

the staff was rigid at the angle the heel had to be kept small, as it was in passing it through the meatus, and in conducting it and the point along the canal that the difficulty lay, but with the hinge at the angle a large wide heel can be easily passed, and so made available. I have used this new instrument four times on the living with great satisfaction and the hearty approbation of those who have seen its simplicity of action.—*The Lancet*.

FRACTURE OF THE FEMUR IN CHILDREN.—

In a clinical lecture delivered at the Bellevue Hospital (*New York Medical Record*, January 5), Prof. Frank Hamilton observed that the pathology of fracture of the shaft of the femur differs as it occurs in children as compared with adults. In adults the fractures are almost always oblique—very oblique; the line of fracture is relatively smooth, and the fragments overlap very much; while in children the fractures are often nearly transverse, denticulated, and not unfrequently, especially in very young children, only partially separated, and not at all overlapped—in short, they are apt to partake more or less of the character of the “green stick” fracture. If overlapping occurs, it is usually to a limited extent, because the muscles have so much less power to cause displacement in this direction. The fragments are bent or thrown out of line easily, but there is little or no displacement in the line of the axis of the bone.

Prof. Hamilton believes that these differences have not been sufficiently borne in mind by surgical writers when directing the treatment of these fractures in children. They seem to consider the same procedures applicable to them as to adults, while, in fact, the indications are reversed. Thus, in the adult the first and most difficult indication is to overcome the shortening caused by the obliquity of the fracture and the powerful action of the fully developed muscles, and the second is to keep the limb in line. But in children the first and most difficult indication is to keep the limb in line, and the second is to overcome the action of the muscles, or this second indication may not be present at all. The double inclined plane is totally unsuited for the treatment of these fractures in children. “I have tried these machines often in my earlier experience, and they gave me infinite trouble and disgust. They had to be readjusted daily, and if I got a good result it was a mere matter of accident.” The plaster-of-Paris bandage, in which the limb is placed in a straight position, is a dangerous appliance for children, and that in proportion as the child is younger—the danger of strangulating the tissues and producing gangrene being greater. Bandages of any kind, indeed, applied with sufficient tightness to support the bones which lie deep in the soft and yielding tissues, are liable to cut off the venous or arterial circulation. Moreover, they soon get loose and became fouled

by the urine and feces, which also, whatever care or ingenuity be employed, excoriate the delicate skin of these little patients. The straight position—with short side pulleys and weights, which constitute the best apparatus for adults—fails in the case of children, owing to the restlessness of such young subjects constantly disturbing the fragments, and leading to vicious union.

To meet these difficulties, Prof. Hamilton devised an apparatus which he has now employed with most satisfactory results for twenty years. This consists in a double thigh splint, connected below by a cross-bar, and which is figured in the last edition of Erichsen’s “System of Surgery.” Each splint is about four inches wide and half an inch thick, and extends from within two or three inches of the axilla, to four or five inches beyond the bottom of the feet. These splints are so united by the cross-bar that they are separated from each other farther at their lower than at their upper extremities by two or three inches—thus, by keeping the legs a little more asunder, preventing the child in some measure from wetting the dressings. The splints must be well padded to fit all the inequalities of the sides of the body and the limbs. So prepared, the double splint is laid on the bed enclosing the body and legs of the child. The sound limb is first secured to the splint by successive strips of roller from the foot to the groin, and, after extension, the injured limb is treated in a similar manner. The short or coaptation splints (consisting of thin wood, cloth, fells or binder’s board, etc., and lined with some lint or woollen cloth somewhat larger than the splint) are now applied, or may, if there be contusion or swelling, be delayed for a few days. The front or top one must extend from the groin to half an inch from the patella, which it should never touch. The outside splint extends from the top of the trochanter major to the external condyle, or lower if the fracture (usually at the middle) is low down, and the inside one from the groin to the internal condyle. The back splint must be firmer, wider, and longer than the others, and should be made of heavy sole-leather or wood. The limb is to rest on this as a sort of bed, and it ought to extend from just below the tuber ischii to three or four inches below the knee. It should be carefully padded for the inequalities, and covered with cotton cloth to keep the padding in place, and fasten the circular bands to. Three or four inches or more of the upper end may be covered with oiled silk. The centres of five or six strips of cotton-cloth, each about one inch wide, are to be stitched to the back of this fourth splint, and, the splints all being in their proper places, the strips are to be brought around them, and tied in bows over the front splint. The long splint is not to be included as there would be danger, when the body sinks upon the bed, that the thigh might bend at the