ectasis. The catarrh was so marked and the fibrous tissue so abundant that in certain portions the normal histology was completely obliterated. Catarrh of the bronchi and bronchioles was usually present; and there was a certain amount of congestion in the pulmonary vessels, but not in the capillaries.

This condition appears to have some economic importance, considering the age of the pigs affected, and the general prevalence of actinomycotic mastitis among dairy cattle in Victoria. As the pigs were all young (porkers four to five months old), at an age where milk plays a large part in their diet, it is under the circumstances reasonable to assume the possibility of the infection being introduced by feeding milk from cattle whose udders are affected with actinomycosis.

CONFLICTING RESULTS OF THE OPHTHALMIC AND SUBCUTANEOUS TESTS WITH TUBERCULIN IN TWO COWS.

By B. E. WOOSTER, M.R.C.V.S., High Wycombe, Bucks.

Cow 298.—From 19th March 1920 until 15th August 1920, this cow was tested on four occasions by the subcutaneous method and on five occasions by the ophthalmic method. As will be seen from the temperature charts, she maintained a normal temperature on each occasion, but at each ophthalmic test she gave a more or less positive reaction.

Cow 307.—From 27th May 1920 until 15th August 1920 this cow was tested on three occasions by the subcutaneous method, and on three occasions by the ophthalmic method.

On two occasions she maintained a normal temperature; on 29th June 1920 the temperature at the fifteenth hour was 103° and at the eighteenth hour 103.2° .

To the ophthalmic test she also gave a more or less positive reaction on each occasion.

It might be said that the subcutaneous tests were applied at too frequent intervals, but this would hardly apply to the first and last tests.

Owing to the conflicting results obtained, I asked and obtained the owner's permission to have the cows slaughtered and submitted to *post-mortem* examination.

The *post-mortem* examinations were conducted by myself in conjunction with Mr Sidney Villar, F.R.C.V.S., and all parts of the carcasses were carefully examined with the exception of the brain and spinal cord.

I may here state that the tests carried out on 15th August were made in conjunction with Mr Villar.

No. 298 was destroyed on 26th August 1920, and the *post-mortem* yielded positive evidence that this cow was affected with tuber-

culosis. Tuberculous nodules varying in size from a grain of wheat to a hazel nut, with commencing caseation, were found in the sub-maxillary, pharyngeal, and mediastinal lymph glands; one tuberculous nodule the size of a bantam's egg was found in the right lung. The bronchial lymph glands were apparently normal. The remaining lymphatic glands and organs were apparently quite normal.

No. 307 was destroyed on 2nd September 1920. The *post-mortem* again yielded positive evidence that the cow was affected with tuberculosis. The right pharyngeal lymph gland contained a caseous tuberculous nodule the size of a filbert, and commencing perlsucht lesions were found on the parietal and visceral pleura. No evidence of tuberculosis was found in any other part of the body.

The greatest care was observed in carrying out the tests that no extraneous condition should in any way influence the results. In the early tests tuberculin obtained from The Royal Veterinary College was used, but in the later subcutaneous tests Pasteur tuberculin was employed and the dose was increased from $3\frac{1}{2}$ cc. to 4 cc.

Record of Tests of No. 298.

<i>Date.</i>	<i>Tuberculin.</i>	<i>Initial Temp.</i>	<i>9th Hour.</i>	<i>12th Hour.</i>	<i>15th Hour.</i>	<i>18th Hour.</i>
19.3.20	Royal Veterinary College. $3\frac{1}{2}$ cc.	102°0	102°0	101°4	101°8	—
19.3.20 (Left eye)	Royal Veterinary College. Ophthalmic.	Lachrymation, conjunctivitis, and muco-purulent discharge throughout.				
14.5.20	Pasteur. $3\frac{1}{2}$ cc.	101°4	101°0	101°8	101°6	102°0
14.5.20 (Left eye)	Royal Veterinary College. Ophthalmic.	Lachrymation, conjunctivitis, and muco-purulent discharge throughout.				
29.6.20	Pasteur. 4 cc.	101°8	101°0	101°6	101°2	101°2
29.6.20 (Left eye)	Royal Veterinary College. Ophthalmic.	Lachrymation, conjunctivitis, and muco-purulent discharge throughout.				
20.7.20 (Left eye)	Royal Veterinary College. Ophthalmic.	Slight muco-purulent discharge, conjunctivitis and lachrymation in both eyes at 9th, 12th, and 15th hours.				
15.8.20	Pasteur. 4 cc.	101°2	101°0	101°0	101°2	101°4
15.8.20 (Right eye)	Royal Veterinary College. Ophthalmic.	—	Conjunctivitis, lachrymation, and muco-purulent discharge profuse.	Same as 9th hour, aggravated.	Lachrymation and conjunctivitis severe. Muco-purulent gone. 36 hour	Lachrymation only slight. clear.

Record of Tests of No. 307.

<i>Date.</i>	<i>Tuberculin.</i>	<i>Initial Temp.</i>	<i>9th Hour.</i>	<i>12th Hour.</i>	<i>15th Hour.</i>	<i>18th Hour.</i>
27.5.20 Previous to purchase	Pasteur. 3½ cc.	101.4	101.2	102.0	102.2	101.6
29.6.20	Pasteur. 4 cc.	102.0	101.2	102.2	103.0	103.2
29.6.20 (Left eye)	Royal Veterinary College. Ophthalmic.	Muco-purulent discharge throughout.				
20.7.20 (Left eye)	Royal Veterinary College. Ophthalmic.	—	Muco-purulent discharge.	Muco-purulent discharge, conjunctivitis, lachrymation.	Do. increased.	Do. decreased.
15.8.20	Pasteur. 4 cc.	101.0	101.2	101.6	101.2	101.6
15.8.20 (Right eye)	Royal Veterinary College. Ophthalmic.	—	Conjunctivitis, lachrymation, muco-purulent discharge profuse.	Do. aggravated.	Do. greatly decreased.	Do. slight.
					36th hour clear.	