

of its efficacy ; yet when a pulp is exposed the intense cold is worse than the pain of extracting. It is also an open question whether pain, occasioned by freezing process and the reaction, be not as great as pain of extraction. Yet as it is in a different form, people are better pleased. At best there is a sense of discomfort. In lower teeth freezing is not so applicable. Better to have patient breathe through the nose. In isolated upper teeth, where the process is quick, freezing is a great success, but where there are contiguous teeth not quite so satisfactory ; also, where adjoining tooth has a metallic filling the pulp is apt to receive a shock from which it will not recover. This idea was suggested by Dr. Hutchison, of Ottawa, one which I think we should bear in mind, for we cannot prevent cold striking adjoining teeth.

Preparations to be rubbed on gums are useful, but it is hard to limit the medicine to proper area, especially in lower jaw, and some are apt to contain medicines one would not like to have swallowed. To be effective, these are necessarily stronger than those for injection. Barr's, I believe, is good, although I have not used it. One I find very good is : Menthol, 2 parts ; ether, 15 parts ; chloroform, 100 parts. Have tried : Menthol, 2 parts ; ether, 100 parts ; chloroform, 15 parts, with equal success. It has the hot feeling of menthol, and yet the cold produced by evaporation of the chloroform and ether.

Preparations for injection are, I suppose, most used, and I believe the most reliable, though far from perfect. They act through anæsthetic properties of medicines, but in some cases, I believe, from pressure only.

Mr. J. Morse, of London, suggested compression of the principal nerves of a limb above the point to be operated upon, by a suitable pad or screw. Sir John Hunter tested this method, while amputating the lower third of thigh. The suffering was thought to have been considerably mitigated. Compression of the nerve at *supra orbital foramen* is one method for relief from neuralgia. So when we forcibly inject fluid into gums, we notice the pressure turns them white, and if one extracts while gum is tense I believe the anæsthetic property is due merely to pressure ; but if one wait four or five minutes, to give medicines time to act, the pressure is lost, and the value, or otherwise, of the anæsthetic is apparent.

Among the many preparations, the majority seem to depend chiefly upon the action of cocaine. Prof. S. P. Sadtler, Philadelphia, analyzed ten different preparations, of which only one, Barr's, was free from cocaine. Arophone, extensively advertised as depending upon aristol (which, by the way, is not an anæsthetic), and having no cocaine, while the other nine contained from 20 to 5.68 per cent. cocaine. The analysis showed no aristol, but 1.46