INFECTION AND CONTAGIUM.

the common property of possessing a contagium, or virus, by means of which all these diseases had been proved to be, or were supposed to be, propagated, whether from outside or from one animal to another, a classification founded on this property seemed to be as reasonable as it was convenient. The special meaning attached to the word "virulent" precluded the use of the adjective derived from "virus." The. necessity of avoiding ambiguity prevented their being termed "infectious diseases," than which "contagious diseases" was a still more objectionable designation. The not very happy escape out of this difficulty has been to give them the name of "infective diseases." An infective disease, taking for granted its microbic origin, may be defined as one that is caused by a living micro-organism which is capable of becoming developed in the animal body.

Although the condition of minuteness is purely arbitrary, it is well recognised in practice : for example, we withold the term "infective" from mange, which is set up by an acarus ; but we concede it to surra, which is caused by an infusorian. The tendency to become general is in most cases considered to be a characteristic of infective diseases ; parasitic ringworm, which is due to a microscopic mould, being classed as a skin disease.

The words "volatile" and "fixed" are employed with reference to the capacity the contagium or virus has or has not of being carried to a distance from its place of development, whether such place is outside or inside the animal body, and independently of the mode of disease transference from one animal to another. Thus the virus of that non-contagious disease, South African Horse Sickness, is fixed; and that of malarial fever, which is a non-infectious disease, is volatile.

When the exciting cause of a disease can, like that of anthrax or tetanus, exist independently of the animal body, we apply the expression ectogenous to it. The cause of an endogenous disease, on the other hand, is one which, like that of glanders, can fulfil its life mission only in its animal host. Hence, in the case of an endogenous disease, the destruction of all infected animals, with the allowance of a reasonable length of time for the death of the special organisms, would prevent its further occurrence; but such action would have no such result with an ectogenous disease. A miasmatic disease is an ectogenous disease, the contagium of which is volatile.

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