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A TEXTBOOK OF

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GYNÆCOLOGICAL SURGERY

BY

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**I DEDICATE
THIS BOOK**

TO

Those who have taught me and those I have taught

Those I have worked for and those who have worked for me

Those who have helped me and those I have helped

PREFACE TO THE SIXTH EDITION

THIS book, which is concerned wholly with the operative side of gynæcology, is a record of personal experience acquired at the Middlesex Hospital and Chelsea Hospital for Women, and the other hospitals with which I have been connected. In the four years which have elapsed since the fifth edition was published, the forward march of surgery has quickened in pace, and it is now necessary to include descriptions of the technique of pelvic exenteration and the radical operation for cancer of the vulva, besides making many smaller additions and numerous emendations.

In the preface to the first edition published forty years ago by Comyns Berkeley and myself the hope was expressed that the volume would be of service, on the one hand to those who were proposing to follow this department of surgery more particularly, and on the other hand to those who were of necessity called upon to perform gynæcological operations, and had not had opportunity for acquiring the ripe experience brought by long apprenticeship in the gynæcological wards and operating theatre. That hope, I have good reason to believe, has been realized to a very gratifying degree, and in presenting this sixth edition, 40 years after the publication of the first, I trust that it will prove still more useful to those for whom the book was originally intended.

To my publishers I wish to express my thanks.

V. B.

NOTE ON THE DRAWINGS

In order that a drawing of a pelvic operation may show clearly what the artist intends to convey, it is necessary for him to superficialize the parts concerned and thus make the procedure appear more easy than it is. For the same reason, in this series of drawings I have deliberately omitted all towels and wrappings except where they form the subject of the text.

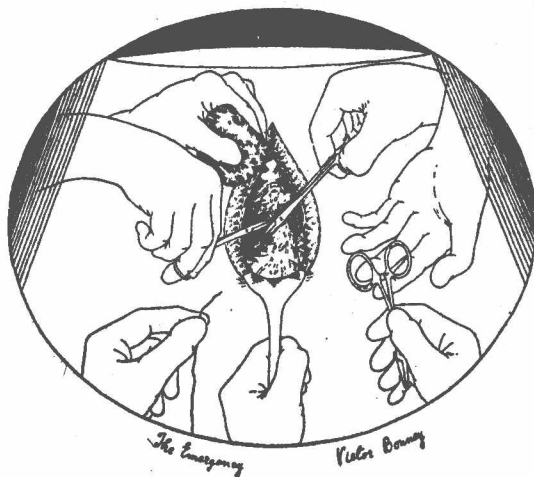
V. B.



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A TEXTBOOK OF GYNÆCOLOGICAL SURGERY

CHAPTER I

GENERAL OPERATIVE CONSIDERATIONS

THE SURGEON

"Send here the bold, the seekers of the way,
The passionless, the unshakeable of soul,
Who serve the inmost mysteries of man's clay."
Kipling

THE surgeon when operating should always remember that the character of the work of his subordinates will be largely influenced by his own bearing. While it is impossible to lay down definite rules suitable for all temperaments, nevertheless there are certain points of which a consideration will, we trust, prove as useful to those embarking on a surgical career as they have been to us.

Anyone who has taken the trouble to study the work of a number of operators cannot fail to have observed how variously the stress and strain of operating is borne by different minds, and will deduce from a consideration of the strong and weak points of each operator some conception of the ideal.

The keystone of the surgeon's bearing should be self-control and, while it is his duty to keep a general eye upon all that takes place in the operating theatre, and without hesitation to correct mistakes, he should be continually on his guard against becoming irritable or losing his temper. The man who, when confronted with a difficulty, gets irritable and unsteady has mistaken his vocation, however dexterous he may be, or however learned in the technical details of his art. The habit of abusing assistants, the instruments, or the anaesthetist, so easily acquired and with difficulty lost, is not one to be commended; the mental incertitude of which such behaviour is the indirect expression will inevitably spread to the other members of the staff, so that at the very time when the surgeon is most in need of effective help he will find it fail him.

The assistants should be encouraged to look forward to each operating day as one of strenuous but pleasurable work, but this object will not be attained if constant fault-finding forms part of the routine. It will also be well for the surgeon to remember that his bearing will be the subject of keen criticism by the spectators, and that there is nothing so much admired as fortitude in adversity. On the other hand, he must avoid any temptation to "play to the gallery," for sooner or later such conduct will be detrimental to the patient. A surgeon should not gossip, for it is impossible for him to do his best work if he is continually engaged in irrelevant chatter; but a silent surgeon is unprofitable to those around him, for he should clearly outline the steps of the operation as it proceeds, and by apposite and instructive remarks compel the attention of those who are there to learn. It is the mark of a good operator to become more and more silent as the difficulty of the operation increases, of a bad one to become more loquacious.

It falls to the lot of every surgeon, when operating, sooner or later to stand face to face with threatened disaster, and even for the most expert and confident there must be moments when the heart sinks. On such occasions the operator should remember that, if he does not hesitate, the deliberate and vigorous application of general surgical principles will nearly always, temporarily at any rate, surmount the difficulty, while half-hearted and nervous measures merely increase it. A sturdy belief in his own powers and a refusal to accept defeat are the best assets of a calling which pre-eminently demands moral courage.

Before operating, the surgeon should go over in his mind the various possibilities of the projected procedure, so that he may be the better able to meet them. Likewise, after the operation he will find it profitable to recall the difficulties he has encountered and the technique he adopted in surmounting them, for it is only by cultivating a habit of self-examination that his workmanship will continue to improve.

In hospitals it necessarily happens that a very large amount of work must be got through in a single operating day, but it is a grave mistake to undertake more work of an arduous nature than the physique and mind of all concerned can fairly tolerate. Operations performed when everybody is tired out are ill done; the surgeon's hand and mind become less steady, his assistants are less apt, the nurses are less careful, and the patient's nervous system is exhausted by long waiting.

The surgeon will do well to bear in mind that until the day of his retirement he should steadfastly seek to improve his technique, for he may rest assured that he will never be perfect, and that there is some good lesson to be learnt from seeing the work of any operator, even if it be only what to avoid. Self-satisfaction is a deadly enemy to progress.

Lastly, nothing is so contemptible as publicly to decry the work

of other men. To hear a surgeon loudly proclaiming the faults and failures of another indicates that he has not attained to that experience which begets leniency, shows a lack of good fellowship, and argues an absence of nicer feeling which sooner or later will be injurious to his patients.

SPEED IN OPERATING

Speed as the outcome of perfect operative technique is a characteristic of a fine surgeon, as a striving after effect is the stock-in-trade of a showman. An operation rapidly yet correctly performed has many advantages over one as technically correct yet laboriously and tediously accomplished. The period over which hæmorrhage may occur is shortened, the tissues are less bruised, the time of exposure of the peritoneum in abdominal section is minimized, the dose of the anæsthetic with its attendant evils is reduced, and shock, which is the expression of all these factors, is lessened. Moreover, less strain is thrown upon the temper and the legs of the operator and his assistants, and the interest of the latter and of the onlookers is maintained at its highest level.

There are, however, two aspects of rapid operating which must not be overlooked. The first is the fact that there is a much greater liability to oozing after the operation has terminated; for when a surgeon has taken two hours to perform an operation, any recurrent bleeding, if it is going to occur, will have declared itself in that time; whereas, had the wound been finally closed at the end of half an hour, the opportunity of discovering the bleeding might have been lost. It is for this reason that the results of the brilliant surgical prodigy and of the laborious plodder are not always so different as at first sight might be expected, since the after-results due to mauling and exposure of the tissues by the latter are, in the former, balanced by the local reaction and fever set up by post-operative oozing.

The second aspect, of equal importance, turns on the fact, not generally appreciated, that the amount of shock produced by an operation depends not only on the amount of operative trauma that its performance entails, but also on the time over which that trauma is spread. That is to say, a given amount of tissue damage will be better borne by the patient if it is spread over a long time than if it is inflicted suddenly, and a given loss of blood will be less felt if its escape occupies, say, an hour rather than ten minutes.

Hence a surgeon whose rapid but rough operating merely succeeds in bestowing on his patient in twenty minutes the same amount of shock impressions as his slower colleague would bestow in an hour, loses by his rapidity, whereas the quickness of the operator of real

outstanding excellence effects not merely a saving of time but a diminution of shock impressions in still greater proportion.

Rapid operating, then, should be acquired only as the result of continual practice and constant thought as to how best to reduce the number of manipulations required and the shock impressions resulting from them to that minimum which, taken in relation with the time over which they are spread, gives the best immediate results to the patient without sacrificing the final efficiency of the operation. Thus obtained, speed is an attribute in the highest degree to be desired and striven for.

There are occasions when the condition of the patient warrants the omission of certain steps from the perfect technique of the operation for the sake of shortening it, but habitually to achieve speed by imperfect technique is poor surgery.

It is impossible to lay down any rules as to time for the various operations dealt with in this work, so much depending upon the nature of the case and the circumstances in which they are performed, for an operation which may take only thirty minutes with full hospital assistance may take double that time when performed with a single assistant in a private house. Given good conditions, we find that all of them, with a very few exceptions, can be performed well under an hour, and most of them under half an hour.

OPERATIVE MANIPULATION

The surgeon should continually endeavour to reduce the number of manipulations required in a given procedure to the minimum consistent with its proper performance. Anyone who will take the trouble attentively to observe the performance of an operation cannot fail to be struck by the number of unnecessary movements made. This wastage of time and effort cannot, of course, be entirely abrogated, much of it being the expression of the wavering intentions of the operator in the face of new difficulties continually presenting themselves. Nevertheless, some part of it is due solely to bad habits and a lack of determination on the part of the surgeon to subject his movements to self-examination, and to improve upon them whenever possible. Thus, to perform the primary incision through the abdominal skin and fascia by a series of niggling cuts is an example of bad technique, as is the practice of passing a needle with a forceps, removing and laying down the forceps, and then extracting the needle with the fingers of the left hand. The needle should, of course, be extracted with the forceps and the two returned to the instrument table together.

These examples might be multiplied many times, but they will suffice for the purpose we have in view. Manipulations should be

conducted with the finger-tips ; there is nothing so inelegant as to see the surgeon's hands sprawling over the operation area, obstructing not only the spectators' view but his own. It is better, whenever possible, to keep the hands entirely out of the wound by performing the necessary manœuvres instrumentally.

All operative manipulation should be gentle. Rough handling of the tissues greatly increases the shock of an operation, and should be strictly avoided whenever possible. There are occasions when the surgeon is obliged to use a certain amount of force as, for instance, when disengaging a very firmly impacted tumour from the pelvis. By one experienced, however, considerable power may be brought to bear which, because it is exercised in the right manner and only for a short time, is not harmful to the patient. A surgeon who is habitually clumsy and heavy-handed is subjecting his patient throughout the operation to unnecessary shock impulses.

CHAPTER II

SURGICAL TECHNIQUE

INSTRUMENTS

THE aim of the surgeon should be to use as few instruments as is compatible with the efficient performance of the operation he is engaged upon. There are many reasons for this. The fewer instruments a surgeon has, the more uses he learns to put them to, and he is thus able to save time in immaterial details of the operation which can be profitably expended on its essential features. Thus, a Spencer Wells pressure forceps may be efficiently used for hæmostasis, as a retractor, as a needle-holder, as a dissecting forceps, as a probe, and as a swab-holder. The surgeon who is accustomed to make one instrument serve many purposes is likely to maintain his self-reliance, no matter what the nature of the operation or the circumstances in which he is called upon to perform it, while one whose habit it is to use a special instrument for every separate manœuvre may become worried and unreliable when it is not forthcoming.

In choosing his instruments, a surgeon should, therefore, have these points in mind, and limit, so far as possible, the number of those which are restricted to a single manœuvre, and should remember that a fictitious value has often been and will again be given to some instrument solely on account of the halo surrounding its inventor's name. It has been our experience that those who are too much dependent for the standard of their work on special instruments and apparatus often lack the manipulative skill and ready resource which are the characteristics of the surgeon by grace of nature. Complicated instruments should be avoided whenever possible for, however well they may work in the instrument-maker's shop, they soon get out of order from the wear and tear of boiling. In the long run it is cheapest to use instruments of the best stainless steel and of the finest workmanship, for though their initial cost is greater, they last longer and are not likely to fail at some critical moment. Instruments, we would add, should be kept in perfect order, for such defects as sprung forceps, loose-jointed scissors, and blunt knives, though not very noticeable in a straightforward operation, become painfully apparent when the difficulty and strain of the case test every joint of the surgeon's armour. Simplicity,

then, in instruments, as in other things, should be the key-note of the operation, but simplicity with efficiency. *In medio tutissimus ibis*: an outfit so large as to require for its conveyance a bag resembling a sea-man's chest is ridiculous; one so small that it can be carried in the trousers pocket is dangerous.

The following are the instruments we use:

Scalpel.—Scalpels with removable blades are the most convenient. The blades should be stored in methylated spirit and the handle boiled with the rest of the instruments.

Forceps. **Dissecting.**—Dissecting forceps should be 7 inches long for use in the bottom of the pelvis; the whole of the last inch of the

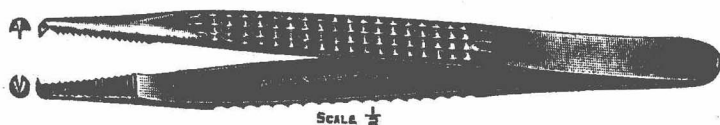


Fig. 1.—Bonney's dissecting forceps.

jaws should approximate and be grooved transversely, for the convenient seizing of needles and masses of tissue; and their points should be rat-toothed to give a better hold in manœuvres requiring delicacy. The instrument shown in Fig. 1 fulfils these requirements.

Spencer Wells.—Two sizes are required, 5 inch and 7 inch. The jaws should approximate before the ratchet locks, so that it is possible to seize small objects without clamping them.

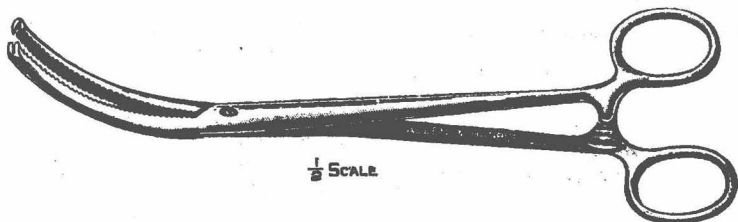


Fig. 2.—Curved Kocher's forceps.

Kocher's.—These forceps are of a similar shape to the Spencer Wells, but their jaws are longer (2 inches) and their ends are furnished with rat-teeth. They are particularly convenient for holding masses of tissue firmly as, for instance, when clamping the uterine arteries on the side of the uterus. We use two sizes, $5\frac{1}{2}$ inches with straight jaws, and 8 inches with curved jaws (Fig. 2), the latter being very useful for panhysterectomy and the radical abdominal operation.

Ring forceps.—These should be 10 inches long (Fig. 3), and they are perhaps the most generally useful forceps in the whole outfit, for they are admirable for securing and tying bleeding-points deep down in the

pelvis when the vessel is enclosed by surrounding tissues and not isolated, and for steadying and pulling up diseased appendages, while they make very good bowel clamps, and can be used for emptying the uterus or for holding swabs.

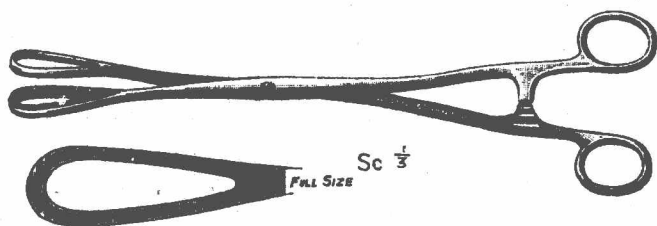


Fig. 3.—Ring-forceps.

Round-ligament forceps.—The forceps shown in Fig. 4 are required for the operation of intraperitoneal shortening of the round ligaments.

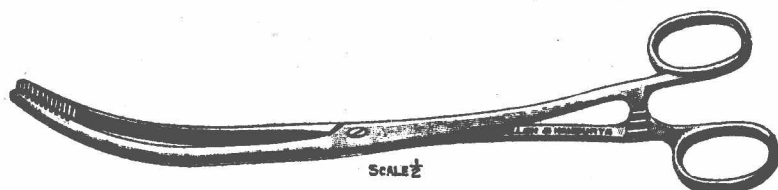


Fig. 4.—Round-ligament forceps.

Towel forceps.—For attaching the sterilized towels to the skin we use forceps with curved pointed grips. They are small and equally suitable for use in all situations.

Moynihan's towel forceps.—We use these to attach sheet rubber to the edges of the abdominal wound.

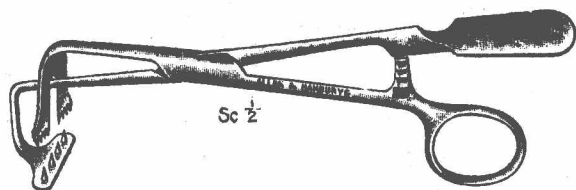


Fig. 5.—Gray's towel forceps.

Gray's towel forceps.—This instrument is admirable for fixing rubber or Jaconette sheeting to the pubic end of the abdominal wound, and also excellent for fixing it at the upper end provided the incision does not extend to the umbilicus (Fig. 5). When it does we use an ordinary towel forceps.

Willett's forceps.—These forceps, originally designed to grip the scalp of the child in cases of placenta prævia, are used by us to extract the head in the lower-segment Cæsarean section (Fig. 6).