

tion, and which there cannot be much harm in saying to them in the presence of a number who represent the non-professional multitude.

The relations of veterinary to social science are varied and numerous. No period could be more appropriate to draw public attention to them than the present. Social science is better understood than formerly, and the general feeling is eminently in favor of inquiry on all subjects relating to that important department of science, Public Health. A yearly increasing number of students flock to our colleges. The profession is growing in numbers, and it is essential to point out the many outlets for expending labour and talent of the best kind in a manner most conducive to public interests, and calculated to enhance the social standing of the veterinary surgeon. On former occasions I have strenuously opposed the opinion, that our profession is overstocked. I have, however, stated that there is a very ample field for the able and industrious. Mediocrity abounds. We now need excellence. But the best way of ensuring a higher class of men is to prepare the material for them to work at, and point out the many ways in which they can develop their powers, either as observers, generalizers, or with some simply as plodding workers in a field opened out for them by minds of a broader grasp.

Legislation has much to do in order to ensure that we shall get that share of public work which necessarily falls to us, and which can be undertaken by no other body of men; but, to attract the notice of legislators, and assert our worth in fulfilling many important duties, we must certainly be better prepared than we have been.

The subjects to be investigated, in order to reap practical benefits from scientific labor on sanitary matters, are vast and comprehensive. Their simple enumeration suggest to any one that there is much to be done, and, indeed, that there is no limit to these all-absorbing inquiries. Let us for a moment dwell on the part which should engage the veterinary profession.

In the first place, men and animals are subject to similar diseases—to diseases communicable one to the other, and to diseases which spontaneously originate either in man in some instances, or in the lower animals in others, and are transmitted from first to second, or second to first, without other means of development or propagation. The study of diseases, in their comparative relations in different animals, constitutes the science of Comparative Pathology. It must be obvious to all that the amount of danger man incurs by living amongst animals, under different circumstances, should be known, but on this all-important subject we need means of determining the spread of diseases in animals, their nature, and the extent to which they are committing ravages. That there are many un-

suspected sources of disease in man, from the prevalence of disease in animals, is often suggested. But positive facts are with difficulty obtained. I must illustrate my meaning. In different parts of England, Scotland, and Ireland, cattle are subject to anthrax, commonly known as quarter-evil, or by the more ludicrous epithet, "black leg." We have to thank our northern latitude for the rare development, in these cases, of the virulent anthrax poison, which destroys many human beings in warm climates. So destructive is this poison, that flies resting on the carcasses of animals that have died of this disease, or even on the parts affected in the living animal, may fly on to a man's face or hand, induce malignant pustule, and death in a short time. Though such accidents are doubtless extremely rare amongst us, we must not take it for granted that they do not occur. Dr. Keith, of Aberdeen, related a case to me where disease and death spread through the family of a man who dressed the carcass of an ox that had died of quarter-ill; and had we better means of collecting information on these subjects, many similar instances would doubtless come to our knowledge.

A cutaneous disease of very common occurrence in cattle, and which generally receives the name of ring-worm, is a pustular eruption communicable to man; and I have often seen bad boils—a furunculoid eruption—on the hands and arms of those attending these animals, which has led to considerable indisposition, and been difficult to cure.

Again, I may mention the vesicular murrain so prevalent in cows, attended with the development of a virus, which is often squeezed into the milk-can as the cow is milked. Such milk, drunk warm, will kill calves and pigs, and induce fever and cutaneous eruptions in men. Why shall it not be attended with dangerous and fatal consequences when partaken of by the infantile portion of the population, which consumes so large a quantity of the dairy produce.

But of late years considerable interest has been excited by the metamorphoses of parasites. In a piece of pork a few yellow specs of transparent vesicles, which do not appear of the slightest importance, may in reality be tapeworms in one stage of development, for the destruction of which we have to hope for prolonged boiling or efficient roasting. If the meat be eaten underdone, a parasite at once develops in the human intestine, which sometimes baffles human skill to displace it.

The veterinary surgeons throughout the length and breadth of our land, should be accurately acquainted with the parasitic diseases of animals, and I know of no more engrossing and satisfactory study than that of Helminthology.

Therefore, gentlemen, the sources of disease in man which are to be discovered by studying the diseases of animals, are far from few and