

introduced to the profession, in its essential features, some years ago by Dr. Callihan, and I have found it so excellent and successful in my own practice that it is only in some minor particulars that I have ventured to modify it.

With hands, rubber dam and instruments thoroughly sterilized, I first apply the rubber dam, and then open into the canal with a sharp burr in the engine. It must be remembered that perfect canal work is only possible where we can see what we are doing. Consequently it is of importance to so open into the canal that, by the unaided eye, or by the help of a magnifying mouth-mirror, we have an unobstructed view of it. After getting a good opening I begin washing out the canal with a hypodermic syringe, using, as an injection, water and listerine in the proportion of four to one. The solution should be as hot as the patient can bear it, and must be thrown into the canal forcibly by the syringe. If the tooth is sore or painful it is better to defer further operation. Simply syringe repeatedly, leaving the crown cavity open, and paint the gum overlying the root with equal parts of tincture of iodine and tincture of aconite.

At the next sitting I again apply the dam, and, after syringing for some time, the excess of moisture is absorbed with bibulous paper, after which I wind the smallest possible fibre of absorbent cotton around the end of a barbed platinum broach. I take up on it a bead of a 50 per cent. aqueous solution of sulphuric acid, and by a gentle pumping motion, coax it to the apex of the root. After about a minute I neutralize the acid by introducing a strong solution of bicarbonate of soda. The effervescence that follows will throw out most of the debris. I then commence syringing again, continuing it in cases of long standing for as much as half an hour, occasionally passing a fine broach up the canal to see that all is clear. Being assured that I have completely removed all putrescent material, the next step is to thoroughly dry and desiccate the dentine lining the canal. To this end I absorb the surplus moisture with bibulous paper points, then moisten the walls with absolute alcohol, which has a great affinity for water, now drying again with bibulous paper. I desiccate the canal with an Evans' root-drier and a fine platinum broach. The desiccation should be continued until all hissing ceases, which indicates a practically dry condition. A good method of ascertaining if desiccation is complete is to introduce a fine, smooth broach to the apex, and then draw it across a piece of dry rubber dam. If it leaves no mark I proceed with the next step.

I believe that here is where some practitioners proceed to fill the root permanently. I noticed a paper by Dr. F. B. Darby, of Elmira, N.Y., written in the *Cosmos* of February, 1899, in which his treatment as given is practically the same as the above up to the pres-