cular, and important vessels come from all sides, this rule cannot be followed, and ligature must be applied to each important branch as it is divided ; but this necessity for delay does not often occur. The ligature,—a firm hempen thread, well waxed,—ought in all cases to be applied very carefully, and made to enclose the orifice of the artery alone, which for this purpose is pulled out by common well-pointed dissecting forceps, or, when the parts have been consolidated by infiltration, by a sharp tenaculum. A double knot, carefully secure, having been made upon the isolated orifice, one end of the ligature is cut off close to the knot, the other being left protruding from the most dependent part of the wound, that the ultimate separa­tion of the ligature and its enclosed slough ■ may thus be watched and made certain. It was lately recommended, and is still practised by some, to cut away both ends of the ligature close to the knot, in the belief that the union of the wound by the first intention would thus be favoured, and in the hope that the noose would become encysted in its original situation, and produce no further annoyance ; that hope however has been disappointed. It was then thought, that by making the ligature of an animal substance, as catgut, it might be slowly removed by absorption, and thus be prevented from becoming a source of future irrita­tion ; but that plan also failed. No doubt, ligatures in such circumstances have long remained quiescent, but that has been seldom ; sooner or later, perhaps after the cure has been thought complete, they occasion the formation of ab­scess after abscess, and produce much irritation, until they themselves are expelled ; and thus recovery is in the end much protracted. The usual practice therefore now is, to leave one end of each ligature a little protruding from the lips of the wound, in order to secure their complete expulsion at the proper period. These remarks of course apply only to wounds which are approximated soon after in­fliction, with the hope of their adhesion. When the cut surface, on the contrary, is left open, in order to suppurate, both ends of each ligature should be removed close to the knot, the practice being then unexceptionable. Another innovation lately practised, was the substitution of torsion for ligature of the arterial orifice, thereby imitating the natural means of suppressing bleeding. The method has only been found to succeed well with vessels of the second class, such as those of the fore-arm—being inapplicable to the smaller twigs, and not safe in the case of the larger arterial trunks. In every extensive wound, therefore, some ligatures must be applied ; and that being the case, it has been found more convenient and satisfactory to apply liga­tures to each orifice requiring artificial closure. Haemor­rhage from veins usually ceases spontaneously when the position of the part is attended to, and all pressure remov­ed that might prove an obstacle to the venous return. If it should be found obstinate, pressure applied to the orifice will be sufficient. Under any circumstances, cauteries and caustics are now seldom if ever required for arresting hae­morrhage.

These remarks naturally lead to the consideration of in­cised wounds, and here we again find that simplicity and improvement in surgery are synonymous. “ Hot dressings, filthy unguents, greasy poultices, stimulating plasters, and complicated bandages, have given place to light water-dress­ing, unirritating plaster sparingly applied, and careful posi­tion of the part.”@@1 To no one does a larger share of merit belong in this, than to him from whom we have made the above quotation ; and we cannot do better than continue to glean from him a little more on this subject. “ Formerly (and they are even still) wounds were put together without delay, and their edges squeezed into apposition, and retained by various means, such as sutures, plasters, compresses, and bandages. They were carefully covered up, and concealed from view for *a* certain number of days. Then the enve­lopes of cotton and flannel, the compress-cloths, the pledgets of healing ointment, and plasters, were taken away, loaded with putrid exhalations, and a profusion of bloody, ill-di­gested, fetid matter. A basin was forthwith held under the injured part, and the exposed and tender surface was deluged with water from a sponge, and then well squeezed and wiped. Then came a re-application of retentive ban­dage, of the plaster, of the grease mixed with drying pow­der, all surmounted by some absorbing stuff, as charpie or tow, to soak up the discharge. This was not unaccom­panied by pain, often more complained of than that at­tendant on the original injury or operation. This process was repeated day after day, the patient was kept in a state of constant excitement, and often, worn out by suffering, discharge, and hectic fcver, fell a victim to the practice. The wound was, as it were, put into a forcing bed, excited action beyond what was required was hurried on, and the consequence was, that immediate union seldom if ever could or did take place. A suppurating surface, on the contrary, with bad profuse discharge, and a very tedious cure, if any, were obtained.” This was an uncomfortable state of mat­ters, but there is now a change. Surfaces are not disposed to unite for many hours after the division and scparation have occurred. So long as there is oozing of blood, no good end is to be attained by their close apposition. Should this be attempted, the blood which continues to be dis­charged from the smaller vessels is necessarily prevented from escaping ; and the consequences are, infiltration of the loose cellular tissue, distention of the cavity of the wound, and separation of the surfaces probably throughout their whole extent. Then ensues a congested state of the sur­rounding vessels, with perhaps a troublesome hæmorrhage from branches that would otherwise have become sealed up ; at all events, much constitutional disturbance, a heated swollen state of the injured parts, profuse, bloody, and put­rid discharges, must occur ; and this will certainly be fol­lowed by wasting suppuration from a foul cavity, which will be long in assuming a healthy action. It is only when re-action has occurred, when gentle vascular excitement has taken place in and around the solution of continuity, and when plastic matter begins to be secreted and thrown out, that the process of adhesion can be expected to commence. The edges of a large wound, as that resulting from ampu­tation of the extremities, may be approximated in part, either by position, or by a few points of interrupted su­ture, as soon as bleeding from the principal vessels has been arrested. But the close apposition, and application of all the retentive means, had better be delayed for six or eight hours at least. In the interval, sensibility will be abated, the oozing moderated, and the chance of second­ary hæmorrhage much diminished, by lightly covering the parts with lint dipped in cold water, and frequently re­newed ; or a piece of lint may be placed between the cut surfaces, and a constant irrigation of them be kept up for some time, by threads passing from a vessel containing cold water. When all oozing has ceased, and the surface be­come glazed, the surrounding skin, previously shaved, is made thoroughly dry ; coagula are removed, the edges arc put carefully and neatly in contact, and are retained by narrow slips of adhesive plaster placed at intervals. The plaster commonly in use does not retain its hold sufficiently long, is loosened by discharge, heats the surface, and often gives rise to erythema. A better kind is made by spreading a strong solution of isinglass in spirit on the unglazed side of oiled silk, cut into slips of the necessary length and size ;

@@@1 Liston's Practical Surgery.