie so regularly above and beside one another, that Hilgendorf was able, in the clearest manner, to unravel the pedigree of the whole group of forms. In like manner, among very many other fossil species (for example, many ammonites, terebratulæ, sea urchins, lily encrinites, etc.) there are such masses of connecting intermediate forms, that they reduce the "dealers in fossil species" to despair.

When we weigh all the circumstances here mentioned, the number of which might easily be increased, it does not appear astonishing that the natural accounts or records of creation formed by petrifications are extremely defective and incomplete. But nevertheless, the petrifications actually discovered are of the greatest value. Their significance is of no less importance to the natural history of creation than the celebrated inscription on the Rosetta stone, and the decree of Canopus, are to the history of nations—to archæology and philology. Just as it has