

about this result most satisfactorily is best done by the use of salines, and I have found that the old preparation of the "liquor acetate of ammonia" when freshly made fulfils the purpose most admirably. After the use of this or other salines iron can be given with most decidedly beneficial effects.

Electricity, too, as suggested by many, holds a most important place as a factor in the treatment of this disorder. Again I can agree with Dr. Currier's statement made before this society, that I fail to see much benefit arising from the use of manganese in any of its various forms. Other drugs might be mentioned, all useful in their way, in the treatment of this malady, each one having its champion to second its merits, but time will not permit at present of speaking further in this direction.

To summarize then I would say :

1st. That scanty menstruation is most usually the result of mal-nutrition in both young and middle-aged women, married or single.

2nd. That the primary seat of this trouble lies in the condition known as chloro-anæmia.

3rd. Its treatment must be directed in an intelligent manner toward rectifying this condition.

And lastly, that a persistent patience must be persevered in with the various forms of treatment laid down, if a permanent cure is to be expected.—Franklin Townsend, M.D., in *Galliard's Medical Journal*.

DELAYED UNION IN FRACTURE.

In these days of antiseptic surgery, we are, perhaps, a little too hasty in regard to the treatment of delayed union in fractures and do not give Nature time to effect repair. The length of time taken for repair was unusually long, yet the result in both cases here reported has been perfect.

CASE I.—*Delayed union in a fracture of the femur.*—(Notes of Dr. Wm. H. Shipps, of Bordentown, N.J.) On January 20, 1893, L. M., a young woman, seventeen years of age, while coasting, was violently thrown from a sled, sustaining a fracture of the right femur at about the junction of its middle and lower third. She was at once carried to her home, placed upon a firm mattress and sandbags and extension by weight and pulley employed. The patient, an intelligent girl, recognized from the start the importance of keeping the fragments in position, and labored in every possible way to avoid disturbance of the limb; so determined was she in this respect, that she avoided in so far as possible, a regular evacuation of the bowels, although assured of the folly of such a course. Having a most capricious appetite, it was difficult for the

first six weeks to get her to take a sufficient quantity of nourishment, although the necessity for this important aid in bone repair was constantly urged upon her.

At the end of four weeks the dressings were removed and the limb carefully inspected. No shortening was detected, but to my chagrin no attempt at union had taken place, notwithstanding the parts were in perfect apposition. The dressings were carefully re-applied.

On March 20, two months after the injury, an examination showed entire absence of bony union. At this juncture I requested Dr. Morton to see the case with me. It was agreed to resort to daily massage of the entire limb, especially in the vicinity of the fracture, and to lessen the amount of extension. The limb was also encased in a firm dressing made of two Russia felt splints; a posterior one, extending from the great trochanter to within six inches of the ankle; an anterior, extending the entire length of the thigh, firmly held in place by a roller bandage. Four weeks later the patient was allowed to get out of bed daily and walk about on crutches, care being taken that no weight be borne upon the limb. This plan of treatment was faithfully carried out; the appetite of the patient materially improved.

In the course of three weeks the circumference of the limb had visibly increased, and an evident attempt at bony union noticed.

From this on the limb gradually improved in size and strength, until at the expiration of eight weeks from the commencement of massage, at which time Dr. Morton again saw the case, consolidation was complete. The dressings were continued for a few weeks longer, when a single roller bandage took the place of splints. Careful measurement of the two limbs at this time failed to show any appreciable shortening. Altogether the case made a most satisfactory recovery.

CASE II.—*Delayed union in fracture of the leg.*—On August 1, 1893, Captain A. S., aged fifty-one years, while at Ivigtut, South Greenland, in command of his vessel, received an injury to the right leg by the fall of a bulkhead or partition which separated the cargo of kryolite from the ballast; a medical man from the shore who was summoned, found the left leg seriously crushed, and an oblique fracture of both bones about the juncture of the middle and lower third; he applied temporary pasteboard splints, and the patient was hoisted from the hold. Four days later, bandages, pasteboard splints and a plaster dressing were applied. Three weeks later the swelling of the limb had so subsided that he observed not only a considerable movement, but a grating of the bone; six weeks subsequent to the injury the dressing was removed when it was found that there was little if any union; posterior board splint was applied, and two weeks later he