

instincts of the species, whether they be simply morbid, and known as hereditariness, or appear to give rise to new species.

The author finally shows, that as unity of structure implies unity of function, we have in these principles the foundation for an investigation of what has hitherto been considered wholly inscrutable, namely, the relations of the organization to the consciousness; or, in other words, the connection of body and mind. Mind is not merely inseparably associated with the primary forces of matter; it acts in and by them. Their phenomena are its signs. Hence, since the order of these phenomena and the action of the forces can be expressed numerically, it follows that the results or ends arrived at can be expressed numerically; or, in other words, the teleological laws can be reduced to numerical formula. This can be done already as to nutrition and development, and the *forms* of vegetables and animals; but since all the successional states of our consciousness correspond to successional vital states, occurring according to the teleological law of the physical and vital forces, it is clear that the signs which express the law of succession of the one series, might be made to correspond to the laws of succession of the other. In this way, the brain may be looked upon as the instrument whereby the mind is brought into immediate relation,—not with matter alone,—but with the forces of matter; and our intuitive cognitions may be considered as direct and immediate cognitions of the teleological operations of those forces in our organization.

## 2. Verbal Notice respecting the Remains of a Seal found at Portobello. By Dr Allman.

Professor Allman called attention to some bones discovered by Dr Andrew Balfour in a clay field near Portobello, and forwarded by him for presentation to the Museum of Natural History. They prove to be bones of a seal, and consist of some vertebræ, a portion of a scapula, a radius, a femur, and a fibula. They thus afford an additional instance to the few already recorded, of the occurrence of phocine remains in the British Islands. The deposit in which they occurred appears to belong to the period of the boulder clay. They were found about 20 feet above the present level of highwater, and about 15 feet below the surface of the soil.