in the larynx. A patient suffering from diphtheritic laryngitis was admitted to hospital under my care. Tracheotomy was performed and antitoxic serum given subcutaneously. The tube was removed later. Recovery was slow. Following on a treatment which was then being given trial, a second injection of serum was given about six weeks after the admission of the patient to hospital. Within a few minutes of the injection the patient (a small boy) developed an extraordinarily severe urticarial rash in practically all regions. At the same time typical signs of laryngeal obstruction were seen and the boy became very cyanosed. The tracheotomy wound was reopened and a tube inserted. All respiratory embarrassment disappeared at once. The simplest explanation seemed to be that the urticarial rash had extended to the larynx.

I should therefore certainly try the effect of tracheotomy if in a severe immediate reaction, accompanied by urticaria, a fatal result was threatening.

I am, Sir, yours faithfully,

Jan. 20th, 1917.

MILES B. ARNOLD.

DEFINITION OF ACUTE ALCOHOLISM.

To the Editor of THE LANCET.

SIR,—I have read with interest Dr. W. C. Sullivan's letter on this subject in your issue of Jan. 20th and I gladly supplement the data of my original letter in the direction desired. I fear, however, that I can give no explanation of the curious paradox that the police figures for the Edinburgh area show an apparent material decrease of drunkenness among women, while the admissions into my wards of women suffering from acute alcoholism have more than doubled. This paradox is all the more remarkable because the conclusion indicated by the hospital figures, as to the great increase of drunkenness among women, is confirmed in the experience of the officials of the out-patient department where minor cases of alcoholism are dealt with, and also by all the collateral evidence obtained.

In reply to one query of Dr. Sullivan's, I may say that there has been no marked alteration in the type, and no change in classification, during the five years in which the wards in question have been under my care.

I have not looked into the point whether there has been any special change observed in the incidence of frankly declared delirium tremens. I attach little importance to this point. Delirium tremens is merely an incident in the development of some cases of acute alcoholism. I should say it is observed in from one-third to one-half of the cases admitted, the former figure being probably the more correct. By way of illustration, I may say that since reading Dr. Sullivan's letter I have taken the last ten cases of alcoholism admitted to my wards, since the 10th of this month, eight of which were brought in by the police; two of these only developed any symptoms of delirium tremens.

My experience leads me to doubt whether statistics of delirium tremens can be regarded as a useful and reliable means of gauging alcoholism in England; if the figures of the Royal Infirmary may be taken as typical of the rest of Scotland, I am satisfied they would not form a complete and reliable guide to sobriety in Scotland.

I am, Sir, yours faithfully,

Edinburgh, Jan. 22nd, 1917.

CHALMERS WATSON.

A PLEA FOR THE GENERAL USE OF PNEUMATIC TOURNIQUETS.

To the Editor of THE LANCET.

SIR,—The usual method of arresting the circulation in the forearm and hand or the leg and foot during operations on these extremities by winding a tightly stretched piece of elastic tubing round the arm or thigh over a layer of gauze has certain disadvantages. The assistant may fail to apply the tourniquet with sufficient tightness to arrest the circulation, or, more often, the tube is applied with some roughness and so as to exert an unnecessary degree of compression. I have seen disappearance of the radial pulse persist for several days after the use of such a tourniquet on the arm of a young adult. The rubber tube must be applied before the towels are arranged and often some minutes before the first incision is made, and its release towards the close of the operation is often an inconvenient business. If vessels

and nerves can be injured by this procedure in a young healthy subject, how much more serious is the danger in old patients with diseased and brittle arteries. Perhaps the occasional recurrence of gangrene in the flaps of an amputation undertaken for diabetic gangrene is due in no small measure to injury and thrombosis of the main artery at the site of the tourniquet.

The ordinary sphygmomanometer makes an excellent pneumatic tourniquet for use in operations below the middle of the thigh or arm. The pneumatic armlet is applied to the upper part of thigh or arm and the pressure raised and maintained for a moment to ensure that the apparatus does not leak. The administration of the anæsthetic is begun, the limb is raised to empty the veins, and the sterile towels arranged. When the surgeon is about to begin the armlet is inflated till 5 mm. of mercury above the maximum systolic pressure is registered by the manometer. A spring clip may then be applied to the tube coming from the inflating bulb to guard against any leakage through its valve. When the main vessels have been ligatured the pressure can be instantly lowered to enable the recognition of fine bleeding points, or as instantly raised again should the hæmorrhage be too free. A bicycle pump can be substituted for the usual inflating bulb with advantage.

To arrest the circulation at the level of the hip or the shoulder a special pneumatic band has to be constructed, but for the greater number of amputations or other operations on the extremities the ordinary sphygmomanometer, which is in the armamentarium of most doctors, suffices. Such a pneumatic tourniquet has the following advantages:—1. No violence can be caused by its application. 2. Only the minimum pressure required is employed. 3. The tourniquet can be brought into action or released easily and instantaneously and so need not be in force for a second longer than is necessary.

I am, Sir, yours faithfully,

KENELM H. DIGBY, M.B., B.S. Lond., F.R.C.S. Eng.,

Ho Tung Professor of Clinical Surgery, University of Hong-Kong.
Nov. 27th, 1916.

THE CAUSE OF TRENCH-FOOT.

To the Editor of THE LANCET.

SIR,—If wetness, leading to electrical changes, were the cause of trench-foot, as suggested by Mr. Nepean Longridge in your issue of Jan. 13th, warm water should cause the condition as much as cold water. Now, anybody who has observed rice-growing and waterside communities in the tropics will know that they do not suffer from trench-foot, though their feet are constantly wet.

I am, Sir, yours faithfully,

V. T. CARRUTHERS,
Captain, R.A.M.C.

Jan. 18th, 1917.

THE TREATMENT OF TRENCH-FOOT.

To the Editor of THE LANCET.

SIR,—The experimental work of Lorrain Smith, Ritchie, and Dawson on rabbits suggests that in the affection known as trench feet the primary and most serious injury is sustained by the blood-vessels. They found in their experiments that the vessel walls had been seriously damaged; there was swelling of the intima and vacuolation of the cells of the muscle coat. There was also considerable exudate and the establishment of a condition of local stasis and œdema.

A large number of cases of trench feet have come under my care, and I have been struck by the fact that nearly all these patients complained of the pain which they endured at night. This symptom, combined with the obvious signs of local vaso-motor paralysis, led me to try the effect of affording external support to the relaxed vessels by means of crêpe bandages. In every case the relief from pain has been striking and immediate, and the progress of cases so treated has been rapid and satisfactory. The bandages should be applied so as to exert a firm but gentle pressure without causing constriction of the vessels, and, as a matter of practice, most patients speedily learn to adjust them for themselves. The entire foot should be bandaged, and the toes can best be included by first enclosing them in cotton-wool. If small patches of broken or ulcerated skin are present the bandages can be applied over the ordinary dressing.

This method of treating trench feet by crêpe bandages will be found most valuable in at once alleviating the pain which is so common a feature of this condition, and, while directly promoting the absorption of exudates, it has the advantage that it need not interfere with any of the usual methods of treatment by massage or electricity.

I am, Sir, yours faithfully,

GEORGE COOPER, B.A., M.D.,

Medical Officer in charge of Electro-therapeutic Department,
Jan. 20th, 1917. Royal Victoria Hospital, Netley.

MUNITION WORK AND CHILD WELFARE.

To the Editor of THE LANCET.

SIR,—In common with other districts throughout the country we have been making special efforts during the past few years for the improvement of child welfare and the protection of infant life. Much good has undoubtedly been done, but disappointment has been met with at times, and I have been impressed lately by the fact that munition work is becoming responsible in many cases for home neglect. This can hardly fail to follow if, as seems to happen frequently, the mother as well as the older daughters of a family spend the day at a munition factory. There is a large factory near here which offers tempting wages to every woman capable of work, and in some families, at any rate, the mothers of small children, together with the older girls, are now working there daily, leaving the younger children, including babies, to the care of girls, or even boys, of from 12 to 14, or to the casual charge of neighbours. The remedy would seem to be that before engaging mothers of families at munition works inquiry should be made, and that the mother should not be engaged unless she can show that some responsible woman is in charge of the children. Munition work is, of course, all-important, but if it be carried on at the expense of the young children of the nation the balance might work out ultimately on the wrong side. From a national point of view the mother's most important work is with her children.

I am, Sir, yours faithfully,

H. CAMERON KIDD,

Jan. 11th, 1917. Medical Officer of Health of Bromsgrove.

THE PREVENTION OF VENEREAL DISEASE.

To the Editor of THE LANCET.

SIR,—Your remarks upon this subject in the leading article in THE LANCET of Jan. 13th are of great practical moment. In venereal disease prevention is the treatment, as very few cases are actually cured. Time and money fail the sufferers, and so these pass into chronic states.

In 1907 I inquired into the German system of prevention, and after much trouble I obtained reliable information. It may be of interest now, and also a practical lesson to us, to state that in 1911 I wrote to the English consul in a leading German city asking him to find out all the facts relating to venereal prevention. He replied that he had inquired in "several competent quarters," and that he was "assured by naval officers of high standing that they knew nothing of such a system"! What ignorance! In 1912 I produced a small case containing drugs to prevent gonorrhœa, chancroid, and syphilis, spending about £50 upon this outfit. My idea was that the shipping companies would take it up, and—after the German plan—fix a slot machine, with the little tin cases inside, so that each seagoing man before going ashore could, by dropping in 1s. or less, obtain a reliable supply. I still hope that such slot machines will be fixed on each ship and at the various sailors' homes and other places.

When I was requested by the Liverpool S.S. Owners' Association to draft a report for presentation to the Venereal Commission, I described fully the system of prevention in various countries. This report was sent to the Commissioners, and also several of the little tin preventive boxes. I regret the Commission did not recommend this suggestion. It is instructive—in this commercial country—that when I attempted to advertise it in so many of the medical and lay papers all refused to insert it! Now that "Mr. and Mrs. Grundy" have been suffocated, I am glad to see that my pioneer work is bearing practical results. The German system makes a marked mistake in attacking this big question from the male side

only. The female must be taken in hand also, especially as it is now recorded that in certain U.S.A. (and other) cities the female prostitute is known to have not less than 30 male prostitutes *daily* having sexual relations with her. We are at the beginning only of this great national question of prevention of venereal diseases, and prevention is almost the only rational programme to adopt. It will give the best results of all.¹

I am, Sir, yours faithfully,

Liverpool, Jan. 20th, 1917.

ROBERT R. RENTOUL.

THE NOMENCLATURE OF "INTERNAL SECRETION."

To the Editor of THE LANCET.

SIR,—Dr. Blair Bell adopts a method of controversy in which I cannot compete with him. I am content to let such epithets as "back-handed," "arrogant," and "vain-glorious" recoil upon the person who employs them.

I am, Sir, yours faithfully,

Edinburgh, Jan. 23rd, 1917.

E. A. SCHÄFER.

THE OFFICIAL VISIT TO THE FIELD BUILDING.

To the Editor of THE LANCET.

SIR,—You will have seen a report published in the *Times* that my private room in the *Field* building had been officially visited under warrant from the War Office. Will you kindly grant me space to say briefly that this visit had no relation to any business of the *Field* newspaper and concerned only correspondence relating to a high explosive in which I am privately interested? I have stated the whole case in a long letter which the *Times* was good enough to print for me on Jan. 18th.

I am, Sir, yours faithfully,

THEODORE A. COOK.

Windsor House, Bream's-buildings, E.C., Jan. 18th, 1917.

MASSAGE AND MEDICAL ELECTRICITY IN THE AFTER-TREATMENT OF CONVALESCENT SOLDIERS.

To the Editor of THE LANCET.

SIR,—I should like to emphasise particularly the efficacy of the following simple applications in the after-treatment of convalescent soldiers.

1. *Ionisation*.—Many of those cases in which the passage of shrapnel or bullets through a limb has produced considerable disorganisation of tissue, with resulting pain, stiffness, and weakness, are very greatly benefited by ionic medication. As a rule, sodium ions are useful for softening large hard scars, and iodine ions help in the absorption of fibrous masses; but in view of the fact that one often finds conditions suggestive of a slow infective process salicylic acid can often be employed with advantage as the ionising drug. A preliminary application of radiant heat will undoubtedly assist ionisation in many instances.

2. *Spinal galvanism*.—For a number of men suffering from the nervous irritability, hypersensitiveness, and indefinite muscular pains which are not infrequently met with in the convalescent stages of war neurasthenia, the descending galvanic current applied with the anode over the cervical spinal region and each foot placed in a small bath, and the baths both connected to the negative pole, gives excellent results. I have been struck by the way in which the men themselves have spoken appreciably of this treatment, which may be varied by using a combined galvano-faradic (or galvano-sinusoidal) current.

3. *Static electricity*.—For the treatment of shell shock after the initial stages I cannot speak too highly of the static apparatus. Where there are irritability, restlessness, disturbed sleep, and headache, I have found simple charging—with the patient on an insulated platform connected to the negative pole whilst an electrode is adjusted to give a gentle head-breeze—an invaluable method.

May I also point out the desirability of medical men in general practice keeping in touch with various electro-

¹ Those practically interested will find a reference to systems in force in my essay, *The Prevention of Enthetic Diseases* (Booksellers Co., 72, Ford-street, Liverpool, 2s. 1d.).