many other vastly different states of the nervous system, so, by careful study in the future, may this disease be resolved into more simple and primitive elements.

To sum up, gentlemen, what I wish to state is briefly this :

1. That save in those cases where death takes place from the action of the typhoid poison directly on the nervous system, there must be intestinal lesion to prove the existence of typhoid.

2. That with such intestinal lesion we will have distinct abdominal symptoms.

3. That acute tuberculosis and septicæmic states are often mistaken for ordinary typhoid.

4. That evening rise and morning fall of temperature, as a proof of the existence of typhoid, is deceiving.

In conclusion, let me express the hope that none will think too severely of me for not more closely following my instructions from the President of this Association to discuss "The Ravages of Bacteria in Blood and Tissues." We now trace almost every pyrexial state to its own peculiar germ, and I am convinced that a paper from me, dealing only with the habits, customs and reproductive methods of all of these various bacteria would, whilst, perhaps, interesting to a section of this meeting, not attain to any particular aim. On this account have I claimed the privilege of drawing your attention to a special disease which has been proved beyond question to be of bacterial origin, and if this short paper may evoke from those before me an expression of their various experiences in typhoid fever, I feel sure the time of this Association will have been well spent.

SAYRE'S "SHORT HIP SPLINT" AS AN EXTENSION APPARATUS IN FRACTURES OF THE HUMERUS.*

BY DR. C. M. SMITH, ORANGEVILLE, ONT.

Owing to the pressure of professional duties, I have been unable to prepare the paper which I proposed to present, and shall merely crave your indulgence for a few moments, while I explain the application of a well-known splint to another purpose than that for which it was originally intended by its inventor. The patient, one of several on whom I have applied a similar apparatus to the one shown, sustained a compound comminuted fracture, one and a-half inches above the condyle of the humerus, separating the capitellum from the trochlear surface and both apophyses from the shaft—the so-called T fracture. The accident happened on the 8th June, 1886, and was caused by the blow of a crank on its downward revolution, while the elbow rested in a bent position on a wooden framework projecting slightly over it at the same time.

This variety of fracture is one frequently followed by the "gun-stock" deformity, in which the external portion is tilted forward with its articulating surface directed forwards, and unites with the shaft and internal trochlear portion, in such a position as to cause anchylosis of the joint, with a marked prominence in the flexure and projection of the olecranon and insertion of the triceps backwards, so that the latter muscle describes a marked curve in its lower portion, with concavity posteriorly, while the joint remains fixed at an angle of about 140°. This occurs more frequently in youth, owing to the fact, that while ossification commences during the second year in the radial portion of the articulating surface, it does not appear in the ulnar portion until the age of twelve. Moreover, while the internal and external condyles ossify respectively at the ages of five and thirteen, the external condyle and articulating surface unite first, and it is not until the age of sixteen or seventeen is reached, that they unite with the shaft. The internal condyle does not unite with the shaft until the age of eighteen.

The wound in the soft parts was situated on the anterior aspect of the arm, about three inches above the joint, and admitted the index finger. The fragments were adjusted, an anterior and posterior concave, rectangular splint, made of tin, applied; a shoulder-cap, similar to the one now exhibited applied, with a perpendicular extension overlapping the upper arm of the elbow splint.

Extension was secured by attaching over all, along the outer aspect of the arm, the Sayre's splint, converting the perineal into an axillary pad and securing the swivel iliac counter-extension pad to the loop in the shoulder-cap. The strap was buckled with moderate firmness around the posterior aspect of the arm, above the elbow,

* Read at the meeting of the Ontario Medical Association, Toronto, June, 1888.