

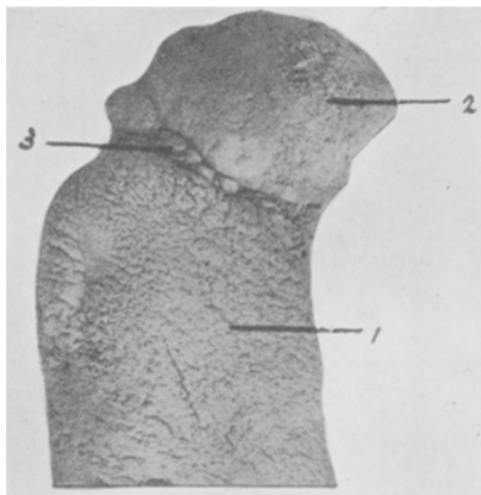
*Post-mortem.*—The lungs were simply crammed with grey translucent tubercles, and the bronchial glands were slightly enlarged; but, as usual, no macroscopic lesions were perceptible in any of the other organs. I have no hesitation in saying that had this donkey not been killed she would have died within the eighth week from the time of inoculation.

## A CASE OF CARCINOMA OF THE BLADDER OF A HORSE.

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ON the 18th November last I had occasion to make a *post-mortem* examination of a chestnut gelding, aged about twenty years, which was killed at the owner's request, because for about a year previously the animal had been passing blood with its urine.

The animal was thin, but not emaciated. As soon as the abdominal wall had been reflected and the intestines partly displaced, attention



Carcinoma of the bladder.

1, Mucous membrane of the everted bladder; 2, the tumour; 3, a fringe of papilla-like growths.

was given to the bladder, and on inspection it was found that the anterior extremity of that organ presented a remarkable depression, due, apparently, to an introversion of the wall at that point. When the bladder was grasped at the part corresponding to the introversion its cavity was felt to be partially occupied by some firm body. As soon as these points had been made out the entire urino-genital apparatus was excised intact, and the interior of the bladder was exposed by an antero-posterior mesial slit along the posterior part of its lower face. It was thus ascertained that the solid body which

had been felt from the exterior was a tumour about the size of a goose's egg, growing inwards from the anterior end of the bladder. The posterior half of the organ appeared quite normal, and in order to obtain a better view of the tumour the bladder was cut across just in front of its neck, and then everted. The accompanying photograph shows the appearance which the parts then presented. The surface of the tumour was rough, ulcerating, and at some places covered with small blood coagula. Its consistence was rather firmer than that of normal liver, and on section it presented a white surface finely mottled with grey.

Around the base of the tumour the mucous membrane of the bladder showed a fringe of growths which in size and shape resembled the large papillæ of the rumen (see Fig.), but elsewhere the lining membrane of the bladder was normal. The urine contained in the organ was turbid and blood-tinged, but it had no odour of putridity.

The abdominal and thoracic viscera were found to be normal, and there was no evidence of metastasis in the pelvic or other lymphatic glands.

Subsequent microscopic examination showed that the tumour had the histology of a carcinoma (see Fig 2, Plate I.). The epithelial cells, like those of the normal bladder, are multiform in shape, but the majority are of the squamous type, and some of them are of very large size. Towards the centre of a few of the larger groups some of the cells have undergone colloid degeneration. The stroma of the tumour is sparing in amount, and for the most part spindle-celled. Clusters of leucocytes are present at places, both in the epithelium and the stroma.

If, as the history indicated, the tumour had been in existence for about a year, it is somewhat remarkable that secondary tumours had not formed even in the adjacent lymphatic glands.

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#### GENERALISED CARCINOMA IN A HORSE: NEGATIVE RESULT OF AN ATTEMPT TO TRANSMIT THE DISEASE BY INOCULATION.

By the Same.

IN the month of December last I had submitted to me by my colleague Professor Penberthy a small piece of a tumour from the tail of a horse for microscopic examination. The examination showed that the growth was a carcinoma, and a few days later Professor Penberthy amputated the tail above the apparent upper limit of the tumour, which, unfortunately, was almost close to the root. The situation and extent of the growth are shown in Fig. 1, which is a photograph of the amputated portion of the tail, viewed from its under aspect after removal of the hair.

The patient, a bay gelding over twenty years of age, remained in the College Infirmary till the 23rd January last, when it fell down in its box and died in less than half an hour. Just before death it was observed that the visible mucous membranes had become very pale.