cork, a tube connected with the bellows, pierces the outer part of the double tube, and communicates by a small aperture at the inner end of the cork with the interior of the bottle. The inner tube for delivering the ether runs upward to the extremity of the outer tube.

When the bellows are worked, *a double current of air is produced;* one current descending and pressing upon the ether, forcing it along the inner tube, and the other ascending through the outer tube and playing upon the columns of ether as it passes from the inner tube.

In operating for teeth extraction, most operators throw the spray first on the gum and then upon the tooth and gum. Others cover the gum and other teeth with a non-conductor and throw the spray directly upon the tooth to be removed, taking the precaution to cover the nerve, if exposed, with wax or cotton. By this method some pain will be experienced during the first seconds of application, but it will speedily pass away, and when the gum becomes white, which should be in from ten to fifteen seconds after the first application of the spray, the tooth may be removed.

To obtund sensitive dentine, throw the spray directly into the carious cavity, taking the precaution to cover that portion of the tissue over the pulp with some non-conducting material. Some operators fill the cavity with cotton and direct the spray upon that. The benumbing effect being only temporary, an occasional repetition of the spray will be required until the excavation is completed.

The spray has also been used with success in the treatment of periodontitis, thrown upon the affected tooth and surrounding gum. It is not considered necessary to carry the freezing process to the extent required for extracting teeth, but the application should be longer continued.

It has also been successfully applied to check undue hemorrhage following extraction, and as a means of affording at least temporary relief in severe local pain, especially in cases of neuralgia.

To obviate the disadvantages of local anæsthesia applied to operations in the mouth, the attempt has been made with considerable success, to produce the anæsthesia required by the application of the spray along the course of the trifacial nerve outside of the mouth.

For use in this manner, some prefer concentrated ether, others consider rhigolene as more sure and more easily controlled, and some advise a mixture of the two in equal parts,

The concentrated ether is the officinal *Æther Fortior;* but for this purpose it should be very carefully freed from alcohol and water, which interferes with the success of the process.

Rhigolene is one of the most volatile products obtained by the distillation of petroleum. It is one of the lightest of all known liquids, its specific gravity being 0.625. It boils at 70° F.