On post-morten examination a well-marked suppurative inflammation of the medulla oblongata and its membranes was discovered. The remarkable point was that this fatal sequel should affect two foals of the same age at almost the same time and with similar symptoms.—(*Ibid.*, No. 35, 1902.)

## THE ORGANISM OF PLEURO-PNEUMONIA.

TARTAKOWSKY and Dschunkowsky repeated Nocard and Roux's experiments on the etiology of pleuro-pneumonia, in connection with an outbreak of the disease which occurred in St. Petersburg during 1900. They also found that the microbes were scarcely visible with a magnification of 1000 diameters. The largest visible bodies, representing masses of microbes, were hardly half a micron in size. They stained best with gentian or methyl violet and with hot carbol-fuchsin solution, but only a part of the micro-organisms were ever stained. The cultures, which are enclosed in collodion envelopes placed in the peritoneal cavity of rabbits, require two to three weeks for growth. In pure cultures the microbe may be propogated for six generations. An injection of the fifth generation into a calf showed its virulence to be slightly lessened. Five camels which were inoculated with attenuated cultures and a calf treated in the same way became immune. The authors declare that the microbe is sufficiently small to pass through the Berkefeldt filter.—(Ibid., No. 37, 1902.)

## HEREDITY OF THE ARTHRITIC DIATHESIS: ITS TRANSMISSION TO THREE FOALS BY THE DAM.

By M. DARMAGNAC.

THE mare Orangine, of pure Arab blood, born in 1892 at the Tiaret stud, was subject to colic, and was treated several times for attacks of skin disease. She had three foals, which Darmagnac kept under observation, and of which

we give a brief pathological history

I. Abandon, pure Arab, suffered during the entire summer of 1899 from squamous eczema. In 1900 the skin disease reappeared with the onset of warm weather. Without apparent cause cracks occurred around the pasterns, and resisted local treatment. In October the animal showed violent colic of a nervous character, which, however, readily yielded to anodyne treatment (morphine and chloral). In 1901 eczema again appeared at the commencement of summer; cracks formed in the skin; in spite of very careful hygienic treatment the animal had frequent attacks of colic, but these always yielded to anodyne treatment and only to such treatment. Rheumatic lameness set in during training, which had to be discontinued. This animal passed beyond observation after this date.

II. Badin, an Arab barb, born in 1899, in 1900 showed patches of eczema, from which the hair was shed. In 1901-1902, during the course of the summer, this animal suffered from generalised eczema and from deep and very obstinate cracks in the skin. It several times suffered from painful colic, which, however, yielded to anodyne treatment, though unaffected by other medication. In April 1902 it was treated for disturbance of circulation, characterised by doubling of the second heart sound and by swelling about the limbs.

III. Castor, an Arab barb, born in 1900, in 1901 showed signs of herpes, cracks in the skin, and colic of the same type as that noted in its brothers. In 1902 it showed eczema and cracks in the skin.

The hereditary character of the above conditions in the three animals appears undeniable. The dam seems to have transmitted to her offspring that pathological condition which has been described under the name of the arthritic diathesis, and which is characterised by the complexity of its symptoms. The relations between arthritis, cutaneous eczema, rheumatism in all its forms (affecting both the general muscular system and the muscle of the heart), and enteralgia are beyond dispute. The occurrence of arthritis and its hereditary transmission having been carefully studied in human medicine, in which observation is easier, it appears interesting to cite this observation, which well shows the varying character of the affections arising from the arthritic diathesis in the horse. The three foals showed all the following forms:—

Abandon: Herpes (eczema with cracks in the skin); enteralgia; muscular rheumatism.

Badin: Herpes; enteralgia; cardiac rheumatism.

Castor: Herpes and enteralgia.—(Revue générale de Médicine Vétérinaire, 1st February 1903, p. 138.)

## THROMBOSIS OF THE ANTERIOR VENA CAVA IN A HORSE.

## By Professor Albrecht.

On the 5th of June the writer was called in consultation to a carriage horse belonging to Prince Hohenzollern.

History.—The horse (a Mecklenburger), six years old, had shown no signs of disease during the two years he had been in his present owner's possession. The first symptoms were noticed on the 18th of April, and developed as follows: A slight painless swelling at first appeared on the right knee (a few days before a similar swelling had occurred on the left knee, but had again disappeared). The swelling extended upwards towards the right elbow; it remained painless and showed the appearance of ædema. The left knee was swollen. The fore-arm, arm, and left shoulder exhibited ædematous swelling, which extended over the chest region as far as the right scapulo-humeral joint. The swelling increased, extending in both limbs from the foot to the elbow, chest, and sub-sternal region. Finally the two jugular furrows were invaded.

On the 15th May the swelling slightly diminished, but movement was still difficult. The general state of health remained excellent. There was no fever. Nothing could be detected on auscultation or percussion except an increase in the zone of cardiac dulness. No venous pulse, urine normal. Venous stasis appeared in the glosso-facial vessels. The horse became dull and did not lie down. On the 3rd June the swellings were larger than ever, and extended under the abdomen. Appetite failed. On the 5th of June the consultation occurred.

State on Examination.—The animal was in fair condition and the coat brilliant. The swellings were as above described; they were so extensive about the region of the neck that the jugular veins could no longer be raised by compression. The head itself was not swollen, but the veins appeared prominent. The conjunctiva and pituitary mucous membranes were red; the pupil slightly dilated; temperature 38.4° C. The extremities were moderately warm, as were the edematous patches. Pulse 42, slightly intermittent. The zone of cardiac dulness extended about an inch and a half backwards. The heart sounds were normal. Nothing could be detected on percussion and auscultation of the lungs. Rectal examination revealed nothing. The