

eventually become permanent ceased reactors, we can at one or other of these stages make reasonably certain of those which will not do so.

Animals which, on being first tested, show a thermal rise exceeding 104° Fahrenheit, accompanied by a characteristic reaction, those which give a more pronounced reaction to a second or subsequent test than they do to the first, and those which suddenly cease to react without showing a gradual lowering of the temperature and a corresponding abatement of the local reaction are not likely to become permanent ceased reactors.

Sound pathological reasons can, I think, be advanced for the lack of improvement shown by the first and second classes, but I must confess that I have no mental theory to fit the case of those last mentioned.

Having now dealt with the supposititious ceased reactors and with those which appear to make an actual and permanent recovery, it becomes our duty to discuss those animals, and they are, in our experience, by far the most frequently encountered, and, needless to say, the most dangerous, which acquire a temporary tolerance to Mallein, but which again give a definite reaction when tested, after sufficient time has elapsed to nullify the effects of previous injections. In the report of the Special Committee appointed by the British Board of Agriculture, to which I have already referred, the records given indicate that all the ceased reactors dealt with in the experiments showed an abnormally high temperature when tested with Mallein some time after they had apparently ceased to react. I considered this a very suspicious circumstance, and one which furnished food for serious thought. In order to discover, if possible, the reason of this peculiar phenomenon I determined to again submit to the Mallein test a number of horses which had been kept for varying periods under supervision as ceased reactors. The results were very interesting, as may be gathered from the following examples from the report of Dr. A. E. Moore, one of our most careful and capable officers, who was entrusted with the task of conducting the investigations. The pathological work was, of course, done by Dr. Higgins.

Results of post mortem examinations conducted on ceased reactors which again reacted on being tested, after a period of not less than six months:

Paddy, Grey Gelding, 16 Years, No. 304.

	Max. temp. before inject.	Max. temp. after inject.	Max. size swelling
1st test, May 22, 1903	100 4-5	105	6x6
2nd test, June 7, 1903	100 2-5	105 2-5	4x5
3rd test, Sept. 7, 1903	100 2-5	101 2-5	2x3 ceased
4th test, Oct. 25, 1903	101	101	3x4
Retest after 1 year and 2 months, Dec., 1904	101 2-5	104	3x6
Result of post mortem of No. 304:			

Very few nodules scattered in the lungs, around some of these nodules small quantity of lymph-like substance was seen, others encysted.