SKIN-GRAFTING IN OPHTHALMIC SURGERY.

BY

FRANK BULLER, M.D.,
Montreal.

We all know that ophthalmic surgery presents many opportunities for the useful application of skin-grafting in both mucous and cutaneous surfaces, and that our work in this field necessitates extreme accuracy in order to insure reasonably good results. In any event, it will be conceded that upon this subject the last word has not been said. It is often desirable—I may say, indispensable—that we employ as much of the skin texture as possible in order to minimize the tendency to subsequent shrinking and loss of pliability; this is a totally different matter from the mere restoration of epithelium to a widely denuded surface, which may be accomplished by the use of extremely thin shavings from the skin surface, or even by scrapings, but for such a purpose ophthalmic surgery has no use, since there is always a necessity for the transference of skin of substantial quality and thickness. This necessity carries with it all the elements of failure, just in proportion to the size and thickness of the graft; we cannot, however, afford anything less than complete success at the first attempt, because the parts are not likely ever again to be in a condition so favourable for obtaining a perfect result, as they were the first time the operation was performed.

By complete success I mean re-covering of entire raw surface with integument, which unites immediately and permanently without the slightest flaw or loss. Judging from the published records of such work the difficulties in the way of obtaining satisfactory results are very great and failures have been many. The causes of failure may be summarized as follows:—(1) The size and thickness of the graft may be so great that it fails to become nourished sufficiently and so perishes through lack of vitalizing power. (2) Imperfect coaptation, so that some part of the new skin fails to seure nourishment. (3) An imperfectly prepared surface, especially as to arrest of bleeding. (4) The parts may not be sufficiently aseptic. (5) Accidents or injury before healing is well advanced. Failure from the first of these causes can fairly be attributed to an error of judgment on the part of the operator; failure from the third and fourth implies an error in technique; from the fifth, a want of proper care in the after treatment. There remains for consideration only No. 2, and this is by far the most important of all. The problem to be solved is how can perfect coaptation best be secured. In this connection the fact must be recognized that every skin-graft