

simplicity of the treatment which we have reason to believe has been attended with much success, is certainly very striking:—

Rinderpest or Cattle-plague is a frequent and fatal disease in many parts of the country. A week to a fortnight after an animal has been exposed to infection, he falls sick and the disorder rapidly spreads in a herd. It is difficult in the earliest stages to decide as to the exact nature of the disease, but later very marked symptoms set in; of these, extreme weakness amounting to prostration, twitching of the muscles of the body, first constipation followed by severe diarrhoea, with a very foul and peculiar swell of the matter passed, which is often mixed with blood, eruptions of the membrane of the nose, mouth, and certain parts of the skin, such as those covering the vulva and the udder. A peculiar cough is generally present, in addition to general high fever and a flow of acrid tears from the eyes. The disease runs its course in from seven to ten days, and usually ends fatally. After death, the intestines and stomach are especially found diseased, and large patches of blood, which has escaped from the veins, are found in different parts of the body. Cattle suffer from this disorder, and sheep can take it from them; it is highly communicable. It must not be confounded with simple dysentery, in which there is no eruption in the mouth.

Treatment.—The healthy animals should be at once segregated from the sick. The deceased animals should be given an ample supply of drinking-water with salt and nitre in it. When the bowels are constipated they should be given a laxative dose of epsom salts. When dysentery sets in, bitter tonics, such as chiretta, cinchona bark, also decoction of bael fruit may be given along with arrack. Their strength should be supported by giving canjee, milk, &c.

HOW FARMERS MAY TEST THEIR SOILS.

Many farmers have somehow become imbued with the idea that to apply manures profitably, and at the same time determine the kind of crop most suitable for a certain locality, all they have to do is to obtain an analysis of the soil from the agricultural chemist. This is all a delusion, because crops differ in their capacity to pick up nutriment from the soil. A chemical analysis shows what the soil contains, perhaps at the moment of examination, but it does not pretend to give the quantity in which the constituents will be available to the plant during the period of growth. The weather or the seasons have a large influence in such matters. For instance, a shower of rain or the absence of that shower may alter the character of a crop to such an extent as to render the analysis of the soil, or its supposed resulting benefits, entirely worthless. The way to get at the real value and character of any particular soil is to make some practical experiments with it. If it is desired to know whether a soil is already provided with nitrogenous matter it is sufficient to sow a handful of wheat upon a small square of ground which has been manured with a mineral substance only. Or the test may be made without the aid of mineral matter. If the ground yields a good crop, it shows that the soil already contains a sufficient supply of nitrogen. On the other hand, to ascertain whether

the soil contains a sufficiency of mineral manure (phosphate of lime and potash), manure plots with nitrogenous substances only, planting, say, one with maize and the other with potatoes. The great influence that phosphate of lime has on maize and sorghum and potash on potatoes is well known; therefore if the maize flourishes you may be sure the land has enough phosphate of lime, and the potatoes will indicate if the ground lacks potash. Thus two experiments, requiring but a small area of ground, and trying three different crops, are sufficient to obtain the indications necessary to a judicious system of culture. The best method of obtaining what is needed in any given case to produce a particular crop is to put the question to the soil itself. Such experiments will abundantly repay the investigator in the practical money value of the results.—*Australasian.*

SOME SKIN DISEASES IN CATTLE.

Tinea tonsurans.—A skin disease, characterized by the appearance of gray scaly patches, appeared in some of the Sind cows belonging to the Government Dairy. The disease spread especially among the calves who for a time were much inconvenienced. *Tinea tonsurans* is caused by a parasitic fungus described under the genus *Trichophyton*. Its contagious character was manifested amply by its attacking over twelve calves. The contagion was not so marked in the older animals for only two cows were troubled with it, and that too only to a very mild extent. It may be remarked that this affection is not peculiar to any country, but is widely distributed over different cattle-breeding districts of the world; however, it is neither common nor, when present, of any serious nature in animals that are well housed and properly taken care of. But as cattle in Ceylon, as a general rule, are not much attended to as regards their housing, and are in most cases allowed to graze about in herds, if they once get a skin disease of this nature, it would undoubtedly assume a serious form for want of proper attention, and, as a result, the animals would become unthrifty, and in the end almost unfit for any work.

The disease rarely spreads over the whole surface of the skin, but usually locates itself in the face, neck and upper portion of the body; it is very seldom that it extends as far down as the limbs. At the commencement a small circumscribed patch, perhaps not bigger than a cent piece will be observed with hair standing on end. Subsequently the hair falls off and the upper layer of the skin (epidermis) becomes prominent and discoloured first a dirty yellow and subsequently a leaden grey, showing several layers of dry epidermis over the patches. Such patches gradually crop up close upon each other till a comparatively large area is thus affected. At the early stages slight itching (pruritis) is observable, but as the diseased patches dry up itching ceases, but new patches crop up rapidly.

Tinea tonsurans is not confined to cattle alone, but is observed in many species of animals, and so far it is known to be met with in horses, dogs, cats and pigs. The affection is even communicated to man from these animals.

Treatment.—The preventative treatment consists in proper attention to the cleanliness of the