

vents fear and screaming in nervous children; 3, there is no disturbance of the jacket while it is "setting;" 4, any country practitioner can make and use this apparatus, and without other assistance than the child's parents can get as good results as an expert can with the Sayre suspension.

A quite extensive practical experience has proven that the above claims are well founded. The comfort to myself, the patient and his friends, and the fact that the patient need not be disturbed during the "setting" of the jacket, would lead me to the use of this method for children in preference to any other.

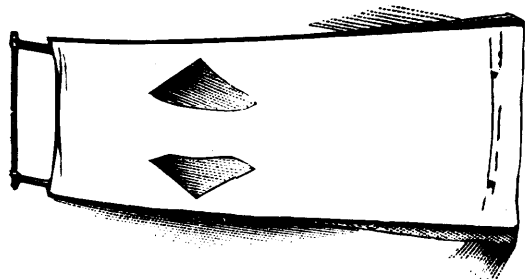


FIG. 2.

If the diseased vertebræ are in the upper portion of the spinal column, so that extension by the head is indicated, this can be brought about by attaching the head support to the cross-bar at upper end of frame.

Permit me to say that Dr. Daniel Brown of this city first suggested to me the use of a frame with a sheet stretched across. The cross-bar for the child's hands, the use of the frame in leaning position, so as to get good extension, and the practical application of it in spinal diseases should, so far as I know, be credited to myself.—Dr. E. Forest, New York, in *Med. Rec.*

ON CHOREA.

The problem of the pathology of chorea has been obscured by at least three circumstances—(1) the refusal on the part of many writers to regard reflex irritation as a possible cause of the malady; (2) the insistence upon its alleged relationship to rheumatism; (3) the assertion that endocarditis is of frequent occurrence in chorea. Not one of these can be justified. Numerous examples of chorea, due to reflex irritation, are scattered through medical literature. It has been shown both by Dr. Gowers and Dr. Sturges that in comparatively few instances is chorea found intimately associated with rheumatism. And, lastly, no evidence has yet been adduced to prove that endocarditis occurs in uncomplicated chorea. It is not surprising to find that the exciting causes

of chorea furnish a theme for the expression of the most contradictory opinions. No two authors give them alike. "The only immediate cause," says Dr. Gowers, "that can be traced with any frequency is emotion, usually fright, rarely mental distress." Dr. Broadbent, on the other hand, asserts that this influence has been much exaggerated. According to Bristowe, rheumatism, especially when "attended with pericarditis or endocarditis, must be regarded as at least one of the most efficient of the determining causes of chorea." That very few cases, if any, can be referred to this source seems almost certain from the careful investigations of Dr. Sturges; and Dr. Gowers emphatically asserts that "it is impossible to regard chorea as the result of acute rheumatism."

Pregnancy, by almost universal consent, is an occasional exciting cause of chorea. Few writers now consider it simply as a predisposing condition. But with regard to the causal influence of all other forms of peripheral irritation, the greatest difference of opinion exists. Many cases of chorea due to the presence of round worms are recorded by Davaine, Leuckhart and Cobbold also recognize the possible connection between the two conditions. Sir Thomas Watson admits that in some few instances chorea seems to depend on the presence of worms, and advises the administration of oil of turpentine in chorea "whether there be worms at the bottom of it or not." Dr. Tanner speaks of worms as well-recognised causes of chorea. According to Trousseau, on the other hand, they "stand to chorea in a very doubtful relation of cause and effect"; while Broadbent affirms that cases of chorea due to worms "must be extremely rare"; and many writers, among them Bristowe, do not refer to them at all. Rilliet and Barthez ignore a large number of recorded cases, but admit, apparently reluctantly, two cases which seemed beyond all doubt due to worms. Other forms of peripheral irritation—e.g., disorders of menstruation, dental irritation, injury to spinal nerves, head injuries, etc.—are freely admitted by older writers among the causes of chorea. Dr. Gowers, however, attributes the operation of all such solely to the emotional disturbance which is wont to accompany them. Very little, he concludes, is known of the influence of reflex irritation. To Dr. Dickinson, on the contrary, "various forms of irritation, mental and reflex, belonging especially to the nervous system," are one of the two great sources of chorea, the other, in his opinion, being the rheumatic condition. (Quoted from Bristowe, loc. cit., p. 1083.) Still less surprising is it to find corresponding contradictions in the various theories which have been propounded. It is needless to refer to them here. Suffice it to say that each is based upon some one element of chorea to the exclusion of others of equal, perhaps greater, moment; and that consequently none satisfies all