Part Second.

MINOR SURGERY.

Minor, or lesser surgery, is that department of medical practice which has to do, more particularly, with the more common and every-day surgical conditions that are presented to the medical practitioner, and do not require special or peculiar surgical skill or knowledge. The catalogue of subjects embraced under this head would include the instruments needed, the methods of keeping them in order, and instruction as to selection of the same; the ordinary dressing of wounds and injuries, with some instruction as to the methods of repair; the construction and application of bandages, splints, and plasters; catheterism; vaccination, and in short the many duties, of a surgical nature, that are daily demanded of the general practitioner, and the manner of affording temporary relief, in cases of accident, until more leisure is found for permanent treatment, or a properly qualified surgeon can be procured.

It can justly be demanded, that all who desire to devote themselves to the responsible calling of the surgeon, should first thoroughly master the elements of the science. For this reason a treatise on Minor Surgery should form the text-book for the first year of study, the subject bearing the same relation to surgery that dissection does to anatomy, or the common rules of arithmetic to higher mathematics. There is little of the science in this department of surgery, the art claiming almost exclusive attention. Whilst a reversal of

the ordinary rules of systematic education, the circumstances here require attention to the "tools of the trade" before we are ready to comprehend the indications for their use.

In private surgical practice, minor surgery must necessarily demand a large share of the attention of the surgeon, he being compelled, from want of trained assistants, to superintend the dressings and all the details of preliminary and subsequent treatment. In public or hospital practice, much of this is relegated to the assistants and other internes, who should possess sufficient skill to entirely relieve the surgeon of all care in such particulars. Speaking from personal experience, I can assure the aspirant for surgical distinction, or hospital preferment, that the surgeon will prefer accurate knowledge of the principles and practice of minor surgery, to theoretical knowledge of the higher departments. Let the student and young practitioner, therefore, devote a large portion of his time to the study of the principles of minor surgery, and familiarity with its practice.

Part Third.

INSTRUMENTS FOR DRESSING, AND MINOR OPERATIONS.

For minor operations and dressing wounds, the surgeon carries a small pocket case, containing instruments, for the most part, shutting into their handles like a pocket knife, the number and style of the instruments varying with the taste or fancy of the surgeon. Those engaged in special surgical practice usually require a small case with a limited number of instruments; those in country practice, who make no special pretensions to surgery, require a larger case, one containing instruments, sufficient in number and size, for the ordinary emergencies in medical life.

For the former, the instruments might be as follows,

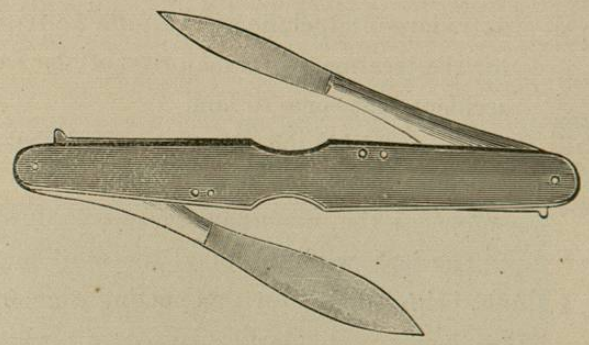

Fig. 1.

either each one in a separate handle, or two blades to each handle. The latter is much the more convenient, if care is

taken not to have instruments in the same handle that are to be used consecutively. The blades had better be provided with either a spring or sliding catch, to prevent accidents from an unexpected closure of the knife at critical times. The instruments in my case, one that I have used for nineteen years, are :

Fig. 2.

Scalpel; curved, sharp-pointed bistoury; curved, probe-pointed bistoury; tenotome; tenaculum; aneurism needle; exploring needle; exploring trocar; needle and artery forceps combined; dressing forceps; straight scissors; three silver probes; small pointed, Nelaton's bullet probe; No. 8 jointed silver catheter, male and female; grooved director, besides different sized needles, silk, silver wire, iron wire, pins, harelip pins, and adhesive plaster. With such a case nearly every minor operation may be performed, even some of the major; and when the rural practitioner adds a small saw and an extra large scalpel, he will be quite well equipped for the treatment of a majority of the cases of accident that come to him.

The *scalpel* is the only instrument that varies much in shape, the more frequent forms are as shown in the accompanying cut:

The last will be found the most generally useful, I think, being supplied with a cutting edge on both sides, and thus being particularly adapted to opening abscesses as well as the ordinary purposes of dissection.

The *curved bistouries*, are as seen in the annexed figure, varying only in the degree of curve.

The tenotome is shown in the upper blade of Fig. 1, and

may be made with a sharp point, as in the sketch, or blunt.

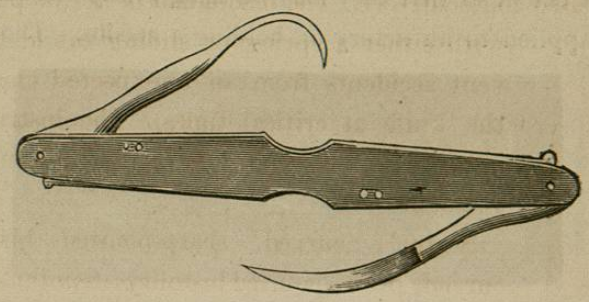

Fig. 3.

Perhaps for young surgeons the latter will be preferable, as there being less danger of injuring the deep structures, they will have greater confidence in its use.

The *tenaculum* is shown in the lower blade of Fig. 3, the curve being greater or less as the operator may fancy.

The *aneurism needle* is simply a blunt tenaculum, with an eye in the point, for carrying a ligature around an artery.

Exploring needles are sharp-pointed needles, set in a handle, grooved on one side. On pushing them into suspicious swellings the groove permits the escape of some of the contents, which will settle the character of the swelling conclusively. The *exploring trocar* is a very delicate trocar and canula, which may be used for the purpose of evacuating small cysts, or for purposes of exploration only.

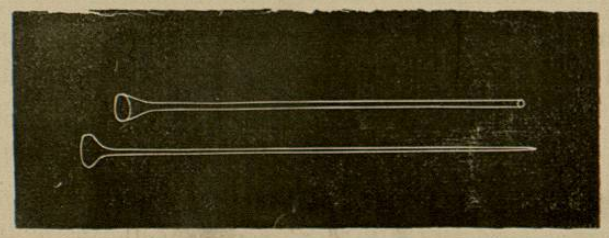

Fig. 4.

Needle and artery forceps combined, are similar to the

ordinary dissecting forceps, except that they are furnished with a catch, so that they may be held firmly closed, when once applied to an artery or holding a needle. The inside

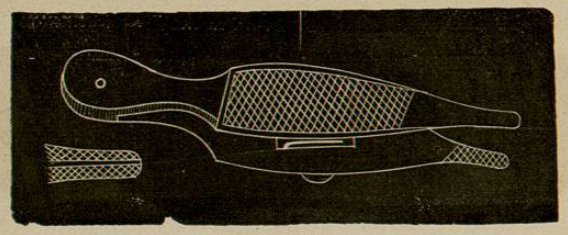

FIG. 5.

of the points are grooved for the accommodation of the needle. They are designed to shut closer than ordinary forceps, the points meeting throughout their whole length. In testing the excellence of the instrument, close it firmly, and if the points do not separate on extreme pressure, they are good. Otherwise they should be rejected.

Dressing forceps may be made as in Fig. 6, known as "ring" forceps, or an ordinary pair of dissecting forceps

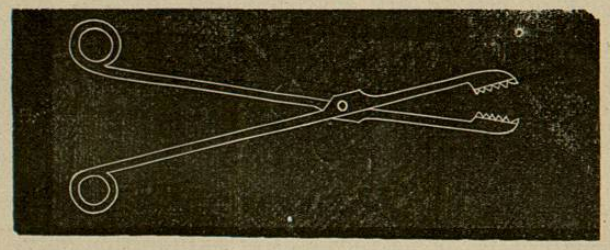

FIG. 6.

may be made to answer every purpose. The former are better, as with attention to the points, which may be broadened and slightly hollowed out, they will answer for polypus forceps as well.

FIG. 7.

Scissors are of various shapes, the straight form with the shanks meeting

closely are to be preferred, as they occupy less room in the case, and do not require so much space to be opened in.

Probes are usually made of German silver, and are about four inches in length, with a button on one end, and the

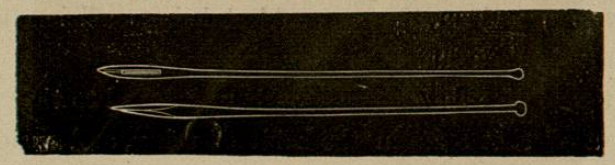

FIG. 8.

other either flattened out and pierced with an eye, or fashioned with a blunt point. With these probes, one of them can be furnished with a male screw, which fits into a small extension with a porcelain button, making an excellent bullet probe according to Nelaton's pattern.

A *catheter*, about No. 8 in size, in a number of sections fitting into each other with a screw, will be indispensable. Both male and female catheter can be thus at hand when needed.

Directors are made in a number of styles, the more generally useful, I think, will be that shown in Fig. 9. For some purposes the finishing at the proximal extremity in the form of a scoop, will be found advantageous.

FIG. 9.

The remainder of the list of instruments will not need special mention, except that the needles are more generally useful when made with a double cutting edge and a short curve. There are a number of styles, however, some of which may be useful in exceptional cases. One of them, designed by DR. LEVIS, of Philadelphia, is deeply grooved, in place of the customary eye, into which the wire is twisted; the object is to avoid the increased size of the shank which is inevitably produced by using wire in the ordinary

needle. Another modification is to have the proximal end of the needle fitted with a female screw, into which the wire is inserted by a screwing motion. While these needles are quite satisfactory in practice, I have never found it necessary to use them, the same object being sufficiently well obtained by securing a broad cutting edge.

In the volume on *Emergencies* I have referred to the "accident case" that I am in the habit of using, and which all practitioners will find useful; at present it will be proper to refer to a more extensive and complete arrangement, which is particularly desirable for hospital purposes, and in private operating rooms.

The dresser or assistant should provide a "dressing tray," in shape and size like the ordinary "butler's tray," covered with enameled cloth, and supported by a light folding frame,

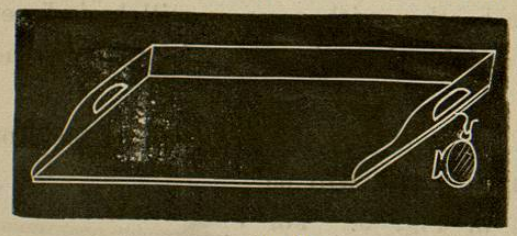

FIG. 10.

so that it can be readily moved about from place to place. This should be kept constantly supplied with the following articles, and deficiencies renewed, every day, as the first duty in the morning:

Chloroform; Ether; Amyl nitrite; Hypericum; Arnica; Calendula; Hamamelis; Cosmoline; Aqua ammonia; Perchloride of iron solution; Sweet oil; Collodion; Absorbent cotton, or Lint; Adhesive plaster; Isinglass plaster; Pincushion, well stocked with pins, etc.; skein of silk; silver and iron wire; Bandages; Soap; Towels; Sponges. Pieces of old linen or muslin for compressess; and a tin hand-

basin hanging from a hook in the side. It will be well to keep probes, forceps, and scissors also on this tray, and a razor will often be found very useful.