

is then drawn back through the hole in the lower piece, carrying the suture wire with it. If there should be any difficulty in pushing the silver wire through the hole in the upper fragment, it may be attached to the eye of the needle and pushed down to the gap; the needle is then detached from the wire, drawn back through the opening in the upper piece, introduced through the hole in the lower piece, reattached to the wire, and the operation finished as in the first instance. Another plan would be to draw a suture in the ordinary way, through a drilled hole in the upper fragment, by means of the shorter needle, to detach the wire from the needle in the gap, and to finish the operation by pushing the larger needle down through a hole in the lower fragment, attaching the suture to its eye, and withdrawing it as already described. There can be no doubt that a really formidable difficulty in introducing the sutures is easily and rapidly overcome by the use of the flexible aluminium needles, which I have just described. Each needle is of such a size that it passes easily through the holes made by the drill and the soft cancellous tissue of the patella is not injured. The needles were made for me by Messrs. Chandler & Sons, Toronto.

SCIENCE IN MEDICINE.*

By F. OAKLEY, M.D.

The word science is now in everybody's mouth, and we all imagine that we have a clear conception of its true signification. I, for one, however, confess that I had but a vague idea of its true meaning until I saw a paper, read by Dr. Ray Lankaster, at a late meeting of the British Association. That eminent naturalist and physician says: "Science is not any and every kind of knowledge. Knowledge of art and literature is not science. Knowledge of the various manufacturing processes is not science; nor is knowledge of the stars or of the joints of a beetle's leg. The truth is, a man may have an acquaintance with all the facts in every branch of knowledge, and yet be devoid of science. All the inventions and machinery in the world may be obliterated without causing a moment's concern to a single student of science. It is of the utmost importance for the progress and well-being of science that this should be understood. The true devotee of science troubles himself little about pecuniary reward, but ever faces nature with a single purpose—to *ascertain the causes of things*. We may say that of all kind and varieties of knowledge, that only is entitled to the name science which can be described as knowledge of causes, or the order of nature. In science, as in the problems of every-day life, an appearance has to be accounted for—a hypothesis or guess is the reply. The truth of that guess is then tested, this testing is an essential part of the process. If my guess be true, then so and so as to which I can decide by inspection of experiment must be true also. In every-day life we have often to be content without fully testing the truth of our con-

* Read at the meeting of the Ontario Medical Association.