I wish to thank the Council of the Newcastle-upon-Tyne and Northern Counties Medical Society,² Professor Rutherford Morison, and Dr. W. K. Russell, for permission to include Cases v and vi.

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A CASE OF SLIPPING PERONEAL TENDONS TREATED BY KELLY'S OPERATION.

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W. B. F., aged 22, was admitted to the Ministry of Pensions Hospital, Streatham Hall, on July 10th, 1921, complaining of pain and weakness in the right ankle, and inability to walk any distance.

History.

He stated that while at physical training in June, 1918, he fell and twisted his ankle rather badly. The injury was diagnosed as a sprain, and he was sent to hospital. Nothing definite was discovered on x-ray examination, and his leg was put on a back splint for five weeks. After this he was given massage for six weeks, followed by a stay of two months in a convalescent camp. He was demobilized in January, 1919. For some time after this his ankle swelled at night, and his leg and foot were put in plaster for seven weeks, but, after the plaster was removed and he was treated by massage and exercises, there was still some swelling of the ankle at night, and, on extreme flexion or extension of the foot at the ankle-joint, something slipped on the outer side of the joint, giving rise to much pain locally and a jarring sensation up his leg and body.

Condition on Admission.

On admission the movements at the ankle-joint were good, and there were no signs of any disease of the joint, but on dorsiflexion a distinct slipping of the peroneal tendons could be felt. A skiagram did not show any damage to the ankle-joint. An operation for retaining the peroneal tendons in their normal position was necessary, and I decided to perform that described by Mr. R. E. Kelly in the *British Journal of Surgery* for April, 1920.

Operation.

On January 26th, 1921, I made a hockey-stick-shaped incision immediately behind the fibula, commencing at a point about $2\frac{1}{2}$ inches above the lower extremity of the bone, and following the course of the tendons downwards. The incision was deepened and the periosteum covering the outer surface of the fibula was incised and stripped, so as to expose the outer surface of the bone and its anterior and posterior borders. The peroneal tendons with their synovial sheath were retracted with the periosteum stripped from the posterior border. At a point about $1\frac{1}{2}$ inches from the lower end of the fibula on its anterior

Diagrams illustrating the method of cutting the wedge. The wedge is shown wider than is necessary. The dotted lines indicate parts of the wedge in the slot in the bone.

border, and midway between its external and internal surfaces, a hole was bored horizontally backwards through the bone with a small bone awl. This hole was enlarged downwards and parallel to the external surface with a Gigli saw, and when the cut was large enough to admit the point of a Hunter-Mackenzie saw, this instrument was used, until the cut reached a point about half an inch from the extremity of the bone. Two cuts were now made in a horizontal direction but approaching one another posteriorly to join the vertical cut, so as to free a wedge-shaped piece of bone with its narrow end at the posterior border of the fibula. The saw was sloped while making these cuts, so that the external surface of the wedge was narrower than the internal surface. The wedge thus formed could only be removed from the bone by sliding it forwards, and when it was pushed backwards and tapped gently it became fixed in the groove made by the saw cuts, with about a quarter of an inch projecting from the posterior border of the

bone, thus making an external lip to the peroneal groove. It was found, however, on attempting to bring the superficial tissues together over the bone, that there was a tendency for the wedge to slide forward in its groove, but this was easily prevented by raising the floor of the groove slightly in front of the wedge with a chisel. After the wound had been closed, the foot was put in plaster, with a window over the incision, in a position of plantar flexion.

Result.

The plaster was removed one month after the operation, and recovery was uneventful. The movements at the ankle-joint were perfect, and no slipping of the tendons could be obtained. The patient states that he is cured, and that he has none of his previous difficulties in walking.

A skiagram taken six months after the operation showed the wedge firmly fixed in the position in which it was placed.

The main difficulty in the operation is, as pointed out by Kelly, the thickness of the saw. Allowance has to be made for this in the inclination of the horizontal cuts to one another, so as to avoid too great projection of the posterior part of the wedge when driven into position. A small fretsaw, such as is used by watchmakers, would be an excellent tool for this operation, and I propose to use it in future cases. It is also rather difficult to avoid injuring the synovial sheath of the peroneal tendons, and I accidentally made a small opening into it in this case, but no harm resulted.

THE INTERPRETATION OF SYMPTOMS IN DISEASE OF THE CENTRAL NERVOUS SYSTEM.

ABSTRACT OF THE GOULSTONIAN LECTURES, DELIVERED
BEFORE THE ROYAL COLLEGE OF PHYSICIANS,

BY

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LECTURE III.

In this final lecture Dr. Feiling said that he proposed to deal with some of the more general rather than the particular aspects of disease of the central nervous system. Any discussion on the interpretation of symptoms could not fail to take account of the principle laid down by that master mind of modern neurological theory and practice, Hughlings Jackson, who distinguished between negative and positive symptoms, a negative symptom implying some definite loss of function, and a positive some accelerated function. The actual symptom-complex produced by disease provided, more frequently than not, both positive and negative symptoms, destructive lesions producing the latter, and irritative lesions the former. The term "irritative," as applied to a pathological lesion, must not be interpreted too narrowly, in the sense of a mere mechanical irritation. Brief or temporary circulatory disturbances might be included in such a category, and the convulsions or deliriums occurring in various states of toxæmia were to be regarded as positive symptoms produced through the medium of the circulation. It must be understood also that when a destructive lesion occurred in the nervous system it did not follow that the ensuing disorder of function was necessarily due to that destructive lesion itself; it might be due, wholly or in part, to the unbalanced action of other parts of the nervous system.

Negative and Positive Symptoms.

The same morbid process might produce at one and the same time negative and positive symptoms. The early stages of syphilis of the central nervous system, for example, might be marked by pain—a positive symptom—while later on negative symptoms in the shape of palsies made their appearance. A more difficult question to decide was whether pain and other subjective sensory disturbances could occur as the result of purely destructive lesions, for this would seem to imply that positive symptoms could be produced by such lesions.

The lecturer did not wish to suggest that in investigating any disease of the nervous system it was necessary to set out by classifying symptoms as negative and positive. It was only necessary to realize that there were these two kinds of symptoms, and from such realization one was led to consider the nervous system as a whole. The consideration of these principles had its value when one was confronted with the task of localizing a lesion in the central nervous system. It was notorious how misleading in such cases the signs might