SKIN DISEASES OF DOMESTICATED ANIMALS.

This is a topic demanding the earnest attention of stock-breeders and farmers generally. Skin diseases, produced by insects, are by no means uncommon, and seriously affect the breeding and feeding qualities of animals. Till recently, but little scientific progress had been made in regard to the natural history and treatment of these parasites. Professor Simonds, the Veterinary Inspector of the Royal English Agricultural Society, recently delivered a Lecture before the Council on this subject, from which the following statements are gleaned:—

All domesticated animals are more or less affected by peculiar parasitical insects, which may be divided into three g eat classes—1. Insects attacking the external parts of the body, on which they pass through the whole period of their existence, as the *acari*, producing scab, mangi, &c. 2. Insects which pass their larva condition only on the skin, as a temporary *nidus*, from which they escape as flies on assuming their winged condition. 3. Insects, most destructive to animal life, lodged in the internal organs and cavities of the body. Some confusion had arisen from giving different names in case of lower animals to diseases identical in their character; the mange and scab in the horse and sheep being analogous to the itch or scabies in the human subject. It would be more simple to include all such diseases under the general term "scabies."

It is well known, both in Canada and Europe, that the scab often leads to serious losses to flockmasters, by its tendency to deteriorate the wool and the general condition of the animal. Its cause was not satisfactorily determined, till a German physiologist, who clearly proved the wide distribution of acari or mites, in dirt or filth, sugar, cheese, flour, and most vegetable substances. He found that the male and female acarus of the horse and of the sheep possessed well-defined characters in the case of each of those animals, the former being the cause of the mange, and the latter of the scab. These mites have the power of travelling from one animal to another; and the scab disease of sheep will sometimes affect the whole flock, if not arrested. From carefully conducted experiments, Professor Simonds concludes that the mites belonging to one class of animals could not engender the same disease on the bodies of another class; that the mite which produced scab on sheep was not capable of producing mange on the horse or dog. This conclusion, however, from recent experiments made in Germany, may be regarded as somewhat doubtful.

The deposition of the acari on the skin of sheep and the development of the scab disease, may be traced as follows:—"First, a slight redness comes on the skin, albuminous fluid is exuded, which mats the adjoining wool. In a few days, definite pain is felt by the animal, which violently attempts to scratch itself by rubbing the part against any resisting object. The irritation extends to ten or twelve inches. The disease makes rapid progress. Acari had travelled over other parts of the body. In sixteen days, fifty or sixty eggs of the acarus were found at the base of the wool. Large thickened crusts of a white appearance were formed. The health of the animal and its skin became generally affected. Large scales or scabs ensued, which, on