the liability of such injury to prevent the possible infliction of a third, was concerned; the probability of such self-infliction was a question left to the jury to decide.

As to the wound in the back, not only is it an entire supposition that the "arm still clutching the pistol" was "convulsively drawn, stiffened, and by the fall twisted back," whilst the deceased was found with one arm outstretched, the other doubled beneath him, and the pistol lying by his side; but I have already pointed out, and still maintain, that the particular wound in question could not by any possibility be inflicted so long as the pistol remained in either hand of the deceased. Under such circumstances, I say that it is distinctly misleading to the general public, for whom, apparently, this annotation was written, to say that "a wound in the back" is peculiarly likely to be self-inflicted, etc.; for it certainly implies that the wound found in the back of the deceased could be so caused.

And partly in self-defence, but also in the interests of medical witnesses in general, I do protest most strongly against a medical journal condemning medical evidence on the scanty and insufficient accounts in the daily press. The attacks of correspondents and article-writers are to be expected, and I have not considered it either necessary or advisable to carry on a discussion on medical subjects in the daily papers; but from those who edit the medical papers, I think medical witnesses have a right to expect better treatment, and I entirely agree with a paragraph in the *BRITISH MEDICAL JOURNAL*, that, "this important case is one on which it would be rash to express an opinion without the most complete data, and a careful description of the wounds in all their bearings is requisite to enable any surgeon to form an opinion of value as to the case."

The expression of hostile opinion to which I have referred above has been accepted by the public at large as indicating that of the medical profession, and implying that the prisoner was in this case wrongfully convicted by reason of some gross misrepresentation of the medical witnesses. The paragraph I have quoted has been the text for various articles pointing to this conclusion. I therefore submit the whole of the facts of the case to the profession at large; and whilst I do not for an instant suppose that, in a difficult and intricate case, my deductions and conclusions will in every particular meet with universal approval, I am confident that the prisoner was not convicted by any misrepresentation of facts by the medical witnesses.

In conclusion, I may say that I shall be very glad if this report induces those who have had greater experience than myself in medico-legal work to express their opinions on the result of the trial, and on the many points for consideration presented by the medico-legal aspects of the case. For my own part, I may say that I shall be happy to furnish any other information in my power. To Mr. Parrott I am much indebted for the most able assistance, without which the present account would have been very imperfect.

ON A CHEAP FORM OF ARTIFICIAL LEG.

By RICHARD BARWELL, F.R.C.S.,
Senior Surgeon to Charing Cross Hospital.

FOR very many years—indeed, I know not for how many—all not wealthy persons having the misfortune to lose a leg, were provided with a support for the body, termed a bucket or pin-leg. This extremely unsightly apparatus appears so hallowed by Rowlandson's and Cruikshank's drawings, and by the "Timber Toe" class of Dibdin song, that in England no serious attempt has been made to improve it. Nevertheless, it is for progression very awkward and clumsy; in sitting, especially, if other persons be moving about in the room, extremely cumbersome. Nor is the bucket, with the upright and strap, a mode of fixation to which people become accustomed without previously undergoing a good deal of galling, abrasion, and other discomfort.

Hence it is somewhat surprising that a form of artificial leg, known long ago both in Paris and Rome, should not have been more extensively introduced and appreciated here, especially as an article by Miss W. M. Wyse,¹ and a pamphlet by General Maxwell,² give excellent descriptions of the mechanism and reports of its efficiency. Probably the cause of this may be, that neither of those publications have fallen under the notice of hospital surgeons, or others having frequent occasion to order artificial limbs. Hence it appears to me desirable to make, through the pages of the *BRITISH MEDICAL JOURNAL*, these appliances more widely known.

They were invented about the year 1847, by the Comte de Beaufort, but have come more markedly into use in and after 1870. The

count's inventions embrace both an artificial arm, with a movable prehensile thumb, and a leg. But in the present paper I shall speak only of the leg, deferring mention of the arm until a rather wider experience has been acquired.

Of the leg, two forms exist—the one for amputation below, the other above the knee. We will begin with the former. It consists of, to quote in part General Maxwell—1. "A wooden foot, soled, and partly covered with leather;" 2. "Two uprights of beechwood, curved to the form of the leg, when seen from before or behind, and provided with a knuckle-joint in the position of the knee;" 3. "Between the uprights are leathern sockets, laced up in front—one for the thigh, the other for the shank or stump."

In this form the limb answers admirably, and many hundreds have been supplied by the society "L'Assistance aux Mutilés Pauvres," both in France and Italy; but the mode of workmanship and the arrangements of workshops in England render it simpler, and therefore cheaper, to make the uprights of steel. The following is the mode of manufacture, which, after many consultations on the subject, I have arranged with Mr. Schramm, of Belmont Street, N.W.

Leather or poroplastic felt is cut to the proper size, soaked or steamed, and moulded by hand and bandage to the thigh and to the thigh and leg-stump. While these are hardening, the necessary measurements

Fig. 1.

The engraving is taken from a patient with an unusually short leg-stump. If in this plate, and in plate 2, the socket had been continued to the top of the boot as recommended, the appearance would have been as of a natural limb with supports. By some blunder, the hinge is not of the proper form; the lower segment should curve backward, not forward.

for length are taken. A tracing is made of the foot, that the size of the artificial may correspond with that of the natural one. Also tracings are made of the outer and inner margins of the limb, as models of the curves to which the steel uprights must be bent. The foot, be it observed, is to be made of willow, the lightest wood. It is partially covered with kid-leather, and Mr. Schramm has introduced a mode of fixing a leather sole on a removable German-silver plate, in such wise that any cobbler can renew it in half an hour.

The sole is not flat like that of a shoe, but curved, the curve being

¹ "Arms and Legs in France," *Macmillan's Magazine*, 1882.

² "Arms and Legs in Rome," by Henry Hamilton Maxwell, Lieutenant-General Royal Artillery, Rome.

struck from the knee as a centre with a radius equal to the height ; from that joint to the ground, this curve compensates for the absence of an ankle-joint. The steel uprights, jointed at the knee, are then rivetted to this foot and to the sockets already prepared, to which straps are also to be secured ; hence results an artificial limb like that depicted below, which fits firmly, and adheres well to the stump, and with which patients walk very well indeed, with very little fatigue and without chafing. Its appearance may be much improved, however, by continuing the lower socket downward to the boot.

Fig. 2.

For amputation above the knee, with a tolerably long thigh-stump, some modification has to be introduced ; thus the hinge of the upright at the situation of that joint must be provided with a simple mechanism that fixes it in a straight position, and quite stiff during progression, and which, by an action of the hand, may be released, allowing the limb to bend, as the natural knee does, in sitting down.

A few words concerning weight and price are now necessary. The Beaufort leg is stated by General Maxwell to weigh about five pounds ; the limb as modified—namely, steel being substituted for wood uprights, weighs about four pounds. The price at which such a limb can be made is £3 3s. for amputation below, £3 13s. for amputation above the knee.¹ A pin or bucket leg costs from 25s. to 30s. Thus, in point of immediate outlay, the Beaufort leg is less advantageous than the sort of limb usually supplied ; but, in point of appearance, utility, and comfort, there really is no comparison between the two ; and indigent persons obtaining such pecuniary assistance as may be necessary, are able to follow their avocations with this leg in very considerable comfort, while to many a little better circumstanced, such a limb is procurable without undue strain on their resources.

¹ Mr. Schramm tells me that his calculation is the lowest possible, and that it is founded on the supposition of his having to make a large number. To make one limb, or only a few, at such price, would not pay him.

PRESENTATION.—Mr. W. J. Penny has been presented with a handsome clock, by the officers, students, and nurses of the Bristol General Hospital, as a token of their regard and high estimation of his labours, as house-surgeon, upon his retiring after three years' service.

A CASE OF DOUBLE, OR BILATERAL, HERPES ZOSTER.

By J. MAGEE FINNY, M.D. Univ. Dub., F.K.Q.C.P.I.,
Physician to Sir Patrick Dun's Hospital, Dublin.

THE following case, having recently occurred in the extern department of the hospital, is worthy of record, on account of the rarity of herpes zoster attacking both sides at the same time.

Mrs. D., aged 40, an otherwise healthy well-to-do woman, consulted me on September 29th, 1884, for what she feared was erysipelas of her neck and ear, and for a most severe headache, which had lasted for four days, and had deprived her of sleep. She stated that the headache was all over her head, but particularly on the right side, and that at the time of its first appearance she noticed a number of small red spots on the left side of her neck and shoulder, that these spots had a burning "sore" pain, that they had increased in size and number since the day before her visit, and that also her right ear was very sore, while a number of painful spots had broken out through her hair on the back of the scalp on the right side.

On inspection, the characteristic erythematous patches of herpes zoster, studded with vesicles of various sizes, were at once recognised ; and it was evident that both sides were simultaneously affected, although at a somewhat different level. On the left side, the erythematous patches were most numerous ; they followed the distribution of the descending sensory nerves of the cervical plexus, with the exception of the suprasternal division, and were limited to the upper part of the deltoid and pectoral muscles ; a large patch occupied the posterior superior triangle of the neck, and one or two small ones were over the sterno-mastoid. The eruption on this side would correspond to von Bärensprung's variety, *Z. cervico-subclavicularis*. On the right side, the ascending branches of the second and third cervical nerves were those engaged (*Nervus occipito-collaris*), and no patches were visible below the level of the thyroid body, though a large cluster occupied the anterior triangle of the neck as far forwards as that body, corresponding to the junction and cutaneous distribution of the superficialis colli and infra-maxillary branch of the facial nerve. Another patch was on the lower jaw, and a third was situated near the mastoid, over the origin of the plexus. The whole of the external ear was red and swollen, and thickly studded with very minute vesicles, the swelling extending a short way into the meatus auditorius. The scalp on the same side, and strictly limited to that side, as far forward as the mid-parietal region, was the seat of a number of scattered pimples and vesicles (the redness usual in herpes elsewhere being absent), and which followed closely the course of the greater and lesser occipital nerves.

When the patient was seen a few days subsequently, the majority of the bullæ had been arrested or had aborted, some few had become confluent and turbid, and those in the scalp were larger, and most distinctly bullous. The patient's general health had been fairly restored, as she was able to sleep, and the headache and the burning stinging pain in the affected parts had greatly abated. No new spots had appeared, but on the right side, above the clavicle, where the skin was free from all rash, very considerable soreness was complained of.

The treatment consisted of quinine and iron, in combination with sulphate of magnesia, and the local application of flexible collodion to the neck, and weak carbolic ointment to the scalp. The patient soon recovered.

REMARKS.—The foregoing illustrates at once the characteristic features of regular herpes zoster and certain unusual peculiarities. To the first belong (a) the sudden occurrence of the eruption, (b) its course along the cutaneous distribution of the sensory nerves, (c) the neuralgic phenomena which preceded and accompanied its appearance, and (d) the acute course of the complaint. To the latter may be referred (1) the occurrence of herpes of the scalp, and (2) the coexistence of the disease at different sides of the neck.

Herpes zoster, or, as I consider it might be termed, with a nearer approach to an accurate nomenclature, *neurotic herpes*, may be found in almost any part of the body. It has, however, its predilections for certain parts, if one may be permitted so to speak of a disease. The most favourite sites are in the course of the intercostal nerves and the lumbo-sacral plexus ; next in order come the brachial plexus, the descending branches of the cervical, and the frontal or facial branches of the fifth nerve. Among the most rare, are the occipital nerve and the nerves of the forearms and legs.

The chief interest of the foregoing case is, however, centred in the fact that the herpes attacked both sides at the same time. This is one of the rarest manifestations of a not uncommon affection ; and, indeed, in many of the most recent text-books, the possibility of