known as patchy pneumonia of one or both lungs, the pleura corresponding being generally involved. The anterior lobes have generally been affected in the cases examined by me. The affected lobules, usually darker in colour, are well marked out by the septa infiltrated with lymph, giving a marbled appearance resembling that so familiar in the contagious pleuro-pneumonia of cattle. The altered lung tissue, however, was less firm; and the interlobular bands were narrower, contained much less liquid, and were more easily broken down. The affected pleura was less thickened and darker in colour. The foci of disease were more numerous, and manifested a greater tendency to break down and become gangrenous than in the scheduled affection. The bronchi in some cases contained a considerable amount.

My experience leads me to the conclusion that this affection is contagious, that the virus remains effective for a considerable time outside the animal body, and contaminates the places in which affected calves are kept, thus accounting for the recurrence of the affection as an enzootic. There is evidence of a short period of incubation, and the course in fatal cases is rarely more than three days. Calves under twelve months old become more readily and seriously affected than those above this age.

Though in advanced acute cases curative treatment is not hopeful, a large measure of success has followed the means suggested. Separation of diseased from the healthy by aid of the thermometer, removal of both lots to a fresh situation after all have been washed about the eyes, nostrils, chest, and feet with a solution of some suitable disinfectant, such as carbolic acid, are among the first procedures. The diseased have been then subjected to inhalation of burning tar, carbolic acid, sulphur, or eucalyptus, strict attention being paid to the hygiene of the animals, nursing, etc.

Intratracheal injection of carbolic acid was tried on four animals, which died shortly afterwards.

The place inhabited by the affected should be thoroughly disinfected.

CONTAGIOUS OPHTHALMIA IN CATTLE.

By JOHN PENBERTHY, F.R.C.V.S., Royal Veterinary College, London.

IN the summer of 1892, I was consulted in the matter of several calves, about six months old, which had suddenly become affected with inflammation of the eyes, leading to temporary blindness. Of thirteen animals kept in a shippen, ten had, without appreciable cause, developed acute inflammation of the cornea and conjunctiva. At first three were noticed to move about strangely, and on examination the cornea was found to be opaque. In the course of a week seven others had become similarly affected. The three remaining unaffected were then removed to a paddock, and showed no signs of the disease. Up to this time, there being no evidence of contagion, the mischief was attributed to mechanical or chemical irritation connected with food stuffs. It happened, however, that a cow which was in a yard into which the ten calves were turned for treatment developed the affection. This naturally excited some suspicion of contagion.

During the summer of 1895, two similar occurrences were reported to me from different parts of the country.

In July 1896 I was consulted by Mr L. Barrett, M.R.C.V.S., of Romford, Essex, regarding an outbreak of the disease in a herd of about fifty young cattle. Here, in the first instance, four animals were found affected, and in course of a fortnight forty were suffering. By a rigorous treatment the disease was for a time limited to this lot of young stock, but in about a month some of the cows on the farm, which were being attended by men who had attended the calves, became affected, and also another lot of calves. Through an unfortunate mistake in a telegram, I was unable to make a direct experiment in order to prove whether it was contagious. During the past summer, however, an opportunity occurred under similar circumstances. Some of the discharge was collected from the conjunctivæ of two affected animals, and inserted between the eyelids of two healthy cattle in another situation and under different conditions. Both young animals developed the affection, and in ten days one of two healthy calves placed with these contracted it.

The symptoms shown are those usually exhibited in inflammation of these parts. Photophobia, redness of the conjunctiva, more or less suffusion of the eyelids, muco-purulent discharge, opacity of the cornea, and in many cases ulceration. In the larger proportion of cases both eyes were affected. In severe cases the temperature has been raised a degree or two, but beyond the consequences immediately depending on the local changes there was little constitutional disturbance. In about 3 per cent. there has been permanent opacity of one or both corneæ.

Treatment which appeared successful consisted in separating the apparently healthy from those yielding evidence of the disease. The affected were placed in a darkened shed, and the eyes of both lots were carefully and thoroughly sponged with solution of sulphate or chloride of zinc, borate of soda, weak nitrate of silver, or some such collyrium twice daily for two or three days. After which to the affected eyes boracic or nitrate of mercury ointment diluted with vaseline as occasion required were applied. Care should be taken in disinfecting sponges, etc., also the buildings in which the animals have resided.

OUTBREAK OF CŒNUROSIS, GID, OR STURDY IN LAMBS.

By JOHN PENBERTHY, F.R.C.V.S., Royal Veterinary College, London.

SPORADIC cases, depending on the presence of the *cœnurus cerebrialis* in the cranial cavity of sheep, are among the commonest occurrences in the flocks of Great Britain. It is amongst lambs that the more severe losses are occasioned by this parasite; indeed, amongst adult sheep the affection is generally regarded as rare. The symptoms shown and the life history of the cestode on which they depend are so well known that it would be superfluous to refer to them in detail here. There may be, however, some points of interest connected with the following outbreak.

The flock consisted of about 900 lambs, some of which began to