

application of cold. Its effects are evident within an hour, and they last from ten to twelve hours when a full dose has been administered. When administered for a long time, the dose must be increased. It produces profuse sweating and redness of the cheeks; it diminishes the pulse-rate, and distinctly increases arterial tension. He found no depressing effects follow its administration, even when full doses were given. Antipyretics belong to two great classes,—namely, those which diminish tissue-metabolism; and secondly those which increase the loss of heat. From the sweating it produces and the rise in arterial tension, one might conclude that antifebrin belongs to the second class as well as to the first one. This might explain the quickness of its action, as antipyretics of the second class act more speedily than those which diminish tissue-metabolism.

IMPLANTATION OF TEETH—YOUNGER'S METHOD.

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The operation to which I have the pleasure of calling your attention for a few moments this evening, aside from its mechanical features, is very little understood, even by those who have performed it the greatest number of times. That teeth which have been for a long time out of the mouth, and, as supposed, entirely devoid of life, are inserted into artificial sockets made in the maxillary bones in the mouths of human beings, and there remain, become firm, useful, and to all appearances as good and healthy as the adjoining teeth in the same mouth, there can be no doubt.

Operations in the same direction, such as the transplanting of teeth, *i.e.*, the removal of a badly decayed tooth, or root, and the placing of a sound one, previously taken from the mouth of another person, into the socket, and there held by ligatures for a time, until union of the periosteum upon the root with the tissues of the socket has taken place, have been done with more or less success, occasionally, for some two hundred and fifty years, possibly for thousands of years even. However, the first published statement in reference to it, that I am aware of, is to be found in the work of Ambroise Paré, published in 1634. He says: "I heard it reported by a credible person, that he saw a lady of the prime nobility, who, instead of a rotten tooth she drew, made a sound tooth, drawn from one of her waiting-maids at the same time, to be substituted and inserted; which tooth in process of time, as it were taking root, grew so firm as that she could chew upon it as well as upon any of the rest. But, as I formerly said, I have this but by hearsay."

I say the operation of transplanting has occasionally been done. It probably would have been performed—and would be at the present time—more frequently, but for the fear many people have of being inoculated with some dread disease, should they have a tooth taken from another

person's jaw and inserted in their own. I judge, however, that a hundred years ago people were less fearful of such a catastrophe. Judging from the every-day manner in which the operation is spoken of, it would seem to have been very common. I find in a small book entitled "A Practical Essay on the Human Teeth," by Paul Euralius Jullion, Surgeon Dentist, published in London in 1781, in a list of "his accustomed charges," the following:

£ s. d.

Transplanting a living tooth.....5 5 0

Ditto, a death tooth2 2 0

In the "Natural History of Human Teeth," by John Hunter, 1778, may be found a description of this operation, as well as that of replantation. It is from this work that the idea of "implantation" was first suggested to Dr. Younger. Hunter then recommended that a tooth be replanted when taken out through mistake, or knocked out accidentally, immediately, if practicable; if not, he would replace it even after it had been out of the mouth twenty-four hours, or "at any time before the socket began to fill up." To sustain his opinion that a tooth would become firmly fixed in its socket again, even after having been out of the mouth so long a time, he gives his own experience in replanting, and an experiment in implanting a freshly extracted tooth into a cock's comb as follows:

"I took a sound tooth from a person's head, then made a pretty deep wound with a lancet into the thick part of a cock's comb, and pressed the fang of the tooth into this wound, and fastened it with thread passed through other parts of the comb. The cock was killed some months after, and I injected the head with a very minute injection; the comb was then taken off and put into a weak acid, and the tooth being softened by this means, I slit the comb and tooth into two halves, in the long direction of the tooth. I found the vessels of the tooth well injected, and also observed that the external surface of the tooth adhered everywhere to the comb by vessels similar to the union of a tooth with the gum and sockets."

The replantation of teeth, *i.e.*, the replanting of teeth removed through mistake or by accident, and the removal of teeth for the purpose of enabling the operator more directly to treat chronic alveolar abscess, or difficult cases of pyarrhea alveolaris, and replacing them, has been practised by many dentists for a great number of years. Hunter speaks of replanting teeth removed through mistake or accident, as though it was at that time, and had been, a common practice. While the removal of teeth for the purpose of getting at and treating disease is a more modern operation, and, as a rule, anything but satisfactory in its results.

It was while reading the experience, recommendation, and experiment above quoted of Hunter that the question suggested itself to Dr. Younger, that, if a tooth would grow fast again in its own socket after it had been out of it twenty-four hours