Much ingenuity has been wasted in the endeavor to apply a continuous extending force to the spine, in an apparatus to be worn on the person. As this appears to be a practically insoluble problem, it is fortunate that a vertically extending force is not needed. Antero-posterior leverage alone is used, because by that means pressure can be most directly and perfectly transferred from the diseased vertebral bodies in front to the sound arches behind.

How then about the plaster of Paris jacket? Bradford and Lovett in their excellent work on Orthopedic Surgery give the following answer, pp. 60, 6 r and 7 I :
"The undoubted beneficial effect of plaster jackets is due, not to the separation of the affected vertebræ, but to a fixation support in an improved position. In short the plaster jackets afford an excellent antero-posterior support." "Unfortunately. however, the plaster jacket does not of itself, by its hold upon the thorax, maintain a continued extension, but the jacket and thorax so adapt themselves to each other that active suspesision ceases. The jacket, however, does, act as an anteroposterior support, until it becomes loose and inefficient." We prefer, as do the authors of the foregoing sentences in most cases, if I understand their practice, a properly adapted steel leverage apparatus to jackets of any make or material, on account of its greater precision, adjustability and cleanliness ; but it should not be overlooked that as regards results the workman is more important than his tool, and that better results will be obtained with a jacket in skillful hands than with the most perfect apparatus carelessly or unintelligently used.

The improved spinal apparatus is shown in the figures.

It differs from the apparatus shown to the New York State Medical Society in r863 in the following points:

1: The vertical parallel bars have been lengthened, and end in hooked pieces,
passing well over the shoulders near the neck.

2. The hinges differ somewhat in construction


