

microscopic points capped with enamel, which indicate its ancestral connections. They are absorbed before the bird is many days old. In the unborn parrot is the vanishing point of a "missing link" with its primeval progenitors.

With the disappearance of the primeval swamp has also disappeared the five-toed ancestor of the horse. Transferred to the plains, he now races free upon a single digit, developed into a hardened hoof, leaving the vanishing remains of other digits within his pastern to mark the transition of slow development, through æons of time, from one form of life to another. These are instances of a plastic power within the living organism which enables it to fit itself in, and adapt itself to, the exigencies of its environments. The very urgencies of subsistence, and the necessities of survival at Nature's table, demand this constitutional tendency to impermanence of form or function.

#### VARIABILITY OF NATURE AND LIFE.

For in all her physical aspects, Nature is herself changeable and inconstant. The rigors of her chequered and ever-changeable conditions have aided in eliciting and fixing the quality of mutability in her life forms. There is thus an element of mutability and reciprocation between the internal organism and its external surroundings. And the instability of the organism is a natural and a necessary part of the dual state of its existence. As Herbert Spencer has sententiously remarked in defining life itself, it is "a continuous adjustment of internal relations with external relations." Such, in brief, is the doctrine of variation, which is the starting point of Darwin's theory of the origin of species and the evolution of life.

Darwin at once seized hold of the enormous range of variation seen in domestic species, and its power of diversity and extension under the hand of the expert breeder and cultivator. And in utilising its multifarious phenomena in support of his thesis, he personally experimented with both animal and vegetable species. Here he showed that the key of man's power over species lies in the accumulation of his selections of varying and variable points of structure and character. Nature provides variations, and their succession in heredity. Man adds them up in directions useful to him. In this way he has built up great and serviceable breeds. He can not merely modify the character of his types, but he can change them altogether. It does not require a great effort of the imagination to determine the motives of man in his selection and improvements of breeds to serve his ends. It is known that sheep skins were used for tents, as well as for clothing and foot-wear, from the