

sensibilities of the part, for a tight ligature undoubtedly has an anæsthetic effect in such cases. So convinced am I of this that before proceeding to open a whitlow, I am in the habit invariably of applying a tight elastic ligature to the finger or wrist, as the case may demand, first emptying the part of blood. I presume the explanation is in the interference to the nerve currents. The extremity is then enveloped as far up as the wounds extend in a towel saturated in a 1 to 20 solution of carbolic acid, the object being to imprison, and at the same time to destroy any putrefactive elements that may be lurking about the lacerated tissues. Now preparations are made for the operation. The sponges are wrung dry out of a solution of 1 to 20; the instruments are placed in a solution of 1 to 20, and the part to be operated on is thoroughly cleansed with a solution of the same strength. Carbolic acid has a remarkable penetrating property, blending with oily substances and animal matters, entering the air follicles, and altogether rendering the skin absolutely pure for surgical purposes. A carbolic solution of 1 to 40 is made ready to be used for washing sponges during the operation, for cleansing the hands of the operator and assistants, and for moistening the deeper dressings.

Next in order is the *Spray-producer*—one of the most essential, while it is at the same time the most troublesome item in the whole proceeding. The instrument I show you was recently purchased from Archibald Young, instrument maker of Edinburgh, at a cost of £8 stg. It is the largest size manufactured by him, and is of the make recommended by Mr. Lister. It acts on the principle of Siegle's steam inhaler, the boiler being filled with water, and the bottle with 1 to 20 carbolic solution, giving an antiseptic atmosphere of 1 to 40. The instrument may either be placed on a table and directed on the part, or, better still, held by an assistant, who should be seated. The spray should always if possible be projected towards the light, as it can then be directed with more exactitude.*

Carbolized Cat-gut, one of the antiseptic essentials, should be

* Dr. R. F. Weir, a New-York Surgeon, (who, by the way, has recently written a very able and exhaustive pamphlet on the "Antiseptic Method,") is the inventor of a spray-producer, which, while it can be strongly recommended for its neat and handy properties, lacks the strength of the British instrument.