

had been previously attempted by similar but less perfect means.

That the practice of surgery may become of still greater service to the community, it is therefore necessary now to turn the surgical mind in another direction, and, by developing the science, to remove the necessity of what has been called the opprobrium, but which is nevertheless the glory of the art—operative surgery. Scientific surgery must be cultivated with greater diligence and zeal, for from it must come any fresh achievements and new conquests. At the same time that we perfect the use of the knife, we must strive for its substitution by means more subtle but equally potent and effectual. It is true that in many cases, as in accidents and injuries, the knife cannot be dispensed with, but it is the province of scientific surgery to find out what will prevent diseases attaining the magnitude that entails the horrid necessity of operative interference.

It is, however, a serious fact, that notwithstanding the perfection in the manufacture and mechanism of instruments and the methods of using them, the results of operations, as regards life, remain about the same as when they were more rudely performed and with instruments less ingenious. The results of a given operation as regards the individual are better, but the mortality of all operations has certainly not diminished in anything like a proportion corresponding to the progressive perfection of surgical manipulations. All the causes of this are not evident, but some are sufficiently obvious to be traced out, and we shall find for instance, that there has been very little improvement in the external hygienic conditions by which the patient is surrounded before and after the operation. He is placed in the same wards, most of which are ventilated in the same rude manner as formerly, and little has been done to diminish the risks attendant on surgical wounds in the wards of the hospital. The fact is, that what is often regarded as the result of an operation is the effect of hospitalism; and although a certain mortality may be necessarily associated with the system of hospitalism, it is equally certain that the number of deaths may be greatly diminished by attention to a strict hygiene. It is this part of the subject of scientific surgery that calls for a closer study and promises greater results than perhaps any other department.—*Lancet*.

#### AN IMPROVEMENT ON ESMARCH'S ELASTIC BANDAGE

By W. HARRISON CRISP, House-Surgeon to St. Bartholomew's Hospital.

Esmarch's admirable suggestion of using an elastic bandage to exclude the blood before operating on limbs, and the complete success attending it, are now probably well known. The following is a simple modification of his arrangement, by which many yards of elastic bandage may be dispensed with, and it can be easily and quickly applied.

A short india-rubber tube is used, not only to prevent the blood from returning to the limb, but also for the purpose of removing it in the first place. The two ends of an india-rubber tube,

twenty-one inches in length and about three-eighths of an inch thick, are bound together with a piece of twine, the whole forming an elastic ring seven inches in diameter. A grooved reel revolving between a double handle completes the necessary apparatus.

To apply this to the arm, three or four complete turns of the elastic ring are wound tightly round the hand in such a manner as to include the fingers and thumb, care being taken that the turns lie even and do not cross one another. The reel is then put under the free portion of the ring connecting the upper and lower coil. The reel is passed round and round the limb in an upward direction: thus each coil is unwound from below as another is added above. In this way four tight coils of india-rubber are carried up the limb to any distance required. The degree of tightness can be regulated with the greatest nicety by the distance the reel is drawn from the limb by the bandager.

This method of driving blood from the limb answers perfectly in the arm and in the lower part of the leg; but in carrying the bandage over the popliteal space the flexor tendons prevent the artery being effectually compressed. A firm pad in this space would probably answer the purpose.

To remove the bandage, it may either be unrolled by reversing the action of the reel, or the twine connecting its two ends may be cut with scissors.

#### SHORT NOTES.

##### A NEW SIGN OF DEATH.

Dr. Liersch states it is well known that when the cornea of a living eye is punctured to evacuate the aqueous humour the pupil always contracts; this, he asserts, does not occur when the puncture is made in the eye of a dead person. He points out this as a simple and certain means of diagnosis of apparent from real death.

##### CANCER ORIS SUCCESSFULLY TREATED BY A SATURATED SOLUTION OF IODINE.

Dr. J. G. Miller reports (*Kansas City Medical Journal*), three cases of cancer oris successfully treated by tonics and the local application of a saturated tincture of iodine prepared by putting as much iodine into the compound tincture as it would dissolve.

##### COD LIVER OIL BREAD.

In order to disguise the taste of cod liver oil, MM. Carré and Lemoine have prepared a special kind of bread, made with oil in the following way:—Oil, 75 grammes; flour, 335 grammes; milk, 90. The oil is first incorporated with the flour. The paste is divided into small loaves of about a quarter of a pound each, which have scarcely any taste, and are of a very agreeable appearance. Dr. Bouchut, of the Children's Hospital, has made a very satisfactory trial of this new means of administering cod-liver oil.

##### THE CURABILITY OF LARYNGEAL CONSUMPTION.

In the course of a lecture at the London Hospital, Dr. Prosser James made an important

statement with regard to the curability of laryngeal phthisis. It is well enough known that consumption may be arrested, but it has hitherto been laid down that one form of it, laryngeal phthisis, is rapidly and necessarily fatal. Now in such cases he had witnessed the arrest of the disease. In one instance the lungs, as well as the larynx, were affected; nevertheless, the patient recovered and resumed employment as a public singer.

##### IODIC ACID IN HYPODERMIC INJECTIONS.

Dr. Luton has been investigating the above substance, the properties of which appear to be very remarkable. Iodic acid is highly soluble in water; a solution to one-fifth can be easily obtained, and it is that which Dr. Luton employs. In this proportion iodic acid does not produce a sore, but it causes amidst the tissues into which it is injected a deep modification which induces rapid absorption. Dr. Luton has employed it in goitre, in indolent adenopathic swellings of the cervical and submaxillary regions, and in a case of osteo-periostitis of a phalanx of the hand. The results have been excellent. Upwards of half a drachm of the solution, as above, has been injected at once. This substitutive injection is thrown into the midst of the tumour, and Dr. Luton thus utilises the natural envelope of the ganglion or degenerated growth, and avoids a diffusion which might be attended with some inconvenience. The local reaction consecutive on the injection is somewhat marked, but is never accompanied by an accident; resolution, without mortification is almost invariably the rule.

##### HYOSCYAMIN.

Dr. Oulmont recently presented to the Academy of Medicine a most valuable paper, containing the results of his more recent researches on hyoscyamin. Dr. Oulmont's conclusions may be briefly summed up as follows:—(1) Hyoscyamin presents all the active properties of henbane; the fixity of its composition gives greater precision to the results obtained with hyoscyamin than with henbane. (2) Hyoscyamin must be administered in weak doses to begin with (two milligrammes daily), either in pills or in the form of hypodermic injections. The dose may be increased to ten and even twelve milligrammes daily. (3) The medicament should be continued, even should any slight symptoms of intoxication supervene, such as dryness of the throat and dilatation of the pupils. Should the symptoms, however, become grave, its use must be discontinued. Moreover, the symptoms are always transitory, and disappear rapidly. (4) Hyoscyamin exerts a narcotic action on man. It is efficacious whenever there is pain, and especially neuralgia, but its efficacy is less than that of opium or belladonna. (5) The medicament exerts a favourable action in spasmodic and convulsive neuroses. It cures nervous trembling in cases where all other remedies have failed. It brings on remarkable amendment in senile trembling and paralysis agitans. (6) Its action is nil in locomotor ataxia. In traumatic tetanus it produced marked remission in the symptoms, and therefore deserved to be further employed in these cases.