

## TRENCH FEVER: THE FIELD VOLE, A POSSIBLE ORIGIN.

Dr. W. J. Rutherford, Temporary Lieut. R.A.M.C., has a most interesting article in last week's *British Medical Journal* on the origin of Trench Fever. He states that when a new disease is encountered, the question naturally presents itself, Is there any other new condition or association of conditions existing with regard to those attacked by this disease? and adds:—Looked at in this way it is not difficult to assert that there is such a new condition of biological importance, this being the commensal association with human beings of the long-tailed field vole, or field mouse. He calls attention to the fact that the trenches along the western front have for some time swarmed with rats and mice. Rats are the disseminators of plague, as well as the less familiar sokodu, or rat-bite fever, besides being subject to the bacillus of pseudo-leprosy, and acting as the source of trichiniasis by conveying that infection to the pig, while the possibility that they might act as a reservoir for the virus has been suggested. Mice are not generally indicated as disseminators of anything worse than favus. The mice in the trenches are not, however, the ordinary house mice that have always lived in domestic association with humanity, but the species particularized zoologically as the long-tailed vole, which is subject to extensive epizootics of high mortality while living in a state of nature. . . . Field mice have been blamed as the source of a disease now extinct—the sweating sickness, or *sudor anglicus*, of the Middle Ages—of which a small epidemic, however, is said to have broken out in the South-West of France in the early years of the present century; it seems reasonable to suggest that they may perhaps be the source from which the infection of this new "trench fever" is derived. There are innumerable opportunities for the spread of infection from the rodents in the trenches apart altogether from dissemination by their parasites; indeed, the chances of infection by organisms carried by the field voles in the trenches are endless.

Dr. W. J. Rutherford predicts that if the increase of these rodents, rats and voles alike, is not checked, their rate of multiplication will result in their overflowing the districts adjacent to the line held by the troops and causing damage to the crops, or else in the development of a sudden epizootic of some virulent disease which will effectually keep down their numbers. In this latter case, if trench fever

has anything to do with these creatures, the possibility of human infection will be greatly increased.

## CELLULOID DRESSINGS FOR WOUNDS.

The dressing of lacerated wounds and of operation cases has hitherto of necessity been a source of dread in anticipation, and too often an agony of realisation. In the present war these terrors have been multiplied many times in consequence of the terrible and unprecedented nature of wounds caused by high explosives. It is therefore with intense interest and hope that we learn of the new method of dressing introduced by Sir Almroth Wright into the military wards of St. Mary's Hospital, Paddington.

It is extraordinarily simple. A very thin piece of perforated celluloid is placed next the wound before the dressings are applied, the result being that the dressings come away quite easily, instead of the too often painful process of removing them.

The celluloid, which is perforated till it becomes more holes than material, is rendered soft and pliable by soaking in a 20 per cent. solution of carbolic acid, and then washed in a weak solution of salt, and is laid directly on the raw granulating surface. Fine lint, soaked in a 5 per cent. solution of common salt or sterile water, is then placed over the celluloid, after which firm bandages are applied.

The use of antiseptics has been discontinued at St. Mary's Hospital. The surgeon in charge has made the following statement to the press:

"The wounds are kept wet with weak salt-and-water solution, and that is all the local treatment they get. In addition, immediately on the patient's admission we attempt to find out just what germs are present in the wound, and the man is then inoculated with a serum prepared in the laboratory from this type of germ.

"We have proved experimentally that certain germs commonly found in wounds, while destroyed by strong antiseptic solutions such as carbolic, actually grow all the faster in very weak solutions, such as are often formed in the depths of a wound when a little antiseptic has been diluted down with a large amount of the natural fluid of the body. Hence our practical discontinuance of the use of antiseptics and the substitution of the salt solution, which, here at any rate, has been found to give much better results."

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