what is known regarding the pathology of a disease before venturing to suggest that it might be diphtheria. In what district, we wonder, are many diseases classed under the term "strongles"? It would be far nearer the truth to say that many different diseases are classed under the name diphtheria. Certain it is there are few diseases of either man or animals with more distinctive characters than strangles.

But even if the pathological and clinical characters of that everyday disease did not make it utterly impossible to believe that it could have any ætiological connection with human diphtheria, no one would be justified in rushing into print on such a slender train of circumstantial evidence as Dr Turner adduces: "The first case of diphtheria at a farmhouse occurred shortly after a horse on the farm had died of strongles; the second was that of a man working on the farm as horse-keeper." There is not much force in that, unless it is intended to prove that being a horse-keeper, or residing at a farm where a horse has died of strangles, will not give immunity from diphtheria.

But we have already quoted enough from this absurd paper. The marvel is that it ever found a place in such a responsible publication as the Local Government Board Report. We should not have deemed it worthy of notice had we not observed that the speculations contained in it have more than once of late been gravely quoted as evidence of the animal origin of diphtheria. The question whether any of our common domestic animals may become the subjects of true diphtheria, and serve as centres of infection to human beings, is certainly an important one. It has during the past twenty years or more formed the subject of much controversy; and although the preponderance of the evidence, both clinical and experimental, appears to give a negative answer, it cannot be said that the question is settled. It is certain that for its solution there will be required more careful observation and experimentation, and less frivolous theorising, than Dr Turner appears to have brought to bear on the subject.

CLINICAL ARTICLES.

SPERMATIC ANEURISMAL VARIX IN THE OX.

By THOMAS WALLEY, M.R.C.V.S.,

Principal of the Royal Veterinary College, Edinburgh.

CASES of this description are of comparative rarity in connection with any of the vessels in the human subject. They are of extreme rarity in the lower animals. In conversations on the subject with several surgeons practising in this city I have been struck by the almost uniform expression of astonishment at the character of the

lesion under consideration, and, so far as I am aware, the case recorded by myself as occurring in a Danish bull in 1878 was the first of the kind observed in veterinary practice. The present case differs from the former in two essential particulars, viz., in the entire absence of anything like a testicle, and in the absence of the spiral or coiled arrangement of the spermatic artery. In that case the artery retained its coiled character, and it was much smaller, the dilatation on the whole being uniform. The greatest circumference was $2\frac{1}{2}$ inches, and the quantity of wax injected was about 25 ounces. The right testicle and its vessels were normal in size, but the left was bent upon itself and forced in an upward direction, and was much atrophied.

During the past winter session several of the students in the course of one of our weekly visits to the abattoir observed an enormous mass suspended from the inguinal region of a Galloway ox. The animal was four years old and in prime condition. The students, thinking they had discovered a case of scrotal hernia of unusual dimensions, called my attention to the animal in question; one glance, however, satisfied me that the lesion was a vascular one, and, bearing in mind the most pronounced symptom in the previous case, viz. the "*purring thrill*" imparted to the fingers on palpation, the mere contact of my hand with the mass was sufficient to satisfy me as to its nature.

The tumour, which was oblong in shape and uniform in contour, with the exception of an elevation corresponding in position to the most dilated portion of the artery, extended below the hocks; but notwithstanding its size it did not offer any impediment to locomotion, nor did it produce any constitutional disturbance.

Fortunately, I was enabled through the courtesy of the owners of the ox, Messrs Wood Bros., to secure the mass, and to have it removed close to the external ring. Under my personal supervision it was dissected, and the vessels were subsequently injected with wax by Messrs Gold & Clayton.

As in the case previously recorded, so here, the injection passed readily through the artery into the vein, the weight of the injected wax being 6 lbs., but neither before nor after the injection could we detect the slightest trace of testicular forma-

a, a. Unequally dilated artery; b. Dilated vein;
c. Point of communication between artery and vein.

tion, nor was there any cicatricial evidence of castration having been performed.

The length of the mass in its dried condition is 26 inches, the greatest circumference of the artery 12 inches, and of the vein 5 inches.

ANTHRAX IN CATTLE.

By F. T. HARVEY, M.R.C.V.S., St. Columb, Cornwall.

THE outbreak of Anthrax so graphically described in the June issue of the *Journal of Comparative Pathology*, by Mr Hunter of Newcastle, is interesting from two or three points of view, so I shall not apologize for offering the following remarks.

Mr Hunter gives various reasons for the more frequent reports of outbreaks of Anthrax which are now heard of; among others, that Veterinary Surgeons are much better able to diagnose the disease than formerly, a statement which his subsequent remarks would seem to negative.

The outbreak at Newcastle occurred on March 15th, the cow being killed when evidently about to die, and the carcass sent off as food for the public. Six days after a similar occurrence is allowed to take place. Now I think that a bullock dying under such conditions, in the absence of evident cause for the illness, should at once suggest the existence of Anthrax, and the carcass should be considered dangerous unless an autopsy proves otherwise. And it is the duty of the professional man to caution the owner whenever possible. Very few would, I think, disregard such caution if properly given. What is the use of legislative enactments, microscopes, and diagnostic ability, if Anthrax carcasses are allowed to be hawked about the country scattering bacilli, and so providing material for future reports?

It would be better probably if Anthrax were never absolutely diagnosed until the carcass has been inspected, or the blood examined, though a tolerably safe guess may sometimes be made during life. Few diseases require more care than Anthrax, in order to avoid error when dealing with symptoms, though its anatomy is tolerably precise.

In a series of outbreaks of Anthrax which I have witnessed yearly since 1882 on a large farm in this district, and where nearly eighty animals have during that time been attacked, almost every possible variety of symptoms, or group of symptoms, has been observed. In fully two-thirds of the cases the class of nervous symptoms predominate, but in outbreaks that I have seen on other farms these nervous symptoms have not been so marked. In fact, the outbreaks seem more virulent on some occasions than others. Might this be due to an alternate attenuation, and recrudescence of the bacillus in the soil, under varying conditions, similar to what occurs in the flasks in the laboratory, or in the blood of the mouse, thus influencing the death-rate? For the prognosis in Anthrax seems not altogether so gloomy as past writers would indicate. Mr Hunter had four cases recover out of six attacked, which is rather a higher percentage, though but slightly so, than that witnessed by me in the series of outbreaks above alluded to.

On this particular farm we have observed that if the animal survives