Illustrated catalogue of electro-medical apparatus / A. Hurst & Co.

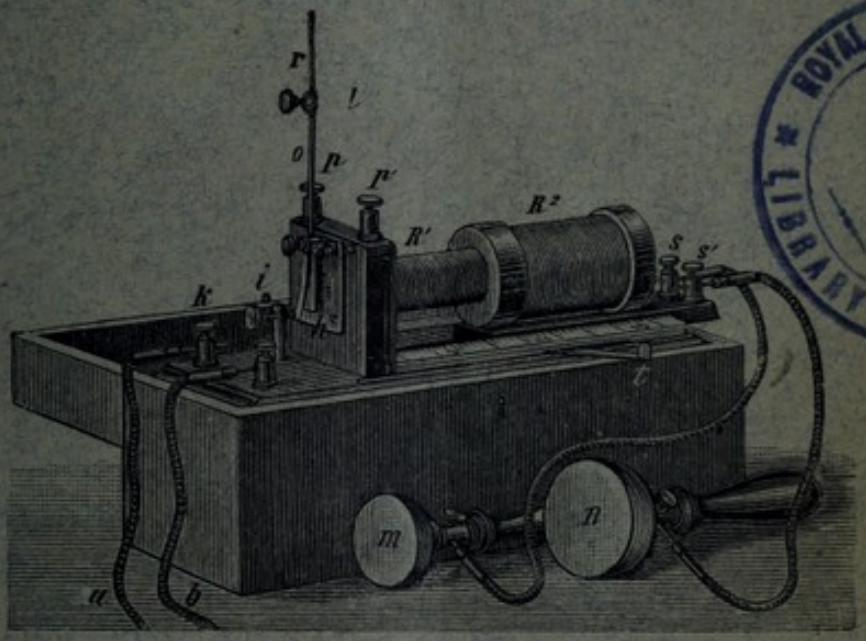
17.

ILLUSTRATED

CATALOGUE

OF

Electro-Medical Apparatus.



A. HURST & CO.,

6, Fowkes' Buildings,

GREAT TOWER STREET,

LONDON, E.C.

PREFACE.

We have great pleasure in placing before you a complete catalogue of **Electro-Medical Apparatus**, including the latest inventions.

Most of the apparatus are manufactured by Mr. R. Blänsdorf, Succr., Frankfort o/M, who has made a special study of such as are used by the Medical Profession.

Through his continually constructing new apparatus for Physicians, Specialists, &c., and through our extensive connections with English and Foreign Instrument Makers, we are always in a position to procure and place before our customers the newest inventions.

Any kind of apparatus can be made from description, drawing, or model.

Only the best of material is used in the construction of our apparatus. Every instrument is thoroughly tested before sent out and we are thus able to guarantee its being in proper working order.

We feel assured that our prices will compare favourably with those of other houses, and by supplying apparatus of the best material and workmanship we trust to merit your favours.

A. HURST & Co.

January, 1892.

NOTICE.

1.—**Claims** will not be entertained unless made within 10 days after delivery of the goods.

2.—**Packing** is most carefully carried out and charged for at cost price.

3.—**Delivery** is effected at the cost and risk of consignees.

4.—**Prices** are strictly net. Hospitals, wholesale purchasers, and the trade however, can obtain special quotations on application.

5.—**Accounts** are payable within one month.

6.—**Orders** must be accompanied by satisfactory references or by remittance, otherwise the goods must be paid for on delivery. This does not apply to customers having monthly accounts.

7.—**Catalogue Number** should be quoted when ordering in order to avoid mistakes.

ILLUSTRATED

CATALOGUE

OF

ELECTRO-MEDICAL

APPARATUS.

Galvanic Batteries.

Fig 1 Nos. 1—5.

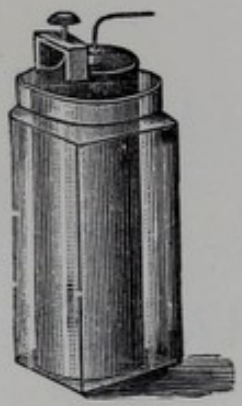


Fig. 2 Nos. 6—8.

Fig. 3 Nos. 9—11.

Fig. 4 Nos. 12—15.

Bunsen Cells.

Fig.	No.	Size.	Complete Cells.	Carbons.	Zincs.	Porous Pots.	Jars.
			s. d.	s. d.	s. d.	s. d.	s. d.
1	1	½-Pint	2 6	8	1 0	5	5
	2	Pint	3 0	9	1 3	6	6
	3	Quart	4 6	1 0	2 2	8	8
	4	3-Pint	6 6	1 6	3 6	9	9
	5	2-Quart	9 0	2 6	4 0	1 3	1 3

Leclanché Cells (Old Form with Porous Pots).

Fig.	No.	Size.	Complete Cells.	Porous Cells Charged.	Zincs.	Glass Cells.	Sal-Ammoniac.
			s. d.	s. d.	s. d.	s. d.	s. d.
2	6	Pint	1 6	1 0	2½	2½	2
	7	Quart	2 0	1 3	3	4	2½
	8	3-Pint	2 9	1 9	3½	6	5

Leclanché Cells (New Form with Agglomerate Blocks).

Fig.	No.	Size.	Complete Cells.	Carbons.	Zincs.	Agglomerate Blocks.	India-rubber Rings.	Porous Tubes.	Glass Cells.	Sal-Ammoniac.
			s. d.	s. d.	s. d.	s. d. Pairs	s. d. Pairs	s. d.	s. d.	s. d.
3	9	Pint	2 3	4	2½	1 0½	1½	2½	2½	2
	10	Quart	2 9	5	3	1 2½	2	3½	4	2½
	11	3-Pint	3 6	6	3½	1 4½	2½	4	6	5

Manganese Cells (with 2 Carbon Plates).

Fig.	No.	Size.	Description.	Complete.
				s. d.
4	12	2-Quart	With 1 Zinc	6 6 each.
	13	3-Quart	,, 1 ,,	8 6 ,,
	14	2-Quart	,, 3 Zincs	9 0 ,,
	15	3-Quart	,, 3 ,,	11 6 ,,

Galvanic Batteries.

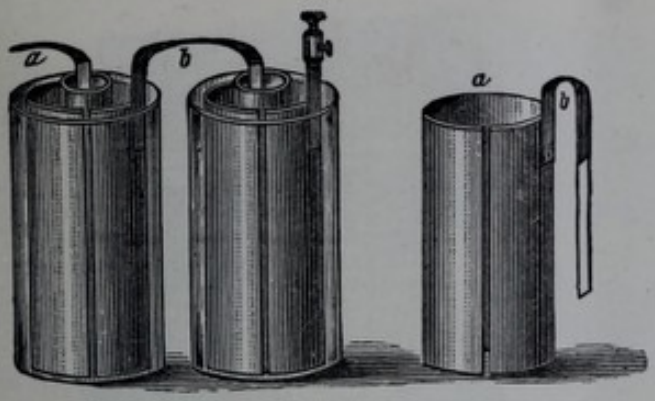


Fig. 5 No. 16.

Fig. 6 Nos. 17 & 18.

Grove Cells (New Form).

Fig 5 No. 16, Pint Size ... ... 12s. 6d. each.

Meidinger "Balloon" Cells.

Fig. 6 No. 17, Pint Size ... ... 3s. 0d. each.
„ 6 „ 18, Quart Size ... ... 4s. 6d. „

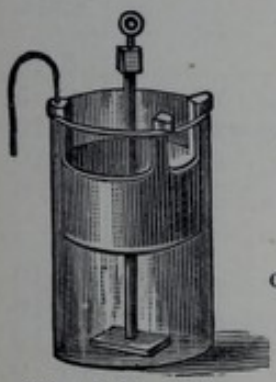


Fig. 7 No. 19.

Meidinger "Calland" Cells.

Fig. 7 No. 19,

complete, 3s. 6d. each.

Fig 8 No 20—22.

Dry Cells (Dr Stein's System).

Fig. 8 No. 20, 1½-Pint size complete, 3s. 0d. each

„ „ „ 21, Pint size complete, 4s. 0d. „

„ „ „ 22, Quart size complete, 5s. 6d. „

Fig. 9 Nos. 23—27.

Grenet Cells

Fig.	No.	Size.	Description.	Complete Cell. s.	d.
9	23	½-Pint	2 Carbons, 1 Zinc	3	6
	24	Pint	„	5	0
	25	Quart	„	7	6
	26	2-Quart	„	10	0
	27	2-Quart	3 Carbons, 2 Zincs	15	0

Portable Galvanic Batteries for Continuous Current.

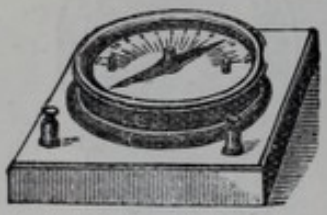


Fig. 11.

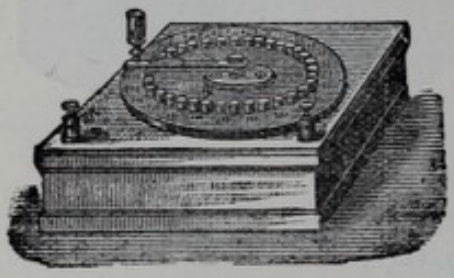


Fig. 12.

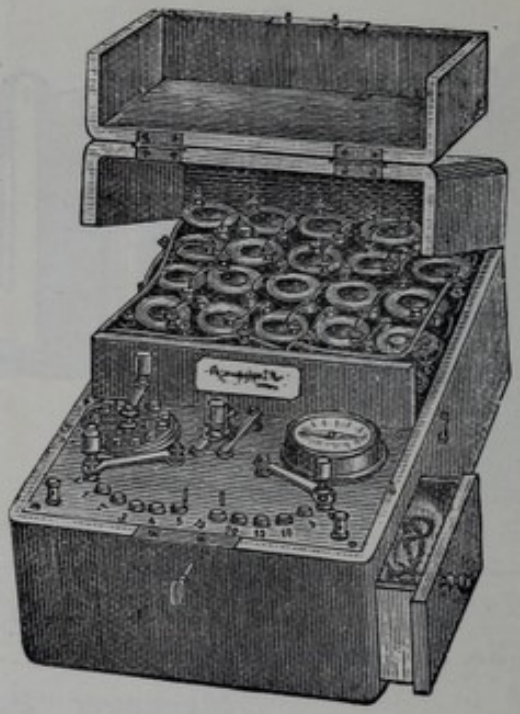


Fig. 10 Nos. 35, Galv. Fig. 11, Rheost. No. 40.

Fig.	No.	With Leclanché Cells or Dry Cells. Fig. 8	£	s.	d.
10	28	With 15 Cells ...	...	5	10	0
	29	„ 20 „ ...	...	6	5	0
	30	„ 25 „ ... With 2 Cell Collectors and Current Reverser.	...	7	10	0
	31	„ 30 „ ...	...	8	10	0
	32	„ 35 „ ...	...	10	0	0
10	33	With 15 Cells ...	...	6	10	0
	34	„ 20 „ ...	...	7	10	0
	35	„ 25 „ ... With 2 Cell Collectors, Current Reverser, and Galvanometer (Fig. 11).	...	8	10	0
	36	„ 30 „ ...	...	10	0	0
	37	„ 35 „ ...	...	11	5	0
		If with—				
12	38	**Rheostat** up to 1000 Ohms Nos. 28-37. Cost Extra	1	15	0
	39	„ „ 2000 „ „ „	2	2	0
	40	„ „ 3000 „ „ „	2	15	0
		If with—			
		Induction Apparatus, Nos. 33-37, cost extra.	1	15	0

The above prices include: 1 Pair of Connecting Cords, 1 Simple Handle, 1 Handle with Interruptor, and 4 Electrodes.

Portable Plunge Batteries for Continuous Current.

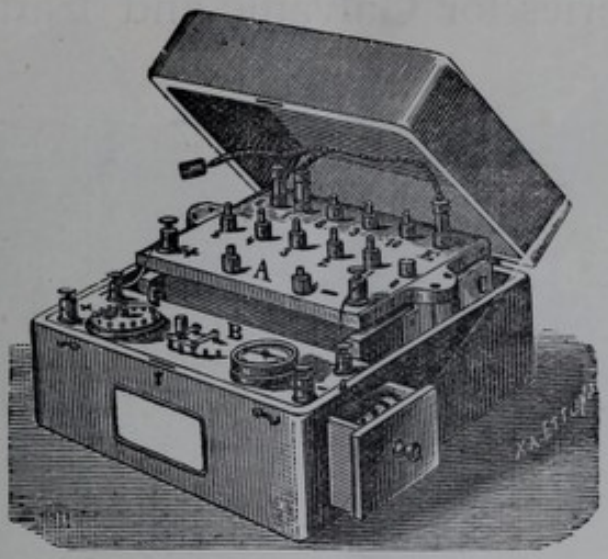


Fig. 13 No. 51, Galvan. Fig. 11, Rheost. No. 40.

Fig.	No.			£	s.	d.
	41	With 10 Cells ...	...	1	18	0
	42	„ 15 „ ...	...	2	12	0
	43	„ 20 „ ... As Fig. 13, but without case and Current Reverser	...	3	8	0
	44	„ 25 „ ...	...	4	6	0
	45	„ 30 „ ...	...	5	10	0
13	46	With 10 Cells ...	...	4	0	0
	47	„ 15 „ ...	...	4	12	0
	48	„ 20 „ ... In polished case, with Current Reverser	...	5	10	0
	49	„ 25 „ ...	...	6	5	0
	50	„ 30 „ ...	...	7	5	0
13	51	With 10 Cells ...	...	5	4	0
	52	„ 15 „ ...	...	5	12	0
	53	„ 20 „ ... In polished case, with Current Reverser and Galvanometer (Fig. 11).	...	6	10	0
	54	„ 25 „ ...	...	7	10	0
	55	„ 30 „ ...	...	8	10	0
		If with—				
12	38	**Rheostat** up to 1000 Ohms, Nos. 46-55, cost extra		1	15	0
	39	„ „ 2000 „ „ „		2	2	0
	40	„ „ 3000 „ „ „		2	15	0
		If with—				
		Induction Apparatus, Nos. 53-55, cost extra		1	15	0

The above prices include : 1 Pair of Connecting Cords, 1 Simple Handle, 1 Handle with Interruptor and 3 Electrodes.

Portable Batteries for Galvanic and Faradic Currents.

Fig. 14 No. 56. Plan of Battery.

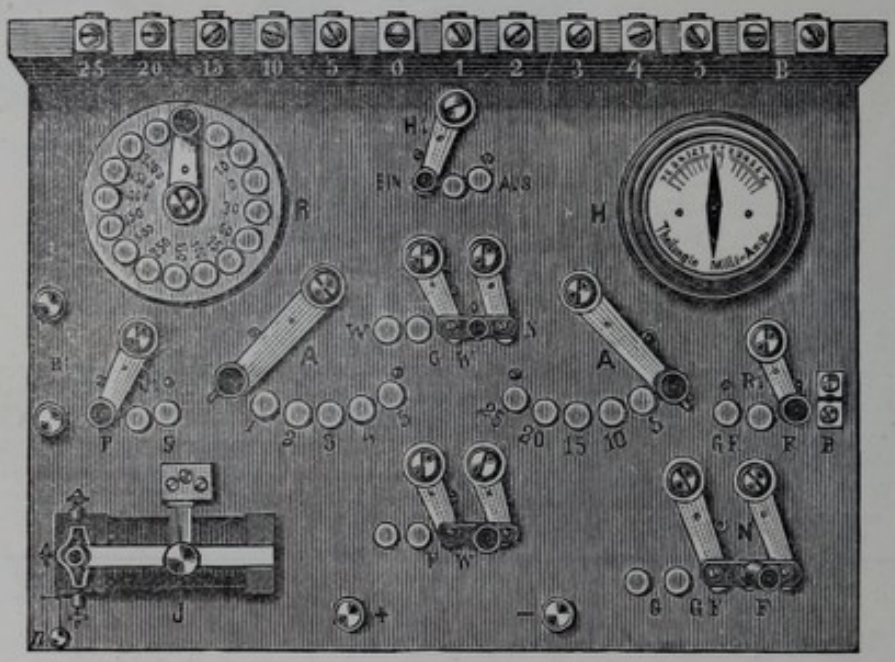


Fig. 14 No. 56. Plan of Battery.

AA Cell Collectors. *GW* Reverser for Galvanic Currents. *H* Absolute-reading Galvanometer *H1* Galvanometer Switch. *R* Rheostat. *R1* Rheostat Switch. *J* Induction Coil (the Sledge Apparatus is inside the box, and can be regulated by means of the screws *P* and *S*). *J1* Switch for the Primary (*P*) and Secondary (*S*) Current. *FW* Faradic Current Reverser. *B* Plug for connecting the Cells. *N* de Watteville Commutator. + — Current Terminals.

Fig.	No.		With 30 Cells.			With 36 Cells.		
			£	s.	d.	£	s.	d.
14	56	**Battery**, with all apparatus as shown in fig. 14	17	0	0	18	0	0
	57	Ditto, but without Rheostat *R*, and Switch *R*1	14	10	0	15	10	0
	58	Ditto, but without Rheostat *R*, Switch *R*1, and Commutator *N*	13	10	0	14	10	0
	59	**Battery**, with Cell Collectors *AA*1, Reverser *GW*, Galvanometer *H*, Switch *H*1, Rheostats *R* (1=3000 Ohms and 1=100 Ohms), and Switch *J*1	13	10	0	14	10	0

Dr. Spamer's Plunge Batteries.

Fig. 15
No. 62.

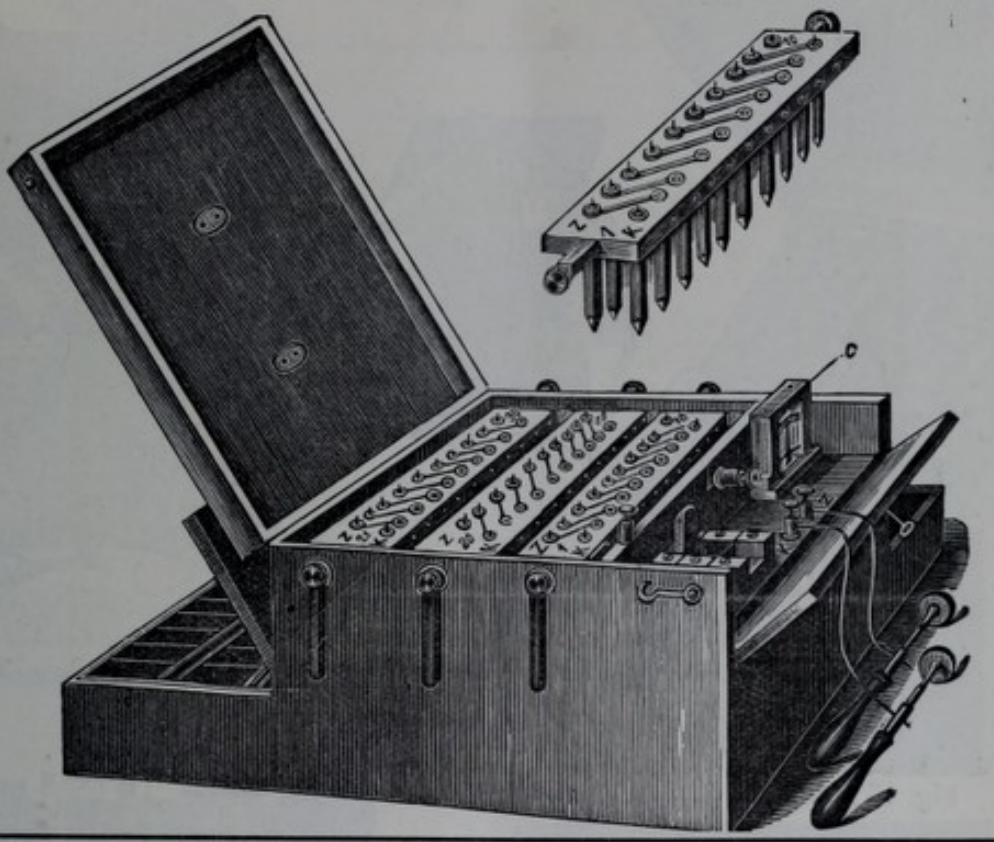


Fig. 15
No. 62.

Fig.	No.			£	s.	d.
15	60	With 10 Cells	...	5	0	0
	61	„ 20 „	...	6	10	0
	62	„ 30 „	...	8	5	0
	63	„ 40 „	...	10	5	0
	64	With 20 Cells	...	8	10	0
	65	„ 30 „	...	10	0	0
	66	„ 40 „	...	11	10	0

With Current Reverser and Galvanoscope

With Current Reverser, Galvanoscope and Induction Apparatus

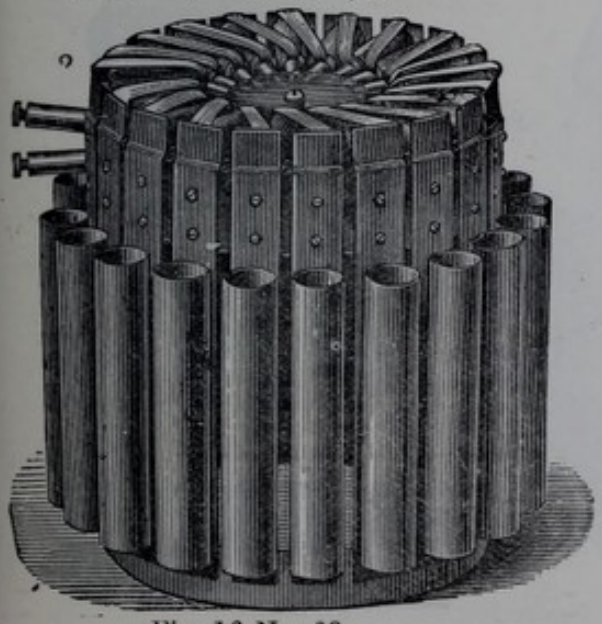


Fig. 16 No. 68.

Thermo-Electric Piles.

Fig.	No.		£	s.	d.
16	67	With 12 small Cells and Gas Burner	1	7	0
	68	With 20 ditto ditto ...	2	4	0
	69	With 20 large Cells and Bunsen Burner	3	8	0

Induction Coils.

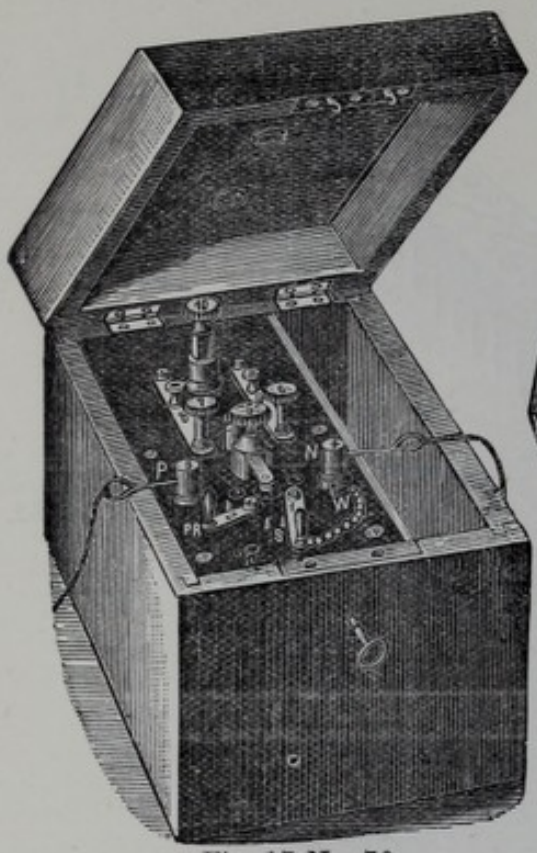


Fig. 17 No. 70

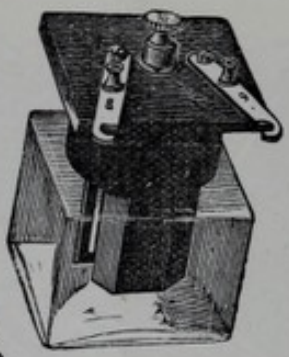


Fig. 19 No. 72.

Fig. 20 Nos. 75 & 76.

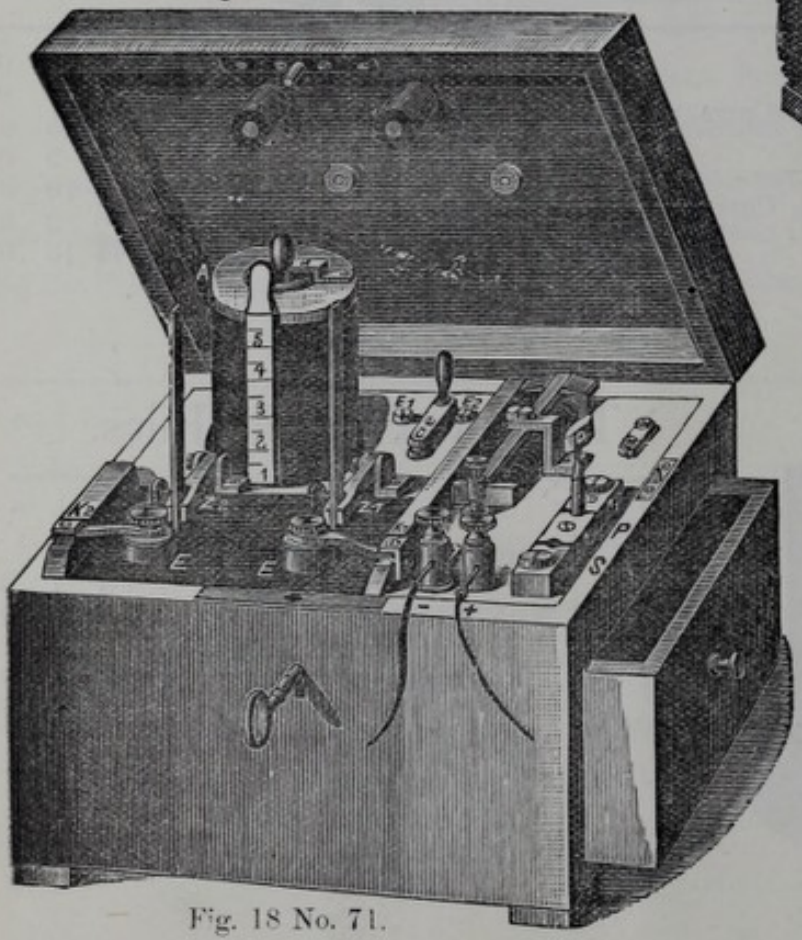


Fig. 18 No. 71.

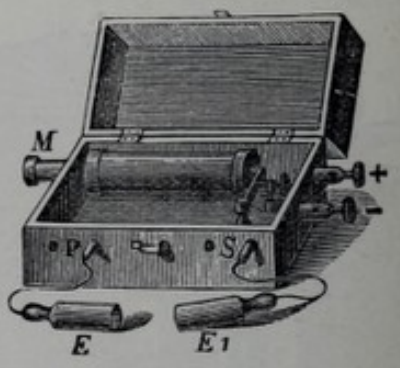


Fig. 21 Nos. 77 & 78.

Fig. 22 Nos. 79 & 80

Induction Coils.

Fig.	No.		£	s.	d.
17	70	**Induction Coil**, with large Glass Cell, Commutator for Primary or Secondary Current, and Crank for regulating the strength of current	2	8	0
18	71	**Dr. Taube's Induction Coil** with 2 Ebonite Cells	3	8	0
19	72	**Dr. Spamer's Induction Coil** with 1 Ebonite Cell...	2	0	0
	73	,, ,, ,, ,, ,, 2 ,, Cells	2	12	0
	74	,, ,, ,, ,, cheap form with 1 Glass Cell	1	5	0
20	75	**Gaiffe's Induction Coil** with Cords, Handles, &c.		17	0
	76	,, ,, ,, larger size	1	7	0
21	77	**Induction Coil**, in Mahogany Case, with Glass Cell, Cords, &c.		19	0
	78	,, ,, ,, ,, ,, larger size	1	6	0
22	79	,, ,, mounted on Wood, with Cell, Cords, &c.		15	0
	80	,, ,, larger size	1	1	0

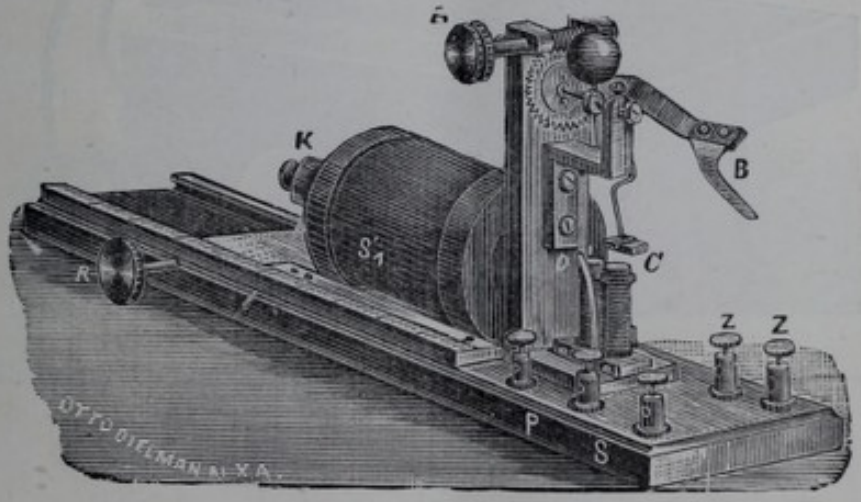


Fig. 23 No. 81.

Fig. 23 No. 81, **Prof. Ewald's Sledge Coil** with Mechanism for change in current (1 to 200 per second) £4 10 0

Dubois-Reymond Sledge Coils.

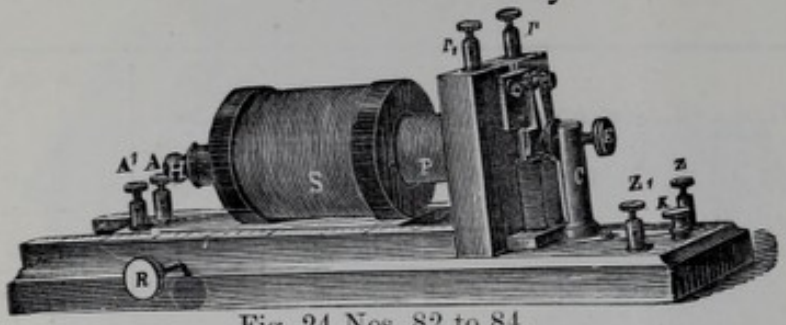


Fig. 24 Nos. 82 to 84.

S Secondary Coil, *P* Primary Coil, *H* Adjustable Iron-core, *AA*1 Terminals for the Secondary, and *rr*1 Terminals for the Primary Current, *ZZ*1 Battery Terminals, *R* Regulator for the Secondary Current.

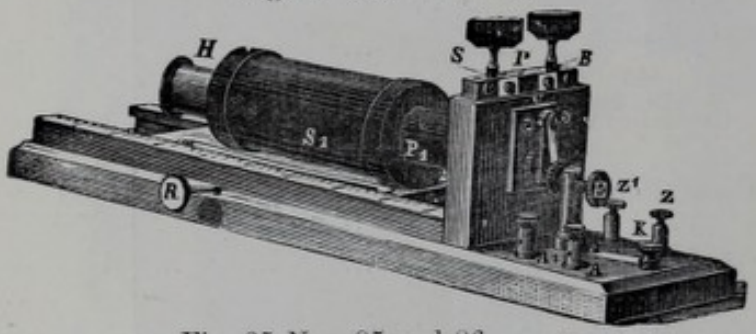


Fig. 25 Nos. 85 and 86.

*S*1 Secondary Coil, *P*1 Primary Coil *H* Adjustable Metal Cylinder *AA*1 Cord Terminals, *ZZ*1 Battery Terminals, *B* Plug for closing the Battery Circuit, *P* Plug for the Primary, and *S* Plug for the Secondary Current, *R* Regulator for the Primary and Secondary Currents.

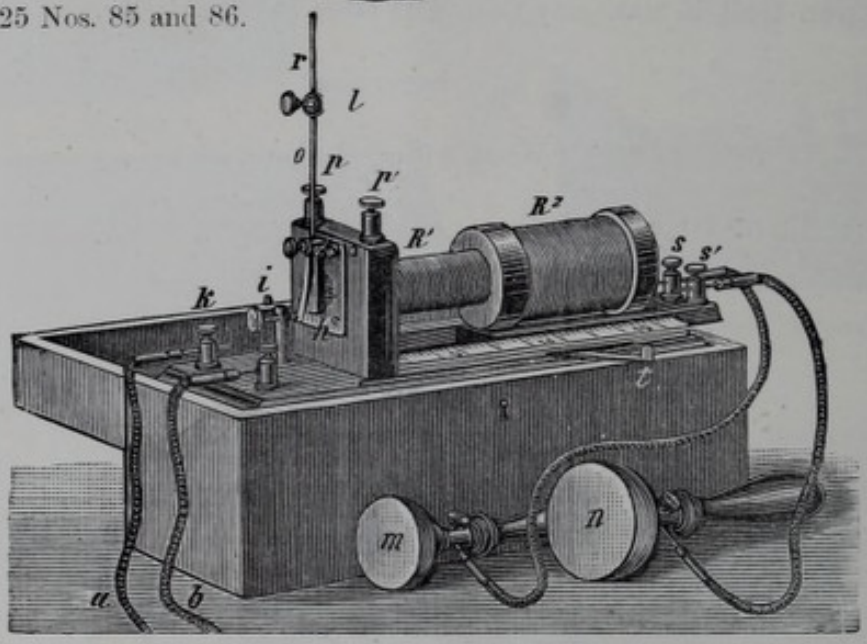


Fig. 26 Nos. 87 and 88.

Dimensions of Coils.	Coils. Length.	Coils. Diameter.	Diameter of Wire.	Number of Windings.	Resistance in Ohms.
Primary 82; Secondary 82;	88 m/m	36 m/m	1 m/m	300	1,5
	65 „	68 „	0,25 „	5000	300
Primary 83, 84, Secondary 83, 84	105 „	46 „	1,5 „	166	1,2
	95 „	75 „	0,25 „	7500	450
and Primary Nos. 85, 86	112 „	35 „	0,8 „	300	1,7
Secondary Nos. 85, 86	103 „	60 „	0,2 „	6000	400

Sledge Coils.

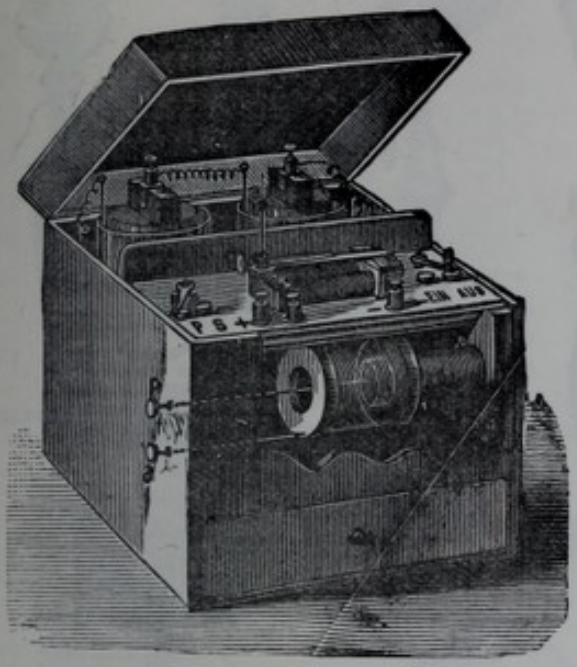


Fig. 27 No. 89.

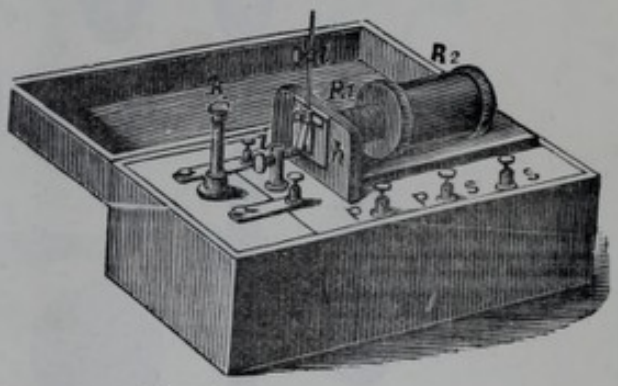


Fig. 28 No. 90.

Fig.	No.		£	s.	d.
24	82	**Dubois-Reymond Sledge Coil** (Standard Pattern), with Millimeter Scale and Morse Key	4	0	0
	83	,, ,, for Electric Baths, with adjustable Contact Breaker and Millimeter Scale	4	5	0
	84	,, ,, but with Current Reverser	4	12	0
25	85	,, ,, large pattern for Physiological Institutes, &c., with German Silver Scale, Morse Key, &c.	4	15	0
	86	,, ,, but with Current Reverser	5	0	0
		If in polished Mahogany Case, Nos. 82-86, cost extra	1	0	0
26	87	**Sledge Coil**, medium pattern, in Mahogany Case, with Handles, Cords, &c.	2	10	0
	88	,, but without Case and Accessories	2	0	0
27	89	,, with adjustable Iron-Core, and 2 Leclanché Cells, in polished case	4	12	0
28	90	,, with 1 Grenet Cell, in polished case	3	5	0

All Sledge Coils are fitted with an Interruptor, which enables the number of Interruptions per minute to be varied from 100 to 2000.

Electrodes.

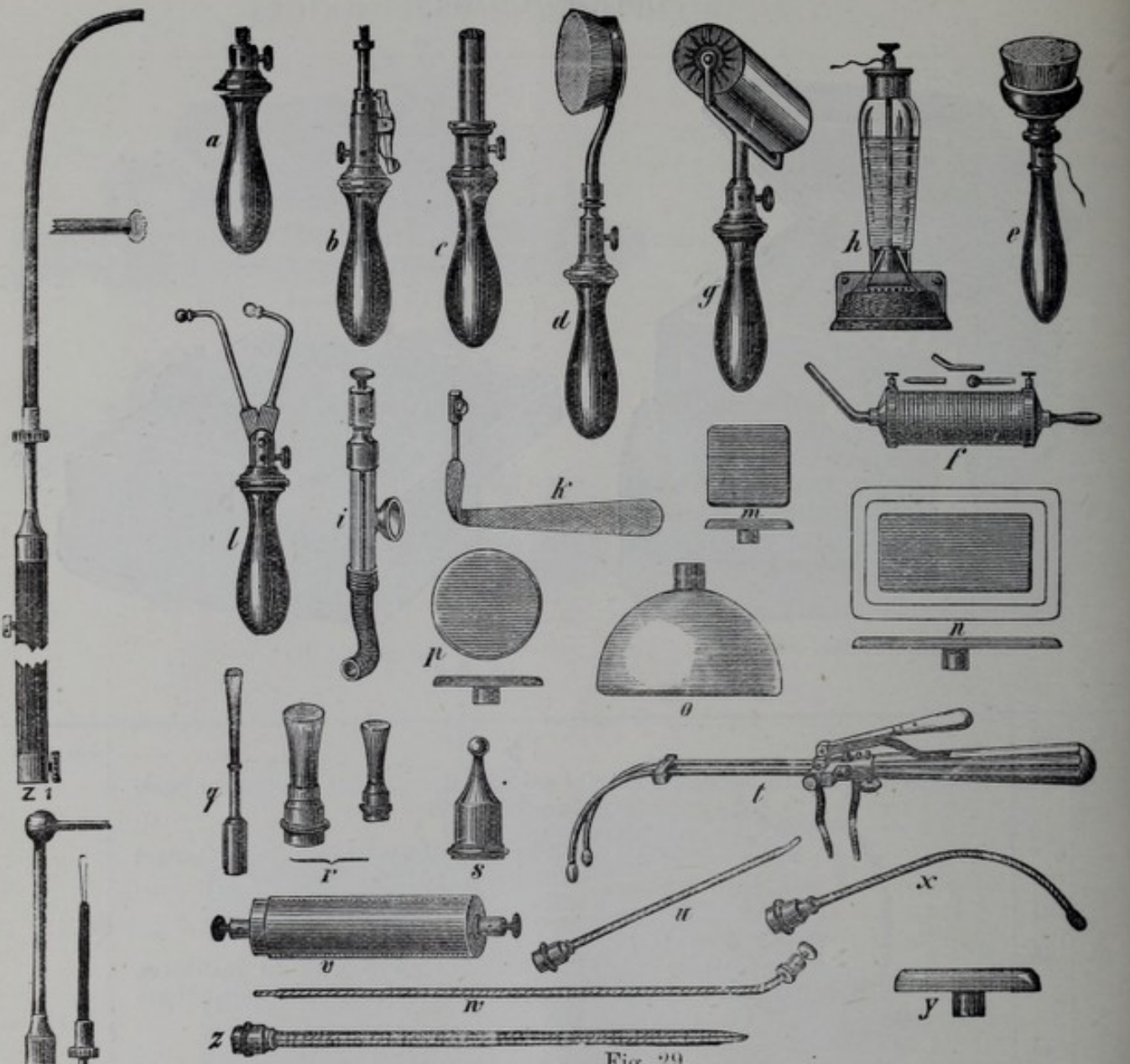


Fig. 29.

Fig. 30 Nos. 130—132.

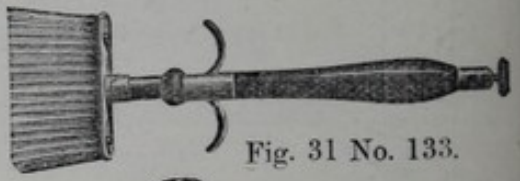


Fig. 31 No. 133.

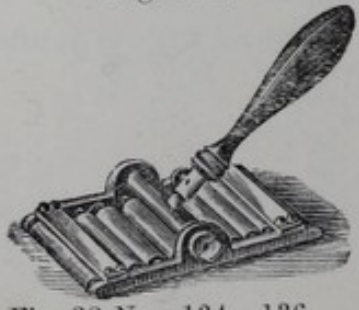


Fig. 32 Nos. 134—136.

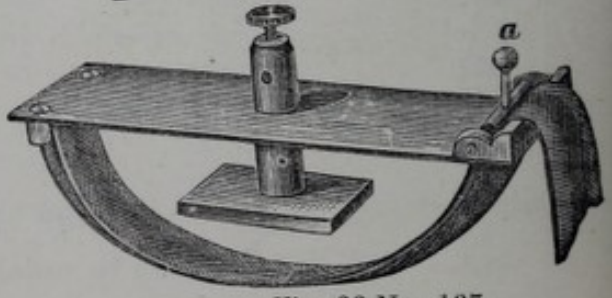


Fig. 33 No. 137.

Electrodes.

Fig.	No.		s.	d.
29a	91	**Simple Handle**...	2	3
b	92	**Handle** with Current Interruptor	7	0
c	93	**Dr. Erb's Brush Electrode**	7	0
d	94	**Brush Electrode**, oval 3 × 1 inch	9	0
	95	„ „ „ 2 × 1 „	8	0
e	96	„ „ round	8	6
	97	„ „ double	11	0
f	98	**Eye Magnet**, different sizes ... ... 15/- to	40	0
g	99	**Electro Massage-Roller**, large	14	0
	100	„ „ „ medium	9	0
	101	„ „ „ small	8	0
h	102	**Dr. Stein's Automatic Self-Moistening Electrode**	9	0
i	103	**Ear Electrode**	5	0
k	104	**Neck Electrode**	5	0
l	105	**Adjustable Double Handle**	9	0
m	106	**Dr. Erb's Standard Electrode** $1\frac{1}{8} \times 1\frac{1}{8}$ inch	2	0
	107	„ „ „ „ 2 × 2 „	2	6
n	108	„ „ **Plate Electrode** 2 × 4 „	3	0
	109	„ „ „ „ $2\frac{1}{2} \times 5$ „	3	6
	110	„ „ „ „ 3 × 6 „	4	0
o	111	**Round Plate Electrode** $1\frac{1}{4}$ inch diameter	1	6
p	112	„ „ „ $1\frac{1}{2}$ „ „	1	6
	113	„ „ „ 2 „ „	2	0
q	114	**Wire Brush Electrode**	1	6
r	115	**Brush Electrode**, small	2	0
	116	„ „ large	2	6
s	117	**Dr. Erb's Button-shape Electrode**, $\frac{1}{6}$ inch diameter	1	6
	118	„ „ „ „ $\frac{1}{2}$ „ „	2	0
	119	„ „ „ „ $\frac{3}{4}$ „ „	2	6
t	120	**Double Electrode for Larynx**	15	0
u	121	**Bladder Electrode**	2	6
v	122	**Hollow Brass Handle**	3	0
	123	„ „ „ nickeled	4	6
w	124	**Rectum Electrode**	3	0
x	125	**Uterine** „	3	0
y	126	**Flat** „	3	0
z	127	**Double Bladder Electrode**	7	0
z1	128	**Adjustable Electrode for Larynx** with interruptor	12	6
z2	129	„ „ „ Ear „ „	12	6
30	130	**Dr. Hunerfauth's Rectum Electrode**, large	7	6
	131	„ „ „ „ medium	7	0
	132	„ „ „ „ small	6	6
31	133	**Dr. Rumpf's Brush Electrode**	16	0
32	134	**Dr. Mayerhausens Roller Electrode**, with 8 rollers	20	0
	135	„ „ „ „ „ 10 „	22	0
	136	„ „ „ „ „ 12 „	24	0
33	137	**Adjustable Belt Electrode**	9	0

All Plate and Ball Electrodes are tinned and covered with a double coating of linen.

Electrodes not mentioned above can be made to order.

Rheostats and Commutators.

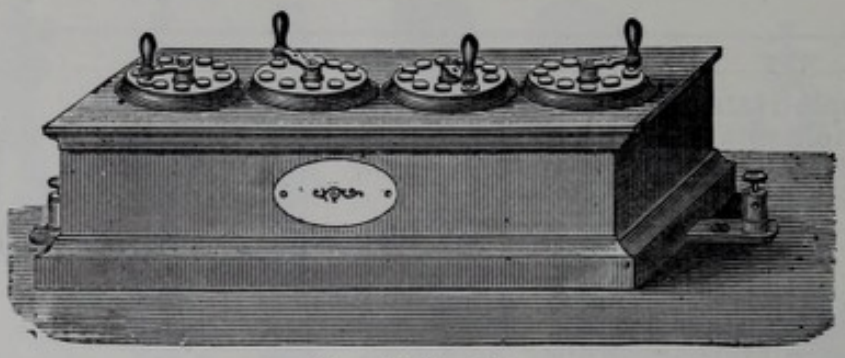


Fig. 40 No. 153.

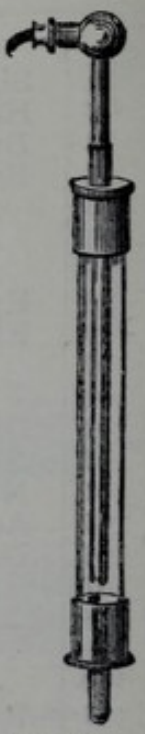


Fig. 34.

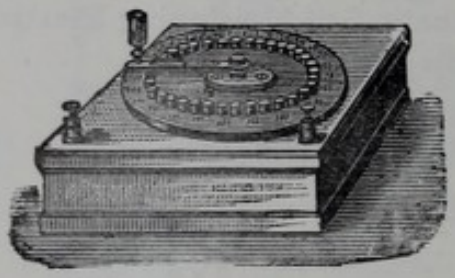


Fig. 36 Nos. 141-146.

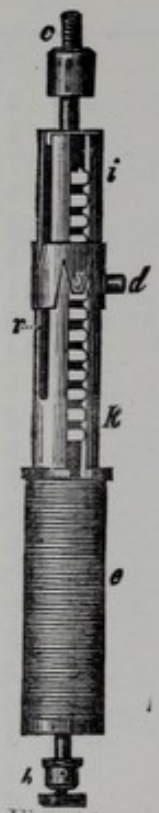


Fig. 42e

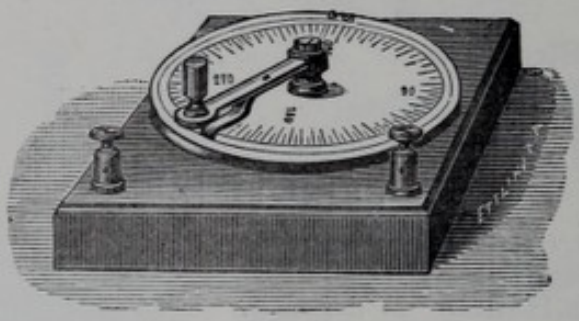


Fig. 41 No. 154.

Fig. 42a

Fig. 38.

Fig. 39.

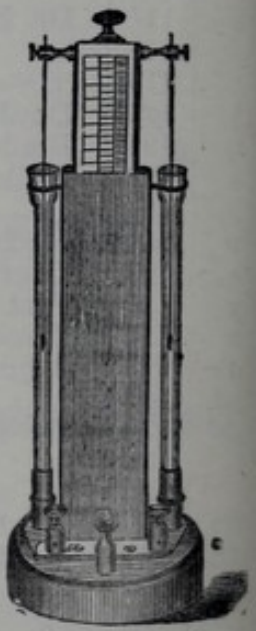


Fig. 35.

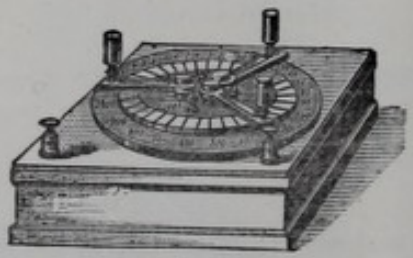


Fig. 37 Nos. 147-149.

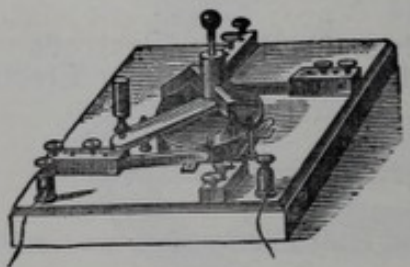


Fig. 43 Nos. 156 & 157.

Rheostats and Commutators.

Fig.	No.		£	s.	d
		LIQUID RHEOSTATS.			
34	138	With 1 Glass Tube	0	15	0
35	139	„ 2 Glass Tubes	1	7	0
	140	„ 4 „ „	2	12	0
		HANDLE RHEOSTATS.			
36	141	With 20 Contacts (Fig. 38) 1000 Ohms Total Resistance	3	5	0
	142	„ 22 „ „ 2000 „ „ „	3	12	0
	143	„ 24 „ „ 3000 „ „ „	4	0	0
	144	„ 26 „ „ 4000 „ „ „	4	10	0
	145	„ 28 „ „ 5000 „ „ „	5	0	0
	146	„ 35 „ „ 10000 „ „ „	6	5	0
		If with large square Contacts (Fig. 39), Nos. 141 to 146, cost extra	0	18	0
37	147	With 33 Contacts (Fig. 39), 3 Handles, 1 Plug, 2110 Ohms Total Resistance	7	0	0
	148	„ 44 „ „ 4 „ 6610 „ „ „	9	0	0
	149	„ 44 „ „ 4 „ 11,100 „ „ „	10	10	0
40	150	„ 33 „ (Fig. 38), 3 „ 1100 „ „ „	7	0	0
	151	„ 33 „ „ 3 „ 1 Plug, 2100 „ „ „	8	0	0
	152	„ 44 „ „ 4 „ 6110 „ „ „	8	10	0
	153	„ 44 „ „ 4 „ 11,100 „ „ „	9	0	0
41	154	**Graphite Rheostat**	1	14	0
42 a & c	155	**Rheostat**, handle shape, up to 5000 Ohms Resistance	2	16	0
		COMMUTATORS.			
43	156	**Commutator** for Galvanisation and Faradisation	1	4	0
	157	„ (Brenner's System) with adjustable Contact	1	16	0
	158	„ (de Watteville's System), for Galvanic, Faradic and Galvano-Faradic Currents	1	18	0

Galvanometers for Absolute Measurement.

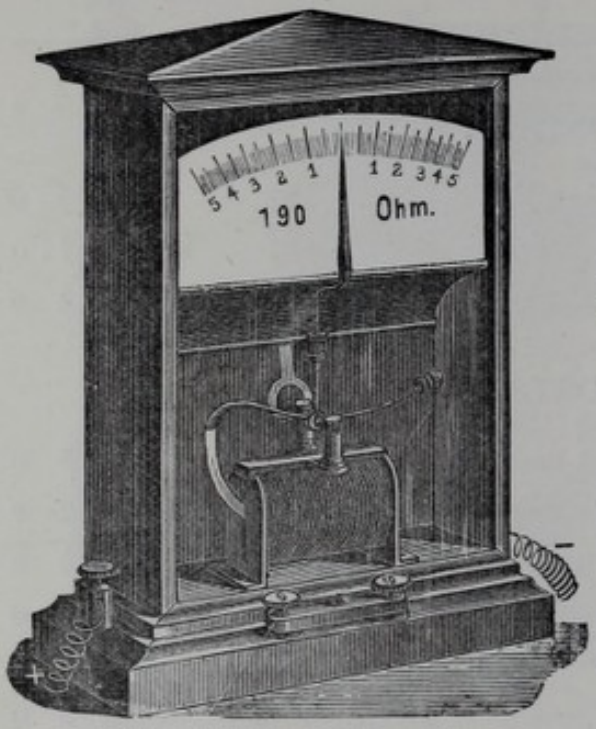


Fig. 44 No. 159.

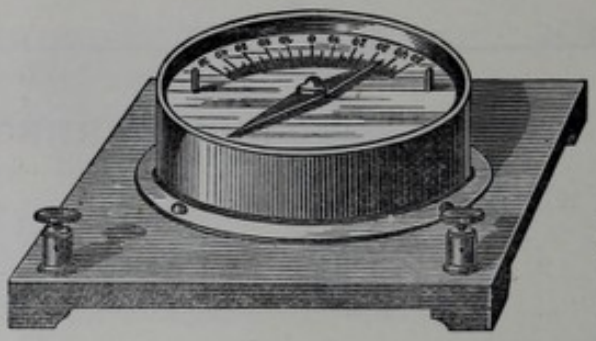


Fig. 46
Nos.
162 & 163.

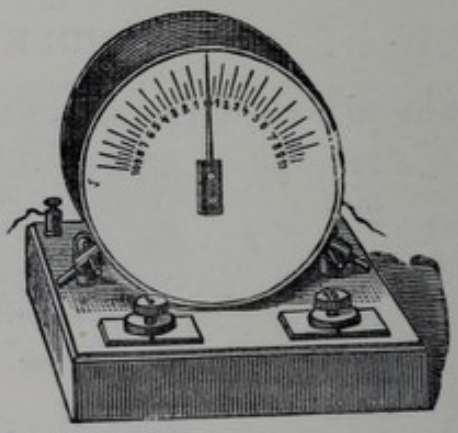


Fig. 47
Nos.
164 & 165

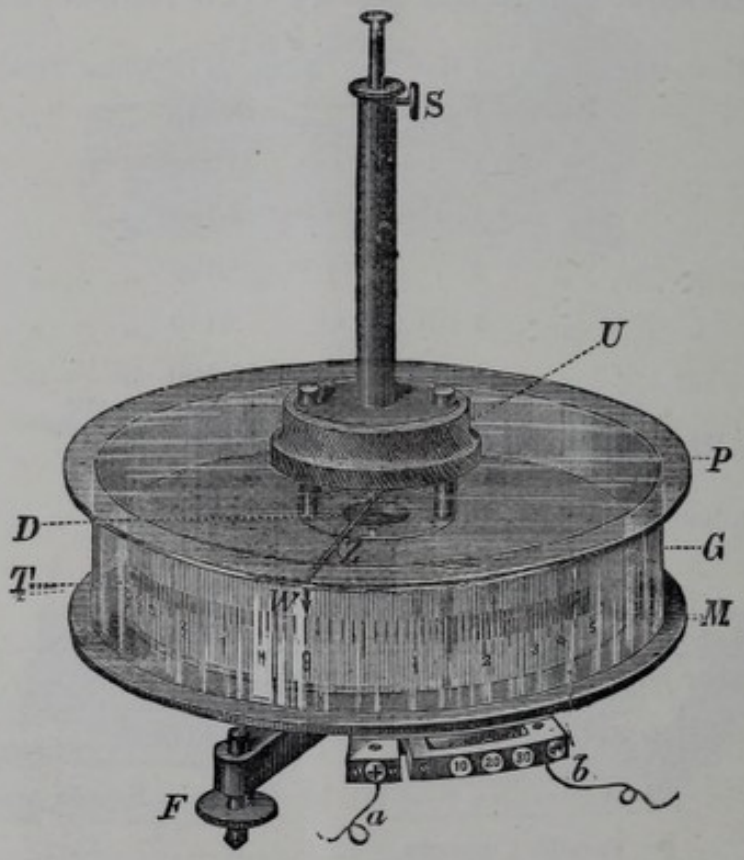


Fig. 45 No. 161.

Galvanometers for Absolute Measurement.

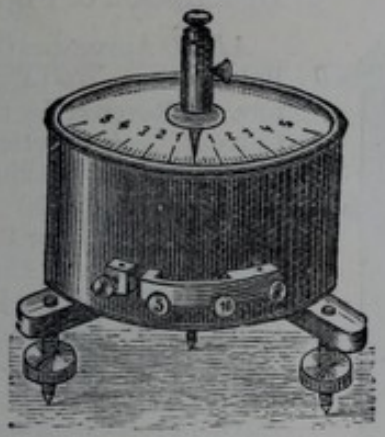


Fig. 48 No. 166.

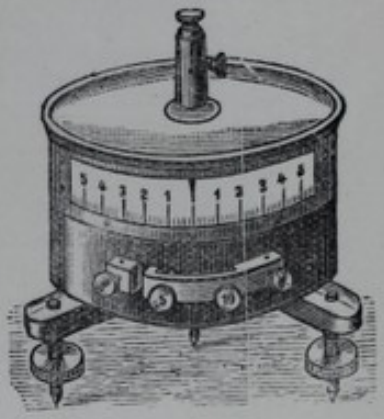


Fig. 49 Nos. 167 & 168.

Fig.	No.		£	s	d.
44	159	**Vertical Galvanometer** with Solenoid in Walnut Case	4	10	0
	160	„ „ in Nickeled Metal Case	4	10	0
45	161	**Dr. Edelmann's Large Horizontal Galvanometer**, indicating from 0, 1 to 80 Milliampères. The divisions are very distinct and can be read at a distance of several yards	11	0	0
46	162	**Horizontal Galvanometer**, indicating from $\frac{1}{2}$ to 20 Milliampères ...	2	6	0
	163	„ „ smaller size, indicating from $\frac{1}{2}$ to 12 Milliampères	1	13	0
47	164	**Vertical Galvanometer**, indicating from $\frac{1}{2}$ to 15 Milliampères	3	10	0
	165	„ „ smaller size	2	10	0
48	166	**Dr. Edelmann's Horizontal Galvanometer,** indicating from $\frac{1}{10}$ to 50 Milliampères	5	10	0
49	167	**Horizontal Galvanometer** with Vertical Scale	6	10	0
	168	„ „ for use with apparatus Nos. 169 to 177 ...	7	10	0

Cabinets for Galvanisation and Faradisation.

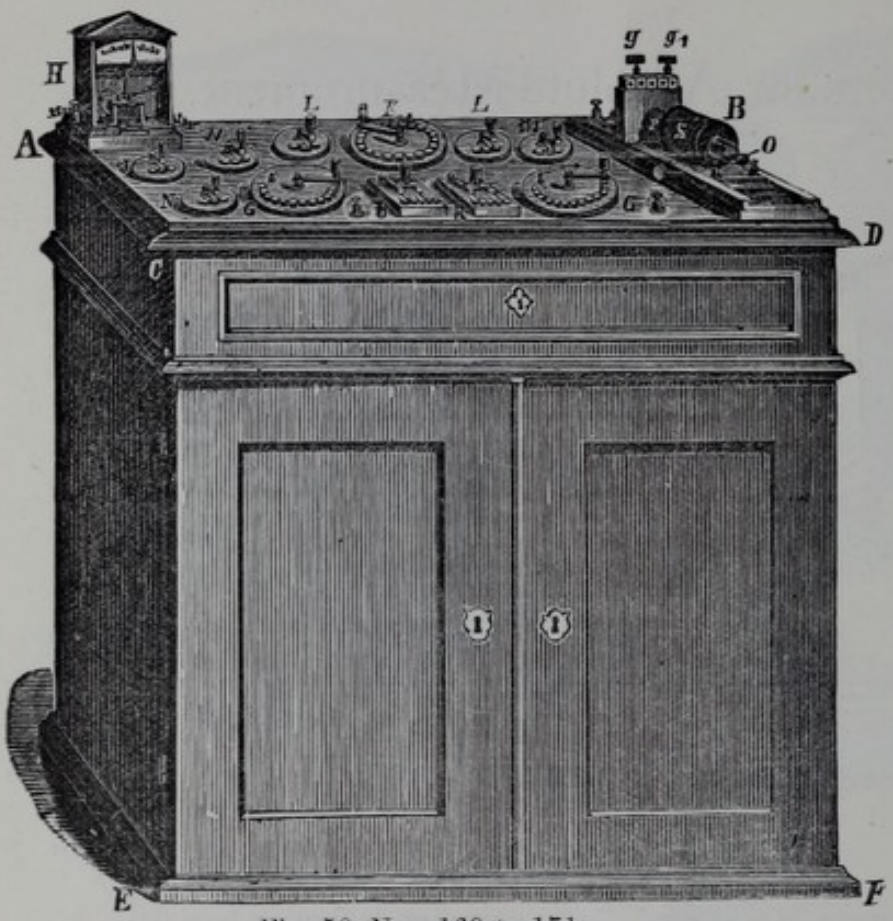


Fig. 50 Nos. 169 to 171.

Description of Fig. 50 to 52:

ABCD Apparatus Case. *CDEF* Battery Case. *GG*1 Current Selectors. *b* Reverser for the Galvanic Current. *H* Vertical Galvanometer. *J* Galvanometer Switch. *K* Rheostat (5000 Ohms). *L* Rheostat Switch for Primary, and *L*1 for Secondary Currents. *M* Rheostat Switch for Faradic and Galvano-Faradic Currents. *N* Commutator for Galvanic, Faradic and Galvano-Faradic Currents. *PSO* Induction Apparatus. *P* Primary Coil. *S* Secondary Coil. *O* Regulator for the Primary Coil. *f* Hammer with Interruptor. *g* & *g*1 Plugs for Batteries and Primary and Secondary Currents. *R* Reverser for the Faradic Current.

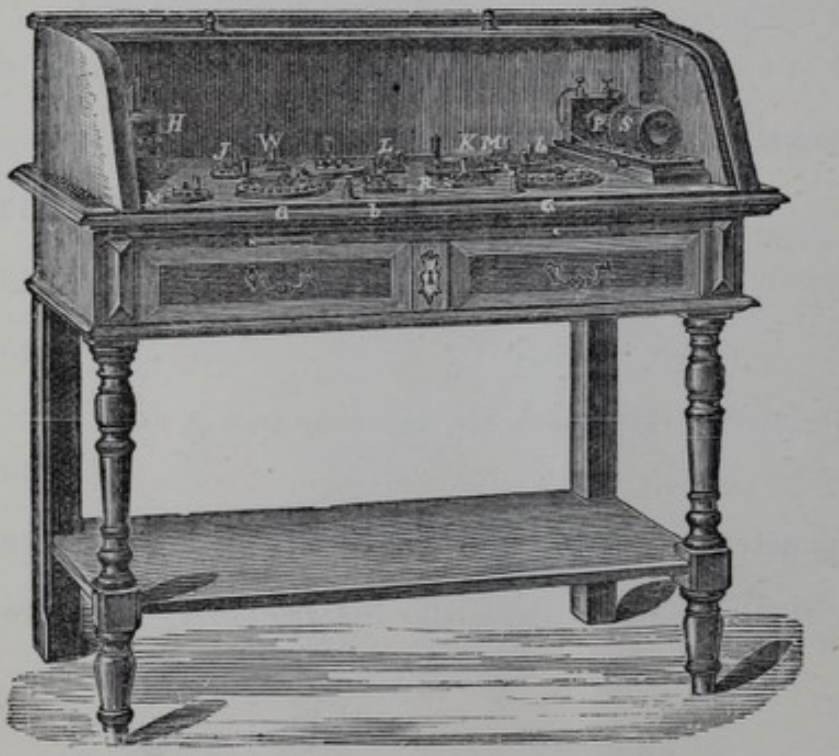


Fig. 51 Nos. 172 and 173.

N.B.—If fitted with the absolute-reading horizontal Galvanometer with vertical Scale (Fig. 49 No. 168) the Cabinets can be turned in any direction desired, without influencing the Galvanometer.

Cabinets can be supplied of Oak or Walnut.

All Cabinets are fitted with Leclanché Cells, but can if desired be furnished with any other Batteries.

Cabinets for Galvanisation and Faradisation.

Fig.	No.		With 40 Cells.	With 50 Cells.	With 60 Cells.
50	169	**Cabinet** with Current Selectors *GG*1, Reverser *b*; Galvanometer, Fig. 47 No. 164; and Accessories	22 0 0	24 0 0	26 0 0
50	170	**Cabinet** with Current Selectors *GG*1, Reverser *b*; Induction Coil, Fig. 24 No. 82, Reverser *R*, Switch *M*; Battery for the Induction Apparatus; Galvanometer, Fig. 47 No. 64; and Accessories	32 0 0	34 0 0	36 0 0
50	171	**Cabinet** with all Apparatus shown in Fig. 50, and Accessories	42 0 0	44 0 0	46 0 0
51	172	**Cabinet** with Revolving Front, Current Selectors *GG*1, Reverser *b*; Induction Coil, Fig. 24 No. 82, Switch *M*; Battery for the Induction Apparatus; Galvanometer, Fig. 49 No. 168; and Accessories	43 0 0	45 0 0	47 0 0
51	173	**Cabinet** with Galvanometer, Fig. 49 No. 168, and all Apparatus shown in Fig. 51; and Accessories	61 0 0	64 0 0	67 0 0

If with Galvanometer, Fig. 49 No. 168 (see N.B. page 17) Nos. 169 to 171, cost extra £4.

If with Galvanometer, Fig. 44 No. 144, Nos. 169 to 171, cost extra, £2.

Cabinets for Galvanisation and Faradisation.

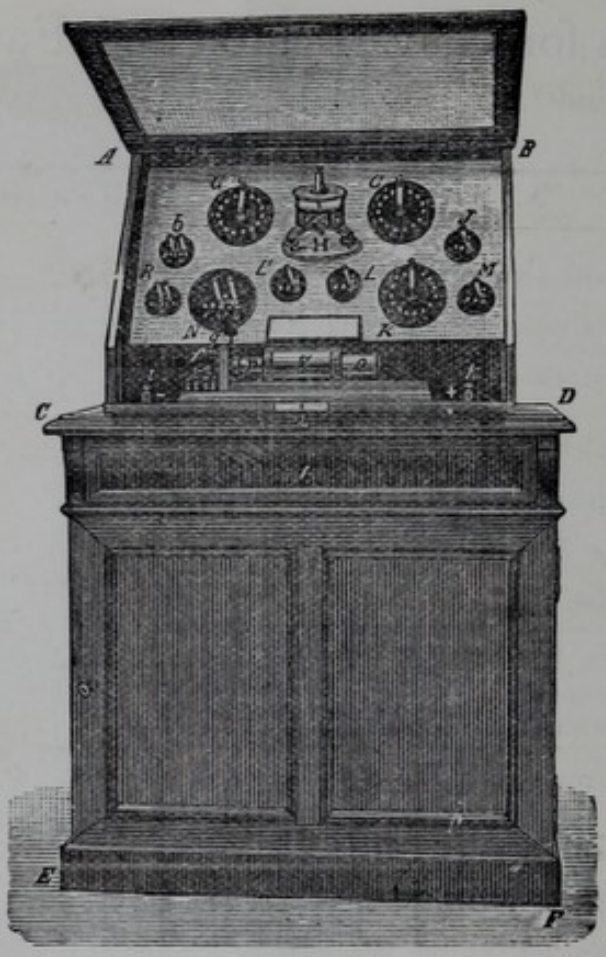


Fig. 52 Nos. 174—177.

Fig.	No.		With 40 Cells.			With 50 Cells.			With 60 Cells.		
			£	s.	d.	£	s.	d.	£	s.	d.
52	174	**Cabinet** with Current Selectors *GG*1, Reverser *b*; Induction Coil, Fig. 24 No. 82, Switch *R*, Battery for the Induction Apparatus; Galvanometer, Fig. 49 No. 168; and Accessories	42	0	0	44	0	0	46	0	0
	175	Ditto, but with Galvanometer, Fig. 44 No. 159	40	0	0	42	0	0	44	0	0
	176	**Cabinet** with Galvanometer, Fig. 49 No. 168; all Apparatus shown in Fig. 52; and Accessories	54	0	0	56	0	0	58	0	0
	177	Ditto, but with Galvanometer, Fig. 44 No. 159	52	0	0	54	0	0	56	0	0

For description see page 17.

Electrodes for Electrolysis

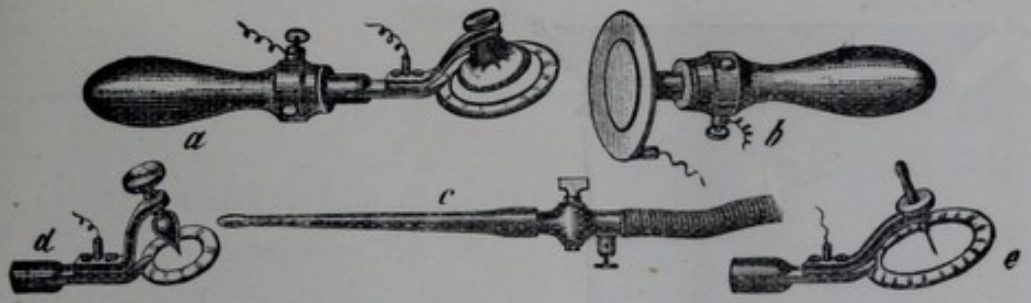


Fig. 53 Nos. 178—183.

Fig. 54b No. 185

Fig. 54 No. 184.

Fig. 55 No. 186 & 187.

Fig. 56 No. 188.

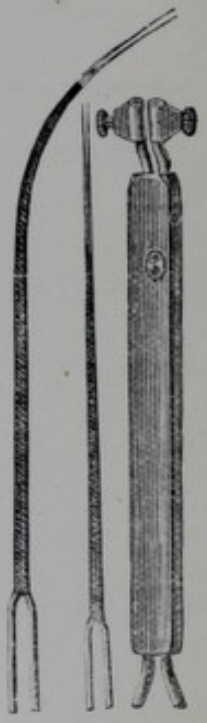


Fig. 57
No. 189 & 190.

Fig.	No.		s.	d.
53a	178	**Electrode** by Dr. Boudet	14	0
53b	179	„ „ „ „	14	0
53c	180	Dr. Boudet's **Rectum Electrode** with tube	10	0
53d	181	„ „ **Electrolytic Electrode**	14	0
53e	182	„ „ „ „ with Steel Needle	14	0
53e	183	„ „ „ „ „ Gold „	16	0
54	184	**Needle Holder** for the reception of different needles, ... per pair	15	0
54b	185	**Platinum-Iridium Needles** with lancet-points. According to size, per pair 4/- to	8	0
55	186	**Needle Holder** with Interruptor (by Dr. Behrend)	13	6
55	187	„ „ without Interruptor	5	0
56	188	**Electrolytic Electrode** with adjustable Platinum Needle	11	0
57	189	**Electrolytic Double Needles**, curved or straight with Platinum Iridium Points	3	6
57	190	**Handle with Interruptor**	14	0

Apparatus for Galvanisation, Faradisation and Hydro-Electric Baths. (Dr. Stein's System.)

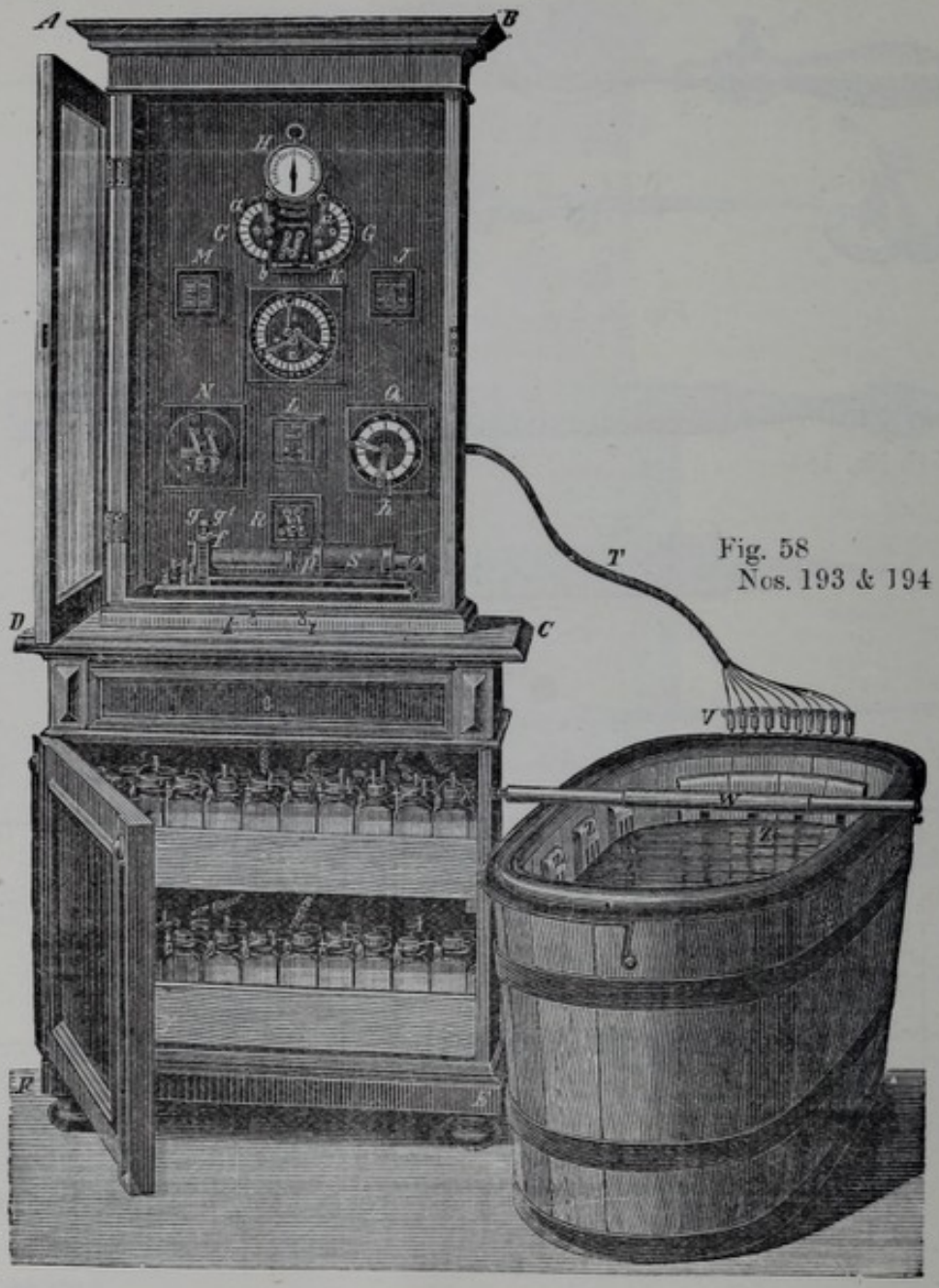


Fig. 58
Nos. 193 & 194

ABCD Apparatus Case. *CDEF* Battery Case with 60 Dry Cells. *GG* Current Selector with Cell Collectors *aa*, Current Reverser *b*, and Galvanometer *H*. *J* Galvanometer Switch. *K* Rheostat. *L* Rheostat Switch for Primary and Secondary Currents, and *M* for Faradic and Galvano-Faradic Currents. *N* Commutator. *S* Secondary Coil of the Induction Apparatus, *P* Primary Coil, and *O* Regulator for same. *f* Interruptor, *g* & *g*1 Terminals. *Q* Commutator for mono-polar and bi-polar Baths. *R* Commutator for Faradic Currents. *T* Connecting Cable. *V* Connecting Terminals. *W* Rod for mono-polar Baths. *ik* Terminals for Galvanisation and Faradisation for use of the Cabinet without Bath.

The Cabinets can be supplied of Oak or Walnut. Any other system of Electric Baths can also be supplied.

Apparatus for Galvanisation, Faradisation and Hydro-Electric Baths. (Dr. Stein's System.)

Fig.	No.		With 40 Cells.			With 50 Cells.			With 60 Cells.		
			£	s.	d.	£	s.	d.	£	s.	d.
	191	**Cabinet** for Galvanisation and Faradisation same as Fig. 58, but without Bath Tub and Commutator *Q*	59	0	0	61	0	0	63	0	0
	192	Ditto, but with Galvanometer Fig. 49 No. 168	61	0	0	63	0	0	65	0	0
58	193	**Complete Apparatus** with Bath Tub, No. 200; Galvanometer, Fig. 44 No. 169; and Accessories	74	0	0	76	0	0	78	0	0
58	194	Ditto, but with Galvanometer, Fig. 49 No. 168	76	0	0	78	0	0	80	0	0
50	195	**Complete Apparatus,**									
		No. 170 } With Commutator for the Bath, Accessories, and Bath Tub No. 201 ...	45	0	0	47	0	0	49	0	0
50	196	Ditto, No. 171 } ...	55	0	0	57	0	0	59	0	0
51	197	Ditto, No. 173 } ...	55	0	0	57	0	0	59	0	0
52	198	Ditto, No. 175 } With Commutator for the Bath, Accessories, and Bath Tub No. 200 ...	67	0	0	69	0	0	71	0	0
52	199	Ditto, No. 177 } ...	73	0	0	76	0	0	79	0	0
58z	200	**Oak Bath Tub**, arranged for Electric Baths, white inside, lacquered outside with black, polished edge							12	0	0
	201	Ditto, but without polished edge							10	0	0

The Cabinets Nos. 191 to 194 are fitted with Dr. Stein's Dry Cells (Fig. 8 No. 21), Nos. 195 to 199, with Leclanché Cells, but can, if desired, be furnished with any other Batteries.

Should it be necessary to place the Batteries apart from the Cabinet, the Apparatus Nos. 191 to 194 can be supplied without the Battery Case *CDEF*. A separate case of Pinewood is then supplied for the Batteries.

Apparatus for Hydro-Faradic Baths.

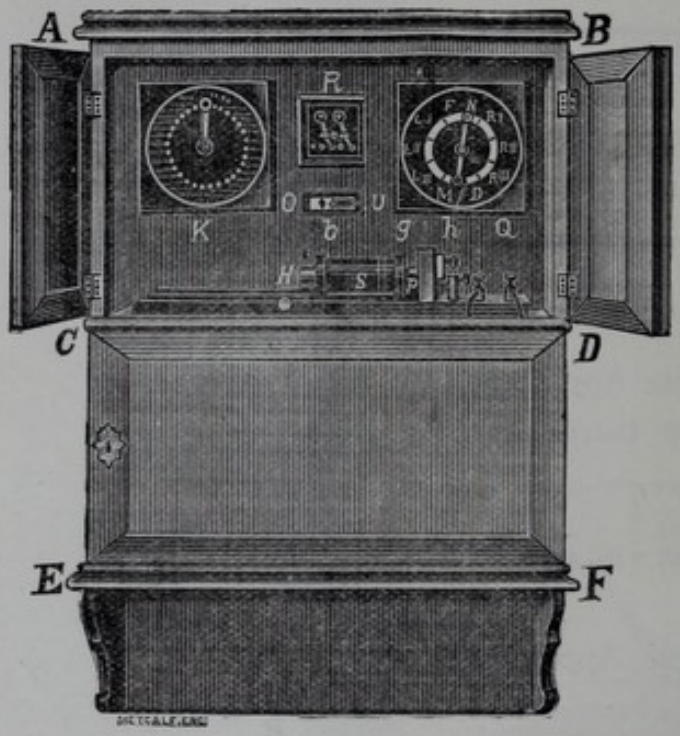


Fig. 59 Nos. 202—206.

ABCD Apparatus Case. *CDEF* Case for the Induction Battery. *HPS* Large Sledge Coil. *Q* Commutator for mono-polar and bi-polar Baths. *K* Rheostat (5000 Ohms). *R* Reverser for the Faradic Current. *b* Battery Switch.

Fig.	No.		£	s.	d.
59	202	**Complete Apparatus** with Induction Coil No. 69, Battery for the Induction Coil, Commutator for bi-polar baths and Bath Tub No. 201	23	0	0
	203	Ditto, but with Rheostat (5000 Ohms)	29	0	0
	204	**Complete Apparatus** with Induction Coil No. 84, Commutator for mono-polar and bi-polar Baths and Bath Tub No. 200	28	0	0
	205	Ditto, but with Rheostat (5000 Ohms)	34	0	0
	206	Ditto, but with Rheostat (10,000 Ohms)	36	0	0

Electrodes for Electric Baths.

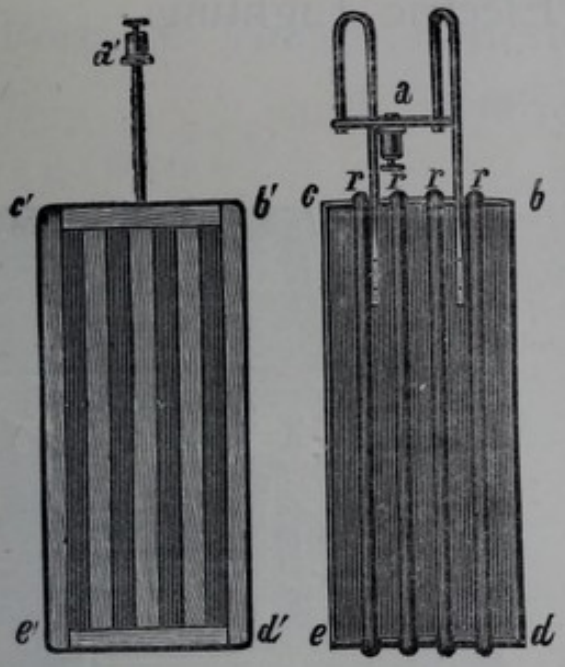


Fig. 61a No. 210. Fig. 61b Nos. 211 & 212.

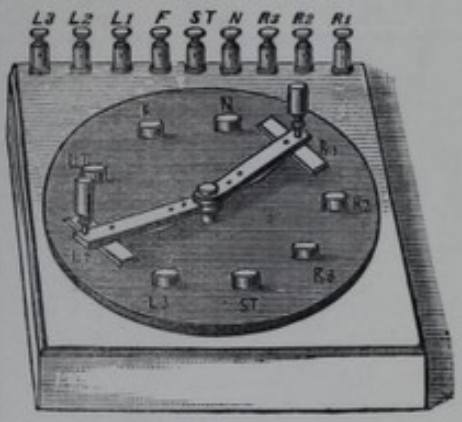


Fig. 62 No. 213.

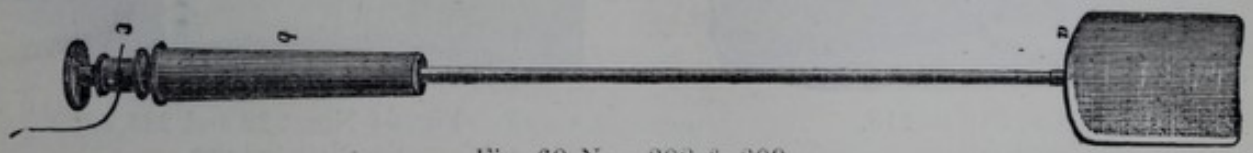


Fig. 60 Nos. 208 & 209.

Fig.	No.		£	s.	d.
58W	207	**Rod** for mono-polar Baths		12	6
60	208	**Paddle Electrode** with insulated stem, handle with screw-terminal and nickeled polished copperplate 8 × 12 inches		10	0
60	209	Ditto, but with copperplate 7 × 10 inches		8	0
61a	210	**Bath Electrode**, straight, mounted with wood		12	6
61b	211	„ „ curved, „ „ Coutchouc	2	0	0
61b	212	„ „ „ „ „ wood		15	0
62	213	**Commutator** for bi-polar baths	2	2	0
59q	214	„ for mono-polar and bi-polar baths	3	3	0
	215	3-**Wire, India-rubber covered Cable** to connect 2 Electrodes with one terminal of the Induction Apparatus		8	0

The Induction Coils Nos. 82—87 can be recommended for Faradic Baths.

Portable Batteries for Galvano-Cautery and Electric Lighting.

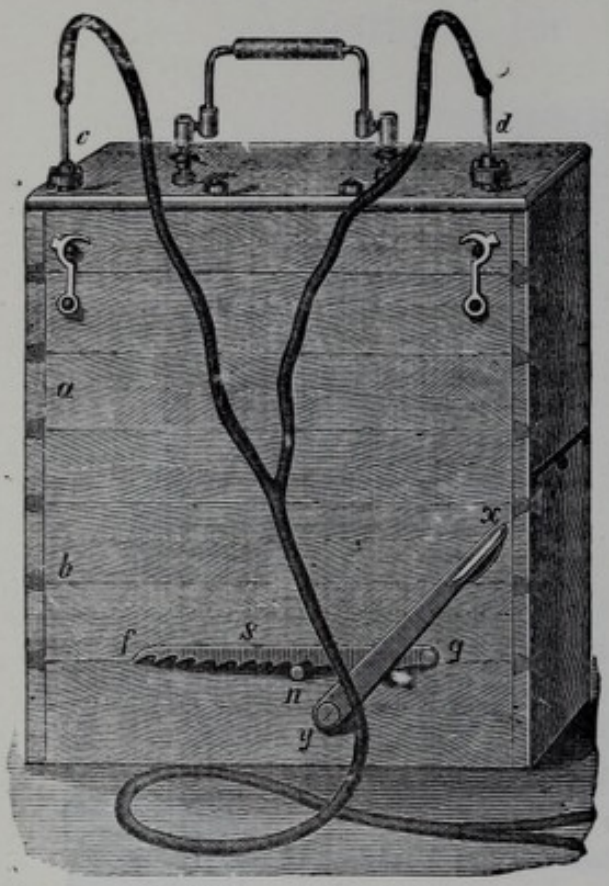


Fig 63 Nos. 216 to 218.
One-fourth full size

Fig. 64 Nos. 222 and 223.
One-sixth full size.

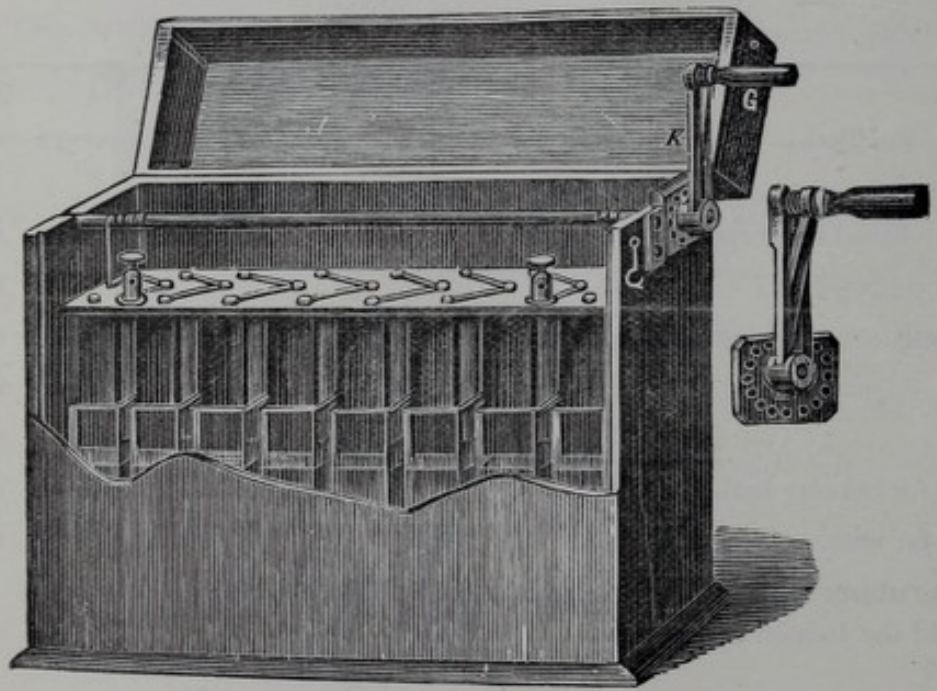


Fig. 65 Nos. 224 and 225.
One-sixth full size.

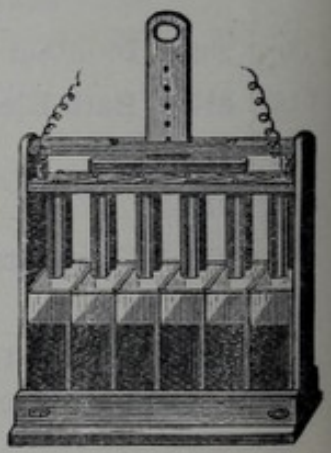


Fig 66. Nos. 226 and 227.
One-sixth full size.

Portable Plunge Batteries for Galvano-Cautery and Electric Lighting.

Voltage for Incandescent Lamps:

6 Cells = 12 Volts. $2\frac{1}{2}$ Amp.
8 „ = 16 „ 3 „

Ampèrage for Cautery:

2 Cells = $12\frac{1}{2}$ Amp. 4 Volts.

Fig.	No.		£	s.	d.
63	216	**Battery** of 6 small Cells for Lighting	2	2	0
	217	„ „ 2 large „ „ Cautery	2	2	0
	218	„ for Galvano-Cautery or Lighting	2	6	0
	219	**Double Battery** for Galvano Cautery and Lighting	4	5	0
	220	„ „ of 12 Cells for Lighting	4	5	0
	221	**Battery** (same as No. 216), but with Lamp and Lifting-gear	2	10	0
64	222	„ of 8 Cells for Lighting	3	5	0
	223	**Double Battery** (same as No. 222) of 8 Cells for Lighting and 2 Cells for Galvano-Cautery	6	0	0
65	224	**Battery** of 8 Cells for Lighting, with mechanism for lifting the Carbons and Zincs with one hand	2	15	0
	225	„ „ 2 „ „ Galvano-Cautery	2	15	0
66	226	„ in plain case, of 6 Cells for Lighting	1	10	0
	227	„ of 8 Cells for Lighting	1	18	0

All Batteries can be supplied in Oak or Walnut Cases.

Portable Batteries for Galvano-Cautery.

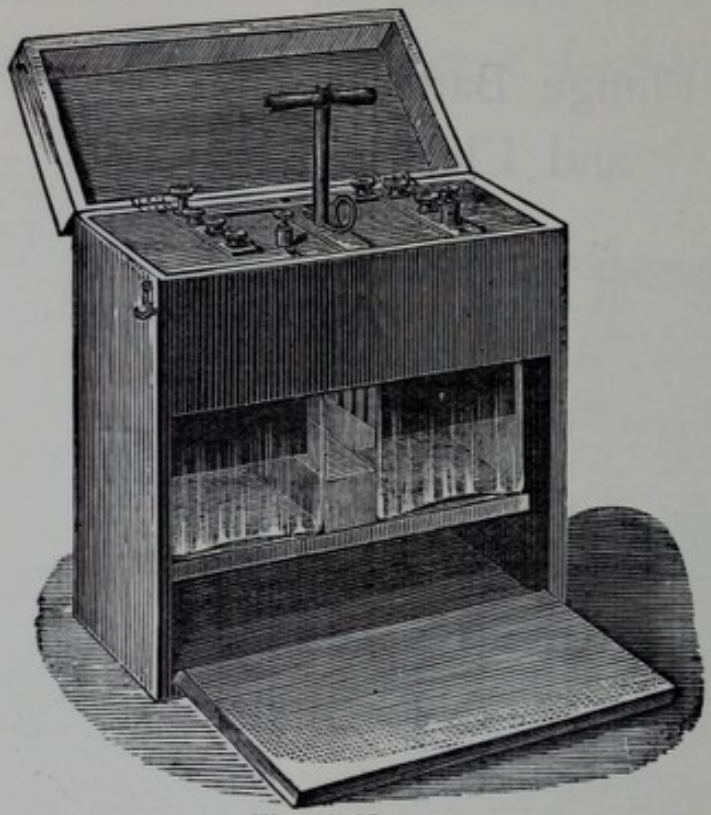


Fig. 67 No 228.

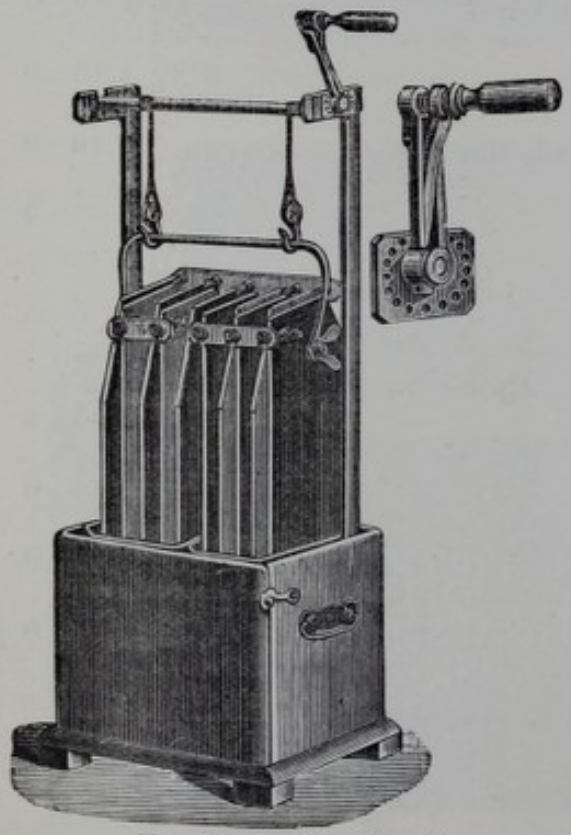


Fig. 69 Nos. 232 & 233.

Fig. 70 Nos. 234 & 235.

Portable Batteries for Galvano-Cautery.

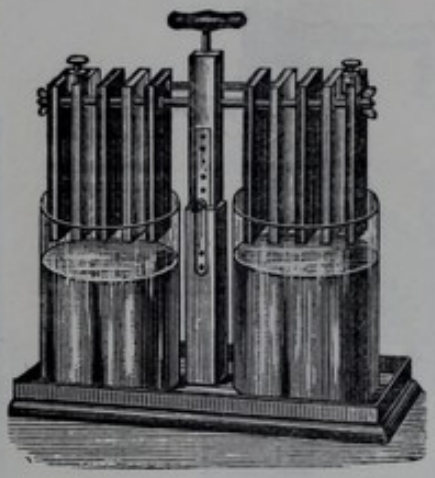


Fig. 68 Nos. 230 & 231.

Fig.	No.		£	s.	d.
67	228	**Portable Battery** by Dr. Boecker, in polished case with 2 Cells (8 Carbons 6 Zincs)	5	8	0
	229	Ditto, with 4 Cells	8	10	0
68	230	**Portable Battery** with mechanism for regulating the depth of immersion of the Electrodes, with 6 Carbons and 4 Zincs (8 × 4 inches)	3	15	0
	231	Ditto, larger size, with 6 Carbons and 4 Zincs (10 × 6 inches)...	5	10	0
69	232	**Large Battery** of 2 Cells (6 Carbons and 4 Zincs) with mechanism for lifting the Electrodes with one hand	6	15	0
	233	Ditto of 3 Cells	9	0	0
70	234	**Large Battery** (Professor Voltolini's System) of 4 Cells (14 Carbons and 12 Zincs) in polished Walnut case. The Acid is contained in strong ebonite cells, ($9\frac{1}{2} \times 4 \times 4\frac{1}{2}$ inches)	5	15	0
	235	Ditto of 2 Cells (8 Carbons, 6 Zincs)	4	0	0

Large Stationary Batteries for Electric Lighting and Galvano-Cautery.

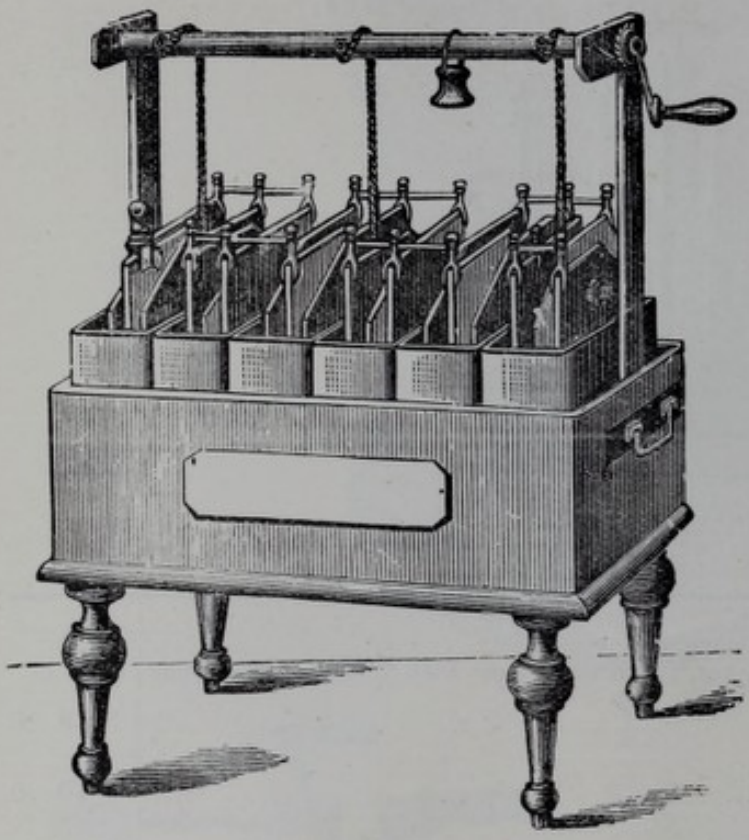


Fig. 71 No. 236.

Fig. 72 Nos. 239 and 240.

Fig.	No.		£	s.	d.
71	236	**Battery** of 6 Cells (12 Carbons and 6 Zincs), Glas-cells 8 × 8 × 3 inches ...	9	0	0
	237	„ „ 4 „ (8 „ „ 4 „) „ „	6	10	0
	238	„ „ 2 „ (4 „ „ 2 „) „ „	4	4	0
72	239	„ „ 2 „ with mechanism for lifting the Glas-cells and lowering the Electrodes (Glas-cells 12 inches high, 6½ inches diameter)	9	10	0
72	240	„ with turning-arrangement and Jars for cleaning Carbons and Zincs	10	0	0

Nos. 236 and 237 can be recommended for Electric Lighting; Nos. 238 to 240 for Galvano-Cautery.

Secondary Batteries for Electric Lighting and Galvano-Cautery.

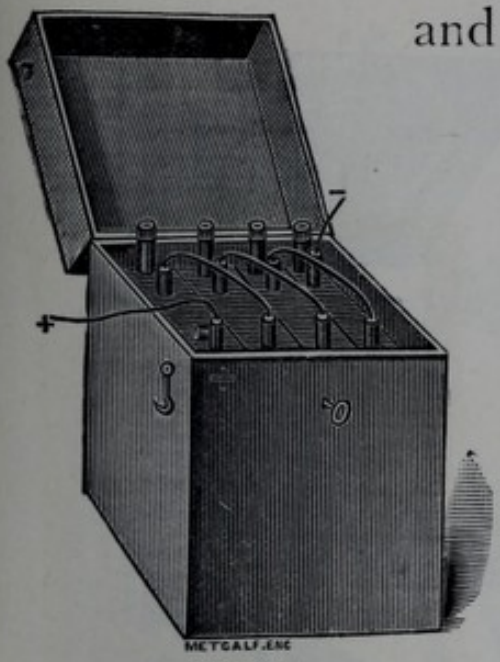


Fig. 73 Nos. 241 to 243.

PORTABLE ACCUMULATORS.

Fig.	No.		£	s.	d.
73	241	**Accumulator** (of 8 Volts) for Electric Lighting ...	3	3	0
	242	,, for Galvano-Cautery ...	3	3	0
	243	,, for Electric Lighting and Galvano-Cautery	6	6	0

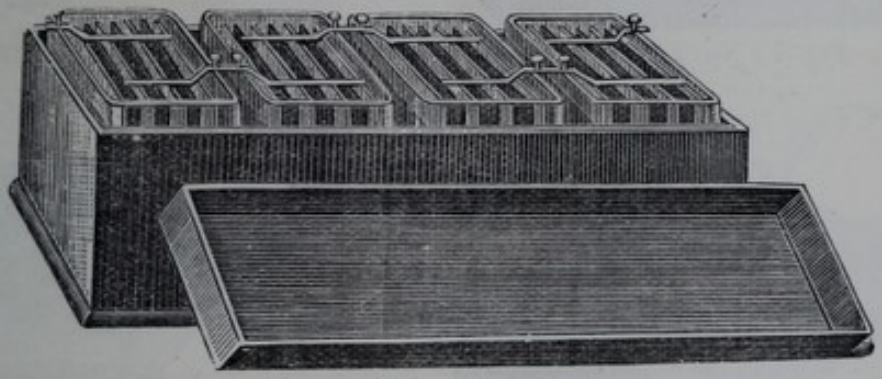


Fig. 74 Nos. 244 to 249.

STATIONARY ACCUMULATORS.

Fig.	No.		£	s.	d.
74	244	**Accumulator** of 7 Plates $5\frac{1}{2} \times 7$ inches	2	2	0
	245	**Two Accumulators**, No. 244, in case, for Galvano-Cautery	4	15	0
	246	**Three** ,, ,, ,, ,, ,, ...	6	6	0
	247	**Four** ,, ,, ,, for Electric Lighting	9	5	0
	248	**Five** ,, ,, ,, ,, ,, ...	11	10	0
	249	**Six** ,, ,, ,, ,, ,, ...	13	10	0
	250	**Eight Accumulators**, No. 244, in polished mahogany case, for Electric Lighting, [and / or] Galvano-Cautery, and with Rheostats for Lighting and Galvano-Cautery	37	0	0

Rheostats for Cautery and Electric Light.

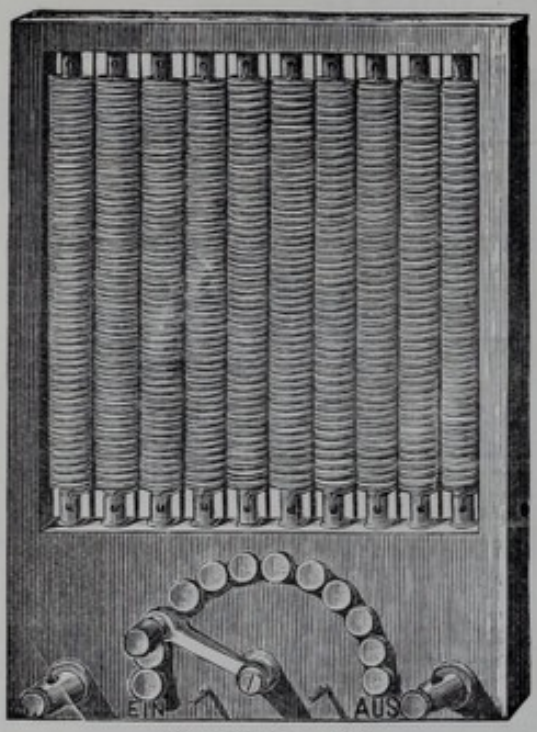


Fig. 75 No. 251.

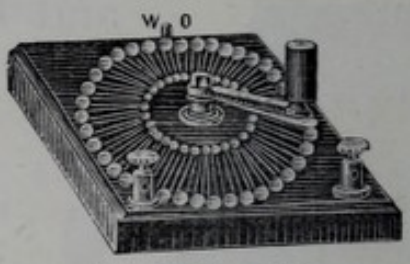


Fig. 76 No. 252.

Fig. 77 No. 253.

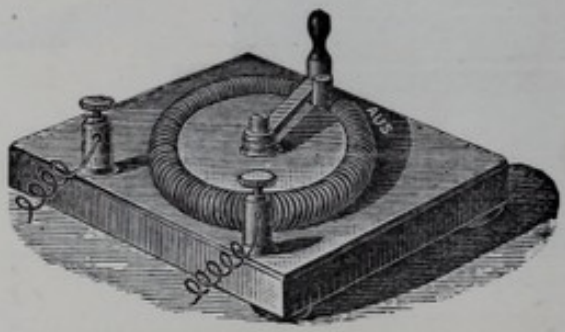


Fig. 78 No. 254.

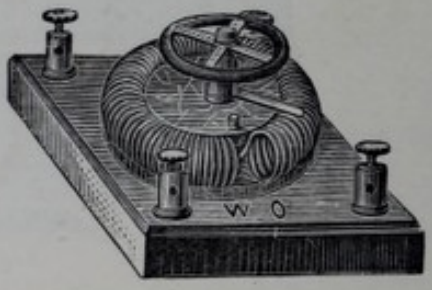


Fig. 79 No. 255.

Fig.	No.		£	s.	d.
75	251	**Rheostat** for Electric Light	1	10	0
76	252	„ „ „ „		17	6
77	253	„ „ „ „		19	0
78	254	„ „ Galvano-Cautery		15	0
79	255	„ „ „ „	1	6	0

Instruments for Galvano-Cautery.

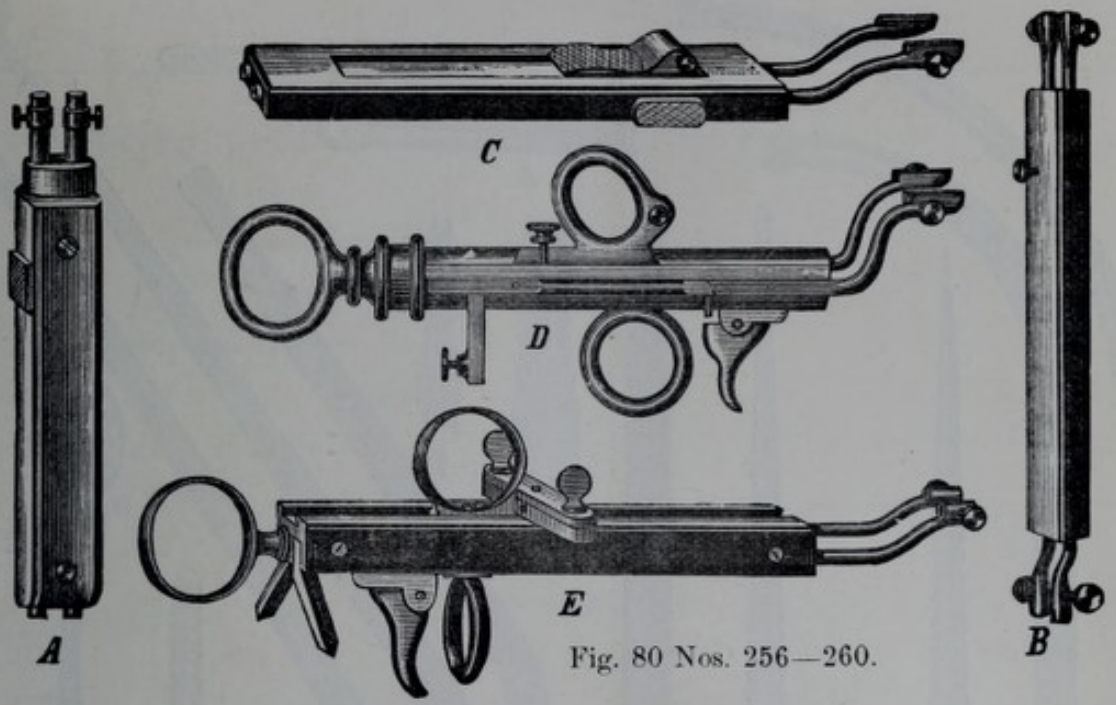


Fig. 80 Nos. 256—260.

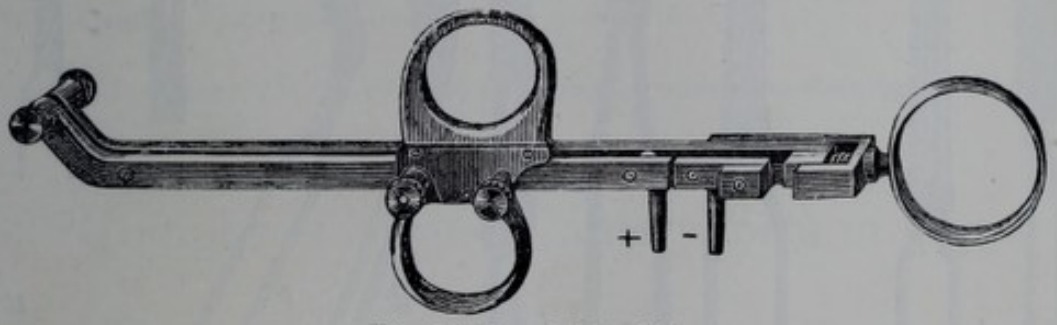


Fig. 81 Nos. 261 & 262.

Fig. 82 No. 263.

Fig.	No.		£	s.	d.
80A	256	**Simple Cautery Handle** with Interrupting Contact		14	0
B	257	Ditto, smaller size		12	0
C	258	**Universal Cautery Handle** with Interrupting Contact	1	2	0
D	259	Ditto, by Dr. Schech	1	8	0
E	260	Ditto, by Dr. v. Bruns	1	12	0
81	261	**Universal Cautery (Metal) Handle** by Dr. Keimer with vertical rings	1	18	0
	262	Ditto, with horizontal rings	1	18	0
82	263	**Round (Metal) Handle** for eye and teeth operations		16	0

Instruments for Galvanic Cautery.

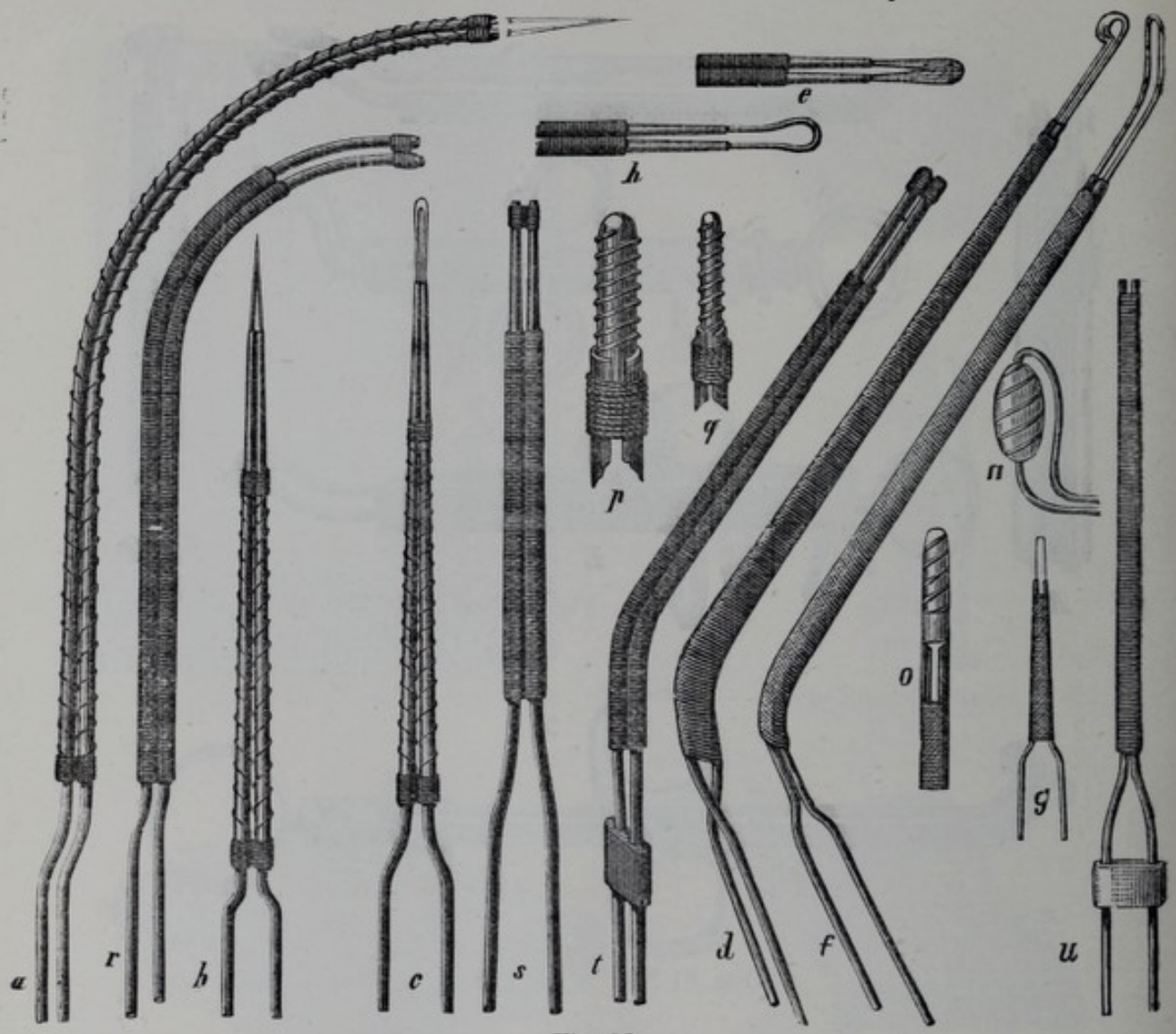


Fig. 83.

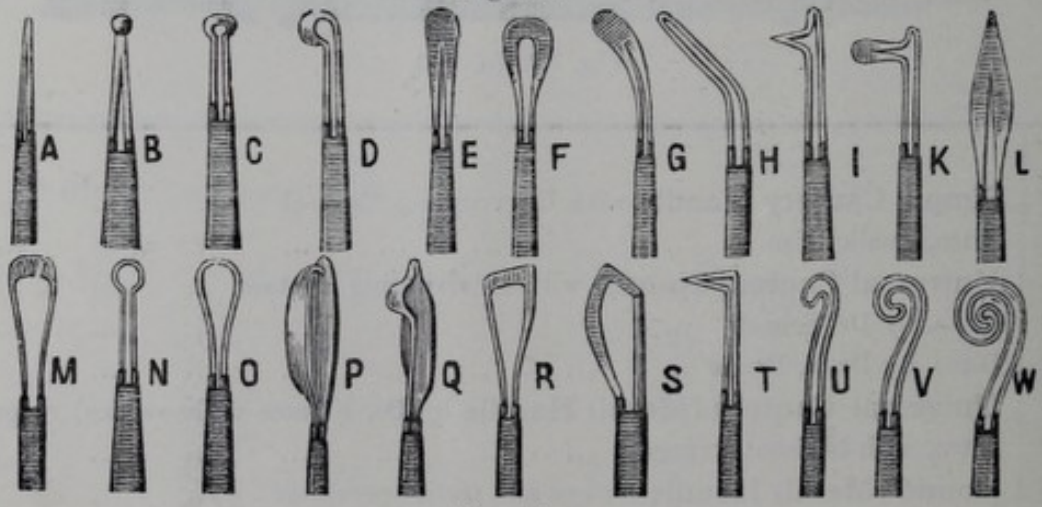


Fig. 84.

Instruments for Galvano-Cautery.

Fig.	No.		s.	d.
83a	264	**Burner**, curved, with different Platinum Point, Fig. 84A to W	3	3
b, c	265	„ straight „ „ „ „	3	3
d, f	266	„ bent at an angle „ „ „	3	3
g	267	„ for Eye Operations „ „ „	3	0
n, p	268	**Porcelain Burner**, large	6	0
o, q	269	„ „ small	5	0
r	270	**Ligature Tube**, curved	3	0
s	271	„ „ straight	3	0
	272	„ „ bent at an angle	3	0
	273	„ „ with Ivory Insulator, curved	3	6
u	274	„ „ „ „ straight	3	6
t	275	„ „ „ „ bent at an angle	3	6
	276	**Double Cable** for Galvano-Cautery, extra thick	7	0

Cautery Instruments not mentioned above can be made from drawings or description.

Complete Galvano-Cautery Sets in Cases.

No.		£	s.	d.
277	**Handle** No. 256, 6 Burners and Cable	2	4	0
278	„ No. 258, 8 Burners, 4 Ligature Tubes and Cable	3	10	0
279	„ (Dr. Schech's) No. 259, 10 Burners, 6 Ligature Tubes, 2 Porcelain Burners Platinum Wire for 4 Tubes, and Cable	5	5	0
280	„ No. 259, Handle 257, 12 Burners, 6 Ligature Tubes, 3 Porcelain Burners Platinum Wire for 8 Tubes, and Cable	6	0	0
281	„ (Dr. v. Bruns's), No. 261, 12 Burners, 6 Ligature Tubes, 3 Porcelain Burners, Platinum Wire for 8 Tubes, and Cable	5	10	0
282	„ No. 261, Handle 257, 12 Burners, 6 Ligature Tubes, 3 Porcelain Burners Platinum Wire for 8 Tubes, and Cable	6	10	0

Electrolytic Instruments for Gynaecological Purposes.

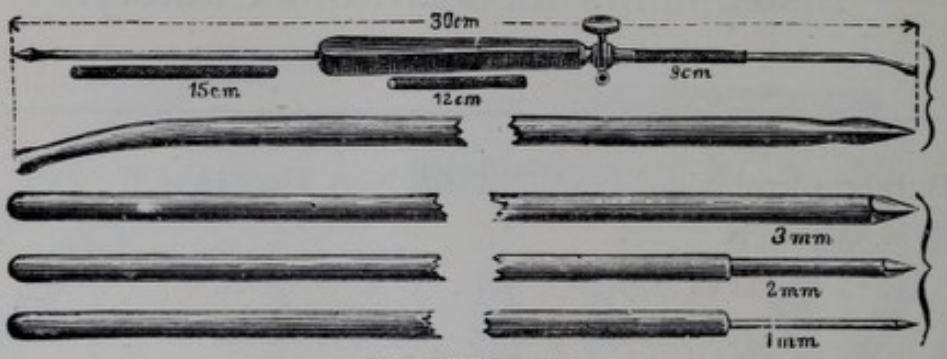


Fig. 85 No. 283.

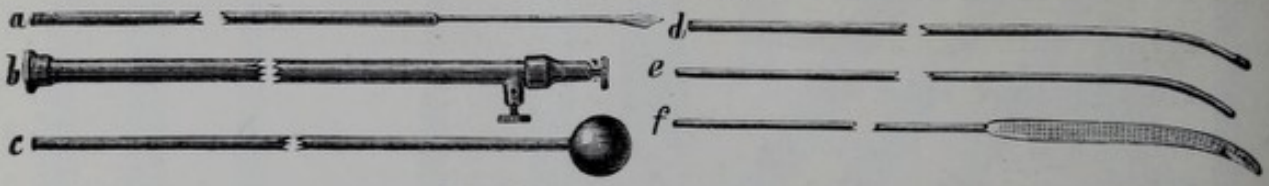


Fig. 86a—f Nos. 284—294.

Fig.	No.		£	s.	d.
85	283	**Dr. Apostoli's Instruments in Case**, comprising: 1 Platinum Sound, 3 Steel Trocars, 3 Ebonite Tubes, Ebonite Handle, and Cable ...	4	10	0
86a	284	**Platinum Needles** with lancet-points, $\frac{1}{2}$ to 4 inches long, according to size ... ... 6/- to		15	0
86b	285	**Double Electrode**		14	0
86c	286	**Ball Electrode**		3	6
86 d & e	287	**Aluminium Sounds**, $\frac{1}{5}$ or $\frac{1}{6}$ inch Diam.		5	6
	288	" " $\frac{1}{8}$ " "		4	6
	289	" " $\frac{1}{10}$ " "		3	0
	290	" " $\frac{1}{16}$ " "		2	6
86f	291	**Aluminium Sound**		2	6
86 d & e	292	**Platinum Sounds**, $\frac{1}{8}$ inch Diam. ... ... circa	2	10	0
	293	" " $\frac{1}{10}$ " " ... ... "	1	12	0
	294	" " $\frac{1}{12}$ " " ... ... "	1	6	0
	295	" " $\frac{1}{16}$ " " ... ... "	1	0	0
	296	**Flexible Pillow Electrodes**, large		8	0
	297	" " " medium		6	6
	298	" " " small		5	0

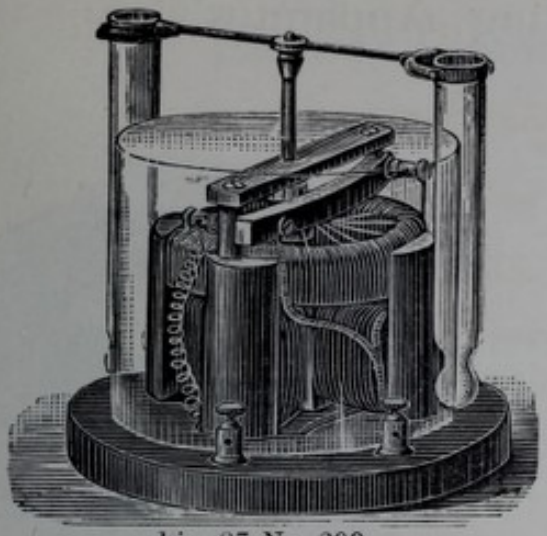


Fig. 87 No. 299.

Dr. Ising's Electric Centrifuge,

for separating the sediments of the urine within a few minutes.

Fig. 87 No. 299 ... ... £2 15s.

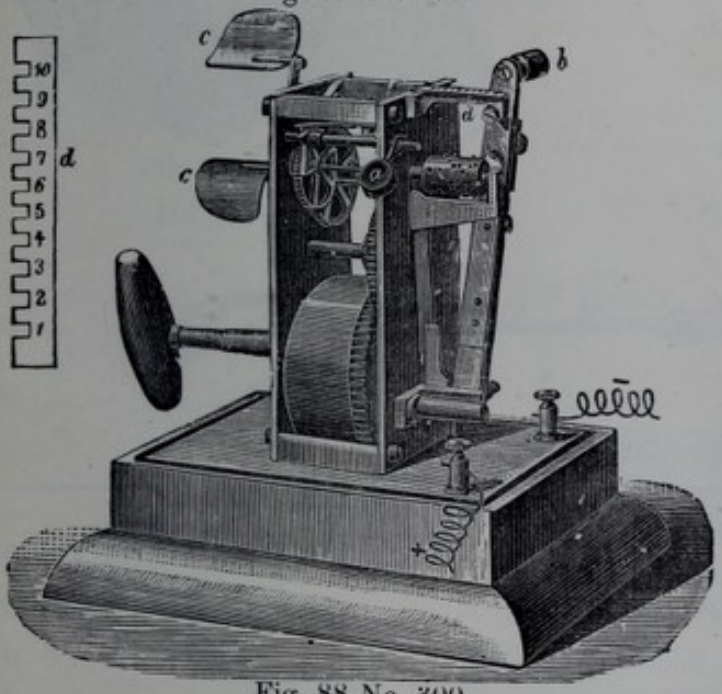


Fig. 88 No. 300.

Dr. Onimus's Clock-Work Interruptor,

for exactly regulating the Interruptions of Galvanic and Faradic Currents.

Fig. 88 No. 200 .. ... £21

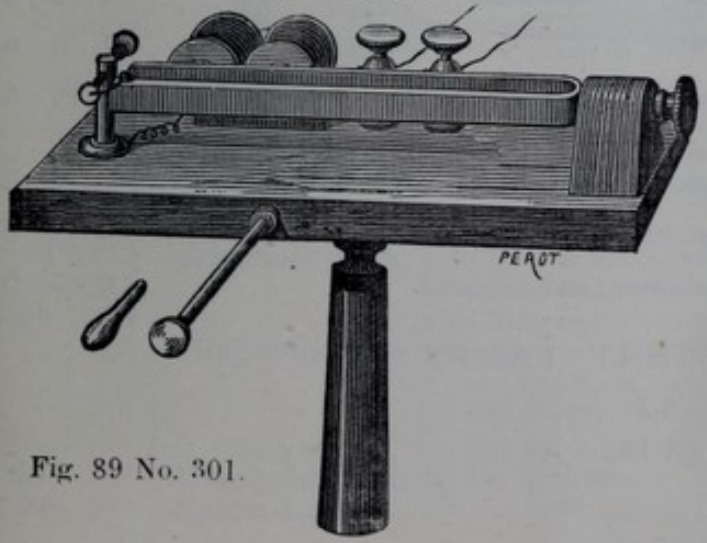


Fig. 89 No. 301.

Dr. Boudet's Electric Apparatus,

for treating Neuralgia by means of mechanical vibrations.

Fig. 89 No. 301 ... ... £1 12s.

Electric Illuminating Apparatus.

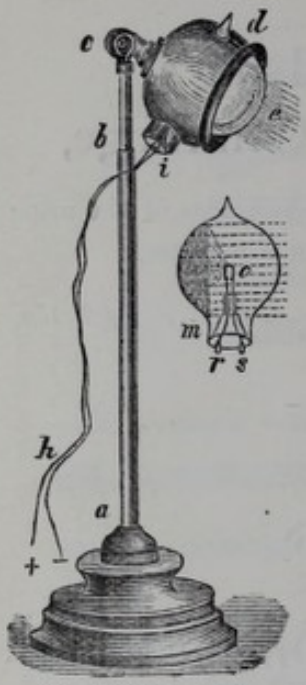


Fig. 90 No. 302.

Fig. 91 No. 303.

Fig. 92 Nos. 304 & 305.

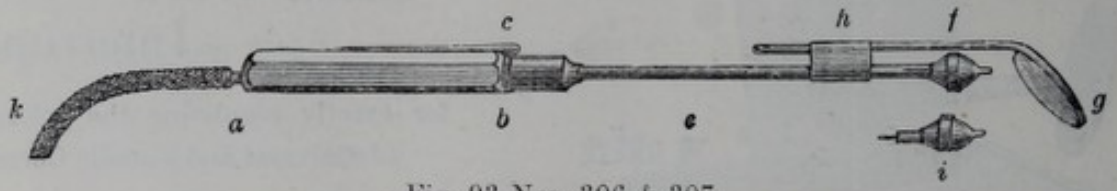


Fig. 93 Nos. 306 & 307.

Fig.	No.		£	s.	d.
90	302	**Laryngoscopic Incandescent Lamp** on Stand with Cable	1	16	0
91	303	**Stand for Incandescent Lamps** without Lamp	0	3	0
92	304	**Photophore** with Forehead-band, in case	1	15	0
92	305	„ „ „ and Stand, in case	2	2	0
93	306	**Laryngoscope** with Mirror and Cable, in case	1	5	0
93	307	„ with Mirror, Rheostat and Cable, in case	1	12	0
93	308	„ with 3 Mirrors, 1 spare Lamp (Fig. 93i), Cable, Handle with screw in case	2	0	0
93i	309	**Spare Lamps** (mounted) for Nos. 306-308	0	4	0
	310	**2-Wire Cable** for Lighting, 2 yards long, and mounted	0	3	0

INCANDESCENT LAMPS.

		Volts: 2-3	4-5	6-7	8-10	12-18
90m	311	£1 4s.	£1 8s.	£1 12s.	£1 16s.	£2 per doz.

Electric Illuminating Apparatus.

Fig, 95 No. 313.

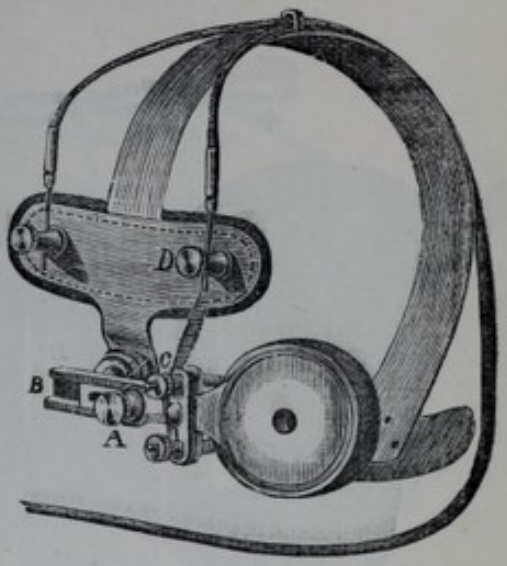


Fig. 96 No. 314.

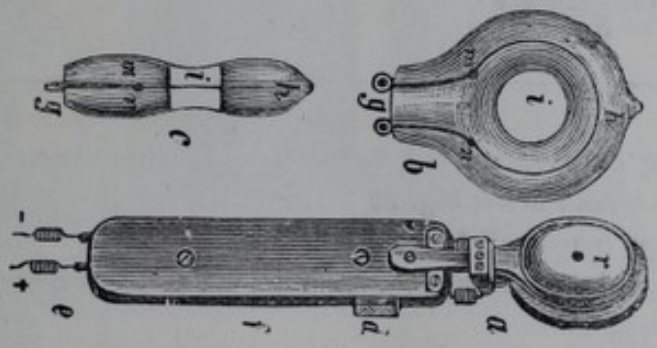


Fig. 94 No. 312.

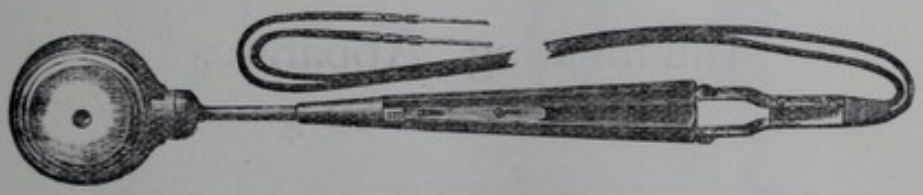


Fig. 97 No. 317.

Fig.	No.		£	s.	d.
94	312	**Diaphotoscope** with Handle and Cable	2	10	0
95	313	„ with Forehead-band and Cable	2	10	0
96	314	„ with American Forehead-band and Cable	2	16	0
	315	**Diaphotoscope**, complete, with Handle (Fig. 94), Forehead-band (Fig. 95), and Cable, in case	3	10	0
	316	„ complete with Handle (Fig. 94), Forehead-band (Fig. 96), and Cable, in case	3	15	0
97	317	**Diaphotoscope**, by Dr. Trautmann	2	15	0
94b	318	**Spare Lamp**	0	6	6

Electric Illuminating Apparatus

by Dr. Stein (D. R.-P. No. 45,046).

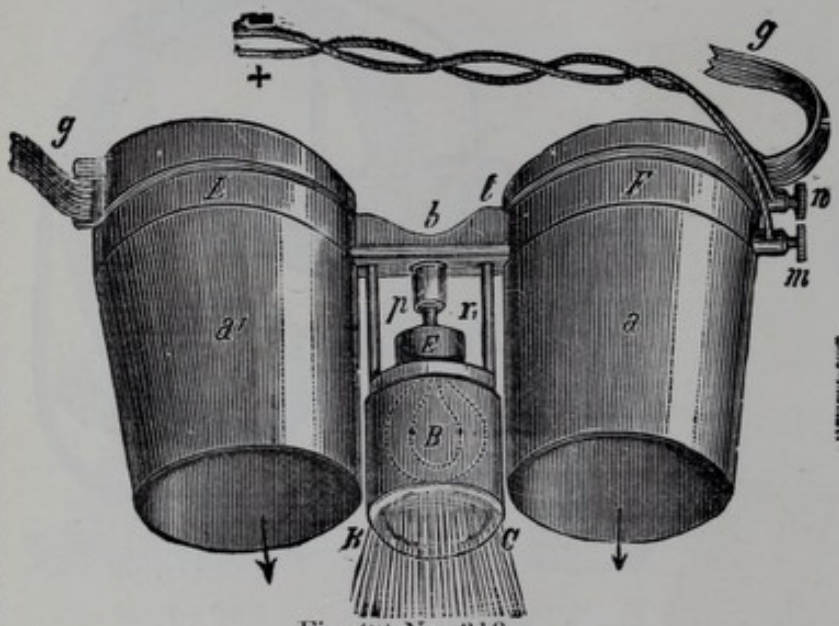


Fig. 98 No. 319.

Fig. 99.

Fig.	No.		£	s.	d.
98	319	**Illuminating Apparatus** with India-rubber Forehead Band	2	0	0
98	320	Ditto, with Forehead Band, Fig. 99	2	10	0
	321	**Spare Lamps** (mounted) for Nos. 319 & 320		6	0
99	322	**Illuminating Apparatus** with American Forehead Band, and without Reflecting Tubes	1	12	0
	323	**Spare Lamps** (mounted) for No. 322...		5	6

Illuminating Apparatus

by Dr. Vohsen.

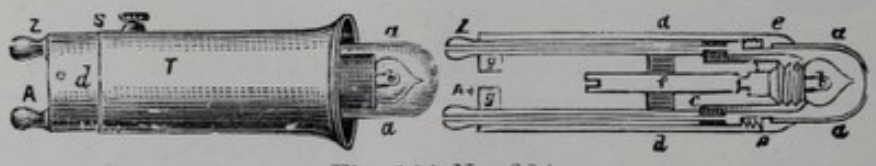


Fig. 100 No. 324.

Fig.	No.		£	s.	d.
100	324	Dr. Vohsen's **Illuminating Apparatus**, surrounded by water to prevent heating	1	12	6
	325	**Spare Lamp** (mounted)		5	6

Dr. Stein's Electric Apparatus

for Illuminating and Photographing the Larynx.

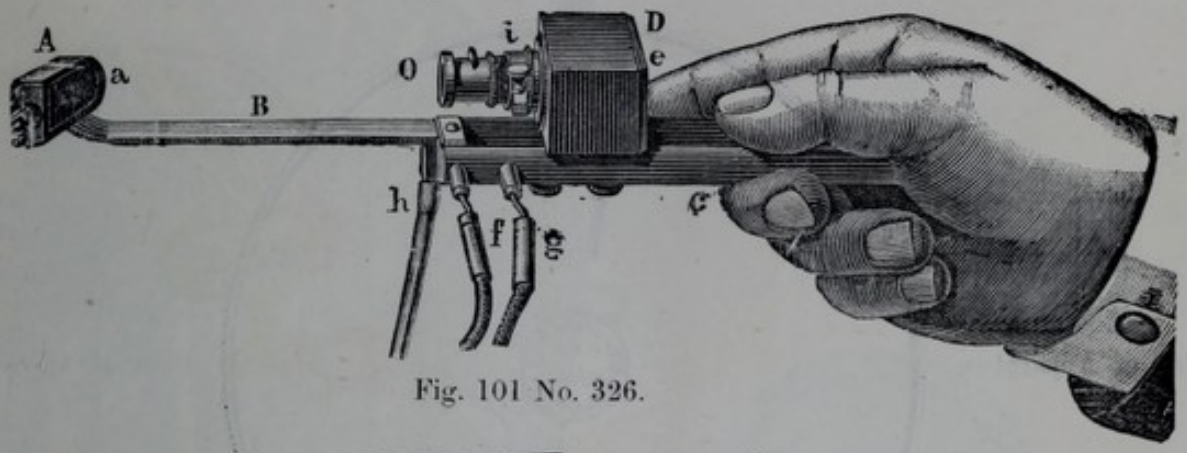


Fig. 101 No. 326.

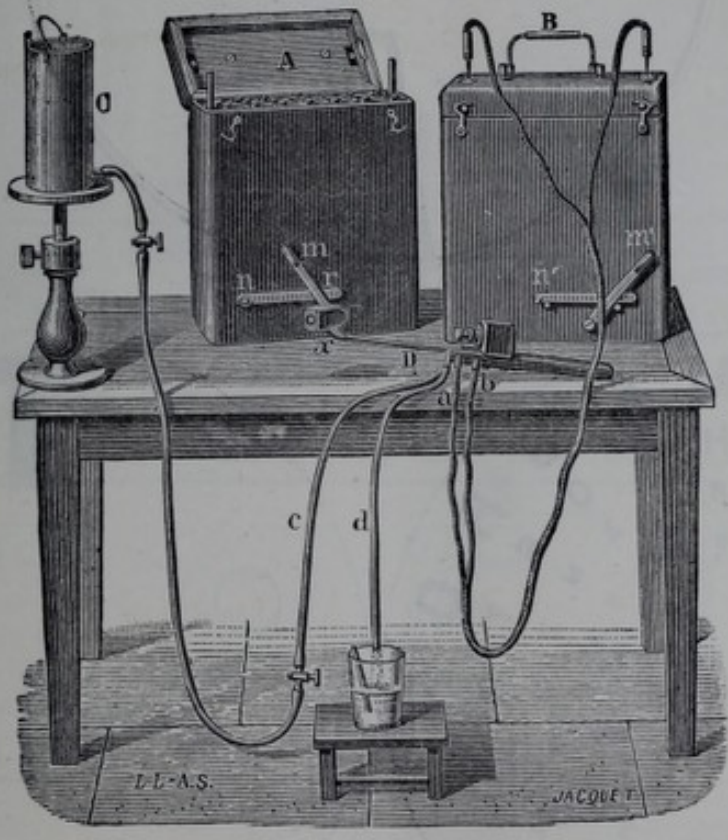


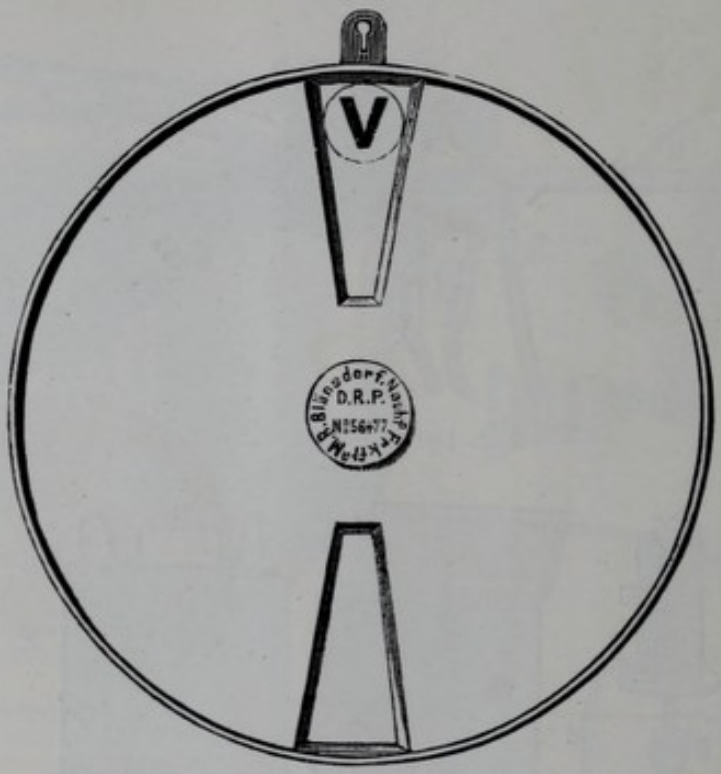
Fig. 102.

Fig.	No.		£	s.	d.
101	326	**Complete Apparatus** with Water Cooling Apparatus, 3 Spare Lamps, 50 Dry Plates in case	14	0	0
	327	Ditto, without Water Cooling Apparatus	12	0	0

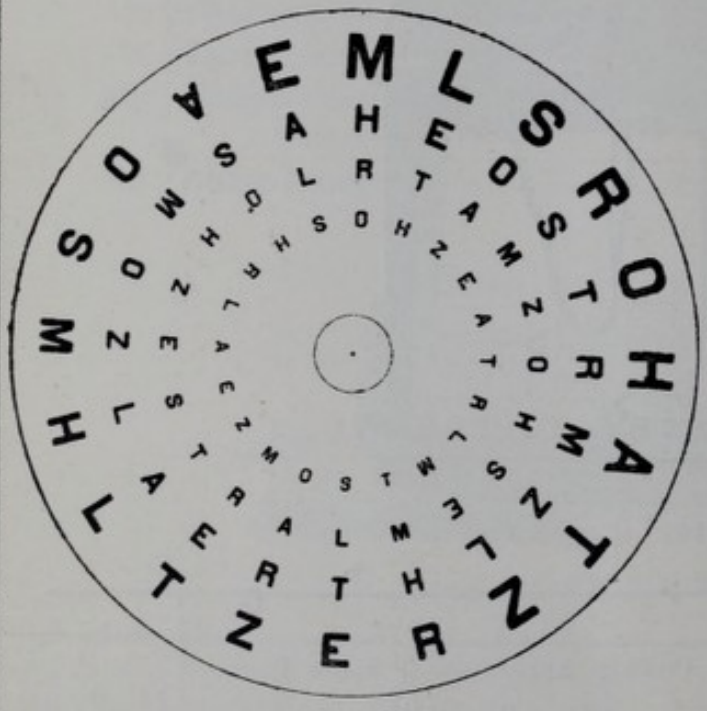
Fig. 102 shows the Apparatus connected with Water Cooling Apparatus and Plunge Battery, Fig. 63 No. 217.

Dr. Carl's Apparatus for Testing the Eyesight.
(D.R.-P. No. 56,477).

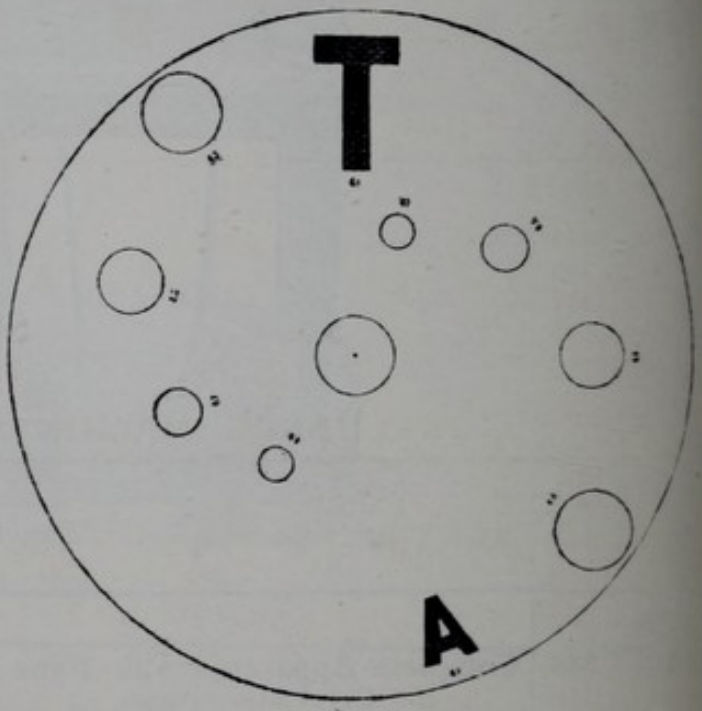
Plan of Apparatus.



Plan of Apparatus.



Revolving Letter Disc.



Revolving Cover Disc.

The Letter and Cover Discs are worked by Electro-Magnets.
Fig. 103 No. 328, price £7 10s.

Self-Exciting Influence Machines

For Medical Purposes.

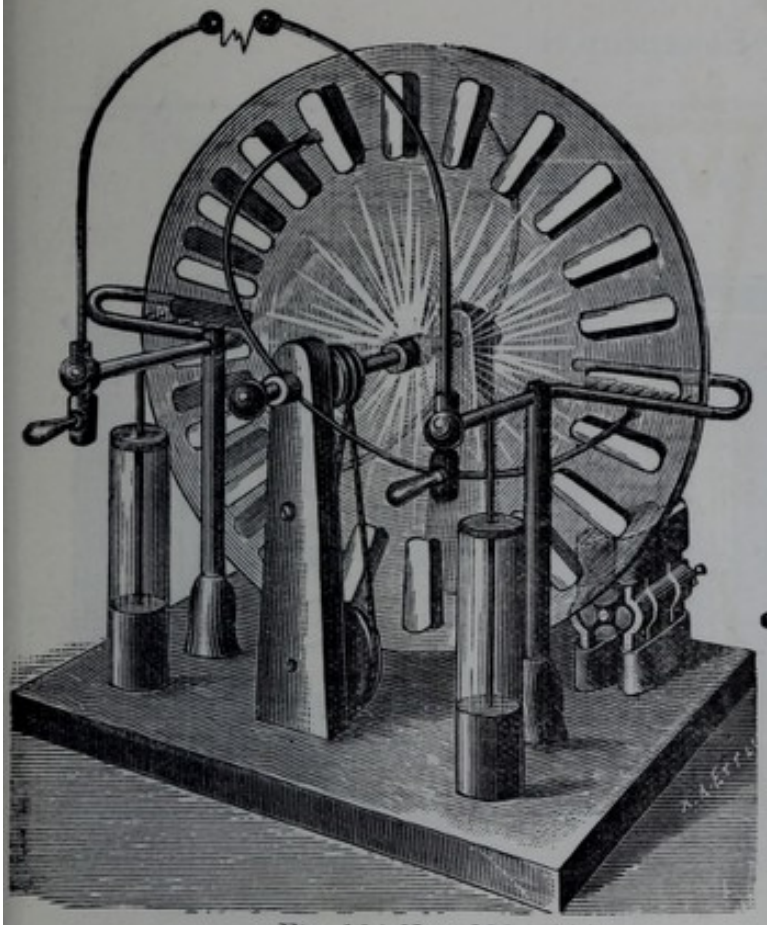


Fig. 104 Nos. 329—333.

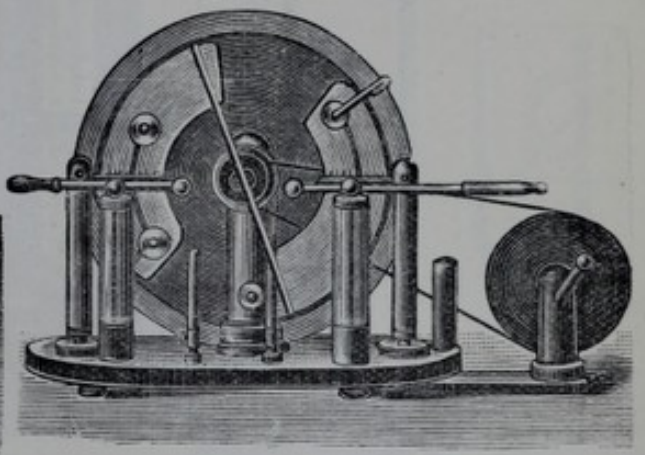


Fig. 105 Nos. 334—339.

INFLUENCE MACHINES BY DR. WIMHURST.

Fig.	No.		Diameter of Revolving Plates.	With Handle. £	s.	d.	With Electromotor. £	s.	d.
104	329	With 2 Revolving Plates	12 inches ...	9	0	0	14	0	0
	330	,, ,, ...	14 ,, ...	11	10	0	16	0	0
	331	,, ,, ...	16 ,, ...	14	0	0	18	0	0
	332	,, ,, ...	18 ,, ...	17	0	0	22	0	0
	333	,, ,, ...	20 ,, ...	20	0	0	26	0	0

INFLUENCE MACHINES BY TÖPPLER-VOSS.

Fig.	No.		Diameter of Revolving Plates.	With Handle. £	s.	d.	With Electromotor. £	s.	d.
105	334	With 1 Revolving Plate	$10\frac{1}{2}$ inches ...	6	10	0	9	10	0
	335	,, ,, ...	12 ,, ...	10	0	0	13	0	0
	336	,, ,, ...	14 ,, ...	11	0	0	14	0	0
	337	,, ,, ...	16 ,, ...	12	0	0	17	0	0
	338	,, ,, ...	$18\frac{1}{2}$,, ...	14	0	0	20	0	0
	339	,, ,, ...	21 ,, ...	18	0	0	24	0	0
	340	With 2 Revolving Plates	14 ,, ...	20	0	0	23	0	0
	341	,, ,, ...	16 ,, ...	24	0	0	30	0	0
	342	,, ,, ...	$18\frac{1}{2}$,, ...	29	0	0	35	0	0
	343	,, ,, ...	21 ,, ...	32	0	0	39	0	0

Complete Apparatus for Franklinisation.

(Static Electricity.)

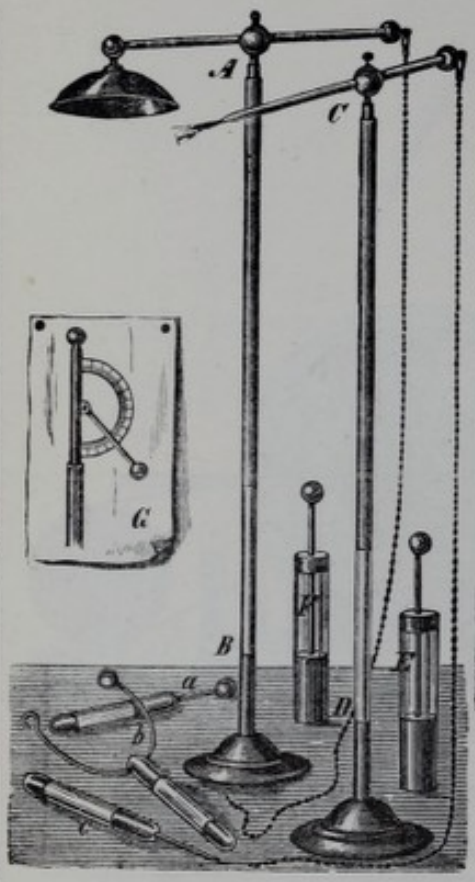


Fig. 106.

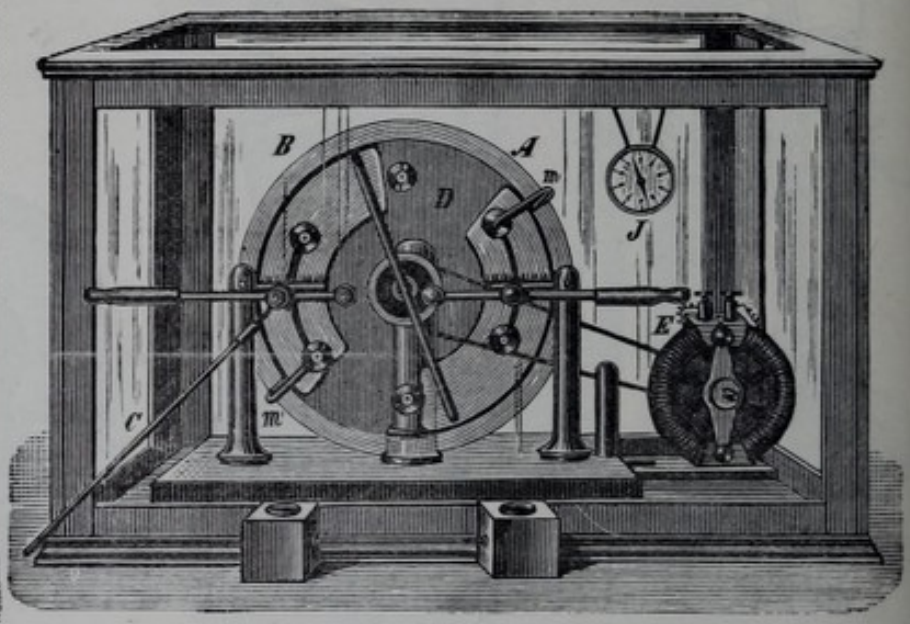


Fig. 107 Nos. 344—346.

Fig. 106.—*AB* Head Cap, $\frac{17}{4}$*C* Ozone Apparatus, *D* Connecting Chains, *EF* Leyden Jars, *G* Quadrant Electrometer, *a* Ball Electrode, *c* Point Electrode, *b* Discharger.—The handles of the Electrodes *a*, *b*, & *c* are of Ebonite.

Fig. 107.—*ABD* Self-Exciting Influence Machine, *C* Connecting Rod, *E* Electromotor, *J* Hygroscope.

A Complete Electro-Static Apparatus Comprises :—

Self-Exciting Influence Machine *ABD* with Electromotor *E* in elegant Glass Case on Table, Battery No. 232 or 233 for the motor, Insulated Stool with Ebonite Feet, six Electrodes *a*, *b*, & *c*, adjustable Rod for connecting the Machine with the insulated stool, Head Cap, Ozone Apparatus, and two Metal Chains.

Complete Apparatus for Franklinisation.

(Dr. Stein's System.)

Fig.	No.		£	s.	d.
107	344	**Complete Apparatus**, with **Toppler-Voss** Machine No. 337	42	0	0
107	345	„ „ „ „ „ „ 338	45	0	0
107	346	„ „ „ „ „ „ 339	49	0	0
N.B.) 108	347	**Complete Apparatus** with **Wimhurst** Machine No. 331	44	0	0
	348	„ „ „ „ „ „ 332	49	0	0
	349	„ „ „ „ „ „ 333	55	0	0

N.B.—For Fig. 108 see back of cover.

ACCESSORIES.

Fig.	No.		£	s.	d.
106A	350	**Head Cap**	2	0	0
C	351	**Ozone Apparatus**	1	14	0
a & c	352	**Electrodes** a and c		9	0
b	353	**Discharger**		9	0
	354	**Shortcircuiter**		10	0
107C	355	**Connecting Rod**		9	0
E	356	**Electromotor, small**	4	0	0
	357	**Electromotor, larger size**	7	0	0
106G	358	**Quadrant Electrometer**		6	0
107J	359	**Hygroscope**		10	0
106D	360	**Nickeled Chains**		6	0
	361	**Insulated Stool**	3	3	0

CONNECTING CORDS.

No.		s.	d.
362	**Connecting Cords**, covered with Cotton, 2 yards long ... ... per pair	4	0
363	„ „ „ „ „ $1\frac{1}{2}$ „ „ ... ... „ „	3	6
364	„ „ „ „ Silk or India-rubber $2\frac{1}{2}$ yards long „ „	4	9
365	„ „ „ „ „ „ „ 2 „ „ „ „	4	3
366	„ „ „ „ „ „ „ $1\frac{1}{2}$ „ „ „ „	3	9

Apparatus for Connection with a Continuous Current of 110 Volts.

No.		£	s.	d.
367	**Apparatus** for working the **Illuminating Apparatus** Nos. 312—323 ...	6	10	0
368	**Cabinet Apparatus for Galvanisation and Faradisation** (Cabinet Fig. 58 *ABCD*) with Current Selectors, Rheostat, Commutator, Galvanometer, and Sledge Coil	39	10	0
369	**Portable Apparatus for Galvanisation**, with Current Selectors, Rheostat, Commutator, and Galvanometer	18	10	0
370	**Portable Sledge Coil**, similar to No. 90...	3	12	0

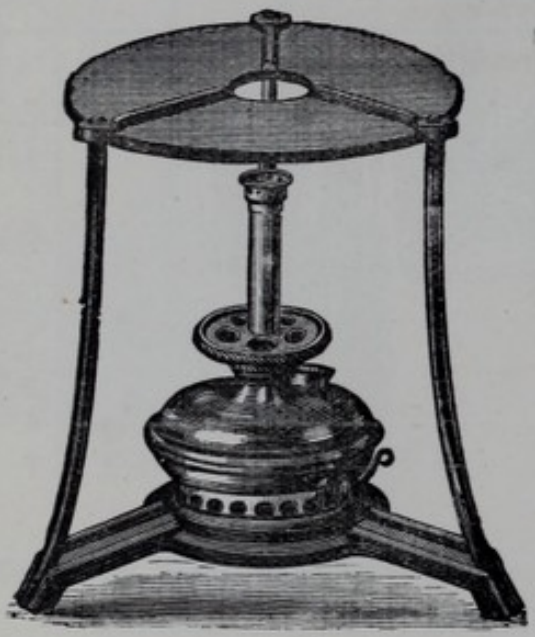


Fig. 109 No. 371.

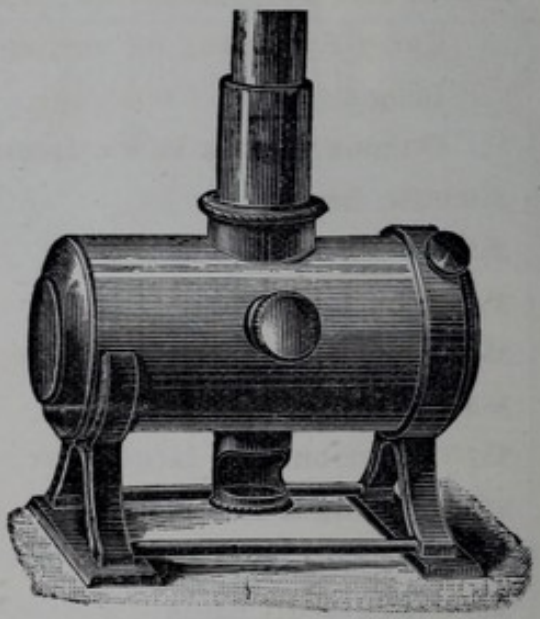


Fig. 110 No. 372.

LABORATORY BURNERS FOR HEATING PURPOSES.

Explosion Impossible. Heating Flame 1300 Centigrade.

Fig.	No.		£	s.	d.
109	371	**Laboratory Burner**, fixed	1	0	0
110	372	„ „ moveable, and mounted on neat Iron Stand; can be used at any angle	1	8	0

CONTENTS.

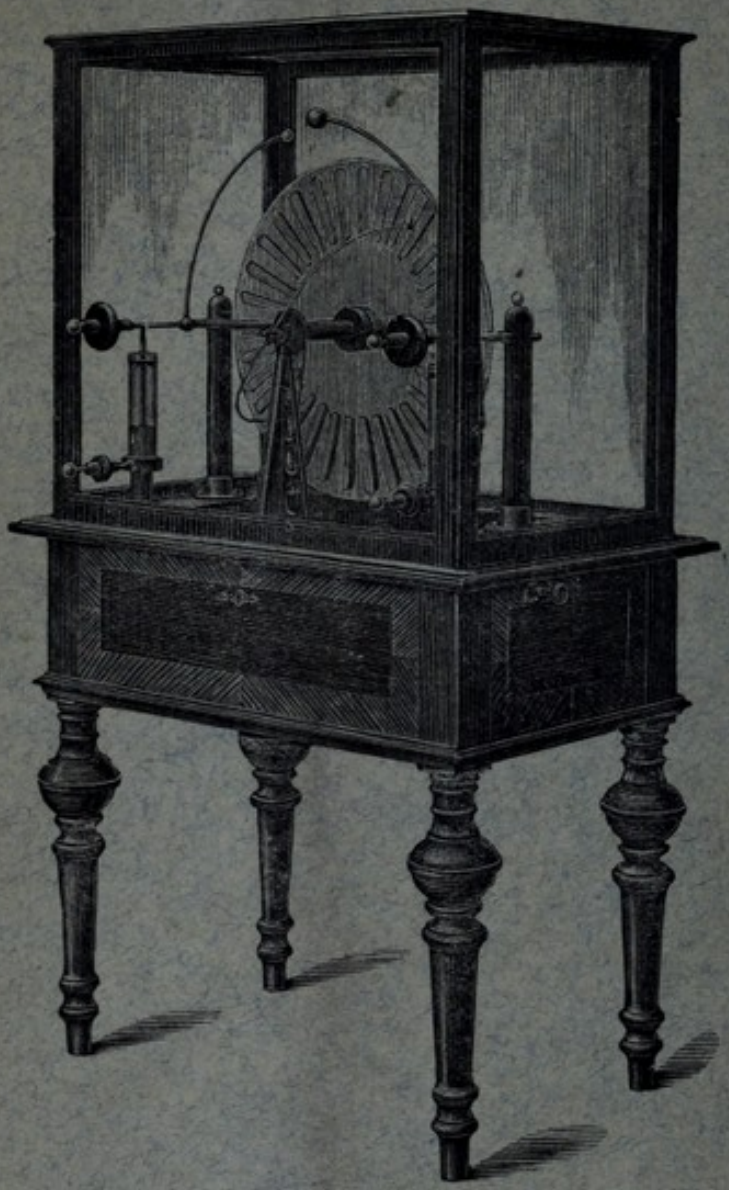


Fig. 108 Nos. 347—349.

8056—W. STRAKER, Steam Printer, 1, Granchurch-st., E. 41, 42 & 43, Liverpool-st., E.C.