examination, when injected subcutaneously into guinea-pigs and a monkey, caused, after several days, death from plague infection. It has not been ascertained who placed the plague culture among the cholera ones after all possible tests of the cholera culture had been made. An investigation of the entire matter was pursued by the government prosecuting attorney at our request, and later the governor-general, in order to satisfy public opinion, appointed a committee of eight, six Filipinos, one American and one Englishman, three of which committee constituted a technical committee, for investigation.

While the serum division of this laboratory is also in charge of Dr. Strong, and while this division prepares our regular cholera vaccine, it must be clearly understood that the regular preparation of our cholera prophylactic had absolutely no connection with this matter and that the vaccine used by Dr. Strong on the day of the accident is entirely distinct from the preparation with which he is identified. The method used on the last twenty-four prisoners is the one which is best known by the names of "Ferran" and "Haffkine." It is perhaps unnecessary to add that the laboratory has prepared several million units of vaccine virus and several thousand doses of plague prophylactic which have been used (in addition to the cholera prophylactic) with good results and without accident.

A NEW NASAL DRESSING.

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I think it will be generally admitted that the ordinary methods of packing the nasal cavities after operation are unsatisfactory. Packing with gauze is particularly so. It is difficult by this method to secure sufficient pressure in the proper place to control hemorrhage efficiently. By its capillarity the gauze acts as a drain, keeping up a continual oozing, which may even reach alarming proportions. It is continually getting down into the pharynx, causing retching and tempting the patient to remove it. Its removal is painful, interferes with healing and always occasions more or less secondary hemorrhage. The open method, with or without the application of collodion to the surfaces operated on, is dangerous and not to be considered as a routine measure.

The Simpson tampon of compressed absorbent cotton in various sizes is a fairly satisfactory dressing but for the difficulty attendant on its introduction or removal. It bends, swells rapidly on contact with the secretions of the nose, making it difficult to introduce and place properly. It clings to the injured surface most tenaciously, causing severe pain and making its removal in the mass practically impossible. When removed piecemeal shreds of considerable size are left adherent to the wounded surfaces and hidden away in nooks and crannies, where it is almost impossible to distinguish them from the wound surfaces when they are stained with wound secretion. Unless discovered and removed they keep up a constant irritation, prolong the healing process and contribute to the chances of infection.

To overcome these objectionable features I use the following method, which, it seems to me, solves the problem of nasal packing after most operations.

From a piece of sheet paraffin, or dental wax, as it is called, two splints are cut, conforming in shape to the Simpson nasal tampon and about 15 mm. ($\frac{5}{8}$ in.) longer than the tampon, and a piece is cut from a second

tampon to fill in the extra length. The tampon is now placed between the two strips of paraffin, to which it is cemented by means of aristol-collodion. Any thickness desired may be had by varying the thickness of the Simpson tampon, either by splitting them or by using the different thicknesses in which they come. The completed tampon is now pushed into place, a procedure which is facilitated by the smooth waxy surfaces of the splints. Once in position the cotton rapidly absorbs moisture from the adjacent mucous membrane and, swelling, forces the paraffin plates against the septum and the outer wall of the nasal cavity. Under the influence of the body temperature the paraffin becomes pliable and is thus molded into accurate apposition with the wound surfaces, controlling hemorrhage and making an ideal non-irritating, protective dressing. When the time comes for its removal, which should be at the end of 48 hours, the tampon can be removed *en masse* easily and painlessly, there being absolutely no adhesion between the paraffin plates and the wound surfaces. Their greasy smooth surfaces offer no resistance to removal and they slip out without pain, hemorrhage or other inconvenience.

A spur or ridge of the septum may be removed coincident with the removal of a turbinate, without the slightest danger of synechia, if this dressing is used and a single plate of the paraffin replaced after the removal of the tampon, and worn until healing is complete.

In submucous resection of the septum it is an excellent dressing. Using a tampon in each nostril, any degree of firm equable pressure may be obtained and maintained as long as desirable, and they may be changed as often as desired without disturbance of the parts.

By placing the Simpson tampons in a letter press or between heavy weights to prevent their expanding, they may be impregnated with alcoholic solutions of aristol, iodoform or other antiseptics and allowed to dry before being placed between the paraffin plates, which also may be kept in an antiseptic solution, thus making an antiseptic as well as aseptic dressing.

A METHOD FOR THE RAPID DIAGNOSIS OF DIPHTHERIA BY THE GENERAL PRACTITIONER.*

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The necessity for the early diagnosis of diphtheria is often painfully apparent to the general practitioner, as failure in that regard too often results in involvement of the larynx, especially in children, while this, in turn, frequently ends in the early demise of the child. I, therefore, offer this method to the profession, with the hope that it may facilitate the diagnosis of this disease:

It is necessary first to obtain a culture from the throat or nose of the patient by means of a swab of absorbent cotton or the platinum needle. A swab which is very convenient for this purpose may be made as follows: An ordinary test-tube is sterilized in the Bunsen or alcohol flame. A wire is bent with a loop at both ends, and made just long enough to fit the tube. One end of this wire is then wound with wick asbestos in the form of a convenient sized swab, the other end is wound with similar asbestos, so as to fit the top of the tube as a stopper, similar to the cotton stopper of the ordinary culture tube. The whole swab is then sterilized in the flame and placed within the tube, and is then ready for use. This swab

* Read before the Macoupin County (Ill.) Medical Society, Jan. 15, 1907.

tube may be carried in the overcoat pocket and used in any suspected case. Its chief advantage is that it may be used repeatedly, sterilizing it each time in a flame. I am indebted to Dr. Wright of the staff of the Calumet and Hecla Mining Company's Hospital for this method of preparing a universal swab, and wish to pass it on to others for what it is worth.

The next step in the process is to obtain some Loeffler's blood serum tube slants; these can be obtained from any of the reputable pharmaceutical houses and may be kept on hand for a reasonable length of time without contamination. They may be kept at the office or one may be carried in the pocket, as necessity demands.

The swab is rubbed over the suspected area of nasal mucous membrane, or tonsil or pharynx, and a smear made at once on an ordinary cover-glass or glass slide. The serum slant is inoculated by passing the swab gently over its surface, and the swab is then sterilized in a blue flame and replaced in its tube for future use.

The inoculated serum tube must be incubated for 12 hours; this can be easily done in the following manner: The tube is slipped in the inside vest pocket and kept next the body for twelve hours, the physician acting as his own incubator. At the expiration of that length of time if the diphtheria bacillus be present there will appear a yellowish-white glazy growth,

The practitioner may also keep a check on his diagnosis by sending specimens to the state laboratory for diagnosis.

IMPROVED FRACTURE APPARATUS.

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The apparatus here shown is the result of combined effort on the part of Dr. Frederick T. Mueller of Chicago and myself, with the assistance of Mr. S. George Hubbell of Milwaukee, a mechanical expert, who carried our ideas into effect. The purpose of the machine is to enable the surgeon to reduce a fracture of any of the long bones of the lower extremity and hold the fractured ends in apposition while a permanent set is made by a plaster cast. It is used also in various orthopedic operations.

To facilitate the reduction of fractures the patient is placed in a horizontal position on the machine, the feet being separately fastened to the foot rests on the ends of

with white colonies here and there, showing irregular edges and smooth surfaces. Smears from this culture are examined microscopically, the staining being done with Loeffler's alkaline methylene blue stain. If the characteristic bacilli with their long-beaded threads, clubbed ends and irregular-sized dots are found the clinical diagnosis of diphtheria is corroborated.

McFarland says: "Very few other germs found in the throat will produce so rapid a growth on this culture media." This I have found to be true, perhaps with one exception, and that is some varieties of the streptococcus; these, however, may be differentiated by the characteristic dew-drop appearance of the culture on the serum slant, when it first appears, and the chain-like structure of the coccus under the microscope. While waiting for the growth to develop the smears made directly from the throat may be examined microscopically, and if suspicious bacilli are found it will help to confirm the diagnosis.

The advantages of this method are: the necessity of waiting from 24 to 48 hours or even more is obviated.

The general practitioner becomes expert in identification of the diphtheria bacillus.

the long rods, the sacrum resting on the horizontal plate supported on the vertical post, which latter comes between the legs and touches the pubic arch. The shoulders of the patient rest on the support at the free end of the main frame, which is attached to the table, while the head rests on a box or on pillows placed on the table.

The two upright supports seen on the horizontal rods are to support on one side the sound knee and on the other the site of fracture so as to prevent backward bowing, the extremities being kept in even planes. In order to facilitate adjustment of fragments and to overcome distortion of proximal fragments such as occur in fractures of the upper third of the femur, the two long rods may be adjusted to any angle the human leg can be placed in. These rods are attached by their proximal ends to the main frame of the apparatus by friction-discs, which permit of universal joint movement.

The extension of the legs is made by screws attached to the hand wheels seen on the foot brackets. These screws pull the body toward the foot rests until the pubic bone impinges firmly against the vertical post in front of the horizontal plate on which the sacrum rests. Ad-