shaped somewhat like the ordinary bag, the body of the bag I have had made of three pieces accurately sewn together, a collar of the same material with a tape attached to be slipped over the ordinary Clover bag-mount and tied there.

As may be guessed this bag does not fill and empty as does the rubber one to the breathing of the patient, it is simply put on in a "bunched-out" condition and only a slight rise and fall tells of the expiration and inspiration. My experience with it is that the patient goes under very quietly, I may say with almost suspicious quietness, there is none of the usual noisy breathing, hardly any salivation and absolutely no lividity, abdominal heaving is less marked, the anaesthesia is as quiet as with chloroform. The time occupied to produce anaesthesia is of course longer than with the rubber bag, varying from seven to twelve minutes. The corneal reflex seems to be lost disproportionately soon. The amount of ether consumed is also considerably more—during the first fifteen minutes about twice as much being used—but in a prolonged anaesthesia the disproportion is not so great as will be seen in a note of the appended cases. There is another very great advantage in the use of the linen bag, in that the anaesthetist holds a trump card, so to speak, in the shape of his chloroform drop bottle; should the patient prove hard to anaesthetise or threaten to come round, he can sprinkle a little chloroform on the bag, selecting by preference the place where the linen shows the most marked rise and fall of the breathing. A freshly-washed and starched bag is used for each case; it can be slipped on to the ordinary Clover mount and tied in position in half a minute.

In practice I turn the Clover gradually, but, compared to the old mode, rapidly on to full, and keep it there or thereabout till sufficient anaesthesia is produced; later on a less concentrated vapour will be found enough. Perhaps one is usually inclined to over-value one's own discovery, but in this case I do not think that I make too much of it in saying that it ought to supersede the rubber bag completely. A fresh clean aseptic bag for each patient is a thing to be desired when it can be had at the cost of washing. The entire absence of even lividity will commend it to every anaesthetist, and the possible resort to chloroform in addition without change is a happy incident.

I may say that the bag has been used by several other men here with the same good results. The bags can be had from Messrs. Reynolds and Branson and Mr. Rauschke of this city. I might add that for further asepsis the Clover chamber can be boiled or immersed previous to operation in a 1 in 20 hot carbolic solution. The mask I have had made of thin nickelled brass, with a detachable red rubber facepad, so that the whole can be rendered as sterile as the operator's instruments.

The following is a summary of some of the cases in which the method has been employed:

Extract of Cases.

Date.	Name.	Operation.	Amount of Ether.	Time of Administration.	Average Time per Ounce.
July 1st..	Mrs. T.	Choledochotomy, etc.	11 ozs.	1 hr. 40 min.	1 oz. in 9 min.
July 1st..	Mrs. F.	Nephrotomy	5 ozs.	45 min.	1 oz. in 9 min.
July 2nd	Mr. D.	Appendectomy	4 ozs.	40 min.	1 oz. in 10 min.
July 3rd.	Mrs. B.	Ovariectomy	7 ozs.	48 min.	1 oz. in 7 min.
July 6th.	Miss M.	Gastro-enterostomy	4 ozs.	40 min.	1 oz. in 10 min.
July 10th	Mr. W.	Exploratory and colotomy	4 ozs.	35 min.	1 oz. in 8 min.
July 10th	Mrs. A.	Breast amputation	4 ozs.	45 min.	1 oz. in 11 min.

I have had in all some 100 cases similar to the above; the average time to produce anaesthesia being 10 minutes, and the average amount of ether being 1 oz. per 8 minutes.

At the Court of Assistants of the Worshipful Company of Dyers of the City of London on Wednesday, November 6th, Dr. George Flux and Sir Edward Montague Nelson, K.C.M.G., took their seats as Prime Warden and Renter Warden respectively, they having been previously elected at the last General Court held on October 9th.

METHOD OF PREPARING STERILISED CATGUT.

By C. ARTHUR BALL, M.B.,

House-Surgeon, Sir Patrick Dun's Hospital, Dublin.

THE impossibility of sterilising any except the finest catgut with reasonable certainty has led to the abandonment of this valuable form of suture and ligature material by a number of surgeons.

To render the inner layers of thick catgut sterile, it is necessary to subject it to heat, as an antiseptic cannot be relied on to act on more than the outer surface. Before starting to prepare any catgut it is advisable to test its strength, as occasionally a strand is found which looks all right, but is quite weak and useless for any method of preparation.

The following method of preparation has been employed with success for the last eight months on catgut up to No. 4

(Droncke). A glass reel is used, 1 inch in diameter and 3 in length, with a flange at each end, each flange being pierced with a hole (A and B). A reel of lignum vitæ or any wood that sinks in water answers the purpose equally well. One end of the gut is tied through the hole A, and the gut is wound firmly and evenly on the reel in a single layer; the other end is then passed through the hole B, and tied to the free end at A. The winding can easily be done with an ordinary bandage roller by placing a perforated cork in each end of the reel. The knots joining two strands together must be very carefully tied, else they will slip when boiled, and such an accident destroys the whole reel of gut by allowing it to untwist. The reel is now placed in a 5 per cent. solution of formalin, and left for about 24 hours; it is then thoroughly washed in cold water. It is next dropped into boiling water and left boiling for from 5 to 10 minutes, according to the thickness of the gut. Lastly, it is placed in the following solution:

Mercury perchloride	...	1 part
Boiled glycerine	...	250 parts
Methylated spirit	...	1,000 parts

The gut is now ready, and receives no handling after sterilisation until it is used.

The glycerine and spirit dehydrate the gut, the former rendering it pliable. The mercury perchloride impregnates the gut swollen by boiling with an antiseptic, and hardens it sufficiently to prevent it twisting when moistened by the tissues during the process of stitching, a difficulty with gut dehydrated by alcohol alone.

Catgut prepared in this way is undiminished in strength, and keeps well; it is pliable and knots nicely; it is absorbable (No. 0 is absorbed in about 6 days); and lastly, it is sterile.

MEDICAL STUDENTS IN AUSTRIA.—Statistics recently collected by the Vienna Medical Council show that the numbers of medical students in the Austrian universities during the last ten years were as follows: 1891-92, 5,275; 1892-93, 4,193; 1893-94, 4,985; 1894-95, 4,686; 1895-96, 4,297; 1896-97, 3,954; 1897-98, 3,604; 1898-99, 3,207; 1899-1900, 2,793; 1900-1901, 2,555, showing that in the ten years the number has fallen by 2,720, or 48 per cent. The number of degrees of Doctor given during the same years was as follows: 721, 716, 764, 857, 801, 724, 732, 675, 714, 603. Therefore the number of graduations has not fallen off very materially.