the result of disturbing stresses" (p. 89). It is not too much to say that the theory claimed for Dr. Gray is largely the motive force of these three books, two of which are well known and have been favourably received by many leaders in the medical sciences.

It should therefore be clear that I have made a continuous use of suggestive hypotheses which I myself welded long ago into a working apparatus and effective theory. I may add that my last book, *Bio-Politics*, lately reviewed in your *Journal*, applies the doctrine of constructive variation which I have called *Stress, Breakdown, and Repair* to life generally and social organization in particular.—I am, etc.,

London, May 15. MORLEY ROBERTS.

Wound Healing in Carcinomatous Patients

SIR,—Whether carcinoma of the stomach is very common here, or whether patients delay before taking notice of discomfort in the abdomen, or whether I am particularly slow to recognize the disease, I leave to the kindness of any who choose to criticize. The fact remains that it has fallen to my lot in the past year or two to open the abdomens of a number of men to find non-operable carcinomata of the stomach. I hasten to add that the diagnosis was made before operation in, I think, every case, but the laparotomy was always undertaken in the forlorn hope that the growth might be operable or the diagnosis erroneous. The point I wish to bring to notice is that without exception all these patients' wounds have healed very rapidly, leaving a thin linear scar such as one all too often hopes for and fails to procure in, for example, appendicectomies. This property of rapid clean healing is most striking in my experience, provided of course that the growth is not invading the abdominal wall. What is the reason for it? The patients are in poor condition and do indeed die of their disease in a few weeks or months. One would expect slow healing or even failure of union. Does the carcinoma itself in some way favour the proliferation of fibroblasts, or is there an increased tendency in general to form firm fibrous tissue as a natural reaction to the presence of the tumour in the body?—I am, etc.,

Cornwall, May 10. L. A. RIDDELL.

Fractures of Neck of Femur

SIR,—Mr. R. Watson-Jones (*Journal*, May 7, p. 1025) writes a characteristically brilliant letter, yet I disagree with his very first statement. Having nailed his fracture he refuses to remove the nail when he is satisfied that bony union has resulted from this procedure, being "content to wait for post-mortem examination to satisfy my surgical curiosity." I reduce all medial fractures of the femoral neck and then immobilize them with a triflanged nail. But, when I am convinced that bony union has occurred, I remove the nail—for the same reason that I remove a plaster in dealing with other fractures. All routines have exceptions, and my very feeble and very aged patients are not subjected to a second operation.

My reasons for removing the nail may be of interest. There is no doubt, from my observations, that stainless steel and bone are unsatisfactory bedmates. In almost all cases there is a reaction between the bone and the nail; the bone undergoes necrosis—pressure or aseptic—and the neck is weakened. In the vast majority of fractures of the femoral neck the fracture has occurred because of atrophy of its bony architecture—the fracture is characteristically one which occurs in patients of advanced years. That we can give the femoral neck temporary additional support by a stainless steel nail is no real advantage. What we aim at is to reconstruct the bony architecture of the femoral neck. This is possible with the help of the Smith-Petersen nail. The nail should be placed either in the middle or above the middle of the femoral neck in the antero-posterior plane (I refer to medial fractures only), and in the middle of the neck in the lateral plane. Having accomplished this and allowed time for soft tissue repair, the fractured limb is quite able to bear the full body weight. In fact early weight-bearing stimulates the reconstruction of the architecture of the femoral neck. When we see the reconstruction of the calcar femorale radiologically, then it is wise to remove the nail, in order that the bone in its immediate vicinity may also be reconstructed. In other words, our endeavour is to make the femoral neck even stronger than it was before the original fracture, since the fracture is generally caused by trivial violence through the atrophic bone of the femoral neck. Consequently I would stress the importance of: (1) accurate reduction of the fracture; (2) placing the nail away from the calcar femorale in medial fractures; (3) early weight-bearing; and (4) removal of the nail as soon as the architecture of the calcar femorale is reconstructed in order to strengthen the femoral neck in the immediate vicinity of the nail and to re-establish the neck more soundly than was the case before the fracture occurred.

These conclusions are arrived at not on theoretical grounds but from practical experience. To revert to theory, however, the explanation of Mr. Watson-Jones's single unsatisfactory case from removal of the nail may be that he removed the nail too late, that the bony changes around the nail had resulted in such a degree of necrosis of the neck that when the nail was removed the neck was so weakened that trivial violence re-fractured it. Mr. Watson-Jones must be quite familiar with the patient who has an osteitis of the femoral neck due to the presence of the nail such that only the removal of the nail cures her symptoms. I have no doubt that he removes the nails in these cases. My contention is that he should go further and remove the nail at an earlier stage—that is, as soon as he is convinced that bony union has taken place. In conclusion, I would like to join the ranks of the optimists who believe in the nailing operation for medial fractures. I do most sincerely agree with Mr. Watson-Jones's last statement—that Mr. Eric Lloyd's aphorism, "the bad results of nailing are the results of bad nailing," should be stamped on every nail.—I am, etc.,

WILLIAM GISSANE.

St. James's Hospital, London, S.W.12, May 8.

Treatment of Anterior Poliomyelitis

SIR,—As a recent arrival from Australia, I have been interested to hear the opinions of orthopaedic surgeons and others on the treatment of cases of paralysis carried out by Sister Kenny at Carshalton. It seems that the results are not all that were expected. Although special facilities were given to Sister Kenny at Royal North Shore Hospital, Sydney, and at other clinics, it is felt by many orthopaedic surgeons and masseurs in Australia that Sister Kenny has not in all cases fulfilled her expectations. It is thought that the abolition of splints is dangerous and that splinting does not prevent muscle re-education.—I am, etc.,

E. A. BUCKLEY, M.B.Syd.
Late Superintendent, Royal North Shore Hospital, Sydney.

Bath, May 9.