

propose in the limits of this paper to discuss the exact chemistry of the dialyzed iron. It is, I believe (when properly prepared, as I have since investigated carefully the process of its formation), a solution of peroxide of iron in the colloid form, with perhaps a trace of hydrochloric acid; but that it will, when very largely diluted with water, perfectly coagulate arsenious acid *in solution*, any one can satisfy himself in a five minutes' test. The only remaining point of interest professionally, is, will it neutralize arsenious acid when taken in *powder (bulk)* into the stomach? It is held by most authorities, I believe, that when arsenious acid is taken in bulk into the stomach, the iron antidote is not reliable. (See Dunglison, R. J. (latest paper on the subject), in his "Practitioner's Reference Book," page 229.) Yet we know from daily experience that arsenious acid is absorbed by the stomach when taken in minute doses, and I think the evidence in the case shows that arsenic powder did poison when presented to and acted upon by a comparatively empty stomach (at least three hours having elapsed since her breakfast), and that the solution of peroxide of iron (dialyzed iron) did prove a prompt and reliable antidote, coagulating and neutralizing the arsenic. Arsenious acid *acts as it is dissolved*, and the antidote (if supplied) combines, *pari passu*, with the solution formed by the liquids of the stomach, and renders it inert before damage is done to the mucous coat of the stomach or it is absorbed into the system. Within twenty seconds after I learned that arsenic had been swallowed I sent a full dose of the antidote after the poison, and with positive and immediate relief to the patient. My experience with dialyzed iron as a pleasant and efficient means of introducing iron into the economy is too limited for an opinion, but I feel disposed, from the history of this case, to strongly recommend it as a safe, reliable, and always-ready-at-a-moment's-notice remedy and antidote for arsenical poisoning. —Dr. Reed, *Medical Times*.

TREATMENT OF FRACTURES OF THE SHAFT OF THE FEMUR.

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First, I wish to remark that fracture of the shaft of the femur in the adult is almost always oblique. The fracture is usually very oblique, so much so, that it almost never happens that we can set it, in the ordinary sense of the term; that is, we cannot make the fragments set supporting each other. The fracture is so oblique, that unless the fragments are maintained in position by extension and counter-extension, they always overlap each other. This is the law. There are exceptions, of course,

as, for example, when fracture occurs in a paralyzed limb, etc.

When the fragments overlap, there will be a projection equal to the entire thickness of the bone. This is illustrated in the specimens you see here. In this specimen the fracture took place about the middle of the shaft, and the overlapping, as you see, is as has already been stated, and the projection is very marked.

The same thing can be observed in another specimen, in which the fracture occurred a little higher up, very near to, but not involving the neck of the bone. In this case there was no extraordinary obliquity, but the fragments overlapped each other fully two inches the lower fragment riding upwards until it impinged against the neck of the bone.

As a rule, then, there is no such thing as setting a fracture of the shaft of the femur, in the ordinary acceptation of that term. The bone can be placed in position, and held there, perhaps, if sufficiently powerful extension and counter-extension are employed, but it does not set upon itself so as to hold itself.

In this particular instance the plaster-of-Paris dressing was employed, and was applied while the patient was under the influence of chloroform, and while full extension was made with pulleys. The splint was worn for several successive weeks, and when the patient died, two or three years after, it was found that just such shortening as the condition of the bone would permit had taken place; the lower fragment had ascended until it struck the neck of the bone. Practically, there was no extension or counter-extension in the case.

How is the tendency in the fragments to overlap, from the action of the powerful muscles, to be overcome?

Certainly never by setting the bone, as it is called, and then binding it tight with bandages, because you will have cut off all circulation in the limb long before you can bind it sufficiently tight to maintain the proper position of the fragments. This is but plain common sense. No surgeon would dare to attempt to treat fracture of the thigh in that manner. He may put on lateral supports and apply bandages, and the position of the fragments may be in some slight degree maintained by pressing them against each other, but this dressing will not prevent shortening.

How then will you overcome the tendency to shortening?

Until the latter part of the last century all surgeons from the earliest periods employed the long straight splint. The method was generally to simply pull the limb out to a certain length, and then bind a long, straight splint to the side of the limb and side of the body. The old-fashioned long splint is illustrated by this simple and practical device employed by a surgeon under Stonewall Jackson, that great soldier and good man. It