

to my mind, is simple enough, viz: by these two manipulations (the disease being situated in the anterior portion of the vertebræ), you relieve the inflamed surfaces from pressure, and, as it were, separate the anterior edges of the vertebræ from each other. This latter, of course, is an impossibility, but at the same time sufficient force is brought to bear by your combined manipulations *to relieve the diseased surfaces from pressure*, and hence the cessation of pain.

This examination we have now made will reveal the disease if it be in the anterior part of the bodies of the vertebræ; but there may be some cases in which the examination we have just made will reveal no evidences of disease at all, and at the same time there may be spondylitis existing. But by a more careful examination you will find the disease upon the side of the bodies of the vertebræ, and it has been caused by some blow or pressure upon the ribs, driving the heads of the ribs into their facets. You detect the disease in this position by pressing upon each rib separately, and the moment you come to the point of disease the patient will flinch with the pain induced by your pressure.

Having now made our diagnosis, I call your attention to the treatment of the case. I shall here apply the plaster-of-Paris jacket and *jury mast*: and will now show you the method of its application.

The child has already been thoroughly cleansed, and we put upon her a skin-fitting knitted wollen shirt tied over the shoulders, manufactured expressly for this purpose by the Bickford Knitting Co., 841 Broadway, this city. We now fold two towels and pass under the shirt in front, allowing them to extend the full length of the trunk. This is to prevent pressure upon the viscera, and allow of free respiration and expansion of the abdominal walls after eating; these towels being withdrawn as soon as the plaster has become sufficiently set. Having now adjusted the towels, the shirt is drawn down tightly and secured between the legs with a safety pin, and your patient is then ready for a partial suspension necessary during the application of the plaster-of-Paris jacket.

The child we now place in the suspending apparatus, which you will notice consists of an iron cross-bar with a chin collar of soft leather, and arm supports also. Having carefully adjusted this so that the weight of the body is borne evenly upon the arm-pieces under the axillæ and the chin collar which supports the head, we make gradual traction upon the vertebral column until our patient states that she is perfectly easy and free from all pain. In this case you will notice the traction necessary to secure this result, is sufficient to slightly raise the heels from the floor; in some cases this is not necessary, and again in others the traction required may be still greater; but never under any circum-

stances should your traction be so great as to lift your patient *completely from the ground*. This I desire you to specially understand, otherwise the word *suspension*, used in our description of the treatment, may lead you to suppose that the patient is to be literally suspended, when in reality it is but *partial suspension*.

This child then is fully prepared for the application of the jacket, and I will at once show you the manner in which it should be properly applied. You will here notice that I have from eight to twelve rolls of bandages formed of crinoline, into the meshes of which the dry plaster-of-Paris has been well rubbed and then rolled up moderately loose; not by any means as tightly as the ordinary roller bandage used in surgical dressings, but sufficiently tight to retain the plaster in the fabric, and at the same time allow of it becoming saturated to its centre rapidly when placed on the water. These bandages vary from two and a half to four inches in width, and also being from three to four yards long, depending upon the size of the patient.

I now place a roll of the bandage in a pail of tepid water, which is sufficiently deep to cover the bandage when standing upon its end, and then wait until it has become thoroughly saturated, which is shown by the cessation of the escape of air from the water. I again place another roll in the water, that it may become saturated while I am applying the one previously immersed. This one, as you observe, I now remove, and pressing out all surplus water, I carefully wind it around the waist of the child, my two assistants rubbing each layer of the bandage well into the preceeding one. I would here call your attention to the manner in which I commence the application of the jacket, viz., at the waist, gradually going down until I come to just above the great trochanter. Then carefully reversing the bandages, as you see, I pass upwards again, and having secured sufficient thickness at the waist, I then pass on up the trunk, until I am on a line with the axillæ, and a little higher in front over the chest, and also higher over the scapulæ at the back. In some cases you find it necessary to put padding between the shirt and your plaster bandages, over the sacrum and crests of the ilii, and also *on either side* of the projection of the vertebræ where the disease is located, in order to prevent excoriation of these parts. But never put any padding *upon the projection of the vertebræ*, but place it upon either side, to prevent pressure upon that point. If you fail to do this and allow of pressure to be made there, it may result in a painful ulcer, which will delay your treatment many months; for if such an ulcer should be started the jacket must be at once removed and the patient placed in bed, until such time as it shall have healed, when the jacket may be again applied. I do not wish you to under-estimate the importance of this careful padding. It is not the plaster-of-