## Appendix to Down Bros.' catalogue of surgical instruments and appliances : Octoberr 1910 / Down Bros., Ltd.

#### **Contributors**

Down Bros. (Firm)

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# APPENDIX TO DOWN BROS, CATALOGUE OF

# SURGICAL INSTRUMENTS AND APPLIANCES

OCTOBER 1910

AWARDED THE GRAND PRIX (Highest Award)



AWARDED THE GRAND PRIX (Highest Award)



DOWN BROS., LTD.,

21 & 23, ST. THOMAS'S STREET, LONDON, S.E.
Opposite Guy's Hospital.

Manufactory: KING'S HEAD YARD, BOROUGH.

Telegraphic Address : Down, London

Telephones: 1384 City, 8339 Central, 965 Hop

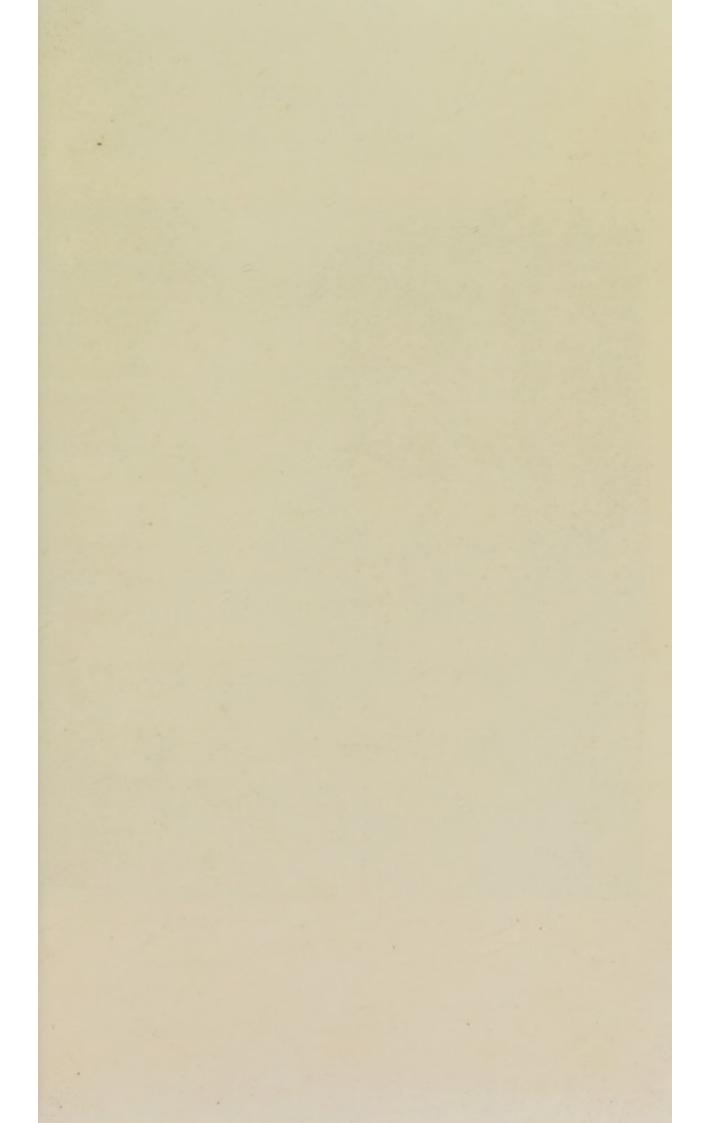
22513

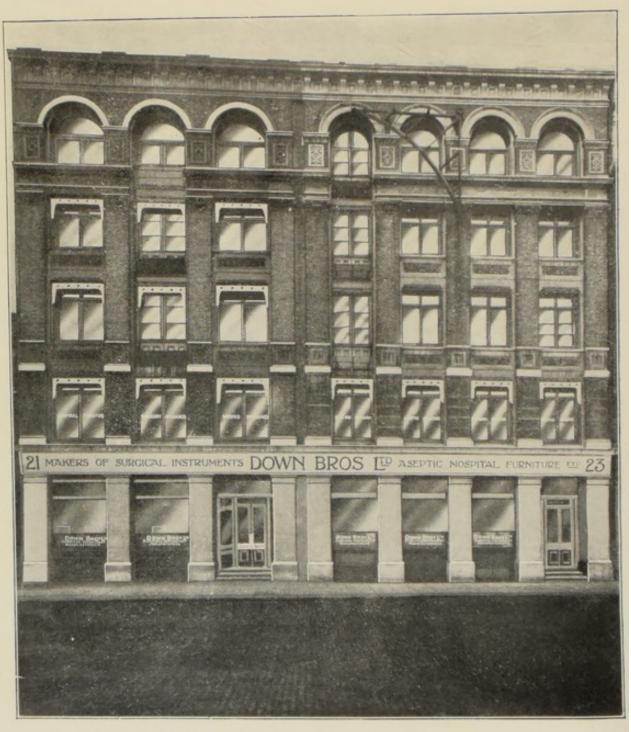
ENTERED AT STATIONERS' HALL.





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SHOW ROOMS: 21 & 23, ST. THOMAS'S STREET, LONDON, S.E. Opposite Guy's Hospital.

# APPENDIX TO DOWN BROS.' CATALOGUE OF

# Surgical Instruments and Appliances

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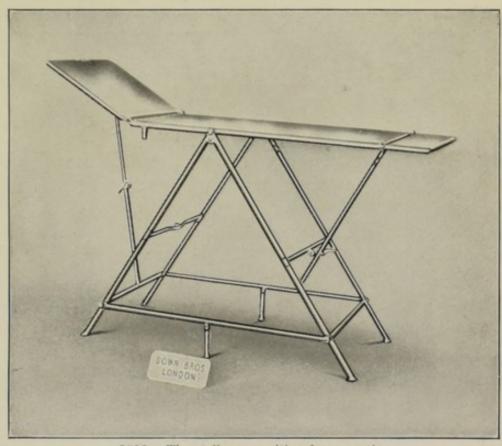
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#### DOWN BROS.' PATENT PORTABLE ASEPTIC OPERATION TABLE.

SUGGESTED BY MR. F. T. PAUL, F.R.C.S., OF LIVERPOOL.

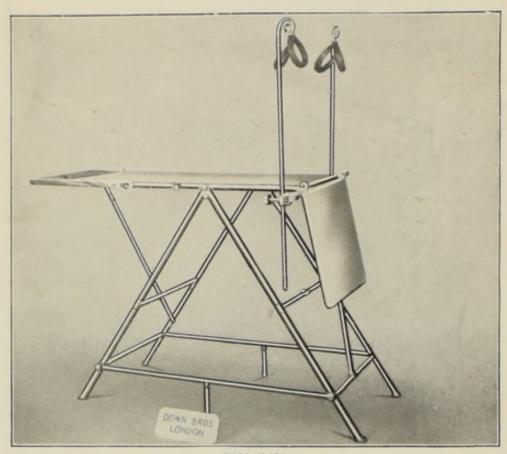


8500. The ordinary position for operating.

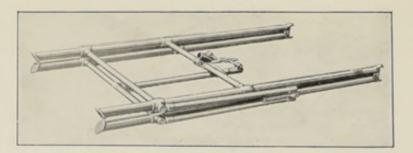


8500. The Trendelenberg position.

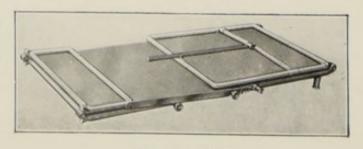
## No. Patent Portable Operation Table, continued,-



8500-8501.
The Lithotomy position.
Showing Leg stems with clamps and foot straps.



Stand folded for portability.



The top folded.

## No. Patent Portable Operation Table, continued,-



8502.

	Packed in canvas case for carriage.			
8500	Portable Operation Table (Down Bros.' patent), suggested by Mr. F. T. Paul, F.R.C.S., of Liverpool, aluminium	£	8.	d.
	painted .  If heavily coppered and nickel-plated (dull), £2 2s. extra.	13	13	0
8501	Leg Supports with Webbing Foot Straps and Aluminium			
	painted Clamps	2	2	0
	Ditto, with leather Straps and gun-metal nickel-plated			
0400	Clamps	3	3	0
8502	Waterproof Canvas Case	2	2	0
	Size—Open, $70 \times 18 \times 36$ in.; closed, $44 \times 22 \times 6$ in. Weight, $46$ lbs.; in case, $56$ lbs.			

# ELBOW LEVER FOR USE WITH ORDINARY SCREW TAPS.

SUGGESTED BY MR. JAMES SHAW, M.B., OF BELFAST.





8503.

Elbow Lever	(registe	ered)—					
Shaw's.					. each	0 12	6

8503

Extract from "British Journal of Nursing," August 27, 1910.

This ingenious contrivance will supply a want that must frequently arise in operating or dressing wounds in private houses, or in Cottage Hospitals

#### No. Elbow Lever for use with ordinary Screw Taps,

continued,-

8504

8505\*

8506

and Nursing Homes where the water supply is delivered through ordinary screw taps.

This admirable little instrument immediately converts such a tap into one

suitable for a surgeon's use.

The invention consists of a lever attached to a revolving disc, surrounded by a ring; this ring having four large notches in its lower edge to fit over the limbs of the ordinary screw-tap and a series of small notches round its upper edge, in any of which the lever first mentioned will engage, so as to carry the ring, and consequently the tap handle round with it, at practically

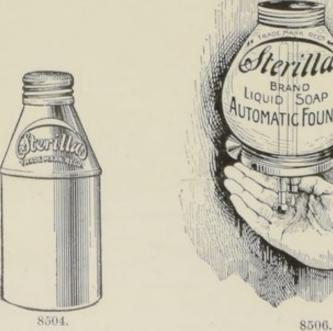
any point of its circumference.

The fitting should be adjusted to the tap, which is quickly done by screwing home the four screws placed between the large notches that take the tap-"wings," and the tap can then be opened or closed at pleasure by a push from the operator's elbow. A spring under the lever releases it from its notch when the pressure is withdrawn in readiness to engage in another notch, and thus either unscrew the tap further to increase the flow, or in the opposite sense, close the tap, as required.

#### STERILLA.

#### Liquid Surgical Soap.

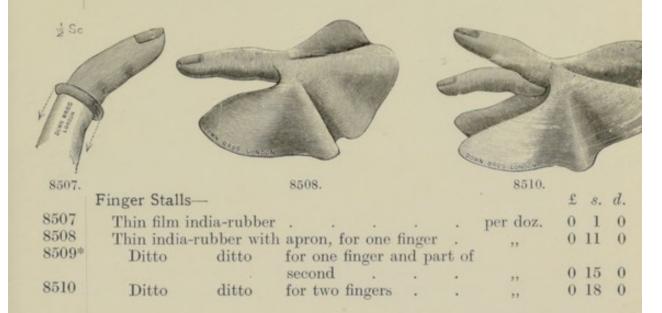
A speedy cleansing and sterilizing agent, certified equal in bactericidal power to pure carbolic acid.



The Automatic Fountain for use in Hospitals, Sanatoria and Nursing Homes is intended to screw to the wall at a convenient distance above the Lavatory Basin. By gently pressing against the knob a definite measured quantity of the Sterilla, sufficient for washing the hands is discharged into the palm. The amount delivered can be easily regulated. A 16-oz. bottle suffices to charge the Fountain and should be ordered with it.

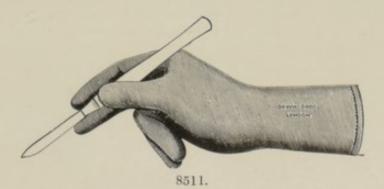
<sup>\*</sup> The items marked thus \* are not illustrated.

#### DIAGNOSTIC FINGER STALLS.



#### INDIA-RUBBER OPERATION GLOVES,

Sterilizable.



8511	India-rubber Operation Gloves— McBurney's (original make), capable of being boiled. In four thicknesses, per pair—			
	Light, 2s. 10d.; Medium, 3s. 2d.; Heavy	0	4	0
	The following sizes are kept in stock:— Light:—Nos. 6, $6\frac{1}{2}$ , 7, $7\frac{1}{2}$ , 8, and $8\frac{1}{2}$ .  Medium:—Nos. 6, $6\frac{1}{2}$ , 7, $7\frac{1}{2}$ , 8, $8\frac{1}{2}$ , and 9.  Heavy:—Nos. 7, $7\frac{1}{2}$ , 8, and $8\frac{1}{2}$ .			
8512*	McBurney's, Roughened, "Never Slip" (original make), medium thickness only per pair Stock sizes, 6½, 7, 7½, 8, and 8½.	0	3	6
8513*	White Cotton Operation Gloves per doz. pairs Stock sizes, 6, $6\frac{1}{2}$ , 7, $7\frac{1}{2}$ , 8, $8\frac{1}{2}$ , and 9.	0	9	9
	* The items marked thus * are not illustrated.			

#### OPERATION SLEEVES.





8514 Ope

8515

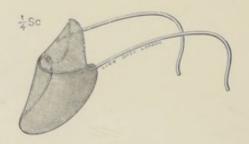
8516

Operation Sleeves, India-rubber . . . per pair 0 5 6

Ditto white cotton, as used at St. Thomas's Hospital ,, 0 1 9

#### FACE MASKS FOR USE WHILE OPERATING.





8516.

Face Masks,-

Harrison's (suggested by Dr. E. Harrison, of Hull) . each 0 2 0

Extract from Harrison's "Modern Methods for securing Surgical Asepsis," 1907.

THE MASK.—After what has been said as to the scattering of droplets of saliva when speaking, it is imperative that the operator and assistant should wear masks. These are easily made by bending thin copper wire so as to fit over the lower part of the nose and under the chin, and with loops to attach to the ears. The mask is then covered with a few layers of gauze, and forms an efficient protection. It is not irksome to wear, and if the wire fits accurately to the nose it does not impede vision.

Messrs. Down have, at my suggestion, made such a frame, which is here figured, and which acts admirably as a mask. It is simple in construction. Only the lower part of the nose is covered, so that there is no impediment to vision, and there are no joins or hinges to get out of order. Each surgeon can readily adapt one of these frames to his face accurately.

8517 8518

#### Face Masks, continued,-







8518.

Face Masks, continued,-Ibbotson's . each, 3s. 6d.; if covered with Batiste, each

Ditto fitted with elastic loops for ears for use of nurses, each, 3s. 3d.; if covered with Batiste, each

0

s. d.

#### Extract from the "Medical Press and Circular," August 17, 1910.

"The above drawing represents a shield for the mouth and nose which Messrs. Down Bros. have made for me. It is very simple in construction, being extremely light and consisting of a framework of plated copper upon which a layer of batiste is stretched. At the two upper ends are two metal ear pieces. These latter can also be made of elastic, which is more convenient for nurses. The whole shield is sterilizable to any extent and can be used for the following purposes, viz.:

Examination of mouth, nose, larynx, etc.

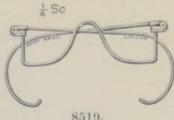
2. For all operations, especially those on the mouth, nose and larynx, such as removal of tonsils and adenoids, tracheotomy, etc.

3. For changing tracheotomy tubes in diphtheria.

There is no doubt that doctors and nurses run great risk of infection when examining and operating on many parts of the body, and this shield not only protects them to a very large extent, but also protects the patient from any secretion or breath from the mouth or nose of the doctor or nurse. It is quite comfortable and can be worn for hours without any inconveni-

WILLIAM IBBOTSON, M.R.C.S., L.R.C.P.

Bethlem Royal Hospital, S.E.



8519.

Johnson's

. each 0 4 0

#### Extract from "Lancet," November 30, 1907.

Some of the combined screens and caps are certainly uncomfortable, very warm for the operator, and, if the material be thin, the efficiency of the screen is open to doubt. The best known are probably those used by Mr. A. H.

8519

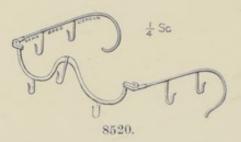
#### \_

No.

#### Face Masks, continued,-

Burgess and Dr. V. Bonney. In my opinion it is much safer and more comfortable to use a thick screen not attached to the cap. If this is to be cool it must be open at the sides and must hang loosely. Such conditions are admirably fulfilled by hanging a length of gauze from a modified spectacle frame. The illustration will give some idea of the contrivance. A length of gauze fourfold thick and long enough to be fixed by the neck of the operating apron and still hang free from the face is doubled over the frame. Thus, eight layers of sterilized or antiseptic gauze are interposed between the mouth and nose of the operator and the aseptic field of operation. The screen has been used in conjunction with one of the operating caps supplied by Messrs. Down Bros., and the adoption of this method will, I think, result in the maximum of efficiency with the minimum of discomfort.

A. E. Johnson, B.M., Ch.B., Vic., F.R.C.S., Eng., Late Surgical Registrar, Royal Infirmary, Manchester.

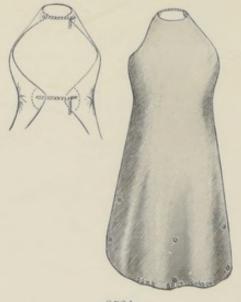


		-	200
0	E	• N	n.
- 0	10.0	20	,

Face Masks,	cont	inued,	_				£	8.	d.
Moynihan's						each	0	7	6

#### THE UNIVERSAL OPERATION APRON,

made of light brown sterilizable waterproof as used at Guy's Hospital.

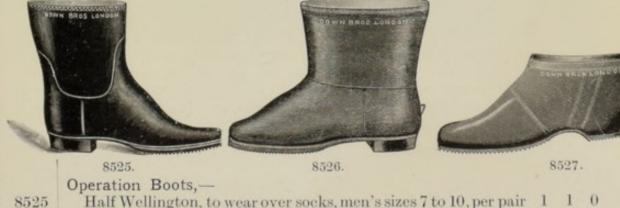


8521.

#### STERILIZABLE CAPS FOR OPERATION THEATRE.



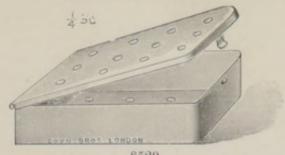
#### INDIA-RUBBER BOOTS FOR OPERATION THEATRE.



8525.		8526.				5527.	
Operation Boots,-							
Half Wellington, t	o wear over so	ocks, men's	sizes 7	to 10, per pair	1	1	0
Ditto, with lar	ge tops, to v	wear over	boots,	men's sizes,			
8, 9 and 10			41	. per pair	1	7	6
High Shoes, to wea	ar over boots,	men's size	s 8, 9 an	d 10 ,,	0	16	6
Ladies' Wellingto	ns, to wear o	ver stocki	ngs, size	es 4, 5 and 6,			
				per pair	0	15	6

#### BOX FOR INDIA-RUBBER GLOVES.

For use in sterilizer.



8529.

Glove Boxes,-

To take 1 or 2 pairs folded loosely, copper tinned . each 0 7 0

\* The items marked thus \* are not illustrated

8529

8526

8527 8528\*

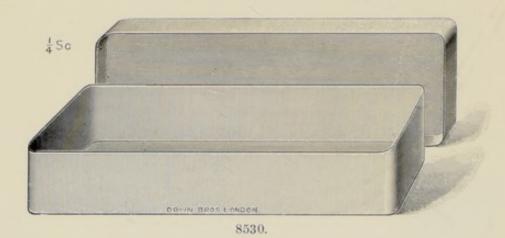
No.

8531

#### BOX FOR INDIA-RUBBER GLOVES.

For storage after sterilization.

As suggested by Mr. E. H. Stack, F.R.C.S., and used at the Royal Infirmary, Bristol, etc.



Glove Boxes,— £ s. d.

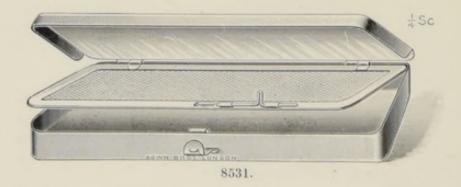
To hold 1 or 2 pairs full length, copper, nickel-plated, each 0 7 6

Ditto, to hold 6 pairs ,, ,, ,, , 0 8 6

#### BOX FOR INDIA-RUBBER GLOVES.

SUGGESTED BY MR. D. M. GREIG, F.R.C.S., SURGEON, DUNDEE ROYAL INFIRMARY.

The gloves are sterilized in box, which also serves for storage afterwards.



Glove Boxes,—
To hold 2 or 3 pairs, copper, nickel-plated . . each 0 14 3

#### SURGEON'S INSTRUMENT BAG.

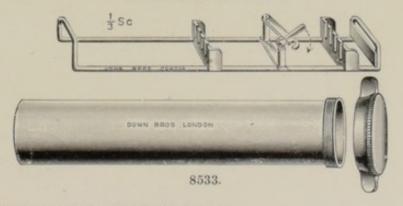


8532.

8532

#### A NEW SCALPEL CARRIER.

Designed for Mr. D. M. Greig, C.M., F.R.C.S., Surgeon, Royal Infirmary Dundee.



8533

Metal Scalpel Carrier, nickel-plated,—

To take 4 Scalpels, Box and Rack complete . . . 0 14 6

If fitted with Scalpels, 24s. 6d.

To take 2 Scalpels, Box and Rack complete . . . 0 8 6

If fitted with Scalpels, 13s. 6d.

-Extract from "Lancet," November 7, 1908.

Surgeons have frequently agreed that the sterilization of knives is better done by the application of some germicidal fluid, as boiling may affect a knife's edge and impair its cutting power. No method of application can have more simplicity and safeness than immersion. For surgeons called

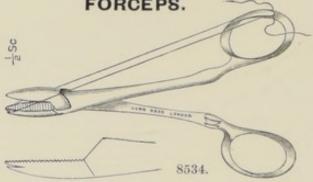
A New Scalpel Carrier, continued,-

upon to operate in private houses or in the country the best means of carrying knives is a matter of interest. I have had made for me by Messrs. Down Bros., Limited, an appliance which, while providing for the sterilization of the knives by constant immersion in a sterilizing fluid, provides a perfectly easy and satisfactory way of carrying them. It consists of a scalpel rack made to contain four knives held firmly in position with a bar which can be fixed by a lever clamp. The scalpel rack is fitted into a metal tube 8 inches long by 1½ inches in diameter, which a screw-on lid renders air-proof. The knives are sterilized and kept sterile by the tube being nearly filled with a solution of 1 part of lysol in 12 of rectified spirit. By no amount of shaking in any position or direction can the edges or points of the scalpels come in contact with anything but the solution in which they are immersed. Each knife is thus kept sterile, does not rust, and retains its original sharpness unimpaired and its polish intact.

D. M. Greig, C.M., F.R.C.S., Edin., Surgeon, Dundee Royal Infirmary, Royal Victoria Hospital, Etc.

d.

# NEW FORMS OF ARTERY AND COMPRESSION FORCEPS.

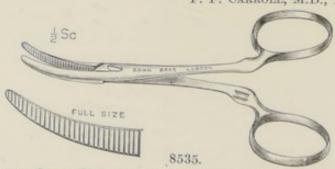


Artery Forceps, etc., nickel-plated,— Carroll's, with take-off joint . each, 5 in., 7s. 6d.; 7 in.

Extract from "Lancet," December 15, 1906.

Devised to facilitate the tying of arteries situated at a depth from the surface of the body, and particularly in those cases where, owing to want of space, great difficulty is experienced in slipping a loop of ligature along the forceps already in situ. The writer has found them of great assistance in cranial surgery. The method of using is extremely simple. The ligature material, whether silk or catgut, is first looped over the notch in the lower blade and both ends crossed under the spring catch on the handle, where they are held tightly. The forceps can now be applied to an artery. When the vessel has been clipped the ends of the ligature should be released and tied in a surgical knot. If the knot is tightened the ligature will be found to slip by itself off the nose of the forceps on to the artery.

F. F. Carroll, M.B., B.Ch. Dub.



Chance's, curved on flat, with screw joint, 5 in. . each 0 5 6 Ditto ditto with take-off joint, 5 in. . ,, 0 6 6 This is a Forceps of the Spencer Wells' type, made for Sir Arthur Chance of Dublin.

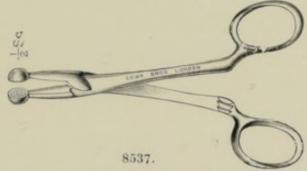
8534

8535 8536\*

<sup>\*</sup> The items marked thus \* are not illustrated.

0 6 6

#### No. Artery Forceps, etc., nickel-plated, continued,-



Artery Forceps, etc., nickel-plated, continued,-

Cressy's ball-pointed with take-off joint each, 5-in., 8s. 6d.; 6-in.

Ditto, with screw joint . . each, 5-in., 7s. 6d.; 6-in. 0 9

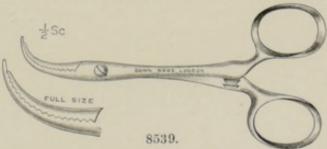
Extract from the "Lancet," August 21, 1909.

The difficulty of tying beyond the points of the artery forceps in deep situations led me to try a globular end to the Spencer Wells, and I can now, after a fair trial, attest to the great advantages thereby attained, because (1) they do not take up more tissue than other forceps; (2) the surgeon can ie off the artery by himself and take off the forceps afterwards; (3) once the ligature is beyond the greatest circumference of the globular end it must tie off properly if it is tied tight enough, and the certainty of this saves much time in operating; (4) they will pick up the smallest and most fragile artery; and (5) the circular grooves on the inner surface give a very firm hold.

Messrs. Down Bros. have taken great pains in carrying out my idea in this

instrument, which they have made excellently.

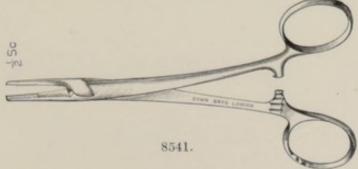
A. Z. C. CRESSY, M.R.C.S., Eng., Surgeon to the Carshalton and District Cottage Hospital.



8539 Garner's curved, suggested by Dr. J. E. Garner, of Preston,

. each, 5-in., 5s. 6d.; 6-in. with screw joint 0 8 6 Ditto with take-off joint . ,, 5-in., 6s. 6d.; 6-in.

Specially useful for securing large veins before they are cut, e.g. on large goitres.



Kelly's, fine-pointed with serrated ends and take-off each joint, 53-in.

\* The items marked thus \* are not illustrated.

8537

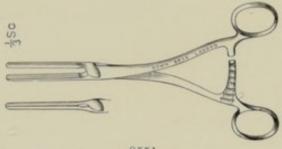
8538\*

8540\*

8541

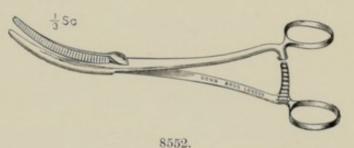
No.	Artery Forceps, etc., nickel-plated, continued,—			
2.0.	S O			
	-10			
	ties till classe			
	8542.			
0540	Artery Forceps, etc., nickel-plated, continued,—	£	8.	$d \cdot$
8542	Kelly's "Mosquito," with tenaculum points, screw joint, 5-in each	0	4	9
8543*	Ditto ditto take-off joint, 5-in ,,	0	5	y
	S -  n			
	S COMM MESS COMM			
	8544-			
8544	Lane's (suggested by Mr. Arbuthnot Lane, M.S., etc.) with screw joint, 5-in each	0	5	e
8545*	Ditto with take-off joint, 5 in ,,	0	5 6 9	6 6
8546*	Ditto with box-joint . each, 5-in., 6s. 6d.; 7-in.	U	y	0 .
	CHILDREN WAR SALE CLEANED			
	000			
	8547.			
8547	Rutherford Morison's (suggested by Mr. Rutherford Morison, F.R.C.S., Surgeon, Newcastle Royal Infirmary) with			
8548*	screw joint, 5-in each	0	5	0
9949.		0	0	0
	3-50			
	DOWN SAIS LENGTH			
	Size of the state			
	\$ control for the first of the			
8549 8550*	Black's Compression, with take-off joint, 7-in each	0	9	0
8550*	Ditto ditto with screw joint, 7in.  A stout Spencer Wells' Forceps with 12-in. blades.	0	7	6
-	* The items marked thus * are not illustrated.			-

#### Artery Forceps, etc., nickel-plated, continued,-



8551.

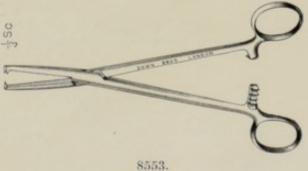
Artery Forceps, etc., nickel-plated, continued,-£ 8. d. 8551 Doyen's Compression, with spring arched blades, and take-off joint, 63-in. . . each 9 6



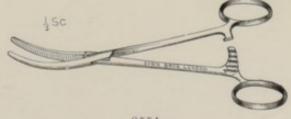
8552

8553

Howard Kelly's Curved Compression, with spring arched blades, and take-off joint, 73-in. . each



Ochsner's (as used by the Mayo Brothers), with tenaculum . each 0 10 0 points and box joint, 74-in. .



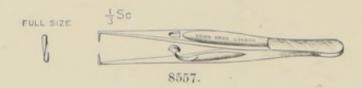
8554.

Ochsner's curved, with box joint, 6½ in. . . each 0 8554 6 ditto with screw joint, 61 in. Ditto 8555\* 9 0 0 ditto with take-off joint, 61 in. Ditto 8556\*

<sup>\*</sup> The items marked thus \* are not illustrated.

#### PERITONEUM FORCEPS.

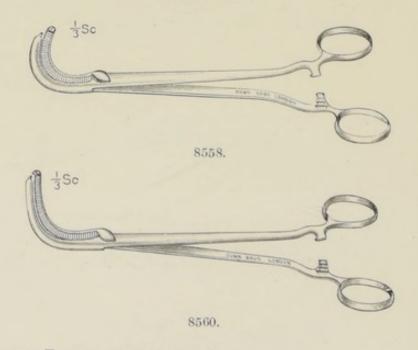
SUGGESTED BY MR. J. HENDERSON NICOLL, M.B., C.M., SURGEON TO THE WESTERN INFIRMARY, GLASGOW.



Peritoneum Forceps, nickel-plated,— £ s. d. 8557 Nicoll's . . . each, 4½-in., 4s. 6d.; 6-in. 0 5 6 N.B.—Mr. Nicoll considers these are not so liable to catch in silk.

#### PERITONEUM FORCEPS.

MADE FOR MR. H. W. PIGEON, F.R.C.S., SURGEON, HULL ROYAL INFIRMARY.

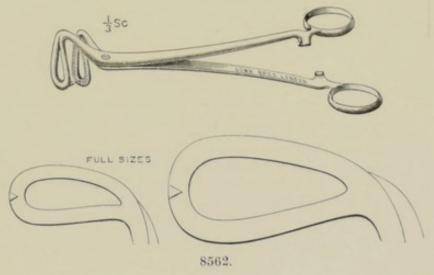


8558	Peritoneum Forceps, nickel-plated,— Pigeon's fully curved (after Mickulitz), with take-off joint each		11	0
8559*	Ditto ditto with screw joint ,,	0	9	6
8560	Ditto large rectangular curve, with take-off joint ,,			0
8561*		0	-	6

<sup>\*</sup> The items marked thus \* are not illustrated.

#### RETRACTOR FORCEPS.

SUGGESTED BY MR. H. LITTLEWOOD, M.Sc., F.R.C.S., ETC., PROFESSOR OF SURGERY, LEEDS UNIVERSITY.



£ s. d.

Retractor Forceps, nickel-plated,-

8562 Littlewood's, with screw joint, 2 sizes

each, small, 13s. 6d.; large 0 15 6

8563\* Ditto with take-off joint .

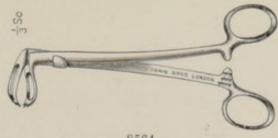
,, ,, 15s.; ,, 0 17 0

The small size is intended for ordinary abdominal operations; the large

size for kidney operations or when the abdominal wall is thick.

#### TISSUE FORCEPS.

SUGGESTED BY DR. POOLE LANSDOWN, SURGEON, BRISTOL GENERAL HOSPITAL.



8564.

Tissue Forceps, nickel-plated,-

8564

8565\*

Poole Lansdown's, with take-off joint . . . each 0 12 0 Ditto with screw joint . . . . . . . . . 0 10 6

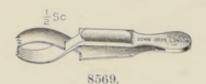
<sup>\*</sup> The items marked thus \* are not illustrated.

#### TOWEL CLIPS, VARIOUS RECENT MODELS.



8566.

					£	8.	d.
	Towel Clips, nickel-plated,—						
8566	Backhaus', with screw joint, 31-in.			. each	0	3	6
8567*	Ditto with take-off joint, $3\frac{1}{4}$ -in.			. ,,	0	4	6
8568*	Ditto with large jaws to take 4						
	for Mr. Carless, of King's Col	lege H	ospita	l, screw			
	joint			. each	0	3	9

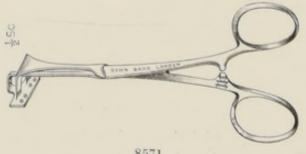


8569 Plain spring with serrated edges . . . per doz. 1 10 0



8570

Gray's, as made for Mr. H. M. W. Gray, Surgeon, Royal Infirmary, Aberdeen . . . per doz. 1 16 0



8571.

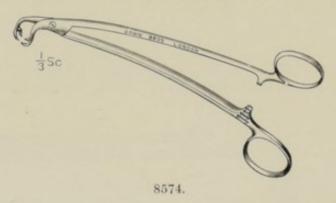
Houzel's, with take-off joint, 5-in. . . 8571

0 10 6 . each

<sup>\*</sup> The items marked thus \* are not illustrated.

#### No. Towel Clips, Various Recent Models, continued,-





Moynihan's 2 teeth for sides of wound, with screw joint

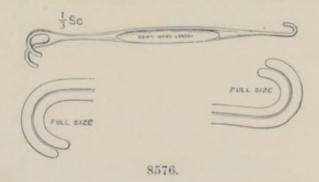
each 0 12 0

8575\*

Ditto with take-off joint . . . . . . , 0 13 6

These are derived from a model originally suggested by and made for Major Heard, I.M.S.

#### VARIOUS FORMS OF WOUND RETRACTORS.



Retractors, nickel-plated,-

8576

"Army pattern," with single and double blunt hooks, 2 sizes, made to nest in one another . . per pair 0 11 6

<sup>\*</sup> The items marked thus \* are not illustrated.

#### Wound Retractors, continued,-No.



£ s. d.

Retractors, nickel-plated, continued,-8577

Copper Spatula (nickel-plated), bendable, useful also as depressor when suturing . . . . each

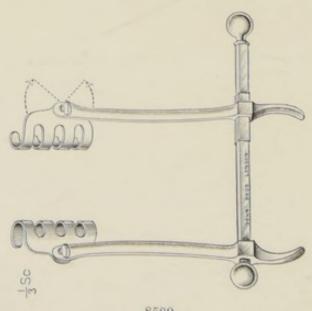


8578.

Farabœuf's, 6-in., double, the short blade 1-in. diam., the 8578 longer blade §-in. diam. . . . per pair 0 7 9



Lane's, 9 in., two sizes . each,  $\frac{1}{2} \times \frac{3}{4}$  in., 6s. 6d.;  $1 \times 1\frac{1}{4}$  in. 0 7 6



8580.

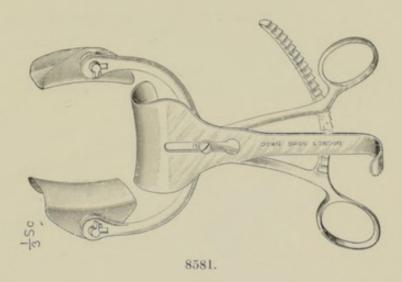
8580 Parallel action, fixing automatically

8579

. each 1 4 6

8581

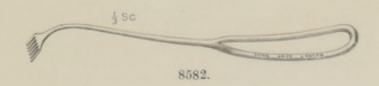
#### Wound Retractors, continued,-



£ s. d. Retractors, nickel-plated, continued,-Tri-valve . . . . . . . each 1 15 6

#### KELLY'S COMB FOR DISSECTION.

SUGGESTED BY DR. KELLY OF BALTIMORE.



Comb for Dissection, nickel-plated,-. . . . . . . . each 0 7 6 8582 Kelly's

#### Extracted from "Medical Annual," 1907.

"Kelly" of Baltimore, has used for the past three years a steel comb for making the axillary and sub-clavicular dissection in cancer of the breast. With a pair of forceps and this comb he can rapidly draw the fat out from the depths away from nerves and great vessels. He is of opinion that a dissection thus made is more perfect, and less liable to distribute any cancerous elements, than one made with the knife.

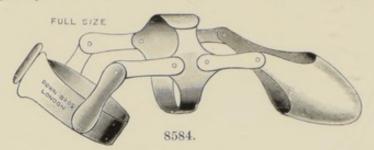
#### VARIOUS NEW FORMS OF DIRECTORS, ETC.



8583

Directors, etc., nickel-plated,—

The Bristol model combined Director, Probe and fine
Raspatory . . . . . . . . each 0 6 6



8584

Childe's Metal Finger Guard . . . .

. each 0 10 6

#### Extract from the "Lancet," April 10, 1909.

Sometimes during surgical operations it is very convenient to cut down upon the finger as a guide. When, for instance, in a septic peritonitis following perforated gastric ulcer it is desirable to drain the loins or pelvis the most convenient way of making a counter opening is to cut down from without upon the forefinger inserted in the original wound, because the finger can feel whether anything is in the way or not. If an instrument is inserted for this purpose it may easily involve a piece of intestine in the counter-opening. But if the gloved finger be used unguarded counter puncture has to be made carefully and deliberately lest the glove and, more serious still, the finger of the surgeon beneath it be cut. Again, a large abscess may be pointing and be opened in front of the thigh. It is desired after opening it to make counter punctures for better drainage at the sides. The finger is again the most convenient guide, because it can feel exactly the most dependent point of the abscess cavity. Examples could easily be multiplied and will occur to every surgeon. To protect the finger when thus used as a director I have had the finger guard, as depicted in the accompanying illustration, made for me by Messrs. Down Bros., and have found it very useful. It allows of as free flexion of the finger as if the latter were unguarded and it can be cut down upon straight away. When used inside the abdomen the forefinger, encased in the finger guard, and the middle finger are inserted together. The latter feels that nothing is in the way, and the guarded forefinger is then cut down upon at once with a single stroke of the knife. The instrument should be made to fit the finger of the surgeon using it.

Charles P. Childe, B.A., F.R.C.S., Eng., Senior Surgeon, Royal Portsmouth Hospital.



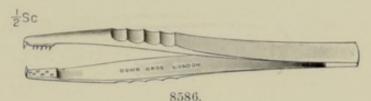
8585

Laurie's Peritoneal Director for use over finger of glove on left hand (suggested by Mr. R. Douglas Laurie, M.B., Ho. Surg., Royal Hants County Hospital) each

0 2 0

#### STRONG DISSECTING FORCEPS WITH FIRM HOLD No.

SUGGESTED BY MR. KENNETH BLACK, F.R.C.S., OF NOTTINGHAM.



8586

£ 8. d. Dissecting Forceps, nickel-plated,— Black's with pin blade and tenaculum ends

each, 5½ in., 6s. 6d.; 7 in.



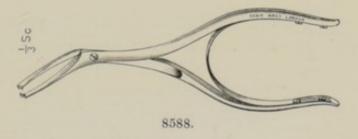
8587.

8587

Dissecting Forceps, nickel-plated,— With "turn over" ends (for easy cleansing) each, 41 and 5 in., 2s.; 51 in. 0 2 3

#### SPRING CURVED OPERATING FORCEPS.

SUGGESTED BY MR. HAROLD UPCOTT, F.R.C.S., ASSIST. SURG., HULL ROYAL INFIRMARY.



8588

Operating Forceps, nickel-plated,-. each Upcott's, curved spring

"The hinged forceps you have made for me have proved very satisfactory; they are particularly useful in operations such as excisions and resections where an instrument is needed for taking a firm hold of soft tissues."

#### GLAND ENUCLEATOR.

SUGGESTED BY MR. R. J. PYE-SMITH, CONSULTING SURGEON, ROYAL Hospital, Sheffield.



Gland Enucleator, nickel-plated,-Pye-Smith's

. each 0 10 6

8589

#### GLAND FORCEPS.

AS USED AT ST. THOMAS'S HOSPITAL.



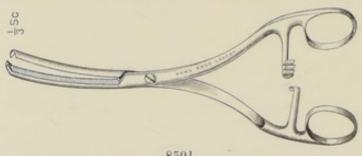
8. d.

Gland Forceps, nickel-plated,-8590 St. Thomas's pattern, with slide

6 . each

#### THYROIDECTOMY CLAMP FORCEPS.

AS USED BY PROFESSOR KOCHER OF BERN.



8591.

8591

Thyroidectomy Clamp Forceps, nickel-plated,-Kocher's, for clamping the base of the Thyroid

. each

THE WINGED HERNIA DIRECTOR.

Suggested by Mr. C. Plumley Childe, F.R.C.S., Surgeon, Royal, Portsmouth Hospital.



8592

Hernia Director, nickel-plated,-Childe's

. each

0 5 6

Extracted from the "British Medical Journal," July 18, 1908.

In operating for strangulated hernia, after the director has been inserted beneath the stricture, the distended intestine sometimes curls over the edge and gets in the way when the stricture is about to be divided. To keep it back requires a little care, but causes no great difficulty. At the same time this inconvenience can be entirely remedied by the modification of the instrument commonly in use, illustrated in the accompanying figure. From the sides of the director (which otherwise is identical with that ordinarily in use), and 1 in. from its end, two wings project. When it is in position the front edges of the wings are close up against the face of the stricture, the wings projecting on either side keep everything out of the way, and the stricture can be very easily divided. I have made trial of this director in several cases of strangulated hernia. Though devised to remedy a somewhat trifling inconvenience, it accomplishes this so effectually that I venture to submit it to the notice of surgeons as an improvement on the director commonly in use. The instrument has been made for me by Down Bros., London.

#### HERNIA FORCEPS.

SUGGESTED BY MR. C. A. LEEDHAM-GREEN, F.R.C.S., ETC., SURGEON, QUEEN'S HOSPITAL, BIRMINGHAM.



£ s. d.

8593

Hernia Forceps, nickel-plated,—
Leedham-Green's (modification of Kocher's), with take-off
joint, children's size . . . . each 0 10 6

#### A NEW HERNIA NEEDLE AND DEPRESSOR.

SUGGESTED BY DR. J. E. GARNER, HON. MEDICAL OFFICER, PRESTON ROYAL INFIRMARY.



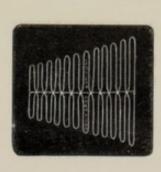
8594

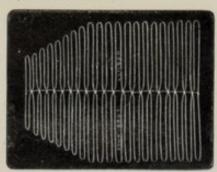
Hernia Needle and Depressor, nickel-plated,—
Garner's . . . . . . . . . . each 0 7 6

The under surface of the hollowed handle serves to depress the cord, while the sutures are readily passed over the convex surface, the stem of the instrument is out of the line of sight, and the thumb-rest gives a good grip.

#### WIRE FILIGREES FOR HERNIA.

SUGGESTED BY MR. LAWRIE McGAVIN, F.R.C.S., SURGEON, SEAMEN'S HOSPITAL, GREENWICH.





8595.

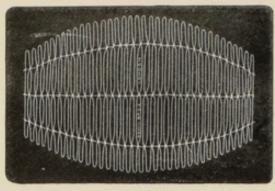
8595

Silver Wire Filigrees—
McGavin's, for Inguinal Hernia

per pair 0 7 6

These filigrees are used in pairs; the smaller is the Pubic section; the larger or Iliac section laps over it and is made wider so as to arch over the cord, thus the cord lies for, say, the first inch of its course between the two sections,

Wire Filigrees for Hernia, continued,-No.



8596.

Silver Wire Filigrees, continued,-

McGavin's, for Ventral Hernia-

each,  $3\times 2$  in., 4s.;  $4\frac{1}{2}\times 3$  in., 6s. 6d.;  $6\times 4$  in.

6 0 For Ventro-fixation (combined with Ventro-suspension) each

#### LYMPHANGIOPLASTY PROBE.

SUGGESTED BY MR. H. M. W. GRAY, F.R.C.S., ETC., SURGEON, ABERDEEN ROYAL INFIRMARY.

1Sc

8596

85974





Lymphangioplasty Probe-Gray's

. each

£ 8. d.

#### PROBES, ETC., FOR LYMPHANGIOPLASTY.

AS USED BY MR. W. SAMPSON HANDLEY, M.S., ETC., ASSISTANT SURGEON, MIDDLESEX HOSPITAL.

15c



8599.

Probes for Lymphangioplasty-

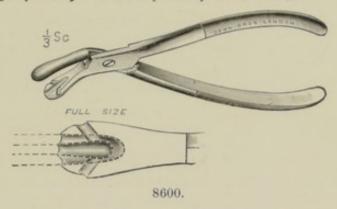
Sampson Handley's each, 10-in., 2s. 6d.; 12-in., 3s.; 15-in. 0 3 6

\* The items marked thus \* are not illustrated.

8599

8598

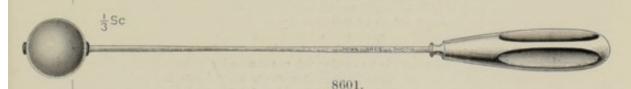
#### No. Lymphangioplasty Probes, etc., continued,—



£ 8. d. Forceps, Sampson Handley's, with soft metal jaws, for grasp-8600 ing firmly either end of probes. . . . . each 0 16 6

#### MUSCLE BEATER.

SUGGESTED BY MR. A. H. TUBBY, M.S., ETC., SURGEON, ROYAL NATIONAL ORTHOPÆDIC HOSPITAL, ETC.



Muscle Beater, nickel-plated,-Tubby's, with rubber ball and flexible steel stem . each 0 7 6

#### SCALPELS WITH ROUNDED END.

As made for Mr. A. Z. C. Cressy, M.R.C.S., Surgeon, Wallington COTTAGE HOSPITAL.



Scalpels, with nickel-plated handles,-1 12 0 Cressy's, 6 sizes . per doz.

#### Extract from "Guy's Hospital Gazette," April 30, 1910.

A FEW REMARKS ON THE KNIFE. Whilst operating on a hygroma of the neck, it occurred to me that the point of the knife was a disadvantage, so I removed the tumour whole with a blunt-ended tenotomy knife. It was too slight for the work, so following up the idea I had some scalpels made with a blunt end, only just turning the edge up for a short distance at the end. I find it has the following advantages over the scalpel with a point :-

In the first incision of an operation the insertion of the knife cuts towards the wound instead of undermining the skin, as happens with a pointed knife, which often punctures a vessel in the situation.

8602

8601

# Scalpels with Rounded End, continued,-

In clearing an armpit of glands no vessels are punctured, though some may be cut. The result of each cut that is made can be seen; the knife reversed makes a good blunt dissector. In the abdomen, the knife need not be changed for the blunt-ended scissors, because there is no point to do damage to any structure that is suddenly pushed into the field of operation, and the resulting work is neater and cleaner than that produced by the scissors.

With this knife one must cut, for to scratch is impossible.

In removing varicose veins the branches of the vessel are not incidentally

wounded, as there is no point.

In the splitting operation for appendicitis the blade reversed acts splendidly for splitting the internal oblique and transversalis. Having opened the peritoneum, the knife can be inserted edge upwards, and a cut made to the right and left without any fear, as the surface towards the bowel is blunt. It would be easy to enlarge on the advantages of a blunt-ended scalpel; but I consider a point on the knife is in the way, a hindrance to quick operating, and a dangerous companion. I am inclined to doubt whether the best surgeon in existence exercises complete control over the extreme point of his knife.

I have used blunt-ended scalpels for some time now, and am very much impressed with the difference. One can work quicker, and the extra

safety is most apparent.

This scalpel wants some getting used to, as the handle has to be depressed—in other words, held much as a violinist holds his bow. It must be sharp, or the operator instinctively rises on the point, which is useless, as the end is blunt. In those situations where it is necessary to cut down on one's finger, for fear of injuring some structure underneath, the knife is held perpendicularly, and the blunt end will come down on the finger whilst the cutting edge works to the right or left as the case may be.

These scalpels have been made with great care by Messrs. Down Bros. As will be seen in the accompanying sketch, they have a straight cutting edge, very slightly turned up towards the end, and the extreme end is

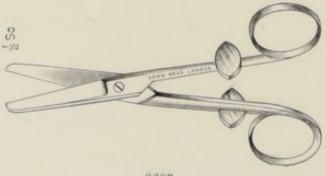
blunt, continuous with the back.

I offer these remarks for what they are worth, hoping my deductions are right, and that others will put the knife to the test.

A. Z. C. CRESSY.

#### OPERATING SCISSORS.

Designed by Mr. C. J. Heath, F.R.C.S., Surgeon, Throat Hospital, Golden Square, etc.

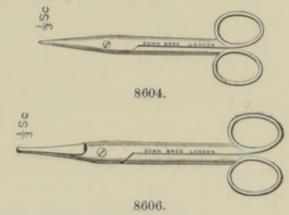


8603.

8603

The wings on the shanks raise the bows from the level of the bottom of sterilizing tray so that they may be the more readily seized.

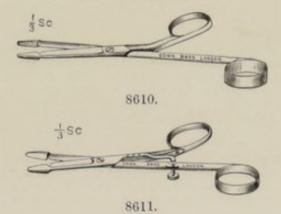
# No. Operating Scissors, continued,-



	Operating	Scissors, nic	Iral plata	d Sha	nlec			£	8.	d.
8604		conical pointed			inks,-		each	0	3	6
8605*	Ditto	ditto	with take	e-off jo	oint		**	0	5	6
8606	Ditto	ditto	6½-in.				,,	0	4	6
8607*	Ditto	ditto	with take	e-off jo	oint		,,	0	6	6
8608*	Ditto	curved on flat	, 5½-in.					0	5	6
8609*	Ditto	ditto	with tak	e-off i	oint	100	100	0	7	6

# THE "PATIALA" SCISSORS COMBINED WITH NEEDLE HOLDER (REGISTERED).

SUGGESTED BY MAJOR C. H. JAMES, I.M.S., MEDICAL ADVISER, PATIALA STATE.



8610	The "Patiala" (registered) .			each	0	10	6
8611	Ditto modified with clip and sp	oring		,,	0	14	6

A modification of Kocher's Scissors, the bow of the longer shank hangs on the ring finger; the scissors remain in the hand during the operation. Major James writes: "The combined Scissors and Needle Holder you made for me has proved an unqualified success. It is now one of the most useful instruments I have, and there are few operations I perform in which it is not in my hand."

<sup>\*</sup> The items marked thus \* are not illustrated.

# OPERATING SCISSORS, CURVED ON FLAT.

AS MADE FOR THE ROYAL CITY OF DUBLIN HOSPITAL.

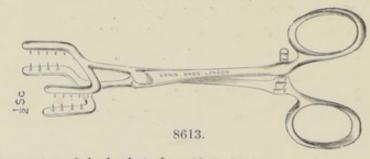


8612

Operating Scissors, nickel-plated Shanks,—  $& & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & &$ 

#### TENDON FORCEPS.

SUGGESTED BY DR. STANLEY RAW, OF SUNDERLAND.



8613

Tendon Forceps, nickel-plated,—
Stanley Raw's . . . . . . . . each 1 1 0

Extract from the "British Medical Journal," April 27, 1907.

The illustration shows a pair of clamp forceps, made to my design for the retention of the cut ends of tendons in apposition whilst being sutured. Although primarily intended for such use, they can be employed for all varieties of tendon work, and for temporarily clamping the edges of wounds during suture. All surgeons are aware of the two prime difficulties in treating cases of cut tendons, namely, the finding of, and having found, the retaining of the proximal end of the tendon in apposition with the distal end until a sufficient number of sutures has been passed to ensure a final and permanent connexion. Obviously these forceps will in no way obviate the first difficulty, but when the proximal end is found it can be brought down to its fellow, and the two ends clamped into the forceps and immediately sutured without any risk of further retraction and without the aid of an assistant. Similar in general construction to ordinary modern forceps, the jaw-blades have an internal measurement of 1 in. by 3 in., thus allowing sufficient room for the proper manipulation of the ends of the tendon. On their inner surfaces the blades carry short spikes 1 in. long and 1 in. apart, so arranged on each blade that when the forceps are closed there is a spike every  $\frac{1}{16}$  in., which ensures the capture of the smallest tendon. It is advisable to include in the jaws of the forceps rather more of the ends of the tendon than is actually required to fetch them into contact, for by this means an amount of "slack" is obtained that allows of very easy manipulation during suture. The advantages claimed for the forceps, and which will be gathered from the foregoing description are:

1. Rapid temporary anchorage of the ends when once they are found.
2. Their use obviates the necessity of continual handling and crushing of the muscles, and an assistant is unnecessary.

3. Each suture can be tied at once, instead of being left slack until all the sutures are passed.

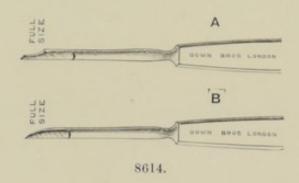
4. There is no necessity to keep the wrist hyperflexed or hyperextended during suture, for, as the ends are fixed between two rigid points, they cannot be separated by the weight of the hand.

The operation is completed more quickly.
 The forceps have been made for me by Messrs. Down Bros., London.

8616

#### TENOTOMY KNIVES.

As made for Mr. Robert Jones, Surgeon, Royal Southern Hospital, Liverpool, etc.



		£	8.	d.
	Tenotomy Knives, solid forged, nickel-plated handles,-			
8614	Jones', 2 patterns, A and B each	0	5	3
8615*	The set of 2 in metal case with lift-out rack	0	18	0

### TENOTOMY KNIFE FOR HAMMER-TOE.

As made for Mr. A. H. Tubby, M.S., etc., Surgeon, Westminster Hospital, etc.



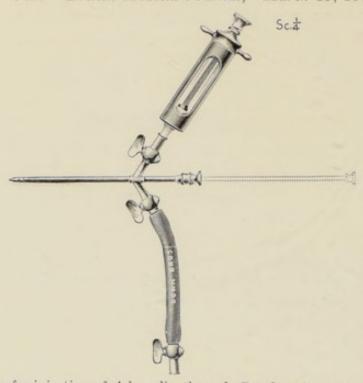
Tenotomy Knife, solid forged, nickel-plated handle,—
Tubby's, for hammer-toe, etc. . . . each 0 5 3

<sup>\*</sup> The items marked thus \* are not illustrated.

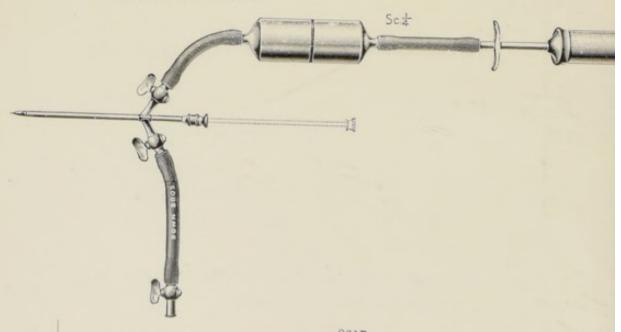
# APPARATUS FOR THE TREATMENT OF SEROUS EFFUSIONS.

Suggested by Dr. James Barr, Physician, Liverpool Royal Infirmary.

Vide "British Medical Journal," March 19, 1904.

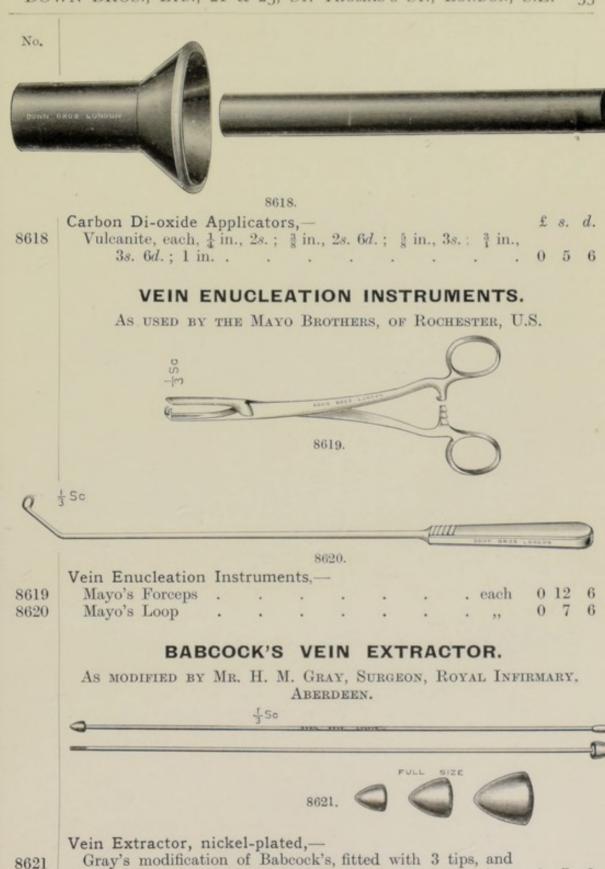


Syrings for injection of Adrenalin through Canula, after withdrawing Trocar, and method of use



8617.
Air Pump and sterilizing chamber for injection of sterile air.

8617 Barr's Apparatus for the Treatment of Serous Effusions by Siphonage and Injections . . in metal case 3 3 0

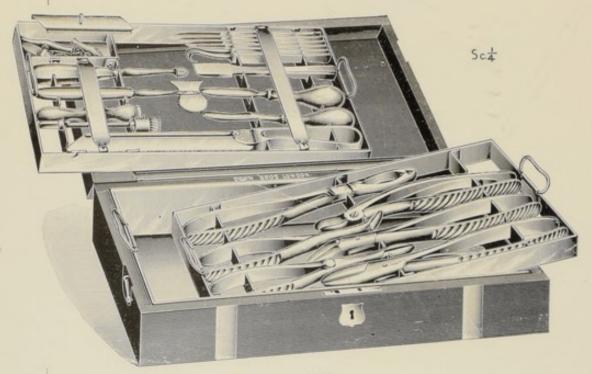


made to unscrew in centre to go in sterilizer, complete

"Babcock's Vein Extractor, as originally made, has the defect that the larger acorn point is not quite large enough, a wide varicose vein has the tendency to involute, as in Keller's method, the liability to tear across is then great—the larger tip is decidedly better in practice."

#### SET OF NECROSIS INSTRUMENTS.

AS MADE FOR HIS MAJESTY'S NAVY.



8622.

Aseptic Set,-

£ s. d.

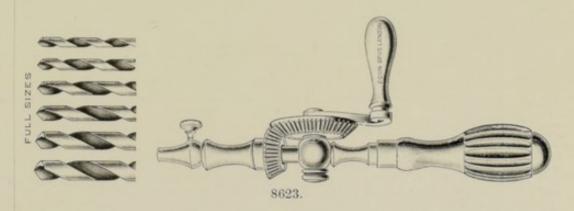
8622

Consisting of—Saw with movable back, Hey's Skull Saw, Chain Saw with guide, Straight Bone Forceps, Bone Forceps curved on flat, Fergusson's Lion Forceps, Hoffmann's Gouge Forceps, Straight Necrosis Forceps, Curved Necrosis Forceps, Marshall's Osteotribe, Horsley's Trephine and handle, Straight Gouge with thumbrest, Trowel-bent Gouge, Chisel, Blunt Hook, Sharp Hook, 3 Scalpels, Scalpel and Raspatory. The knives forged entirely of solid steel, handles nickel-plated, and all forceps made with joints to take apart, nickel-plated. The instruments fitted into metal frames in a metal tray. The tray can be used for antiseptic solutions and forms an inside lining to a brass-bound mahogany case

12 17 0

# NEW MODEL BEVEL WHEEL ACTION DRILL

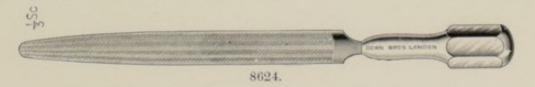
AS MADE FOR MR. H. A. BALLANCE, F.R.C.S., SURGEON, NORFOLK AND NORWICH HOSPITAL.



Bevel Wheel Action Drill,-£ s. d. 8623 Ballance's, with set of 6 Morse's Drills complete 2 14 0 Spare Drills to fit same, 6 sizes. . . . . each

### FILE FOR BONE OPERATIONS.

MADE FOR MR. A. H. TUBBY, F.R.C.S., ETC., SURGEON, WESTMINSTER HOSPITAL, ETC.



File with metal handle, nickel-plated . . . each 0 5 6 8624

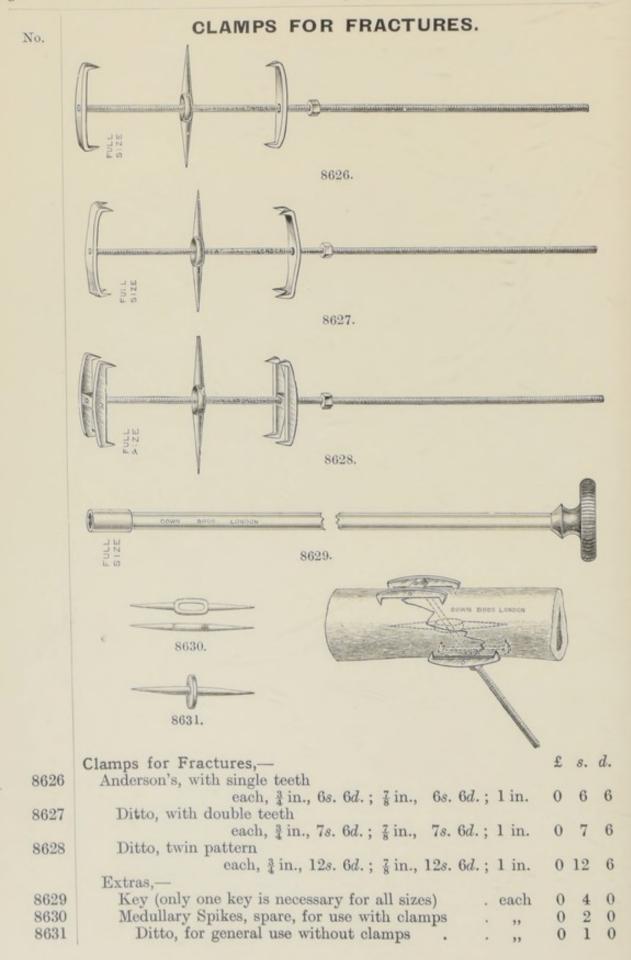
#### PATELLA PINS.

AS USED AT THE WESTMINSTER HOSPITAL, ETC.

+ Sc

8625.

8625 Patella Pins, Westminster pattern . . . each 0 1 3



### No. Clamps for Fractures, continued,-

Extract from the "Royal Army Medical Corps Journal."

(1) The Medullary spike.

(2) The bone fracture clamp.

They depend for their effect in the one case, on the support of the medullary cancellous tissue alone, and in the other, on the sole support of the compact bone. They may be employed singly or in conjunction and will

be described separately and in detail.

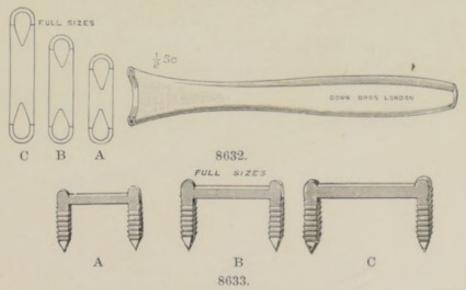
The medullary spike consists of a double-pointed steel spike, divided by a raised flange into two unequal lengths, each from a quarter to two inches and varying according to the necessity of the case, alterations being made if necessary during the operation, by means of a file or cutters. I have been using the ordinary carpenter's bradawl heads, which answer the purpose admirably, and can be bought at any hardware shop at the small cost of two a penny. These may be filed down at the rough end, cut to the required size and electro-plated, if desired, before use. The variety employed in conjunction with the clamp is essentially the same, but perforated to admit the passage of the tension screw, as I shall describe later.

The fracture clamp is a simple instrument consisting of two toothed jaws, each formed by the junction of small parallel steel rods, armed at their extremities with sharp spikes, and joined centrally by a free pivot, so allowing their close adaption which may be considered advisable.

The jaws grasp the bone on either side of the fracture, and are placed, one superficially, the other deeply. They are joined by a tension-screw of fine steel, which pierces the pivots and passes directly through the line of fracture to the obliquity of which it accommodates itself accurately. The tension wire, some three or four inches long, is finely threaded and provided with a minute nut, which can be screwed down, thus clamping the jaws firmly home to any required position, after which any surplus is filed off and discarded.

# PUNCH FOR INSERTING DUJARIER'S STAPLES FOR FRACTURES.

SUGGESTED BY MR. ROBERT JONES, F.R.C.S., SURGEON, ROYAL SOUTHERN HOSPITAL, LIVERPOOL.



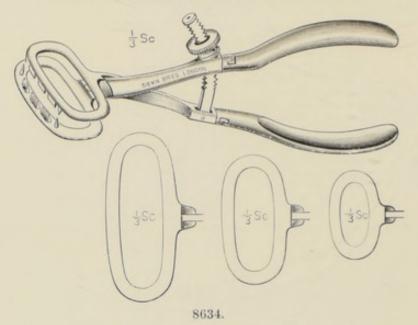
Punches and Staples, nickel-plated,—

Jones' Punches, 3 sizes, A, B, C . . . each 0 5 6

Dujarier's Staples, 3 sizes, A, B, C . . . per doz. 0 15 0

## CLAMP FOR FIXATION OF UNUNITED FRACTURES.

As described by Rutherford Morison, F.R.C.S., etc., Surgeon, Royal Infirmary, Newcastle-on-Tyne.



Clamp for Ununited Fractures, nickel-plated,-

£ s. d.

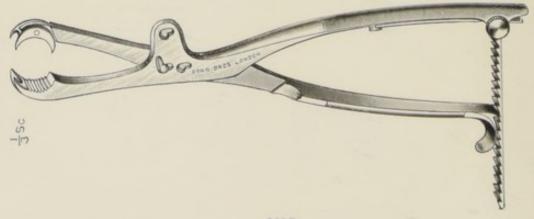
Willan's, made in 3 sizes, with detachable handles, per set . 4 5

8634

This Clamp, designed for Mr. Rutherford Morison by Mr. R. J. Willan and described in the Annals of Surgery, December, 1909, is intended to hold fractured bones together until union occurs and then to be removed, in order to avoid leaving anything indestructible permanently buried in the tissues.

### BONE-HOLDING FORCEPS AND SCREWS.

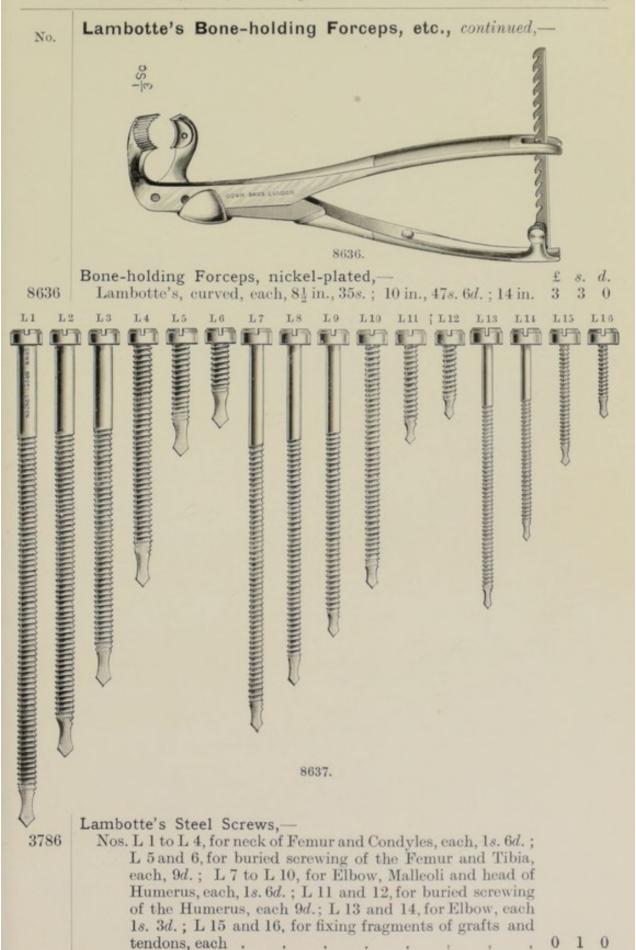
As used by Dr. Albin Lambotte of Antwerp.



8635.

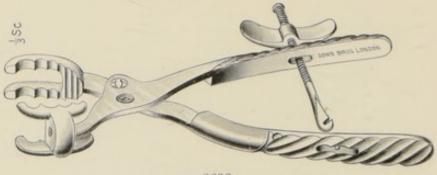
Bone-holding Forceps, nickel-plated,— Lambotte's, straight, 3 sizes

each, 9 in., 32s. 6d.; 11 in., 38s. 6d.; 13 in. 2 10 0



# A NEW BONE-HOLDING FORCEPS (MODIFICATION OF PETERS').

MADE FOR DR. R. LANE JOYNT, SURGEON, MEATH HOSPITAL, DUBLIN.



8638.

£ 8. d.

Bone-holding Forceps, nickel-plated,— 8638 Lane Joynt's

2 2 0

"I have had this instrument modified by the addition of a second doublejawed blade, which has proved of great use in holding transversely broken bones in place while a plate was being applied to them."



FULL SIZES

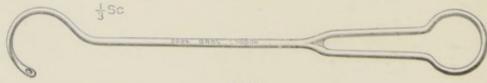
Region of the state of the state

8639

Needles for Wiring Bones, nickel-plated,-

Lane Joynt's for passing wire round bones, 3 sizes, A, B and C, each right and left . . . each 0 7 6

"Force has to be used to perforate the strong attachment of muscles and also to press back the side of the wound in the manœuvre of making the point of the needle appear at the opposite side of the bone."



8640.

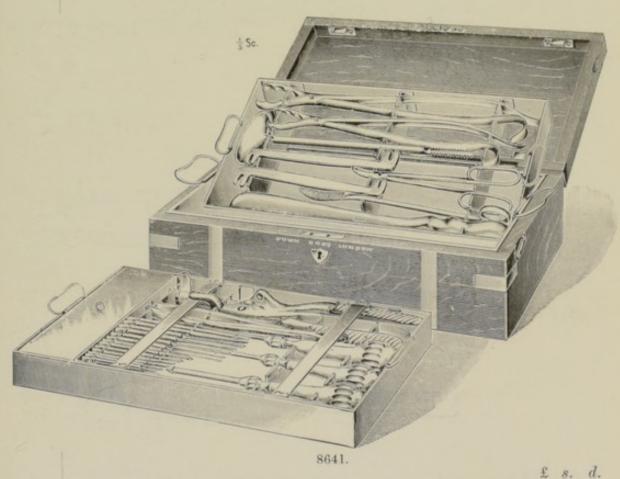
Lane Joynt's, hook shaped, one size only

each 0

0 6 6

# No. NEW INSTRUMENTS FOR THE OPERATIVE TREAT-MENT OF FRACTURES.

SUGGESTED BY MR. ARBUTHNOT LANE, M.S., ETC., SURGEON, GUY'S HOSPITAL.



8641 Set of Instruments for the Operative treatment of Fractures, consisting of—

Suggested additions .-

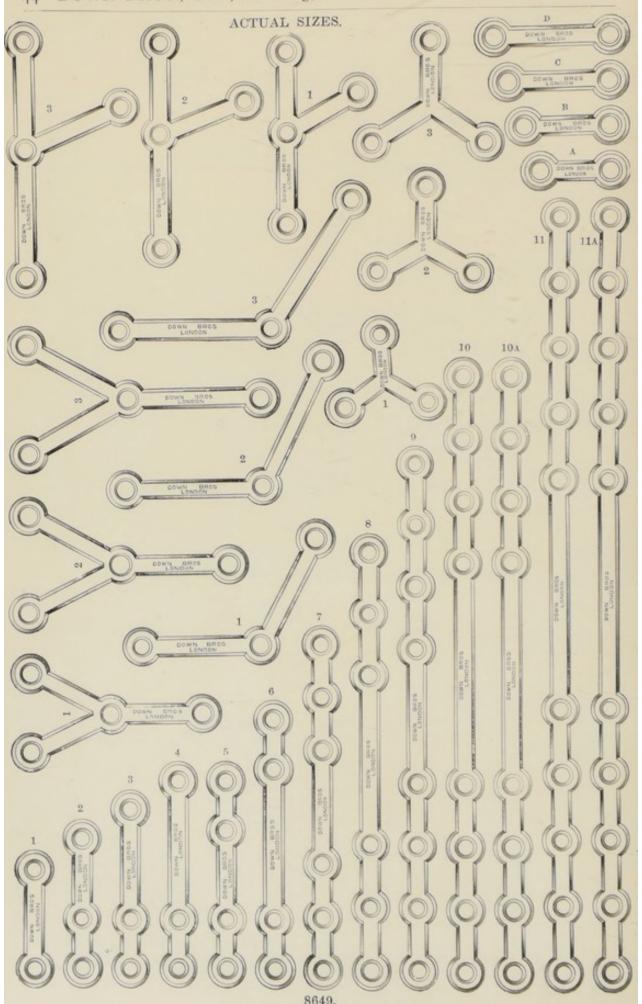
aggester accuracy,				
1 Complete set of Lane's Steel Plates per	set .	2	13	9
1 Gross assorted Screws for use with Piates, at per of	doz.	0	2	0
2 dozen assorted Screws for direct screwing, at per of				

# Arbuthnot Lane's Instruments for the Operative Treat-No. ment of Fractures, continued,-8642. s. d. 8642 Bone-holding Forceps, 12 in. . 0 17 . each Ditto, ditto, 14 in. . 1 0 8643. 8643 Bone-holding Forceps for Patella . . each 1 0 0 1Sc 8644. 8644 Bone-holding Forceps for small bones . . . each 0 11 6 350 8645. 8645 Bone Lever (two of these are usually employed) . each 0 13 6 3Sc 8646. 8646 Bone Lever for small bones . . . . , each 0 8 6

No. Arbuthnot Lane's Instruments for the Operative Treatment of Fractures, continued,-1 Sc 8647. s. d. 0 10 6 8647 Rotary Bone Lever . . . . each +Sc 8579. Retractors, 2 sizes . . each,  $\frac{1}{2} \times \frac{3}{4}$  in., 6s. 6d.;  $1 \times 1\frac{1}{4}$  in. 0 7 6 8579 8648. 0 15 0 . . per pair Benders for steel plates 8648 Toughened Steel Fracture Plates, New Series, the set com-8649 2 13 9 . . . . . SEPARATE PRICES. 9 No. 1, Straight, 2 hole . each 3 3 3, 3 6 5, 4 6 0 6 0 6 6 6 0 8 6 8 10. . 0 0 " extra stout 10A, 8 .. 6 11, 10 . . 0 9 10 ,, extra stout 11A, 9 Straight thin for patella, 4 sizes, A, B, C and D 6 Elbowed, 3 sizes, Nos. 1, 2 and 3 . 0 6 0 Semaphoric, ,, Nos. 1, 2 and 3 6 0 Triangular, Nos. 1, 2 and 3 "Y" shaped, " Nos. 1, 2 and 3 N.B.—These plates are made of toughened steel and are bendable, but not easily so, especially the thicker ones; however, they can be twisted

or bent with the "Benders" provided for the purpose,

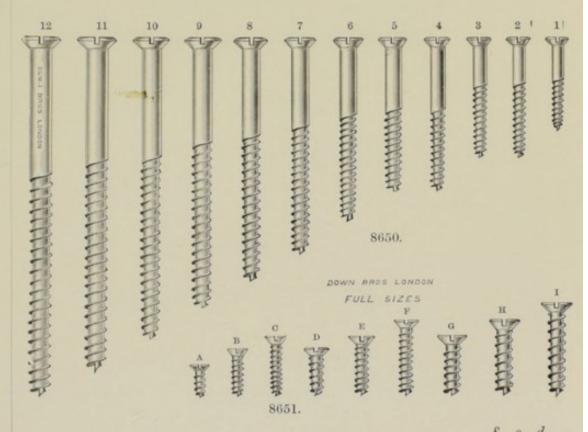
44 DOWN BROS., Ltd., 21 & 23, St. Thomas's St., London, S.E.



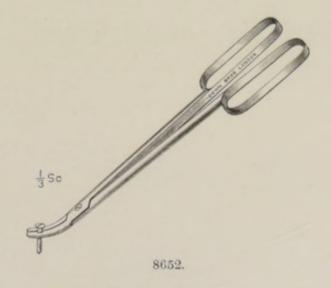
8650

8651

# Arbuthnot Lane's Instruments for the Operative Treatment of Fractures, continued,-

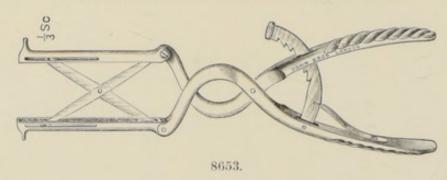


s. d. Screws, for the direct screwing of fractures, Nos. 1 to 12, per doz. 0 Ditto, for use with plates, 9 sizes, A to I 0



No. RETRACTING OR SEPARATING FORCEPS FOR LOWER JAW.

SUGGESTED BY PROFESSOR KOCHER, OF BERN.



Separating Forceps for Lower Jaw, nickel-plated,—
Kocher's . . . . . . . . . . each 2 2 0

RASPATORIES.



8654.

8653

8654

Raspatories, nickel-plated,—
Langenbeck's curved . . . . each 0 7 6



Legg's (made for Mr. T. Percy Legg, F.R.C.S., Surgeon, Royal Free Hospital, etc.) . . . each 0 5 6

# SAWS FOR SUBCUTANEOUS OSTEOTOMY.

Made for Mr. A. H. Tubby, F.R.C.S., etc., Surgeon, Westminster Hospital, etc.

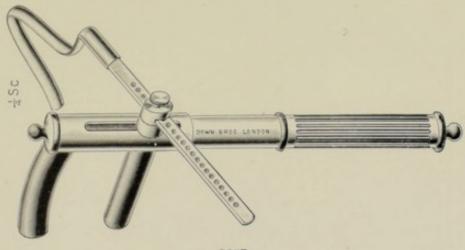


8656.

Subcutaneous Osteotomy Saws,—
Tubby's (modification of Adams'), with large metal
handle (A) . . . . . . each 0 19 6
Ditto, with curved probe end (B) . . . , 1 0 0

### WRENCH FOR TREATMENT OF DEFORMITIES.

SUGGESTED BY MR. E. MUIRHEAD LITTLE, F.R.C.S., SURGEON, ROYAL NATIONAL ORTHOPÆDIC HOSPITAL.

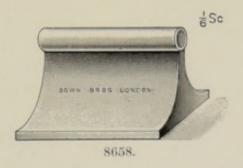


8657.

Orthopædic Wrench,-

8. d.

Muirhead Little's, fitted with 2 sizes of heel loops, complete



8658

8657

Lorenz's Orthopædic Fulcrum, for wrenching the foot and breaking down adhesions . . each

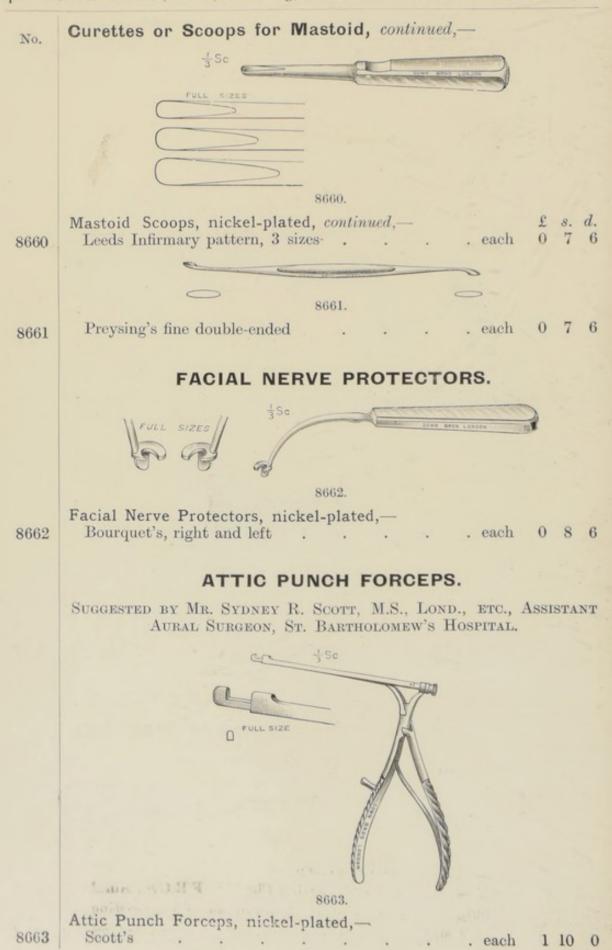
# CURETTES OR SCOOPS FOR MASTOID.



Mastoid Scoops, nickel-plated,-

Cheatle's (as made for Mr. Arthur Cheatle, F.R.C.S., Aural Surgeon to King's College Hospital), set of 3, consisting of 2 sizes oval and 1 circular, each 7s. 6d.; per set

1 2 6



# Attic Punch Forceps, continued,-

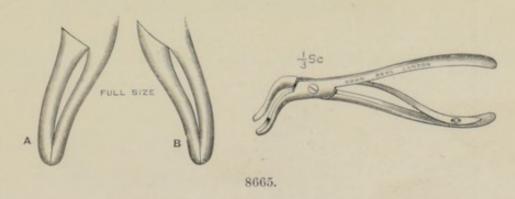


8664.

Attic Punch Forceps, nickel-plated, continued,-£ 8. d. . . . . . . . . each 1 7 6 8664 Krause's

### NIBBLING FORCEPS FOR MASTOID.

SUGGESTED BY MR. KENNETH BLACK, F.R.C.S., OF NOTTINGHAM.



8665

Mastoid Nibbling Forceps, nickel-plated,-Black's, curved to left (A) and right (B). . . cach 0 12 6



8666.

0 12 6 Jansen's . each 8666

E

MASTOID RETRACTORS. No. -Sc 8667. FULL SIZES Mastoid Retractors, nickel-plated,— £ s. d. 8667 Jansen's, in 2 forms, A and B (1 of each are generally employed) . . . . each 0 14 6 MASTOID SCALPEL. As made for King's College, Hospital. OWN BROS LONDON 8668. Mastoid Scalpels, solid forged, nickel-plated handles . each 0 2 8 8668 INSTRUMENTS FOR MASTOID OPERATIONS. USED BY MR. CHARLES J. HEATH, F.R.C.S., SURGEON, THROAT HOSPITAL, GOLDEN SQUARE. +Sc 8669. Gouges forged out of solid, nickel-plated, 3 sizes, 3, 3, and 8669 0 5 6 9 in. . 8670. Mallet, copper, nickel-plated 8670 . each 0 14 6 8671. Probe, double ended, nickel-plated 8671 . each 0 6 6 8672\* Probe, straight, malleable, in handle . \* The items marked thus \* are not illustrated.

# Instruments for Mastoid Operations, continued,-



8673.

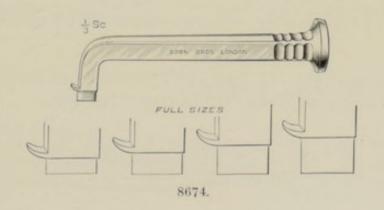
8673

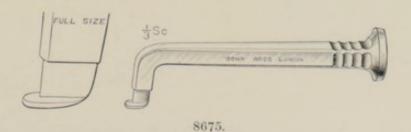
8674

Specula, Heath's, 2 sizes, for use during after-treatment; their shape renders them self-retaining . . each 0 7 6

#### SET OF GUARDED CHISELS FOR SKULL SURGERY.

SUGGESTED BY MR. J. HENDERSON NICOLL, M.B., C.M., ETC., SURGEON, WESTERN INFIRMARY, GLASGOW.





Guarded Chisels, nickel-plated,-

Nicoll's, with upper guard, depth of cut \$\frac{1}{8}\$, \$\frac{3}{16}\$, \$\frac{1}{4}\$ and \$\frac{5}{16}\$ in.

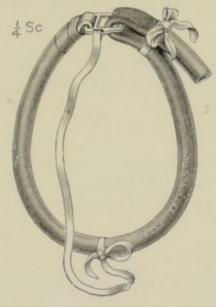
each 0 10 6

8675 Ditto, with under guard (one size only) . . ,, 0 10 6

# No. SET OF GOUGES FOR SKULL SURGERY. SUGGESTED BY DR. F. WINSON RAMSAY, SURGEON, ROYAL VICTORIA HOSPITAL, BOURNEMOUTH. FULL SIZES 8676. £ 8. d. Gouges, nickel-plated,-Ramsay's, 3 patterns . . . each, A, 10s.; B, 12s.; C 0 12 0 8676 VARIOUS INSTRUMENTS FOR CRANIAL SURGERY. FULL SIZE A 1 N T 8677. Cranial Gauge, nickel-plated,-Nicoll's . . . . . . . each 0 3 6 8677 FULL SIZE BOWN BACK LONGON 8678. Dura Mater Forceps, nickel-plated,-8678 Horsley's . . . . . . each 0 6 9 8679. Hæmostatic Clamp Forceps, nickel-plated,-

8679 Crile's . . . . . . . . . each 0 5 6

# Various Instruments for Cranial Surgery, continued,—



8680.

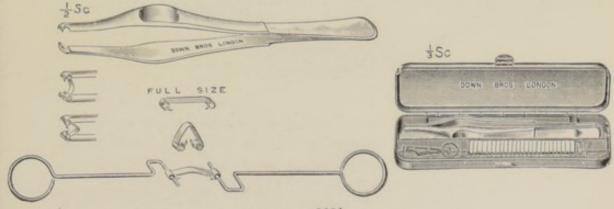
Cranial Tourniquet, 8680 Cushing's

8. d. . each

How to APPLY.

The tube can be made into a ring of any size; practice enables one to estimate the size of the ring necessary in a given case to shut off arterial supply without causing undue pressure. The ring is provided with a median tape, the length of which measured after the head is shaved should equal the length from glabella to inion to prevent the Tourniquet rolling over the orbits. Having been boiled, the Tourniquet is applied over the head from occipital to frontal regions, the point directly opposite to buckle being held below the inion by assistant while the ring is stretched over head, the tape preventing buckle from overriding glabella.

# DR. MICHEL'S ASEPTIC METAL SUTURE CLIPS FOR SUPERFICIAL SUTURES.



8681.

8681

Metallic Suture Appliances,-Michel's set, consisting of 100 Metal Suture Clips, Compressing Forceps, and pair of Hooks for adjusting and removal, in metal case .

0 12 6

Separate prices, Forceps, 3s. 6d.; Hooks, per pair, 6d.; Clips, 2s. 6d. per 100.

# Michel's Metallic Suture Appliances, continued,-

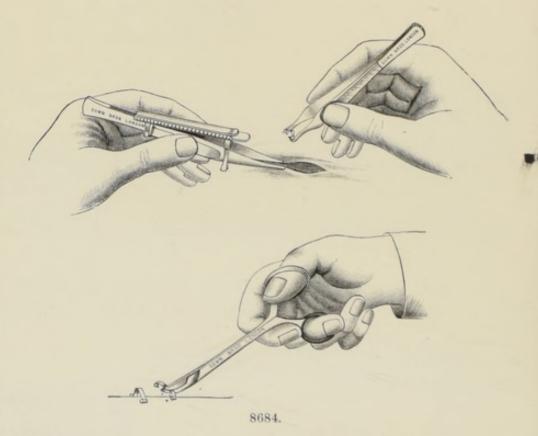


8682.

Metallic Suture Appliances, continued,— £ s. d.

8682 Improved Hooks for Michel's apparatus . . per pair 0 3 0

The set in larger metal case, with the improved Hooks . 0 15 0



8684

Michel's improved set complete, consisting of Spring Tenaculum Forceps for holding edges of wound together, with magazine for carrying the Suture Clips, Forceps for applying and compressing the clips, Bow Extraction Forceps, and 100 Metal Suture Clips in metal case

1 6 6

Separate prices, Tenaculum Forceps with magazine, 9s.; Compression Forceps, 3s. 6d.; Extraction Forceps, 4s. 6d.; Clips, 2s. 6d. per 100.

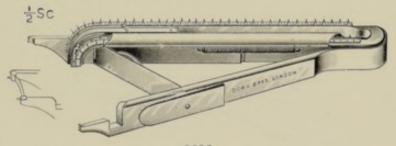
<sup>\*</sup> The items marked thus \* are not illustrated.

#### Michel's Metallic Suture Appliances, continued,-No.



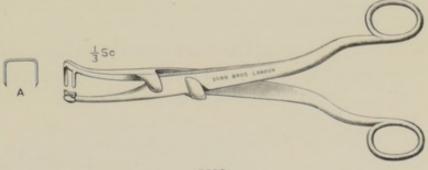
8685.

£ s. d. Metallic Suture Appliances, continued,-Heaton's Improved Tenaculum Forceps for holding the 8685 edges of wound together (suggested by Dr. C. J. Heaton, of Westgate-on-Sea) . . . each



8686.

Michel's Automatic Magazine Forceps for applying the 8686 3 5 0 Suture Clips (self-feeding) . . . Set consisting of Automatic Magazine Forceps, Tenaculum 8687\* Forceps for holding edges of wound together, Bow Extraction Forceps, and 100 Suture Clips in metal 5 0 . .



8688.

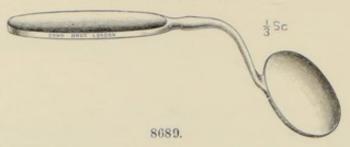
Michel's Forceps for applying metallic ligatures in deep 8688 . . . . . . . . 3 0 wounds Metallic Ligature Clips for use with same, 6 mm.  $\times$  5 mm. 8688A 3 0 A smaller Forceps is also made at same price and smaller clips 4 mm. ×

4 mm.

<sup>\*</sup> The items marked thus \* are not illustrated.

#### SUTURING DEPRESSOR.

SUGGESTED BY MR. H. M. W. GRAY, F.R.C.S., SURGEON, ABERDEEN ROYAL INFIRMARY.



Suturing Depressors,-

£ s. d.

0 15 6

Gray's, 2 sizes, each, small,  $1\frac{7}{8} \times 1\frac{1}{8}$  in., 13s. 6d.; large,  $3\frac{1}{8} \times 1\frac{3}{4}$  in.

### A NEW SUTURING FORCEPS.

SUGGESTED BY MR. T. CARWARDINE, M.S., ETC.



8690

8691

8689

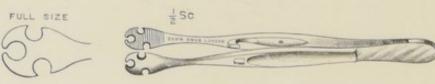
Suturing Forceps, nickel-plated,—
Carwardine's . . . . . . each 0 3 6

Extract from "Medical Press," February 2, 1910.

"In the application of the continuous sutures uniting the stomach and small bowel, I have found a specially designed forceps very useful indeed. The assistant holds them in the palm of the hand, and grips each suture as it is passed, close down, to maintain tension on the last stitch as the next is being passed. The forceps being held horizontally, his hand is out of the way, and the tapering points enable any loops of suture to pass readily over them. The springs are much weaker than those of ordinary dissecting forceps, so that they do not tire the hand. After long experience of their use, I venture to make them known as useful aids in gastric and intestinal anastomosis."

#### A NEW SUTURING FORCEPS.

SUGGESTED BY MR. P. J. LE RICHE, HONORARY MEDICAL OFFICER TO THE WORTHING HOSPITAL.



8691.

Suturing Forceps, nickel-plated,— Le Riche's

. . each 0 8 6

Extract from the "Medical Annual," 1910.

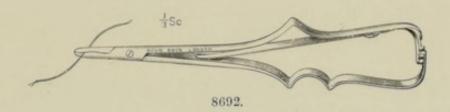
This is an excellent idea; it will be seen that there is absolutely no strain upon either the skin or mucous membrane while the needle is being passed through them, and the thread can be tied and cut with the forceps in position, thus avoiding the strain which is always present when a stitch is put in on the side of the forceps.

£ 8. d.

No.

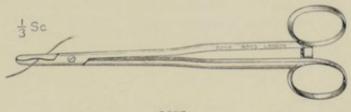
### SUTURE-HOLDING FORCEPS.

SUGGESTED BY MR. ARBUTHNOT LANE, F.R.C.S., ETC., SURGEON, GUY'S HOSPITAL.



Suture-holding Forceps, nickel-plated,-

Lane's. 0 12 9 . each



8693.

8693

8694

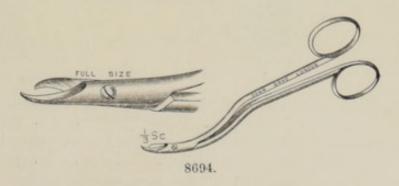
8695\*

8692

Eve's (modification of Lane's), made for Mr. Frederic Eve, F.R.C.S., Surgeon to the London Hospital . each

### STITCH SCISSORS FOR REMOVING SUTURES.

AS USED BY MR. CHARLES J. HEATH, F.R.C.S.



Stitch Scissors, nickel-plated shanks,-

Heath's, with screw joint . . Ditto, with take-off joint .

\* The items marked thus \* are not illustrated.

No.	SUT	URE	AND L					LS, I	Etc	.,	
			WIII	REVI	SED	FNIC	Eo.		£	8.	d.
8696*	Cargile ped	Membra: licles, etc							0	12	0
8697*	Catgut, I	Raw (unt	reated),	per doz.	hanks,	_					
	Nos.	000000			000	00	0	1			
			1/3								
		$\frac{2}{2/3}$	$\frac{3}{2/9}$	$\frac{4}{4/6}$	5/-	6/6	7 7/6	8 9/-			
8698*	Catgut, F					,					
		000000	00000	0000	000		0	1			
		2/9	2/9	2/9	3/-	3/-	3/-				
		2	$\frac{3}{4/6}$	5/2				8			
9800*	Cataut I						10.0	9/0			
8699*		0000000				00		1			
	IVOS.										
		2	10d. 3	4	5	6	7	8			
		1/4	1/6	1/8	1/10	2/-	2/3	2/6			
8700*	Catgut, I	ister's St	alpho Ch	romic, d	lry, per	doz. h	anks,-	-	100	(N)	
	Nos.	000000	00000	0000	000		0	1			
			2/9	2/9	3/-	3/-	3/-				
		2	$\frac{3}{4/6}$	5/3	5 5/9	7/-	8/-	8 9/6			
		*/-	1/0	0/0	0/0	./	9/	₫Sc			
		8701.	350				\$1100 LCEO	02.			
8701	Catgut, St	terilized, tle, 14 siz	in alcoho zes, Nos.	ol, on gla 000000	ass reel to 8	in glas	per b	pered oottle	0	1	4
	Ditto way	ditto	in 5 % 00000 to	carboli 8 .	e solutio	on, put	up in per h	same	0	1	2
8702	Ditto	ditto	in alco			ht bott	les, cor	ntain-			
		3 sizes o					per b	ottle	0	2	9
	Ditto		in 5%				,	,	0	2	4
8703*	Ditto		in alco			-	tals ,	,	0	6	0
	Ditto	ditto	in 5%	carbolic	solution	on .	,	,	0	5	3
20		* The	e items n	narked th	us * are	not ill	lustrate	d.			

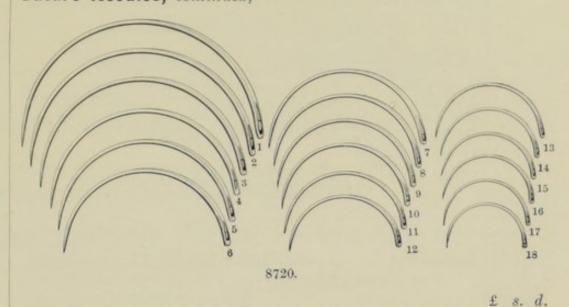
#### Suture and Ligature Materials, continued,— No. 8704. s. d. Catgut, Sterilized, 12-in. lengths, in alcohol . per bottle 8704 0 2 0 ditto ditto in 5% carbolic solution ,, 0 1 6 Tin Cases to hold one tube, each, Japanned, 1s.; nickel-plated, 1s. 3d. 8705. 8705 Catgut, Sterilized, 18-in. lengths, in alcohol, each, small tubes, 3 3 2s. 6d.; large tubes ditto ditto in 5% carbolic solution, each, Ditto small tubes, 2s.; large tubes . . . 8706\* Cumol Catgut, Krönig's, in boxes containing 3 lengths (each 2½ to 3 metres long), in 9 sizes,— Nos. 00 and 0 . . . . . . . 1 6 per box 0 Nos. 1 and 2 . Nos. $2\frac{1}{2}$ and 3 . 1 0 9 33 0 2 0 Nos. 4 and 5 . 2 0 3 Catgut, Iodized, prepared in Spirit, on glass reels in stoppered 8707\* bottles,— 0 12 0 Nos. 000000 to 0 . . per doz. bottles 0 13 0 Nos. 1, 2 and 3. 55 Nos. 4, 5 and 6 . 0 15 0 0 18 0 Nos. 7 and 8 8708. Catgut, Iodized, prepared in Spirit, in stoppered tubes,-8708 0 8709\* Catgut, Triollet, in bottles,-. . per bottle 1 10 Nos. 00 to 6. The 8 sizes of Triollet's Catgut numbered 00 to 6 (French sizes) correspond to the usual Nos. 1 to 8 (English sizes). 8710\* Japanese Silk, on original reels, containing about 120 feet, per reel,-Nos. 0000 000 00 0 3 1/- 1/3 1/6 6d. 9d.6d. 6d. 6 8 5 51 4 41 6/6 3/6 1/9 2/6 It is claimed for this silk that it is very strong and absorbable.

\* The items marked thus \* are not illustrated.

No.	Suture and Ligature Materials, continued,—	£	8.	d.
8711*	Silk, Pearl, or Sewing, 11 sizes, Nos. 4, 6, 8, 10, 12, 14, 16,			
	18, 20, 22 and 24 per doz. skeins Ditto extra thick, No. 1½, for Hæmorrhoids per skein	0	6 2	0
8712*	Thread, Fergusson's, semi-bleached, 3 sizes, Nos. 20, 30 and 40			
8713*	Ditto Sterilized, 12-in. lengths, in 5% carbolic solution	0	2	0
0	(100 lengths) per tube	0	0	10
	VARIOUS FORMS OF SUTURE NEEDLE	s.		
	(Sold in ½ dozen packets only—of one size or 6 assorted s		)	
	Arterial, fine, with Spring Eyes,—		11000	
8714* 8715*	Straight, Nos. 1 to 6 per doz. Full curved, ,, ,, , ,	0	3	0
0,10	2 dir currou, ,, ,, , ,,			
	8716.			
8716	Bland Sutton's Abdominal, $2 \text{ lengths}$ , $2\frac{1}{2}$ and $4 \text{ in.}$ , per doz.	0	2	0
	91			
	93			
	95			
	9 7			
	<b>9</b>			
	<u> </u>			
	8717.			
	33 /			
1	9 1			11.1
	n 1			10 5
	13		16	7
		1	11	
	8718.		.3	
8717	Bonney's (these are made only in the sizes illustrated),— Straight, Nos. 1, 3, 5, 7, 9, 11, 13			
8718	Half Curved, Nos. 1, 3, 5, 7, 9, 11, 13	0	2 2	6
8719	Full Curved, Nos. 1, 3, 5, 7, 9, 11, 13 ,,	0	2	6
	* The items marked thus * are not illustrated.			

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	•		ж.	

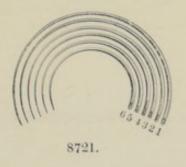
# Suture Needles, continued,-

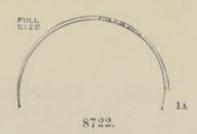


8720 Mayo Brothers' (of Rochester, U.S.), round-bodied, sharp perforating ends and flattened portion at eye, sizes

1 to 18 . .

0 1 9 . . per doz.





8721

Moynihan's, round bodied, 5 circle, fine, sizes Nos. 1 to 6

per doz.

8721A\*

strong, with lance point, No. 1 ditto Ditto . per doz. size only

0

8722

spring-eyed, fine, No 1a size only ditto Ditto per. doz.

0 2 9

8723.

	Suture Nee	edles with '	'Grip" Eyes	,-						
8723	Paterson'	s, Round-boo	died, Straight,	sizes	1 to	18	per doz.	0	3	0
8724*	Ditto	ditto	Half curved	**	1 to	18	,,		3	
8725*	Ditto	ditto	Full curved	,,	1 to	18	"		3	
8726*	Ditto	Triangular,	Straight	,,	1 to	18	,,		3	
8727*	Ditto	ditto	Half curved	,,	1 to	18	**		3	
8728*	Ditto	ditto	Full curved	33	1 to	18	"	0	3	0

<sup>\*</sup> The items marked thus \* are not illustrated.

## Suture Needles, continued,-



£ 8. d.

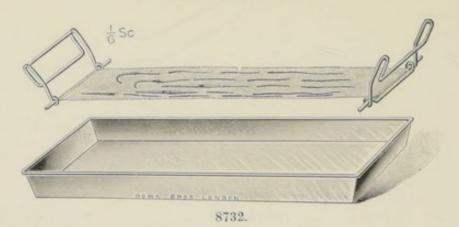
Suture Needles threaded with Silkworm Gut, sterilized, in sealed glass Tubes,—

8729	Full curved				per doz.	0	5	0
8730	Half curved				,,		5	
8731	Straight				,,	0	5	0

N.B.—These are usually supplied in assorted sizes Nos. 7 to 12, but any sizes or type of needle can be prepared to order. The Silkworm Gut can be supplied in natural colour or dyed Green, Pink or Violet.

# TRAY AND CARRIER FOR THREADED NEEDLES.

GUGGESTED BY MR. H. J. PATERSON, F.R.C.S., SURGEON, LONDON TEMPERANCE HOSPITAL.

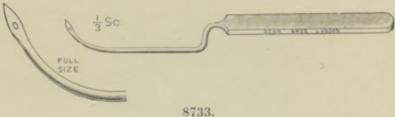


Tray and Carrier for Threaded Needles,-

Paterson's . . . . . . . . . . . complete 0 7 : Separate prices : Enamelled Iron Tray, 2s. 6d.; Stretcher Wires, per pair, 4s. 6d.; Linens, each 3d., or 2s. 6d. per dozen.

### ABDOMINAL SUTURE NEEDLE.

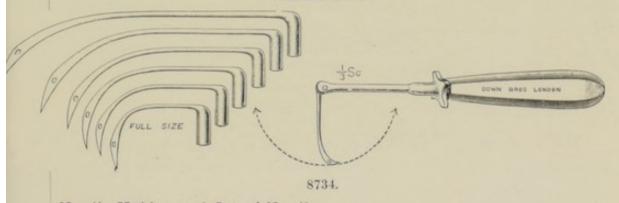
SUGGESTED BY DR. J. E. GARNER.



£ s. d. Needle for Abdominal Sutures, nickel-plated,-. . . . . . . each Garner's

8733

# DR. GAUDIN'S NEEDLE HOLDER AND SET OF NEEDLES.



8734

Needle Holder and Set of Needles,-Gaudin's, with set of 6 Needles; the needles can be fixed at any convenient angle either to the right or left of 1 4 6 the holder . . . per set complete in metal case Separate prices: the Holder, 8s. 6d.; the Needles, 10s. 6d. per set. Needles with slot eyes can also be supplied, 1s. 6d. per set extra. Gaudin's Needle Holder, as described above, but smaller size for Cleft Palate, Fistula, etc., with set of 6 smaller . . per set complete in metal case 1 4 6 needles .

8735\*

#### VARIOUS NEEDLE HOLDERS.



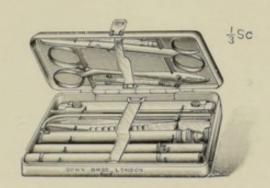
8736

Needle Holders, nickel-plated,-Cushing's, improved, with releasing lever . . each 1 10 0

<sup>\*</sup> The items marked thus \* are not illustrated.

No.	Various Needle Holders, continued,—
	3Sc.
	8737.
8737	Needle Holders, nickel-plated, $continued$ ,— Martin's, with take-off joint, 8 in each $\begin{pmatrix} \pounds & s. & d. \\ 0 & 9 & 6 \end{pmatrix}$
	No. 100
8738	Sims', with take-off joint, $7\frac{1}{2}$ in each 0 8 6
	25 -162 -162
	8739.
8739	Sims', with curved shanks, as used at King's College Hospital each 0 9 6
	OS COMPANY TO THE PARTY OF THE
	8740.
8740	Stanmore Bishop's, latest model, with releasing spring, as made for Mr. Stanmore Bishop, Surgeon, Ancoats
	Hospital, Manchester, etc., etc each 1 1 (

### NEW DESIGNS ASEPTIC METAL POCKET CASES.



8741.

8741 Army Regulation, containing 1 Symes' Knife and Scalpel, Spencer Wells' Forceps, Dressing Scissors, Dissecting Forceps, Hypodermic Syringe with 2 platinum-iridium

Forceps, Hypodermic Syringe with 2 platinum-iridium Needles and combined with receptacle for Suture Needles, Clinical Thermometer, Eye Spud combined with spool of Silk in case, Aneurysm Needle and Director, Probe with screw end, 16 Suture Needles and 2 tubes of Tabloids; the blunt instruments and handles of scissors nickel-plated, in metal case, gilt inside.

2 15 0

£ 8. d.



8742.

8742

Eve's (made for Mr. Frederic Eve, F.R.C.S., etc.), Down Bros.'
Registered design, with removable racks, containing
Paget's Knife and Scalpel forged out of solid steel, Dressing Scissors and Spencer Wells' Artery Forceps (finepointed, useful also for inserting drainage tubes) with
take-off joints, Dissecting Forceps, Scraper and Director,
silver Probe, 6 assorted Needles and 2 sizes Sterilized
Silk; the blunt instruments and handles of knives and
scissors nickel-plated, in metal case, £2 2s.; in metal case,
gilt inside

2 4 0

8744

## Aseptic Metal Pocket Cases, continued,-

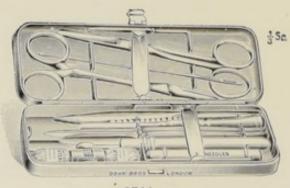


8743.

£ s. d.

Indian Government Model, containing Syme's Abscess Knife and Scalpel with metal handle to take apart, Dressing Scissors with take-off joint, 2 pairs Spencer Wells' Artery Forceps, Dissecting Forceps, silver Director, silver Probe, all metal Hypodermic Syringe with 2 platinum iridium Needles, 2 tubes of Tabloids in metal case, Clinical Thermometer, and 6 half curved Needles with Tablet of Silk and Wire; the blunt instruments and handles of scissors nickel-plated, in metal case, gilt inside

3 10 0

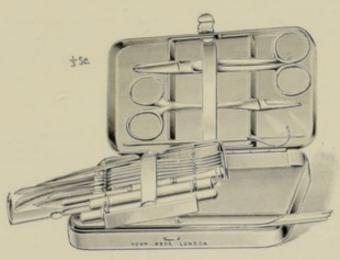


8744.

Dr. Leeson's, improved (Down Bros.' registered design with removable racks), consisting of Paget's Knife and Scalpel in solid-forged steel handles, Dressing Scissors, Spencer Wells' Artery Forceps with take-off joints, Dissecting Forceps, Lupus Scraper and Director, Exploring Trocar in metal case, silver Caustic Case with palladium Quill, silver Probe, 6 assorted Needles in metal box and 2 sizes Sterilized Silk; the blunt instruments and handles of knives and scissors nickel-plated, in metal case, gilt inside

2 15 0

## Aseptic Metal Pocket Cases, continued,-



8745.

Down Bros.' Registered Design, with removable racks, containing Finger Knife, Curved Sharp and Blunt Bistouries, Paget's and Syme's Knives and Scalpel (all forged entirely out of solid steel), Dressing Scissors and Spencer Wells' Artery Forceps with take-off joints, Dissecting Forceps, Exploring Trocar in metal case, Double Scoop for Lupus, etc., silver Caustic Case with palladium Quill, Aneurysm Needle and Director, silver Probe, 6 assorted Needles in metal box and Silk and Wire fitted on metal tablet; the blunt instruments and handles of knives and scissors nickel-plated, in metal

£ s. d.

3 13 6

#### SNAKE-BITE LANCET.

SUGGESTED BY SIR LAUDER BRUNTON.



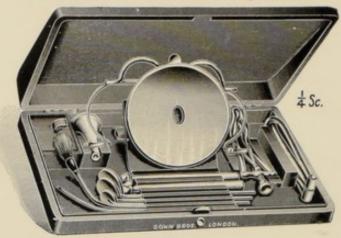
Snake-bite Lancet,-

8746 Brunton's, with receptacle for permanganate of potass, in metal case . . . . . . . . . . per doz. 0 18 0

No. VARIOUS NEW CLEFT PALATE INSTRUMENTS. 3 Sc 8747. 8748. 8. d. Forceps, nickel-plated,-8747 Nicoll's, curved with serrated ends . each 6 8748 ditto tenaculum points ±Sc FULL SIZE 8749. Hook and Flap Support, nickel-plated,-8749 Lucy's 5 6 . . each 1 Sc FULL SIZE Charles. 8750. Knife, nickel-plated handle,-8750 Lane's . each 0 5 3 FULL SIZE -8751. Needle, Anderson's . 8751 0 12 0 . . per doz. The idea of this Needle, made for Mr. C. Morton Anderson, M.R.C.S., of Christchurch, N.Z., is to make both puncture and counter puncture from above by simply turning its point to either side. It is especially useful at the apex of a very acute arch in the cleft palate, and has answered when all other methods have failed.

## Cleft Palate Instruments, continued,— No. 8752. £ 8. d. Needles, nickel-plated,-. . . . . . each 8752 Berry's, fine 8753. . . each 0 5 6 8753 Lucy's 8754. Owen's, strong, for carrying the pilot Suture in the radical 8754 . . . . each 0 3 6 operation of infancy Lead Suture Plates, Brophy's, for holding the maxillæ to-8755 gether in the radical operation of infancy. 0 3 0 per doz. 8756. Raspatory, nickel-plated,-. each 0 6 0 Lane's, double-ended . 8756 8757. Scissors, nickel-plated shanks,-. each 0 5 0 8757 Lane's, fine-pointed, 6 in. . .

## No. DIAGNOSTIC SETS FOR THROAT, EAR AND NOSE.

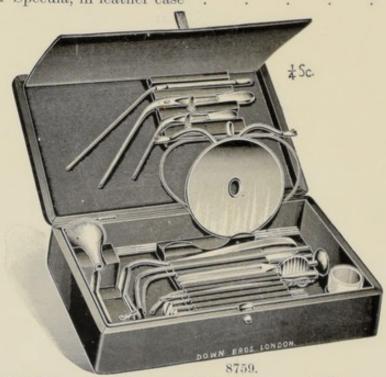


8758.

Diagnostic Set for Throat, Ear and Nose, consisting of Symonds' Laryngoscope with set of 3 Laryngeal Mirrors and handle, Tongue Depressor, 1 curved Throat Probe, 2 straight bendable aluminium Application Probes and Throat Brush fitting one metal handle, spare Throat Brush, Frankel's Nose Speculum, and set of Toynbee's Ear Specula, in leather case



£ s. d.



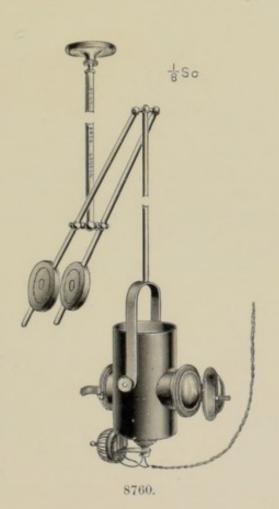
8759

8758

The "Guy's" Diagnostic Set, consisting of Symonds' Laryngoscope with set of 3 Laryngeal Mirrors with handle, Tongue Depressor with handle, Hovell's Nose Speculum, set of Toynbee's Ear Specula with expanded ends, Throat Brush and Probe with handle, spare Brush, Angular Nose Probe, 3 spare straight aluminium Application Probes, Aural Probe, Symonds' Nasal Dressing Forceps, Gardiner Brown's Tuning Fork, Eustachian Catheter, Gardiner Brown's Hook and Loop for removing foreign bodies, and Wylde's Ear Forceps, in leather case

#### NEW

## CANTILEVER PENDANT FOR LARYNGOSCOPIC AND OPHTHALMIC EXAMINATIONS.



£ s. d.

8760

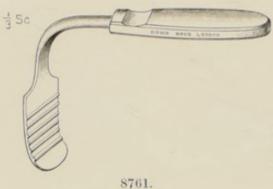
Down Bros.' Cantilever Pendant for Electric Light, fitted with improved metal chimney with cover to bull's eye and opening at back with Iris Diaphragm to give smaller or larger pencil of light; the bracket can be swung round to convenient position, and also raised or lowered to different heights, and is automatically balanced by the cantilevers .

5 5 0

N.B.—In ordering this pendant the height of room should be stated.

8761

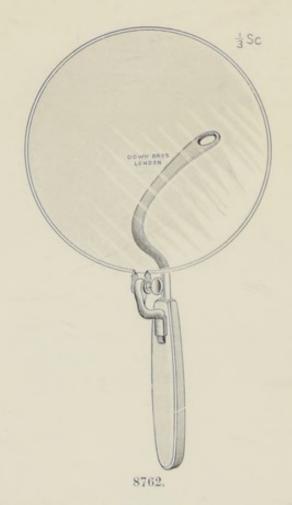
### NEW MODELS OF TONGUE DEPRESSORS.



£ 8. d.

Tongue Depressors, nickel-plated,-

Rumboll's, suggested by Dr. Sydney Rumboll, of Leeds, especially useful in the removal of adenoids

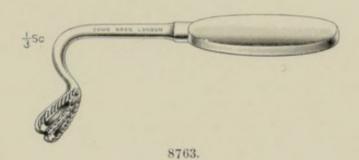


8762

With glass shield for use in infectious cases (a modification of the original design suggested by Dr. W. Hale White, physician to Guy's Hospital). . . each

8764

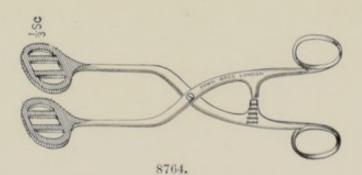
### New Models of Tongue Depressors, continued,-



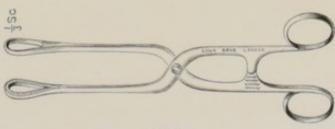
Tongue Depressors, nickel-plated, continued,— £ s. d. Woakes' . . . . . . . . . . each 0 10 6

### TONSIL COMPRESSION FORCEPS.

Suggested by Dr. Watson Williams, Laryngologist, Bristol Royal Infirmary.



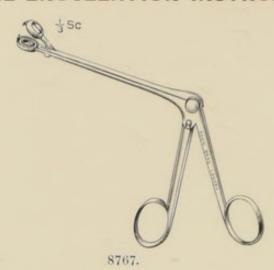
Tonsil Compression Forceps, nickel-plated,—
Watson Williams' . . . . . each 0 12 6



8765.

\* The items marked thus \* are not illustrated.

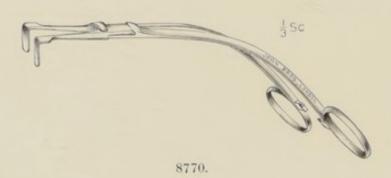
### TONSIL ENUCLEATION INSTRUMENTS.



8767 Tonsil Forceps, nickel-plated,— £ s. d.
Bloxsome's, for seizing the Tonsil (made for Mr. A. Henley
Bloxsome, House Surgeon, Royal Alexandra Hospital
for Children, Brighton) . . . . each 1 5 6



8768 Fletcher Ingall's, for seizing the Tonsil, with take-off joint each 0 14 0 8769\* Ditto ditto with screw joint . . . . . . . . . 0 12 6



Fletcher Ingall's, for separating the Tonsil, with take-off joint

each 0 14 0

Bitto ditto with screw joint. . . . ,, 0 12 6

\* The items marked thus \*\_are\_not illustrated.

8776

Tonsil Guillotine,—
Sworn's, in 3 sizes . . . . . each 1 7 6

This instrument is the well-known Mackenzie pattern, with the important modification that the rim is made removable for readily cleansing; it is firmly secured in position by a pin joint and sliding clip.

8777

8779

## TONSIL PUNCH FORCEPS, Etc.



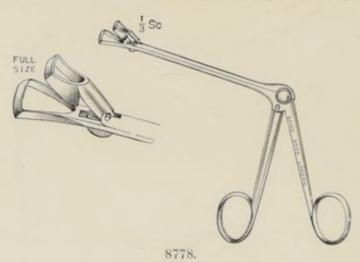
8777.

### Extract from "Laryngological Journal," May, 1901.

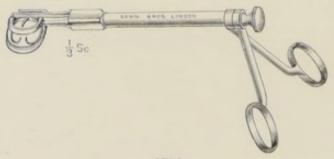
The Tonsil Forceps illustrated in the above diagram effectively removes those large, flat, vertically-elongated tonsils occasionally met with, and which cannot be grasped by a guillotine. It has this advantage over the circular punch forceps—that the surface from which the tonsil is removed is even.

Bagnalstown.

WILLIAM DELANY, L.R.C.P.I., L.R.C.S.I.



8778 Waterhouse's . . . . . . . each 1 6 6



8779.

Tonsil Punch Scissors, nickel-plated,-

Roberts' adjustable, to cut in 4 different directions . each 2 2 0

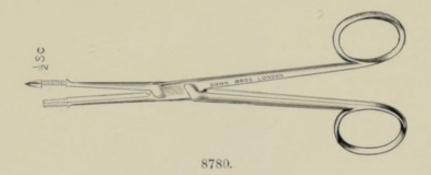
To alter the direction of blades, unscrew the nut, push out the stem and replace in desired direction.

8780

8781

### FORCEPS FOR PERITONSILLAR ABSCESS.

AS MADE FOR MR. A. TODD-WHITE, M.R.C.S., OF LEYTON.



 $\pounds$  s. d. Peritonsillar Abscess Forceps, nickel-plated,—

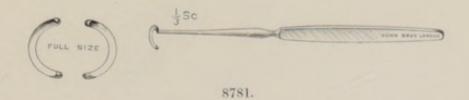
Todd-White's . . . . . . each 0 10 6

Extract from the "British Medical Journal," June 22, 1907.

Dr. Arthur Todd-White (Senior Clinical Assistant, Throat Hospital, Golden Square), writes: "Messrs. Down Bros. have made for me a pair of forceps for opening peritonsillar abscesses. The advantages of these forceps are that the abscess can be lanced and thoroughly opened with one instrument, which is less painful to the patient; a further advantage is that the point and two cutting edges are in one piece, so that a much sharper instrument is obtained than if the division extended to the end. A projecting shoulder prevents insertion too far, and the serrations at the side prevent it slipping out or dilating before dilatation is complete.

## TONSIL SLITTERS FOR CHRONIC LACUNAR TONSILLITIS.

AS USED BY DR. J. B. BALL, PHYSICIAN, THROAT DEPARTMENT, WEST LONDON HOSPITAL.

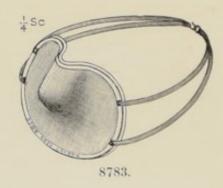


Tonsil Slitters, solid forged, nickel-plated handles,—
Ball's, right and left . . . . . . each 0 8 6

## ALUMINIUM COTTON-WOOL PROBES FOR GENERAL SURGICAL PURPOSES.

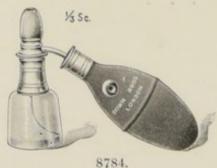
	35C			2
	8782.			
		£	8.	d.
	Probes for Cotton-Wool,-			
8782	Aluminium, bendable, for Throat, Nose, Uterus, etc., per			
	set of 12 with metal handle	0	2	6
	Spare Probes per doz.	0	1	0

### ORONASAL COTTON-WOOL RESPIRATORS.



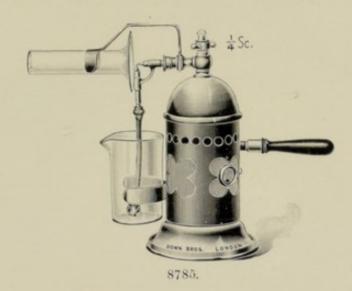
Oronasal Cotton-Wool Respirators,-Aluminium, made of two surfaces aluminium gauze, with 8783 layer of cotton-wool between, for exclusion of dust particles, etc. . . . . per doz. 2 5 0

### NASAL ATOMIZER FOR OILY FLUIDS.



Nasal Atomizer,-French model 8784 . . each 0 3 3

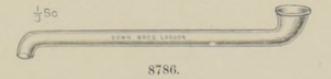
### STEAM THROAT SPRAY.



8785

£ 8. d. New French model, with metal tube . . . each 0 9 6

## GLASS THROAT TUBE FOR AUTO-INSUFFLATION OF POWDERS.

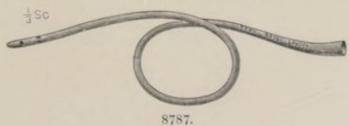


8786

Throat Auto-insufflation Tube,-Escat's glass . . . . per doz. 0 9 0

### INDIA-RUBBER TUBES FOR WASHING OUT THROAT AND NOSE.

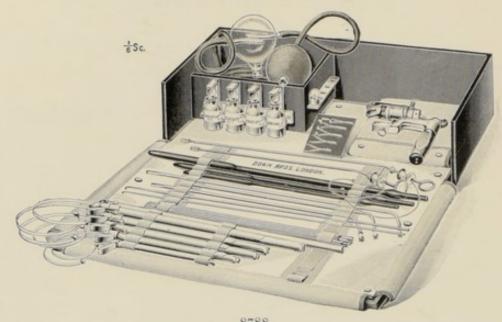
AS USED AT THE LONDON FEVER HOSPITAL. SUGGESTED BY MR. W. L. MACKINNON GOLDIE, F.R.C.S., ASSISTANT MEDICAL OFFICER, LONDON FEVER HOSPITAL.



Irrigation Tube for Throat and Nose,-8787 | Goldie's, 4 sizes, 6, 8, 10 and 12, Eng. Cath. gauge, each 0 2 6

8788

#### BRUNINGS' INSTRUMENTS FOR LARYNGO-TRACHEO-BRONCHOSCOPY AND **ŒSOPHAGOSCOPY.**



8788.

Brünings' Instruments, the set consisting of-

Electroscope with Cable and reserve Lamp (£4 8s.).

1 Double Tube, 5 mm. diam. (18s. 6d.).

- 1 each ditto, 7, 8.5 and 10 mm. diam., with fixing arrangement (each, £1 1s.).
- 1 Tube for Œsophagoscopy, 10 mm. diam. (10s. 6d.).
- 1 ditto ditto 12 mm. diam., with fixing arrangement (£1 1s.).
- 3 Bougies to use as pilots (each, 4s.).
- 1 Forceps for foreign bodies for Bronchoscopy, with 5 different ends (£1 18s. 6d.).
- ditto for Œsophagoscopy, with 2 different ends (£1 5s.). 1 ditto
- 1 Saliva Pump, with 3 tubes of different lengths (13s. 6d.).
- 2 Hooks for foreign bodies (each, 2s.).
- 12 Wool Carriers (doz. 6s.).

Complete in case with bottles

£ 8. d. 16 5 0

0 7 6

Extras, spare Lamps, each, 4s. Brünings' Autoscopy Spatulas, 3 sizes, each, 8s. 6d.



8789.

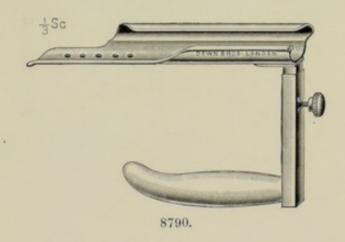
8789 Bellamy Gardner's Chloroform Tube for delivery of Chloroform Vapour from Junker's Apparatus through

the Brünings' tube . . each

8790

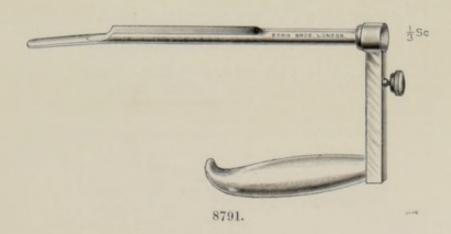
### DIRECT OPERATING LARYNGOSCOPIC SPATULA.

SUGGESTED BY DR. WILLIAM HILL, SURGEON, DISEASES EAR, NOSE AND THROAT, St. Mary's Hospital.



Operating Laryngoscopic Spatulas,— Hill's . . . . . . . . . . . . . . each 0 15 6

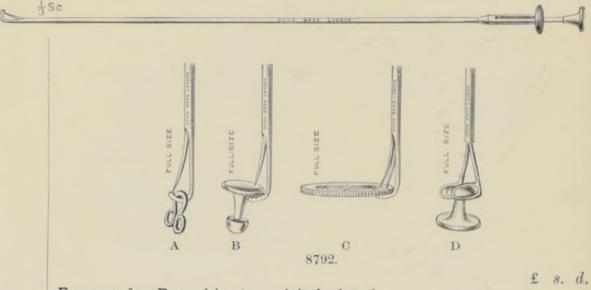
This forms a useful addition to Brünings' set.



8791 Killian's . . . . . . . each 0 13 6

# THE BRONCHI BY THE DIRECT METHOD.

SUGGESTED BY MR. W. CUTHBERT MORTON, M.B., Ch.B., ETC., OF LEEDS.



Forceps for Bronchi, etc., nickel-plated,—

8792 Morton's, with hook and single point, 2 patterns (A and B)

each 0 15 6

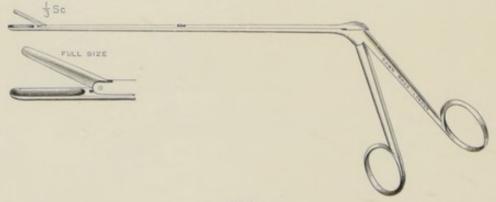
Ditto with double point (C) . . . , 0 16 6

Ditto with fenestrated blades (D) . . . , 1 1 0

These Instruments, originally devised by Mr. Cuthbert Morton and used by Professor Killian (see *Journal of Laryngology*, January, 1906), have since been adopted in principle by Professor Brünings of Freiburg.

## FORCEPS FOR REMOVING LARYNGEAL POLYPI BY THE DIRECT METHOD.

By Dr. D. R. Paterson, Surgeon, Throat Department, Cardiff Infirmary.

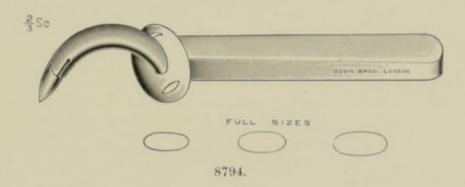


8793.

Laryngeal Forceps, nickel-plated,—

8793 | Paterson's . . . . . . . . each 1 5 0

### INSTRUMENTS FOR LARYNGOTOMY.

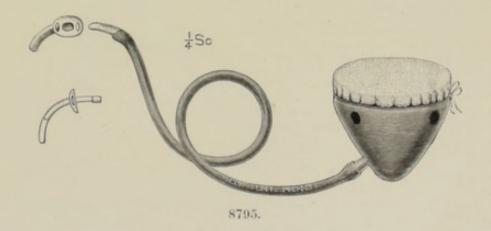


Laryngotomy Tubes,-

Butlin's, silver, with pilots, 3 sizes . . . . each 0-17 6

The largest size is usually employed by Mr. Butlin.

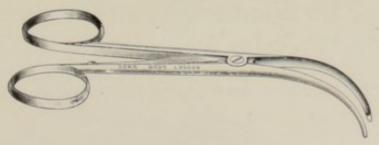
£ s. d.



8795

8794

Butlin's, silver, with pilot and apparatus for administering anæsthetic . . . . . . complete 1 7 6



8796.

Laryngotomy Dilator, nickel-plated,—

8796 Cozens Bailey's . . . . . . . each 0 11 6

## No. Instruments for Laryngotomy, continued,-

8797

8798

8799



Scissors, nickel-plated shanks,— £ s. a. Bond's. . . . . . . . . . . . . . . each 0 5 6

These are used for plunging through the crico-thyroid membrane downwards and backwards in the mid-line, keeping close to the upper border of the cricoid so as to avoid the little artery. The blades of the Scissors are then widely opened to assist passage of tube, or the Scissors withdrawn and Dilator used for the purpose.

## INDIA-RUBBER TRACHEOTOMY TUBES OF ANGULAR SHAPE.

AS RECOMMENDED BY MR. R. W. PARKER, M.R.C.S.



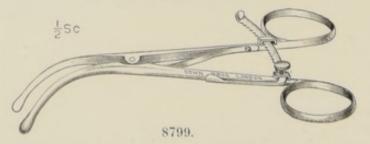
8798.

India-rubber Tracheotomy Tubes,-

Down Bros.' (made from new series of moulds of the angular shape originally suggested by Mr. Parker for his silver tubes), 8 sizes, Nos. 18, 20, 22, 24, 26, 28, 30, and 32, French gauge . . . . each 0

### TRACHEOTOMY DILATING FORCEPS.

Suggested by Dr. St. Clair Thomson, Professor Laryngology, King's College Hospital.

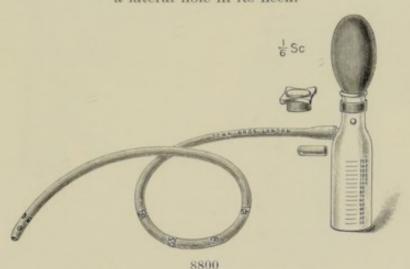


Tracheotomy Dilating Forceps, nickel-plated,— St. Clair Thomson's

St. Clair Thomson's . . . . . each 0 12 6

### DR. SENORANS' GASTRIC JUICE EXTRACTOR.

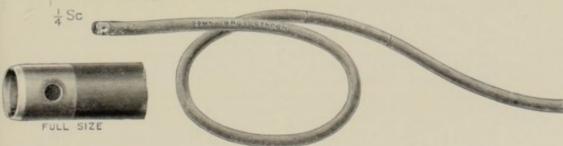
This instrument consists of a glass bottle graduated to 150 c.c. with a rubber suction ball. The bottle has a tubular outlet, and a lateral hole in its neck.



8800

Gastric Juice Extractor,—  $\pounds$  s. d. Senorans' . . . . . . . . . . . . each 1 4 0

Having passed the india-rubber tube into the stomach, attach its proximal end to the tubular outlet of the bottle, the bottle itself being held in the left hand so that the right is free for pressing the suction ball. Having done this, occlude the lateral hole in the neck of the bottle with the left thumb, and then make suction by releasing the pressure on the ball, when gastric juice will flow into the bottle. This action may be repeated until the necessary quantity is obtained. The bottle is then detached from the stomach tube, and closed with the rubber cork, the tubular outlet in the neck of the bottle by means of the rubber cap, and the lateral opening with the rubber band. The bottle is thus hermetically sealed and ready for sending to the laboratory.



8801

8802

Stomach Tubes,— 8801.

Bergheim's, with soft end (patient chews the soft end and then swallows it), one size only, No. 22 gauge . each 0 6

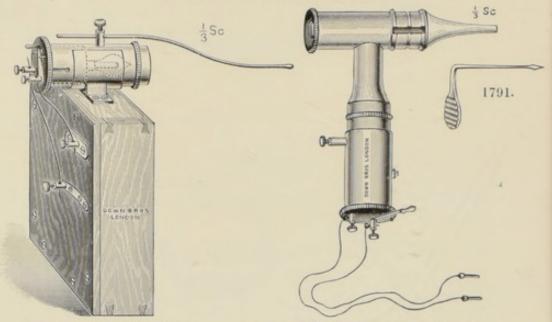
### METAL MASSAGE BALL FOR CONSTIPATION.



Metal Massage Ball,— Osler's. 8802.

. . each 0 7 6

### AURAL SPECULA.



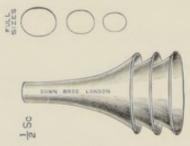
Battery and Lamp, with Probe for Swab attached.

Lamp, with the Auriscope attached, and the Myringotome.

8803.

8803 Electric Auriscope, improved (suggested by the late Dr. £ s. d. E. O. Hopwood, of the London Fever Hospital), complete with Dry Cell Battery, Myringotome, Throat Probe, and spare Lamp . . . 3 0 The Auriscope only, with Cords, in case . 0 5 Dry Cell Battery . . . . each 0 10 0 Throat Probe 3 Hopwood's Myringotome (1791) . 6 4 Spare Lamps (Swan-Edison) . . . 3 9

A Dry Cell Battery in light mahogany case is the source of electric power. The beam of light, rendered parallel, convergent or divergent by a  $\frac{3}{4}$ -inch focal length bi-convex lens in a sliding mount, can be so directed as to brightly illuminate the fauces without falling also upon the lips or teeth. A binding-screw on the top forms an attachment for the end of a wire swab for bacterioscopic examination, thus leaving the other hand available for the tongue depressor. The lamp is detachable from the clip which fixes it to the top of the Battery and is furnished with a flange for the attachment of a "Brunton's" Otoscope, modified by having a slot cut in it, so as to permit of the use of a specially-shaped Myringotome. The membrana tympani is very well illuminated by the electric lamp, and operation upon it rendered easy.



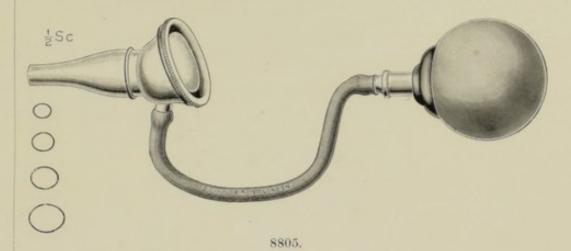
8804.

Aural Specula,—
8804 Heath's, per set of 3 . . . silver, 17s. 6d.; plated 0 10 6

## No. Aural Specula, continued,-

8806

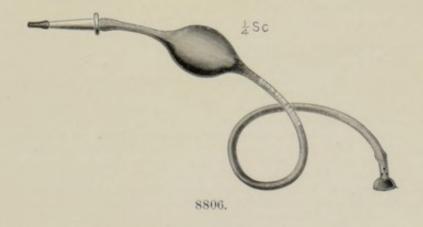
8807



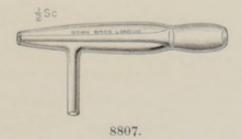
Peters' modification of Siegle's Pneumatic Speculum £ s. d.

(made for Dr. E. A. Peters, Surgeon, Throat and Ear
Department, Bolingbroke Hospital), with set of 4
Specula, plated . . . . . . per set 1 2 6

### IMPROVED EAR SYRINGE FOR SELF USE.



Ear Syringe for self use,—
Dr. Wyatt Wingrave's, with Glass Pipe and Rubber Tip
each 0 3 9



Double-channel Pipe for use with Ear Syringe,—
Mendoza's Glass, for removal of foreign bodies, etc., per doz. 0 10 6

### A NEW INTRA-TYMPANIC SYRINGE.

Made for Dr. Jas. Kerr Love, Aural Surgeon to the Glasgow Royal Infirmary.



8808.

8808

Intra-tympanic Syringe,— £ s. d. Kerr Love's . . . . . . . . each 0 10 6

Extract from the "Lancet," June 30, 1906.

Considering the frequency with which obstinate middle-ear discharge is associated with disease of the tympanic attic and the difficulty there is in cleansing the attic either by the dry method or by the ordinary ear syringe, it is not surprising that many special Intra-tympanic Syringes have been constructed. Intra-tympanic Syringes are used both in diagnosis and in treatment. When a large part of the membrana tensa is gone, and when easy access is thus given to the upper part of the tympanic cavity, the turned-up point of an Intra-tympanic Syringe may be inserted into the attic or backwards into the auditus, and in this way large quantities of flakey or cheesy discharge may be removed. Evidence of this kind, along with the information obtained by probing, goes a long way in guiding the surgeon in the conduct of the case, and if a continuance of such cleansing does not result in entire cessation of discharge, the indications for operation (ossiculectomy or the radical operation) are often clearly defined. Such a syringe must present the following features:—(1) Its point must be narrow and so turned upwards that it can enter behind the membrane into the tympanic attic; (2) its point must be capable of rotation through the upper half of a circle, for it may have to be introduced behind the malleus handle under the posterior fold of the membrane, or in front of the handle under the anterior fold of the membrane; and (3) as the current from the syringe must be directed with precision the instrument must be small and easily handled. The lumen of the delivery tube must be free from obstruction as the solution must be applied in considerable volume and with considerable force, the secretion to be dislodged being often tough and present in large quantity. Nearly all existing Intra-tympanic Syringes fail in one or more of the above requirements. In nearly all the point is too narrow and the current too weak—results often produced or made worse by the fitting of a narrow rotation nozzle to the syringe. Often the bag containing the solution is too small. I have designed the syringe

## No. Intra-Tympanic Syringe, continued,-

shown in the illustration. It fulfils all the above requirements, and both for diagnosis and treatment has proved satisfactory. Like all such instruments, the syringe must be used by the surgeon himself, and only with the aid of the mirror and speculum.

The instrument is made by Messrs. Down Bros., Ltd., London.

### GLASS RECEPTACLE FOR AURAL PROBES.

SUGGESTED BY Mr. CHARLES J. HEATH, F.R.C.S., SURGEON, THROAT HOSPITAL, GOLDEN SQUARE.



£ s. d. Glass Jars for Adrenalin, etc.,-8809 Heath's . each These serve to take a little of the Hæmostatic from the stock bottle and thus avoid waste, and are so shaped as to stand a probe upright in without risk of its falling out. AURAL PROBE. MADE FOR DR. ADOLPH BRONNER, SURGEON, BRADFORD EYE AND EAR HOSPITAL. 8810. Aural Probes,-. each 0 1 6 Bronner's, silver 8810 8811. Heath's 0 2 0 . each 8811 .00w # 8812. &Sc 8813. Purves' Corkscrew Probe and Presser for Cotton-Wool 8812

Pledgets

8813

Corkscrew Probe and Conical Screw combined

9

0 2 9

. each

### EUSTACHIAN CATHETER.

SUGGESTED BY MR. RICHARD LAKE, F.R.C.S., SURGEON, ROYAL EAR HOSPITAL.



8814.

£ 8. d.

Eustachian Catheter,— 8814

Lake's, in 3 sizes, Nos. 7, 8 and 9, French gauge . each

GRADUATED EUSTACHIAN BOUGIES.

SUGGESTED BY DR. F. HUNTER TOD, AURAL SURGEON, LONDON HOSPITAL.



8815.

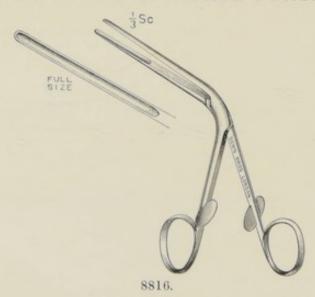
Graduated Eustachian Bougies,-8815 Hunter Tod's, per set of 3 in case .

Used as a means of diagnosis to demonstrate the existence and position of a stricture, to dilate a stricture, and to apply medicants to the mucous

lining.

The graduations, I centimetre in width, show how far the Bougie projects beyond the end of Catheter.

VARIOUS FORMS OF AURAL FORCEPS.



Aural Forceps, nickel-plated,-

Heath's (Mr. C. J. Heath, F.R.C.S.), with wings to raise from bottom of sterilizing tray . . . each 0 10 6

8816

### MOUTH GUARD.

To prevent Mouth-breathing in Children.

Suggested by Dr. H. Macnaughton Jones.



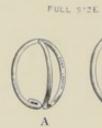
8821

Mouth Guard,-Macnaughton Jones'

£ 8. d. 0 10 6 . each

### DILATORS FOR DISTENDING THE ALÆ NASI.

By Dr. Alexander Francis.





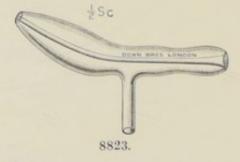




8822

Nasal Dilators,-Francis', silver, 4 sizes, A, B, C and D . . . per pair 0 2 6

## VARIOUS MODELS NASAL DOUCHE TUBES.



8823

Nasal Douche Nozzle,-Mendoza's, double channel glass

per doz.

0 10 6

8824.

Post-nasal Douche Tubes,-

Moure's, with end to screw off, plated . . . each 0 3 6

Post-nasal Douche Tubes, continued,-No.

8825

8826

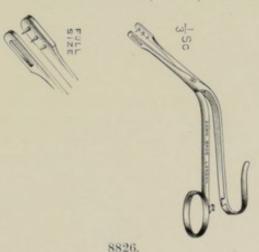
8827



Post-nasal Douche Tubes, continued,-£ 8. d. Vacher's, with end to screw off, plated . 0 3 6 . each

### NEW FORCEPS FOR USE IN TURBINECTOMY.

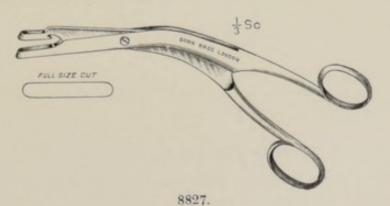
SUGGESTED BY MR. A. STANLEY GREEN, M.B., B.S. LOND., OF LINCOLN.



Turbinectomy Forceps, nickel-plated,-

Stanley Green's . each "When the anterior half of the inferior turbinated bone is divided from its attachment to the wall of the nose, it is then removed by means of the Snare, and it is in many cases extremely difficult to get a good hold of the bone, but if held by a forceps passed through the loop of the Snare, no difficulty is experienced."

0 10 6

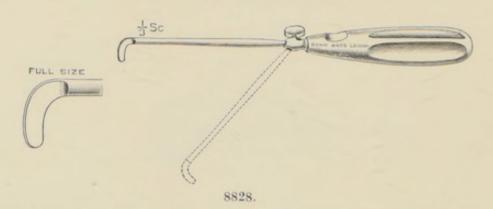


Mahu's each

8828

8829

### TURBINECTOMY KNIFE.

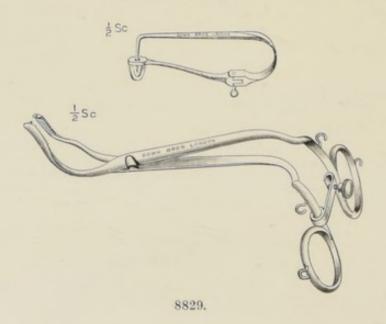


Turbinectomy Knife, nickel-plated, except blade,— £ s. d.

Ballenger's, for posterior Turbinates, with 2 blades . . 0 17 6

### POST-NASAL SWAB FORCEPS.

Suggested by Dr. Watson Williams, Laryngologist, Bristol Royal Infirmary.



8832

### NASAL PROBES FOR COTTON-WOOL.



8830.

Nasal Probes,-

8. d.

8830 Bronner's

. each

+Sc

8831.

Heath's, with metal handle . . . . 8831

. each 0 2 0

### NEW TYPES NASAL SCISSORS.

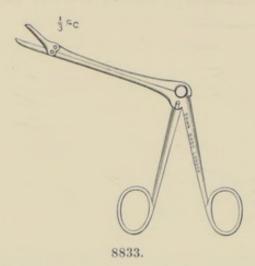


Nasal Scissors, nickel-plated shanks,-

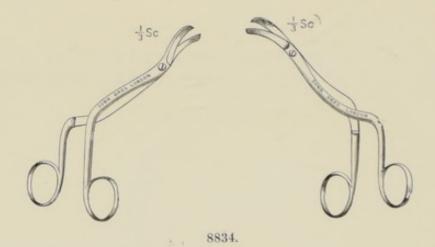
Stanley Green's . . . . . . . each 0 9 6

For use in connexion with Snare for removing anterior portion of inferior turbinate. "The method I employ is to make a cut with Scissors, which I had made for the purpose with the lower blade a little longer than the upper. I then pass the loop of the cold Snare round the cut end and remove the amount necessary." Vide Mr. Stanley Green's paper Lancet, July 24, 1909.

#### New Types Nasal Scissors, continued,-No.



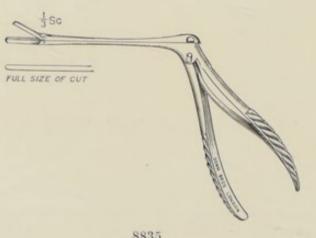
Nasal Scissors, nickel-plated shanks, continued,— £ s. d. . each 1 1 0 8833 Hartmann's .



Sherwell's, right and left, with serrated edges to blades each 0 12 6

8834

8835



8835.

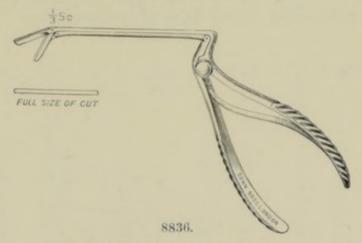
Struycken's . .

8836

8837

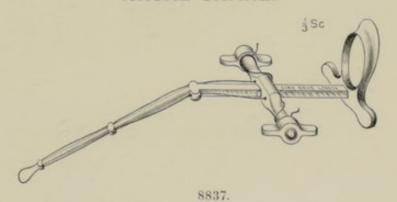
8838

New Types Nasal Scissors, continued,-



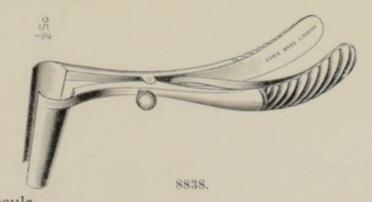
Nasal Scissors, nickel-plated shanks, continued,-£ s. d. Watson Williams', with downward curve to facilitate horizontal section of the middle turbinal . . . each

### NASAL SNARE.



Nasal Snare, nickel-plated,-Heath's . . . each 1 5 0

## VARIOUS NEW MODELS NASAL SPECULA.

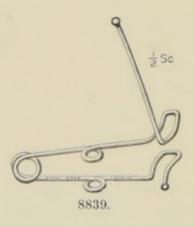


Nasal Specula,-Hajek's, steel dilating, nickel-plated . . . each 0 10 6

H

8839

## New Models Nasal Specula, continued,-



Nasal Specula, continued,-

£ 8. d.

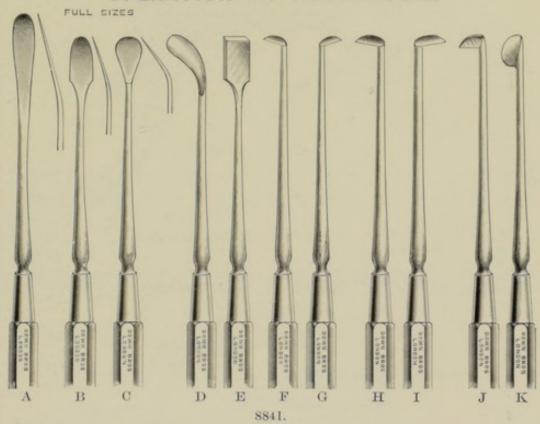
Hefermann's, right and left . . each, 2s.; per pair



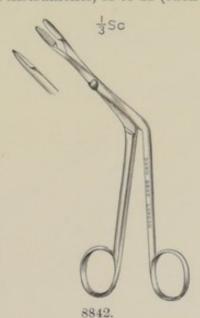
Watson Williams', with ivory blades

. each 0 17 6

# OPERATION ON THE SEPTUM.



Instruments for Sub-mucous Operation, nickel-plated,—  $\pounds$  s. d. Freer's Set of eleven instruments, A to K (each 5s. 6d.) . 3 0 0



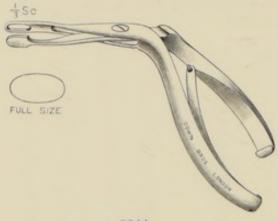
8842 Killian's Forceps, with take-off joint 8843\* Ditto with screw joint . .

. each 0 10 6

8841

<sup>\*</sup> The items marked thus \* are not illustrated.

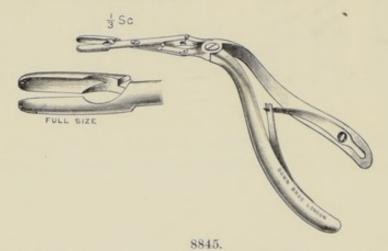
#### No. Instruments for Sub-Mucous Operation, continued,-



8844.

Punch Forceps for Septum, nickel-plated,— £ s. d. Foster-Ballenger's . . . . . . . each 1 7 6

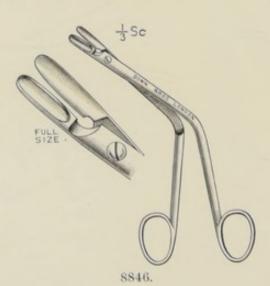
N.B.—These are now made with a flat spring attachment to fenestrated blade to hold the portion removed as suggested by Mr. H. A. Ballance.



Jansen-Middleton's . . . . each 1 10 0

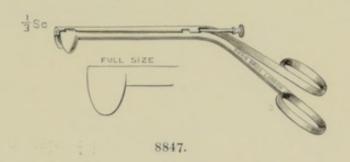
8845

8846



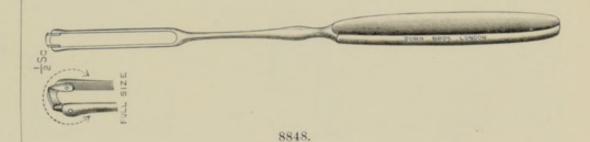
Symonds', with screw joint . . . . each 0 13 6

#### Instruments for Sub-Mucous Operation, continued,-



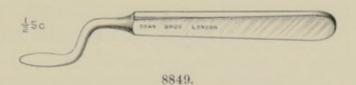
8847

Vomer Forceps, nickel-plated,—  $\pounds$  s. d. Wood's, for removing ridge at base of Septum . each 1 5 6



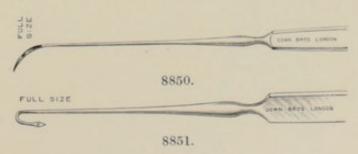
8848

Ballenger's Knife (improved by Watson Williams) . each 0 10 6



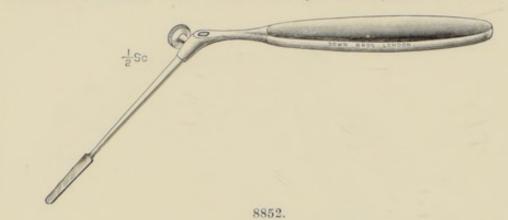
8849

Killian's Knife Separator . . . each 0 5 6

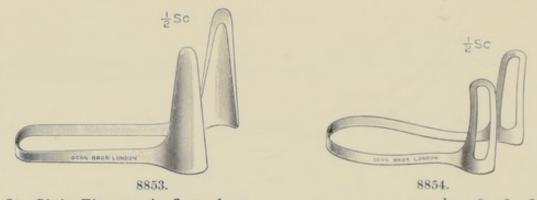


Needles, nickel-plated,—

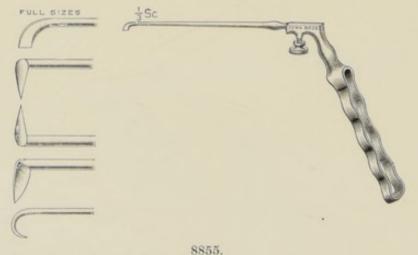
#### No. Instruments for Sub-Mucous Operation, continued,—



8852 Watson Williams' Raspatory . . . . each 0 8 6



## NEW MODELS OF INSTRUMENTS FOR THE ANTRUM OF HIGHMORE.



Antrum Instruments, nickel-plated,—
Lack's Set for inner wall of Antrum, consisting of 3 rightangled Knives, Hajek's Hook and Chisel and Handle,
per set

8855

## Antrum Instruments, continued,-No. 8856. £ s. d. 8856 . each, plated, 2s. 6d.; silver Lack's Canula 8857. Citelli's Punch Forceps . . each 1 8 0 8857 8858. 8858 Halle's Trocar and Canula, with blunt pilot complete 0 12 6 FULL SIZE CUT 8859. 8859 Wagener's Punch Forceps each

8861

#### Antrum Instruments, continued,-





India-rubber Plugs,-

With straight shields, 3 sizes, 4, 4·5 and 5·5 mm. diam.

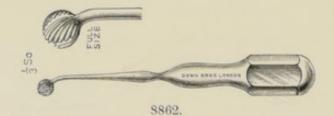
per doz. 0 12 0

£ s. d.

With oblique shields, 3 sizes, 4, 4.5 and 5.5 mm. diam.

per doz. 0 12 0

## VARIOUS INSTRUMENTS FOR THE ETHMOIDAL FRONTAL AND SPHENOIDAL SINUSES.



8862

Burr, with metal handle, nickel-plated,—
Tilley's, for breaking down the fronto-ethmoidal cells, each 0 8 6

It is passed from above downwards through the fronto-nasal duct.



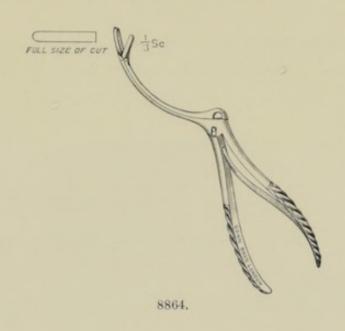
8863.

8863 Lack's . . . . . . . . each 0 7 0

8864

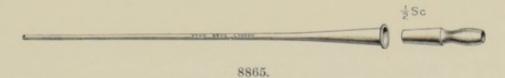
8866

## Instruments for the Ethmoidal, Frontal and Sphenoidal Sinuses, continued,—



Anterior Ethmoid Forceps, nickel-plated,—  $\pounds$  s. d.

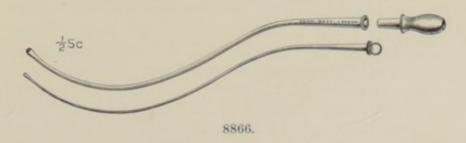
Lange's . . . . . . each 1 7 6



Frontal Sinus Canulas, silver,-

Straight, bendable, with mount for I.R. tube . . each 0 4 6

This is also suitable for Ethmoidal and Sphenoidal cells.

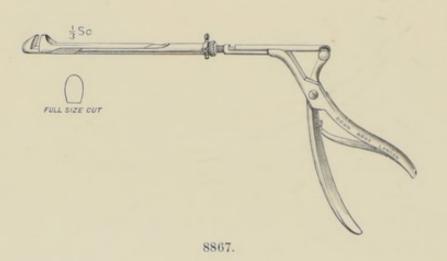


Tilley's, curved, with stilette . . . . each 0 6 6

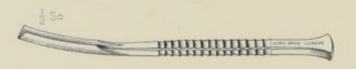
8867

#### SPHENOIDAL CUTTING FORCEPS.

Suggested by Dr. P. Watson Williams, Physician, Throat Department, Bristol Royal Infirmary, Author of Diseases of the Upper Respiratory Tract, Nose, Pharynx and Larynx, etc., etc.



Sphenoidal Cutting Forceps, nickel-plated,—
Watson Williams' . . . . . . . each 2 2 0



8868.

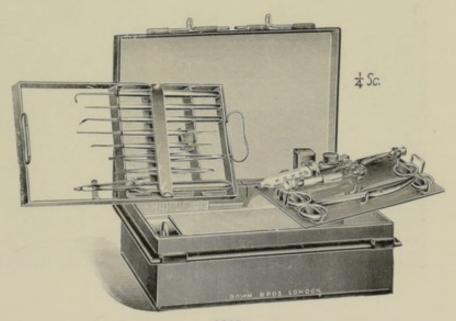
Sphenoidal Gouge, nickel-plated,—

8868 Killian's . . . . . . each 0 5 6

8869

## THE "EMERGENCY" SET FOR OPHTHALMIC SURGEONS.

SUGGESTED BY DR. A. MAITLAND RAMSAY, CONSULTING OPHTHALMIC SURGEON, ROYAL INFIRMARY, GLASGOW.



8889.

£ s. d.

#### Ophthalmic Emergency Case,-

Iridectomy Knife, Weber's Canaliculus Knife combined with Probe, platinum Cystotome combined with plain spud, Strabismus Hook, all with metal handles; Fixation Forceps, curved Iris Forceps, straight fine Iris Scissors, strong curved on flat Excision Scissors, Bowman's Speculum with stop screw, Stevens' Needle Holder, all glass Hypodermic Syringe with 2 platinumiridium Needles and Meyer's fine Lachrymal Pipe and Panas' Nozzle for Anterior Chamber to fit same Syringe, ½ dozen full curved Needles, 1 reel White Silk, 1 box of each Atropin, Eserine, Cocaine, Adrenalin and Fluorescin Sterules and 1 Ejector for Sterules, 1 bottle Collargol Gelatine Discs, 1 tube Morphia Hypo.

Tabloids, 1 tube Sodium Soloids, 1 tube Corrosive Sublimate Soloids, and 3 Bernay's Compressed Sponges, complete in japanned tin case . . .

Ramsay's, containing Graefe's Cataract Knife, Jaeger's

6 18 0

#### BI-MANUAL OPHTHALMOSCOPE.

SUGGESTED BY MR. HERBERT TANNER, F.R.C.S.

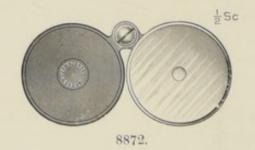




8870.

					£	8.	d.
	Bi-manual	Ophthalmoscope,—					
8870	Tanner's,	with 13 D lens in case .			2	10	0
8871*	Ditto	with electric light attachment			3	10	0

#### RETINOSCOPY MIRROR.

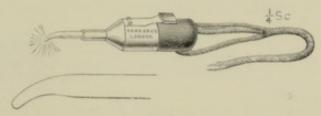


8872	Retinoscopy Mirror with Sliding Cover		each	0	7	6
8873*	Ditto made with amber-tinted glass.		,,	0	8	6

<sup>\*</sup> The items marked thus \* are not illustrated.

8874

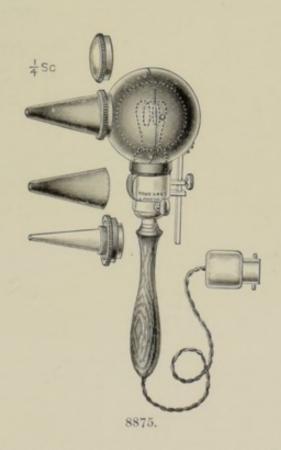
#### TRANSILLUMINATION LAMPS.



8874.

Transillumination Lamps,— Lange's, fitted with 10 volt Lamp . . .

in case 1 1 0



8875

Sachs', for use in connexion with main supply, with conducting cord (but exclusive of wall plug) . . each 3 3 0 Spare Lamps for ditto . . . . . . . , 0 4 0

This instrument consists of a 24 c.p. electric lamp, silvered at the back, enclosed in a hood from which projects a solid glass cone silvered on its convex surface, producing a light of great transilluminating power. The small end of the glass cone is held in contact with the sclera, brilliantly illuminating the interior of the eye and bringing into view the whole ciliary body and anterior chamber.

It is invaluable in locating and defining intra-ocular tumours, and also foreign bodies; and in all cases where opacities in the media render examination with the ophthalmoscope difficult or impossible.

N.B.—When ordering, state voltage of current; 100 and 200 volt Lamps only kept in stock.

#### No. AN UNSPILLABLE OPHTHALMIC DROP BOTTLE Registered.

Suggested by Mr. J. Burdon Cooper, M.B., B.S., etc.



					0010	16			0			
Unspillable (	Opht	halr	nic 1	Drop	Bot	tles,-	-4			£	8.	d
Cooper's									. eac	h 0	2	(
Set of 4 Bo	ttles	in c	ease v	vith 8	Spirit	Lan	ap		per se	et 0	13	(
Case for Set	of .	5 rei	naini	ng B	ottles	3.			. eac	h 0	4	(
The bott	les ai	re ma	de in	nine	colou	rs as i	follow	s:				
Blue						*			. Ho	matropi	ne.	
Green									. Met	hyl-atr	opin	
Amber								,	. Ese	rin.		
Ruby									. Silv	er Nitr	ate.	
Yellow									. Pile	carpin.		
Purple					*:				. Atr	opin.		
Light Blu	ie .					- 0			. Dio	nin.		
Light Gr	een								. Flu	orescin.		
Flint Gla	88								. Coc	aine.		

The author suggests that the most generally useful set is one comprising Cocaine, Atropin, Eserin, Silver Nitrate, Spirit Bottle and Lamp. A second case will accommodate the remaining five bottles and complete the set if required (special cases made to order).

Extracted from the "Ophthalmoscope," March, 1906.

The accompanying woodcut represents a safety sterilizable Ophthalmic Drop Bottle (Registered), which has been made for me by Messrs. Down Bros. of London, the construction of which allows of rapid sterilization without the removal either of the rubber cap from the dropper, or the latter from the bottle.

This bottle is of test tube shape, and has a safety tube fused into the

neck which prevents its contents from escaping.

The pipette or dropper is ground to fit the bottle accurately, and is provided with a safety tube (see diagram) fused to the aperture of the upper

This safety tube prevents any fluid that has been drawn up into the pipette running back into the rubber nipple when the bottle is laid on its side or the

8876 8877\* 8878\*

> The rubber nipple fitted to the upper bulb of the pipette has, near its centre, a fine longitudinal slit. It occurred to me to utilize this ingenious device of Bunsen, known as the Bunsen Valve, in order to sterilize the interior of the rubber nipple of Ophthalmic Drop Bottles.

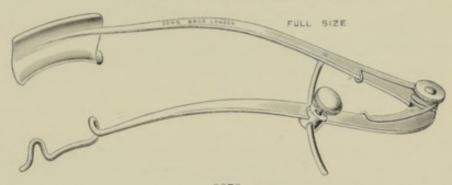
> In order to sterilize the bottle it is held slantwise over the flame of a spirit lamp with the curved end of the pipette directed upwards and the contents boiled. The pressure of the steam drives the fluid into the pipette until the curved end is free, and the steam then passes up through the liquid in the pipette, on into the interior of the rubber cap, sterilizing it, and escaping through the Bunsen Valve. The valve prevents the admission of external air to the bottle after it has cooled, so that at the end of the process of sterilization, the bottle is entirely free from air, and the atmospheric pressure prevents the pipette from coming out. The tube can be carried in this condition until its contents are required, when pressure on the top of the rubber cap opens the valve, and the pipette can be removed with ease.

> As most of the fluids used are alkaloids the bottle is readily cleansed by means of a little strong nitric acid which forms a salt easily soluble in water. The deposit occurring in a solution of cocaine mixed with Adrenalin is difficult to remove, but by allowing the acid to stand for some time in contact with it, with perhaps boiling it occasionally and washing well with

water, it is possible to remove the greater part of it.

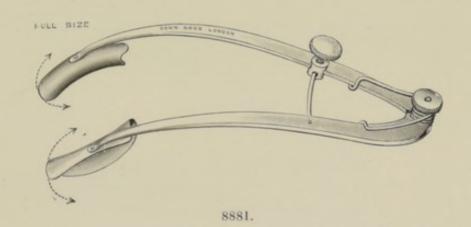
<sup>\*</sup> The items marked thus \* are not illustrated.

#### EYELID RETRACTORS.



8879.

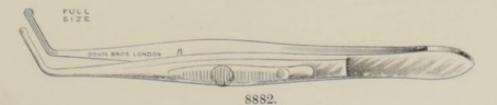
£ s. d. Eyelid Retractors,-0 13 6 8879 Lawford's, for left eye . each Ditto for right eye 8880\* 0 13 6



8881

Whitehead's, with swivel lid-holders . . . each 0 17 6

#### ADVANCEMENT FORCEPS FOR TENECTOMY.



8882

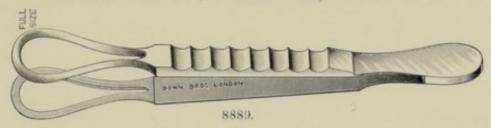
Advancement Forceps, nickel-plated,-. . . . . . each 0 12 6 , Worth's

\* The items marked thus \* are not illustrated.

No. CAPSULAR FORCEPS. FULL SIZE DOWN BROS LONDON 8883. Capsular Forceps, nickel plated,-£ 8. d. 8883 Gidney's, suggested by Major H. A. J. Gidney, I.M.S. 0 3 6 each FULL 8884. 8885. Treacher Collins', long pattern . 0 10 6 8884 . each 0 10 6 8885 Ditto short pattern FULL SIZE DOWN MHOS LOS 8886. . each 7 6 Kalt's 8886 DISSECTING FORCEPS. FULL SIZE GUNDAN SHOS LONDON Dissecting Forceps, nickel-plated,-With fine points, as used at St. Thomas', for Lid Opera-8887 tions, etc. . . . . . . each 0 3 0 Fixation Forceps, nickel-plated,-. each, with  $\frac{1}{2}$  teeth, 5s. 6d.; with  $\frac{2}{3}$  teeth 0 6 6 Landolt's . 8888\* \* The items marked thus \* are not illustrated.

#### IMPROVED TRACHOMA FORCEPS.

As suggested by Dr. J. Cropper, of Chepstow.



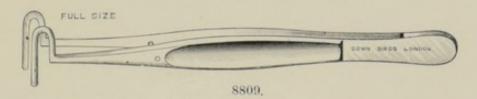
8889

Trachoma Forceps, nickel-plated,—  $& & & & & & & & \\ & & & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$ 

Extracted from the "Lancet," May 9, 1908.

Of the two forms of forceps for the removal of trachomatous granules or "sago grains," those of Grady and Knapp, the former may be considered to cause somewhat less bruising but has the drawback, especially in unruly children, of occasionally catching in the eyelid. Messrs. Down Bros. have lately made me an improved pattern with closed ends, which gets over this difficulty with complete success.

J. CROPPER, M.D., Cantab.

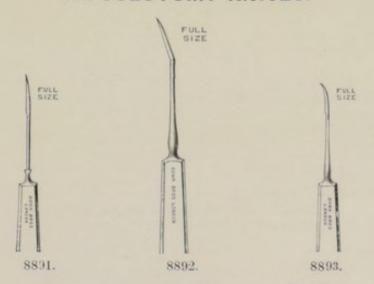


8890

8891 8892

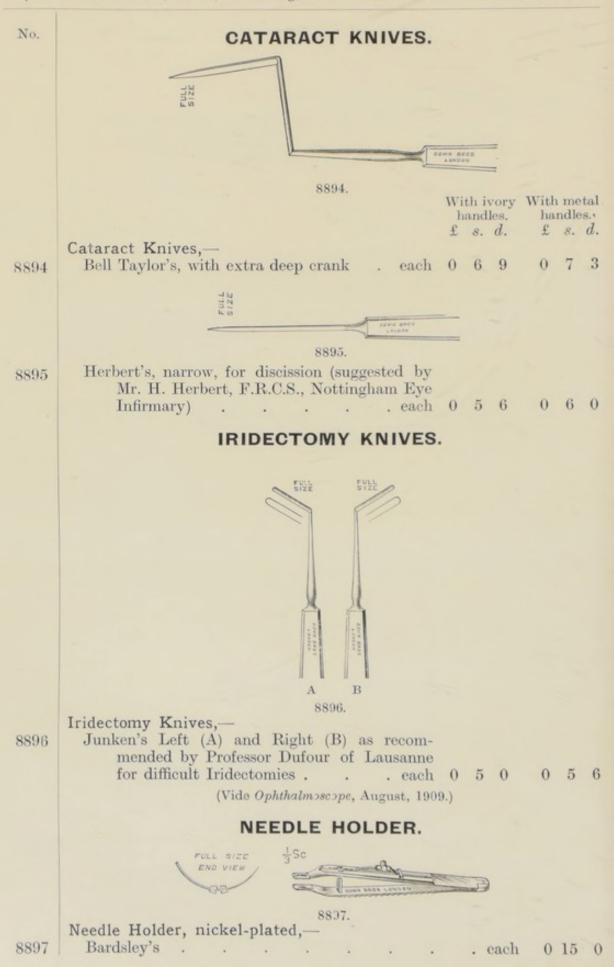
8893

#### CAPSULOTOMY KNIVES.



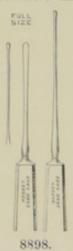
metal				ndle	ha	,								
8. d.	£ 8.	£	d.	8.	£				-	Knives,-	ny F	Capsulotor		
6 0	) 6	0	6	5	0	each	"	pette	e Serr	" Aiguill	ki's	Galezows	1	
												Payne's	2	
6 6	) 6	0	0	6	0	each				shaft)	the	with		
6 0	) 6	0	6	5								Ziegler's	3	
													3	

1



#### IRIS REPOSITOR.

Suggested by Dr. J. Bowring Lawford, Ophthalmic Surgeon, St. Thomas's Hospital.



With ivory With metal handles, handles.

£ s. d.

Iris Repositor,—

Lawford's, silver Spatula with thickened end and probe . . . each 0 6 6

£ s. d.

0 7 0

8898

#### A COMBINED CATARACT SPOON AND SPATULA.

By H. H. B. Cunningham, M.D., F.R.C.S.I., M.R.C.S.Eng., Assistant Surgeon, Belfast Ophthalmic Hospital; Examiner in Ophthalmology, Royal College of Surgeons, Ireland.



With ivory With metal handles. handles.

8899

Cataract Spoon and Spatula,— Cunningham's

0 7 6

In performing the operation of cataract extraction, and more especially when it takes place in a private house, the surgeon is not always provided with the number of assistants and of appliances that are to be found in a modern well-equipped hospital, therefore the less the actual number of instruments the better for the operator. With this aim in view, the instrument shown in the accompanying drawing has been designed. It consists simply of an ivory handle, into one end of which is inserted a tortoiseshell spatula and into the other a tortoiseshell spoon. The handle is made of ivory on account of its light weight, and also because with this instrument it is easy to estimate the amount of pressure that is being exerted on the eye when in use. The makers are Messrs, Down Bros., London.

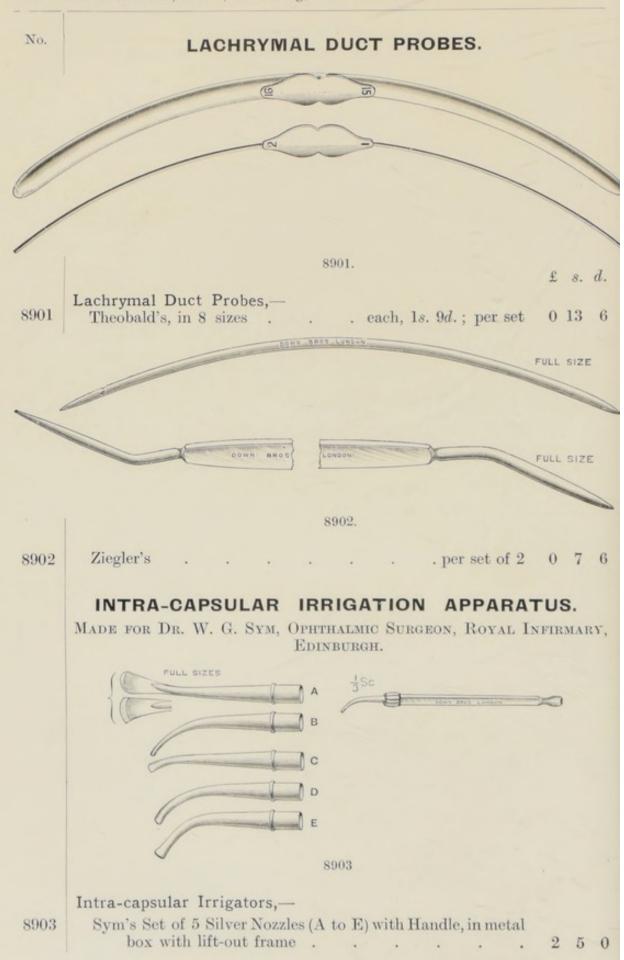


8900.

Glass Spatula,— Pagenstecher's

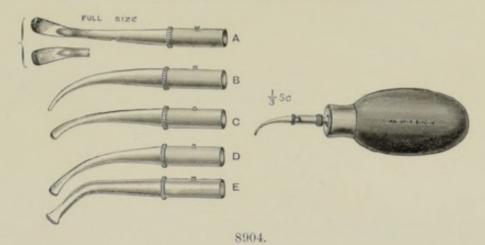
. each 0 2 0

8900



#### INTRA-CAPSULAR IRRIGATION SYRINGE.

Made for Dr. W. J. Wanless.



8904

Intra-capsular Syringe,— £ s. d.
Wanless', with set of 5 Silver Nozzles (A to E) and 2 Rubber
Balls, in mahogany case . . . . . . . . . . . . . . . . . . 2 10 0

Extract from "Indian Medical Gazette," April, 1906.

I have had Down Bros, of London make for me a simplified modification of the McKeown Syringe and in which the wash bottle and bellows are discarded. The Syringe is made with a bayonet joint attachment to facilitate ready filling of the bulb and changing of the nozzles. The shape of the bulb and bend of the nozzles make syringing easy and safe. The syringing may be done from above, or by use of the angular nozzle from the side. The Syringe is supplied in a case with one or two rubber bulbs and three to five nozzles as desired. We use two bulbs to save the time of refilling, and changing the nozzle to suit the case, although one bulb with three nozzles will usually suffice for all kinds of cases.

The Syringe is sterilized by immersing it in, and filling it with, Formaldehyde Solution 1 in 500 for ten minutes (a new syringe should be left in the solution an hour for the first time). Before using it and after emptying it of the Formalin Solution, and in order to further free it of the Formalin Solution, it is rinsed out with normal salt solution; this solution also is used for syringing. The nozzles are sterilized separately by boiling. The bulbs are kept in, and filled with, the Salt Solution used for syringing and the nozzles applied after filling, the bayonet joint saving the time of screwing on the nozzles. The rubber bulbs should be retained and used exclusively for cataract work and kept in the case when not in use, thus the interior will practically always remain sterile. In taking the bulbs from the Salt Solution only hands prepared as for general aseptic operations should be used: or a wide-mouth sterilized bottle may be used into which only the end of the Syringe is immersed in filling, and the nozzles then applied by holding them between the folds of a piece of sterilized lint or gauze.



8905 8906\* Bishop Harman's Silver Nozzle, to attach to tubing . each 0 5 6
Ditto fitted with 3 ft. India-rubber Tubing and Glass
Undine Douche . . . . . . each 0 8 3

<sup>\*</sup> The items marked thus \* are not illustrated.

No. SCISSORS FOR SCLERECTO-IRIDECTOMY. 8907. Scissors, nickel-plated shanks,-£ s. d. 8907 Lagrange's, for Sclerecto-iridectomy 0 6 6 . each TREPHINES FOR TREATMENT OF GLAUCOMA. Suggested by the late Dr. D. Argyll Robertson. FULL SIZE 8908. Sclerotic Trephine,-8908 Argyll Robertson's . each 0 7 6 FULL SIZE 0 8909. Stephenson's, 3 sizes 8909 . each 0 . 8910\* Ditto set of 3 fitting one handle per set 1 FULL SIZE 8911. Verhoeff's "Sclerectome" . . . . each 0 13 6 8911 Extract from the "Ophthalmoscope," July, 1910. As its inventor says: "it combines the actions of a punch and a trephine." An incision 2-3 mm. long having been made parallel with, and about half a millimetre from the corneal margin, the instrument is passed through the wound, and having been carried to one end of the incision, it is made to cut out a small clean round hole, the diameter of which is one millimetre.

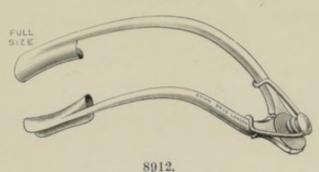
is carried out under a conjunctival flap.

A small buttonhole is made in the iris. The operation, like the others,

<sup>\*</sup> The items marked thus \* are not illustrated.

# INSTRUMENTS FOR THE EXTRACTION OF THE LENS IN ITS CAPSULE (WITH OR WITHOUT AN IRIDECTOMY) IN CASES OF IMMATURE CATARACT.

SUGGESTED BY LIEUT.-COL. HENRY SMITH, I.M.S., CIVIL SURGEON, JULLUNDUR.



8912 Smith's Eyelid Retractor . . . . each



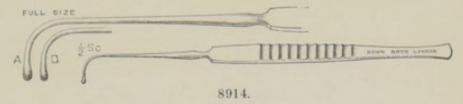
8913.

8913 Smith's Iris Forceps, nickel-plated

. each 0 6 6

£ 8. d.

0 16 6

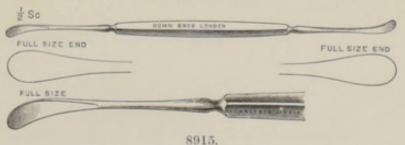


8914

Smith's Hooks, Large (A) and Small (B) . . each

each 0 5 6

The smaller hook is for working forward the lens in its capsule by pressure on the cornea. The larger hook is used as a lid retractor, the lid being held up at this stage of the operation.



8915

Smith's Double-ended Spoon or Spatula

. each 0 9 6

Lieut.-Col. Smith, in describing his method of operating (India Medical Gazette, October, 1908), states that his experience extends over 20,000 cataract operations, 17,000 of which have been in the capsule, including a large number of immature cataracts,

INSTRUMENTS FOR EXTIRPATION OF No. LACHRYMAL SAC. FULL SIZE 8916. £ s. d. Lachrymal Retractors,-0 19 6 . each 8916 Bishop Harman's . FULL SIZE 8917. Lachrymal Retractors-. each 0 12 6 Müller's 8917 FULL SIZE mmmm 8918. Stephenson's (made for Mr. Sydney Stephenson, Ophthalmic 8918 Surgeon, Evelina Hospital, etc.) . . 8919. Rugine,-Rollet's, for raising the sac from the lachrymal groove 8919 each 0 6 0 FULL SIZE 8920. 8920 Scoop and Chipper, Kilkelly's, . . , each 0 6 0

#### No. Instruments for Extirpation of Lachrymal Sac, continued,-



8922

8923

8921 Zimmermann's "Prothesen," for use after extirpation of £ s. d. Sac, in sets of 3 pairs, per pair, 4s.; per set complete 0 12 0

#### PORTABLE TUBE STERILIZER.

Suggested by Dr. J. Burdon-Cooper, Ophthalmic Surgeon, Bath Eye Infirmary.



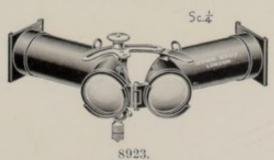
Portable Tube Sterilizer,—
Burdon-Cooper's, to take 1 Graefe's Knife . . . each 0 3 3

#### Extract from the "Lancet," March 21, 1908,

A PORTABLE TUBE STERILIZER.

The accompanying illustration is a half-size representation of a Portable Tube Sterilizer and carrier for Graefe's Knives which has been made for me by Messrs. Down Bros. of London. The glass tube is fitted with a removable rack provided with a guard at each end, within which the knife is securely fixed, so as to obviate the risk of damaging either edge or point in removing and replacing the instrument. With the rack and instrument (blade downwards) in position the tube is filled to the mark upon it with absolute alcohol, and the filling is completed by adding distilled water. This mixture (80 per cent. alcohol) is a more efficient germicide than absolute alcohol, and the instrument that remains in this for 24 hours can be considered safe. Before use I usually draw the blade of the knife several times through the hot water in my sterilizer to remove the alcohol and as an extra precaution. On no account should methylated spirit or ordinary tap-water be used for filling the tube, as the effect of either upon a good instrument is very detrimental. To remove the knife the tube should be held vertically and the upper end of the rack grasped by any small pair of forceps that may be handy. This device I have found useful for temporarily storing and preserving Graefe's Knives, which are ready sterilized in case of emergency. Its portability is an additional advantage; it can be carried in the surgeon's pocket and the knife only removed by him, or under his supervision, a minute or two before the operation is commenced. J. Burdon-Cooper, B.Sc., M.D., B.S. Durh.

#### AMBLYOSCOPE.



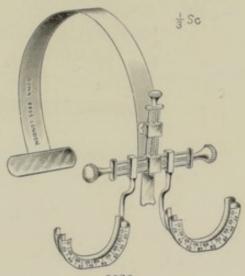
Amblyoscope,—
Worth-Black's, with set of 10 diagrams , . . , 2 2 0

CONVERGIOSCOPE. No. ± Sc. £ 8. d. 0 12 6 Convergioscope, with wicker shield . . each 8924 Ditto with vulcanite ditto . . . . . , 0 19
An optically correct Binocular magnifier suggested by Dr. Berger of 0 19 6 8924A\* Paris. LENSOMETER. → Sc. 8925. . each 0 17 6 Lensometer 8925 REFRACTOMETERS. Sc. # 8926. Refractometers,-8926 Snell's, the set comprises 16 Concave Lenses, — 0.5 to 8, and 16 Convex, +0.5 to 8 . . . per pair TONOMETER. Suggested by Professor Schiotz of Christiana. FULL SIZES 8927. Tonometer,-Schiotz's, for testing the intra-ocular pressure . in case 4 4 0 8927

\* The items marked thus \* are not illustrated.

#### TRIAL FRAME FOR USE WITH CHILDREN.

SUGGESTED BY MR. F. P. S. CRESSWELL, F.R.C.S., OPHTHALMIC Surgeon, Cardiff Infirmary.



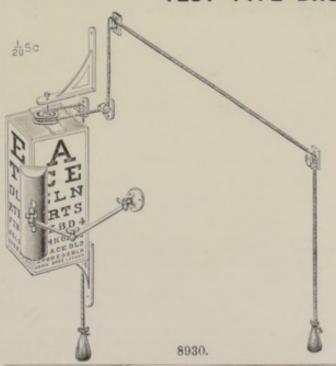
8928 8929\*

8928. Trial Frame,-£ 8. d. Cresswell's, for children, with Steel Headband 1 15 0 . each Ditto adjustable for children and adults 1 17

Extract from the "Ophthalmoscope," January, 1907.
The difficulty with the ordinary form of Trial Frame is that when applied to children, the bridge of the nose is not sufficiently prominent to afford the necessary support, and the whole arrangement is inclined to slip down. The present form obviates this difficulty, as the Frame is entirely dependent on the spring band which grasps the head. It is easily placed in position, and the centring of the lenses is finally accomplished by two simple screw arrangements, the one to alter the distances between the lenses, and the other to raise or lower them. Mr. Cresswell states that after an experience of twelve months, he finds the Trial Frame to act well in practice.

#### TEST TYPE DRUM.

8930



Test Type Drum, foursided, revolving, with Porcelain Types and Pulley, fitted with bracket with reflector, with fittings for 3 Electric Lamps (lamps charged extra), and 3 yards of cord. £7 12s. 6d.

> When ordering state voltage of current.

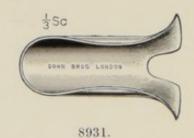
<sup>\*</sup> The items marked thus \* are not illustrated.

8931

932

#### OPERATING BLADDER SPECULA.

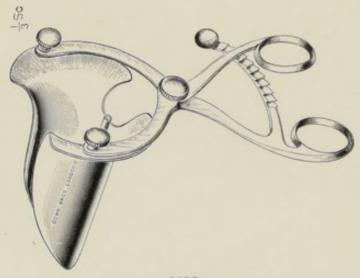
Designed by Mr. Thos. Carwardine, F.R.C.S., etc., Surgeon, Bristol Royal Infirmary.



£ s. d.

Operating Bladder Specula,-

Carwardine's Cylindrical, open at side . . . each 0 10 6



8932.

Carwardine's Dilating, with Rack . . . each 2 2 0

#### Extract from "Lancet," December 11, 1909.

The illustration represents a Dilating Bladder Speculum made for me by Messrs. Down Bros., St. Thomas' Street, London, S.E. The handles of the Speculum are provided with a toothed rack, and may be used closed when examining the prostatic region or the pouch left after prostatectomy, or expanded, as shown in the figure, as when excising villous growths. On the hinged side of the Speculum an opening is left through which an electric lamp can be inserted (unless a head lamp be preferred). The reverse side of the Speculum gives sufficient dilatation to allow freedom for operative work, such as the excision of the base of a villous growth, the bevelling of the blades enabling the base of the growth to be brought near the surface and the mucous membrane of the bladder sutured. The Speculum was designed to meet a distinct want, and the various bevels and dimensions have been carefully worked out; it has proved in practice to be a very useful instrument.

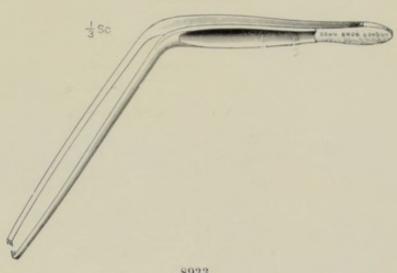
THOMAS CARWARDINE, M.S.Lond., F.R.C.S.Eng.

8933

8935

#### INSTRUMENTS FOR OPERATING ON BLADDER GROWTHS.

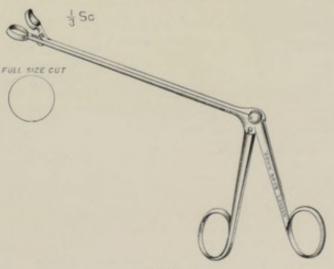
SUGGESTED BY MR. F. T. PAUL, F.R.C.S., SURGEON, LIVERPOOL ROYAL INFIRMARY.



8933.

£ s. d.

Bladder Instruments, nickel-plated,-Paul's Tenaculum Forceps for seizing growth . . each 0 10 6



8934.

8934 Paul's Cutting Punch Forceps for removal of growth each 1 6 6



8935.

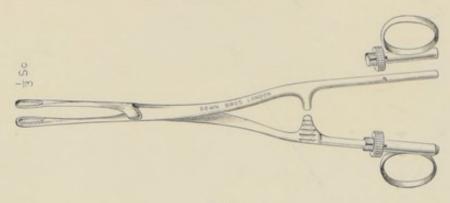
Paul's Scissors, of a convenient curve for using through Speculum , . . . each 0 12 6

8936

8937

#### BLADDER FORCEPS WITH DETACHABLE HANDLES.

SUGGESTED BY MR. E. HURRY FENWICK, F.R.C.S., SURGEON, LONDON HOSPITAL.



8936.

		t	8.	a.
Bladder Forceps,	nickel-plated,—			
Fenwick's	each	1	1	0

After removal of a growth through caisson tube, the forceps are clipped on to a bleeding point and the handles removed. The wound is stitched up as far as possible and the forceps left *in situ* for 24 hours, after which the sutures are completed.

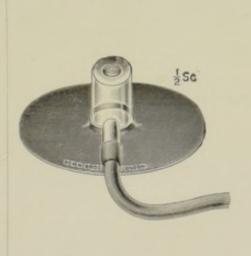


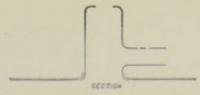
8937.

Suprapubic	Retra	actor	,—						
Fenwick's						each	0	5	6

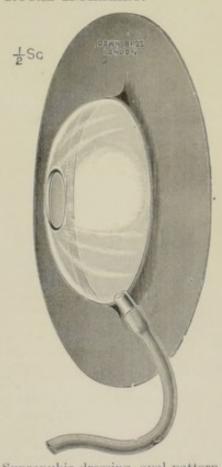
## No. A NEW ASEPTIC WATERTIGHT SUPRAPUBIC DRESSING.

SUGGESTED BY G. H. COLT, M.B., B.C., CANTAB., ETC., ASSISTANT SURGEON, ABERDEEN ROYAL INFIRMARY.





Suprapubic dressing, round or cylindrical pattern, 8938.



Suprapubic dressing, oval pattern. 8939.

		£	8.	d.
8938	No. I Set, consisting of 1 small and 1 large round Glass Capsules, and 1 of each for patient when up and about, with supply of 6 various Rubber Discs, 1 length Rubber Tubing, 1 tin Rubber Solution, and spool of each Narrow and Wide Plaster, in partitioned card box	0	13	6
8939	No. 2 Set, consisting of 2 patterns Oval Capsules, 1 each small and large Round Capsules, and 1 of each small and large for patient when up and about, with supply of 14 various Rubber Discs, 2 lengths Rubber Tubing, 1 tin Rubber Solution, and spool each Narrow and Wide Plaster, in			
	partitioned card box	1	10	0
8940*	No. 3 Set, same as No. 2, but in partitioned japanned tin box,			
	for Hospitals and for use in Hot Climates	1	18	6
	The principle of the dressing may be stated as follows:—  It is possible to make a watertight joint with the patient's skin by of sheet rubber and a solution of pure rubber in naphtha. To carr			

into effect a glass capsule is made to which a piece of sheet rubber can

\* The items marked thus \* are not illustrated.

#### A New Aseptic Watertight Suprapubic

Dressing, continued,-

be attached in a watertight manner, and from which the urine or lotion can flow away by a side tube. The upper part of the capsule is open to admit air. Siphonage is thus avoided, and the urine flows off by its own pressure alone. The figures show two of the patterns. In addition there is provided:—

- 1. A larger variety of the cylindrical vessel.
- 2. A modification of the small cylindrical vessel in which there is an additional side tube inserted near the top, and in which there is no hole in the top of the glass.
- 3. A modification of the oval glass in which there is a small pinhole remote from the exit tube instead of the large oval hole in the top.
- 4. Extra large oval pieces of rubber with holes to fit the cylindrical glasses.

A rubber disc is attached to a cylindrical glass by springing the edge of a hole which is punched in the rubber over the glass. The size of the hole in the rubber has been so arranged as to make a watertight joint and yet avoid crinkling the rubber sheet. The oval rubber is attached to the oval glass by tying it round with silk in a groove provided for the purpose, because mere springing over is insufficient.

THE SELECTION OF THE PIECE BEST SUITED TO THE CASE.

In general it may be stated that the small cylindrical glass, with the hole at the top, is best suited to every case in which the wound has been partially sewn up. The small glass should be used whenever practicable as it is the least likely to become deranged.

The large cylindrical glass is best for those cases in which the hole left by removal of the drainage tube is relatively large.

The large oval glass with large opening at the top is suitable for cases in which the wound has not been closed at all, or for cases in which there is an area of ulceration around the fistulous opening. The large oval glass with small pinhole opening remote from the exit tube is suitable when the patient is to get up. The oval glass is not as a rule suitable if the abdomen is pendulous and the wound gaping. In such case the small cylindrical glass and the large oval piece of rubber are employed.

The small cylindrical glass with additional side tube instead of the hole at the top is suitable for most cases in which the patient is to get about. It will be noted that when this side tube becomes vertical, the margin against overflow is the same as in the other pieces. A portable urinal is advisable, but the use of this depends on whether the patient is moving about or not.

#### THE METHOD OF APPLYING THE DRESSING.

The method of applying the dressing is the same in all cases. For convenience it is best performed in this order. Sterilize and allow to dry, or dry-sterilize, the capsule, rubber and tube. The oval pattern is sterilized with the rubber attached, the cylindrical patterns with it separate so as to preserve the spring of the rubber. Remove all dressings from the patient, dry his back, and change his shirt and the draw sheet, so that when the dressing has been applied he need not be disturbed until it has set firmly. Fit the parts of the dressing together. Shave the skin around

#### A New Aseptic Watertight Suprapubic

Dressing, continued,-

the fistula carefully and closely. Ascertain on which side the patient prefers to lie. Let small swabs be kept in the fistula to absorb the slightest trace of urine before it wets the skin. Thoroughly free the skin from grease by means of swabs and ether, not turpentine. Rub a small quantity of the rubber solution well into the skin around the fistula. It is best to do this quickly and firmly over a large area at once. The solution should be spread very thinly and evenly. The rubbing should be stopped as soon as the solution becomes dry and "tacky" and begins to peel off. Treat the under surface of the rubber disc with solution in a similar manner. By the time this has been done the solution on the skin will hardly be perceptible, and the rubber will have curled up. Let both surfaces be nearly dry and quite "tacky." Remove the swab from the fistula and quickly, before any urine can escape, apply the glass in the desired position with the exit tube pointing either towards the pubes or slightly turned towards the side on which the patient naturally turns. Let the glass be pressed gently and evenly against the skin, while at the same time the rubber disc is pressed down all around. No movement likely to cause the rubber and skin to slide over each other should be made, and any attempt at rectifying the position after the first application has been made results in failure. The drainage tube is curled round and fixed to the abdomen with leukoplast well internal to the anterior superior iliac spine. The tube is led to the receptacle beneath the bed, and is cut as short as possible. The upper opening in the capsule is covered with a strip of gauze fixed to the vertical part with leukoplast. The patient is instructed not to turn on the side remote from the drainage tube. He should raise the clothes off the dressing when they have to be moved.

#### TO REMOVE THE DRESSING.

The disc strips off readily and the leukoplast is soluble in ether. Dilute hydrochloric acid will remove phosphates from the glass. When the solution becomes too thick, naphtha or benzine well stirred into it will improve it. At any time the wound may be attended to with sinus forceps through the hole in the top of the glass.

The common causes of overflow through the hole in the top of the glass are: (1) The exit tube being at some part of its course above the level of this hole; (2) the exit tube being interrupted by a joint. This is unnecessary; (3) the exit tube being too long and the distal end being coiled up in the receptacle; (4) kinking of the tube; (5) siphonage occurring through the wool or gauze used to cover the top of the dressing having sagged down into the glass.

The dressing may be applied as soon after the operation as the urine is free from blood clot and débris likely to block up the tube. If it is to be applied early exact apposition of the edges of the skin wound is essential. The stitches may be cut short.

By means of this dressing the patient is kept dry and comfortable. The saving per week in cost of dressings is about 25s. Further information is to be found in the original papers, viz.:—

- The Lancet, November 4, 1905.
- 2. The Practitioner, for June, 1906.
- 3. The Lancet, September 29, 1906.

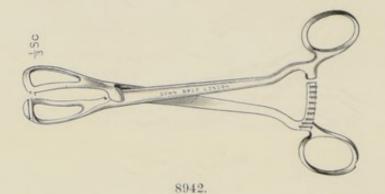
N.B.—The india-rubber solution quickly evaporates and is also inflammable: therefore the tin should be kept closed when not in use.

## INSTRUMENTS FOR CONSERVATIVE PERINEAL PROSTATECTOMY.

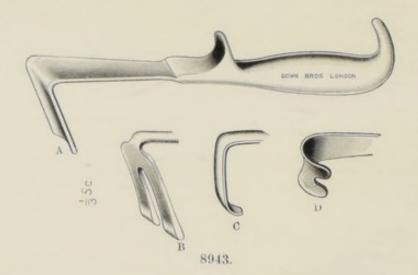
SUGGESTED BY MR. YOUNG, OF THE JOHNS HOPKINS HOSPITAL,
BALTIMORE, U.S.



8941 Enucleator . . . . . . . . each 0 7 6



8942 Lobe Forceps, with take-off joint . . . each 0 18 0



8943 Retractors, with metal handles,-

	 ******	uics,						
Posterior (A)					each	0	15	6
Large Bifid (B)					**	-	16	6
Lateral (C) .					23		13	6
Small Bifid (D)					***	0	15	0
		*		+	5.5	U	19	0

No.	NEW PATTERNS FINE URETHRAL BOUGIES.	
	⅓Sc	_
	8944. £ s. d.	
8944	Fine Bulbous, sizes Nos. 1 to 6 French gauge . per doz. 0 18 0	
	\$50	
	8945.	
	8946.	
8945	Guyon's double-ended Exploratory Sounds, 6 sizes, Nos. 13 to 18 French gauge each 0 1 8	
8946	Ditto ditto 4 sizes, graduated, Nos. 6, 8, 10 and 12 French gauge each 0 2 0	
	13Sc	_
	8947.	
	1/3 Sc	-
	8948.	
8947	Guyon's Filiform, Silk Web Bayonet End, assorted, 3 fine sizes	
8948	per doz. 0 18 0 Ditto ditto Corkserew End, assorted, 3 fine sizes ,, 0 18 0	

8949.

8956

8958

### BACK-FLOW CATHETER FOR URETHRAL IRRIGATION.

SUGGESTED BY DR. E. W. HEY GROVES, ASSISTANT SURGEON, BRISTOI.
GENERAL HOSPITAL.



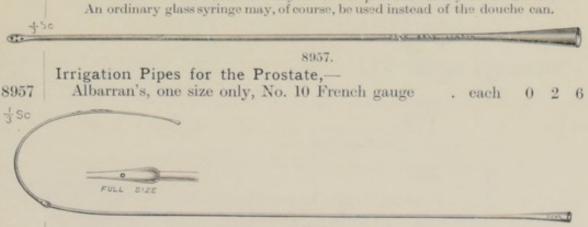
8 11111

8956.

Urethral Irrigation Catheter,— £ s. d Hey Groves', Back-flow, with Mount for I.R. Tubing, each 0 7 6

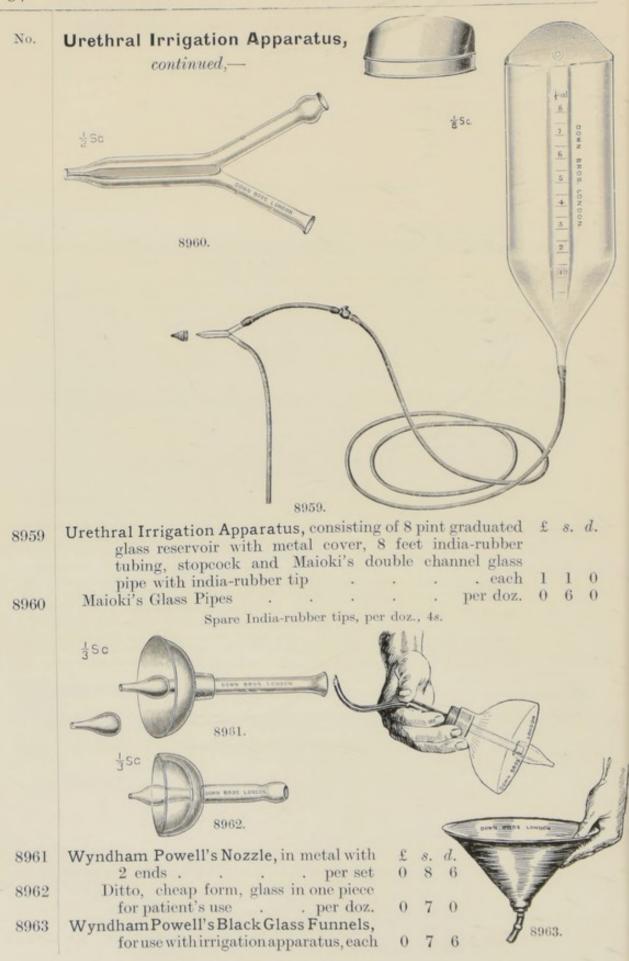
Extract from the "Lancet," September 8, 1906.

Opinions differ very much concerning the treatment of gonorrhea by the use of injections, but the majority of those who see much of the disease order injections of some kind. There can be no doubt that if an injection is to do any good at all it must be properly administered, and much of the failure of injections to hasten the cure must be attributed to the inadequate method of use. Messrs. Down Brothers have made for me a Back-flow Catheter through which any quantity of fluid can be made to irrigate the whole urethra without entering the bladder. The instrument is composed of a metal catheter, with a bulbous extremity, curved in the ordinary way. The eyes of the catheter consist of three apertures situated at the junction of the stem and the bulb. The greatest diameter of the bulb is three sizes larger than that of the stem. I have found that No. 4 for the stem and No. 7 for the bulb is the most useful size. The shoulder of the bulb fills up the urethra in front of the eyes and all the lotion escapes in a rapid stream at the side of the stem. The best arrangement is to attach the instrument by means of a rubber tube to a can containing one quart of the lotion. The instrument is passed with the ordinary precautions as far as the compressor urethræ, when it is naturally arrested. This is far enough for a case of anterior urethritis, but in posterior urethritis the instrument should be passed into the bladder, and then withdrawn until the bulb is felt to be just grasped by the vesical orifice. The douche can is raised three feet above the patient's bladder and the quart of lotion takes from three to five minutes to run out. An intelligent patient can be taught to do this for himself night and morning, and provided he sterilizes the catheter each time there is no more risk of septic infection than when he uses an injection with an ordinary glass syringe. The rapid improvement in cases where it is used will soon convince anyone of the practical utility of the device.



8958.

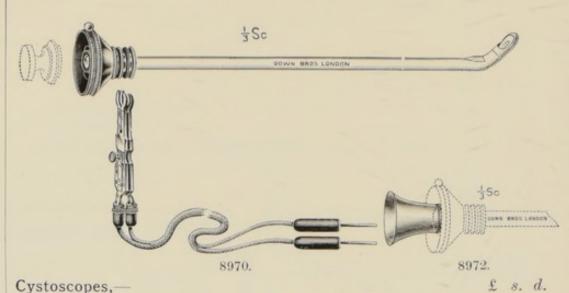
Urethral Irrigation Pipes with Bulbous Conductor Guides,
"Instillateur à boule conduit," 3 sizes, Nos. 8, 10, and
12 French gauge . . . . . each 0 2



to any desired curve, and is sufficiently rigid to prevent expulsion of the

instrument.

#### CYSTOSCOPES.

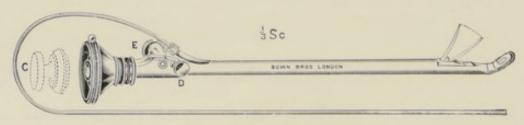


Max Nitze's, for examining the bladder, latest type, with new lens giving clearer definition, sizes Nos. 21 and 23 French gauge, with conducting cords and spare lamp. in case 5 8 0

8971\* Ditto ditto ditto fitted with removable telescope and tube for irrigation, with conducting cords and spare lamp. in case 7 0 0

Spare lamps, 6 volt, with screw mounts . . . each 0 3 9

Pardoe's Eyepiece, for use with Nitze's Cystoscope (prevents dimming of the lens), as used at St. Peter's Hospital, each 0 3 6



8973.

8973 Max Nitze's, latest model for examination and irrigation of the bladder, and catheterization of the ureters, with new lens giving clearer definition, with conducting cords, catheter, and spare lamp . . . . in case 9 12 0 8974\* for simultaneous catheteriza-Ditto ditto ditto tion of both Ureters . . 10 12 Spare lamps (6 volt), with serew mounts. . each 0 3 Spare Catheters, silk web, 2 sizes (Nos. 4 & 5, Fr. gauge), each 0 4 0

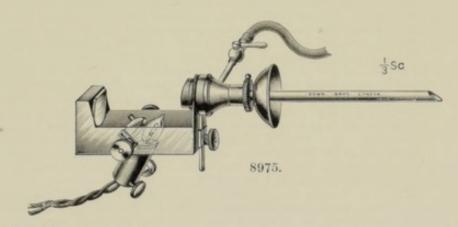
These instruments are now fitted with removable Telescopes; as the Telescope is removed a valve closes preventing escape of bladder contents; the Telescope may then be replaced by an irrigation tube fitted with two stopcocks to allow of alternate filling and emptying of the bladder.

<sup>\*</sup> The items marked thus \* are not illustrated.

8975

#### AERO-URETHROSCOPES.

SUGGESTED BY MR. W. WYNDHAM POWELL, F.R.C.S.



## Aero-Urethroscopes,-

£ s. d.

Wyndham Powell's, fitted with condensing lens and set of

3 Urethra Specula, with cup-ends and metal pilots . 4 9

The advantages claimed for Mr. Wyndham Powell's instrument are :-

- 1. Its square shape gives a firm hold.
- 2. The tap-inflating arrangement being on the left side leaves the right hand of the operator free to manipulate his instrument.
- The high candle power lamp and condensing lens give a much greater illumination than is possible with any other instrument now on the market.

The points to be observed in adjusting this instrument are :-

(a) For use with a long Speculum.

The condensing lens must be clamped at the lower extremity of the slot with the lamp in a central position behind it, adjusted so as to throw the light on to the mirror. The reflected ray of light from the filament will then be seen on the window of the inflation arrangement, and a strong white light will then be thrown down the Speculum.

(b) For use with a shorter Speculum.

The lens can be moved slightly higher up the slot, thus shortening the focus of the rays.

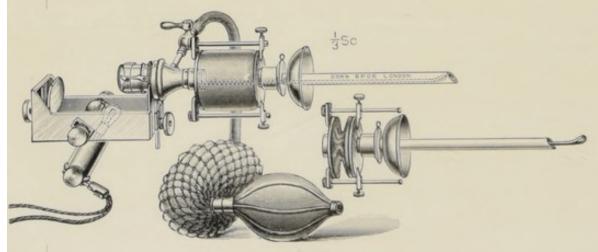
#### Extract from the "Lancet," July 21, 1906.

In common with many of my fellow surgeons I have for some years past been in the habit of using the instrument designed by Leiter of Vienna for illuminating the urethra. Although this instrument is admirable in many respects, I have lately been using a modified form (vide illustration), and its superiority is so marked that I venture to bring it to the notice of my colleagues. The illumination (which when examining a dark red canal can never be too great) has been much increased by the juxtaposition of a high candle power lamp and a condensing lens which concentrates

# Aero-Urethroscopes, continued,-

nearly all the light obtainable from one side of the Urethroscope when any instrumentation through the cannula is necessary. The cannula is thus much more under the direct control of the hand and the presence of the handle affects the balance and the delicacy of the manipulations. The square shape of the modified instrument affords a firmer hold, and one of the projecting screws of the lens carrier, falling naturally between the first and second fingers of the hand, a perfect grip and balance are obtained. The mirror can be moved freely, and when the position reflecting the maximum illumination down the speculum has been found, it can be fastened firmly in place by means of a small screw-head projecting behind it upon the back of the instrument and therefore well out of the line of sight. In the old model the mirror, which was usually kept more or less loose for focussing purposes, frequently moved whilst operating by its coming into contact with cotton-holders, forceps, etc., thus plunging the part into darkness at a critical moment. All minor details have been carefully arranged. The window of the nose-piece has the spring catch on the right side as the Urethroscope is held with the left hand in all intra-urethral manipulations; the lamp has been obliquely placed and the filament arranged to obtain the best possible result. The new instrument is fitted with von Antal's arrangement for distending the urethra with air. I would like to mention also that my friends to whom I have shown or lent the instrument have stated that they had hitherto been working in a comparatively dim light and that this illumination was quite a revelation to them. I have to thank Messrs. Down Brothers for so successfully carrying out my ideas and for producing an instrument which is not only simple and handy but practical and efficient, and which will go a long way towards popularizing this method of treating chronic urethral diseases. W. Wyndham Powell, F.R.C.S.Eng.

Cavendish Place, W.



8976.

Aero-Urethroscopes, continued-

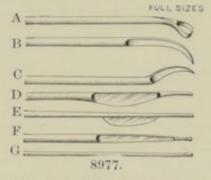
£ 8. d.

5 9 6

3976

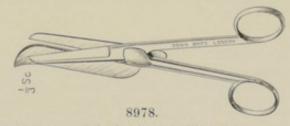
# Aero-Urethroscopes, continued,-

No.



8977	Instruments for use with Aero-Urethroscope:								8.	d.
	Wyndham	Powell's Curette (A)					each	0	5	0
	Ditto	Knife, curved (B) .					33	0	5	0
	Ditto	Knife, sickle-shaped (C)					,,	0	5	0
	Ditto	Knife with probe end (D	).				**	0	5	6
	Ditto	ditto (E)					**	0	5	6
	Ditto	ditto (F)					33	0	5	6
	Ditto	Probe, copper, bendable	(G)				**	0	2	6
	Ditto	ditto with platinum of	end			-		0	5	6

#### CIRCUMCISION SCISSORS.



Circumcision Scissors, nickel-plated Shanks,—
Dutch's, with guard . . . . each 0 8

These Scissors, suggested by Dr. Henry Dutch and described in *Lancet*, August 25, 1906, are intended for operating on young children, no anæsthetic or ligatures being required.

"1. The prepuce to the required length is seized by the thumb and forefinger of the left hand and passed obliquely (the blades being separated) through the groove in the scissors shield, the cutting blade being above. 2. The prepuce is now cut off with one movement directed obliquely from below upwards, to avoid the vessels of the frænum. 3. The mucous lining which is now exposed over the glans is treated in a similar manner. 4. The mucous membrane is now further torn in the middle line by the fingers or cut with a scissors right down into the neck of the glans, this being the most important step in the operation. The remains of the mucous membrane is now reflected flatly and evenly downwards, and held in position by a narrow slip of lint and 'heft-band' plaster—i.e., a piece of plaster shaped like an obtuse-angled splint."

# FLEXIBLE URETERAL BOUGIES.

-Sc

8978

8979.

8979 Ureteral Bougies,—
Morris', elastic gum, conical, with lead Stilette, No. |2
English Catheter gauge . . . . each 0

# FLEXIBLE STEEL URETERAL SEARCHER.

Suggested by Mr. H. A. Ballance, Surgeon, Norfolk and Norwich HOSPITAL.

3Sc

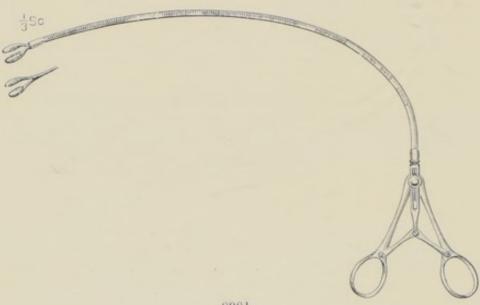
980

8980. s. d. Ureteral Searcher,-0 4 6 Ballance's, steel . . each

"I have found it very useful in probing the ureter during the course of a kidney operation, and I find it is the only probe which will with any degree of certainty find its way down the ureter into the bladder."

# FLEXIBLE FORCEPS FOR EXTRACTING FROM THE URETERS.

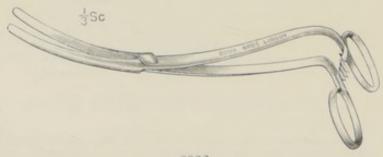
Suggested by Mr. F. T. Paul, F.R.C.S., of Liverpool.



8981.

Ureter Forceps, nickel-plated,-Paul's, with 1 pair of each serrated and scoop-shape blades

# NEPHRECTOMY CLAMP FORCEPS.



8982.

Nephrectomy Clamp Forceps, nickel-plated,-Cumston's, for clamping the renal pedicle (the blades are usually enclosed in rubber tubing) . . . each

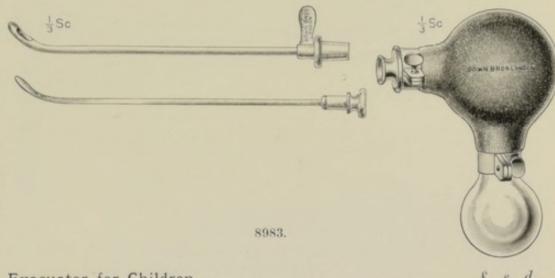
3982

3981

0 13 6

# A NEW EVACUATOR FOR LITHOTRITY IN CHILDREN.

SUGGESTED BY DR. ARTHUR LANKESTER, C.M.S. HOSPITAL, PESHAWAR.



8983

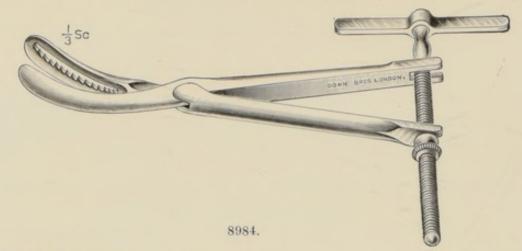
#### Extract from the "Lancet," January 8, 1909.

It has long been a matter of surprise to me that Lithotritists should have been content to use the same Evacuator for small boys as for adults, seeing that the urinary bladder is so different an organ in the two cases. I have of late had a not inconsiderable number of cases of stone in the bladder to deal with—upwards of 60 during eight months of the past year—and have felt at last compelled to devise an instrument specially adapted for use with young children. The two important points in which this modified Evacuator differs from the forms in use for adults are, first, its size, the rubber bulb having little more than half the content of that of the adult pattern of the same model—i.e., that designed by Mr. H. M. N. Milton, late Chief Surgeon, Kasr-el-Aini Hospital, Cairo—and secondly, in the greater softness and compressibility of the bulb. The evacuating catheter is also shorter. For these alterations I claim the following advantages: -1. Removal of the risk of over-distension. With an evacuator containing far more fluid than does the bladder of the patient it needs constant watchfulness to avoid the introduction of a dangerously large amount, especially when, as may often be the case, the preliminary distension of the bladder has been effected by an assistant in the absence of the operator. 2. A far more accurate estimation of the condition of the bladder as regards muscular tone and resilience. In the case of children the resistance of the stiff incompressible bulb of the ordinary Evacuator is out of all proportion to that of the delicate bladder wall, so that an important indication of the condition of affairs is, to a great extent, lost. 3. There is a great diminution of fatigue for the operator. He is not only spared the strain of repeated compression of an unnecessarily stiff bulb, but he is able to close his hand freely upon it. As will be seen by the illustration, the collar mounts are made to unscrew and the whole instrument may be easily taken apart for sterilization. I see no reason why other models than Milton's should not be modified in a similar way with equal advantage; it might even be possible in the case of the more expensive ones to have interchangeable bulbs for use with adults and children respectively. The Evacuator has been made for me by Messrs. Down Bros., of St. Thomas's Street, London, S.E., who have carried out my instructions most carefully. ARTHUR LANKESTER, M.D.Lond.

142 DOWN BROS., LTD., 21 & 23, St. Thomas's St., London, S.E.

IMPROVED STONE CRUSHER.

SUGGESTED BY MAJOR C. M. STEVENS, I.M.S.

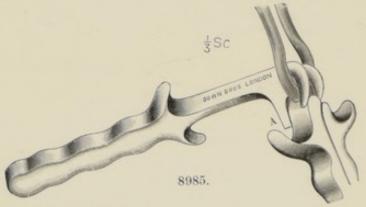


Stone Crusher, nickel-plated,— Stevens', with blades to take apart. £ s. d. 2 18 0

. each

# IMPROVED AXIS-TRACTOR FOR USE WITH MIDWIFERY FORCEPS.

SUGGESTED BY MR. L. W. PENROSE WILLIAMS, M.R.C.S., OF BRIDGWATER-



Axis-Tractor, nickel-plated,-

Penrose Williams' . . . . . each 0 11 6
Extract from the "Lancet," August 20, 1910.

The application of this tractor is simple, being always free of the maternal soft parts. The forceps and tractor form one rigid apparatus and become a lever. Either the point A or the handle of the forceps may be made the fulcrum at will. On the principle of the parallelogram of forces, a force in the same direction can be applied by either hand alternately or both together, the direction and plane of the resultant being determined by the proportionate amount of force used by either hand, and thus affording most welcome relief to the operator's muscles. For converting occipito-posterior presentations the forceps should be applied and the tractor placed in position; the head can then be "lifted" in the pelvis and rotated with the greatest ease, the forceps, of course, being then removed and

reapplied if desired.

I have used this instrument, which was made for me by Messrs. Down Bros., for the past three years with much satisfaction; it is a modification of Le Page's tractor, but the latter is too small, in my opinion, either for grasp or for power; as a rotator it is a new instrument. In this instrument the claws are longer and not only hold the tractor in position, but lock the blades together, an important point, as the combined apparatus can be steadied, or traction made, with the left hand alone, the right being free for examination, etc.; and the increased length and weight of the handle increase its power, of course, to a considerable degree.

PENROSE L. W. WILLIAMS, M.R.C.S., L.R.C.P., Lond.

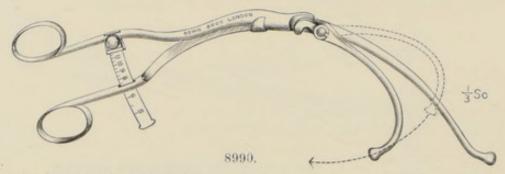
8985

No.

8984

MUCUS EVACUATOR. No. 1/3 Sc 8986. £ s. d. Mucus Evacuator,-8986 Carton's, with receptacle for wool . . . each 0 7 6 TRACHEAL INSUFFLATOR. 1/3 Sc. 8987. Tracheal Insufflator,-8987 Ribemont's . . . . . . each 0 10 6 PUBEOTOMY NEEDLE. 8988. Pubeotomy Needle, nickel-plated,-Döderlein's . . . 8988 . . each 0 10 6 PUBEOTOMY SAW AND GUIDE. 8989. Pubeotomy Saw and Guide, nickel-plated,-Seligmann's, complete . . . . 8989 . . each 0 7 6 Spare Thread Saws, each 6d.

# PELVIMETER FOR DIRECT MEASUREMENT OF THE CONJUGATE.



8990

Pelvimeter, nickel-plated,—
Solowij's, for measurement of the "true" Conjugate, each 1 17 6

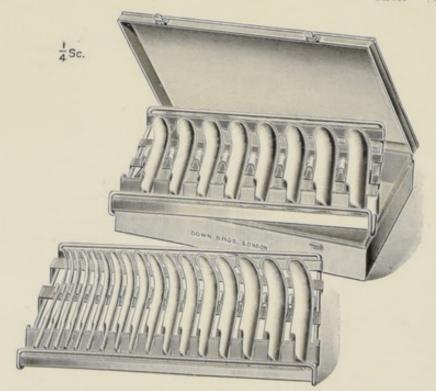
N.B.—Dr. Hellier, of Leeds, writes:—"The best instrument I know of for the purpose."

#### CERVIX DILATORS.



8991

Cervix Dilators,—
Hegar's, metal, nickel-plated, 25 sizes (2 to 26 mm. diam.)



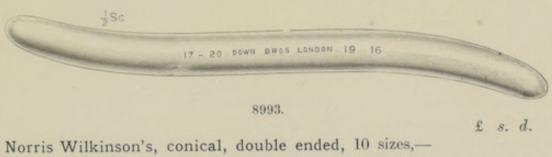
8992.

Hegar's, metal, set of 25 sizes (2 to 26 mm. diam.), complete . . . . . . in metal case 5

8993

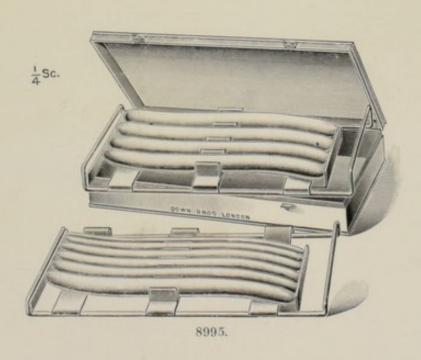
# DOUBLE-ENDED CONICAL METAL CERVIX DILATORS.

SUGGESTED BY DR. NORRIS WILKINSON, PORT PIRIE, SOUTH AUSTRALIA.



Norris Wilkinson's, conical, double ended, 10 sizes,— $\frac{2}{5} \times \frac{3}{6}$ ;  $\frac{4}{7} \times \frac{5}{8}$ ;  $\frac{6}{9} \times \frac{7}{10}$ ;  $\frac{8}{11} \times \frac{9}{12}$ ;  $\frac{19}{13} \times \frac{11}{14}$ ;  $\frac{12}{5} \times \frac{13}{6}$ ;  $\frac{14}{17} \times \frac{15}{18}$ ;  $\frac{14}{17} \times \frac{15}{18}$ ;  $\frac{16}{17} \times \frac{15}{17} \times \frac{15}{18}$ ;  $\frac{16}{17} \times \frac{15}{18} \times \frac{1}{12} \times \frac{15}{18} \times$ 

8994\* Roll-up Sterilizable Pouch in Kharki, for set of 10 . . 0 5 6



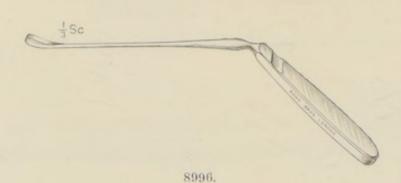
Norris Wilkinson's, conical double ended, set of 10 sizes (\$\frac{2}{5}\$ to \$\frac{21}{24}\$ mm. diam.), complete in metal case . 5 5 0

8996

8997

8998

# NEW MODELS OF UTERINE CURETTES, ETC.



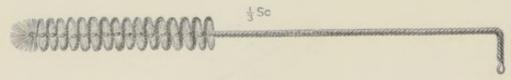
£ 8. d.

Uterine Curettes, nickel-plated,-

Angular, as made for the New Hospital for Women . each 0 8 0



McDead's, with blunt edge . . . each 0 8 6



8998.

Doleris' "Ecouvillons" or Uterine Spiral Mops, as used by
Dr. A. Warden, Hertford Hospital, Paris; Dr. Budin,
etc., etc.; 3 sizes . . . . . . per doz. 0 5 0

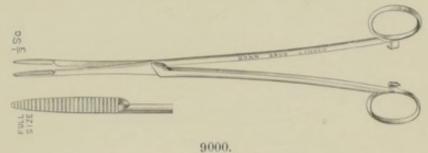


8999.

8999 Olivier's Cervix Scrapers or "Metal Ecouvillons". each 0 5 6

9000

# UTERINE DRESSING FORCEPS.



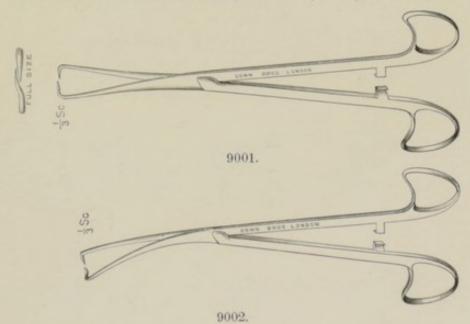
£ s. d.

Uterine Dressing Forceps, nickel-plated,— Royal Free Hospital pattern, with take-off joint

. each 0 11 6

#### A NEW UTERINE VULSELLUM FORCEPS.

DESIGNED BY MR. J. S. ASHE, L.R.C.P., ETC., OF DUBLIN.



9001 9002

Vulsellum Forceps	, nickel	l-plate	d,—				
Ashe's, straight					each	0 13	
Ditto curved					,,	0 13	6

#### Extract from "Lancet," April 4, 1908.

The annexed illustration represents a new Vulsellum Forceps which I have devised and for which the following advantages are claimed: 1. The points interlock and therefore cannot give, especially on side pressure.

2. The under surfaces of the points are flattened, which prevents them pulling through the tissues whether it be the cervix when required for such operations as curetting and dilating, or trachelorrhaphy, seizing the fundus of the uterus and holding it securely, or for perineorrhaphies, etc. 3. The upper surfaces of the points are flattened to prevent undue pressure on other tissues. 4. The handles have been so made as to cause as little pressure as possible on the hands. The foregoing points can best be seen from the accompanying diagram.

The forceps have been made for me by Messrs. Down Bros., Limited, 21, St. Thomas' Street, London, S.E., from whom they can be obtained.

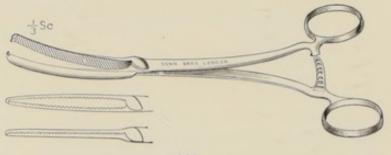
J. S. ASHE, L.R.C.P. and S. Ireland.

9003

9004

## CLAMP FORCEPS FOR BROAD LIGAMENT.

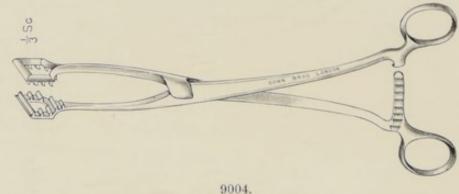
Made for Dr. F. Winson Ramsay, Surgeon, Royal Victoria HOSPITAL, BOURNEMOUTH.



9003.

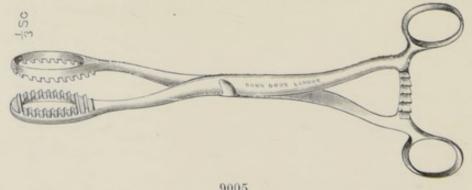
£ s. d. Broad Ligament Clamp Forceps, nickel-plated,-Ramsay's . . each 0 13 6 . . . . . .

## CYST FORCEPS.



Cyst Forceps, nickel-plated,-Pean's, also used for piecemeal removal of fibroids each 0 19 6

# FORCEPS, ETC., FOR HYSTERO-MYOMECTOMY (Wertheim's Operation).



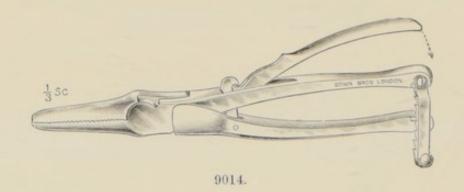
9005.

9005 Küstner's Forceps, for holding up the Uterus . . each 1 5 0

Forceps, etc., for Hystero-myomectomy, continued,-No. 9006. £ s. d. Clamp Forceps, nickel-plated,-0 13 6 9006 Wertheim's Parametric, with take-off joint . each 0 11 6 9007\* Ditto with screw joint . . . 9008. . each 0 14 6 Wertheim's Rectangular, with screw joint 9008 0 16 6 ditto with take-off joint . 9009\* Ditto 9010. . each 9010 Black's Straight, with take-off joint 0 12 9011\* 0 10 6 Ditto with screw joint . 9.9 Sc 9012. Darwall Smith's Scissors, with take-off joint . . each 0 15 6 9012 9013. Hellier's Hook, for isolating and retracting the Ureters, each 0 5 6 9013 \* The items marked thus \* are not illustrated.

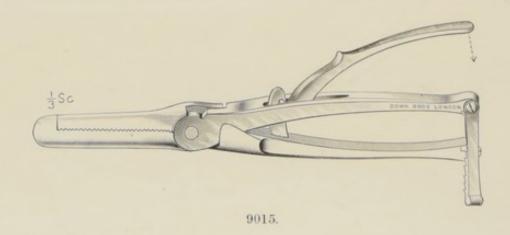
9015

# NEW MODELS LEVER COMPRESSION CLAMPS.



Lever Compression Clamps, nickel-plated,— £ s. d.

9014 Doyen's, smaller model . . . . each 2 12 6



Gray's modification of Doyen's, with guard at end of blade each 2 15 0

# UTERINE OINTMENT APPLICATOR.



Ointment Applicator,—

9016 Bandl's, with metal handle . . . each 0 6 6

No. NEW MODEL TUBES FOR WASHING OUT THE UTERUS. -sc 9017. Tubes for Washing out the Uterus, nickel-plated,-Budin's (Down Bros.' improved), to take apart . each 9017 15c 9018. each 0 13 6 Gibson's modification of Bozemann's . 9018 9019. Guy's Hospital model of Budin's tube with double curve, 9019 . . . . each 0 5 6 3 sizes 15c 9020.

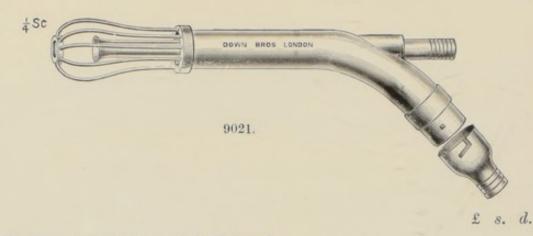
Segond's, with dilating branches .

9020

. . each

## A TWO-WAY PERITONEAL IRRIGATOR.

SUGGESTED BY MR. H. M. W. GRAY, F.R.C.S., ETC.



Peritoneal Irrigator, nickel-plated,—
9021 Grav's

Gray's . . . . . . . . each 1 11 6

#### Extract from the "Lancet," August 11, 1906.

In spite of the weighty and widespread opinion in favour of dry swabbing in purulent peritonitis, as opposed to irrigation with normal saline solution, I am still of opinion that the latter method is the better, provided one can irrigate without forcing infective fluid into non-infected areas. That is practically impossible by the ordinary methods of irrigation. At my instigation Messrs. Down Bros., Limited, have made the instrument here depicted, which, I think, permits, indeed favours, localized flushing without infecting non-infected areas. The instrument consists of a central delivery tube, made bell-shaped at its distal end so as to dissipate the force of the injected fluid. The egg-whisk arrangement, made of strong smooth wire, prevents coils of bowel pressing around the mouth of the exit tube and thus obstructing the outflow of the irrigating fluid and at the same time allows irrigation of the adjacent parts. The exit tube surrounds the delivery tube at its proximal end and the exit area is several times greater than the sectional area of the delivery tube. The exit tube is continued laterally by a stiff rubber tube of sufficient length to reach a receptacle at the side of the table. When this rubber tube is filled with fluid a strong syphon action is obtained. The advantage of this is evident. If by any chance the suction draws intestine between the wires of the "whisk" part gentle nipping of the rubber part will tend to remedy the tendency. The instrument can be taken to pieces for cleaning purposes.

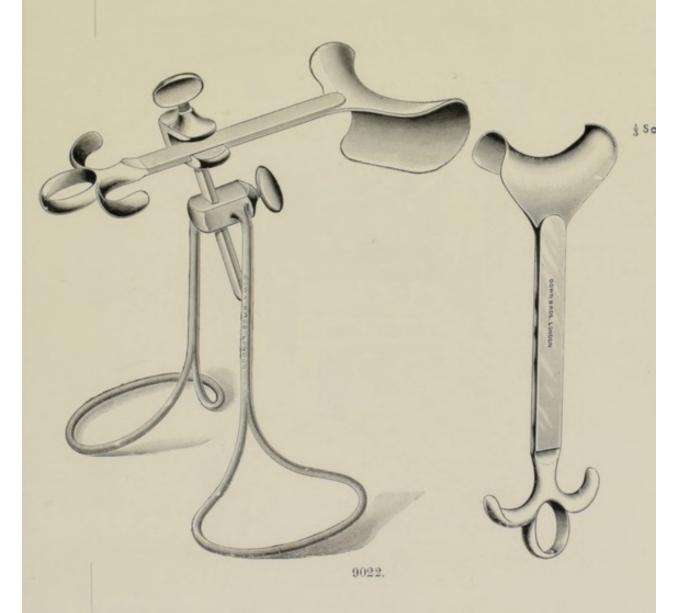
A few weeks after Messrs. Down Bros. had made the instrument for me I was much interested to find that a somewhat similar device had been thought of and put into practical shape by Dr. Joseph A. Blake of New York ("Surgery, Gynæcology, and Obstetrics," May, 1906). I venture to think that the instrument figured here is superior to his and will give even better results than he has obtained. By the use of such an instrument much time, manipulation, and mechanical injury of the peritoneum are saved, thereby lessening shock. There is not the same tendency for the bowel to protrude as with the usual method of irrigation. There is infinitely less danger of carrying infection to uninfected areas. The irrigation may be carried out through a small incision if that be thought desirable. It will indicate, as Dr. Blake points out, the extent of the infection of the returning fluid as the various

peritoneal recesses are successively washed out.

H. M. W. GRAY, M.B. Aberd., F.R.C.S. Edin.

Aberdeen.

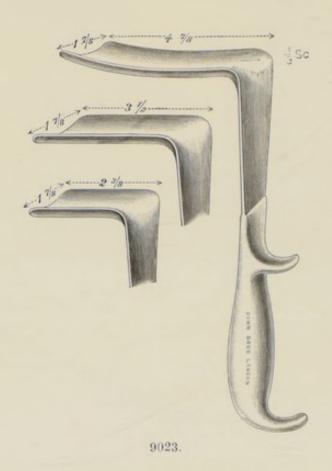
#### RETRACTORS FOR ABDOMINAL HYSTERECTOMY.



9023

# SPECULA FOR VAGINAL HYSTERECTOMY.

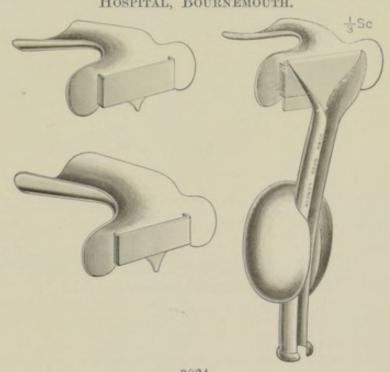
AS USED BY DR. DOYEN.



							£	8.	d.
Vaginal Specula, nickel-plated,—									
Doyen's, in 3 sizes						. each	0	13	6

# No. AN OPERATING SPECULUM FOR CONTINUOUS IRRIGATION.

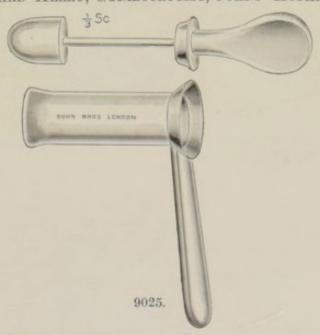
SUGGESTED BY Dr. F. Winson Ramsay, Surgeon, Royal Victoria Hospital, Bournemouth.



9024.

# VAGINAL SPECULUM.

BY DR. HOWARD KELLY, GYNÆCOLOGIST, JOHNS HOPKINS HOSPITAL.



Vaginal Speculum,— Kelly's. . .

. each 0 15 6

9025

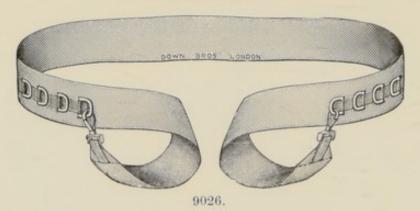
0026

0027

0028

0029

# STRAPS FOR SECURING PATIENT IN LITHOTOMY POSITION.



Lithotomy Straps,—  $\underbrace{\text{Kelly's}}_{\text{Kelly's}}$  . . . . . . . . . . . . . . . . per set 0 6 6

# VARIOUS NEW FORMS OF PESSARIES.



Pessaries,—
Kelly's, for pressure on Urethra in cases of incontinence
each 0 6 6



Schatz's, perforated vulcanite, 6 sizes, say  $2\frac{1}{4}$ ,  $2\frac{3}{8}$ ,  $2\frac{5}{8}$ ,  $2\frac{3}{4}$ , 3 and  $3\frac{1}{4}$  in. diam. . . . . . per doz. 1 10 0

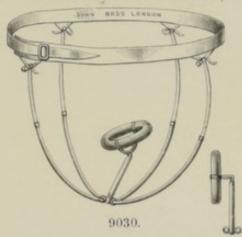


Skene's, vulcanite, for Cystocele . . . each 0 10 6

9030

#### PESSARY FOR PROCIDENTIA.

SUGGESTED BY DR. SEYMOUR STRITCH, OF DUBLIN.



Pessaries for Procidentia,— £ s. d.
Stritch's, fitted with rubber-covered watch-spring ring
each 0 10 6
Ditto with vulcanite ring . . . . . . . . . 0 10 6

#### Extract from the "Lancet," March 7, 1908.

The accompanying illustration is that of a new form of pessary intended for cases of procidentia uteri, which, for one reason or another, are not treated by operation. The pessary has been made by Messrs. Down Bros. with great exactness according to my instructions. The necessity for this form of pessary and the cases in which its use is indicated will be best appreciated by describing the condition of the patient for whom I originally had it made. She was a lady upwards of eighty years of age, in possession of all her faculties, but whose locomotion and general comfort gradually became greatly interfered with by the complete prolapse of the womb. She had suffered from the procidentia for forty years. When I first saw her it was in response to an urgent message to the effect that she was supposed to be dying from hæmorrhage. On arrival the first thing noticeable was a smell or stench which at once suggested a case of cancer. The bed on which my patient lay was fouled with blood and clots, in the midst of which the womb was found. Having cleansed the parts I was unable to discover the source of the origin of the recent hæmorrhage, though three ulcers measuring from one to two inches in length were observable on the cervix of the uterus. There were no signs of malignant disease and the history of the case since that date has entirely removed all anxiety on this score. There were three considerations which appeared to me to be essential in the management of her case: (1) to avoid the recurrence of the hæmorrhage; (2) to avoid keeping her in bed for any longer time than absolutely necessary; and (3) to discover some means by which the cause of her present illness could be removed. It was clear that whatever pessary was used it should not support the uterus by direct pressure on its surface or on the ulcers or tend to retain its discharges, whether septic or not. The pessary made for me by Messrs. Down Bros. fulfils all these conditions, as I think a glance at the accompanying illustration will make evident. The ring fits into the vaginal fornices and supports the roof of the vagina and enables the uterus to hang as it were within its circumference free from all pressure and all possibility of any discharge or secretions being retained. The ring, which may be hollow vulcanite or of the ordinary "watch-spring" type, is held by clasps which provide for its easy renewal when necessary. The clasps constitute the free extremities of a crescentic-shaped transverse bar. The curve is sufficiently deep to enable it to arch over the cervix without impinging upon it. As there would be a difficulty in inserting a ring pessary with a rigid fixed stem, the latter has been constructed with a hinge action. This hinge is controlled by a device which permits of its being locked or released at pleasure by means of a few turns of a sheath, which, in comPessary for Procidentia, continued,-

No.

9031

9032

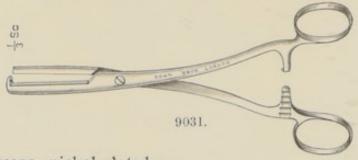
9033

bination with the hinged rod, forms the stem of the pessary. The pessary is supported by a waistband and four elastic understraps, as shown. The outer sheath of the metal stem is detachable, which enables easy cleaning of all parts.

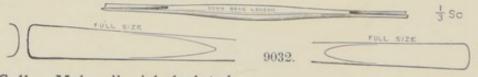
The master of the Rotunda Hospital, Dublin, Mr. E. Hastings Tweedy, was good enough to examine an earlier form of this pessary and expressed his approval of it; he also very kindly made several suggestions which were acted upon when making the final instrument.

SEYMOUR STRITCH, L.R.C.P. and S. Edin., J.P., etc., The Governor, The Apothecaries' Hall, Ireland.

## NEW INSTRUMENTS FOR APPENDICECTOMY.

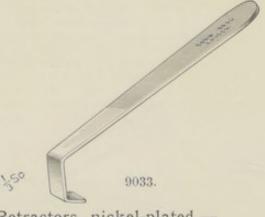


Clamp Forceps, nickel-plated,— £ s. d. Adams' modification of Corner's . . . each 0 15 6



"Collar Maker," nickel-plated,— Cheatle's (suggested by Mr. Lenthal Cheatle), for separat-

Cheatle's (suggested by Mr. Lenthal Cheatle), for separating Peritoneum from inside stump of Appendix . each 0 5 6



Appendicectomy Retractors, nickel-plated,—

Cressy's . . . . . per pair 0 7 6

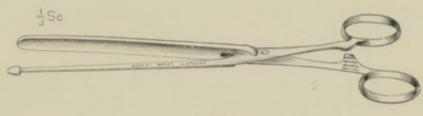
Extracted from the "Lancet," August 21, 1909.

As I consider the splitting operation in appendicitis the only justifiable one, I have thought that the modification in the form of the retractor shown obviates one or two objections common to those in ordinary use, because (1) the part introduced into the wound is always in the same plane as the muscle retracted, consequently it is not lacerated; (2) the width of the retractor is just enough to give a good field of operation without unduly stretching the external oblique; and (3) the handle is placed at an angle to accommodate the assistant's fingers below, whilst the thumb lies on the upper surface.

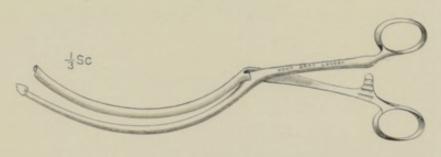
A. Z. Cressy, M.R.C.S., Hon. Surgeon, Carshalton Cottage Hospital.

#### INTESTINE CLAMP FORCEPS.

Suggested by Dr. J. Crawford Renton, Surgeon, Western Infirmary, Glasgow.



9034.



9935.

£ 8. d.

0 17 6

6

0 16

Bowel Clamp Forceps, nickel-plated,-Renton's, straight,  $9\frac{3}{4}$  in. . . . each Ditto curved, 93 in.

9034 9035

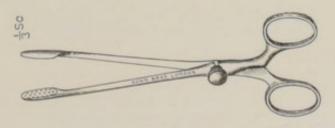
#### Extracted from "British Medical Journal."

The accompanying woodcut illustrates the intestinal clamp which Dr. J. Crawford Renton, of Glasgow, has used for fourteen years. The one blade is slightly cup-shaped, and the other is a round-pointed rod. The rod is so made that it easily perforates the mesentery when that is necessary, and being blunt-pointed does no harm. The cup-shaped blade enables a small amount of pressure to clamp the bowel.

Having used the clamp, Dr. Renton has been thoroughly satisfied with its efficiency, ease of application and safety. It is made by Down Bros., of London, both straight and curved, and he is greatly indebted to them for the time and labour they have expended in carrying out his wishes.

#### GALL STONE FORCEPS.

SUGGESTED BY MR. G. H. MAKINS, C.B., F.R.C.S., SURGEON, ST. THOMAS'S HOSPITAL.



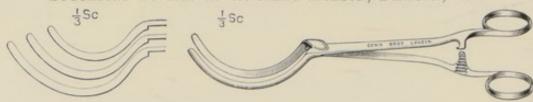
9036.

Gall Stone Forceps, nickel-plated,-9036 Makins' . . . each, 5 in., 8s. 6d.; 7 in. 0 10 6

9037

# CYSTIC DUCT CLAMP FORCEPS.

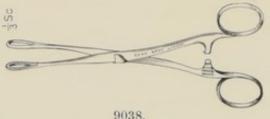
SUGGESTED BY MR. A. W. MAYO ROBSON, F.R.C.S., ETC.



9037.

Cystic Duct Clamps, nickel-plated,-Mayo Robson's, 3 sizes, 2, 21 and 3 in. across blades each, 13s. 6d.; per set 0 0

## PERITONEUM FORCEPS.



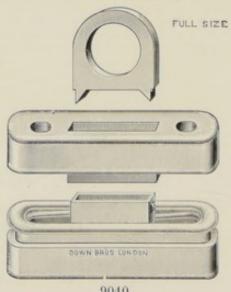
9038

Ditto 9039\*

Peritoneum Forceps, nickel-plated,-Westminster Hospital pattern, as used by Mr. Spencer; with take-off joint . . . . . each 9 0 ditto with screw joint

### NEW OBLONG ANASTOMOSIS BUTTON.

Suggested by Dr. J. B. Murphy, of Chicago.



9040.

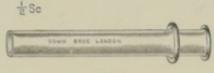
Anastomosis Button,-9040

Murphy's oblong, with key . each Dr. Murphy states that the oblong button takes from eleven to thirteen days to come out and seems more definite in its time for loosening than the round button. "I use the button all the time; I believe it gives the best scar. There is less likelihood of leakage when properly made and inserted, and the oblong button has not been retained in the stomach in a single instance." (Practical Medical Series, Vol. II.)

<sup>\*</sup> The items marked thus \* are not illustrated.

9041

# DRAINAGE TUBES FOR GALL BLADDER.



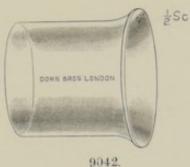
9041.

£ 8. d

Drainage Tubes for Gall Bladder,-

Burghard's, glass, 4 sizes,  $2\frac{1}{4} \times \frac{3}{8}$ ,  $2\frac{1}{4} \times \frac{5}{16}$ ,  $3\frac{1}{4} \times \frac{5}{16}$ ,  $3\frac{1}{4} \times \frac{3}{8}$ 

N.B.—The end with collar is tied in, and the free end protrudes through the dressings.



9042 Rutherford Morison's, glass,  $2 \times 1\frac{3}{4}$  in. . . each

# INDIA-RUBBER DRAINAGE TUBE FOR SIGMOID FLEXURE.

Suggested by Mr. J. P. Lockhart Mummery, F.R.C.S., Surgeon, St. Mark's Hospital.



9043.

Drainage Tube for Sigmoid Flexure,-

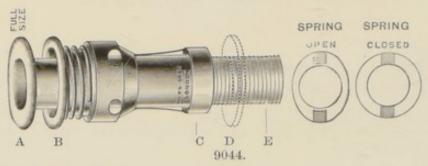
Mummery's, for restoring continuity of the bowel in cases of excision of a growth low down in the sigmoid flexure, 2 sizes,  $\frac{11}{16}$  and  $\frac{7}{8}$  in. diam. . . each N.B.—These may also be used instead of Paul's glass drainage tubes.

9043

#### ENTEROSTOMY TUBE.

# For use in Enterostomy, Colostomy and Cholecystostomy.

As suggested by T. Carwardine, M.S. Lond., F.R.C.S.Eng., etc., Surgeon, Bristol Royal Infirmary.



- A Flange of inner tube.
- B Flange of outer tube.
- C Spring which by compression releases the clutches.
- D Fly nut to protect spring (optional).
- E End of inner tube to which india-rubber tubing is attached.

9044

# Enterostomy Tubes,— £ s. d. Carwardine's, 3 sizes, $\frac{5}{8}$ , $\frac{13}{16}$ and 1 in. outside diam. . each 1 1 0 Very thin india-rubber tubing for use with above per yd. 0 2 6

The enterostomy tube is intended for lateral drainage, and is employed in the following manner. The selected portion of gut is clamped at two places by bowel clamps, or the fingers of an assistant placed back to back, with sufficient interval between. A short incision is made into the bowel, and a purse-string suture of fine silk or thread, which may comprise all the coats, is inserted round the margins of the opening. The central tube is then placed into this opening, and the suture drawn tightly, so as to apply the margins of the opening in the gut over the flange of the tube. Then the outer tube is passed over the inner tube, and pressed lightly so as to grip the edge of the gut. Then a long piece of india-rubber tubing is fixed to the free end of the inner tube. The clamps, or fingers of the assistant, are then removed and the intestinal contents will drain through the tube into a receptacle.

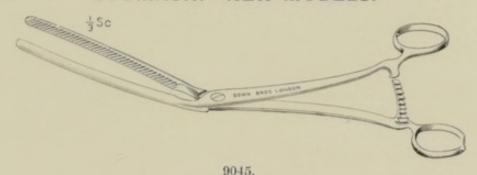
For merely draining the bowel while an operation is in progress, the pursestring suture, which applies the opening in the gut over the flange of the inner tube, may be tied in a bow. Then, after the bowel has drained sufficiently, the gut is again clamped near the tube, the rubber drainage tubing removed, and then the outer tube. The bow-knot of the purse-string suture is untied, the inner tube removed from the bowel, and the purse-string suture drawn tightly, tied permanently, and reinforced by an outer continuous or interrupted suture. The loop of bowel is then released, cleansed, and returned into the abdomen.

For temporary drainage of the bowel, prolonged beyond the period of operation, the tube is placed in the incision in the abdominal wall, so that the parietal and visceral peritoneal surfaces are in contact, without the formation of a spur. The tube will then remain in for six days, if necessary.

For permanent Enterostomy and Colostomy, when more of the gut is brought out of the abdomen for the formation of a spur, the procedure is similar, except that drainage may be made after the patient has been put to bed, and the bowel clamped laterally while the tube is being inserted. By leaving a medium-sized tube in for five days, and then replacing it by a larger one, the wound may be kept free from faccal contamination for over a week.

For Cholecystostomy, the tube may be fixed into the gall-bladder in the same way as into the bowel, and if the purse-string suture be tied in a bow, the ends may be left out of the wound, so that the suture may come away at the same time as the tube.

# CLAMP FORCEPS FOR OPERATIONS ON THE STOMACH. NEW MODELS.



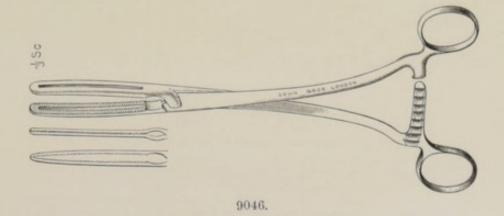
9045

Stomach Clamps, nickel-plated,— £ s. d.
Basil Hall's . . . . . . . each 0 15 6

#### Extract from "British Medical Journal," January 5, 1907.

AN IMPROVED GASTRO-ENTEROSTOMY CLAMP.

Mr. J. Basil Hall, M.C. Cantab., Surgeon to the Royal Infirmary, Bradford, writes: Certain inconveniences in connexion with the usual types of gastro-enterostomy clamps have led me to ask Messrs. Down Bros. to make me an instrument on the lines of the accompanying sketch. I have found that with clamps of the Doyen type the pressure of the curved blade is not evenly distributed, and also that the curve of the blades does not allow the stomach wall to be readily lifted into the abdominal incision. The blades are scarcely long enough, and the shanks also being comparatively short, the handles are sometimes in the way. On the other hand, in clamps of the straight type, the shanks, though longer, do not readily lie flat upon the abdominal wall, and the handles project upwards in an awkward manner. The clamp here depicted has a straight blade full 41 inches long. It is serrated and bowed in the usual way. It obtains a good grip with a very evenly-distributed pressure over an ample area of the stomach wall. The instrument is bent "on the flat" at the joint to an angle of 20°, which I find to be just sufficient to allow the shanks to lie perfeetly flat upon the body wall, when the stomach is well lifted into the abdominal incision. On account of the extra length of the shanks, the handles are well out of the way during suturing. I have now used this instrument, not only for gastro-enterostomy, but also for other operations upon the stomach, and find it most efficient. The pressure exerted by it is so even and well graduated that it is quite unnecessary to ensheath the blades with rubber.



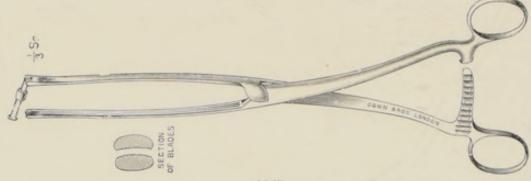
9046

Black's, with take-off joint (suggested by Mr. Kenneth Black, F.R.C.S., of Nottingham) . . . each 0 16 6

These clamps are intended to be used (with or) without rubber tubing; one forceps clamps the stomach near the pyloric end, and the other forceps

No. Stomach Clamps, continued,-

clamps towards the cardiac end, leaving the intervening portion unclamped. The small intestine can be included in the clamps or an extra pair used. By these means the stomach and intestine will lie in apposition, and a gastro-enterestomy opening of from 4 to 6 inches made. The line along which the stomach and intestine is sutured will be of equal tension throughout; there will be a large lateral surface of stomach on which to work as the forceps will not be in the way; there should not be any risk of post-operative hæmorrhage, as large vessels in the stomach wall will bleed and should be ligatured; the contents of the stomach during the operation will not be found in practice to escape unless the patient strains or coughs, as the part of the stomach opened is dragged by the weight of the forceps forward out of the abdominal cavity.

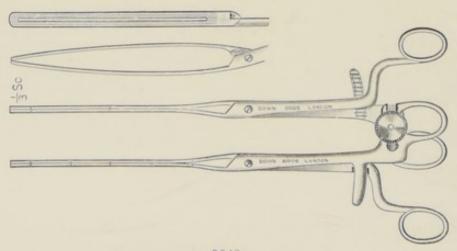


90

Stomach Clamps, nickel-plated, continued,—

Childe's, with take-off joint (made for Mr. C. P. Childe,

F.R.C.S., of Southsea) . . . each 1 12 0



9048.

9048 9049\*

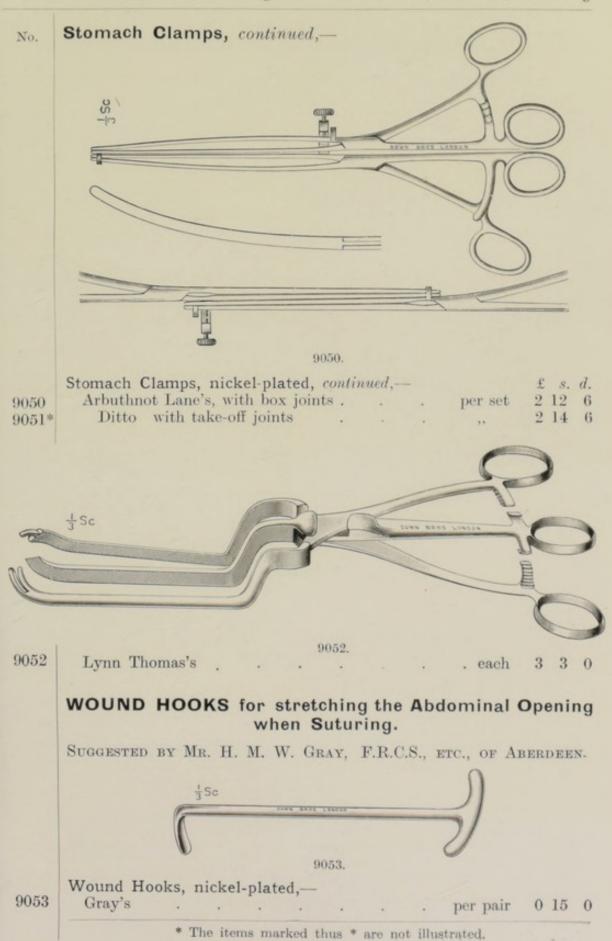
9047

Carwardine's Twin pattern, latest model, with screw joints 2 5 0 Ditto ditto with take-off joints . . . . 2 9 0

Extract from "Medical Press," February 2, 1910.

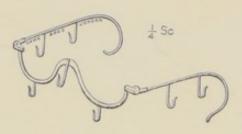
With regard to the details of the operation for gastro-enterostomy, surgeons of most experience in the operation habitually use clamps for the stomach and small intestine. Some years ago I designed twin stomach forceps, similar to my intestinal clamps. They are referred to in the latest edition of Jacobson's Surgery, but I refrained from previous personal publication of them until satisfied with their use. It should be noted that they are employed without any covering of rubber tubing, and I have not met with any technical defect in their use, or damage to viscera.

<sup>\*</sup> The items marked thus \* are not illustrated.



### INSTRUMENTS FOR ABDOMINAL SURGERY.

SUGGESTED AND USED BY MR. B. G. A. MOYNIHAN, F.R.C.S., SURGEON, LEEDS INFIRMARY.



8520.

8520

£ s. d. Operating Mask,-Moynihan's . . each



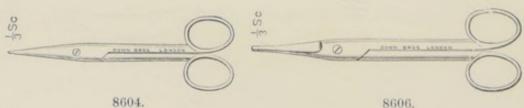
9054

Abdominal Scalpels, nickel-plated handles,-Moynihan's (one size only) . . . per doz. 1 16 0



9055.

9055 9056\* Scissors for slitting up the Peritoneum, with screw joint, nickel-plated shanks . . . . each itto ditto with take-off joint . . . ,, 0 6 6 Ditto 0 8 6

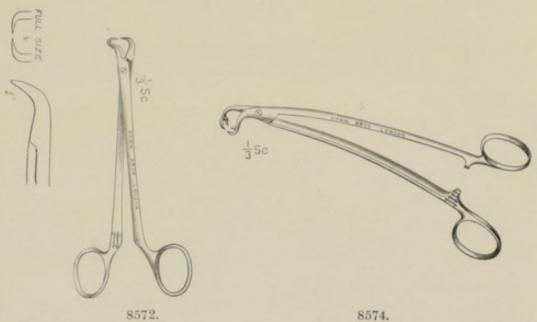


Scissors, with nickel-plated shanks,-

8604	Mayo's, 5½ in., with screw joint			each	0	3	6
8605*	Ditto with take-off joint .			33	0	5	6
8606	Ditto $6\frac{1}{2}$ in., with screw joint		*:	, >>	0	4	6
8607*	Ditto with take-off joint			22	0	6	6

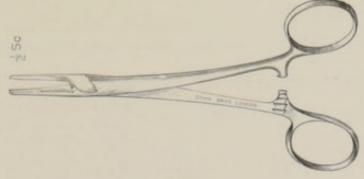
<sup>\*</sup> The items marked thus \* are not illustrated.

# Mr. Moynihan's Instruments, continued,-



£ s. d.

	Tower Clips, mcker-placed,—						
8572	Moynihan's, for top and bottom	edges of	wound,	with			
	screw joint			each	0	6	6
8573*	Ditto ditto with take-off join	nt .		,,	0	8	0
8574	Ditto for sides of wound, with s	crew joint		,,	0	12	0
8575*	Ditto ditto with take-off join	nt .		,,,	0	13	0



8541.

Artery Forceps,-

Kelly's, as used by Mr. Moynihan,  $5\frac{3}{4}$  in. . . each 0 6 6

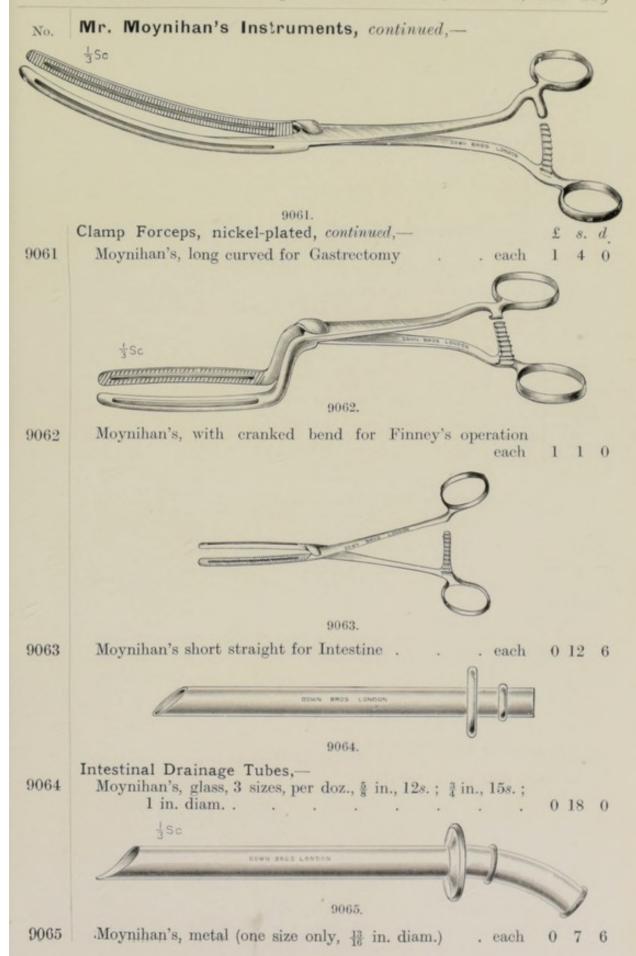
<sup>\*</sup> The items marked thus \* are not illustrated,

# Mr. Moynihan's Instruments, continued,— No. FULL SIZES 9057. Clamp Forceps, with Tenaculum Ends, nickel-plated,-9057A Moynihan's Mickulitz's, size A for Cystic Duct, with takeoff joint 0 11 0 Ditto size B for Broad Ligament, 9057Bditto . 0 12 0 Ditto size C, ditto . 9057c0 13 6 9058\* Ditto with serew joint each, A, 9/6; B, 10/6; C 0 12 0 9059. Clamp Forceps, nickel-plated,-9059 Moynihan's, straight for Gastro-enterostomy . each 0 18 6 9060.

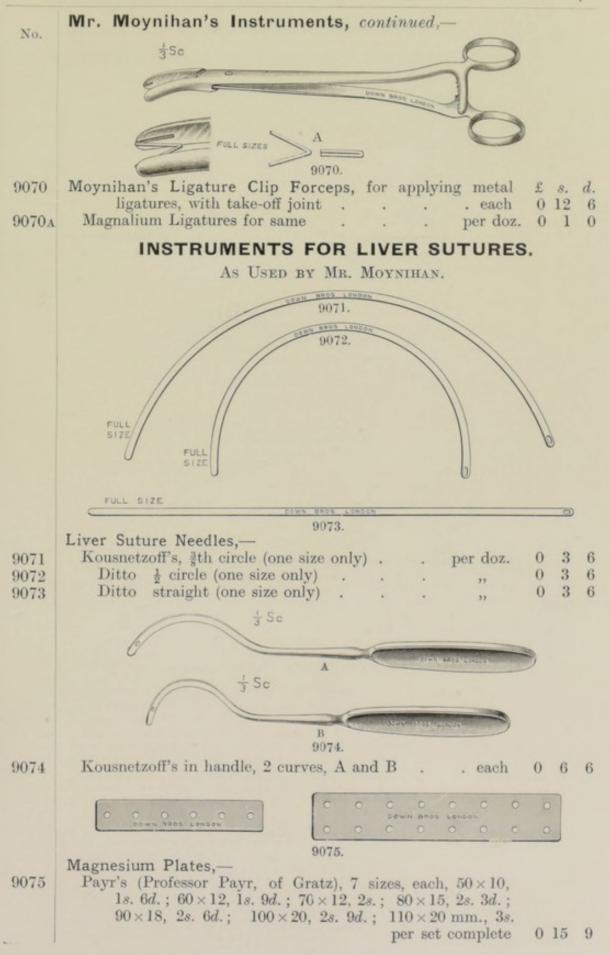
Moynihan's, long straight for Gastrectomy

[ 9060

. . each 1 2 0

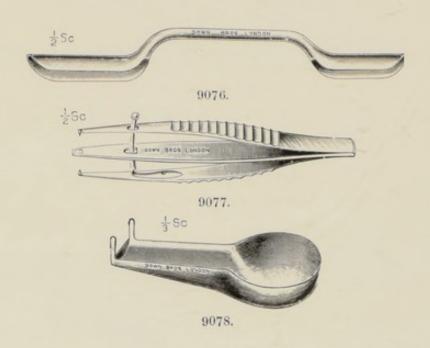


Mr. Moynihan's Instruments, continued,— No. 9036. 8. d. Gall Stone Forceps, nickel-plated 0 10 6 9036 each 9066. 9066 Flexible Probe and Scoop, of soft metal, for Cystic Duct each -Sc FULL SIZE 9067. 9067 Scoop, double ended, steel, bendable at necks, nickelplated 6 FULL 8721. 8722. Needles,-Moynihan's, round-bodied, 5th circle, fine, for Gastro-8721 enterostomy, Nos. 1 to 6 . . . . per doz. 0 0 Ditto ditto ditto strong, with lance points. No. 1 8721A\* size only . per doz. 0 Ditto 8722 ditto spring-eyed, No. 1A size only 9 (No. 8721A were originally employed for abdominal sutures, but Mr. Moynihan now uses them indiscriminately for stomach and external.) 9069. Moynihan's Suturing Forceps, for holding edges to-9069 gether while suturing, nickel-plated. . each \* The items marked thus \* are not illustrated.



# INSTRUMENTS FOR GASTRO-ENTEROSTOMY AND CHOLECYSTOSTOMY.

SUGGESTED BY MR. HAROLD UPCOTT, F.R.C.S., ASSISTANT SURGEON,
HULL ROYAL INFIRMARY.



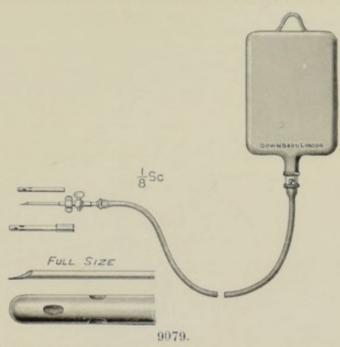
						£	8.	d.
	Instruments for Gastro-enter	ostomy,	etc.,	nick	el-plated,—			
9076	Upcott's Depressor				. each	0	5	6
9077	Ditto Coaptation Forceps				. ,,	0	10	6
9078	Ditto Gall-stone Bowl .				. ,,	0	5	6

#### Extract from the "British Medical Journal," July 24, 1909.

During the performance of gastro-enterostomy or intestinal anastomosis, it frequently happens that the pouting mucous membrane of the already sutured half of the bowel is in the way of the needle while the anterior or return half of the mucous membrane is being sutured. To aid in the application of this suture I have had a protector made with ends of different sizes for stomach or intestine. It is applied after the posterior suture line is complete, and serves to depress the ridge of mucous membrane, at the same time affording a smooth surface over which the point of the needle readily glides. It is easily withdrawn before the suture is completed. A three-bladed coaptation forceps (originally designed for the coaptation of skin edges) has also proved useful for lifting up in apposition the edges to be sewn. The gall-stone bowl is of assistance in the cleanly performance of cholecystostomy. The apex of the gall bladder, after having been drawn through a hole in the centre of a sheet of thin rubber, is seized with two pairs of Porrier's forceps, which are allowed to hang over the projections on either side of the lip of the bowl. The gall bladder is opened between them, and its contents readily scooped into the bowl which rests upon the lower part of the abdominal incision. The instruments have been made for me by Messrs. Down Bros.

## APPARATUS FOR CONTINUOUS SALINE INFUSION.

SUGGESTED BY MR. ARBUTHNOT LANE, M.S., ETC.



Saline Infusion Apparatus,—

Lane's, fitted with needle for subcutaneous injection and with metal (or india-rubber) nozzle for rectal use

complete 1 3 6

£ s. d.

#### Extract from the "Lancet," February 8, 1908.

After the operation the patient is put upon continuous saline injections subcutaneously. Two pints are introduced into the axilla at once while the patient is still under the anæsthetic; during the three days following the operation about eight or ten pints are absorbed in this way by continued transfusion. To meet any risk of infection of the material introduced I devised an arrangement by means of which this can be effectually eliminated. It has also the advantage of occupying a very small bulk in the bag of the surgeon. It is made for me by Messrs. Down Bros. It consists of a bag made of the best rubber capable of containing two pints of water. It has a metal orifice sufficiently large to admit the ordinary salt "tabloids." To this is joined a rubber tube by means of a bayonet catch, to which a suitable needle can be attached. This needle is fitted with a shield which serves the double purpose of keeping it covered after sterilization and preventing any blunting of its point. A rectal nozzle is also supplied in the event of the surgeon wishing in certain cases to introduce the solution into the rectum. By using saline solution subcutaneously in this manner any sickness with the strain on the wound and the associated pain and distress is absolutely avoided, while the danger of shock to the patient from the operation is reduced to a minimum. I first employed this continuous transfusion with the most marked success in cases in which I had removed the big bowel, with the result that the risks from the operation are very much reduced, while I believe the tendency to the formation of adhesions about the dilated small intestine, which is an occasional annoying sequence, is apparently obviated by it. The bag can be placed in any situation in or above the bed and its contents can be kept warm by placing it on a hot-water bottle, etc. If the solution does not run freely pressure can be exerted in it readily or it may be suspended at a greater height. To employ it the bag is filled with water after the salt has been introduced into it. The shield, tubing, and needle are then connected and the whole thing is put into any suitable vessel and boiled. The shield being taken off the needle, it is introduced between the cleansed skin and is fixed in position with a suitable dressing so as to ensure asepsis at the seat of puncture.

9079

No.

#### COLOTOMY APPLIANCE.

SUGGESTED BY MR. ARBUTHNOT LANE.



9080.

9080

Colotomy Appliance,-£ 8. d. Lane's . 0 14 6 . each

Extract from "Excision of the Rectum for Carcinoma," "The Lancet," February 8, 1908-

A curved tube fitted with a special rubber apparatus, which I have employed for many years, is then tied into the portion of the sigmoid flexure left protruding from the abdominal incision, all fouling of the wound or discomfort to the patient during the whole period of convalescence being absolutely avoided by this means. The two or three inches of gut projecting from the wound is utilized to re-attach the glass tube as each section of bowel sloughs off with the constriction due to the ligature till the bowel is divided flush with the skin. This leaves a perfect aperture which is readily controlled by the rectus muscle and over which a cup and belt is worn without inconvenience.

## ANASTOMOSIS TUBES FOR THE DIRECT TRANSFUSION OF BLOOD.

SUGGESTED BY DR. GEORGE CRILE, OF CLEVELAND, OHIO. Vide "Annals of Surgery," September, 1907.



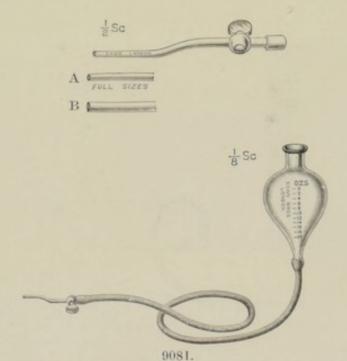
9080A

Crile's Anastomosis Tubes, 3 sizes, 3, 4, and 5 mm. in-.per set of 3

The proximal end of the vein, which has been previously temporarily closed with a Crile's Clamp, is pushed through the tube, turned back and tied over the second rim, the handle of the tube being meanwhile held by a forceps; the artery of the donor is then drawn over the vein and tied over the first rim.

#### SIPHON APPARATUS FOR INTRA-VENOUS INFUSION IN CHOLERA.

Suggested by Major Leonard Rogers, I.M.S.



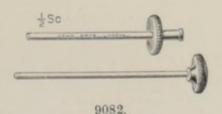
Siphon Apparatus for Intra-venous Infusion,-

£ s. d.

9081

Rogers', consisting of graduated glass bulb reservoir, with open neck for cotton-wool plug, length of indiarubber tubing and 1 each 2 sizes silver Canulas (A and B) with stopcocks . . . . . per set The silver Canulas (A and B) with stopcocks separate, 10s. each.

For use with Hypertonic Solution. Partial turning of the stopcock allows the fluid to run in at a given slow rate and to pass into the tissues.



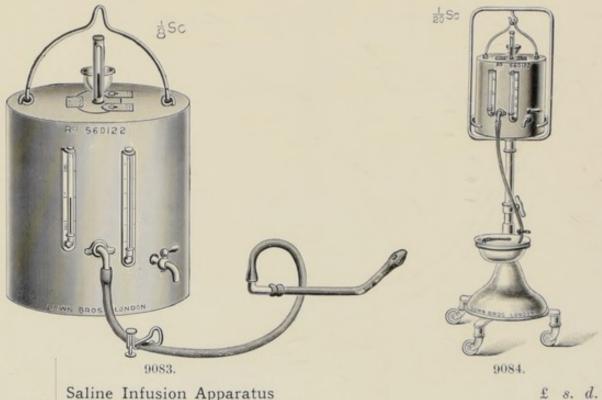
9082 Rogers' sharp steel Canulas, with Pilot for Abdominal Infusion . . . . . . each 0 3 6

9083

9084

# SALINE INFUSION APPARATUS (registered), for Continuous Irrigation at Constant Temperature.

SUGGESTED BY MR. A. E. WILSON HIRD, M.R.C.S., RESIDENT SURGEON, BIRMINGHAM GENERAL HOSPITAL.



Saline Infusion Apparatus

Hird's (registered)

Ditto, with stand to raise and lower, fitted on 3 ball-bearing, rubber-tyred castors

12 12 12

This apparatus consists of a metal can of one and half pints capacity, the interior of which has been prepared so that the saline solution will have no corrosive action upon it. This vessel is surrounded by a hotwater jacket; the water jacket is protected by a thick layer of non-conducting materials. The whole is enclosed in a polished metal case, which is further protected by an outer covering of thick felt. The capacity of the water jacket is seven and a half pints, and is filled by means of a funnel fixed on to the top of the apparatus; it can be easily emptied by the tap shown in the figure. The aperture of the saline tank is large enough to admit the hand, so that it can be readily cleaned after use. It is closed by a metal lid which has a rubber cork in the centre, through which a thermometer enclosed in a metal case is fixed so that the temperature of the saline in the reservoir may be easily noted. Both the indicator and the outlet of the saline tank can be removed for cleaning.

The saline leaves the can through a delivery tube and is connected to a large rubber rectal tube by a glass junction. The apparatus is suspended on an adjustable stand mounted on ball-bearing castors so that it can be readily wheeled up to the bedside. Once it has been properly adjusted both the saline tank and the hot-water jacket can be replenished without interfering in any way with its proper working. The temperature of both the saline solution and the water required to fill the apparatus should be 110° F, when used without a constriction on the delivery tube. If a constriction on the delivery tube is used, both the saline solution and the water must be at 212° F, and the constriction, whether it be screw clip or forceps, should be placed as near to the outlet of the tank as possible.

The saline can will need replenishing every hour; this is no detriment,

# Saline Infusion Apparatus, continued,—

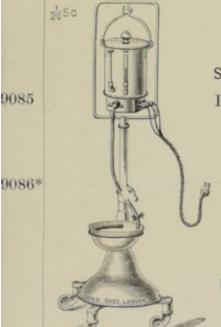
for patients who are given continuous saline generally require attention more often than that. The hot water in the jacket requires to be changed about every two or three hours; it is not necessary to withdraw all of it, if three pints are withdrawn and replaced with hot, the temperature

can by this means be adjusted to the proper level.

I have found that the "heat loss" of this apparatus amounts to less than five degrees an hour when used by Murphy's method, without a constriction on the delivery tube, but if a constriction is used the loss is

much greater.

No.



Saline Infusion Apparatus, continued,—

Paterson's, with electric heating arrange-£ s. d. ment for use in connexion with main supply, with stand to raise and lower, fitted on ball-bearing castors. 12 12 0 Ditto ditto without stand

In ordering state voltage of current.

# RECTAL SPECULA.



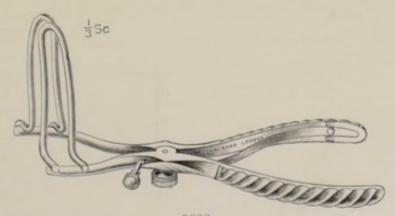
Rectal Specula,-

9087

9088

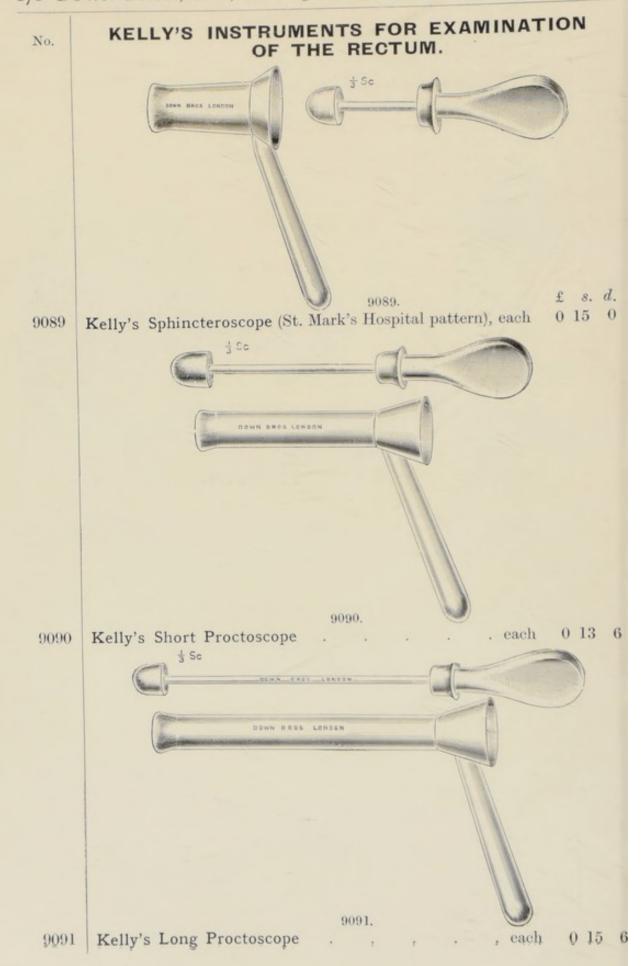
9085.

Mummery's, with thickened edges allowing of rotation, made in 2 lengths . . each,  $2\frac{1}{2}$  in., 6s, 6d, ;  $3\frac{1}{2}$  in. 0 7 6



9988.

Sims', dilating . each 1 1 0

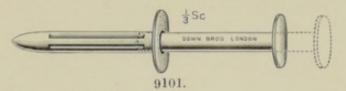


Kelly's Instruments for Examination of the Rectum, No. continued,-\$ 50 DOWN BROS LONDON 9092. 0 17 6 Kelly's Sigmoidoscope . . . . . . each 9092 PILE CLAMP FORCEPS. SUGGESTED BY MR. W. E. MILES, F.R.C.S., SURGEON, GORDON HOSPITAL FOR DISEASES OF RECTUM. tsc 9093. Pile Clamp Forceps, nickel-plated,-. each 0 9093 Miles' . FOR COMPLETE REMOVAL OF INSTRUMENTS HÆMORRHOIDS. SUGGESTED BY MR. A. HEYGATE VERNON, F.R.C.S., OF BOURNEMOUTH. \$Sc 9094. 9095. Hæmorrhoid Instruments,-. each 0 9094 0 8 6 9095 N#

100	DOWN BROS., LID., 21 & 23, St. THOMASS St., LONDON, S.E.
No.	SOLID INDIA-RUBBER RECTUM BOUGIES.
	35c
	COWN IBMSS LUNDON
	9096.
9096	Rectum Bougies, india-rubber, 12 sizes,—
	Nos. 1, 2 and 3 each 0 2 3
	Nos. 4, 5 and 6
	Nos. 7 and 8
	GALVANIC CAUTERY FOR USE WITH
	SIGMOIDOSCOPE.
	9097.
	DOWN HOSS LEADON
	9098.
9097	Galvanic Cautery, for use with Sigmoidoscope, etc., 2 lengths, 25 and 40 cm each 0 7 6
9098	Handle for use with above
	NEW MODELS RECTAL IRRIGATION TUBES.
	1/3 Sc
	DEWN BROS LONDON
	9099.
9099	
0000	Baraduc's Double Channel Flexible, to remove intestinal contents, and to relieve congestion or inflammation in
	cases of chronic or acute Prostatitis, Metritis, Salpingitis,
	inflammation of Broad Ligament, etc each 0 4 6
	1/3 Sc
	DOWN 8665 LONGOR
	9100.
9100	Chetwood's, Double Channel Glass each 0 2 6

#### RECTAL OINTMENT APPLICATOR.

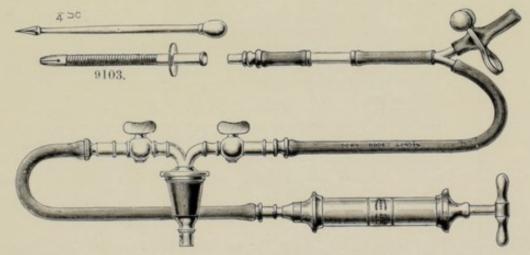
SUGGESTED BY MR. ANDREW CHARLES, F.R.C.S., OF DUBLIN.



9101 9102\* Charles'
Conical pipes for filling same, with screw-end to fit the ordinary
collapsible metal ointment tubes
each 0 7 6

# ROGERS' FLEXIBLE SHEATHED TROCARS, ETC., FOR THE TREATMENT OF LIVER ABSCESS.

SUGGESTED BY MAJOR LEONARD ROGERS, I.M.S.



9103

Trocars and Flexible Cannulæ, etc., for Liver Abscess,—
Rogers' Trocars, fitted with flexible silver Cannulæ, 4
sizes, each, 32, 188.; 32, 198.; 32, £1; \$\frac{1}{32}\$ in. . . . 1 1 0

N.B.—These Trocars may be used with the pump of an ordinary Aspirator, but the accessories enumerated below will generally be required because it is necessary that the mounts, tubing and stopcock between the Cannula and the bottle should be equal in lumen to the Cannula.

DESCRIPTION OF THE TROCAR WITH FLEXIBLE SHEATH, ETC.

This instrument has been devised for the aseptic drainage and daily quinine irrigation of amorbic abscess of the liver. (See British Medical Journal, October 24 and 31, 1908.) It consists of an aspiration trocar

<sup>\*</sup> The items marked thus \* are not illustrated.

# Rogers' Trocars, etc., for Liver Abscess, continued,-

and cannula, the sheath of which is made of flexible silver tubing, so that it can be safely left in as a drainage tube, which will accommodate itself to the altered relationship of the traversed parts due to emptying the abscess cavity. A plug is provided to fit the proximal end of the cannula for connexion with the tubing leading to the aspiration bottle. A metal "Y" tube is also supplied to facilitate the daily aspiration and quinine injection. The single limb is connected by pressure tubing with the end of the cannula, and one of the branches by similar tubing with the aspirator. The other limb admits of solutions being injected by means of a glass syringe after aspiration, without having to disconnect the tubes, this injection tube being clamped or closed with the fingers during the aspiration. In passing the trocar through the cannula before use the end of the sheath should be supported by the fingers to prevent the tube being unduly stretched.

#### METHOD OF USE.

As the whole principle of the instrument is to enable a liver abscess cavity to be drained aseptically, and repeatedly washed out with sterile quinine solution to kill the causative amoeba, the strictest antiseptic precautions are essential.

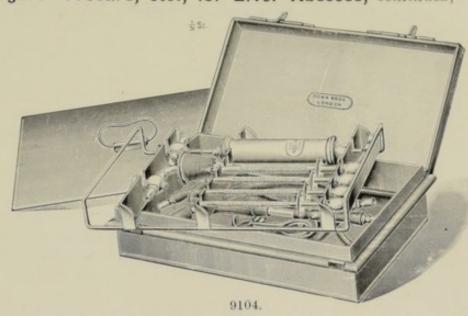
When the abscess is deep-seated it must first be located by aspiration with an ordinary small lumened cannula, but without removing much of the pus. The flexible sheathed trocar is then inserted into the cavity, along-side the small one if thought advisable, and the latter withdrawn. The trocar is then removed, leaving in the flexible sheath, through which the abscess is emptied thoroughly with the aspiration bottle. From two to four ounces, in accordance with the size of the cavity, of sterile quinine solution (10 grains to the ounce of the soluble bi-hydrochloride) is now injected into the cavity, and allowed to act for five to ten minutes. The end of the cannula is next connected to a long drainage tube of large calibre, the distal end of which is carried into a bottle containing 1 in 40 carbolic acid, or other antiseptic, and siphon drainage thus set in action, which will keep the abscess cavity empty. A dressing is now applied over the puncture wound, and either a bandage or a piece of strapping so arranged as to prevent the cannula slipping out, the drainage tube projecting through it.

#### AFTER TREATMENT.

As the discharge all drains into the bottle of carbolic lotion, no change of dressings will be required for some days. Each morning the drainage tube should be detached from the end of the cannula, and the "Y" tube connected with it arranged as detailed above. Suction is then applied with the aspirator to remove any thick pus which may not have drained through the tube. Sterile quinine solution is then injected through a sterile syringe, and siphon drainage restarted. After this has been repeated on several days the discharge should become thinner and the cavity contracted down, while after a time no thick discharge may be obtainable on aspirating. If thought advisable, the tube may now be clamped at night so as to allow the patient more movement. When the discharge has become reduced to a little thin serous-like fluid, and the cavity only admits a few drachms of fluid, the cannula may be entirely removed, and a dressing applied over the sinus, which should then heal in a few days with practically no discharge with but one or two changes of dressings, provided asepsis has been successfully maintained, and the temperature is normal.

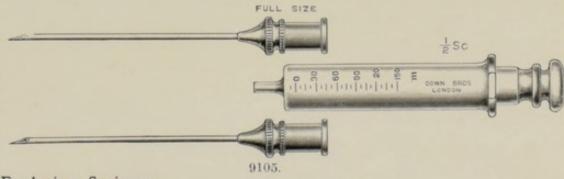
The pus obtained at the first aspiration should be placed in a sterile test tube, and subsequently stained for bacteria, and, if possible, a culture made; as it is only originally sterile abscesses which are suitable for this treatment, these comprising over 80 per cent. of large tropical abscesses. A further examination of the pus aspirated at the morning irrigation should be made later to see if it remains sterile and amoeba are absent as a result of the quinine injections. The patient should have a course of large doses of ipecacuanha to heal the amoebic ulcers in the cacum, often latent in character, which are the cause of the liver complication, as further amoebic hepatitis and abscess formation will thus be prevented.

# No. Rogers' Trocars, etc., for Liver Abscess, continued,—

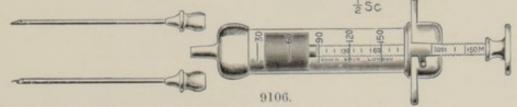


9104 Rogers' Complete Set of Liver Abscess Apparatus, consisting of Aspirator with double way cock with large bore, set of 4 Trocars with flexible silver Cannulæ, 2 Y-shape Connecting Tubes, 2 glass Unions, 2 Spring Clips, 4 metal Tubing Mounts and supply of large bore pressure Tubing, in japanned tin case with nickel-plated lift-out rack. 7 5 0

## **EXPLORING SYRINGES.**



9105 Exploring Syringes,—
All Glass, 150 minim, with 2 steel Needles, in metal case 0 13 6
If with platinum-iridium Needles, 4s. per Needle extra.

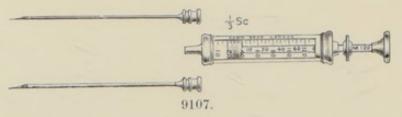


V\*\*

9109

# EXPLORING SYRINGE FOR LIVER ABSCESS.

SUGGESTED BY MR. JAMES CANTLIE, C.M., F.R.C.S., ETC., SURGEON, SEAMEN'S HOSPITAL, ETC.



£ s. d.

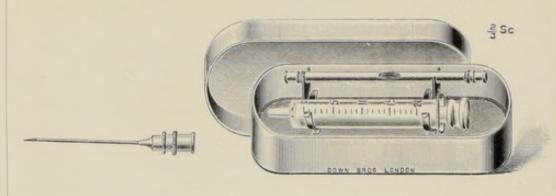
Exploring Syringe for Liver Abscess,—

Cantlie's, 120 minim, fitted with asbestos piston and I each

3\frac{3}{4} \text{ and } 4\frac{1}{4} \text{ in. Needles} \text{. . . in metal case } 1

The longer Needle is intended for exploring obliquely.

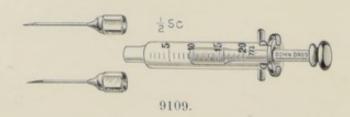
#### HYPODERMIC SYRINGES.





Hypodermic Syringes,—
All glass, 20 minim, with 2 steel Needles . in metal case 0 3 6
Ditto 30 minim, with ditto . . ,, 0 4 6

If with platinum-iridium Needles, 1s. 6d. per Needle extra.



All glass, 20 minim, with large nozzle and 2 steel Needles, in metal\_case 0 7 6

If with platinum-iridium Needles, 1s. 6d. per Needle extra.

#### Hypodermic Syringes, continued,-No.



9110.

Hypodermic Syringes, continued,—

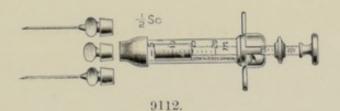
£ 8. d.

9110 Glass, with metal mountings and metal piston, 20 minim, with 2 Needles . . . in metal case 0 10 6

ditto fitted in Down Bros.' regisditto Ditto tered metal frame and case for storage in alcohol

0 15 0

If with platinum-iridium Needles, 1s. 6d. per Needle extra.



9112

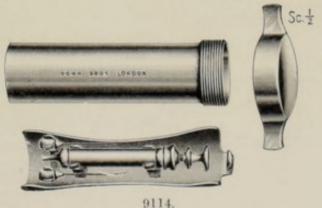
Glass, with metal mountings, metal piston, and wide opening to take tabloids, 20 minim, with 2 Needles, in metal case

0 12 0

9113\*

9111\*

Ditto ditto ditto fitted in Down Bros.' registered metal frame and case for storage in alcohol 0 16 6 If with platinum-iridium Needles, 1s. 6d. per Needle extra.



9114

All metal, 20 minim, with 2 steel Needles, in Down Bros.' registered metal frame and case for storage in alcohol .

0 11 6

9115\*

ditto but with wide opening to take tabloids, fitted in Down Bros.' registered frame and case If with platinum-iridium Needles, 1s. 6d. per Needle extra.

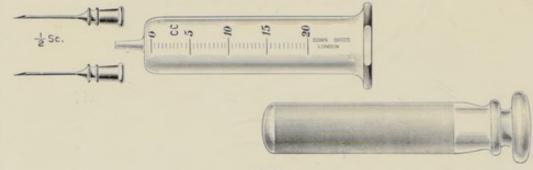
0 13 0

<sup>\*</sup> The items marked thus \* are not illustrated.

# SYRINGES FOR INTRA-MUSCULAR MERCURIAL No. INJECTIONS.

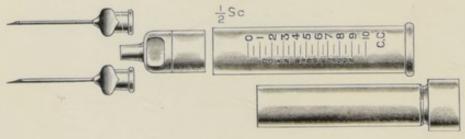
	Mercurial Injection Syringes,-	£	8.	d.
9116	All glass, 40 minim, fitted with 2 large platinum-iridium			
	Needles, and stopper to preserve any preparation			
	TOTAL TIL CITO TO TATINGO	1	4	6
9117*	Barthelemy's, with I Platinum-iridium Needle, in metal case	0	16	6
9118*	Lambkin's, 20 minim, ordinary all glass Hypodermic			
	Syringe, with 2 fine platinum-iridium Hypo-needles,			
	in metal case	0	19	6

## ANTITOXIN SYRINGES.



9119.

9119	Antitoxin Syr	inges, all	glass,	with	glass	piste	ons,—			
0.000	5 c.c., with	2 steel Ne	eedles			. i	n metal case	0	10	6
	10 e.c., with							0	12	6
	20 c.c., with						,,	0	14	6
	Tf ·	with plating	ım-iridiu	m Nee	dles, 3s	per	Needle extra.			



9120.

9120	Antitoxin Syringes	, all	glass,	with	glass	piston	and	wide
	stoppered n	zzle,						

. 5	c.c.,	with	2 steel	Needles	*	in metal	hinged case	0	16	6
10	c.c.,	with	ditto			,,	27	0	19	6
20	c.c.,	with	ditto			"	,,	1	7	0

If with platinum-iridium Needles, 3s. per Needle extra.

<sup>\*</sup> The items marked thus \* are not illustrated.

# Antitoxin Syringes, continued—



9121.

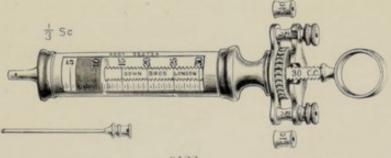
9121 Antitoxin Syringes, glass, with metal mountings and metal niston

	mic cer p	incorr,							
5	e.e., with	2 steel Needle	es .		in metal	case	0 ]	17	6
10	c.c., with	ditto .			22	**	1	1	0
20	e.e., with	ditto .			**	.,	1	7	6

If fitted with platinum-iridium Needles, 3s. per Needle extra.

# SYRINGE FOR DELIVERING ACCURATE VOLUMES OF TUBERCULINS OR VACCINES (Registered).

Suggested by Dr. J. W. H. Eyre, Bacteriologist to Guy's Hospital.



9122.

Syringe for Measuring Vaccines,-Eyre's (registered), with 2 pairs of stops as illustrated . 1 14 6

£ 8. d.

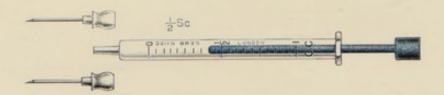
#### Extract from the "Lancet," April 22, 1910.

This syringe has been designed to provide a means by which glass "ampoules" may be rapidly and accurately filled with definite quantities of fluid. The amount of fluid ejected from the syringe into each "ampoule" is regulated by means of bosses in conjunction with a screw disc stop, the latter regulating the descent of the plunger to the height of the particular bosses employed (0.5 cubic centimetre and 1 cubic centimetre bosses are usually supplied with the syringe). The thread on the piston-rod is of a rapid type, upon which the disc stop travels quickly on receiving a slight impulse from the finger. The syringe is so constructed that every part may be sterilized by boiling, and the plunger, which is of asbestos, will absorb sufficient moisture during the process to act as an efficient lubricant. These syringes have also been made with metal plungers, but the asbestos plungers have proved to be more easy and less costly to maintain. Messrs. Down Bros. owe the suggestion to produce such syringes to Dr. J. W. H. Eyre, who has employed them for some considerable time in the Bacteriological Department of Guy's Hospital, where they have given every satisfaction.

9122

No.

# SYRINGE FOR INJECTING TUBERCULINS OR VACCINES.

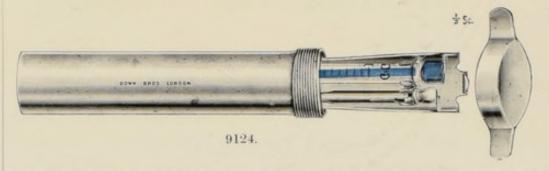


9123.

9123

Syringe for injecting Vaccines,—

Eyre's, 1 c.c. in 20 c.c., with dark blue coloured piston for easy reading and 2 steel Needles, without case . . . 0 12 6



9124

# BLOOD LANCET FOR WASSERMANN'S REACTION.

SUGGESTED BY MR. J. E. R. McDonagh, F.R.C.S., ETC.



9125.

9125

Blood Lancet for Wassermann's Reaction,—
McDonagh's, fitted with Down Bros.' metal guard for
point . . . . . . . . each 0 4 6

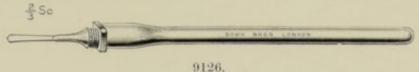
This instrument affords a simple and rapid means of testing for Wasser-

The Lancet has a pointed blade with sharp edges and a ridge bisecting each side, thus forming four facets; the blade, which is 5 mm. in length, has a shoulder at its base to prevent its penetrating too far. The handle is grooved so as to be easily and firmly held between the thumb and finger of the operator.

In using the Lancet, one quick plunge is made into the pulp of the finger, and the blood thus drawn off can be examined for the spirochætæ; 0.5 or 1 cubic centimetre of blood is enough for examination purposes, but 3 cubic centimetres or more is easily obtained.

## LANCET FOR TUBERCULOSIS DIAGNOSIS.

SUGGESTED BY DR. VON PIRQUET, OF VIENNA.

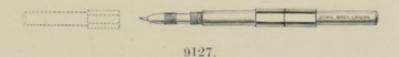


£ 8. d.

9126

Lancet for Tuberculin,-Dr. von Pirquet's, with platinum-iridium blade . each 0 7 6

# LANCET FOR TAKING BLOOD SPECIMENS FOR BACTERIOLOGICAL EXAMINATION.



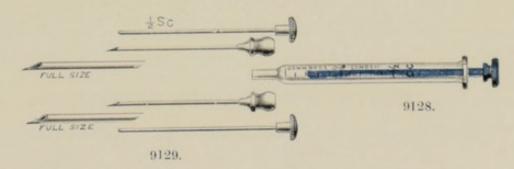
9127

Blood Lancet,-Spitta's .

\*. . in metal case 0 3 6

# SYRINGES AND NEEDLES FOR TRANSPLANTING CANCEROUS TISSUE.

SUGGESTED BY DR. E. S. BASHFORD, DIRECTOR, IMPERIAL CANCER RESEARCH.



	Syringes, etc., for Cancerous rissue,					
9128	All Glass, 0.5 c.c., grad. in 0.05 c.c., w	ithout Nee	edles, each		-	6
	Ditto I c.c., ,, in 0.05 c.c.	**	22			0
	Ditto 2 e.e., ,, in 0.05 e.e.	**	,,	0	12	6
9129	Needles with Stilettes,-			17.00		
	No. 4 French gauge, 3 in. long, steel		. 37			3
	Ditto ditto platinum-iridium		,		11	6
	No. 6 French gauge, $2\frac{3}{4}$ in. long, steel		. 31		2	6
	Ditto ditto platinum-iridium		. ,,	0	16	6

N.B.—The stilettes fit closely to act as suckers when evacuating fluid.

# SUCTION SYRINGE FOR COLLECTING BLOOD FOR BACTERIOLOGICAL EXAMINATION.

SUGGESTED BY DR. R. GRAINGER HEBB, PHYSICIAN, WESTMINSTER HOSPITAL.



9130

9131\*

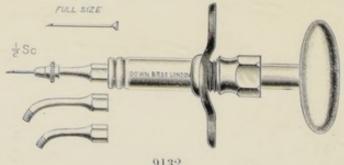
Suction Syringe,-Hebb's, fitted with 2 platinum-iridium Needles, without 0 12 6 . . . . . . . each Ditto, fitted with Down Bros.' registered frame for sterilizing (3s. 3d.) and glass tube (9d.) with cotton-wool plug in mouth . . each 0 16 6 . .

Extracted from "Royal Microscopical Society's Journal," June, 1906.

Apparatus for Collecting Blood for Bacteriological Examination.

At the April Meeting Mr. R. G. Hebb exhibited an apparatus for obtaining blood for cultivation purposes. It is very simple, and consists merely of a piece of glass tubing and a cannula needle. The tube, which holds about 10 c.c., has its front conical end accurately ground so as to fit the cannula. The other end is constricted in two places so as to form a small bulb, which is stuffed with cotton-wool. To this end is attached a piece of rubber tubing with a glass mouth-piece for the purpose of exerting suction if necessary. The syringe has been found to work well, and is easily cleaned and sterilized. It is made by Messrs. Down Bros.

#### DENTAL SYRINGE FOR NOVOCAINE.



9132.

Dental Syringe,-

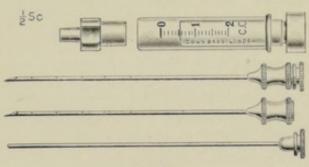
Pare's, fitted with 3 Nozzles, 11s. 3d.; in case

. 0 13 6

<sup>\*</sup> The items marked thus \* are not illustrated.

# SYRINGE FOR TREATMENT OF TRIGEMINAL NEU-RALGIA "TIC DOULOUREUX" (Schlosser's method).

SUGGESTED BY DR. PURVES STEWART, PHYSICIAN, WESTMINSTER HOSPITAL.



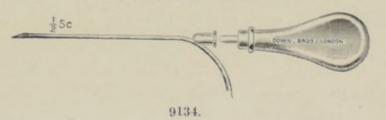
9133.

9133

Syringe for treatment of Trigeminal Neuralgia, fitted with 2 graduated platinum-iridium Needles, in metal case 3 0 0

# PUNCTURE NEEDLES FOR EVACUATING CEREBRO-SPINAL FLUID.

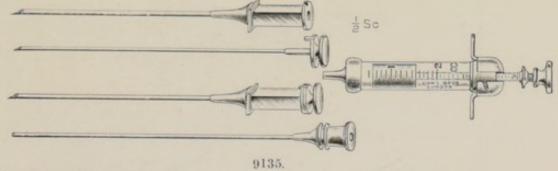
SUGGESTED BY DR. W. D'ESTE EMERY, CLINICAL PATHOLOGIST, KING'S COLLEGE HOSPITAL.



9134

Needles for Evacuating Cerebro-spinal Fluid,-Emery's, with metal handles, 2 sizes . . . . each 0 5 6

# STOVAINE SYRINGES FOR SPINAL ANALGESIA.



Stovaine Syringes, Barker's.

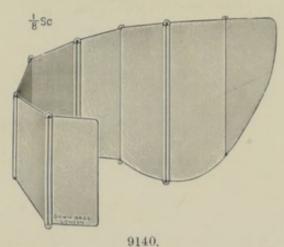
in metal case 1 13 0

£ 8. d.

9135

Stovaine Syringes for Spinal Analgesia, continued,-No. 9136. Stovaine Syringes, continued,-9136 £ s. d. Dean's, consisting of 3 c.c. all glass Syringe and 3 Needles with sliding shields and stilettes, and 3 plug mounts for use when needles are left in sitw, with handle for . in metal case 1 12 0 introduction Sc 11121 14 9137. Ryall's, consisting of 10 c.c. glass Syringe with metal 9137 piston, 2 steel Needles, handle, connecting tube and . in metal case Lancet for making skin incision . 2 17 6 9138. Purves Stewart's, consisting of 5 c.c. all glass Syringe with 9138 2 steel Needles, and handle. . . in metal case If fitted with platinum-iridium Needles, 7s. per Needle extra. Tuffier's, consisting of 2 c.c. all glass Syringe with 1 steel 9139\* Needle . in metal case 0 13 6 Ditto but with 3 e.c. ditto 0 15 6 \* The items marked thus \* are not illustrated,

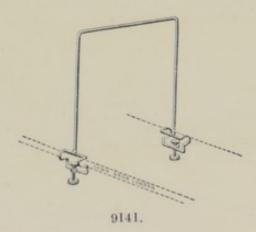
## ANÆSTHETIC SCREENS.



9140

Anæsthetic Screens,-£ 8. d. Cheatle's (as made for Mr. Lenthal Cheatle, C.B., F.R.C.S., 0 etc.), folding to carry in bag

This is packed in position with the help of one or two sterilized towels.

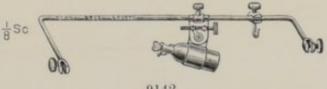


9141

Down Bros.' (Registered)

. each

This is designed to use with any of Down Bros.' Operation Tables, or any table made with tubular frame; it is intended to spring on to the table; the adjustable screw renders it equally suitable to clip on to the main body of the table, or the head plate, the latter being made of smaller sized tube.



9142.

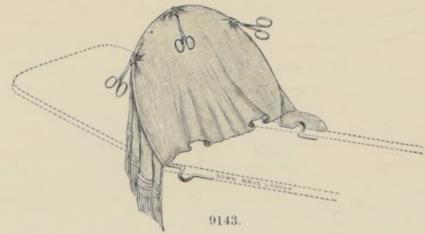
9142

Rowling's Crossbar for attaching to screen, fitted with Drop Regulator, Drop Bottle, and Watch Holder

This arrangement, suggested by Mr. S. Thompson Rowling, M.B., Anæsthetist to Leeds Infirmary, is used in connexion with a stop watch and is usually regulated to give three drops every five seconds; this, however, can be increased or diminished as desired.

No. Anæsthetic Screens, continued,-

9143



Anæsthetic Screens, continued,—

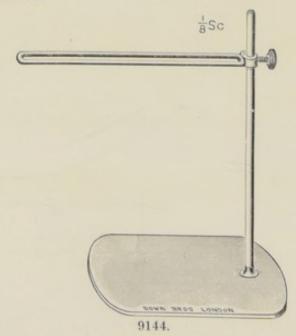
Maynard's (suggested by Mr. E. Maynard, F.R.C.S.,

Royal National Orthopædic Hospital) . each 0 8 6

This is designed to clip on to the tubular framework of the main body of any of Down Bros.' Operation Tables.

Extract from "British Medical Journal," July 23, 1910.

The sketch shows an operating screen introduced by Mr. Edwin Maynard, F.R.C.S., while at the Bristol General Hospital; it is intended to shut off operation areas from contamination by the patient's expirations or apparatus used in maintaining anæsthesia. It can be used for operating on any site below the chin. It consists of a piece of spring steel of circular section and of \{\frac{1}{2}\) in. diameter, shaped as shown. It fixes itself to an operating table with rounded edges, and holds firmly in position by virtue of its shape and resiliency. A sterilized operating sheet of thick honeycomb towelling thrown over the screen and the operating table below it is held in place on the screen by two or three pairs of Lane's tissue forceps, and the central slit in the operating sheet exposes only the operating area. It is made by Messrs. Down Bros.

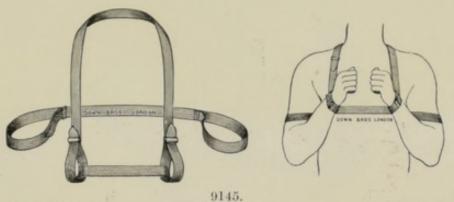


9144 Silk's (as made for Dr. J. F. W. Silk) to carry one or two strips of gauze . . . . . . . . . . . each 1 1 (

This is made in two forms, with fixed base for Hospital use, or with detachable base for portability.

# OPERATION BRACES, For Securing Patient's Arms During Anæsthesia.

SUGGESTED BY DR. W. BLAIR BELL, GYNÆCOLOGIST, ROYAL INFIRMARY, LIVERPOOL.



9145

Operation Braces,— Blair Bell's . . £ s. d.

per set 0 6 6

These braces have been designed to prevent the occurrence of postoperation paralysis in the arms, and to keep the arms from getting in the way of the operator.

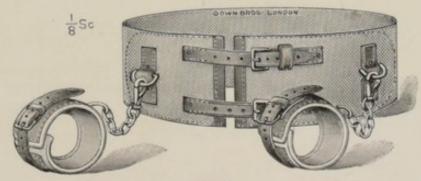
The apparatus consists of two parts:—
(1) That which passes behind the back. This strap has two loops of fixed size which are placed over the arms, just above the bend of the elbow. They fit loosely but are drawn tight by means of a buckle attached at the junction of one loop with the back strap. By means of this strap the arms are fixed to the side and prevented from being moved forwards.

(2) That which passes round the neck, and terminates in two loops which are tightened by means of buckles round the wrists. There is a buckle also on the strap passing round the neck, by means of which the hands are drawn up to the right level. There is also a cross strap between the wristlets to prevent separation of the hands.

When the braces are properly adjusted, the arms and hands are fixed almost immovably, but without undue pressure on any one part. The great improvement over other methods of fixation is specially noticeable with the patient in the Trendelenberg position.

# APPLIANCE FOR SECURING PATIENT'S ARMS DURING ANÆSTHESIA.

SUGGESTED BY Dr. L. KIDD, SURGEON, FERMANAGH COUNTY INFIRMARY.



9146.

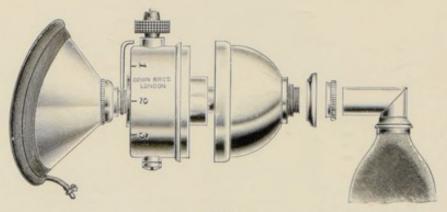
Appliance for securing patient's arms,—

\* Kidd's, webbing belt and wrist straps .

per set 1 5 0

9148

## NEW MODELS OF CLOVER'S ETHER INHALER.

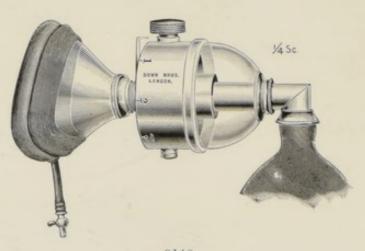


9147.

Ether Inhalers,— £ s. d.

9147 Stock's modification, to take apart (suggested by Mr.

W. S. Stock, M.B., etc., Anæsthetist, Bristol Royal
Infirmary), each, £3 11s. 6d.; if with Measure and
Ether Bottle in case . . . . . . . . . . 4 2 6



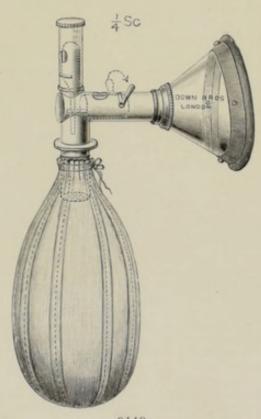
9148.

3 17 6

Clover's, with glass barrel, with tube passing right through body and attached to face-piece to revolve with it, £3 6s. 6d.; if with Measure and Ether Bottle in case

## IMPROVED CHLORIDE OF ETHYL INHALER.

Designed by Lieut.-Colonel W. B. Browning, C.I.E., I.M.S.



9149.

Chloride of Ethyl Inhaler,-Browning's .

9149

The capsule container is made to accommodate either the 3 c.c. or 5 c.c. capsules of the various makes at present on the market. In cases where the container is too long for any particular capsule the former should be lightly packed with thin tissue paper to keep the capsule steady.

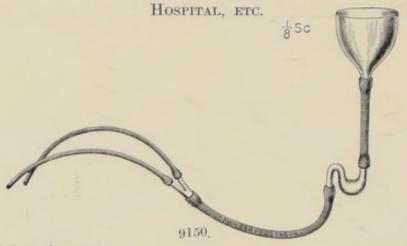
The capsule should be placed in the container when the air hole is open; on closing the latter by means of the lever the capsule is broken, allowing the contents to escape into the bag; metal gauze diaphragms prevent any fragments passing into the bag or face-piece.

There are also two apertures for use when spraying in ethyl chloride from cylinders; they are suitably placed for anæsthetizing a patient when in a sitting or recumbent position.

The bag is made of a material which can be sterilized by boiling, and is unaffected by climate.

#### NASAL ETHER APPARATUS.

Suggested by Dr. G. Crile, of Cleveland, Ohio, AND AS USED BY MR. H. M. PAGE, F.R.C.S., ANÆSTHETIST TO GUY'S



9150

Crile's .

Nasal Ether Apparatus,-0 13 6 . each

## Extract from the "Lancet," August 7, 1909.

A METHOD OF GIVING ETHER BY MEANS OF NASAL TUBES. By H. M. Page, F.R.C.S.Eng., Anæsthetist to Guy's Hospital, etc.

Dr. George Crile of Cleveland, Ohio, devised this method for administration of ether in cases of removal of the tongue and of operations for malignant disease of the mouth, and in extensive dissections for secondary disease in the neck. The advantages claimed by Dr. Crile after a large experience are that a laryngotomy is avoided; that no blood or septic material is inhaled, and therefore the risk of bronchitis and pneumonia is eliminated; that the anæsthetist is altogether out of the way of the operator; and that in the neck cases asepsis can be more certainly attained than by the other methods in use for anæsthetizing these cases. Though the number of cases in which I have used this method has been small, I venture to publish an account of them, as I do not find the method described in the English textbooks on anæsthetics, and I think it deserves further trial and to be better known over here. I have also for the same reasons fully described the technique of the method.

The apparatus necessary is very simple and has been most satisfactorily made for me by Messrs. Down Bros. from a photograph which Dr. Crile was kind enough to send me. It is shown in the accompanying illustration. It consists of two india-rubber tubes sufficiently large to closely fit the nares; these nasal tubes are coupled to a much larger india-rubber tube by means of a Y-shaped piece of glass tubing; the larger india-rubber tube is connected with a large glass funnel which is covered with a single layer of thin flannel, and it is interrupted in its course by a glass trap to prevent

any excess of ether running down the nasal tubes.

An injection of morphine and atropine is given an hour before the operation. I have used \(\frac{1}{4}\) gr. and \(\frac{1}{15}\) gr. respectively. Ether anæsthesia is induced by the open drop method, the mouth is then opened, and the pharynx and pharyngeal aspect of the epiglottis and larynx are brushed over with a 2 per cent. solution of cocaine, and the closely fitting india-rubber tubes are pushed down the nares till the lower ends are opposite the epiglottis. The pharynx is then packed with a roll of sterilized gauze whilst the tongue is being pulled forward. In packing, though it must be done thoroughly, care must be taken not to compress the tubes, and the space between the lateral parts of the pharynx and the outer sides of the tubes must not be neglected. Ether anæsthesia is now maintained by the drop method on the flannel covering the glass funnel. It is a help to get some one to begin dropping ether on the flannel as soon as the nasal tubes are passed and so prevent to some extent the lessening of anæsthesia which must occur whilst the packing, etc., of the throat is being done. A sterilized towel is thrown over the head of the patient, completely covering it. The anæsthetist stands about two feet

# Nasal Ether Apparatus, continued,-

behind the patient. The breathing and the colour of the blood at the site of the operation are watched and an occasional look at the patient can be taken by raising the towel without interfering with the operator. It would be quite easy to give a little oxygen by passing a tube through the flannel, but this has not been called for in the cases I have anæsthetized. As to the rate of dropping the ether, less ether was required than in the ordinary

way of using the open drop method.

The first case was one of extensive dissection of the neck for malignant disease secondary to that of the tongue. The second case was one of removal of half of the tongue subsequent to the above operation. On this second occasion the patient was anæsthetized by Mr. George Rowell. I was present only at the beginning of the operation, but Mr. Rowell writes as follows: "The method answered well. The patient kept a good colour, while his breathing remained free and was unaffected by inconvenient reflex action during all the time that the tubes were in position. Very little ether was needed to maintain this degree of narcosis, and at the end of the administration recovery was rapid."

In the third case an extensive operation for clearing the neck for secondary disease was first done, and then half of the tongue was removed at one sitting. Shortly after beginning the dissection of the neck it was noticed that the blood was rather dark at the site of operation, and on raising the towel some cyanosis of the face was found, so the mouth was opened, the gauze packing removed, and the pharynx repacked, after which the colour kept quite good for the rest of the operation. One of the tubes may have been somewhat compressed. The operation was not delayed for more

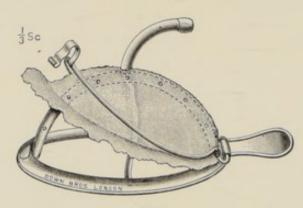
than two minutes.

As far as the anæsthetist was concerned the cases of removal of the tongue presented no difficulty and caused less anxiety than when the tongue is removed under other methods of anæsthesia, especially when a preliminary laryngotomy is not done. The patient in each case had recovered all the reflexes and spontaneous movement and was almost conscious when removed from the operating table and could be sat up in bed immediately. I should say that this condition of the patient is easier to ensure after a long operation by this method than when chloroform has been given. The third case, in which the whole operation was done at one sitting, was naturally a long one and liable to be followed by a good deal of shock, but there was practically no shock at all. I do not think the method could be used when the whole of the tongue down to the epiglottis is to be removed as there would not be enough hold left for the packing. Mr. W. Arbuthnot Lane and Mr. C. H. Fagge, who operated on these cases, have authorized me to say that the method gave a very free access to the site of operation owing to the anæsthetist being altogether out of the way, that antiseptic precautions were facilitated, that hæmorrhage was not trouble-

some, and that each patient made an uneventful recovery.

I have used Crile's nasal tubes on two other occasions with chloroform instead of ether. Chloroform had to be employed as fulguration was to be done after the removal of the malignant disease from the neck. Morphia and atropine were injected, anæsthesia was induced with chloroform, the pharynx was cocainized, and the nasal tubes were passed and the pharynx packed as before. The nasal tubes were then coupled up with a Vernon Harcourt inhaler and chloroform administered with a small quantity of oxygen. The anæsthesia gave no trouble whatever on either occasion, the air-way and the working of the valves being more satisfactory than in some cases in which the Vernon Harcourt inhaler is used with the face-piece. The patient on each occasion kept a perfect colour, and though each administration, owing to the fulguration, lasted nearly two hours, movement and phonation had returned before the patient left the table. A faint corneal reflex was allowed to persist the whole time, but the patient was absolutely still and there were no reflex effects on respiration or circulation. The strength of chloroform vapour used was in the first operation from my notes: "Most of the time 1 per cent., part of the time 1 per cent., never more than 1 per cent." In the second administration: "2 per cent, was used at first for a short time, after which the indicator varied between \$\frac{1}{4}\$ per cent. and 1 per cent., being most of the time at \$\frac{1}{2}\$ per cent." The two operations were on the same patient and there was a good deal of after-vomiting for twelve hours on each occasion. This did not occur in the before-mentioned cases in which ether was used.

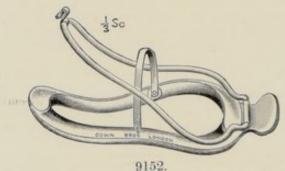
# VARIOUS FORMS OF CHLOROFORM MASKS.



9151.

9151

Chloroform Masks,-8. d. Blumfeld's, consisting of Schimmelbusch's Mask with the addition of Chloroform Tube . 6 . each



9152

St. Johnston's

each

#### Extract from the "Lancet," November 24, 1906.

Perhaps the two most important points in chloroform administration are the proper regulation of the air-supply and the constant observation of the pupil reflexes. In the Schimmelbusch pattern of mask I have often found that the large rounded upper end has almost covered the eyes of the patient, especially if the lint was not trimmed quite close to its edge; while if kept resting on the face the mask did not allow of sufficient passage for the admission of air under the frame, which becomes necessary when the lint gets saturated. Messrs. Down Bros., St. Thomas' Street, London, S.E., have made for me a modification of the Schimmelbusch mask in which the upper end is shaped to fit the nose, thus allowing a complete and perfect view of both eyes during the whole operation. At the same time the part that goes round the mouth and lower part of the nose is carried forward a little, just sufficient to allow of the passage of a small quantity of air, so that the whole mask takes a very slight double curve on side view. I have also arranged the handle at an angle of 45° so that it can readily be held between the forefinger and thumb of the left hand while the other three fingers support the chin forwards and upwards and the middle finger in addition just catches the patient's right facial artery, keeping the anæsthetist informed of the pulse condition. There is a slight difference also in the method of securing the lint, as only one cross-bar is needed, which is held in position when upright by fitting into two small slots in the frame and when closed lies in the bigger end of the mask. The other wire is the same as that of Schimmelbusch, except that it is made to the shape of the frame. The whole mask is light and shuts up almost flat for the pocket.

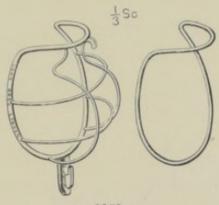
T. R. St. Johnston Late Assistant House Surgeon and Anæsthetist, Dudley Hospital.

9153

9154

9155\*

# Various Forms of Chloroform Masks, continued,-



9153.

Chloroform Masks, continued,— For Ophthalmic Operations .

£ s. d.

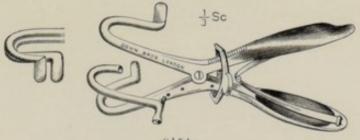
. each 0 6 6

N.B.—The patient is generally got under with one of the larger masks, and this model substituted during the operation.

#### A NEW MOUTH GAG.

SUGGESTED BY MR. G. H. COLT, F.R.C.S., ETC.

Vide the "Lancet," October 12, 1907.



9154.

Mouth Gags, nickel-plated,-

Colt's, complete with Anæsthetic Tube . . . each 1 10 0

Ditto without Anæsthetic Tube . . . ,, 1 7 6

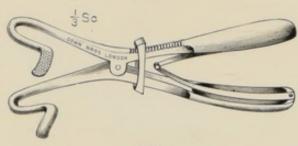
Spare india-rubber Caps to fit over tooth plates, per pair, 9d.; 9d. deducted from the price of each Gag if these rubber

Caps are not supplied.

The Gag has been scientifically designed from the average of measurements made on 500 patients. The special features are great mechanical advantage and wide separation of the tooth plates combined with short handles of relatively small span. The curve given to the tooth plates renders their introduction easy and tends to prevent slipping. The anæsthetic tube can be adjusted with accuracy to any position and fixed there. It is designed so as not to break at the junction of the rigid nipple with the flexible portion. The spring is detachable, there are certain stops, and the handles are also rounded off to prevent the hand from being nipped.

<sup>\*</sup> The items marked thus \* are not illustrated.

# Mouth Gags, continued,-

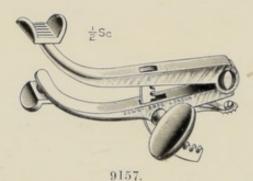


9156.

9156

9157

Mouth Gags, nickel-plated, continued,-£ 8. d. Hewitt's new modification of Fergusson's, as made for Mr. F. W. Hewitt, M.V.O., etc. . . 1 1 0



Fergusson's (of U.S.), hinged, recommended by Chevalier Jackson for use with Œsophagoscopy instruments, etc. . . . . . each 0 16 6



9158.

Hewitt's Aluminium Mouth Props, 5 sizes . 9158

. each 0 3 6



9159.

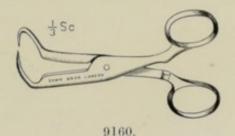
Hewitt's Hollow Aluminium Mouth Props . . each 0 2 6 9159

9160

9161

#### TONGUE FORCEPS.

Suggested by Dr. Victor Corbould, Anæsthetist, Charing Cross Hospital.



£ s. d.

Tongue Forceps, nickel-plated,—

Corbould's . . . . . . . each 0 7 6

The tongue is transfixed by the forceps, which then lies in the hollow of the cheek beneath the face-piece.

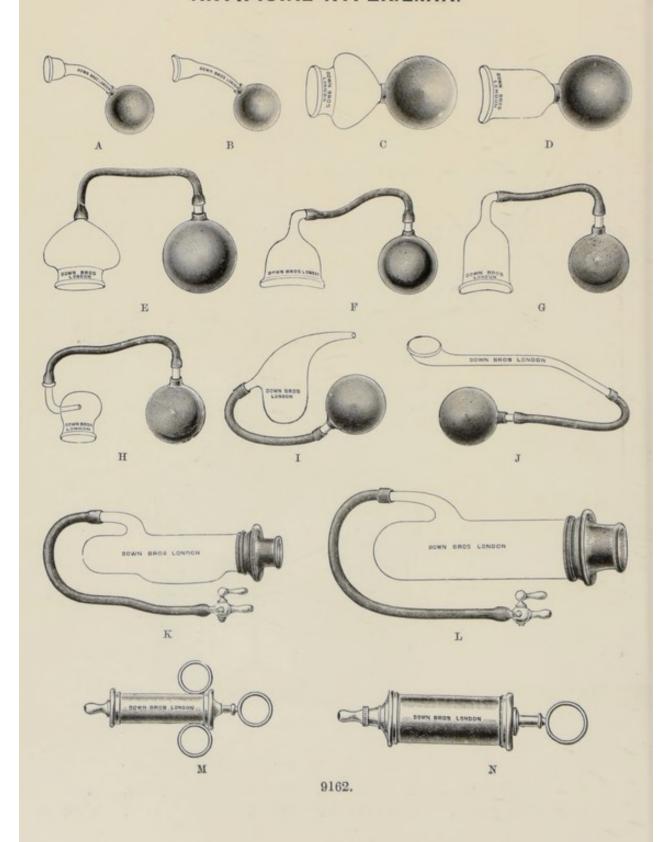
## ASEPTIC SET OF CUPPING INSTRUMENTS.



9161.

Cupping Instruments,-

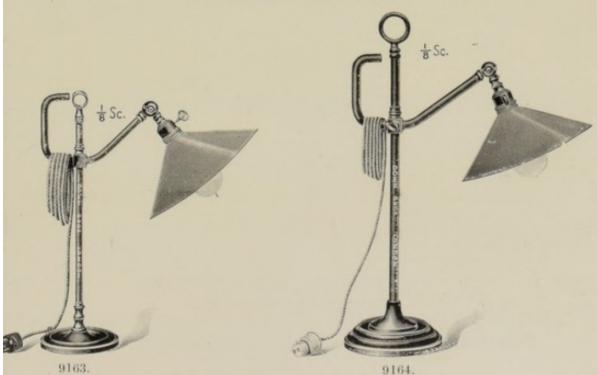
# BIER'S APPARATUS FOR THE INDUCTION OF ARTIFICIAL HYPERÆMIA.



# Bier's Apparatus for the Induction of Artificial Hyperæmia.

	nyperæmia.			
		£	8.	d.
A	Gum	0	1	3
В	Lip each, $\frac{1}{2}$ in., $1s$ . $4d$ .; $\frac{3}{4}$ in.	0	1	4
C	Abscess and Carbuncle, etc. (flat surface), each, 1 in., 2s.;			
	$1\frac{1}{4}$ in., $2s$ .; $1\frac{1}{2}$ in., $2s$ .; $2$ in., $2s$ . $6d$ .; $2\frac{3}{8}$ in	0	3	0
D	Neck (or convex surface), each, $\frac{3}{4}$ in., $1s. 6d.$ ; $1\frac{1}{4}$ in., $2s.$ ;			
	1½ in	0	2	6
E	Abscess and Carbuncle (flat surface), each, 1 in., 2s.; 14 in.,			
	$2s. 6d.$ ; $1\frac{1}{2}$ in., $3s.$ ; $2$ in., $3s. 6d.$ ; $2\frac{3}{8}$ in	0	4	0
F	Thorax (or convex surface), each, $\frac{3}{8} \times 1\frac{1}{2}$ in., 3s.; $\frac{3}{4} \times 2\frac{1}{4}$ in.,			
	38. $\ell d$ .; $1 \times 2\frac{3}{4}$ in., $4$ 3.; $1\frac{1}{2} \times 3$ in	0	4	6
G	Prominent Abscess, each, $\frac{3}{4}$ in., $2s. 6d.$ ; $1\frac{1}{4}$ in., $3s.$ ; $1\frac{1}{2}$ in.	0	3	6
H	Abscess (general), each, 1 in., 2s. 9d.; $1\frac{1}{4}$ in., 3s. 3d.; $1\frac{1}{2}$ in.	0	3	9
I	Ear, 3 sizes, Small, Medium and Large each	0	3	6
J	Tonsils, 3 sizes ditto , ,	0	3	9
K	Finger (Whitlow) ,,	0	5	0
L	Penis (gonorrhœa) ,,	0	5	6
M	Suction Pump, small ,,	0	9	6
N	Ditto large ,,	0	10	6

# ELECTRIC LIGHT READING LAMPS FOR CONSULTING-ROOM.



 $9163 \\ 9164$ 

Electric Light Reading Lamps,—
Down Bros.' light model, dark bronzed . . each 1 16 6
Down Bros.' large model, ditto . . ., 2 5 0

N.B.—The prices are inclusive of 9 feet of cord and wall plug, but exclusive of lamps; if lamp is required voltage should be stated.

# DOWN BROS.' REVISED PRICE LIST OF CLINICAL

	THERMOMETERS.								
	N.B.—A reduction of 2s. per dozen is made in quantities of not less than 1 dozen; of 3s. in quantities of 3 dozen; and of 4s. in quantities of not less than 1 gross.								
	DOWN BROS   Laborated and and and and and and and and and an	Elm							
	LONDON 95 100 5 11								
	9165.								
	Clinical Thermometers, with indestructible Index,-	£	8.	d.					
9165	Down Bros.' "G.P.," 3½ and 4 in., in nickel cases . each	0	1	3					
9166*	Ditto "60 seconds," ditto ,,,	0	1	6					
9167*	Ditto "30 seconds," ditto ,, , ,,	0	1	9					
	Kew Certificates, 1s. 3d. each extra. 1s. per dozen allowed for nickel cases if not required.								
9168*	Down Bros.' "Hospital," 4 in., in nickel cases . each	0	1	0					
9169*	Ditto "60 seconds," ditto ,,,	0	1	3 6					
9170*	Ditto "30 seconds," ditto ,,,	0	1	6					
	Kew Certificates, 1s. 3d. each extra.								
	1s. per dozen allowed for nickel cases if not required,								
	FULL DIZE								
		0	2						
	9171.								
	Clinical Thermometers, magnifying, with indestructible Inc	dex	_						
9171	Down Bros.' "G.P.," 3½ and 4 in., in nickel cases . each	0	-	9					
9172*	Ditto "60 seconds," ditto ,, . ,,	0	2	0					
9173*	Ditto "30 seconds," ditto ,,,	0	2	3					
	Kew Certificates, 1s. 3d. each extra.								
	1s. per dozen allowed for nickel cases if not required.								
9174*		0	1	6					
9175*		0	1	9					
9176*		0	2	0					
	Kew Certificates, 1s. 3d. each extra. 1s. per dozen allowed for nickel cases if not required.								
	Cases for Clinical Thermometers (1d. deducted for nickel cases , if not required),—								
9177*	Leather, as used at Guy's, to hold 4, each, 3s. 6d.; to hold 6	0	4	9					
9178*			20						
	rolling each	0	3	9					
9179*	Ditto ditto with ring to hang on watch chain ,,	0	4	0					
	FULL SIZE								
		-	-	7					
	DOWN BROS LONSON	-	-						
4	9180.								
9180	Silver, stout, hall-marked, with clip to hold on watch								
	pocket each	0	4	6					
	N. D. The alinean he supplied consentals to fit to any motel and		cna						

N.B.—The clip can be supplied separately to fit to any metal case, price 9d.

<sup>\*</sup> The items marked thus \* are not illustrated.

## Revised Price List of Clinical Thermometers, continued,-No. 9181. Clinical Thermometers, with Double Scale and inde- £ s. d. structible Index,-Down Bros.' "G.P.," 4 in., in nickel cases . . . each 9181 Ditto "30 seconds," ditto ,, 0 2 9 9182\* Kew Certificates, 1s. 3d. each extra. 1s. per dozen allowed for nickel cases if not required. 3.5 4 100 cores seos 5 venera 110 9183. Clinical Thermometers, with Double Scale, magnifying and indestructible Index,-Down Bros.' "G.P.," 4 in., in nickel cases . . . each 2 9 9183 Ditto "30 seconds," ditto " 0 3 3 9184\* Kew Certificates, 1s. 3d. each extra. 1s. per dozen allowed for nickel cases if not required. 9185. Clinical Thermometers, with Ruby Back,-With indestructible Index, in nickel cases, 4 in. . each 0 9185 9186\* Ditto "30 seconds," ditto ,, . . ,, 0 3 0 Kew Certificates, 1s. 3d. each extra. 1s. per dozen allowed for nickel cases if not required. 9187. 9187 With magnifying and indestructible Index, in nickel cases each 0 3 0 Ditto "30 seconds," ditto . . 0 4 0 9188\* Kew Certificates, 1s. 3d. each extra. 1s. per dozen allowed for nickel cases if not required. 2 50 9189. Nurses' Clinical Thermometers, in nickel cases, with chain 9189 and safety-pin attached; these can be swung round in 0 1 6 order to bring down the index by centrifugal force, each \* The items marked thus \* are not illustrated.

9190

9191

# THE ASEPTIC CLINICAL THERMOMETER CASE (Registered).

SUGGESTED BY DR. F. W. MORTON PALMER, OF TEIGNMOUTH.



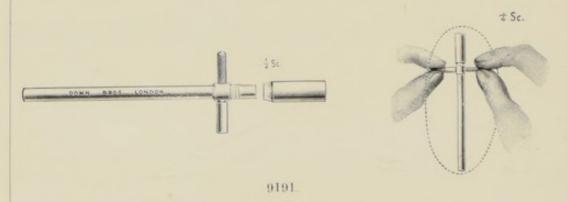
£ 8. a.

Thermometer Case,-

Morton Palmer's Aseptic (Registered) . . . each 0 2 6

The Thermometer is rendered aseptic by formalin sterilization. A formalin tablet (broken up) is first placed in the receptacle and the Thermometer then placed in the case, stem downwards; no cotton-wool should be used in this end, as it would prevent the circulation of the formalin vapour, but a little wool may be placed in the cap to protect the bulb.

# THE CENTRIFUGAL THERMOMETER CASE (Patented).



The Centrifugal Thermometer Case, for readily adjusting index by centrifugal force . . . each 0 1 0

#### DIRECTIONS FOR USE.

To reset the Thermometer, place it, mercury end downwards, in the case, replace the cap, and then make the case revolve in the following manner:—Hold the loose swivel firmly in the left hand as shown above, then give the roughened pin one or two good spins with the right hand.

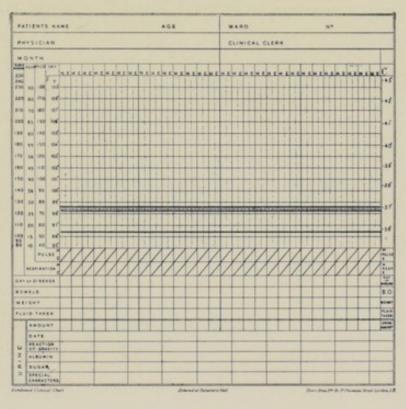
9192

9193\*

9194\*

# COMBINED CLINICAL CHART (Copyright), For recording Temperature, Pulse, Respiration, Blood Pressure, Urine, etc.

SUGGESTED BY DR. H. D. ROLLESTON, SENIOR PHYSICIAN, St. GEORGE'S HOSPITAL.



9192.

£ s. d.

Combined Clinical Chart (Down Bros.' copyright),—

Rolleston's, printed in 4 colours . . . per 100 0 3 0

Blood, purple; Respiration, green; Pulse, red; Temperature, black; it is intended to fill in the corresponding particulars in inks of similar colours.

Coloured Inks for same, 4 colours . . . per bottle 0 0 6

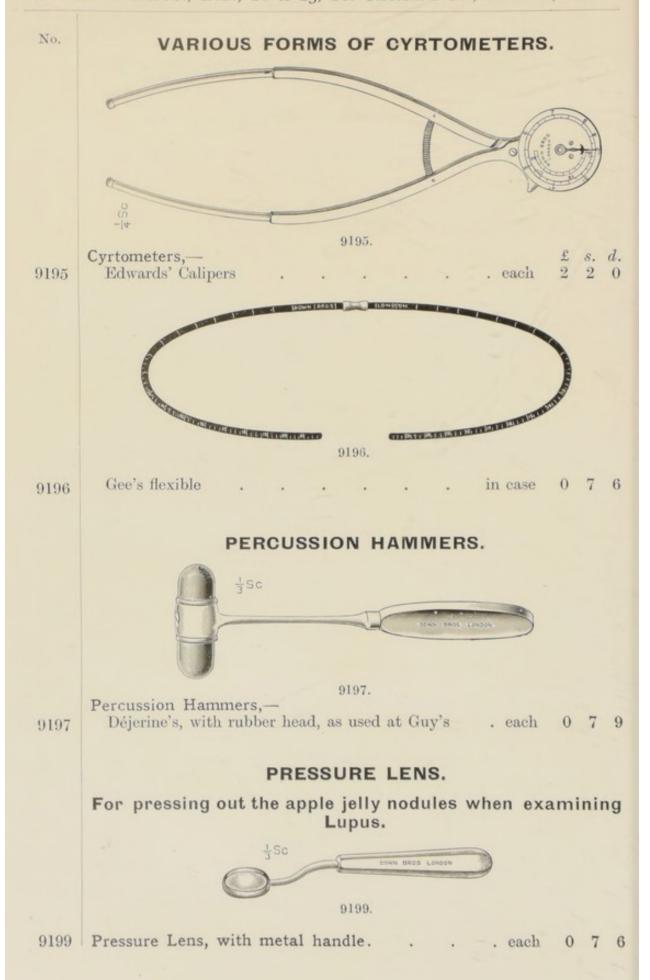
# Dr. MACKENZIE'S INK POLYGRAPH.

Price £10 10s. 0d.

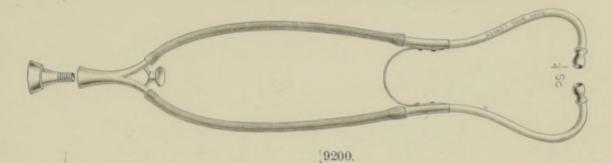
Descriptive circular on application.

Full directions accompany each instrument.

<sup>\*</sup> The items marked thus \* are not illustrated.



#### BINAURAL STETHOSCOPES.



Binaural Stethoscopes,-9200 Down Bros.' "India" model, with metal ear-pieces, doubleended metal chest-piece and finger rest, fitted with 12-in, india-rubber tubes . . . each



9201.

9201

Down Bros.' "Dome" model, with new registered domeshaped metal chest-piece for readily slipping under the clothing or between patient and bed, fitted with 12-in. india-rubber tubes . . . each 0 11 6

# NEW FORMS OF CHEST-PIECES FOR STETHOSCOPES.







£ s. d.

0 12 6

Chest-pieces for Stethoscopes,-

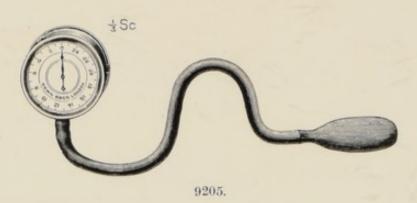
. . each 0 3 6 Mann's, with ivory end, as made for Dr. Corry Mann,

9204

9202 9203

> Physician to Evelina Hospital . . . , 0 3 6

#### PROFESSOR VON BASCH'S SPHYGMOMANOMETER.



Sphygmomanometer,—
Basch's . . . . . . . . . . . . in case 1 2 0

9205

The air pad having been previously inflated may be placed on the Radial Artery, or if the Radial Artery is not made use of, seek a place where the Artery runs superficially over a bony substratum, and then ascertain that it is compressible, that is to say, that when pressure is applied to the vessel by one finger, no pulsation is felt by the second or further finger.

After this preliminary precaution, place the pad on that place which has been selected, and apply pressure upon the Artery in a vertical direction. Press with the forefinger placed on the upper surface of the pad until the complete disappearance of the pulse under the feeling finger, and when this happens, gradually lessen the pressure. At the moment of the reappearance of the pulse read the pressure indicated on the scale. This is the measure of the Blood pressure.

In making use of the Radial Artery in order not to be deceived by a recurring pulse, practise applying strong pressure with the pulp of the finger and notice that pulse which is felt at the finger-tip. By means of the pressure exercised with the pulp of the finger, the communication between the Ulna and Radial is interrupted, and what is felt with the finger-tip only is the pulse of the free part of the Radial.

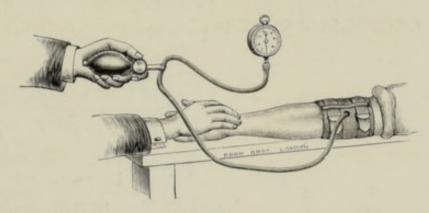
In measuring the Temporal Artery this precaution is not necessary, because the condition for a recurring pulse does not exist. The finding of the Temporal is easily acquired with a little practice.

The figures on the scale indicate centimetres of Mercury.

When the pad becomes flattened, it should be re-inflated by means of the tube. The pointer should not be allowed to go back forcibly to O, as it may be easily put out of order.

In no case should more pressure be exercised than is shown by a complete turn of the pointer.

# Sphygmomanometers, continued,-



9206.

9206

9207

Sphygmomanometers, continued,-

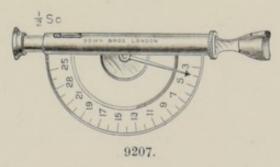
£ s. d.

Brunton's, suggested by Sir T. Lauder Brunton, consisting of graduated dia!, with broad armlet and bellows,

in case 3 3 0

#### SPRING SPHYGMOMANOMETER.

Devised by Sir Francis Cruise, M.D., of Dublin. Vide "Lancet," August 22, 1908.



Spring Sphygmomanometer,-

Cruise's, graduated in mm. of mercury, in case

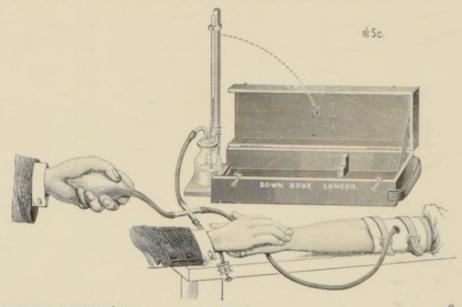
2 0 0

DIRECTIONS FOR USE.

Having put the patient's arm resting on a table, or on a pillow if the subject is in bed, I place the first and second fingers of my left hand on the Radial Artery, leaving a short space between them. Next I place the foot of the sphygmometer on the nail of the finger nearest to the heart, and then press the stem, which acts on the spring in the gauge with the forefinger of the right hand until I cease to feel the pulse beat with the finger of the left hand furthest from the heart. At this moment the figure indicated by the needle marks in centimetres (of mercury) the pressure needed to obliterate the pulse. Multiplying this by ten I find the pressure m millimetres (of mercury) just as in Riva-Rocci's apparatus.

No. SIMPLIFIED PORTABLE SPHYGMOMANOMETER.

SUGGESTED BY DR. HERBERT FRENCH, PHYSICIAN, GUY'S HOSPITAL.



Sphygmomanometer,— 9208.  $\pounds$  s. d. French's . . . . in case 1 17 6

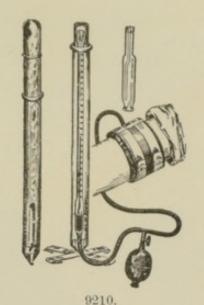
Extract from "British Medical Journal," August 27, 1910.

This apparatus consists of a vertical mercury manometer connected, as shown in the diagram, with a four-way glass cannula, the other three limbs of which lead to a rubber air bellows, a broad rubber bag enclosed in canvas for encircling the arm, and a clip for letting out air when required. The principle is similar to that of various other sphygmomanometers devised for measuring the maximum systolic blood pressure. Most instruments of the kind, however, have the disadvantage that, until fixed up, they are not ready for immediate use, and that, unless great care is used, the mercury is very apt to become spilled, and that if the apparatus is carried to a consultation at a distance much time is taken up in packing it so that nothing will go wrong with it en route. These disadvantages are obviated by the instrument here described. The box into which it fits has one of its narrow sides hinged, and to this the mercury bottle is fixed in such a way that the whole manometer can either stand vertically, as in the illustration, or else be rotated down in the direction indicated by the dotted line and arrow until it lies flat in the box. The length of the glass manometer tube and the amount of mercury in the bottle are so adjusted that whereas the lower end of the tube is immersed in the mercury when the manometer is vertical the tube leaves the mercury some little time before it reaches the horizontal position. The result of this simple adjustment is that the mercury cannot become upset whatever position the apparatus is in. It is something like the inverting ink-well in this respect. The great advantage of this is that as soon as a reading has been taken the manometer and its attachments can be laid down flat in the box, and the latter can be carried in any position-even upside down-without any spilling of the mercury. The apparatus can be carried amongst one's luggage, and yet on arrival it is ready for immediate use. When it is required all that has to be done is to open the box, rotate the manometer into the vertical position, and take a reading in the ordinary way. Owing to the hingeing of the mercury bottle to the main box, no clamp is required to prevent its upsetting. There are minor points about the instrument, such as a contrivance for making the mercury in the manometer rise or fall smoothly, when blood pressure is being measured, without the wide jumpings and oscillations which are apt to occur in the case of some other forms of apparatus. As will be obvious, however, when the instrument is seen, the main advantage claimed for the sphygmomanometer is that whilst giving direct readings in millimetres of mercury it is so constructed as to be equally and instantly ready either for transit to a distance or for immediate use upon a patient. The instrument is made by Down Bros., Ltd., St. Thomas's Street, London, S.E.

2908

# No. Sphygmomanometers, continued,—

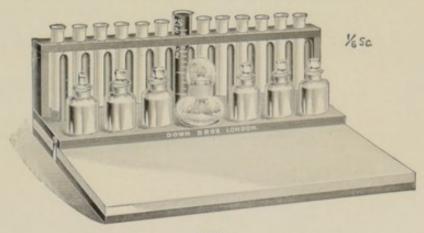




9209.

	The "Leonard Hill" Sphygmomanon	neters	,—		£	8.	d.
9209	Pocket form with rubber ball .			. each	0	10	0
9210	Riva Rocci system, portable, in case			. ,,	2	5	0
9210a*	Charts for recording blood pressure			per doz.	0	1	0

# URINE TEST STAND FOR USE IN HOSPITAL WARDS, ETC.



9211.

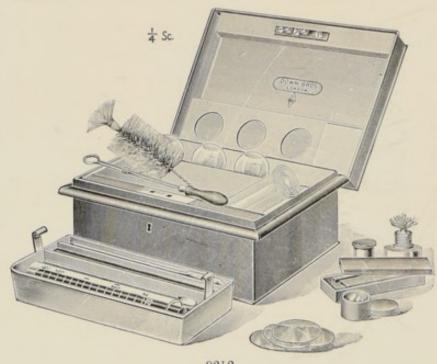
The "Sparkhill," as made for the Birmingham Hospital for Women, consisting of unpolished Mahogany Stand with Opaline Slab in front, fitted with  $5 \times 1\frac{1}{2}$  oz. narrow mouth and  $1 \times 1\frac{1}{2}$  oz. wide mouth Stoppered Bottles, amber coloured, 12 Test Tubes, Urinometer, graduated Trial Glass and Spirit Lamp, complete . 1 5 0

9211

<sup>\*</sup> The items marked thus \* are not illustrated.

#### URINE TEST CABINET.

As made for His Majesty's Indian Government.



9212.

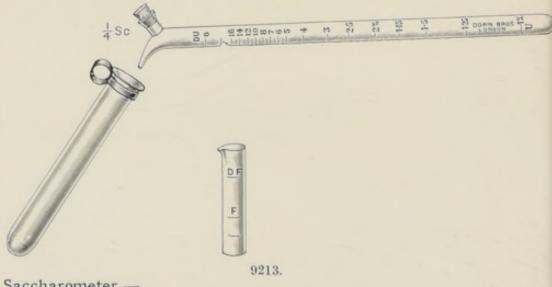
9212

Urine Test Cabinet, fitted with 3 stoppered and capped Bottles for solutions, brass Spirit Lamp, Urinometer and Trial Glass, Thermometer, nest of Test Tubes, Test Tube Stand, Test Tube Holder, Tube Brush, Pipette, Watch Glasses, Stirring Rod, blue and red Litmus Books, Microscopic Slide and Cover Glasses, in japanned tin case per set

1 12 0

£ 8. d.

### CARWARDINE'S SACCHAROMETER.



9213 Saccharometer,— Carwardine's, in C

Carwardine's, in card box . . . each 0 4 6

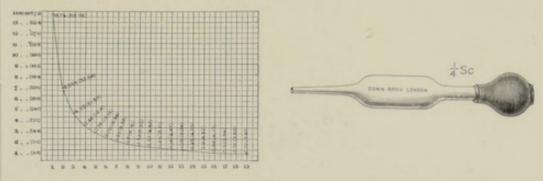
Full directions for use accompany each instrument.

9215

# THE URO-SACCHAROMETRY CHART (Down Bros.' Copyright).

Providing a sufficiently reliable Test for all Clinical Purposes in the shortest possible time.

Designed by Dr. T. J. Walker, of Peterborough.



9214.

The figures opposite the horizontal dark lines of the chart, as well as those on the curved line crossing the chart, indicate the percentage of sugar, and the corresponding number (figures between brackets) of grains of sugar per fluid ounce. By "percentage" is understood "weight in volume"—i.e., grains per 100 minims. The figures below the vertical dark lines indicate the number of minims of urine consumed in discharging the blue colour from 30 minims of Fehling's solution.

£ 8. d

Uro-Saccharometry Chart,-9214

Walker's, printed on stout card with cord to hang up, with special Pipette and full directions for use.

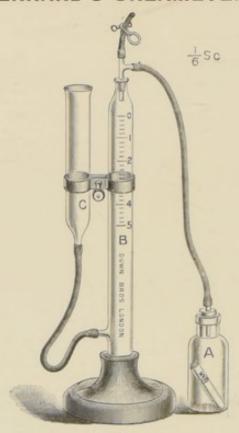
THE MODIFIED DOREMUS' UREAMETER, with side tube for Urine.



9215.

Doremus' modified, with side tube stopcock . . each 0 5 6

#### GERRARD'S UREAMETER.



9216.

#### ADVANTAGES CLAIMED.

Simplicity.—No calculation being needed.

Accuracy.—The determinations being scientifically accurate, and the results of analysis shown at once in percentage of urea. Rapidity of Action.—Results being arrived at in less than five minutes.

9216

#### Gerrard's, with full directions for use . . . 0 12 6 . each

AN IMPROVED CLAVICLE SPLINT. SUGGESTED BY DR. T. CUMING ASKIN, OF WOODBRIDGE.



9217.

Clavicle Splint,-9217

Askin's, one size only, adjustable for children and adults and suitable for both right and left . . . each 0 6 0

9218

# An Improved Clavicle Splint, continued,-

Extract from "Lancet," April 3, 1909.

I should like to draw attention to a modification of Mouat-Biggs' clavicle splint which ought, I think, to supply a distinct want. This splint I have found most useful in two or three cases, but have been deterred from using it on more than one occasion owing to the difficulty in getting one of the three stock sizes to fit the length of the patient's arm. Messrs. Down Bros. have now made a splint with adjustable elbow-piece whereby the length can be altered as required, one splint thus taking the place of three or more fixed splints, an incidental advantage being its increased portability.

T. CUMING ASKIN, M.D.Dub.

# AN IMPROVED METHOD OF PUTTING UP FRACTURED CLAVICLES.

BY T. D. MANNING, M.B., B.S. (LOND.), WEYMOUTH.

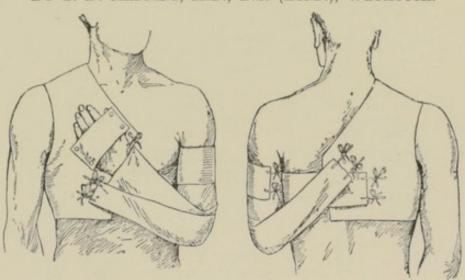


Fig. I. Front.

Fig. II. Back

9218.

Apparatus for Fractured Clavicle,— Manning's, suitable for right and left

£ s. d.

Extracted from the "Practitioner," September, 1906.

The method of putting up fractured clavicles, suggested by Dr. Sayres of New York, by means of two strips of adhesive plaister, has supplanted all other appliances in general use. It was a great advance in efficiency, and some in comfort for the patient, but still leaves much to be desired by patients, and by those who have to look after these cases.

In the Medical Review for January, 1899, an illustrated note was published of a suggestion by Dr. Henson (Georgian Medical Journal, November, 1898), to substitute for part of the strapping two pieces of jean or other stout material (for the shoulder and elbow), retaining the plaister strip, which is used in Sayres' method to draw back the upper arm.

other stout material (for the shoulder and elbow), retaining the plaister strip, which is used in Sayres' method to draw back the upper arm.

In the spring of 1900 I had an opportunity of trying this plan, and found that the elbow-piece, as suggested by Dr. Henson, is uncomfortable and difficult to manage, and that it was desirable, if possible, to get rid of the strapping. After some trouble I succeeded in getting an elbow-piece made, which is efficient and comfortable. For the strapping I have substituted a band of webbing, which is not only cleaner, but also completes the apparatus in a manner which I shall explain later on.

The apparatus, as now made for me by Messrs. Down Brothers, consists of a shoulder-piece, which is practically half of a short waistcoat, an elbow-piece, and the webbing to draw back the upper arm.

9219

# An Improved Wethod of putting up Fractured Clavicles, continued,—

All are interchangeable from side to side. The first two are made of jean, and the webbing is similar to that used for babies' binders. The accompanying sketches show better than words how the apparatus is

pplied.

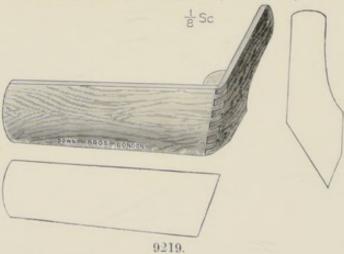
First, the shoulder-piece is fitted on the uninjured side, taking care that the loop to support the hand comes in front; a pad is then placed in the axilla, and the arm-piece is tied on round the arm as close up to the axilla as possible, the two free tapes at the end being loosely tied to the lower two tapes on the back of the shoulder-piece; lastly, the elbow-piece is put on, the two tapes behind being tied to the upper two on the back of the shoulder-piece, whilst in front, the arm having been placed in the usual completely-flexed position, with the hand well up on the whole shoulder, the loop is buttoned over the wrist, the upper tape is passed through the small loop opposite to it on the elbow-piece, and tied to the uppermost one on the shoulder-piece; the adjustment of the last two pairs of tapes is now obvious, and it will be found that the arm on the injured side is fixed in good position, and that all that now remains is to tighten up the tapes.

A little consideration will show that there is now a line of traction passing from elbow completely round the chest to the upper arm, any shortening of which pulls the elbow forwards and the shoulder back; whilst, by tightening the posterior attachments and upper anterior tape of the elbow-piece, the whole weight of the arm is slung, and the shoulder can be considerably raised. There is some constriction of the chest which checks, to some extent, thoracic breathing—an end not undesirable in itself, since it is the movement of the inner end of the clavicle caused by respiration which

makes it impossible to secure complete immobility of the bone.

# A NEW SPLINT FOR COMPOUND FRACTURES OF THE HUMERUS.

SUGGESTED BY MR. ALEXR. R. TWEEDIE, F.R.C.S., OF NOTTINGHAM.



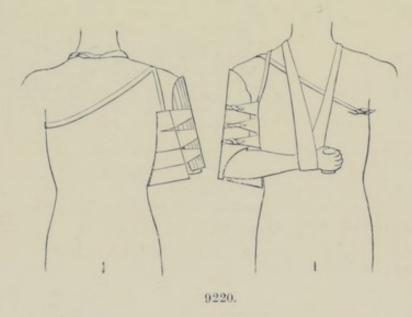
Humerus Splints,— £ s. d.
Tweedie's, 3 sizes, each right and left, per set of 6 splints 0 10 0

Extract from the "Lancet," February 10, 1906.

The illustration given above is that of a modified angular arm splint adapted for application to the anterior surfaces of the upper and forearm, whilst allowing the latter to be held midway between supination and pronation, i.e., in the most comfortable position. By its use accurate apposition of the fragments may be continuously maintained in such severe compound fractures of the humerus as involve the outer and inner aspects of the upper arm at once, and which thereby entail the removal of an internal or external angular splint and consequent disturbance of the parts when dressing the wounds. It is made wider than usual to allow of firm bandaging without producing venous congestion, a point neglected in many splints. Both a right and left pattern are, of course, necessary. It has been made for me by Messrs. Down Bros.

#### A NEW SPLINT FOR FRACTURED HUMERUS.

DESIGNED BY MR. GEORGE WILKINSON, F.R.C.S., SURGEON TO THE SHEFFIELD ROYAL HOSPITAL.



£ s. d.

### Humerus Splints,-

9220 Wilki

Wilkinson's, double wedge-shaped, per set of 5 sizes, complete with corresponding outside splints and straps . 0 17 6

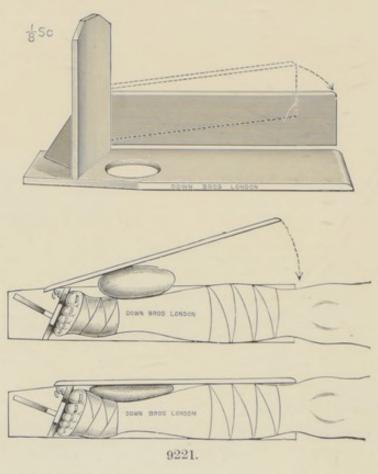
#### Extracted from the "British Medical Journal," February 17, 1906.

The engraving shows the "double-wedge" splint as applied to a patient with fracture of the shaft of the right humerus. In reference to it, Mr. George Wilkinson of Sheffield, its inventor, says that fractures of the humerus often fail to unite because there is difficulty in keeping the fractured ends in place, owing to the fact that when the forearm is brought across the body and the wrist slung from the shoulder there is a space between the chest wall and the arm. This space is wider below than above, and behind than in front. The "double-wedge" splint is shaped so as to fill it, and provide firm support for the arm. The splint is suspended from the shoulder by a band at its apex, and has straps fixed to it by which a suitable exterior splint can likewise be kept in position. A bandage carried round the trunk and limb then keeps the fractured ends and the splint all firmly fixed to the chest wall. When the fracture is near the neck of the humerus, a shoulder-cap of poroplastic felt or plaster of Paris may be substituted for the exterior splint. In a case of fracture near the elbowjoint the arm should either be completely flexed and supported by a bandage or an anterior angular splint can be applied, internal support being furnished as before by the double wedge. These splints are formed of stout cardboard, and are reversible, so as to be useful for either arm. They are made by Messrs. Down Bros., St. Thomas' Street, London, S.E.

9221

#### A NEW SPLINT FOR POTT'S FRACTURE.

DESIGNED BY MR. GEORGE WILKINSON, F.R.C.S., ETC., SURGEON SHEFFIELD ROYAL HOSPITAL.



Splints for Pott's Fracture,-

Wilkinson's, per set of 3 pairs (right and left) .

1 2 6

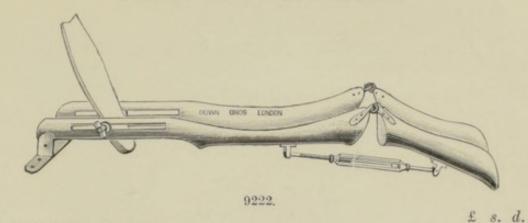
£ s. d.

#### Extract from the "Lancet," November 21, 1908.

I have designed, and Messrs. Down Bros. have made, a new splint for the treatment of Pott's fracture. The apparatus consists of a short back splint with the foot-piece set at an angle to the back piece of about 30 degrees, so that the foot is brought into a position of inversion. There is also a single side splint of the same length as the back splint. The side splint is provided with two rings at its lower end, which fasten on to two hooks below the foot-piece at its inner end. When the leg has been fixed on the back splint a large pad is applied to the inner side of the ankle. The side splint is then brought up to the back splint and fixed with a bandage carried round both back and side splints. The side splint thus acts as a lever of the second order, the fulcrum being the hinge which fastens it to the foot-piece of the back splint. The lever makes pressure through the pad on the inner side of the ankle, above the inner malleolus, and forces the leg outwards, thus reducing the outward displacement of the foot, and the broadening of the limb above the ankle-joint due to separation of the malleoli. The splints do not reach up the leg as far as the knee, so that the limb can be put up with the knee in the flexed position.

George Wilkinson, M.B., B.C. Cantab, F.R.C.S. Eng., Honorary Surgeon to the Sheffield Royal Hospital.

### SPLINT FOR X-RAY WORK.



Splint for X-Ray Work,— Liston's model, made in aluminium 9222

. each 1 1 0

### SPLINT FOR COLLES' FRACTURE.

DESIGNED BY DR. JOSEPH GRIFFITHS, SURGEON, ADDENBROOKE'S HOSPITAL, CAMBRIDGE.

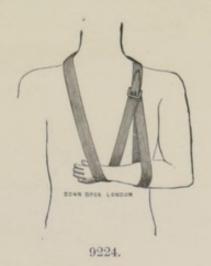


9223.

9223

Splints for Colles' Fracture,-Griffiths', aluminium, in 3 sizes, each right and left, each, 8s.; per set of 6 2 8 0

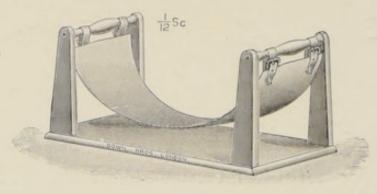
#### WEBBING ARM SLINGS.



9225

#### SLING FOR USE IN CASES OF LORDOSIS.

As recommended by Mr. Richard Barwell, F.R.C.S., Consulting Surgeon, Charing Cross Hospital.



9225.

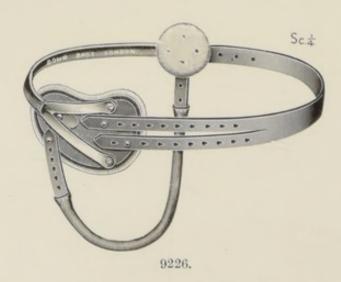
£ 8. d.

Lordosis Sling,— Barwell's

. . each 0 12 6

# TRUSS FOR FLOATING KIDNEY.

As recommended by Sir Frederick Treves.



Truss for Floating Kidney,—

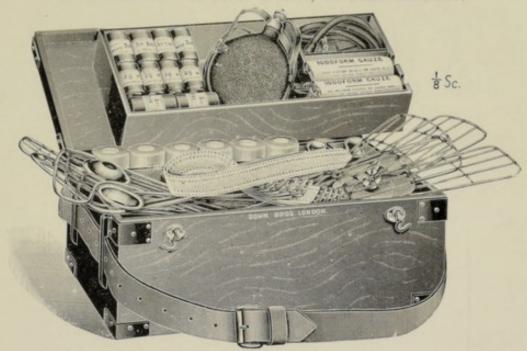
. . . each 1 7 6

9226

9227

#### THE "SOUTH AFRICA" FIRST-AID CASE FOR USE IN MINES.

Suggested by Dr. L. G. Irvine, of Johannesburg.



9227.

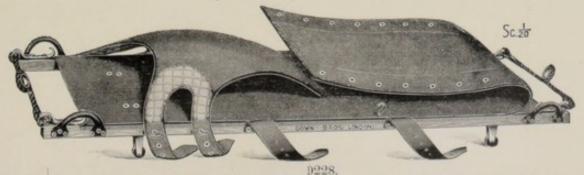
First-Aid Case, containing 2 pairs jointed wire Arm Splints, 2 pairs wire Leg Splints, 2 wire Thigh Splints, 12 Splint Straps, 2 Esmarc's Tourniquets, 1 Esmarc's illustrated and 5 plain Triangular Bandages, 6 each 21, 3 and 6 in. Open Wove Bandages, 4×3 yard Cartons Iodoform Gauze,  $6 \times 2$  oz. Cartons Absorbent Wool,  $2 \times 6$  oz. Bottles in metal cases engraved "Emetic" and "Sal Volatile," 1 Graduated Horn Measure, 1 Army model Water Bottle; roll-up pouch containing Dressing Scissors, Spencer Wells' Artery Forceps, strong Knife, 12 each Curved and Straight Suture Needles in metal box, tablet with 3 sizes Ligature Silk, and box assorted steel Safety Pins, the whole fitted in strong stained wood box with lift-out tray, with stout leather strap to carry across shoulder.

£ s. d.

5 18 0

### THE "SOUTH AFRICA" STRETCHER FOR USE IN MINES.

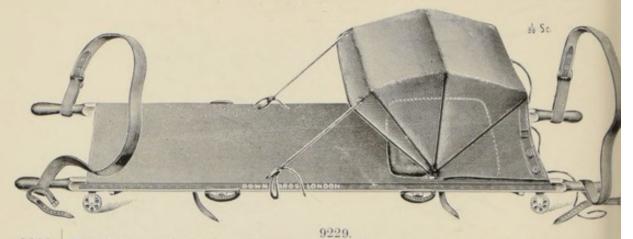
A MODIFICATION OF THE DESIGN ORIGINALLY SUGGESTED BY STAFF-SURGEON' MANSFIELD, R.N.



9228 The "South Africa" Stretcher, for use in Mines each 5 10 0

R

No. FOLDING STRETCHER WITH HOOD.

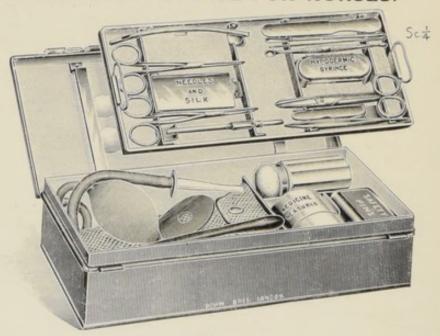


Folding Stretcher, with hood and pillow, Army regulation £ s. d. pattern .

# A NEW ASEPTIC CASE FOR NURSES.

9229

9230



9230. Nurse's Aseptic Set, consisting of Dressing Scissors with nickel-plated shanks, Dressing Forceps, Dissecting Forceps, Sinus Forceps, and double-ended Scraper, all nickel-plated; Dressing Scissors with nickel-plated shanks, Scalpel with metal handle and lock back, all metal Hypodermie Syringe, silver Female Catheter, silver Probe, plated Spatula, plated Director and Scoop, Clinical Thermometer, Seamless Enema with Vagina Pipe in waterproof bag, Medicine Tumbler and Minim Measure in case, Glass Bottle for Vaseline with metal cap, metal Needle Case with 6 assorted Needles, Tablet of Silk and Wire, Safety Pins in metal box, the whole fitted in neat japanned tin case with lift-out tray, with brown waterproof canvas case outside complete

# DOWN BROS.' "MICROFORM" COMPRESSED DRESSINGS.



0	0	w	×		
ч.	on.		а	3	•

									£	8.	d.
9231*	Absorbent Gauze	and	Woo	1,—							
	In 2 oz. packets,	size	24×2	$24 \times 13$	in.		per d	oz. pkts.	0	3	6
9232	Gauzes, in 1 yard	pack	kets, s	size 1	$\times 1\frac{3}{16}$	×§	in.,—				
	Bleached, plain							oz. pkts.	0	2	0
	Boracie .							,,	0	2	3
	Carbolic .						,,	,,	0	2	6
	Double Zinc Cya	nide					,,	>>	0	2 2 2 3	3
	Iodoform 5%							,,	0	2	9
	Ditto 10%							,,	0	3	3
	Sal Alembroth							,,	0	2	3
9233*	Gauzes, in 21 yard	pac	kets,	size 1	$\frac{3}{4} \times 1\frac{1}{4}$	$\times 1\frac{1}{4}$	in.,-				
	Bleached, plain						per d	loz. pkts.	0	4	0
	Boracie .								0	5	0
	Carbolic .							,,	0	5	6
	Double Zine Cya	nide					,,	,,,	0	5	0
	Iodoform 5%						"	,,	0	5	6
	Ditto 10%							,,	0	6	0
	Sal Alembroth				*			,,	U	1)	0
9234*	Gauzes, in 5 yard	pack	ets, s	ize 24	$\times 24 \times$	(1\frac{1}{4} i	n.,—				
	Bleached, plain						per d	loz. pkts.	0	5	6
	Boracic .						,,		0	7	6
	Carbolic .			,			,,	,,	0	8	6
	Carbolic . Double Zinc Cya Iodoform 5%	nide					,,	,,	0	7	6
	Iodoform 5%							"		10	6
	Ditto 10%						"	33	0	-	6
	Sal Alembroth							"	0		()
9235*	The second secon										
	Absorbent, plain						per c	loz. pkts.	0	2 2	3
	Boracie .						,,	,,	0	2	0
9236*											
	Absorbent, plain							loz. pkts.	0	4	0
	Boracic .			-			,,	"	0	3	9
	* Th	e ite	ms ma	rked t	hus *	are r	ot illus	trated.			

No.	"Microform"	Con	pre	ssed	Dre	ssin	gs, co	ntinued,—	-		
		2 10							£	8.	d.
9237*	Wools, in 1 oz. pac	kets,	size	13×1	$14 \times 14$	in.,	_				
	Absorbent, plain						per de	oz. pkts.	0	1	9
	Boracie .				-		"	,,	0	1	9
	Double Zinc Cyar	nide					,,	,,	0	2	3
	Sal Alembroth						,,	,,	0	2	3
9238*	Wools, in 2 oz. pac	kets,	size	$24 \times 2$	24×14	in.,-	_				
	Absorbent, plain						per de	z. pkts.	0	3	0
	Boracie .				*		,,	,,	0	3	0
	Double Zine Cyar	nide					,,	,,	0	3	9
	Sal Alembroth						,,	"	0	3	9

# CYLLIN PREPARATIONS.



9239	Cyllinette Towels					per doz.	0	1	9
9240*	Cyllin Gauze						0	3	0
9241*	Gauze Tissue				1	per lb.	0	2	6
9242*	Lint							3	
9243*	Wool					23		1	
9244*	Dusting Powder							0	
9245*	Bar Soap, per cwt.: in 1 lb.	bars	368	97 .	in 3	lh hare		15	
9246*	Surgical Soap	Dutis	, 000.	···· ,	III o	on tablet			
9247*	Disinfectant for general use	*			. 1	per tablet		0	
9248*	Disinfectant, for general use				· 1	per bottle		0	
	Ditto for medical use					,,	0	0	4
9249*	Lano Cyllin		0	per	tube	, 6d. and	0	1	0
9250*	Sanitary Powder					6d. and		10	

more perishable Gamgee tissue.

<sup>\*</sup> The items marked thus \* are not illustrated.

#### GLASS DRAINAGE TUBES.

AS USED BY SIR ALFRED FRIPP.



9253.

9253

Glass Drainage Tubes,-	_				£	8.	d.
Fripp's, in 16 sizes Sizes :—				per doz.	0	9	0

 $\frac{1}{4}$  in. diam., 2 and  $2\frac{1}{4}$  in.  $\frac{5}{16}$  in. diam.,  $2\frac{1}{2}$ ,  $2\frac{3}{4}$  and 3 in.  $\frac{16}{3}$  in. diam.,  $3\frac{1}{4}$ ,  $3\frac{1}{2}$ ,  $3\frac{3}{4}$  and 4 in.  $\frac{5}{16}$  in. diam.,  $4\frac{1}{2}$ , 5,  $5\frac{1}{2}$  and 6 in.  $\frac{1}{2}$  in. diam., 7, 8 and 9 in.

# DREDGERS FOR BORACIC AND IODOFORM POWDERS, ETC.



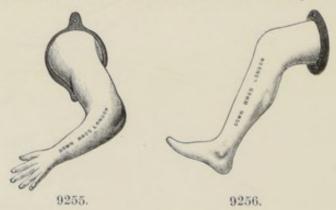
9254

Dredgers, nickel-plated,-Metal, with screw-off cap

. per doz. 0 14 0

# DUMMY FIGURES FOR PRACTISING BANDAGING.

AS SUPPLIED TO THE LONDON HOSPITAL, ETC.



nama
<b>しまっきょっちょ</b>
9256

-	Arm with	spread	Fin	gers				each	1	7	0
	Leg .					-	-	,,	0	16	6
k	Trunk with	Head		12	1000				3	15	0

<sup>\*</sup> The items marked thus \* are not illustrated,

#### BATISTE CLOAK.



9258.

9258

Batiste Cloak,-£ 8. d. For use while syringing the ear to protect patient's clothes, 0 5 6

#### REST FOR FOOT.

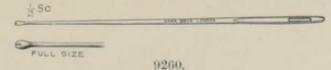


9259

Foot Rest,-For use while bandaging leg, as made for King's College . . . . each 0 14 0 Hospital

# GAUZE PROBE OR PACKER, for packing Gauze Plugs into Sinuses.

SUGGESTED BY MR. B. T. VERVER, OF GUY'S HOSPITAL.



9260

Gauze Probes or Packers,-

Verver's, silver . . . each, 5 in., 1s.; 6 in. 0 1 8

Extract from "Guy's Hospital Gazette," July 24, 1909.

An extremely useful probe has been designed by Mr. B. T. Verver, intended to substitute the use of sinus forceps when inserting gauze drains, particularly in mastoid wounds, but also generally applicable to any wound or sinus. By catching the drain in the shallow terminal slit, one is enabled to pass it into the narrowest sinus with a minimum of pain and discomfort to the patient and without repeated withdrawals, due to its being caught in the jaws of the sinus forceps. It is found that on withdrawal of the probe the drain is always left in situ.

# GLASS OINTMENT APPLICATORS (Registered).

Suggested by the late Miss J. A. Smith, Matron, Kingston Infirmary.





9262

9261

9262

Glass Ointment Applicators (registered),-Smith's, with plain surfaces, in 4 colours, each, White,

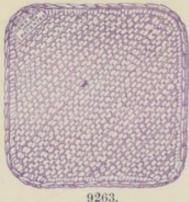
1s. 6d.; Amber, 1s. 9d.; Green, 1s. 9d.; Ruby Ditto with ground surfaces, each, White, 1s. 9d.;

Amber, 2s.; Green, 2s.; Ruby.

Extract from "The Hospital," February 2, 1909.

Mr. James Donald, M.R.C.S., L.S.A., Medical Officer, Kingston Infirmary, and Honorary Medical Officer, Victoria Hospital, Kingston-on-Thames, writes as follows: A long-felt need has been supplied by the introduction of a new glass ointment applicator designed by Miss J. A. Smith. When irritating ointments, or those which stain the hands, have to be applied in cases of ringworm, scabies, psoriasis, eczema, and other specific diseases, the glass applicator will be found almost indispensable. It is made in two forms, with plain or ground glass surfaces, and can be easily cleansed and sterilized. The ointment applicators have been in use in this infirmary for some time, and I find that they answer their purpose exceedingly well. This applicator is made by Messrs. Down Bros., London, S.E.

### THE SAFE SURGICAL SPONGE (Down Bros.' Patent).

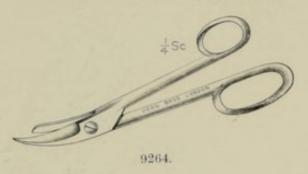


9263

The Safe Surgical Sponge (patented), in 6 sizes,— Per dozen,  $4\times4$  in., 7s.;  $6\times6$  in., 10s.;  $8\times8$  in., 14s.;  $10 \times 10$  in., 16s.;  $12 \times 12$  in., 18s.,  $14 \times 14$  in.

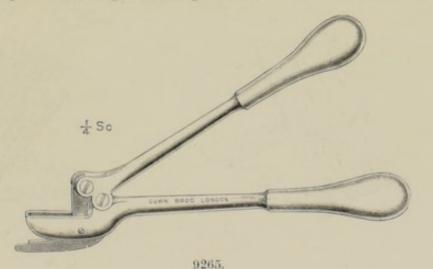
This article is the invention of Mrs. George, of Oxford, a Nurse. The "Sponges" are made of highly absorbent cotton stained with methylene purple and hand-knitted so as to present a reticulated surface, thus ensuring the greatest possible amount of absorption; whilst from the nature of the material perfect sterilization is possible. The sponges may be used over and over again with due regard to asepsis, thus rendering them economical, a point that cannot be overlooked since aseptic surgery has so much increased the cost of the toilet of operations. The sponges, though generally useful for all operations of surgery, will be found especially so in abdominal operations, their distinctive colour and appearance rendering it a practical impossibility for them to be overlooked in the body. Whereas other sponges may become stained to the colour of the blood itself, and thus only with difficulty be distinguishable, it is a peculiar characteristic of the dye in this case that it turns to a deeper purple when saturated with blood, and always stands out in clear contrast to the tissues.

# NEW MODELS OF PLASTER SHEARS for removing Plaster of Paris Bandages.



9264

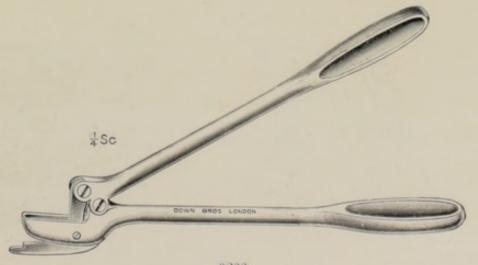
£ s. d. Plaster Shears, nickel-plated shanks and handles,-Guy's pattern, strong, with shaped bows . each 0 13 6



9265

9266

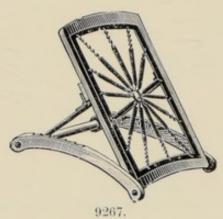
. each 1 11 6 Lorenz's, short model



9266.

Lorenz's, long model (as used by Mr. Muirhead Little) each 1 11 6

### BED RESTS.

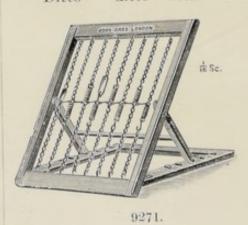






9267	
9268*	
9269	
9270	

Bed Rests,—		±	8.	d.	
"Matlock," improved shape, with spring backs	each	1	8	6	
Ditto ditto fitted with adjustable arm rests	**	1	11	6	
Palatine, with spring backs	,,		12	- 70	
Ditto ditto with arm rests	33	0	15	6	



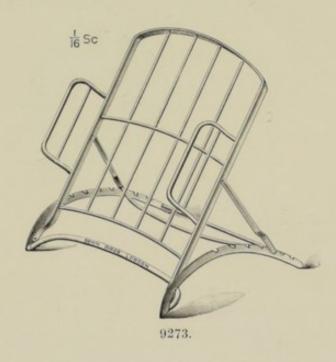


9271 9272

Hospital,	with	spring	back				each	0	8	6
Ditto	with	woven	wire bac	ck .			,,	0	7	6

<sup>\*</sup> The items marked thus \* are not illustrated.

# Bed Rests, continued,-



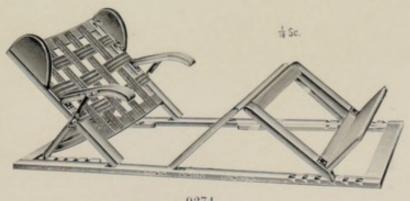
9273

9274

Bed Rests, continued-£ s. d. Wire, white enamelled, as used at the London Hospital, Westminster Hospital, etc., etc. . . each 1 10 6

#### COMBINED BACK AND LEG REST.

SUGGESTED BY MR. VIVIAN TUDOR GREENYER, F.R.C.S., OF HOVE.



9274.

Combined Back and Leg Rest,-

. each Greenyer's .

Designed as a means of keeping patients in semi-recumbent position; it will be found far preferable to the ordinary combination of Pillows and Bed-rest.

### **ELBOW AIR PILLOWS.**



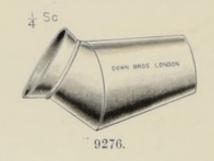
9275.

9275

9276

Elbow Air Pillows,—  $\pounds$  s. d. For resting the elbows of bed-ridden patients . . each 0 7 3

#### THE IDEAL FEEDER.



Invalid Feeders,-

The "Ideal," earthenware . . . per doz. 0 4 0

#### DRAINAGE CLAMP.

AS USED IN THE CANADIAN HOSPITALS.



9277.

9277 Drainage Clamp, for passing through a hole in centre of waterproof sheet and bedding for drainage into receptacle under bed . . . . . . each

1 1 0

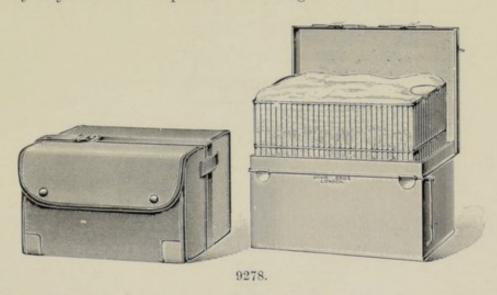
#### THE ST. THOMAS'S DRESSING BOX

fitted complete with

# SET OF STERILIZED DRESSINGS (High pressure 250° Fahr.) READY FOR IMMEDIATE OPERATION

(about two hours' notice required).

The box is made of stout tinned copper for resisting high temperature, as originally designed for St. Thomas's Hospital, and now generally adopted for use in High-pressure Sterilizers. The contents may be varied in any way to suit the requirements of Surgeons.



9278

The St. Thomas's Dressing Box fitted complete.

Containing—

2 Gauze Squares, 16 × 16 in.

2 ditto  $20 \times 20$  in.

6 Absorbent Gauze Pads,  $3 \times 3$  in. 4 ditto  $9 \times 9$  in.

2 doz. 2-in. Gauze and Wool Swabs.

1 doz. 3-in. ditto

3 Thick Gauze and Wool Pads.

6 yds. Double Zinc Cyanide Gauze.

6 × 6 in. Absorbent Gauze Bandages.

 $2 \times 2\frac{1}{2}$  in. Open Wove Bandages.

2 × 4 in. ditto

 $2 \times 6$  in. ditto

£ s. d.

The whole in copper tinned box, with wire Lift-out Tray and outside Brown Waterproof Cover with Strap . . . 1 17 6

Re-fill set of Sterilized Dressings as above, 9s.

Useful additions: Operation Apron, Gloves, Cap, Mask, etc. (see pages 3-10).

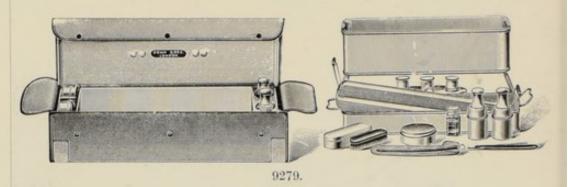
# COMPLETE SET OF OPERATION ACCESSORIES

as made for

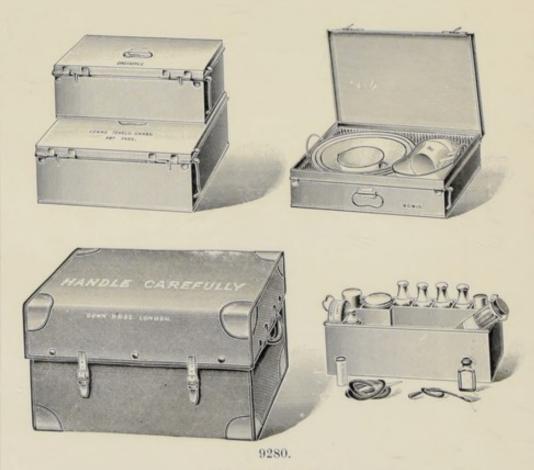
# ST. BART.'S TRAINED NURSES' INSTITUTION.

This complete Set is intended to be sent (with supply of Dressings) to patient's house or Nursing Home, and consists of—

- Preparation Box. For preparation of patient, etc., previous to arrival of Surgeon.
- Operation Box. To be opened immediately prior to operation in presence of the Surgeon.



The Preparation Box.



The Operation Box.

9280

# St. Bart.'s Operation Accessories, continued,-

9279 The Preparation Box. Japanned tin with stout leather handle and outside brown waterproof cover, containing—

Down Bros.' Instrument Sterilizer, copper, nickel-plated, with Lift-out Tray and 3-burner Spirit Lamp with Regulator.

Two 2-oz. Stoppered Bottles in metal cases, engraved "Turpentine" and "Ether Soap."

Vaseline Pot in metal case.

Bottle Corrosive Sub. Tablets.

Nail Brush in metal case.

Hollow-ground Razor and Shaving Brush.

Female Catheter.

£ s. d.

5 7 0

12 8 0

The Operation Box. Japanned tin, with stout leather handles at each end and outside brown waterproof cover, containing—

Copper tinned box, with Lift-out Wire Tray, engraved "Dressings."

Dressings not included, must be ordered separately if required.

Copper tinned box, with Lift-out Wire Tray, engraved "Gowns," "Towels," "Swabs," "Pads."

Contents not included, must be ordered separately if required.

Copper tinned box, with Lift-out Wire Tray, engraved "Bowls," containing I Instrument Tray,  $14 \times 10\frac{1}{2}$  in.; Kidney-shaped Dressing Tray; Graduated Measure; Porringer and 6 assorted Bowls, all in enamelled iron.

Partitioned Tray, containing—four 2-oz. Bottles in metal cases, engraved "Carbolic," "Ether," "Glycerine," "Brandy"; one ¾-oz. Bottle in metal case engraved "Strychnine"; Vaseline Jar in metal case; Medicine Tumbler and Minim in metal case; Bottle Mercuric Iodide Soloids; Hypodermic Syringe in metal case; Horrocks' Saline Infusion Apparatus; Tube of Saline Soloids; Sterilizable Wound Syringe with glass pipe; Tube containing 6×10 in. lengths Drainage Tube; India-rubber Catheter; Bath Thermometer; and box Safety Pins . . . . .



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