MEN AND HORSES PARTIALLY INCAPACITATED BY THE BITES OF SIMULIUM (SAND FLY) IN A HAMPSHIRE WOOD.

By JAMES CANTLIE, M.B., F.R.C.S.,

Surgeon to the Seamen's Hospital Society, Victoria and Albert Dock
Hospital.

On Saturday, April 14th, 1900, whilst some 200 men of the London Scottish Volunteers were engaged in manoeuvres in woods about six miles to the westward of Winchester, about one-third of the force engaged were severely bitten by "flies." The insects attacked the bare knees of the men. Little or no sensation was caused, either when they alighted on the skin or whilst they bit; but on being brushed off a small red spot was observable, around which speedily developed a circumscribed ecchymosis. In many instances only one or two bites occurred, but in the majority there were from twelve to thirty bites on each knee.

On the evening of April 14th—that is, about four hours after being bitten—one of the men of the corps felt cold and shivery and then got very hot, and noticed that the skin of the knees was becoming puffy and painful. Being a medical student he happened to have a thermometer with him, and on taking his temperature he found it 102.5° F. This was but the forerunner of several dozens of cases, for within twenty-four hours a considerable number of those bitten presented the following signs and symptoms: Fever from 100 to 102.5° F.; shivering, and waves of heat and sweating; pain and stiffness round the knees; and oedema extending from half way down the thighs to the ankles. The oedema was excessive, especially over the legs below the garter, and therefore below the exposed and bitten surface. In several, erythema extended from the middle of the thighs to below the knee, and in a few the groin glands were swollen and tender. Even in those who had been bitten by one or two insects only the feeling of feverishness and local pain and oedema were distinct. In most instances hot boracic fomentations allayed the erythema and soothed the pain, and as a rule in thirty-six hours the acute symptoms disappeared; but in a few cases the limbs were so injured that a week passed without the man being able to get about as usual. The horses with the troops also suffered severely, especially along the abdomen and about the genitals. They were very restless during the afternoon of April 14th, and on the following day the parts were swollen considerably and tender to the touch.

The people about Winchester and the ostlers in the stables were totally unacquainted with this pest and could give no explanation of the circumstance. The insect was somewhat smaller than a house fly, presenting a blackish head, thorax, and abdomen on the upper surface, but striped black and white along the under surface of the abdomen. The wings appeared white and transparent. As the condition was so unusual I sent specimens to Professor Nuttall at Cambridge, and he replies as follows:

The flies are a species of *Simulium*, vulgarly called "sandflies," and known to be a great pest at times. Personally I have suffered intensely from a similar species in Canada; such flies are very widely distributed and have been known to actually kill cattle when present in great numbers, as is the case in Hungary, where the *Columbaczermücke* occurs. In the United States the dreaded "southern buffalo gnat" (*Simulium pecuarium* Riley) occurs, and causes much suffering. Protection is afforded against their attacks by means of smoke or tar preparations, which repel the insects through their odour. Unless you wish the specimens returned I shall keep them here.

I have deemed this attack by insects as sufficiently important to be placed permanently on record, and should be glad to hear of similar experiences. There were two medical men present with the volunteers besides myself, and a number of medical students, all of whom can bear testimony to this report, several of them unfortunately from personal experience.

PRESENTATION.—At the men's mess room at the New Cross Station of the London, Brighton, and South Coast Railway the members of the ambulance class presented a gold-mounted umbrella to Dr. Carvell bearing the following inscription: "St. J.A.B. Presented to Dr. J. M. Carvell by the members of the New Cross and Willow Walk division." The presentation was made by Mr. E. W. Trangmar, C.E., the superintendent of the division.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

AN OBSTINATE CASE OF NEURASTHENIC INSOMNIA.

In a case of neurasthenia, when we cannot command the Weir-Mitchell treatment in its entirety, and when all probable contributing causes have been removed—or the patient removed from their influence—after constipation, insomnia becomes the next fortress to be attacked.

A perusal of Professor Clifford Allbutt's exquisitely finished picture of neurasthenia, in his *System of Medicine*, vol. viii, suggests that a recent experience in the attack on insomnia may be worthy of record.

The patient is a married woman, aged 26, with two children, aged respectively 3 years and 10 months. Up to the time of her marriage she had been worked very hard as a schoolmistress. She never in her recollection had been a good sleeper, and since the birth of her first child had not averaged more than three or four hours' sleep in twenty-four hours. For the past few months, as her infant was very cross, she had had only "cat's sleep," and when my services were requested she appeared to be on the verge of insanity.

Constipation was an old trouble. 3j of castor oil, with 3j of "terps" added to warm it up, produced no effect, neither did 3ij of Epsom salts, with ext. cascarae 3ij, etc., administered in twenty-four hours; 5 grs. of calomel might as well have been sugar, whilst 3 drops of croton oil only acted slightly after an interval of twelve hours. However, the constipation was overcome; the insomnia was still an urgent question.

I shall only mention the maximum doses of each drug given in the endeavour to induce sleep. The patient was kept in semi-darkness during the day, fully fed, and the bromides in combination with cinchona administered continuously. Oatenmeal gruel, hot milk, cocoa, or strong beef, tea were always given either with, or a short time before, the final sleeping "draught."

1. R Butyl croton chloral 3ss, tr. hyos. 3j, tr. lupulin 3j, at bedtime.
Result.—No use; the patient never "lost herself," or from her nurse's description, ceased "to fidget."

2. R Sulphonal gr. 60, thoroughly dissolved, and taken hot.
Result.—"Cat's sleep," "fidgeted all night." Next day intense stupor, but no sleep. As to the dose of sulphonal, note that Dr. Sutcliffe, of Cheshire Royal Asylum, records in the *Journal of Mental Science*, October, 1899, that after 50 grains had been administered to a patient "in a state of great excitement.....without apparent result.....60 grains were given, after which he slept almost continuously for three days." In my case 60 grains gave no sleep.

3. R Chloral hydrate 3j, tr. hyos. 3j, nepoche (Ferris) 3ss.
Result.—This was tried on three occasions, without useful result.

4. R Trional 3j (60 grains) dissolved in hot draught stout.
Result.—The first dose of this strength (50 grains had done nothing) gave 6 hours' easy sleep, the second 8 hours, and the third 9½ hours.

Messrs. Motterhead and Co. inform me that the largest dose of trional they have ever dispensed is 30 grains.

Saddleworth. COLIN CAMPBELL.

HYPODERMIC ADMINISTRATION OF MERCURY IN SYPHILIS.

WITH reference to Dr. Fosbery's queries *re* treatment of syphilis by intramuscular injections of mercury, in the *BRITISH MEDICAL JOURNAL* of January 13th, page 74, I would like to state that I cannot understand why he has met with such pain and induration in the two cases he has treated. During the year that I was stationed at Colchester I had about 104 men attending for the treatment, and many were cavalry and artillery soldiers. I use Major Lambkin's original prescription. I cannot remember the quantities, but think they are: Mercury, 3j; lanolin, 3j; carbolic oil, 2 per cent., 3ij. Of this I inject deeply into the muscles of the buttock, high up near the iliac crest, 5 minims. I use a syringe which holds 20 minims; four men stand in a row, and the needle is pushed into the first up to the hilt. The piston is pushed down to the required distance, finger removed from the piston, and the needle rapidly withdrawn. It is then wiped on wool soaked in 1 in 20 carbolic, and the process repeated until the syringe is empty. If any of the injection is left in the skin, or if it is injected hypodermically, induration and pain are bound to result.