would have much the better chance of recovery. In actual practice the apparatus is seldom right on the spot adjusted and ready. Critical time is lost, and thus in the above suppositious cases, as they actually occur, the only victim with any considerable chance of resuscitation (aside from those who recover spontaneously and are credited to the apparatus) is the one treated manually.

Even more important is the fact, demonstrated now by universal experience, that when apparatus is known to be obtainable, it is sent for and the manual method neglected. Thus to-day the apparatus in public use is, one the whole, contributing very materially to decrease the saving of life.

## THE ADRENALINO-PITUITARY TREATMENT OF ASTHMA.

By R. Bensaude, M.D., Physician to the Paris Hospitals, and L. Hallion, Deputy Professor at the College of France.

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VERY satisfactory and immediate results can be obtained in the treatment of the attack of asthma by the subcutaneous injection of either adrenaline or of pituitary extract, or, still better, by a mixture of the two substances.

The solution with which we obtained the results to be set forth below contained per c.c. half a milligramme of hydrochloride of adrenaline and an amount of disalbumenized total extract of pituitary body corresponding to o. gr. 25 centigrammes of the fresh gland. This we employed at the rate of one c.c. a day, but one of our patients, unknown to us, made three injections in twelve hours without any untoward symptom.

We have employed the adrenalino-pituitary mixture in 56 cases of asthma, and also in a few cases of persistent spasmodic cough. The youngest patient was 8 and the oldest 60 years of age. We have given, in all, some 500 injections.

In almost every instance the treatment determined subsidence of the asthmatic attack. The effect usually made itself felt within from two to five minutes after the injection, and a single injection in most instances sufficed to cause the attack to subside. As a rule the relief is immediate and complete. One of our patients, employed at a neighboring railway station, when he feels the attack coming on, runs round to the hospital, gets his injection, and is able to return to work in the course of a few minutes. In most of these cases not only does the attack cease, but complete quiescence takes place, so that when the attack is by night refreshing sleep follows.