

## BOURNEMOUTH FEVER OUTBREAK.

## OFFICIAL REPORT.

The report of the late Dr. W. Vernon Shaw, a medical officer of the Ministry of Health, on his investigations into the outbreak of enteric fever which occurred in Bournemouth, Poole and Christchurch in August and September last, was published on June 2nd by H.M. Stationery Office, price 9d.

The outbreak was first brought to the notice of the Ministry on August 21st, 1936, and Dr. Shaw began his investigations on the following day. On arrival Dr. Shaw was informed that 30 cases of enteric fever had been notified during the preceding 24 hours, and that medical practitioners in Bournemouth and Poole reported that they had a very large number of other patients, who would probably prove to have enteric fever, under observation. The patients were scattered throughout the three towns, without distinction of age, sex, occupation, or social status, and it was clear that a widely distributed article of food or drink was concerned in the spread of the infection.

Dr. Shaw ascertained that the only factor common to all the patients was the consumption of raw milk retailed by one distributor. This distributor, acting on Dr. Shaw's advice, adopted a form of commercial pasteurisation (heating the milk to 160° F.) for the whole of his supply, and distributed no unpasteurised milk after the morning round on August 22nd. This measure was immediately successful in terminating the outbreak. Dr. Shaw concluded that the milk was infective for a period of about 31 days preceding August 22nd, and that the approximate number of persons who had contracted the disease was 718, of whom 518 were residents and 200 visitors. The deaths of residents numbered 51.

No source of infection could be discovered amongst the personnel employed in the distribution of the milk or at the retailer's depot, and investigations were accordingly made at the farms from which the milk was supplied. The supply was collected from 37 farms scattered throughout a large part of Dorset; all were visited and inquiries made into the health of such of the personnel as had had any part in the production of milk during the critical period. In all, 192 persons were examined, and two at one farm were found to be suffering from enteric fever. They were the wife and son, aged 12, of one of the milk producers. A careful examination of the circumstances in which these persons became ill led Dr. Shaw to conclude that neither was the cause of the outbreak, though there was strong presumptive evidence that the milk produced at the premises in question was the source of infection of the retailer's supply and of the farmer's wife. Dr. Shaw also ascertained that in the house adjoining that occupied by the farmer a fatal case of enteric fever had occurred in May, 1934, when the water supply of the two houses—which was common also to eight other houses in the vicinity—was suspect. It was derived from a well 162 feet deep, situated 100 yards from a small stream which ran within a few yards of the two houses. Repeated examination of the well water proved that it was liable to pollution, although at times it yielded a good potable water. The condition of the stream was investigated, and into it at a point about half a mile upstream from the farm the sewage effluent from a house in the neighbourhood was found to be discharging. Bacteriological examinations of the effluent for the presence of the typhoid organism proved negative on four occasions in September and early October, but it was found to be present in large numbers on two further examinations in the latter part of October. The occupants of the house were examined, and one of them who had been living there in April, 1934, and in July and October, 1937 (*i.e.*, during the material periods), was found to be harbouring typhoid bacilli in his digestive

tract and excreting them. The person in question was unaware that he was a potential source of danger to others, and he complied at once with the suggestions made to eliminate any further contamination of the stream.

Dr. Shaw was satisfied that the outbreak was due to the consumption of raw milk, and that the dealer's supply was infected by the contributions of one or possibly two producers whose milk in turn was infected by the contaminated water of the stream. How the infection was conveyed from the stream to the milk, whether by the use of the water of a certain well or by the cows subsequent to their drinking at the stream, was not determined. The suggestion that a cow may excrete typhoid organisms in her dung or even in her milk is apparently a novel one, but one which Dr. Shaw found himself unable to reject.

The Chief Medical Officer of the Ministry, Sir Arthur MacNalty, in a prefatory note submitting the report to Sir Kingsley Wood, draws attention to the fact that the bulk supply of milk was infected by a relatively small contribution, itself produced without apparent fault. He concludes that "in the present state of our knowledge, where large milk supplies and commensurate risk are involved, the only practicable way to reduce the risk of such outbreaks to a minimum is by pasteurisation."

This very important Report on the Bournemouth typhoid epidemic gives food for thought. It is not pleasant to think that it is only safe to drink milk when it has been pasteurised so that the poison it contains may be rendered inert.

## MEDICAL MATTERS.

## A BRAIN-STIMULATING DRUG.

Very interesting information about benzedrine, the remarkable brain-stimulating drug, is published in the *British Medical Journal* of May 14th.

The general effect of small doses taken in tablet form is to produce increased confidence, initiative, and ease in making decisions. There is also a pronounced impulse to talk more than usual. Thinking processes appear to be speeded up without impairing attention, concentration, or judgment.

According to the authors of the present report "medical colleagues and others who have themselves taken benzedrine have found it of definite value in such tasks as lecturing or taking an examination. It also helps to remove mental fatigue brought on by excessive work or worry.

Important interviews of various kinds have been tackled more confidently than usual under benzedrine, especially those requiring quick thought and ability to talk convincingly and fluently.

Another effect of benzedrine is to produce sleeplessness, but this is not always unpleasant. It is reported by some as "lying contentedly in bed," in contrast with the distressing restlessness of the insomnia in many nervous illnesses. The effects of the drug often persist the following morning, so that the subject gets up feeling surprisingly fresh and active in spite of the comparative lack of sleep.

The effect of benzedrine upon sufferers from mental disorders is being slowly elucidated. Clearly it has a great value in chosen examples of severe depression.

The present report emphasises that benzedrine is a powerful drug not to be too lightly used.

## Two Great Men.

On Tuesday, June 1st, during the Jubilee celebrations of the Liverpool Medical Institution, the new library of orthopaedic surgery, commemorating Hugh Owen Thomas and Robert Jones, was formally opened and Mr. W. Rowley Bristow, president of the British Orthopaedic Association, gave the Hugh Owen Thomas memorial lecture.

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