twenty-three pages shows the reasons—a generally increased morbidity. The method was used from 1941–44 only, and it had damned itself by the time 110 cases had been dealt with.

In the fourth section the late results of treatment are analysed. It is considered important to accept tibial shortening up to 5 millimetres as normal and, indeed, almost essential for early healing. The loss is explained by the absorption of the bone ends. This statement arises from an examination of the harmful effects of traction that is excessive either in amount or duration.

There is much in this review to stimulate thought, confirm belief and shake convictions. Any statistical evidence related to fractures of the leg will, in future, have to be reviewed in the light cast by the figures in this text. So many aspects of injury to the lower leg are analysed in detail that it is disappointing to find no mention of the influence on healing of double fractures of the tibia.

Included in the volume is a review of traumatic separation of the lower tibial and fibular epiphysis. The absence of brutal figures to the second decimal place lends to this section an additional attraction after what has gone before, and the material and presentation are excellent. Four varieties appear: 1) Pure epiphysal separation 37.5 per cent, 2) Fracture separation of the epiphysis 35.8 per cent, 3) Epiphysal separation with epiphysal fracture 12.3 per cent, 4) Epiphysal separation with fracture of both epiphysis and diaphysis 14.2 per cent. The highest incidence lies between the years of fourteen to sixteen.

This volume cannot be recommended to those allergic to statistics. It cannot be read with comfort even by those insensitive to them, but it is an excellent review of the final results and complications encountered in the routine treatment of fractures of the leg and can be opened with interest at almost any page by anyone wishing to compare his experiences with those of another school.—J. G. BONNIN.

PERIPHERAL NERVE REGENERATION: A Follow-up Study of 3,656 World War II Injuries. Edited by Barnes WOODHALL, M.D., Professor of Neurosurgery, Duke University Medical School, Durham, North Carolina; and Gilbert W. BEEBE, Ph.D., Statistician, Follow-up Agency Division of Medical Sciences National Research Council. 9 × 5½ in. Pp. xxiv+671, with 22 figures, 60 plates and 286 tables. Index. 1956. Washington, D.C.: United States Government Printing Office. Price \$3.75.

War is always a stimulus to the study of injuries of the peripheral nerves. Much of our knowledge of these lesions stems from the careful observations of Weir Mitchell during the American Civil War.

In this monograph a statistical analysis is made of the factors influencing nerve regeneration based on a study of over three and a half thousand nerve injuries three years or more after wounding. In the introduction the casual reader is advised to lay aside the report: your reviewer being full of purpose pressed on, but must admit that long before the end he fell to reading the chapter summaries and cannot therefore claim to be "a brave disciple of our Art." It is regrettable that this immense study is not presented in a more palatable form, because many of the observations are relevant to the nerve injuries of civilian life. It is only when the report escapes from the jargon of the statisticians that we have a report such as the one on Causalgia by White and Selverstone which is a delight to read. Immediately one asks how far a statistical inquiry is justified when there are so many uncontrollable factors influencing recovery, and such wide variation in the estimates of motor and sensory recovery. For example the estimated percentage of good sensory recovery after median nerve suture varied from 10.7 per cent in Chicago to 48 per cent in San Francisco. In general the analysis supports the findings of the more readable British monograph published by the Medical Research Council. In places it is in conflict with informed opinion, as when it is stated that delay in suture, length of gap, state of nerve ends or tension on the suture line do not appear to be associated with significant variation in sensory recovery. Indeed Dr Barnes Woodhall in his analysis of the best and poorest results after peripheral nerve suture states "that adequate motor and sensory return can be obtained . . . when the effector mechanism has not been destroyed by undue delay of suture after injury . . ." Among the more important observations are:—1) Lesions in continuity should not be resected until adequate time has elapsed for the commencement of spontaneous recovery, which is usually superior to the recovery that occurs after resection and suture. 2) Avoid unnecessary delay in the suture of high lesions. Early exploration is always indicated in case the nerve is found to be divided. 3) Lesions of the brachial plexus should in general be treated conservatively, though in *gun-shot wounds* useful recovery may occasionally occur after suture of the upper roots. 4) Causalgia as defined by Weir Mitchell can be successfully treated by sympathectomy.

Stress is rightly laid on the value of reconstructive surgery once the extent of the residual paralysis is known. It is advised that an orthopaedist should be a member of the team, but why not make him responsible for the treatment of the nerve, bone, and soft-tissue injury and its reconstructive surgery, as in Great Britain?—Roland BARNES.