

very important to remember. For, if the trophic influences to any part be deranged, the reduced defensive power of that part would render it susceptible to the attack of living or dead destructive agents. Thus, as already mentioned, above, the lining mucous membrane of stomach and intestines resists "auto-digestion," as it were, when its nerve-supply is unbroken. But, in Neurosis the trophic influences to this region are so interfered with that the hydrochloric acid and pepsin are able to exert their digestive activities and so produce, what is called gastric ulcer.

Another important fact well worth the reader's attention is the following:—In the lower animals, such as the dog, the rabbit, etc., it has been found that recovery from an operation on any part of the abdomen takes place within three or four days—five days at the outset. In man it takes at least three or four weeks—sometimes as long as six weeks—until health returns. Again, it has been shown that even when very little attention has been paid to the disinfection of a wound in the lower animals, no appreciable ill-effects result; in man, ninety-nine cases out of a hundred, septicemia (and often death) is the consequence. This is, in fact, a concrete case of the laws regarding Conservation of Energy. For, in man the mental power and the dexterity of actions are the most developed and pre-eminent; in the lower animals, however, this is almost altogether absent. Consequently, the difference is required by a more highly-developed *protective* nervous system which serves for the purpose of eliminating all noxious materials.

Next shall be considered (as briefly as possible) what is included under the heading of racial immunity. The latter refers to that specific congenital immunity (against the various infections) possessed by different species of animals. Thus, according to Lazarus Weyl, the chick is immune (even at birth) to the most virulent culture of the anthrax bacillus. Insusceptibility to the same infection is possessed also by frogs, rats and pigeons. Dogs are not attacked by the tubercle bacillus, nor rabbits by that of glanders. And all kinds of animals (excepting man) are congenitally insusceptible to measles, scarlet and typhoid fevers. And, since these immunities are congenital (as seen in the insusceptibility of the new-born chick to anthrax), therefore this racial form of immunity must be a property of the parent-cell.

Also the human species possesses natural resistance to certain disorders to which some of the lower animals are subject. But we can yet subdivide the human species into many races which possess varying immunities, yet they cannot be accounted for. But, just as habits, environment, and modes of living, bear an influence on any kind of heredity, so they may be said to bear an influence on the heredity of immunity