connexion with district nursing, with nursing recruitment, with hospital diet, catering, and domestic supervision, and with the emergency bed service are well known. In the new hospital arrangements its function as an agency of distribution, although it will continue, may be expected to bulk less largely in comparison with other activities. But it is no small advantage to have an organization with such large resources under its own control, giving a guarantee of freedom and elasticity to the new Service. It will encourage voluntary work in that large field which lies just beyond the border of State provision, and, as the annual report states, it will be open to hospitals in the metropolitan area, whether teaching hospitals or those coming under the four regional boards, in any matters which are experimental or which seem, to go beyond the normal activity of a hospital under the Act, to lay proposals before the Fund and seek its assistance.

In 1947, although the National Health Service Act was already law, and the shape of the hospital service was clearly seen, a sum of £34,000 was contributed to the King's Fund by subscribers and donors. This, however, is only about one-tenth of its total income, which comes mainly from investments. The ordinary distribution, to 145 hospitals and 53 convalescent homes, was £303,250. Until it has been decided how the resources of the Fund can be most usefully applied, a conservative policy may be necessary, but the Fund is looking forward not to restriction but to increased opportunities. Among the immediate activities are the inauguration of an information service, the continuation of bursaries for the training of hospital administrators and the establishment of new bursaries for hospital almoners, and the setting up, in consultation with the Ministry of Health and the Royal College of Nursing, of a resident training course on new lines for those about to take up posts as ward sisters.

Nova et Vetera

W. G. GRACE

William Gilbert Grace was born on July 18, 1848, and fifteen years later achieved prominence as a cricketer when he scored 32 runs in a match against the All-England Eleven. He was the fourth son of Mr. Henry Mills Grace, who practised as a surgeon at Downend, near Bristol, and was himself an ardent cricketer. His uncle, Alfred Pocock, and his father introduced him at an early age to the delights of our national sport, and when only nine years old he played for West Gloucestershire against Bedminster. At the age of 17 he played twice for the Gentlemen v. Players, being selected then for his prowess at bowling rather than batting, and thereafter continued to play in first-class cricket until 1900. In first-class matches his highest score was 344, made in 1876 for the M.C.C. against Kent; two days later he made 177 for Gloucestershire v. Notts, and two days after that 318 not out for the same county against Yorkshire.

Endowed with a splendid physique—he stood 6 ft. 2 in., and was powerfully built—"W.G." excelled also at running and hurdling, and two days after scoring 244 not out for England v. Surrey in 1866 he won a race at the National and Olympian Association meeting at the Crystal Palace. Commenting on Grace's fine physique, Dr. Clippingdale pointed out¹ that the surname derives from the French "Gros," a sobriquet originally bestowed on men of large stature. As soon as the cricket season was over he threw himself energetically into sports more adapted to the English winter—running with the beagles, shooting, and hunting.

Grace qualified in 1879 with the L.R.C.P. of Edinburgh and the M.R.C.S. of England, and practised at Bristol until 1899, being at one time medical officer to the Barton Regis Union, vaccinator to a district in the union, and surgeon of the Pennywell Collieries. In that year he gave up practice and moved to Sydenham to become secretary and manager of the London County Cricket Club. He died of heart failure after a short illness in 1915.

¹ *British Medical Journal*, 1915, 2, 736.

Correspondence

Pain in Phantom Limbs

SIR,—The correspondence in your columns on this subject has been extremely interesting. It seems possible that the disappointing results from the treatment of this condition may be due in part to a failure to appreciate that at least two distinct types of phantom limb pain may occur in amputation stumps. The presenting symptom of pain may be (1) a painful paraesthesia associated with a tender neuroma, or (2) causalgia. It is to Weir Mitchell that we owe the term causalgia, and it is clear from his writings that he restricted the use of the term to the immoderate burning pain which is a *sine qua non* of the condition. Modern usage has extended the term to include the peripheral manifestations of the syndrome (coldness, hyperidrosis, hyperalgesia).

Phantom limb pain may be of a causalgic type and give a typical history, but on the other hand, and much more commonly, it may take the form of painful paraesthesia. This latter type of pain is quite different from that of causalgia, being of a stabbing, shooting, or tingling quality, in which the characteristic burning of causalgia is absent. Reference of pain to the phantom limb occurs in both types of case. Some degree of paraesthesia is common to all neuromata, whether of amputation stumps or of peripheral nerve injuries, and in the large majority it can only be elicited by an obvious mechanical stimulus of the neuroma. Associated with this "stump tenderness," however, may be a paraesthesia of a much more serious and disabling nature, which occurs—apparently spontaneously—as a result of the constant irritation of regenerating sensory nerve fibres which are sprouting freely into the scar tissue from the cut end. This type of phantom limb pain, the aetiology of which is mainly if not entirely peripheral, can usually be relieved by a careful resection of the neuroma with or without reamputation of the stump. It is unlikely to be affected by sympathectomy. On the other hand, unfortunately, the causalgia is very seldom if ever cured by local operative procedure alone.

A minute investigation of the history of the onset and evolution of the pain, of its quality, and of its aggravating and relieving factors should help to differentiate between the two types and thus act as a valuable guide to the form of operation most likely to prove successful.—We are, etc.,

R. E. M. BOWDEN.
J. R. NAPIER.

London, W.C.1.

Short Leg

SIR,—May I reply to the interesting letter of Captain Robert Fuller and Lieut. Douglas L. Woolf (July 10, p. 109)? The first thing to decide when the examination of a patient reveals a short leg is if the shortening is real or apparent. A real short leg will cause a tilting of the sacral top and is bound sooner or later to lead to a scoliosis with the convexity towards the shorter leg. In that case a lift under the short leg, sufficient to make the sacral top level, will be indicated. If, however, the shortening is due to fixed backward rotation of the ilium on the sacrum a lift will make the sacral top level, but will at the same time make the backward rotation of the ilium permanent. The resultant ilio-sacral strain is one of the most fruitful causes of chronic backache. The rational treatment of this type of short leg is forward rotation of the ilium by manipulation, which will equalize the length of both legs, make the sacral top level, and either prevent a scoliosis or, if it has developed, bring the lumbar spine into normal alignment.

There are two methods to decide if the shortening is real or apparent. The one is a standing A.P. x-ray of the pelvis and lumbar spine. If a thin wire exactly parallel with the floor or the surface on which the patient is standing while the film is exposed is fixed across the Potter-Bucky, differences in the level of the trochanters, femoral heads, and acetabula down to 1/4 in. (0.63 cm.) or even less can be easily appreciated. The second method is of help only indirectly in so far as it helps to determine the range of mobility of the sacro-iliac joints in a given case. A short left leg, for example, may be due to a

forward rotation of the *right* ilium on the sacrum, with an apparent lengthening of the *right* leg. In that case again a lift under the short leg would be contraindicated. The correct treatment would be manipulative backward rotation of the right ilium, which will result in equal length of legs and levelling of the sacral top. To decide if a shorter (or longer) leg is due to a backward (or forward) rotation of the ilium the test described by Downing is invaluable. If my memory serves me right it is also mentioned in Menell's book on backache. It has been out of print for years and I do not possess a copy.—I am, etc.,

Bristol.

H. WOHLFELD.

Repair of Indirect Inguinal Hernia

SIR,—Mr. E. S. R. Hughes and Mr. J. T. Fathi (July 17, p. 135) record an interesting observation on the anatomy of the internal ring in cases of indirect inguinal hernia, and the refinement of technique which they introduce is worthy of attention. A sentence in their opening paragraph, however, invites comment. They state, "It is this weakness [at the internal ring] that may account for the high percentage of indirect herniae as well as their early reappearance after operation." This can only be taken to mean that a high proportion of "recurrence" after operations for indirect hernia occur at the internal ring. This appears to have been the case in those operated upon in the Services during the late war, a fact which has coloured much recent writing on the treatment of inguinal hernia.

In twenty years of civilian practice I have encountered my fair share of "recurrent" herniae, and almost without exception a direct hernia has been found in Hesselbach's triangle with no hernia at the internal ring. The discrepancy is possibly accounted for by the observation made in the Service cases that the sac had been left behind or incompletely removed at the first operation.

It is questionable whether a post-operative hernia in Hesselbach's triangle after radical cure of an indirect hernia should properly be called a "recurrence." Though the term is useful in that it reflects the patient's probable view of the matter and that it fastens the responsibility on the surgeon, it is misleading in that it obscures the pathology. The fact that the great majority of acquired inguinal herniae, whether post-operative or otherwise, are *direct* shows that in the absence of a patent processus vaginalis Hesselbach's triangle and not the internal ring is the weak point of the inguinal canal.

The moral surely is that to avoid post-operative hernia attention must be concentrated on reinforcing the medial part of the posterior wall of the canal, and that plastic procedures applied to the site of emergence of the spermatic cord at the internal ring are at most of only secondary importance.

If a relieving cut is made in the internal oblique aponeurosis well above its lower free border and extending well into the rectus sheath, a stitch firmly uniting its medial end to the periosteum of the pubic spine will hold the conjoined tendon down so that it lies practically in apposition with Poupart's ligament. These two structures can then be united by a row of stitches which do not need to be so tight as to cause either undue tension or strangulation of the contained tissue.

The effectiveness of this method in preventing post-operative hernia through Hesselbach's triangle—so called "recurrence"—is such that fascial grafts, darns with silk or nylon, filigrees, and the rest can be reserved for exceptional cases. Failures of the method are, I am sure, due to insufficient exposure of the pubic spine and consequent inadequate placing of the first and all-important stitch.—I am, etc.,

Edgware, Middlesex.

FRANK FORTY.

Penicillin in the Treatment of Neurosyphilis

SIR,—Will you allow me to add a postscript to your leading article on penicillin in the treatment of syphilis (July 17, p. 141), or rather to that paragraph of it which deals with neurosyphilis? Our American colleagues have a larger number of cases to treat than we have in this country, and it seems most likely that the question whether malarial therapy will still be necessary in G.P.I. and allied conditions will be settled by their experience, and their reports are now coming forward so rapidly that our few British accounts are superseded by the time they are published.

In a recent paper by Stokes¹ and his colleagues entitled "Three Years of Penicillin Alone in Neurosyphilis," observations on 321 cases are summarized. These authors continue to take the view (which I am unable to share) that the immediate

clinical improvement with penicillin in cases of paresis is not as great as that with malaria, but among their conclusions are the following:

"Malaria in paresis is superior to penicillin alone in the clinical improvement produced when compared with the first year or two of penicillin responses; but penicillin rapidly overtakes malaria in the second and equals it in the third year of observation. Taking the durability of penicillin effect . . . the comparative simplicity, short duration, and safety of penicillin therapy into account, it begins to look as if penicillin alone were the equal of malaria in paresis. . . . Spinal fluid results . . . are apparently superior with penicillin to those obtained with malaria."

"In tabo-paresis the fluid improvement with penicillin definitely surpasses that obtained with malaria, and the symptomatic improvement with penicillin is equal after the second year: in meningo-vascular neurosyphilis the results are markedly superior serologically and equal clinically. . . ."

Dathner² has recently summarized his observations on 151 patients treated with penicillin alone. Among these were 33 cases of general paresis and 19 cases of tabo-paresis, and they are considered chiefly in relation to the spinal fluid results. In two cases of general paresis the results were regarded as indefinite, but in all the others they were satisfactory in that the spinal fluid syndrome indicated an arrest of the disease process. Dathner is more clear than some other observers that all that can be expected from treatment is the extermination of the infection, and that symptomatic improvement thereafter depends on the recovery of the nervous tissue—a process which we have as yet little power to influence.—I am, etc.,

London, W.1.

J. PURDON MARTIN.

REFERENCES

- ¹ *Amer. J. Syph.*, 1948, **32**, 28.
- ² *Med. Clin. N. Amer.*, 1948, **32**, 707.

Prevention of Venereal Disease

SIR,—There will be no quarrel with the aim of the National Society for the Prevention of Venereal Disease, which, in Lord Horder's words (July 17, p. 171), is "to set the people free from V.D."; but there is no such general agreement as his letter implies, even among the experts, about the methods by which it is likely to be attained. Many would contest his assertion that in the protection of the fighting Services during the war "the enthusiasm of the officer-in-charge" (for preventive measures) was the decisive factor where such "protection" was achieved. Indeed, some medical officers having pressed prophylactic measures by every means at their disposal were driven to the conclusion that by so doing they had not diminished but increased the rate of infection in their units. "Enthusiasm" in this context is inseparable from the assumption that promiscuous sexual behaviour will be the general rule. That assumption, especially when openly avowed by the M.O., is bound to lower the resistance to such behaviour, among young soldiers in particular, and therefore leads to a higher exposure rate.

A good deal of wartime experience indicates that the amount of disease prevented by the "enthusiastic" advocacy of prophylaxis was balanced (some would say was outweighed) by the amount of infection among those who, without the prophylactic policy and its powerful suggestion, would not have incurred the risk of it. To retort that most Service men are promiscuous and that therefore all should be protected is precisely to beg the question; for even if the assertion be true it cannot be known how far the assumption by those in authority that the Service man's promiscuity is simply a fact to be reckoned with and, so to say, provided for is a major cause of the problem. No one should be too dogmatic upon this point. But Lord Horder and those who think with him should give due weight to the results in a number of units of quite different assumptions about the men's standards and conduct, and of the "combined operations" of C.O.s, M.O.s, and padres who tackled the problem in a more constructive and, I venture to affirm, a more enlightened way.

Lord Horder speaks of the "violent prejudice" which the society has to combat. It may be that all the prejudice is not on one side, and that those who insist that V.D. must be viewed as a medical problem and no more are leaving out of account factors which, however imponderable, are in the end decisive. V.D. is not just a medical or even a social problem; it is one