

SIR,—It makes extraordinary reading, in your issue of November 7th, to find two of my old teachers taking up such an antagonistic attitude over the subject of treating the wounded. I refer to Sir Victor Horsley's criticism of Sir Rickman Godlee with regard to swabbing the wounds with strong carbolic acid.

The great art of treating wounds is to keep them free from germs, and whilst strong carbolic helps one to arrive at such a freedom by the destruction of the germs (to say nothing of the tissue cells), an equally marked freedom can be obtained by removing all the products of destruction that can act in any way as a breeding ground for these germs.

The destruction by chemicals of healthy cells that are so necessary for repair, imposes an increased burden on the patient in that these healthy cells have to be built up again, whereas the removal of the germ nidus frees the wound of germs and allows the healthy cells an opportunity of doing their work in a satisfactory manner.

Our great desire then should be to obtain asepsis in the easiest way, which in my opinion can be done by spraying petrol on the wounds. Petrol cleans the wound not only of the gross dirt, but also of the half destroyed cells which with the liberated fat form the great breeding bed for the germs, an advantage it possesses over any aqueous solution of a disinfectant, and this combined with its readiness to evaporate helps to render the wound dry—a condition suitable for healing by first intention. Petrol is readily obtainable, non-poisonous, and can be applied by any one before the ordinary field dressing is put on.

The presence of anaërobic organisms which is so marked a feature of the wounds at the front only goes to emphasize the great importance of surface tension in their treatment, and herein lies the value of petrol which tends to modify it in such a way as to interfere with the life-history of these organisms.—I am, etc.,

Swansea, Nov. 7th.

G. ARBOUR STEPHENS.

SIR,—It really begins to look as if the conditions now obtaining as regards the surgery of the war were going to bring antiseptics—as opposed to aseptics—into its own again.

As a pupil of Sir Joseph Lister in the eighties, it was antiseptics that I learnt, and the work which has since fallen to my lot in such diverse corners of the empire as Fiji, Cyprus, East Africa, and also on board Indian emigration ships, has convinced me that it could only have been dealt with satisfactorily by such methods. Aseptics, away from the full equipment and surroundings so essential to their reliability, prove a broken reed indeed.

I have found pure carbolic safe to use in certain conditions, as for instance in cases of infective gangrene of subcutaneous tissue due to *Staphylococcus pyogenes aureus*—the introduction of crystals of the glacial acid will often have an almost magical effect, without any hint of carbolic. It seems to be much a question of extent of exposed surface, but no matter of what extent, I have never found that sponging or swabbing with carbolic acid in rectified spirit, 1 in 12 or 15, had other than good results. This solution will also arrest oozing and haemorrhage from multiple small points, and in an emergency, when a lot of small instruments require quickly sterilising, a little of it poured over them in a tin or basin and then a match applied will do the trick effectively.—I am, etc.,

STUART OLIVER,

Surgeon Superintendent Indian Emigration Service.

November 9th.

SIR,—The three letters in your last issue by Sir Rickman Godlee, Bart., Sir Victor Horsley, and Mr. Nicoll respectively show widely divergent views as to the treatment of wounds received in warfare.

In the August number of *Surgery, Gynaecology and Obstetrics*, p. 199, there is a most interesting paper by an American surgeon, Behan, on the treatment of gravely infected wounds seen by him in the last Balkan campaign. Many of the wounded arrived at the base hospital in an indescribably filthy condition, some having only received the first field dressing, and that some days previously. Behan's conclusion was that the best dressing for badly infected wounds was a wet compress of 60 per cent. spirit. Mr. Nicoll shows that pure spirit is as good a preparation for the skin as iodine, and it is known that a 70 per cent. spirit represents the optimum per cent. for the sterilization of organisms in catgut.

During the past two months at the 1st Western General Hospital T.F. (Liverpool) I have had the opportunity of applying this spirit method in treating infected wounds from the front. These cases reach us on an average from four days to a week after being in the firing line, and, therefore, can hardly be so serious as those unable to be transported. Nevertheless, some of the wounds are gravely infected, and present sloughing surfaces 3 in. to 4 in. in diameter. I refer to the badly lacerated shell wounds.

Scissors and forceps are used to remove obvious dirt and pieces of clothing, and the wound is well washed out with a mixture of two parts of methylated spirit and one of water. A compress of gauze wet with the same mixture is then applied, and splinting and drainage used when necessary. No protective is employed. If the wound is sloughy, the compress is changed three or four times daily, but if covered with healthy granulations the dressing is allowed to dry, and is only renewed once daily. The skin does not become sodden and white as with an ordinary watery compress, and the spirit does not interfere with the delicate epithelial margin. It is the most successful dressing I have tried for wounds of this nature.—I am, etc.,

ROBERT E. KELLY, M.D., B.Sc., F.R.C.S.,

Liverpool, Nov. 10th.

Captain, R.A.M.C. (T.F.).

SIR,—It was Lord Lister's fate to be misunderstood, misrepresented, and misquoted by his unscientific and uninformed contemporaries for many years while he was yet alive.

It is melancholy to see our JOURNAL once more made by Sir Rickman J. Godlee the vehicle of similar perversions of Lister's scientific principles of surgery. He actually says in your issue of the 7th, "I would remind them" (meaning ourselves, the surgeons of the present day) "that in Lister's early compound fracture cases the wounds were treated rather freely with undiluted carbolic acid without any evil result following."

Fortunately, Lister has left his real opinions on record.¹ He did at first experimentally apply undiluted acid to some cases of compound fracture, but he abandoned that practice immediately he discovered that he could get better results with a 5 per cent. solution in water; and, moreover, what analogy is there between the limited puncture or laceration of the skin in a compound fracture with the severely contused wound caused by a shell or high-velocity projectile? Lister himself laid it down that "undiluted carbolic acid is a powerful caustic," and that the tissues must not be "irritated"; while in respect of his treatment of compound fractures he especially says that the watery carbolic solution is "obviously superior to the strong acid, since it does not produce the slightest sloughing from caustic action"; besides, it may be used on "tissues which are the seat of extravasation with a freedom that could not be used with the acid of full strength."

All this is clear enough, and no one could have imagined that because Lister had experimented on one surgical condition that the method he himself so soon abandoned should now be put forward as Listerian by the late President of the Royal College of Surgeons of England for the treatment of other and even worse conditions.

To prevent once and for all any repetition of these dangerous misrepresentations of Lister's work, I will conclude with one more quotation from the Address in Surgery at the Plymouth meeting in 1871. After dealing in detail with the object of an antiseptic—namely, to disinfect but not to injure—Lister says: "At one time I used the undiluted acid; and in doing this I could not avoid producing not merely irritation, but a certain amount of sloughing."

And now, when our wonderful troops are exposed to anaërobic infection and to sloughy wounds, we have Sir Rickman J. Godlee advising that their sufferings and dangers should be aggravated by producing more sloughs and more nidus for the anaërobics.—I am, etc.,

London, W., Nov. 11th.

VICTOR HORSLEY.

A MEDICAL WAR INSURANCE FUND.

SIR,—I notice the sad case of the young surgeon killed in the war, leaving a widow and two young children in great temporary distress.² Why should dependants of

¹ BRITISH MEDICAL JOURNAL, 1883.

² BRITISH MEDICAL JOURNAL, October 31st, p. 776.