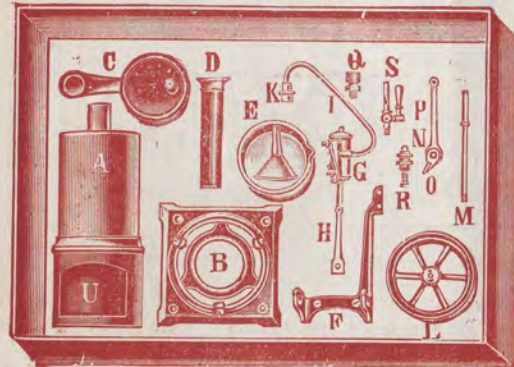


Overhead type. Exact running models of the Electric Tramways in almost every town in England and Colonies. Pattern supplied differs slightly from illustration. Wheel contact List No. on wires instead of bow (as illustration).

031 Complete Electric Car gin. long, 8 Curved Rails, 8 Overhead Posts and Wires, Flexible Wires and Connecting Terminals	...	...	each	17/6
032 Comprises Powerful Electric Car, 1 extra Car (as illustration, but without Head Light). Total length 18in., 8 Curved Rails, 4 Straight Rails, 12 Overhead Posts, 12 Overhead Wires, Connecting Terminals, &c.	...	...	each	23/9
Note.—The above prices do not include Electric Head Lights on front and back of Cars. If this is required add				per car
We can supply Special Electric Cars to suit above Tramways to run from 110 or 220 volt continuous current circuits (to order only) extra on above prices, per car				15/6
033 Curved Rails, with overhead Post and Wire	...	...	each	8
034 Straight	"	"	"	8
035 Crossing	"	"	"	3/7
036 Overhead Posts only	...	...	"	5

Postage extra.

**THE "MODEL ENGINEER" ENGINE PARTS.**



- List No.
- 964 Superior Set of Parts for Model Steam Engine, all arranged to screw. NO SOLDERING. Packed in box with full directions for fitting. Complete set ... 9/
  - 965 Similar set to No. 964, but much larger and heavier built, with full directions. Complete set 35/

**BEARINGS.**



Cast-Iron Shaft and Holding-down holes bored ready for fitting.  
High—1 1/4 1 1/2 2 2 1/8 ins.  
Each /4 /6 1/ 1/6 2/6 each

**STEAM PRESSURE GAUGES.**

List No.	
966 Cheap quality, 8lb. sq. in.	2/
967 Brass cover, 60lb.	6/6
968 " " 75lb.	6/6

**WE CAN SUPPLY—**

- STEAM WHISTLES
- WATER GAUGES
- OSCILLATING CYLINDERS
- ECCENTRICS
- SAFETY VALVES

**ALL AT LOW PRICES.**

CAREFUL ATTENTION TO COLONIAL ORDERS.

**POCKET LAMPS, ELECTRIC TORCHES.**

OWING to the largely-increased demand for Pocket Flash Lamps, Electric Torches, &c., we are able to offer our customers almost wholesale prices. Each complete Lamp, Torch, Refill or Bulb is guaranteed to give a Brilliant Light before Despatch, and to have been thoroughly tested at our works in Twickenham.

**THE "LITTLE GEM" TORCH.**

A useful little miniature 2-volt Torch, measuring 3 in. long by 1/2 in. diam. Fits easily into waistcoat pocket. Supplied with powerful 2-volt Battery and a 2-volt metal filament lamp.

Each 1/9. Postage 2d. each.



**THE "SEARCHLIGHT" TORCH.**

Powerful Electric Hand Torch, Jewelled Press Button, Plated Ends, Brilliant Bullseye Lens and Carbon Filament Bulb. Size 6 1/4 in. long, 1 1/4 in. diameter.

Each 1/6. Postage 3d.

Ditto but fitted with Metal Filament Lamp.

Each 2/6. Postage 3d.

**THE "SUNRISE" TORCH.**

Superior quality, in Handsome White or Black Polished Celluloid Case, Plated Sliding Switch, Powerful Screw Lens. Complete with 4 1/2-volt Battery and Bulb. Size 6 1/4 in. long 1 1/4 in. diameter.

Each 2/9. Postage 4d.

or fitted with Metal Filament Lamp.

Each 3/9. Postage 4d.

"THE SUNRISE."



**SPECIAL NOTICE.**

On receiving Pocket Lamps or Electric Torches, first take out Battery from case, either by sliding the lid or unscrewing the cap, and remove the paper from contacts. All our Pocket Lamps and Torches are protected in this way, so that it is impossible for the Lamp or Torch to light in transit.

**THE "BRILLIANT" POCKET FLASH LAMP.**

Comprises powerful Battery and Bulb, Plated Reflector, Side Press, Imitation Leather Case with Plated Ends, each 10, or fitted with Metal Filament Lamp, each 1/9, or fitted with Metal Filament Lamp and Accumulator "No. 062," each 4/9.



THE "BRILLIANT."

**THE "RUBY" POCKET LAMP.**

Superior Quality to "Brilliant." Cases Nickel Plated all over, Smooth Sides, with Sliding Bottom, Side Press and Powerful Bullseye Lens. A Lamp we can recommend similar to illustration, 1/ each, or fitted with Metal Filament Lamp 2/ each, or with Metal Filament Lamp and non-spillable Accumulator, each 5/.

Postage 3d. each.



THE "RUBY."

CHEAPEST HOUSE FOR RELIABLE NOVELTIES.



**PERMANENT AND ELECTRO MAGNETS.**

ENGLISH. RELIABLE. POWERFUL.  
HORSESHOE (with keepers).



Length.	Each.
2 inches	1/2
2½ "	2/3
3 "	1/3
3½ "	5/8
4 "	1
4½ "	1/10
5 "	1/6
6 "	1
8 "	3/6
10 "	4/8
12 "	7/

Postage, /2 or /3 extra.

**BRIGHT BAR MAGNETS**



List No. 384.

(For Tele-  
phones.)



List No.	Length.	Diam.	Each.
380	4	7/	3/4
381	5	11	3/8
382	6	1/2	3/8
383	7	1/6	3/7

For Magneto Machines. Most powerful Magnet made. Postage, /4 to /6 extra.

**HORSESHOE MAGNETS FOR THERMOMETERS.**

**SHIPS' MAGNETS,** Polished. 2/ per lb.

**MAGNETS FOR ALL PURPOSES.**

SPECIALLY MANUFACTURED. Ask for quotations.

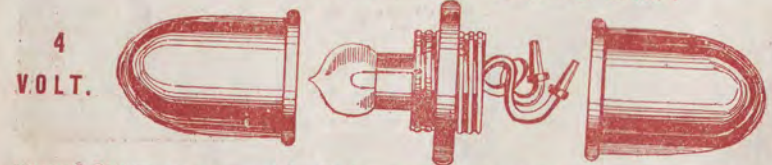
List No. 395.

**YOUR OWN MAGNETS RE-MAGNETISED FROM SIXPENCE EACH.**

**ELECTRO-MAGNETS SPECIALLY MADE TO LIFT ANY WEIGHT IMPROVED PATTERN TESTING LAMP.**

Compounding makes a very powerful set for long-distance telephone circuits or experimental use. The soft iron pole pieces couple up four 5 inch powerful magnets fitted with adjusting screw.

List No. 388. Each 5/. Per Pair 8/6. Postage 4d.



**4 VOLT. REDUCED PRICE.**

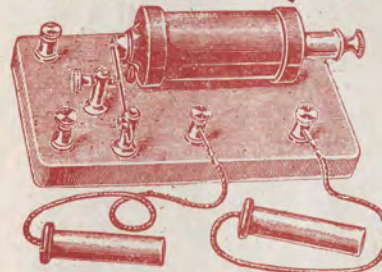
Improved Pattern, very compact, for Tool Bag or Pocket. Valuable to all Motorists, Electricians, &c. It enables one to see at a glance the condition of any cell. It has the advantage of being cheaper than a voltmeter, and does precisely the same work. In Selected Boxwood Screw Case, entirely protecting Lamp from damage, with 4-volt High Vacuum Lamp, as illustration. Each 1/. Postage 1½.

**ALL MAGNETS GUARANTEED FULL POWER.**

**SHOCKING COILS.**

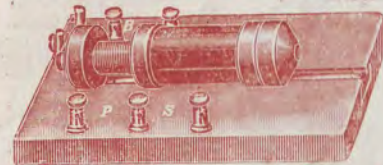
The "ECONOMIC ELECTRIC CO." genuine Shocking Coils are acknowledged amongst amateurs to be the most Powerful and Reliable yet manufactured. Each Coil is carefully wound with best SILK-covered 100% Conductivity Copper Wire and thoroughly tested. The Bobbins are neatly covered with thin Celluloid Sheet, protecting and at same time giving the wires a neat and glossy finish. OUR PRICES are MODERATE and will bear strict comparison with any other make. For quality the name "ECONOMIC" is immediately a recommendation.

**THE "LITTLE TERROR" COIL.**



Complete Coil, with Slide Tube Regulator, Nickel-plated Handles with Flexible Cords. Packed in strong box. Each, 1/10. Postage 2d. extra. Battery for working, 1/ each. Postage 4d. extra.

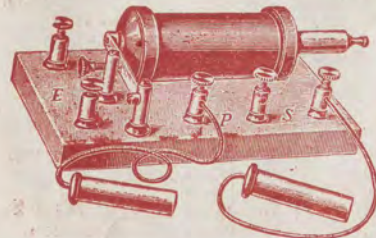
**THE "HUSTLER" COIL.**



A Grand Coil with Primary and Secondary Terminals. Strength of Shock is regulated by passing the Primary over the Secondary Winding.

We advise you to give this a trial. Mounted on Polished Wood Base, all metal parts highly finished. Complete in box with Handles and Coloured Flexible Cords. Each, 3/9. Postage 3d.

**THE "CAPTAIN" COIL.**

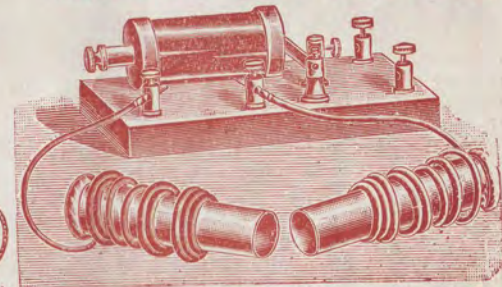


Consisting of Polished Celluloid-covered Coil, carefully wound layer for layer, and mounted on handsome base. A Coil which has an excellent finish and one that this illustration does not do full justice. Consists of one long Powerful Coil, Contact Breaker, Plated Primary and Secondary Terminals, Fittings and Handles. Complete in strong box, together with set of superior Silk Flexible Cords. Each. Postage

410 As illustration	...	3/6	3d.
411 Larger and more powerful	..	4/6	4d.

A customer writes: 'A very smart piece of work.'

**THE "MODEL ENGINEER" COIL PARTS**



Superior complete Set of Parts for making Powerful Shocking Coil (as illustration above). Any amateur can put the parts together and make a very successful evening's employment if printed diagram sent with set is carefully followed. Consisting of one Large Coil ready wound, Primary and Secondary, one pair of Nickel-plated and Flexible Cords, Contact Breaker fitted to pillar, Slide Tube Regulator, Iron Core Wire, and all holes drilled in handsome Polished Base.

Price, complete set in strong box, 1/8. Postage 3d.

**THE "STUDENT'S" COIL.**

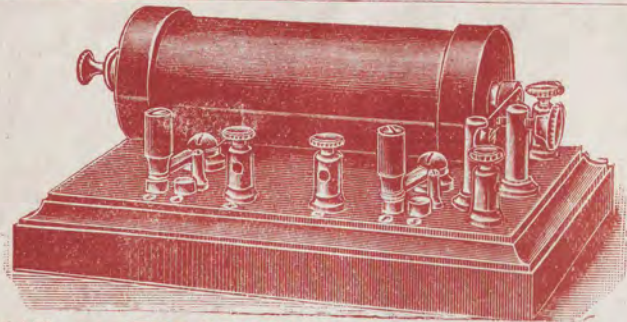
A well-made Coil of neat appearance; a particular favourite amongst all Students. All connections are carefully made and insulated.

Complete with Handles, Cords and Regulator. Each, 2/6. Postage 3d. extra.

Set of Handsome and Superior Parts for making the "Student's Coil" (recommended).

Each, 2/. Postage 3d. extra.

**GIVE US A CALL. SEE PAGE 1.**



**THE IMPROVED  
"EXHIBITION"  
OR  
"BAZAAR"  
COILS.**

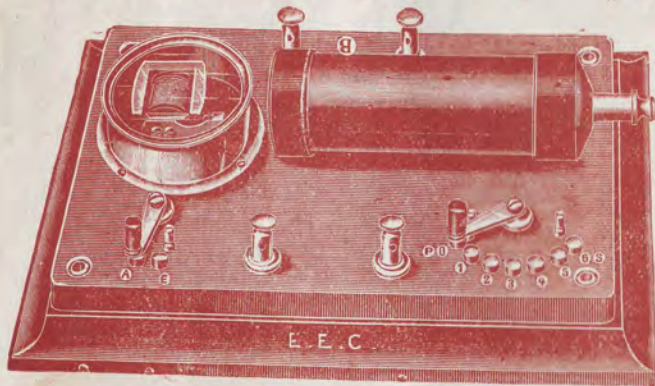
List No. 0132. **THE "DEFIANCE" MEDICAL COIL.** Splendid New Pattern has 1 Switch, Controlling Switch On and Off, P. and S. Terminals, Battery Terminals, special Handles with Polished Wood Ends, Connecting Cords, Mounted on Polished Wood Base, measuring 6½ in. long by 4 in. wide, Bobbin wound with Green Silk Covered Wire, measuring 4 in. long by 1½ in. diam. All parts heavily Nickel Plated.

EACH, 6/. Postage 4d. extra.

**THE "EXHIBITION" COILS.** Entirely improved efficient and novel design most suitable for Exhibitions or Bazaars. The strength of shock using one battery is more than sufficient for one person, providing regulator is right out. On the other hand it can be adjusted so that shock is hardly perceptible. Size of Base, 7½ ins. by 5 ins. Length of Bobbin, 4½ ins. Size of Coil Flange, 1½ in. The Prices quoted include all the necessary handles, etc. These same Coils were described by a customer "as of neat workmanship and a marvel at the price."

List No. 412. Small Bobbin, 4 ins. long and one switch. EACH, 9/6, postage 5d. extra.

" 413. Large " (as illus.) 4½ ins. lg. & two " " 10/9, " 6d. "



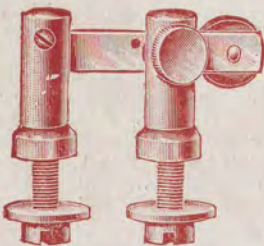
**THE "AJAX"  
MEDICAL COIL.**

List No. 0130 (as illustration). Suitable for Invalids or, on the other hand, heavy use at Exhibitions, Bazaars, etc. The regulation of this coil is remarkable. It can be adjusted in the case of an Invalid so that the current is hardly perceptible, or increased so that 6 persons joining hands would get a powerful shock. Mounted on Handsome Bevelled Mahogany Polished Stand with unique High-Speed Trembler attachment under Glass Dome, Battery Terminals, P. & S. Studs, 7 way Lever, Revolving Switch, On & Off Switch,

complete with Special Handles and Conducting Cord 4. Size 9 ins. long, 5½ ins. wide, 2½ ins. high. EACH, 17/6. Postage, 8d. extra.

**CONTACT BREAKERS.**

(As illustration).  
Nickel Plated.



List No.	Size.	Each.	(As illustration). Nickel Plated.	
429	½ in., Cheap	... 9	} 3 per Set extra.	
430	½ in., Best Quality	... 11		
431	¾ in., " "	... 1/6		
432	1 in., " "	... 1/8		
433	1¼ in., " "	... 2/6	} 5 per Set extra.	
434	1½ in., " "	... 2/8		
435	1¾ in., " "	... 3/		
436	2 in., " "	... 3/4		
437	3 in., " "	... 5/		} Large sizes ask for quotation.
438	4 in., " "	... 10/		

Postage, 1 per Set extra.

**HIGH-CLASS MEDICAL APPARATUS.**

**MEDICAL COILS,** to be serviceable, *must be* correctly designed and manufactured by experienced workmen. The Cheap Article is oftentimes worse than useless, and

does more harm than good. In the following pages we give a selection of our High-Class Medical Apparatus, which we can, with every confidence, recommend to our customers. Members of the Medical Profession recommend a course of electrical treatment in preference to drugs, as a curative for Rheumatism, Gout, etc.

**IMPROVED  
"ECCON" MEDICAL COILS.**

List No. 414.

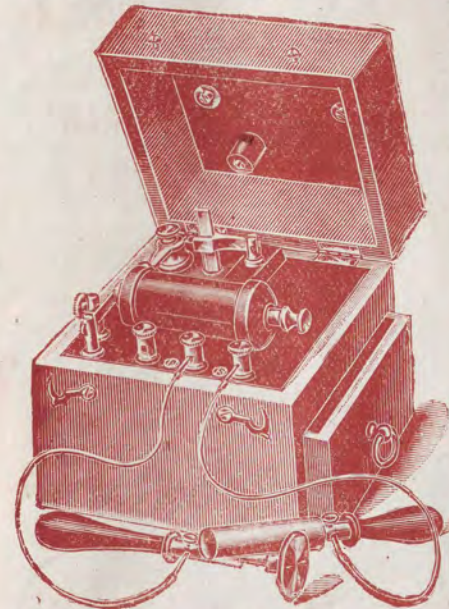
Will be found a Serviceable Coil at a Low Price. In Handsome Polished Mahogany Case, with Accessories. Splendid Regulator, Primary & Secondary Terminals, with One Bichromate Cell, Lifting Zinc (as Illustration, but without drawer).

EACH ... 11/-, Postage 6d. extra.

List No. 415.

Similar Coil to above, but Larger Bobbin, in Handsome Polished Walnut Box. Nickel-Plated Fittings, Drawer (as Illustration) containing Accessories, Primary and Secondary Terminals, Delicate Regulator, Switch, and One Reliable Medical Dry Battery, contained in case, or Bichromate Battery, if preferred.

EACH ... 15/-, Postage 7d. extra.  
Spare Dry Batteries, 1/- each, postage 3d. each.



"ECCON" MEDICAL COIL. List No. 415

**THE "M.D." MEDICAL COIL.**

Specially suitable and recommended for Medical Profession or Home Use. It contains Two Powerful Dry Cells, which make it especially suitable for Export, under Glass Dome, Rotary Improved type of Regulator, indicating Strength of Current on Marked Dial, Unique Switch Arrangement, making it impossible to leave Current on when Case is closed. Complete Set of Electrodes, with containing Drawer, Mounted in Handsome Selected Satin Wood Case. Very Superior Apparatus.

PRICE, with full Set of Electrodes, 27/-. Per passenger train.  
Spare Export Dry Cells ... 2/ each.  
" "E.E.C." " " " " 1/

**THE  
"COLONIAL" MEDICAL OUTFIT.**

A perfect Balanced Coil, contained in Selected Satinwood Case, fitted with Improved Type of Export Battery, Plated Regulator, One-Way Lever Switch, Set of Complete Electrodes Very Compact, Powerful, and handy to Carry.

EACH 14/-,  
Postage 6d. extra.  
Spare Export Dry Battery, 1/9.  
Spare "E.E.C." Dry Battery, 1/,  
Postage 3d. extra.



THE "COLONIAL."

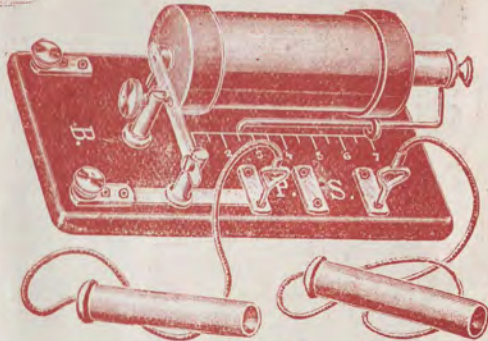
THE "M.D."

**THE "HOME" MEDICAL COIL.**

This is a Handsome set and one that can be relied upon to give the purchaser entire satisfaction. Undoubtedly it is a Powerful Coil and one on which the regulation is perfect. Two methods are furnished, one is to put into operation by means of a two-way Lever Switch, 1 or 2 Dry Batteries at will, or by Slide Tube Regulator you can adjust the current to any desired strength. It is essentially a traveller's set, being very compact and light, contained in Real Walnut Polished Case, splendidly finished, Complete with large assortment of useful Electrodes.

PRICE, 27/6. Carriage Forward.  
Spare Batteries, 1/ each.

**THE "JAP" INDICATING SHOCKING COIL.**



List No. 1537.

**VOLT AND AMMETER COMBINED.**

Mounted on Handsome Polished Wood Stand. All scales are engraved and Silvered, 3 1/4 inch Dial Reading to 6 Volts, 5 Amps. or 10 Volts, 10 Amps. VOLT or AMMETER only, 20/. COMBINED (as illustration), 25/.

**MILLIAMPERE-METERS**

in 3 1/4 inch Lacquered Brass Cases, Engraved and Silvered Dial, Central Zero. Stock Reading.

0-5  
0-10  
0-15  
0-20  
**EACH, 35/.** Any reading to order. Fitted with Shunt to multiply by 10, 8/ extra.  
Postage, 4d. extra.



58 POSTAL ORDERS RECEIVED—VALUE FOR MONEY GIVEN.



**MEDICAL ACCESSORIES.**

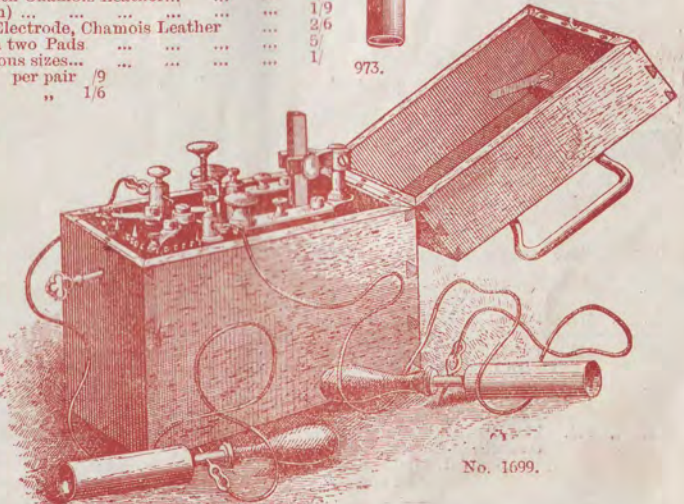
List No.	Each.
420	2/6
421	1/6
421A	1/6
422	2/10
423	4/
424	2/6
964	1/3
965	2/
966	9/
967	2/
968	1/9
969	2/6
970	5/
971	1/
972	1/
973	1/6



**THE E. E. C. "SPAMER" MEDICAL COIL.**

Embodying the very Latest Improvement in Medical Coil Design, Mounted in French, Polished Mahogany Case, with Lock and Key controlling 10-Way Lever Switch for Current Regulation, Primary and Secondary Terminals, High Grade and Reliable Battery.

All parts Nickel Plated, together with a very complete set of Medical Appliances, each 35/6. Postage 8d. extra.



No. 1699.

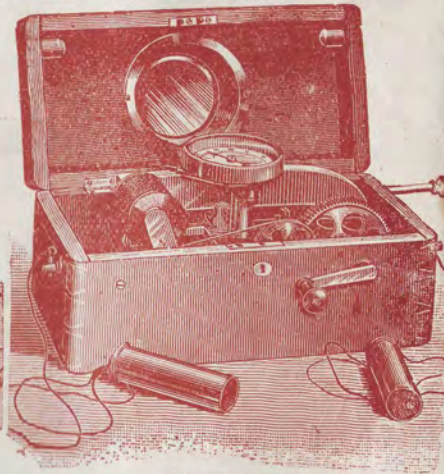
WE CARRY LARGE STOCKS AND CAN DESPATCH PROMPTLY. 59

**IMPROVED MAGNETO ELECTRIC MACHINES.**

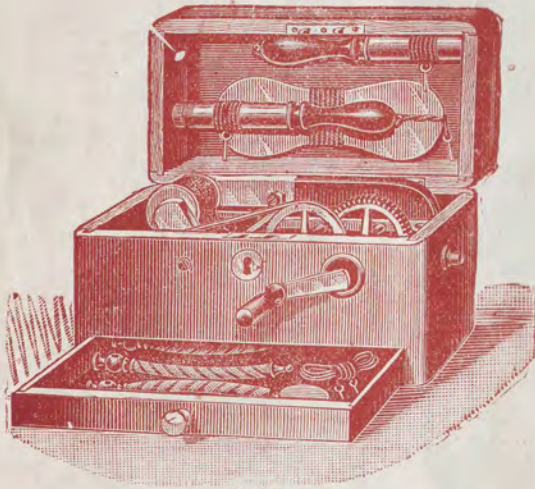
THESE Handsome Magneto Medical Machines are recommended and largely used by members of the Medical Profession as a certain cure for Rheumatism, Gout, &c. Any desired strength of current can be obtained by turning the handle fast or slow. No acid or chemicals are needed. These machines are substantially constructed and will last years with ordinary care.



List No. 443



List No. 976.



List No. 975.



List No. 440.

List No. 440. Magneto Machine in Selected Polished Pine Case with 7in. Magnet, Regulator, Cords and Handles. Size 8in. by 4in. by 3½in. Each 8/. Postage 8.

List No. 441. Superior Quality. Size 8½in. by 5in. by 4in. Each 9/3. Postage 8.

- List No. 441a. Larger size than No. 441, more Powerful. Size 10in. by 5in. by 4½in. ... Each 11 3
- Postage 10 extra.
- “ “ 442. Handsome Pocket Magneto. Very Powerful. Fitted with 4in. Magnet in Polished Walnut Case, Belt Drive, size 5½in. by 2½in. by 3in. ... “ 10/6
- “ “ 977. Pocket Size, Superior Quality, Cog Drive, size 5½in. by 2½in. by 3in. ... “ 15/6
- Postage 6 extra.
- “ “ 443. Powerful Magneto in Polished Mahogany Case, Cog Drive, 7½in. Magnet with Lock and Key. Size 10in. by 5in. by 4½in. ... “ 15 8
- “ “ 975. Superior Machine, Polished inside and out, Selected Mahogany Case with drawer containing Appliances for treatment to Foot, Mouth and Ear, a very Powerful and Compact Magneto. Size 10½in. by 6½in. by 5½in. ... “ 36/6
- “ “ 976. The “M.D.” Magneto, Perfect Control, fitted with Indicator showing strength of Current. Size 10½in. by 5½in. by 5in. ... “ 39/6
- Nos. 441, 441a, and 443, can be fitted with Current Indicator 8/ extra.
- All measurements given are outside of Cases.

60 **LARGE STOCKS—GENUINE MAGNETOS—MODERATE PRICES.**

**HIGH-CLASS “È.E.C.” BRITISH MADE COILS.**

We maintain for High-Class Appearance and Moderate Price these Coils have no equal in London. Consider these points, all of which are embodied in the manufacture of these Coils:—

**SPECIAL LOW-CURRENT CONSUMPTION. PERFECT INSULATION. HIGH SPEED (No Sticking). LEAKAGE LOSS NIL.**



List No. 456A.



List No. 450.



List No. 454.

**THIS SHOULD DECIDE — FACTS —**

Perfect adjustment to the thousandth part of an inch with lock-nut on all Trembler Coils. Guaranteed Pure Platinum Contacts. Mounted in Select Polished Teak Cases with hinged lid and Heavily Nickel Plated Fittings. They are the fastest Coil on the market, to say nothing of absolute RELIABILITY. Hot Flaming Spark—Fire through any sooted plug. Measurements given are over all. Any size Coil supplied to order, Trembler or Non-Trembler.

**SINGLE CYLINDER COILS.**

List No.	Size.	Description.	Price
450	5½ by 3½ by 3 in.	Square Non-Trembler...	14/6
451	3 “ 3 “ 3 “	“ “ “ “	13/6
453	4 “ 3 “ 2½ “	Square Midget Trembler	17/6
454	5 “ 4½ “ 2½ “	“ Medium “	19/6
455	7½ “ 4½ “ 3½ “	“ Large “	30/6

**2 CYLINDER COILS.**

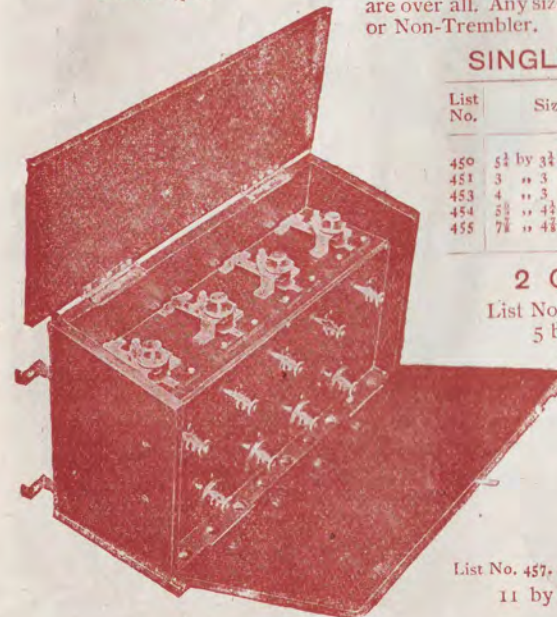
List No. 452. Square Non-Trembler, 5 by 5 by 3½ in., each, **33/-**

List No. 456 High Speed Trembler, 7 by 7 by 4 in., each, **£2 10s.**

List No. 456A. Ordinary Pattern Trembler, 5½ by 5½ by 3½ in., each, **£2.**

**4 CYLINDER COILS.**

List No. 457. High Speed Trembler, 11 by 7½ by 5 in., each, **£4 10s.**



USE E.E.C. COILS—IT MEANS ANOTHER 5 MILES PER HOUR.

**MOTOR IGNITION WIRES.**



We have decided to manufacture only the Best Insulated Wires and leave our competitors to the cheaper class of trade.

When entering for RELIABILITY TRIALS, use only THE ECONOMIC ELECTRIC CO.'S Guaranteed Wires and assure yourself of a NON-STOP run.



**"SIMPLEX" TERMINALS.**

Assures good connection of wires to accumulator terminals. Made in two sizes:—

PRICE, 4½ doz. Per gross, 4/- Postage, 1d. extra. Brass Terminals, page 77.

**ECONOMIC ELECTRIC CO**  
**TWICKENHAM**  
**S.W.**  
**POLE FINDING PAPER**

**DIRECTIONS**

**"E.E.C." Pole Finding Paper.**

A simple and rapid method of obtaining the polarity of any Cell, Electric Light, Main, Dynamo, &c., with full printed directions how to use on each book.

Book of 2 sheets, each 1d. Postage, 1d. " " 6 " " 2d. " " " 14 " " 4d. extra.

Actual Manufacturers by special process.

**LOW TENSION FLEXIBLE WIRE.**

List No.	Number and Size of Wire.	DIAM.	PER YARD.
519	32/36 S.W.G.	1/8 inch	3d.
520	40/36 "	1/16 "	5d.
521	41/33 "	1/16 "	7d.

**HIGH TENSION FLEXIBLE WIRE.**

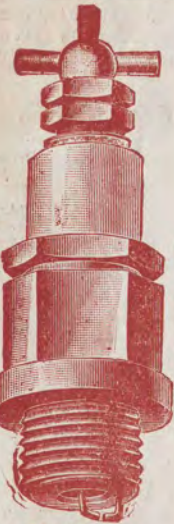
List No.	Number and Size of Wire.	DIAM.	PER YARD.
523	40/33 S.W.G.	1/8 inch	1/4
524	40/33 "	1/8 "	1/4
525	45/36 "	1/8 "	1/6
526	40/33 "	1/8 "	2/
527	40/33 "	1/8 "	3/

Any Length cut. Postage extra.

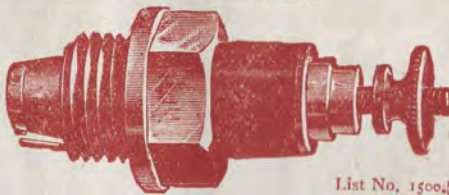
**HYDRO-METERS.**

Special design for testing accumulator acid for correct strength. Marked scale correct strength of acid should read 1.200

In Tube Case, PRICE, each, 1/- Postage 1½d. extra.



List No. 1502



List No. 1500, 3

- |          |                                |   |                                 |
|----------|--------------------------------|---|---------------------------------|
| LIST No. | 1500 Eecon Mica Plug, 1/6 each | LIST No.  | 1504 Minerva Pattern            |
| 1501     | Do Dion Pattern 1/6 "          | 1505  | Magnetic Plug 1/6 each          |
| 1502     | Oleo Pattern 1/9 "             | 1506  | Plug washers, C and A, 6d. doz. |
| 1503     | Genuine Oleo 2/ "              |   |                                 |
|          |                                |   | Postage 2d. extra.              |
|          | 1507                           | Minerva Pattern Two-way Handle Switch, 1/2 each, postage 1½d. |                                 |
|          | 1508                           | Simplex Belt Hooks, 1/ Asbestos String, page 93, very handy.  |                                 |



List No. 1501

With Side Glass in Hinged Frame, Leather Mask, Lined White Kid, Bound with Fur, Perfect Fitting, but not air-tight. 1/8 each. Postage 1/2 extra. Superior Quality, Different Pattern, 2/6 each.



**MOTOR DUST-PROOF GOGGLES.**

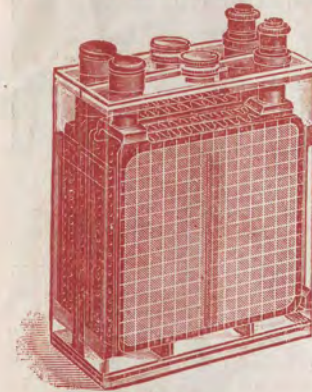
(As Illustration)

E.E.C. MOTOR ACCESSORIES GUARANTEED RELIABLE.

**THE "E.C.O." IGNITION ACCUMULATORS.**

THE "E.E.C." ACCUMULATORS are now so well known in England that little introduction is necessary. During the past year special features have been introduced in their manufacture to make them the FOREMOST ACCUMULATORS IN LONDON.

Improved vents are fitted, whereby it is now impossible to get any splash. The cases themselves are manufactured from the stoutest and very best clear sheet Celluloid. Finally, they are the outcome of 12 years' practical experience, and carry a TWO YEARS' GUARANTEE, a point to consider when making a selection of your next Accumulator.



List No. 471.

**IN CELLULOID CASES.**

List No.	Volts.	Amp. Hrs.	DIMENSIONS.			Weight without Acid.	PLATES.		Miles run on one Charge.	EACH.
			Width.	Length.	Height.		No.	Size		
470	4	10	2 ins.	2 ins.	6½ ins.	2½ lbs.	6	4 x 1½	500	11/
471	4	20	2 "	4 "	6½ "	3½ "	6	4 x 4	900	12/9
472	4	40	3½ "	4½ "	6½ "	5½ "	10	1 x 4	1800	22/

Postage 6d., 8d., and 1/2 extra.

NOTE.—The Number of Miles run on one Charge will bear favourable comparison with any rival Accumulators. The above figures were obtained in official trials. Height listed includes Terminals. List Nos. 471 and 472 have Four Terminals, and can be used as Two or Four-Volt Accumulators.

Under each Terminal we put Vaseline, making it impossible for corrosion to occur.

Insulation between Plates, Perforated Corrugated Ebonite, which will not affect plates like Celluloid. Terminals silver-plated. Full Charging instructions on each Cell.



List No. 474.

**IGNITION ACCUMULATORS IN EBONITE CASES.**

In Stout Ebonite Cases, separated with Perforated Celluloid Sheets. Owing to the improved method of separating and raising plates from bottom of cell, these Accumulators will be found to hold their charge much longer than the ordinary Accumulators.



List No. 475.

List No.	Volts.	Amp. Hrs.	DIMENSIONS.			Weight without Acid.	PLATES.		Miles run on one Charge.	EACH Fitted with 2 Terminals	EACH Fitted with 4 Terminals
			Width.	Length.	Height.		Number.	Size.			
473	4	8 hrs	1½ ins.	3½ ins.	5½ ins.	1½ lb. 12ozs	3 per cell.	3½ x 1½	200 miles	8/6	9/6
474	4	15 "	2 "	3½ "	5½ "	3½ lbs. 2 "	3 "	4 x 2½	700 "	10/0	11/0
475	4	25 "	1½ "	5½ "	5½ "	4 " 4 "	5 "	3½ x 2½	1200 "	14/0	15/0
476	4	35 "	2 "	7½ "	5½ "	9 " 8 "	5 "	4 x 3½	1500 "	16/6	17/0

Postage 6d., 7d., 1/, and 1/6 each extra.

Any of the above Ebonite Accumulators can be fitted with Four Terminals. They can, of course, then be used for Two or Four Volts.

N.B.—Any of above Accumulators sent charged at following rates:—10 amp. hr., 6d. extra; 15 amp. hr., 8d. extra; 20 amp. hr., 9d. extra; 30 amp. hr., 1/ extra; 40 amp. hr., 1¼ extra.

**SPARE CASES FOR ABOVE ACCUMULATORS.**

CELLULOID, with Lid and Vents.				EBONITE.			
List No.	For Size.	EACH.	Post.	List No.	For Size.	EACH.	Post.
978	470	3/6	4d.	981	473	2/6	4d.
979	471	4/9	4d.	982	474	2/6	5d.
980	472	5/9	5d.	983	475	3/2	5d.
				983A	476	4/0	6d.



List No. 470.

ANNUAL SALE OF ACCUMULATORS EXCEEDS 3,000



**THE AMATEUR'S "O.T."  
ACCUMULATORS.**

(LAST SEASON'S SALE OVER 2,000.)

If we published all the testimonials from satisfied Amateurs appreciating this well-known Accumulator, it would go well to make another catalogue. That it is **VALUE FOR MONEY**, and especially acceptable to Amateurs, is read in almost all the letters. It is manufactured in hundreds at our Twickenham Works. We largely advertise it, and for what reason—because we know it to be a **SOUND ARTICLE AT A REASONABLE PRICE**. It gives 4 Volts, is strongly made in clear Celluloid Case, 4 1/2 in. high, 2 3/4 in. wide, 3/4 in. thick. Weight, 9oz. Will light a 4-V. "H.E." Lamp 5 hours on one charge. Can be used for Motors, Trams, Spark Coils, Electro-Plating, &c.

**The Well-Known  
"O.T."**

Mr. F. Bryant writes:—  
"A few months ago I purchased one of your 'O.T.'s," which is still in wonderful working order.—Kersal, Manchester."

Mr. W. Sumner writes:—  
"I have found your 'O.T.' Accumulator the best I have seen at such a price.—New College, Harrogate."



**"O.T."  
FOR VALUE.**

Mr. H. N. Hasler writes: "I am very pleased with your 'O.T.' Accumulator. Where I had it charged they said it was a **marvel for the money**.—Hurst Green, Sussex." Originals can be seen of all testimonials in his List.

**COMPLETE ACCUMULATOR FOR  
2 OR 4 VOLTS.**

Each 2/. Postage 4d. extra.  
Or fully Charged, each 2/6. Postage, 4d. extra.

We can supply the "O.T." as a Boat Accumulator with Vents in side 6d. extra on above prices.  
Set of Complete PARTS including Celluloid Case, 2 Positive and 2 Negative 3 by 1 1/2 Plates, Black Sealing Compound, Terminals, Vents, &c.

The Set, 1/9. Postage 4d. extra.



**GUARANTEED BRITISH MADE  
"E.E.C." ACCUMULATORS.**

Fitted with Non-Splash Vents and Non-Corrosive Terminals. Best Quality English Plates, Celluloid Separators. All Lead Burnt not soldered.

Manufactured throughout in our own Factory. You will get satisfaction from every Accumulator.

Sizes given are for Cases only. Allow 1/2 inch for Terminals.

We can supply any size or capacity not listed at very MODERATE PRICES.



List No.	Volts.	No. of hours light using "H.E." Lamp.	Weight without Acid.	Shape.	Case.	Measurements.			Each.	Or if sent fully charged.	Complete Set of Parts.	Cases only.
						Height.	Width.	Length.				
2	4	4	6oz.	Rectangular	Ebonite	3 1/2 in.	1 1/2 in.	1 1/2 in.	1/10	2/2	1/6	8
3	6	6	8oz.	"	"	3 1/2 in.	1 1/2 in.	1 1/2 in.	2/2	2/8	1/9	8
4	12	12	12oz.	"	"	3 1/2 in.	1 1/2 in.	1 1/2 in.	3/	3/6	2/3	8
5	18	18	1lb. 3oz.	"	"	4 in.	1 1/2 in.	1 1/2 in.	6/	6/6	4/	1/
6	15	15	1lb. 2oz.	"	"	4 in.	1 1/2 in.	3 in.	4/3	4/9	2/10	1/4
7	5	5	12oz.	"	"	4 in.	1 1/2 in.	3 in.	3/6	4/	2/6	1/2
8	8	8	1lb. 2oz.	"	"	4 in.	1 1/2 in.	3 in.	4/6	5/	3/	1/2
9	5	5	13oz.	Curved	"	4 in.	1 1/2 in.	3 in.	3/	3/6	2/3	1/4
10	5	5	10oz.	"	Celluloid	4 in.	1 1/2 in.	2 1/2 in.	3/6	4/	2/7	1/7
11	12	12	2lb.	Rectangular	Ebonite	5 in.	1 1/2 in.	3 1/2 in.	8/6	9/	6/9	2/6
12	24	24	2lb. 10oz.	"	"	9 in.	2 1/2 in.	2 1/2 in.	9/6	10/	7/	2/3
13	22	22	2lb. 2oz.	"	"	4 1/2 in.	1 1/2 in.	2 1/2 in.	8/6	8/	6/6	2/3
14	6	6	1lb. 1oz.	"	"	4 1/2 in.	1 1/2 in.	4 in.	6/6	7/	4/6	2/5
15	6	6	1lb. 2oz.	Curved	"	4 1/2 in.	1 1/2 in.	4 in.	7/	7/6	5/	2/7

**CELLULOID CEMENT.**

In Sealed Bottles, for repairs to all Celluloid Articles.

Our own special make.

Small bottle, 6d. Postage, 3d. Large bottle, 1/, postage 4d.

In larger quantities write for quotation.

**SHEET CELLULOID (Clear).**  
For repairing Celluloid Cases, &c.

Thickness.	3 inch by 3 inch sheet.	3 inch by 6 inch sheet.	12 inch by 12 inch sheet.
1/8 inch ...	2d.	3 1/2 d.	1/8
3/16 " " ...	3d.	5d.	3/
1/4 " " ...	5d.	9d.	6/

Postage extra.

**THIN PATCHING CELLULOID.**

3 x 3 in., 1d. | 12 x 12 in., 8d.  
Any size or thicker ess cut to order, 6/0 per lb.

**RUBBER CORKS**

With central glass tube for accumulator vents, each 2d., doz. 1/8. Postage 1d.

**CELLULOID VENTS.**

With tube, Small size, each 2 1/2 d. Large size, each 3d.

**THE "E.E.C." BOAT ACCUMULATORS.**  
REASONABLE PRICES. CAPACITY GUARANTEED.

WE are the ACTUAL MANUFACTURERS of this popular type of Boat Accumulator both in Ebonite and Celluloid, supplying direct from our Factory at REASONABLE PRICES for CASH. When selecting a SUITABLE ACCUMULATOR for your Boat or Loco, first go carefully into the CAPACITY. You will note we give not only outside dimensions and overall size of cases, but number and size of plates in each cell. We maintain that every "E.E.C. BOAT ACCUMULATOR" is packed with the greatest number of plates it is possible to carry. The Capacities given are ACTUAL AMP. HRS. and not ignition, quoted by some of our competitors, who list an imitation of our Cells. Further, the Plates in "E.E.C." Boat Accumulators have Perforated Corrugated Celluloid Separators which obviate buckling of plates due to external Short Circuits. They have ample clearance at bottoms, are fitted with Non-Splash Vents and our well-known Positive and Negative Plates.

RELIABLE without a doubt and capable of exceptionally heavy discharge, and what is further, carry the E.E.C. guarantee for twelve months.



LIST No. 1514.



LIST No. 1523.

**EBONITE CASES.**

List No.	Volts.	Actual Amp. Hrs.	Weight.	Plates per Cell.	Size of Plates.	Height over vents.	Length over Terminals.	Wide.	Price.	Cases only.
1509	2	4	12 ozs.	5	3 by 1 1/2 in.	2 in.	4 in.	1 1/2 in.	5/9	9
1510	2	6	1 lb. 2 ozs.	7	3 by 1 1/2 in.	1 1/2 in.	4 1/2 in.	1 1/2 in.	7/	1/
1511	2	15	2 lbs. 6 ozs.	7	3 1/2 by 2 1/2 in.	2 1/2 in.	4 1/2 in.	1 1/2 in.	1/6	1/3
1512	4	4	1 " 8 "	5	3 by 1 1/2 in.	2 "	4 "	2 1/2 "	9/6	1/6
1513	4	6	2 " 2 "	3	3 1/2 by 2 1/2 in.	3 1/2 "	4 1/2 "	1 1/2 "	10/6	2/3
1514	4	7	2 " 14 "	3	4 by 2 1/2 in.	3 1/2 "	5 1/2 "	2 "	11/	2/6
1515	4	12	2 " 10 "	6	3 by 1 1/2 in.	2 1/2 "	4 1/2 "	2 1/2 "	15/	2/9
1516	4	3	10 "	7	4 by 4 in.	5 "	6 1/2 "	4 1/2 "	34/6	4/9
1517	6	6	3 "	3	4 by 2 in.	2 1/2 "	5 1/2 "	2 1/2 "	15/6	4/

**CELLULOID CASES.**

List No.	Volts.	Actual Amp. Hrs.	Weight.	Plates per Cell.	Size of Plates.	Height over vents.	Length over Terminals.	Wide.	Price.	Cases only.
1520	2	4	11 ozs.	5	3 by 1 1/2 in.	2 in.	4 1/2 in.	1 1/2 in.	6/6	2/3
1521	2	6	1 lb. 4 ozs.	3	4 by 2 "	2 1/2 "	5 1/2 "	1 1/2 "	7/6	2/6
1522	2	12	1 " 14 "	5	4 by 2 "	2 1/2 "	5 1/2 "	1 1/2 "	9/6	3/
1523	4	6	2 " 8 "	3	4 by 2 "	2 1/2 "	5 1/2 "	1 1/2 "	14/	5/
1524	4	12	3 " 10 "	5	4 by 2 "	2 1/2 "	5 1/2 "	2 1/2 "	18/	6/
1525	6	6	3 " 12 "	3	4 by 2 "	2 1/2 "	5 1/2 "	2 1/2 "	19/6	7/6
1527	6	12	5 " 8 "	5	4 by 2 "	2 1/2 "	5 1/2 "	4 1/2 "	25/6	9/
1528	8	6	5 " "	3	4 by 2 "	2 1/2 "	5 1/2 "	3 1/2 "	26/	10/
1529	8	12	7 " 4 "	5	4 by 2 "	2 1/2 "	5 1/2 "	5 1/2 "	33/6	11/

Postage extra according to weight.

N.B.—Terminals fitted at Top, 1/ per accumulator extra.

NOTE.—Plates per CELL. To find total number of plates in accumulator of course multiply by number of cells, 2 volts per cell.



**STORAGE ACCUMULATORS IN GLASS BOXES.**

Manufactured in our own works under careful supervision, these well-known E.E.C. Glass Cells take a high standard for EFFICIENCY, RELIABILITY, and CAPACITY. They are of the open type so that plates can be removed and the cell cleaned out with minimum amount of trouble. Between each plate is inserted perforated corrugated celluloid. The plates cannot Buckle, and External Short Circuit will do little harm. Owing to the improved method of separating and raising plates from bottom of cell, these Accumulators will be found to hold their charge much longer than the ordinary type. Flint Glass Boxes only used. Specially note New Improved Type of Grids supplied with Lead Nut or Fly Nut Coupling.

**2 VOLTS EACH CELL.**



List No. 085

List No.	Size of Glass Jar.			No. of Plates per cell.	Size of Plates.	Capacity in Amp. Hrs.	Each.	Glass Jars Only.
	Height.	Length.	Width.					
080	4½ in.	3½ in.	1½ in.	3	3½ by 2½	6	3/6	9d.
081	"	"	2 in.	5	"	12	5/-	10d.
082	"	"	2½ in.	7	"	18	6/6	11d.
083	6 in.	4½ in.	"	3	4 by 4	10	5/-	1/-
084	"	"	"	6	"	20	6/6	1/-
085	"	5 in.	3½ in.	7	"	30	7/6	1/3
086	"	"	5 in.	9	"	40	10/6	1/6
087	"	"	"	11	"	50	12/6	1/6
088	"	"	"	13	"	60	17/6	1/6

Carriage Forward.

**THIS SHOULD BE GOOD ENOUGH.**

The Government National Physical Laboratory at Bushey House, Teddington, selected an installation of 250 of the above cells after careful tests.

**ACCUMULATOR PLATES READY FORMED.**

Prices quoted are for Positive or Negative Plates with lugs. High Class English Plates only supplied.

List No.	Size of Plates.	Each.	Doz.	List No.	Size of Plates.	Each.	Doz.
488	3 in. " 1½ " " "	4½d.	4/-	493	4 in. " 4 " ½ " "	9d.	8/6
489	3½ in. " 1½ " " "	5d.	4/6	494	4 in. " 4 " ½ " "	10½d.	9/9
490	3½ in. " 2½ " " "	5½d.	5/-	495	4½ in. " 4½ " ½ " "	1/6	17/-
491	4 in. " 2½ " " "	7d.	6/6	496	6 in. " 4 " ½ " "	1/10	20/-

Postage extra according to number.

**THE "EXCELO" 4-V. CELLULOID POCKET ACCUMULATOR.**

SPECIFICATION.

CAPACITY—5 AMP. HOURS AT 4 VOLTS.

The above is guaranteed.

PLATES—Size 3 by 1½ in., 4 Negatives, 2 Positives.

CASES—Specially reinforced Celluloid Clear.

SEPARATORS—Perforated Corrugated Celluloid.

VENTS—Celluloid Non-Spillable.

TERMINALS—Improved Non-Corrosive.

This cell will light a 4-v. 4-c.p. Metal Filament Lamp 6 hours on one charge or on ignition will do approx. 150 miles. Charging instructions on each Accumulator.

N.B.—If sent fully Charged add 6d. extra.

Spare Cases each add 1/6 extra.

We guarantee the "Excelo" will give the output as listed and that it is made in our Twickenham Works.

On actual test this cell lights a 4-v. H.E. Lamp 18 hours continuous.



Size 4½ high, 3½ long, 1 in. wide.

**4/6 EACH.**

Postage 4d. extra.



Size 4½ high, 3½ long, 1 in. wide.

**4/6 EACH.**

Postage 4d. extra.

66 WE ARE ACTUAL ACCUMULATOR MAKERS, THEREFORE YOU GET LOW PRICES.

**ACCUMULATOR REPAIRS.**

All repairs are done in our own Works under careful supervision at very MODERATE PRICES. We have had considerable experience in this class of work, and customers can rely on obtaining thoroughly good results from repairs executed by us. If at any time you are in doubt whether your cell is worth repair, forward it to us, Carriage Paid or by Post. We will examine and give you a LOW QUOTATION for its repair. It is impossible to give detail prices for all makes, but below you will find a list from which you can arrive at a near approximate cost.

Fitting one new Terminal to Pocket Accumulator	...	...	...	...	1/9
" two " " " " " "	...	...	...	...	1/3
" new Case " plus price of case " "	...	...	...	...	1/6
" and new Plates, ask for quotation.					
Burning new Lug and fitting new Terminal to 10, 20, 30 or 40 amp. hr. size					2/
Repairing Leak outside Case	"	"	"	"	10/
" " inside " and cleaning out " " " "	"	"	"	"	3/3
Cleaning out and repainting Terminals	"	"	"	"	2/6
Fitting Celluloid Case to your Plates, we supplying Non-corrosive Terminals, Non-splash Vents, Separators, &c.—					
10 amp. hr., 6/; 20 amp. hr., 6/6; 30 amp. hr., 7/6; 40 amp. hr.					8/

CAPACITY.	Number Plates with Terminal.									
	1	2	3	4	5	6	7	8	9	10
10 amp. hr. ...	2/	3/9	4/9	5/9	6/9	7/9	—	—	—	—
20 " " ...	2/3	4/3	5/6	7/	8/6	9/6	—	—	—	—
30 " " ...	2/3	4/	5/6	7/	8/6	9/6	11/	12/9	14/	10/
40 " " ...	2/6	4/3	5/6	7/	8/6	9/6	11/	12/9	14/6	16/

**THE "ECONOMIC" CHARGING and POLARITY INDICATOR.**

One of the most Up-to-Date and Reliable methods for charging Accumulators. The Set weighs only 3 ozs., and can be easily carried, NO ELECTRICAL KNOWLEDGE being necessary.

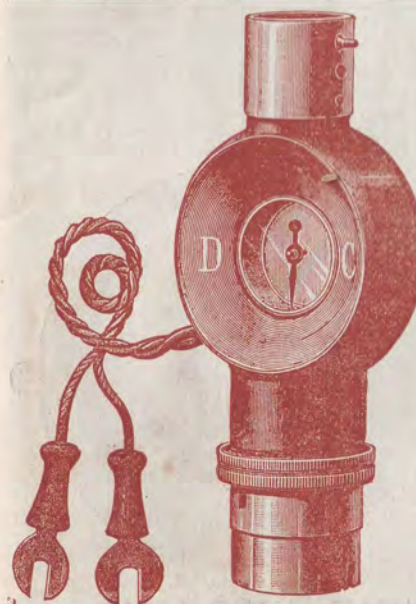
**DIRECTIONS.**

Switch off current and remove Electric Lamp from fitting. Place this lamp in holder at one end of Charging Set. Now put adaptor end of Charging Set in fitting from which lamp was originally removed. Connect your Flexible Wires of Charging Set to Accumulator Terminals and switch on light. The small needle in Charging Set should now point to C. Should this not be the case, it is only necessary to reverse the Charging Set in lamp holder.

SPECIAL PRICE. Each, 4/9.

Postage 4d. extra.

N.B.—The "Economic" Charging Sets can only be used for direct current circuits.



ACCUMULATEUR

LAMP

"ECONOMIC" FOR NEW IDEAS AT MODERATE PRICES.

**ADVICE ON ACCUMULATOR CHARGING.**

Keep terminals smeared with vaseline; it prevents corrosion.  
See acid is right strength by Hydrometer, 1.200 specific gravity.  
Sulphuric acid solution for accumulators, 5 parts water to 1 of acid.  
Always pour the acid into the water, *not* water into acid, when mixing solution.  
Connect positive of accumulator to positive of charging supply. See our charging adaptor, It is as well to test supply for polarity before connection is made. [page 67.  
All our accumulators are fitted with non-splash vents; these must be removed during charging.

When charging from "Fuller" Cells at first only slightly immerse zincs in solution. This will prevent excessive current flowing at the start of charge. Lower zincs to full extent in about 2 hours after.

DON'T FLASH CONNECTIONS TOGETHER to see if cell is charged; use voltmeter or lamp. Cell is charged when gassing freely from negative plate—known as milking.  
Don't leave your accumulator for a longer period than four weeks without re-charging. If you do it will sulphate and ruin plates.

**NOTICE.**

When using Metallic Filament Lamps our Ignition Accumulators will give the following results:

Ignition Capacity.	No. of hrs. light, using Metal Filament Lamp.
8 amp. hrs.	5 hrs. actual light.
10 " "	7 " " "
11 " "	11 " " "
20 " "	14 " " "
30 " "	21 " " "
40 " "	28 " " "

**ACCUMULATOR CHARGING.**

Night and day our plant is running for this purpose. Every care is taken to see that each accumulator is correctly charged and that it contains acid of the right specific gravity. Pocket Accumulators 4d. each.

CAPACITY.	10 amp.	20 amp.	30 amp.	40 amp.	60 amp.	80 amp.
EACH.	6d.	6d.	9d.	1/	1/3	1/9
Filling with acid and 1st charge	1/	1/	1/3	1/9	2/3	2/9

**SPECIAL LINE CHEAP.**

**GLASS ACCUMULATORS 2V. EACH.**

List No.	Inside Measurement of Glass Jar.	Size of Plates.	Complete EACH	Glass Jars only
984	3 3/4" x 1 1/2" x 1/2"	3 x 1 1/4 in.	1 1/4	1/6
985	" " " "	3 x 1 1/4 in.	1/9	1/6
986	" " " "	3 x 1 1/4 in.	1/8	1/6
987	" " " "	3 x 1 1/4 in.	2/	1/6

No. 984 and '86 contain 2 plates per cell.  
No. 985 and 987 " " " " " "

Postage 4d. extra per cell. " "

N.B.—Cheap Glass Jars, 4 1/2 high, 1 3/4 x 1 1/4. EACH 3d.

**PERFORATED CORRUGATED CELLULOID**

For Separators in Cells. Any Size Cut to Order.  
4in. x 4in. Medium 1/2  
12in. x 12in. " 1/5  
4in. x 4in. Thick 3/4  
12in. x 12in. " 2/6  
Postage 1d. and 2d. per sheet.



List No. 985

Complete with 4, 6, or 8 Volt Lamp, Spring Contacts. Powerful Nickel plated Parabolical Reflectors. Diam. at back 4in. Mounted on handsome mahogany base. Suitable for Motor Interior Lighting, &c.  
List No. 988 (as illustration). EACH 8/ Postage 5d. extra.

List 989. Similar design to List No. 988, but for recessing flush into roof.  
EACH 8/. Postage 5d. extra.

N.B.—We can quote special prices for High class Interior Fittings, Leaves, &c.

EACH 5/. List No. 990.

With 4 volt Lamp.

**SPECIAL MINIATURE 4 VOLT. HAND LAMP.**

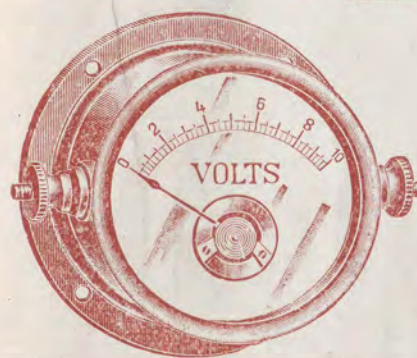
With Flexible Wires suitable for Examination of Motor when on pit.



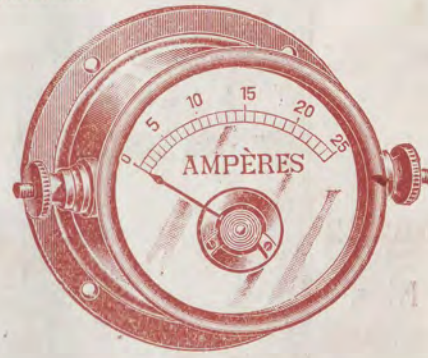
List No. 988.

**HIGH-CLASS VOLT AND AMMETERS (OUR SPECIALITY).**

One of the most Accurate and Reliable Small Meters on the Market. An Electro Magnetic Instrument of Soft-Iron Type, in Solid Metal Case, Nickel Plated and Polished in Small Size. Brass and Lacquered in Large Size. The construction of the Instrument is substantial and of a thoroughly reliable design. As a Purchaser you have this advantage: We have listed and sold hundreds of these meters for over three years and can, with confidence, recommend them to our best customer. For the Voltmeters we claim a very Small Current Consumption, in fact the efficiency for both Volt and Ammeter is exceedingly high. These Meters read correctly in any position, are unaffected by dampness, and can be left continuously in circuit.



List. No. 07.



List No. 020.

**VOLTMETERS.**

Type A.			Type B.		
Dials, 2 1/2 inches. Back Flange, 3 1/4 inches.			Dials, 3 inches. Back Flange, 4 1/4 inches.		
List No.	Reading.	Each.	List No.	Reading.	Each.
05	0-5	7/	021	0-5	12/6
06	0-6	7/	022	0-6	12/6
07	0-10	7/6	023	0-10	12/9
08	0-12	7/6	024	0-12	13/
09	0-15	7/9	025	0-15	13/6
010	0-25	8/	026	0-25	14/
011	0-40	8/6	027	0-40	15/
012	0-60	9/	028	0-60	16/
013	0-120	9/6	029	0-100	18/6
			030	0-150	20/
			031	0-250	22/6

Postage 3d. per Meter

Postage 4d. per Meter.

Postage 3d. per Meter.

Postage 4d. per Meter.

**AMMETERS.**

Type A.			Type B.		
Dials, 2 1/2 inches. Back Flange, 3 1/4 inches.			Dials, 3 1/2 inches. Back Flange, 4 1/4 inches.		
List No.	Reading.	Each.	List No.	Reading.	Each.
015	0-2	7/	021	0-2	12/6
016	0-5	7/	022	0-5	12/9
017	0-6	7/	023	0-6	13/
018	0-10	7/6	024	0-10	13/3
019	0-15	7/9	025	0-15	13/6
020	0-25	8/	026	0-25	14/
			027	0-40	14/
			028	0-60	16/
			029	0-100	18/6
			030	0-150	20/
			031	0-250	22/6

TYPE A.—Substantial Metal Cases, Nickel Plated and Polished.  
TYPE B.—Solid Brass Cases, Lacquered Old Gold. Splendid Instrument.  
We can Supply any Reading to Order.

Mr. CYRIL CHILTON writes: "I am very pleased with the 0-25 Voltmeter I got from you on the 28th inst. It has been in circuit continuously, does not get warm, and uses very little current.—Bournemouth, Hants."

**SATISFACTION!**

Mr. FRED NICOLL, of Dundee: "I received Accumulator and Voltmeter safely, and am delighted with them both."

Draw your own Conclusions. Originals can be seen.

NOTE.—We have Larger Pattern Meters, Dial, 6in., Flange, 7in. Close Prices on Application.

Mr. N. H. JACK writes: "Through my agents I obtained Spark Coil Volt and Ammeters from you. All are very satisfactory, so much so that I am ordering some more goods.—Wellington, New Zealand."

**POCKET VOLT & AMMETERS.**

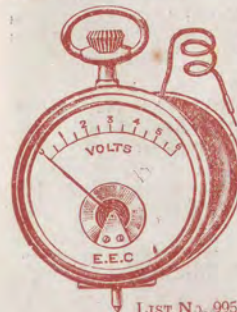
Solid Metal Cases, Nickel Plated Spring Back, and Crown for Pressing (Watch Pattern). Silk Flexible Cords close into Case after using. Guaranteed Accurate and Reliable, and will read in any position.

VOLTMETERS.		AMMETERS.	
List No.	Each.	List No.	Each.
995	0-6 Volts, 6/	997	0-6 Amps., 6/
996	0-10 " 6/8	998	0-10 " 6/8

**COMBINED VOLT AND AMMETER**  
(As Illustration).

List No. 999, 0-6 Volts, 0-20 Amps., 10/6.

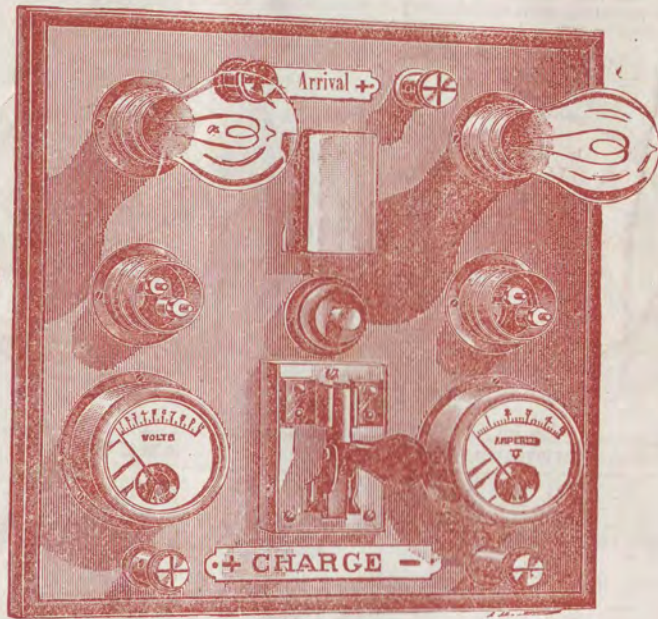
List No. 995. Each Pocket Meter is supplied in Purse Case. List No. 999.



**THE "E.E.C." LIGHTING OR CHARGING BOARDS.**

**B**EING ACTUAL MANUFACTURERS we are in a position to quote you **SPECIAL LOW PRICES** for any description or size of Board. These Boards are completely wired and ready to connect direct to Dynamo or Supply Mains. Made for any Voltage.

Note  
Reasonable  
Prices.



Any  
Board  
Fitted  
To  
Order.

List No. 1607.

- List No.  
1600 Small Handy Board, comprising Single Pole Tumbler Switch, Positive and Negative Charging Terminals. Mounted on Polished Base, Book of Polefinding Paper, 6ft. Flexible Wire with Adaptor ready to connect to the ordinary Lampholders.  
Each 3/9. Postage 4d.

- 1601 Permanent Wall Fitting, comprising 2-way Switch mounted on Polished Base with Positive and Negative Charging Terminals together with diagram of connections and Book of Polefinding Paper.  
Each 4/3. Postage 4d.

To fit No. 1601 remove the ordinary Tumbler Switch from wall, connect up and replace with this switch. You can now at any time connect your accumulator to the terminals and charge through the light that is used for illuminating the house at no extra cost.

- N.B.—We can fit 1601 with Ammeter reading 0.5 amps. at 8/ extra.  
1602 Charging or Lighting Board, fitted with 0-12 Voltmeter, 0-6 Ammeter, 6 amp. Tumbler Switch, Fuse, Dynamo and Charging Terminals, suit 1/2 H.P. set.  
Complete Board 19/6. Postage 10d. extra.

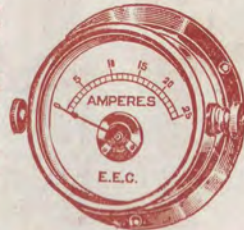
- 1603 Similar to No. 1602 but fitted with 6 amp. 6-way Regulating Switch.  
Complete Board 28/. Postage 1/ extra.

- 1604 Charging or Lighting Board, fitted with 0-25 Voltmeter, 0-10 Ammeter, 10 amp. Tumbler Main Switch, Fuse, Dynamo and Charging Terminals.  
Complete Board 24/6. Postage 1/ extra.

- 1605 Similar to No. 1604 but fitted with 10 amp. 6-way Regulating Switch.  
Complete Board 34/6. Carriage forward.

- 1606 Useful Main Charging Board for Motor Garage, Workshop, &c., fitted with meters (any reading supplied at slight extra cost; write for quotation), 0-15 Voltmeter, 0-6 Amps., Batten Lampholders, 2 Lamps, 6 amp. Tumbler Switch, Charge and Main Terminals, similar to illustration.  
Complete Board 28/. Carriage forward.

- 1607 As No. 1606 and similar to illustration, fitted with 0-25 Voltmeter, 0-6 Ammeter, 4 Batten Lampholders and 4 Lamps, 6 amp. Tumbler Switch, Terminals, &c.  
Complete Board 33/6. Carriage forward.

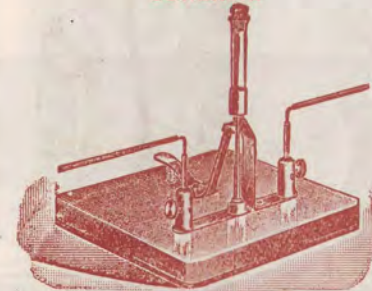


Note: All Charging Boards fitted with this reliable type of meter.

**EXPERIMENTAL WIRELESS TELEGRAPHY.**

After listing and giving these Sets exhaustive trials over two years, we can thoroughly recommend them to any Amateur. The prices quoted are moderate. The Sets are strongly constructed and easily worked by any Amateur with ORDINARY ELECTRICAL KNOWLEDGE. If you already possess a Wimshurst Machine or Spark Coil a set of Wireless will make your instrument doubly interesting and instructive.

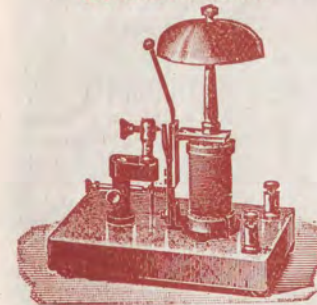
**COHERER.**



List No. 550.

For receiving the Electric Aerial Undulations with Hand De-Coherer, adjustable Receiving Arms, mounted on handsome Polished Base. Complete with filings. The performance of this Coherer is perfectly correct and faultless.

Each, 6/. Postage 4d. extra.  
**WIRELESS BELL.**



List No. 555.

For experimenting with Wireless apparatus.  
Each, 6/9. Postage 4d. extra.



**RESISTANCE COIL,**  
200 ohms.

List No. 557. Each, 1/10.  
Postage 2d. extra.

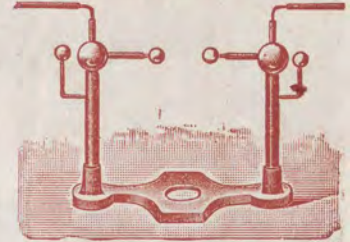


**TAPPING KEY.**  
Well finished.

List No. 556.  
Each, 2/6.  
Postage 2d. extra

**TRANSMITTER.**

Small Aerial Transmitter, with adjustable Transmitting Arms and Spark Discharge. Suitable for apparatus up to 2in. spark. Finished in Old Gold.

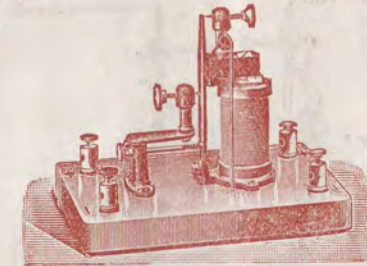


List No. 551.

List No. 551.  
Price,  
4/9.  
Postage,  
4d. extra.

**RELAY.**

Special design. Very sensitive on short distance.

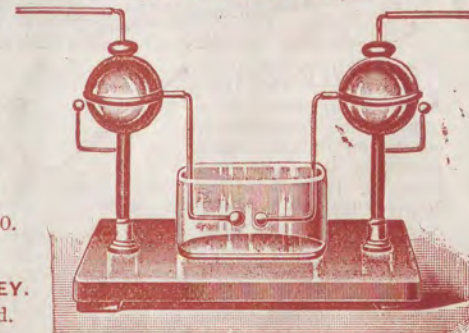


List No. 554.

List No. 553.  
Each, 9/.

List No. 554.  
More sensitive than No. 553, works on minimum current. Suitable for larger sets,  
Each, 10/6.

**OIL-BREAK TRANSMITTER.**

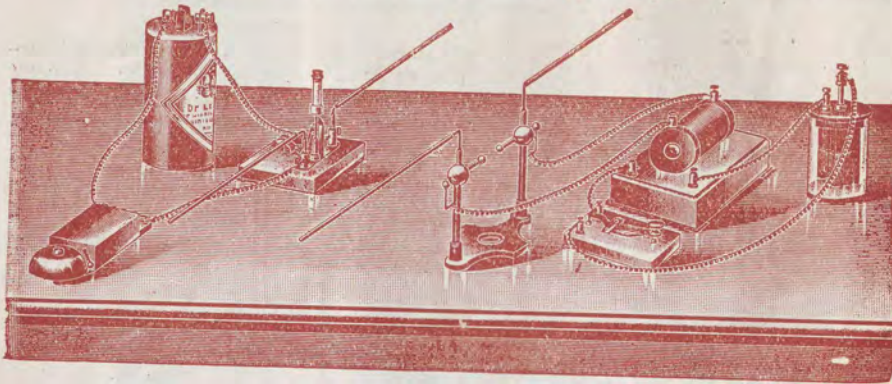


List No. 552.

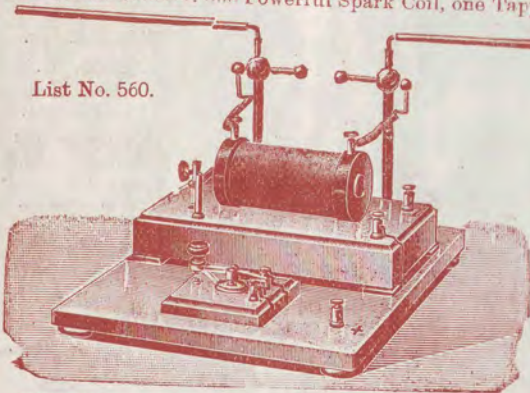
Larger size than No. 551, with Oil Discharge. Suit Coil up to 1 1/2 spark.  
Each, 11/10. Postage 6d. extra.

**COMPLETE WIRELESS SETS. THE "AMATEUR'S."**

This Complete Set is specially listed and adapted for Amateurs. If carefully connected up according to the diagrams and printed instructions supplied with each set we guarantee the customer will obtain satisfactory results. Distance covered by this apparatus, from one room to another, approx. 6 yards.



The "AMATEUR'S" WIRELESS SET complete, as illustration, consists of one Transmitter, one Coherer, one Powerful Spark Coil, one Tapping Key, two E.E.C. Dry Batteries, one Bell and Connecting Wires with printed instructions and diagrams. List No. 559. Price of Complete Set 22/6. Postage 1/ extra.



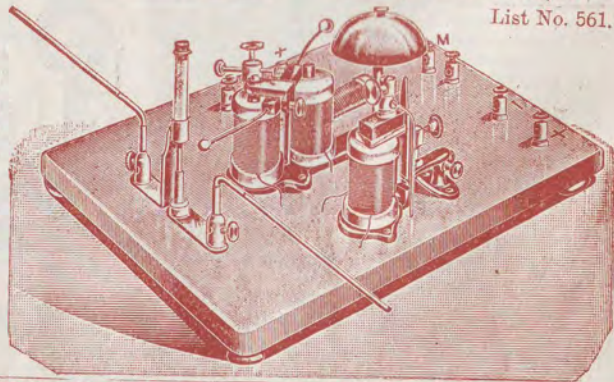
List No. 560.

**POWERFUL TRANSMITTER.**  
List No. 560. Complete Wireless Transmitter, consisting of powerful 1/2 in. Spark Coil, Tapping Key, Adjustable Transmitter, Condenser etc. The whole mounted on Handsome Polished Real Teak Base and connected up ready for working with our No. 561 Wireless Receiver. EACH (as illustration) 19/6 List No. 561.

**RECEIVER SET.**

Adapted to work with our No. 560 Transmitter, consisting of one Automatically De-Coherered Coherer, Bell, Sensitive Relay (Platinum Tipped), 3 pair Terminals, Resistance Coil, etc., all connected ready for receiving together with full printed instructions and diagrams

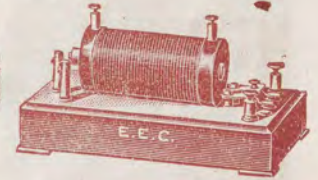
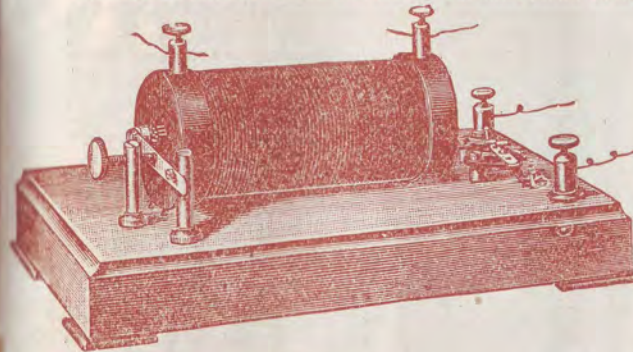
List No. 561. EACH 31/ Postage 1/ extra. Book on "Wireless," 1/ each.



72 COMPARE THESE PRICES WITH RIVAL COMPETITORS.

**HIGH-CLASS INDUCTION OR SPARK COILS.**

We list below a Powerful Selection of Spark Coils from 1/8 in. to 4 in. The Primary and Secondary Windings are carefully insulated and wound. The prices quoted include Condenser, which is built into base of Coil in such a manner so that at any time it can be easily disconnected. All fittings metal are grained and lacquered old gold. We would particularly call your attention to the adaptability of these Coils for Wireless Telegraphy, X Rays, Geisler Tubes, Gas Engine Ignition and Static Experiments. For working, allow 2 volts for each 1/2 in. spark.



**WITHOUT COMMUTATOR.**

List No.	Length of Spark.	Each.	Post Extra.
570A	1/2 in.	4/9	3d.
570	3/8 "	4/6	4d.
571	3/4 "	5	5d.
572	7/8 "	7/3	5d.
573	1 "	7/9	6d.
574	1 1/8 "	10/9	7d.
575	1 1/4 "	17	7d.
576	1 1/2 "	21/6	8d.
577	1 3/4 "	30/6	10d.
578	2 "	40	Carriage Forward.
578A	2 1/2 "	60	Carriage Forward.
579A	2 3/4 "	75	Carriage Forward.
580A	3 "	100	Carriage Forward.
581A	4 "	130	Carriage Forward.

Mr. E. FARROW writes:

"The 1/2 in. Spark Coil continues to give satisfaction working a small Tesla transformer beautifully.—Spalding, Lincs."

**WITH COMMUTATOR.**

List No.	Length of Spark.	Each.	Post Extra.
579B	1/2 in.	5/9	3d.
579	3/8 "	6	4d.
580	3/4 "	6/3	5d.
581	7/8 "	8/6	5d.
582	1 "	10/6	6d.
583	1 1/8 "	12/6	7d.
584	1 1/4 "	18/6	7d.
585	1 1/2 "	24/6	8d.
586	1 3/4 "	32	10d.
587	2 "	39/6	Carriage Forward.
588	2 1/2 "	70	Carriage Forward.
589	2 3/4 "	82	Carriage Forward.
590A	3 "	120	Carriage Forward.
590A	4 "	150	Carriage Forward.

**OUR STRONG POINT.**

We always satisfy each Individual Customer.

**GEISLER TUBES.**

We carry a large stock, and can supply promptly all sizes and designs.

List No.	Length.	Plain.	Filled.
500	3 1/2 in.	8d.	1/1
501	4 "	9d.	1/2
503	4 1/2 "	10d.	1/4
503	6 1/2 "	1/	1/6
504	8 "	1/3	2/

Postage 3d. and 4d. each extra.



**FILLED TUBES.**

**GEISLER TUBE ROTATORS.**

Specially designed for High Speeds. Tubes light from Coils or Wimshurst. Machines rotated by these Motors are specially attractive and effective for Exhibition at Evening Parties or Bazaars.

**Motor Driven.**

List No.	To take up to	Each.
598	4 in. Tubes	7/
599	5 1/2 "	8/
600	8 "	10/

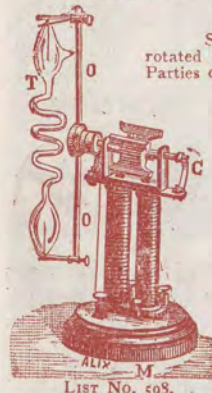
Postage 4d. and 5d. extra.

**Hand Driven.**

List No.	To take	Each.
040	1-8 in. Tube	2/6
041	3-8 "	3/7

Postage 4d. extra.

By means of a special adjustment any tube smaller than size listed can be fitted to machine, as, for instance, the 8 in. Rotator can be adjusted to take tubes 4 in.



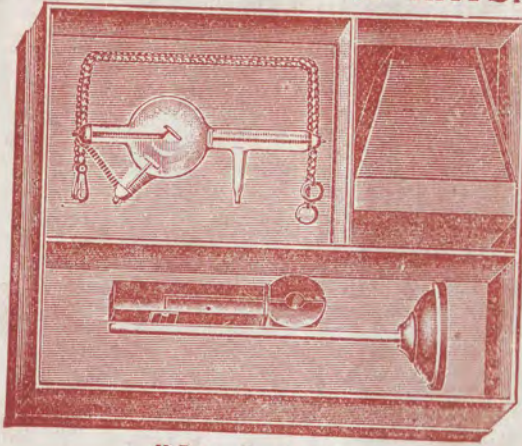
List No. 598.



List No. 041.

WE HAVE TWELVE YEARS' REPUTATION FOR VALUE.

**X RAYS.**



X Rays. Complete Set.

X Rays are now commonly used for numerous Medical Purposes, but for the Amateur there is not a Set of Apparatus on the market which he can easily afford. We introduce a set which if used with our No. 620 Wimshurst Machine or No. 574 Induction Coil will be found both Practical and MODERATE IN PRICE. It will enable you to produce a genuine X Ray photograph 7in. by 9in. or by means of the Screen expose to view bones in the hand and various other interesting studies.

List No. 037. Comprising 1 Rontgen Tube, 1 Standard Fluorescope, Tube Stand and Holder, Conducting Chains, together with book of full instructions. Price 35/ (Complete Set). Postage 1/ extra.

List No. 038. Rontgen Tube only 1/ Postage 6d. extra.

List No. 039. Standard Fluorescope Screen. Each 19/6. Postage 10d. extra. Book "X Rays simply explained," post free 7d. "Practical Induction Coil Making," post free 1/3.

Above two Books can be thoroughly recommended.

List No. 601. For use with Wimshurst Machines, 2in. to 3in. Spark. Each 15/

List No. 602. For use with Spark Coil, 2in. to 6in. Spark (Jackson Pattern) 19/6. Postage 5d. extra.

Mr. Jackson, of Folkestone, writes:—"Received X Ray Tube safely. Have tested it and obtained an excellent Photograph."



**APPARATUS FOR STATIC EXPERIMENTS.**

For use with Wimshurst Machines or Induction Coils. See our Book "Static Experiments," Post Free 7/.

- |          |                                    |          |                                  |
|----------|------------------------------------|----------|----------------------------------|
| List No. | Each.                              | List No. | Each.                            |
| 603      | Electroscopes, Gold Leaf ... 2/    | 610      | Proof Planes ... .. 1/           |
| 604      | " Pith Ball ... 1/6                | 611      | Thunder, House ... .. 7/6        |
| 605      | Discharges ... .. 3/               | 612      | Lightning, " ... .. 7/6          |
| 606      | " with Glass Handles 5/6           | 613      | Faraday Butterfly Net, with } 3/ |
| 607      | Pith Balls, /7 per dozen ... /1    | 614      | Stand ... .. 3/                  |
| 608      | " Stand ... .. 1/                  | 615      | Electric Pistol ... .. 7/        |
| 609      | Dutch Gold for Electroscopes... /6 | 616      | " Cannon ... .. 6/               |
- (above for exploding mixture of Hydrogen Gas)
- |     |  |
|-----|--|
| 617 | Head of Hair ... .. 3/                   |
| 618 | Electrical Circus ... .. 4/              |
| 619 | Pith Figures, for use with above } 2 1/2 |
| 620 | Henley Dischargers ... .. 3/6            |

**BRASS BALLS.**

3/4 1/2 1 1 1/4 1 1/2 2 inches.  
/1 /1 /2 /2 /4 /5 /8 1/2 1/9 each.



**GEISLER TUBES (LATEST).**

Containing Flowers, Butterflies, etc. Very effective for exhibiting, can be lighted from our 1/8in. Spark Coil.

List No. 044.  
Each 4/6. Postage 6d.

We hold a record selection of Tubes. If possible give us a call. See page 73.

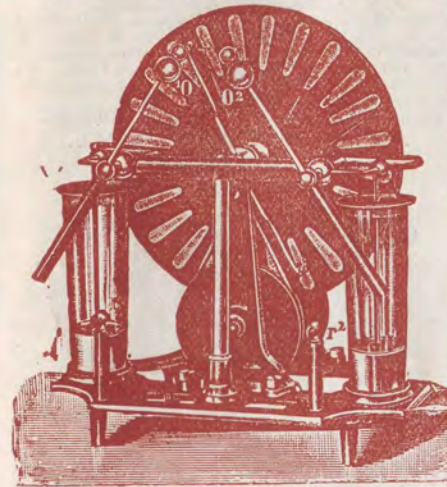
**YOU KNOW**



we have reduced all our stamping prices. See pages 38 and 39. First Rate Battery Set for Spark Coils, see page 20.

**HIGH-CLASS WIMSHURST MACHINES.**

From RESULTS we have personally obtained from these High-Class Machines we do not hesitate to recommend them to our customers. Special Improvements have been introduced whereby the Machines can be used in conjunction with our Wireless Telegraphy or X Ray Apparatus. All machines despatched from our Twickenham Works are thoroughly tested, and guaranteed reliable. Each Wimshurst is supplied with Best quality Polished Ebonite Plates, carefully Sectored, two Discharging Rods, two Leyden Jars, all metal parts heavily Nickel Plated, mounted on Massive Base. The Machines bear a very handsome and effective appearance.



List No.	Plates Size	Length of Spark.	Each	Carriage
620	7in	2 to 3in	19/	/8
621	8 "	3 " 4 "	25/	1/
622	10 "	4 " 5 "	36/6	Forward.
622a	12 "	5 " 6 "	90/	"
622b	14 "	6 " 7 "	110/	"

**DON'T BE MISLED.**

Some manufacturers list their machines to give say 4in. spark, whereas on testing we have found approx. 2 1/2in. to be the maximum. WE GUARANTEE that all our machines will give the length of spark as tested easily.

**OPINIONS.**

Dr. McDonald writes from Co. Down, Ireland:—"8 inch Wimshurst, obtained with other articles a fortnight ago, has given very great satisfaction."

Mr. Henry Boase, of Dundee, writes:—"Received materials and Wimshurst in good condition, Wimshurst works well."

**CLASS PLATES FOR WIMSHURST MACHINES.**

Centre Hole drilled Rounded Smooth Edges.

List No.	Size.	Centre Hole.	Thick-ness.	Plam. Each.
623	10in.	1 1/2 in.	5/32 in.	2/
624	12 "	" "	" "	2/3
625	14 "	" "	" "	2/6
626	15 "	" "	" "	3/
627	16 "	" "	" "	3/6
628	18 "	" "	" "	5/
629	22 "	" "	" "	6/
630	24 "	" "	" "	8/6

Special Packing /6 per pair, Carriage Forward. These plates are cut from stout 21oz. Glass Sheet, guaranteed Balanced and perfectly true.



**EBONITE WIMSHURST PLATES.**

Best quality Polished Ebonite Plates, manufactured from 1/2 material, Sectored & Varnished. 1/2in. Centre Hole, guaranteed true and well balanced.

List No.	Size	Each	Post.
046	7in.	2/10	/5
047	8in.	3/10	/6
048	10in.	4/10	/7

Large sizes write for quotation

**RADIOMETERS.**

Have you ever used a Radiometer? both novel and instructive, mounted on glass stand with two plates which Revolve by power of Sunlight. List No. 10037, each 2/, postage 3/.

**EXPERIMENTAL SOLENOID.**



Very interesting and instructive, works well from 2v. and upwards, 3 1/2in. high 3 1/2in. long. Each 2/. Postage /3 extra.



**LEYDEN JARS.**

We hold a large stock of Leyden Jars in various sizes and shapes and can execute all orders promptly.

List No.	Each.	Post.
1000	approx. size 1/2 pint.	1/6 /4
1001	" " 1/4 "	2/9 /5
1002	" " 1/8 "	4/6 /6

We are in a position to quote low prices for larger sizes. Send us your enquiry.



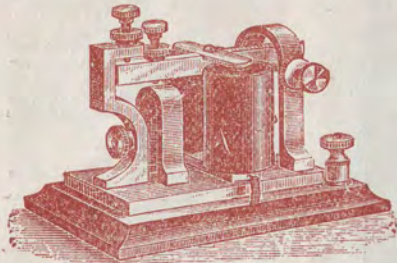
**ELECTROSCOPES.**

Gold Leaf 1 pint size (as illustration) Each 2/. Postage /4.  
Pith Ball Type. Each 1/6. Postage /4.

Glass Jars or Tubes. We can quote you Low Prices.

**G.P.O. MORSE TELEGRAPH INSTRUMENTS.**

These Learners' Outfits will be found extremely useful to those who propose making Telegraphy a profession. The Instruments are carefully adjusted and designed with the special intention to provide a substantial and practical G.P.O. instrument for Learners about to enter the Service.

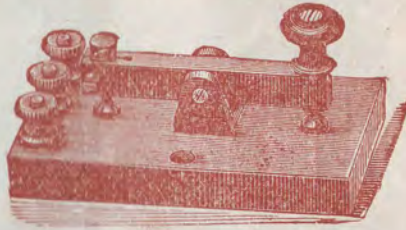


G.P.O. MORSE SOUNDER.

**G.P.O. MORSE SOUNDER.**  
All metal parts Lacquered and Polished. Coils wound with Best Quality Silk Covered Wire, Enclosed in Polished Ebonite Bobbins. All parts are substantially made and eminently suitable for practical use. We can thoroughly recommend as a high-class reliable instrument. List No. 635B.

Each (as illustration) 9/. Postage 6d. extra.

**MORSE TAPPERS or KEYS.**



List No. 636.

List No.	Each.
635A Cheap Pattern ... ..	2/
635 (3 terminals more massive) ... ..	5/6
636 (as illustration) ... ..	7/6

Nos. 635 and 636 have platinum contacts. Postage 1d. extra.

Splendidly made and finished in Old Gold Lacquered Case, Perfect Movement, Clear Inker. This is not a model but an instrument capable of practical work.

**COMPLETE MORSE INKER** (as illustration), 36/.

Extra rolls of paper 1/ each.

This instrument can be successfully used with our Wireless Telegraph Receiver No. 561.

**NOTE.**

We can quote moderate prices for all instrument work. Send us your enquiries.

**THE "AMATEUR'S" ELECTRIC ENGRAVER.**

A Handy little Instrument capable of good work. With ordinary care any amateur can successfully manipulate. Price 9/ each. Postage 6d. extra. Works on 4 volts easily.



**THE "E.E.C." ELECTRIC ENGRAVER.**

The illustration from a photograph of our Engraver shows details of its construction. It is finished throughout in High-Class style by practical instrument makers: it is capable of the very best Class of Jewellers' work. Solid Brass Case and Stand, Grained and Old Gold Lacquered, Platinum Points (guaranteed).

List No.	Each.
052 COMPLETE with Spring Stand (as illustration) ... ..	35/
053 ENGRAVER only ... ..	30/6
054 Set of 3 Large Cells for working the Set ... ..	6/

Postage on complete set, 10d. extra; engraver, 8d. extra; cells, 1/ extra. Impossible to get out of order. Easy to manipulate. It opens up New Business for Jewellers, etc.

**BRASS TERMINALS.**

These Terminals are of our own STANDARD SIZES, well finished and polished, for Bells, Telephones, Medical Coils and all electrical instruments.

N.B.—Illustrations are approximately full size. All terminals are supplied with back nuts or screws except T 9. Remember, in most sizes we are actual manufacturers.

List No.	Each.	Doz.
T 0 ...	2	1/9
T 1 ...	1½	1/3
T 2 ...	1½	1/3
T 3 ...	2	1/6
T 4 ...	4	3/6
T 5 ...	5	4/6
T 7 ...	2½	2/3
T 8 ...	2	1/9
T 9 ...	1	1/9
T 10 ...	1½	1/2
T 11 ...	1½	1/3
T 12 ...	3	2/9
T 13 ...	2½	2/
T 14 ...	1½	1/3
T 15 ...	3	2/9
T 16A ...	3½	3/
T 17 ...	4½	4/3
T 18 ...	4	3/9
T 19 ...	1½	1/2
T 20 ...	2½	2/3
T 21 ...	3½	3/
T 22 ...	3	2/9

Postage extra.

**CARBON CLAMPS.**

T	Each.	Doz.
T 16 ¼ in. Jaw	5	4/6
" 1 "	5	4/9
" 1½ "	6	5/6
" 1¾ "	7	6/9
" 1½ "	8	7/6
" 1½ "	9	8/

Postage extra.

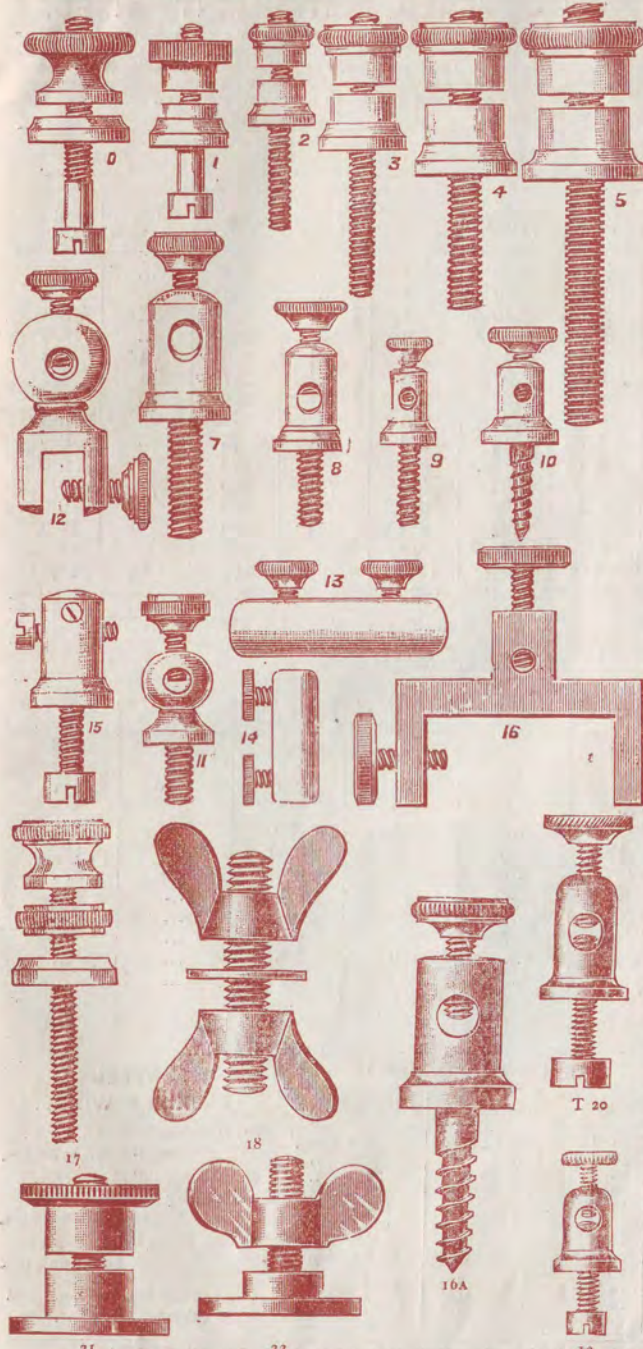
Any Terminal heavily Nickel Plated and Polished, each, 1d. extra.

Lots of 2 doz. sent Post Free. Terminals, Lacquered, ¾d. each, not less than 1 doz. at doz. prices.

For large quantities, say over 1 gross, we can give you special quotation.

**NOTE.**

If you want some special article and do not see it listed, write us! Without a doubt we shall meet your requirements and at a reasonable price.



**SILK AND COTTON COVERED INSTRUMENT WIRES.**

We hold a Large Stock of Instrument, Resistance and other Wires, and do a big business: it therefore follows we are in a position to quote you **LOW PRICES.** The Wires are Manufactured in London from the Best Possible Materials. Conductivity, 100 per cent. The Insulation, whether Cotton or Silk, is evenly wound. **CAUTION.**—In winding a Dynamo, Motor, or other Electrical Apparatus its working depends on your receiving the **CORRECT GAUGE** Wire. All Wires sent out by us are Guaranteed and Stamped Correct Gauge. A Mistake is Impossible by this System.

STANDARD WIRE GAUGE.	APPROXIMATE YARDS PER LB.	SINGLE COTTON COVERED.		DOUBLE COTTON COVERED.		SINGLE SILK COVERED.		DOUBLE SILK COVERED.	
		12yd. Coil.	1lb. Coil.	12yd. Coil.	1lb. Coil.	1oz. Coil.	1lb. Coil.	1oz. Coil.	1lb. Coil.
12	10	1/3	1/2	1/8	1/4	...	2/2	...	3/3
14	16	1/11	1/2	1/9	1/4	...	2/2	...	3/3
16	27	1/9	1/2	1/10	1/4	...	2/2	...	3/3
18	48	1/5	1/3	1/6	1/5	...	2/4	...	3/6
20	87	1/4	1/4	1/4	1/6	2 1/2	2/6	1/4	3/8
22	142	1/3	1/6	1/3	1/8	2 1/2	2/7	1/4	4/2
24	233	1/2	1/9	1/2	2/1	3	2/9	1/5	4/10
26	345	1 1/2	1/11	1/2	2/5	3	1/3	1/5	5/6
28	520	1	2/3	1 1/2	2/8	3 1/2	3/5	1/5	6/0
30	720	Per oz.	2/8	Per oz.	3/2	4	4/2	1/6	6/6
32	955	1/3	3/	1 3/4	3/9	4 1/2	4/9	1/7	8/
34	1,325	1/3	3/2	1/4	4/2	5	5/8	1/8	9/0
36	1,960	1/3 1/2	4/	1/4 1/2	5/2	5 1/2	6/8	1/9 1/2	10/9
38	3,050	1/5 1/2	6/	1/7	8/	8	8/6	1/	14/
40	5,225	1/7 1/2	8/11	1/	13/9	9 1/2	10/6	1/5 1/2	18/11

POSTAGE.—1/2 lb. Hanks, 2 1/2 d.; 1/4 lb. Reels, 3d. 1 lb. Hanks or Reels, 4d. ex., 1/2 lb. & 1/4 lb. Reels supplied at 1 lb. prices.

**GERMAN SILVER WIRES.** Silk or Cotton Covered, **DOUBLE ABOVE PRICES.**

**METAL WIRES.**

S. W. GAUGE.	HARD STEEL WIRE.	PURE TIN WIRE.	GALVANIZED IRON WIRE.	PLATINOID RESISTANCE WIRE.	GERMAN SILVER BARE WIRE.	HARD BRASS WIRE.	TINNED COPPER WIRE.
10-16	2/10	3/11	1/6	6/	2/7	1/8	1/8
18	2/10	4/	1/7	6/2	2/8	1/9	1/8
20	2/10	4/1	1/8	6/6	2/9	1/10	1/10
22	3/3	4/3	...	6/9	3/6	2/	2/
24	3/6	5/	...	6/10	3/10	2/2	2/3
26	3/9	5/10	...	7/2	3/11	2/6	2/7
28	4/6	6/	...	8/	5/	3/	...
30	7/6	7/6	...	8/3	5/2	...	...
32	9/	8/	...	8/9	6/	...	...
34	13/	9/	...	9/3	6/9	...	...
36	18/	10/	...	9/9	7/6	...	...
38	...	...	...	12/	8/9	...	...
40	...	...	...	13/6	...	...	...
	Per lb.	Per lb.	Per lb.	Per lb.	Per lb.	Per lb.	Per lb.

Ounce or any quantity supplied. **POSTAGE EXTRA.**

**WIRE GAUGES.**



For Standard Wire Gauge 1 to 26. EACH, 5/6. Postage, 2d. extra. Handy Gauge for the workshop, Guaranteed Accurate.

Gauge	RESISTANCES, PER lb.	
	Platinoïd.	German Silver.
16	4'852 ohms	2'67 ohms
18	15'33	8'46
20	48'46	26'75
22	132'4	73'11
24	347'5	191'8
26	775'3	428'1
28	1606	937
30	3443	1900
32	6582	3303
34	11362	6272
36	24398	18469
40	153333	84652

**STEEL**

**FLEXIBLE WIRES.**

Cycle Brake Wire, 1d. per ft. Breaking Strain 230 lbs.  
Double Strength, 1 1/2d. per ft. Suitable for Exhaust Lift.  
Breaking Strain 600 lbs.  
Tri-Car Break Wire, 2d. per ft. Breaking Strain 1/2 ton.  
We can thoroughly recommend these reliable wires.

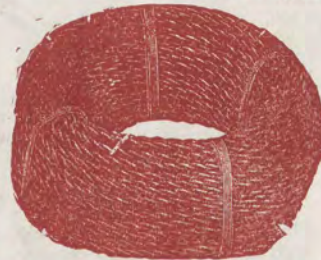
**ELECTRIC BELL AND TELEPHONE LINE WIRES.**

These Bell Wires have a Guaranteed Conductivity of 100% and are made from the best High Conductivity Copper Wire. They are exceptionally well covered, paraffined waxed and polished. Can be supplied in assorted colours. **NOTE.**—We manufacture only One Quality Wires, "THE BEST." No rubbish. **N.B.**—When ordering please quote List No. to prevent mistakes.

LIST NO.	SIZE.	SPECIFICATION.	36ft.	75ft.	105ft.	330ft.
665	22	DOUBLE COTTON COVERED and paraffined waxed... ..	1/3	1/6	1/11	1/8
667	20	DOUBLE COTTON COVERED and paraffined waxed... ..	1/4	1/8	1/3	2/4
668	22	INDIA RUBBER COVERED, double cotton covered, tinned & paraffined waxed	1/4	1/8	1/4	2/5
669	20	INDIA RUBBER COVERED, double cotton covered, tinned & paraffined waxed	1/6	1/	1/10	3/6
670	18	INDIA RUBBER COVERED, double cotton covered, tinned & paraffined waxed	1/9	1/6	2/10	5/3
<b>TWIN WIRES.</b>						
671	2/22	Two wires, different colours, lapped together, DOUBLE COTTON COVERED, tinned and paraffined waxed ... ..	1/6	1/	1/10	3/6
672	2/20	Two wires, different colours, lapped together, DOUBLE COTTON COVERED, tinned and paraffined waxed ... ..	1/9	1/6	2/10	5/6
673	2/22	Two wires, different colours, lapped together, ONE INDIA RUBBER COVERED, both double cotton covered, tinned and paraffined waxed ... ..	1/9	1/5	2/7	4/11
674	2/20	Two wires, different colours, lapped together, ONE INDIA RUBBER COVERED, both double cotton covered, tinned and paraffined waxed ... ..	1/10	1/10	3/6	6/6
675	1 2/22	Same as 673 but BOTH INDIA RUBBER COVERED ... ..	1/10	1/8	3/	5/10
676	2/20	Same as 674 but BOTH INDIA RUBBER COVERED ... ..	1/6	2/9	4/6	8/

**DANGER!** Cheaper Wires than our standard lines can be bought, but be advised by us and **DON'T.** Remember the **BEST** is always **CHEAPEST.**

**SILK FLEXIBLE BELL WIRES.**



**ELECTRIC LIGHT FLEXIBLE WIRES.**

We Stock Flexible Wires in Standard Colours—Blue, Olive Green, Maroon, Light and Dark Blue, &c.

We Stock Flexible Wires in Standard Colours—Blue, Olive Green, Maroon, Light and Dark Blue, &c.

**SILK FLEXIBLE BELL WIRES.**

LIST NO.	SIZE.	DESCRIPTION.	3ft.	30ft.
660 ...	Medium	Twin Wires, SILK covered ... ..	1d.	9d.
651 ...	Thick	Twin Wires, SILK covered ... ..	1 1/2d.	1/3
	Thin	Twin Wires, SILK covered, for Scarf Pins ... ..	1d.	11d.

**ELECTRIC LIGHT FLEXIBLE WIRES.**

LIST NO.	QUALITY.	PURE RUBBER INSULATION.				VULCANIZED INSULATION.			
		55/40		70/40		55/40		70/40	
		Per yard.	12 yards.	1 yard.	12 yards.	1 yard.	12 yards.	1 yard.	12 yards.
662 ...	Cotton	1/2	1/3	1/3 1/2	2/3	1/3	1/8	1/4 1/2	3/
663 ...	Silk	1/3	1/9	1/4 1/2	3/3	1/4	2/4	1/6	4/3

"E.E.C." GENUINE! NO FOREIGN MADE WIRES.

**ELECTRIC LIGHT and POWER WIRES and CABLES.**

Specification—High Conductivity Copper Wire, Insulated with Pure Rubber or Vulcanized India Rubber and Taped.

**NOTE**  
**REDUCED**  
**PRICES.**



**NOTE**  
**REDUCED**  
**PRICES.**

CLASS A.—300 Megohm Grade.—Tinned Copper Wires 100% Conductivity Insulated with Pure Rubber and Vulcanized, protected by Braided Covering, the whole compounded.  
CLASS B.—600 Megohm Grade.—Similar to above, but with much higher Insulation Resistance (recommended).

Size. S.W.G.	Current Carrying Capacity. I.E.E. Standard.	CLASS A.			CLASS B.		
		Per yard.	Per 55 yards.	Per 110 yards.	Per yard.	Per 55 yards.	Per 110 yards.
1/20	1'0 ampere.	2½	7/	13/	3	8¼	15/
1/18	1'7 "	2¾	8/3	15/6	3	10/	18/6
1/16	3'2 "	3	11/6	22/	3½	14/6	26/6
3/22	1'9 "	3½	9/3	17/6	4	12/6	20/
3/20	3'2 "	4	10/6	20/	4½	15/	25/
7/22	4 "	4½	19/6	38/	4½	24/	47/
7/20	7'26 "	6	26/8	50/	6½	32/6	62/
7/18	12'5 "	8	30/	58/6	9	56/	110/
7/16	23 "	11	50/	98/6	11	80/6	155/6

**BALL FITTINGS.**

Polished Brass and Lacquered, Long or Short Arms.

List No.	ENGLISH MANUFACTURE.	each	doz.
728.	2 Light Short Stem ... ..	1/4	14/
729.	3 " " (as illustration) ... ..	1/5	16/
730.	4 " " ... ..	1/7	18/
731.	5 " " ... ..	1/9	20/

Postage extra.

All above fitted with Cord Grip and Shade Carrier.

**SPIDER FITTINGS.**

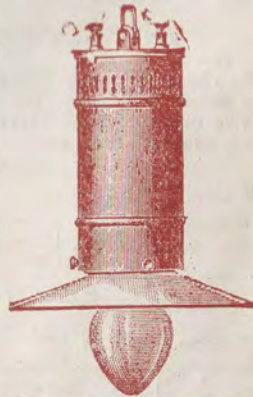
List No.	each
1708.	2 Light ... 2/
1709.	3 " " ... 2/3
	(as illustration)
1710.	4 Light ... 2/6
1711.	5 " " ... 2/10

Postage 6d. extra.

N.B.—If required fitted with Lamp Holders, small or large, i.e., 1/2 or 1, add 6d. per light.



List No. 1709.



**The "MIDGET" ARC LAMPS.**

For Continuous Current only, with Self Contained Resistance. English Made Arc Lamp consuming 1½ to 2 amps. for burning 16 to 25 hours.

Complete with Lamp, Globe and Reflector (as illustration). List No. each

1704.	For Parallel on 90 to 120 Volts ... £2
1705.	Two in Series on 200 to 250 Volts £2 5s.

Carriage Forward.



List No. 729.

**CARBONS (Round).**

For Midget Arcs.

List No.	per 100
1706.	Solid ... 5/6
1707.	Cored ... 6/6

Carriage Forward.

**SPARE GLOBES**

For Midget Arcs ... each 1/  
Weather Hoods to protect Lamp in exposed positions. Each 3/3.

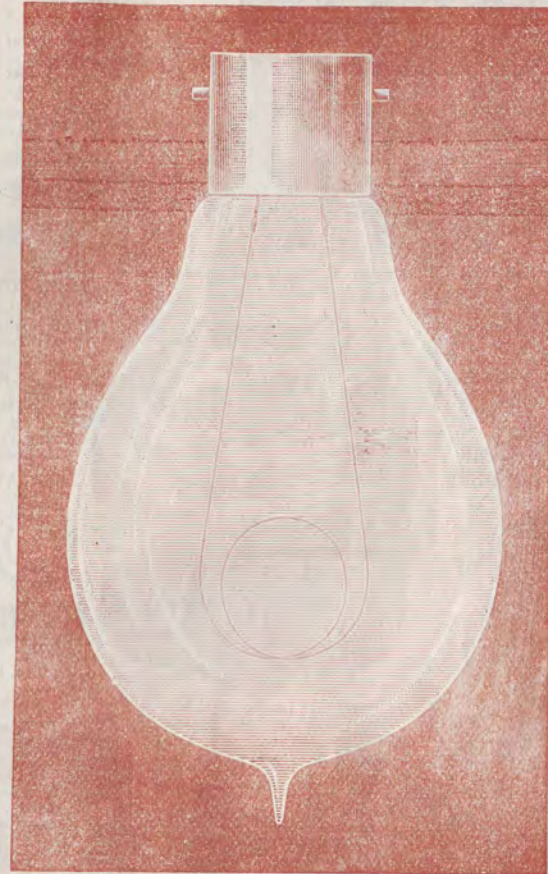
**ALTERNATING LAMPS**

All Voltages, write for REASONABLE QUOTATION.

**"E.E.C" INCANDESCENT ELECTRIC LAMPS.**

One of the Best and most Reliable on the market. Illustration approximately full size.  
LONG LIFE—about 1,000 to 1,500 hours.

**NOTE SPECIAL PRICES.**



**EVERY LAMP GUARANTEED.**

We hold Large Stocks and can Supply in 5, 8, 16, 25, and 32 Candle Power. 50 to 150 volts. Each 7d. Per Doz. 5/8. 150 to 250 volts. Each 8½d. Per Doz. 7/6  
Lamps Coloured (any colour) 2d. each extra, Frosting 2d. each extra

**"TANTALUM" METAL FILAMENT LAMPS.**



Standard Pattern.

A Lamp that we can thoroughly recommend. It will burn in any position from direct or alternating current mains. Its chief claim is EFFICIENCY, 1.7 Watts Guaranteed per British Candle Power, or about 50 per cent. less current than the ordinary Carbon Lamp for same amount of Light.

50 to 120 volts ... .. Each 2/6.

For circuits over 120 volts use two Lamps in series. When ordering state what voltage circuit the Lamps are required to burn on.

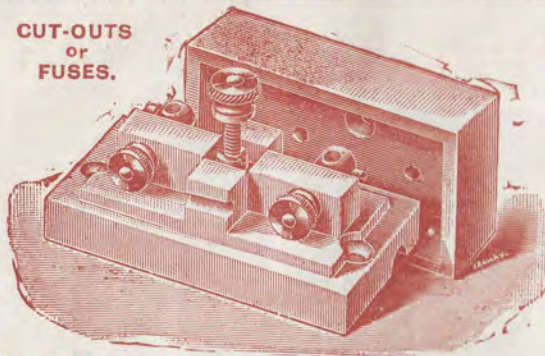
Special adaptors for burning on 240 volts. Each 1/3 including lamp-holders



Sun Pattern.  
1/ extra.



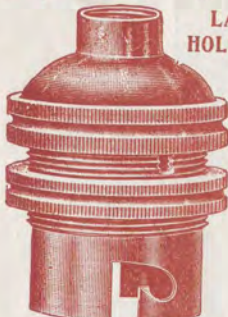
**CUT-OUTS  
or  
FUSES.**



List No. 685.—Manufactured from Best Quality Porcelain only, and will meet all fire insurance regulations.

- | List No.  | Each. |
|---|-------|
| 683. 5-Amp. Single Pole, Round Base, 2½ in. ... | 1/4   |
| 684. 10-Amp. ditto ...                          | 1/7   |
| 685. 5-A. Oblong (as illustration) ...          | 1/8   |
| 686. 10-Amp. ditto ...                          | 1/11  |
| 687. 20-Amp. ditto ...                          | 1/13  |
| 688. 30-Amp. ditto ...                          | 2/2   |

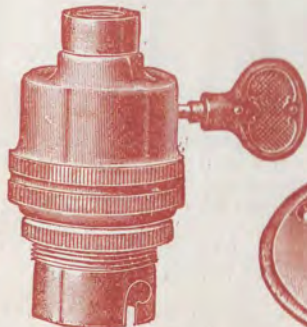
**LAMP  
HOLDERS.**



List No. 705.



List No. 706.



List No. 715.

High Voltage, ¾ size only.  
No. Each. Doz.

- |                              |     |      |
|------------------------------|-----|------|
| 714. Plain ¾ or ¾ thread ... | 1/2 | 11/6 |
| 715. With Shade carrier ...  | 1/3 | 12/6 |
| 716. ditto and cord grip ... | 1/4 | 15/  |

**COUNTER WEIGHT FITTINGS.**

Complete (as illustration) including Pulley Ring.

No. 682. The Set, 1/2 each; 12/6 doz. Postage 1/6 extra.

Shots for filling counter weight per lb. Say you want better quality? Then we can quote you the right price.



**HIGH-VOLTAGE  
CEILING ROSES.**

Best White Porcelain, Substantial Terminals, screws perfect, for any circuit up to 250-volts.

- | List No.                                 | Each. | Doz. |
|--|-------|------|
| 680. 2½ in. base ¼                       | 3/9   |      |
| 681. Best English China, 2½ in. base 1/9 | 8/6   |      |
- Postage 1/2 each.

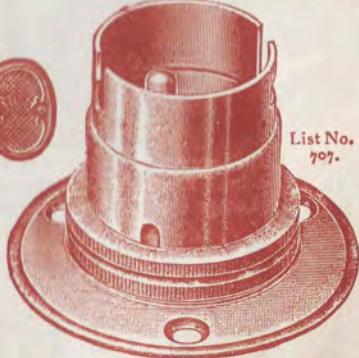
**INSULATED EYELETS.**



Brass Eyelets insulated by China Cups, for carrying Wires along ceiling, &c.

- | List No.               | Each. | Doz. |
|------------------------|-------|------|
| 689. 1 in. Eyelets 1/2 | 1/9   |      |
| 690. 3 " " 2½          | 2/2   |      |
| 691. 3 " " 1/3         | 2/8   |      |

List No. 680.



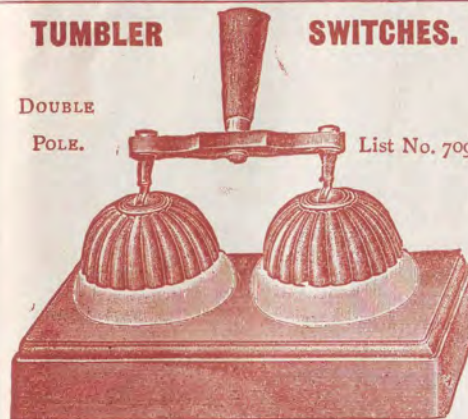
List No. 707.

Made in substantial Brass, Thick and well Polished and Finished, Latest Type of Insulator for complying with fire insurance regulations, ¾ size only.

- | List No.                       | Each. | Doz. |
|--------------------------------|-------|------|
| 704. Ordinary ...              | 1/5   | 4/3  |
| 705. With Shade Carrier ...    | 1/5½  | 4/8  |
| 706. ditto with Cord Grip ...  | 1/8   | 5/3  |
| 707. Batten Holders, Plain ... | 1/8   | 5/6  |
| 707½. " " S.C. ...             | 1/7   | 6/8  |
- Not less than doz. at doz. prices.

**TUMBLER SWITCHES.**

DOUBLE  
POLE.



List No. 709.

A Good Quality Switch, Brass Fluted Covers, Reliable Action, Quick Break and well insulated.

List No.	Description.	Single Pole.	Double Pole.
708	Miniature	1/8	—
709	5 ampères	1/8	2/3
710	10 ampères	1/6	4/3

Post  
1d., 3d.  
and 6d.  
extra.

**WOOD CASING & CAPPING.**

List No.	Width.	Size of each Groove.	Per 50 ft.	Per 100 ft.	Per 1000 ft.
694	1½ in.	¼ in.	2/6	4/9	45/
695	1½ "	¼ "	2/8	5/	47/
696	1½ "	5/16 "	3/3	6/	52/
697	2 "	3/8 "	4/	7/6	70/

Carriage forward.  
N.B.—Prices include both capping and casing.  
Nos. 694 and 695 suitable for Bell Wires.  
ZINC TUBING, see page 93.

**FANCY GLASS SHADES.**



Satin, with Pink, Blue or Yellow Edge.  
6 in. wide, 3½ in. deep. ¼ LBC sizes. Ea./8, doz. 7/6 Post 1/4 extra.

**ENAMEL IRON SHADES.**

- | List No.                        | Post | 1/8 LBC Size only. |
|---------------------------------|------|--------------------|
| 1530 6 in. by 2½ in. deep, each | 1/4  | doz. 3/6           |
| 1531 7 " "                      | 1/5  | " 4/6              |
| 1532 8 " "                      | 1/6  | " 5/6              |
| 1533 10 " "                     | 1/7  | " 6/6              |

Above are Blue outside, White inside.  
Opal Shades same price as Iron.

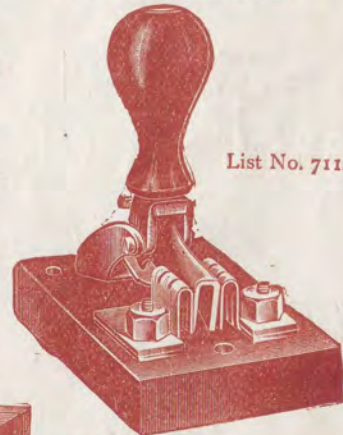
**MAIN SWITCHES.**

These are thoroughly reliable and well-made Knife Switches of Improved Pattern. Quick Wide Break, suitable for High Voltage, mounted on Glossy Black Enamelled Slate.

List No.	Description.	15 Amp.	25 Amp.	50 Amp.	100 Amp.
711	Single Pole ...	4/	5/	9/6	20/
712	Double " ...	8/9	15/	20/	41/
713	Double " in- cluding Fuses	12/	18/	35/	45/

N.B.—SINGLE POLE.—If Single or Double Pole Switches are required, in Polished Wood Cases with Glass Fronts, add 5/ extra to above prices.

In case of Double Pole and Fuses, add 7/6 extra.



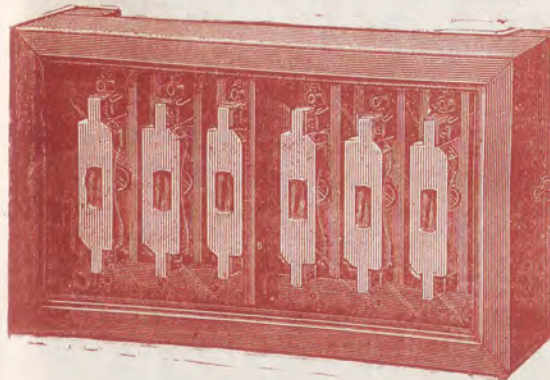
List No. 711.

**HIGH VOLTAGE  
FUSE BOARDS.**

Best Quality English Porcelain, Clip Type, in Polished Teak Cases, Glass Front, Double Pole.

- | No.  | Way.                   | Per Way. |
|------|------------------------|----------|
| 1534 | 2 or 3 way ...         | 2/       |
|      | 4 ways and upwards ... | 1/11     |
|      | In Cast Iron Cases.    |          |
| 1535 | 3 or 4 way ...         | 6/       |
|      | 5 or 6 " ...           | 5/       |
| 1536 | 7 way and upwards ...  | 4/6      |
- Carriage Forward.

**COMPARE PRICES  
WITH RIVAL COMPETITORS.**





**WALL PLUGS.**

List No.		Each
720	{ Two-Pin Plug, complete } (as illustration) ...	1 2
721	Ditto Miniature ...	1/6
722	Concentric Plug ...	1/8
723	Spare Plugs ...	1/
724a	Miniature Two-Pin Plug ...	1/6

**ADAPTORS.**

For plugging into ordinary lampholders.  
We also supply in 1/4 sizes for miniature lampholders. Postage 1d. extra.

List No.		Each.
718	... 1/4 in. Miniature ...	1/8
719	... 1/4 in. Ordinary ...	1/8

List No. 720.

**POLISHED WOOD BLOCKS.**

Well Seasoned.

In real selected woods, Teak, Walnut, Mahogany, &c., Dove-tailed Edges,  
Recessed Backs, Rounded Corners, Bevelled Edges.  
(Highly Polished.)



List No. 719.

**ROUND BLOCKS.**



(3/4 in. diameter.)

Recessed at Backs. Polished  
Imitation Walnut, &c.

Each.	Doz.
1/4	1/
1/2	1/2
3/4	1/2
1	1/10

Real Woods, Polished.  
Each. Doz.  
1/2 ... 1/10  
Postage 1 1/2 d. extra.

SQUARE.		OBLONG.	
List No.	Each.	List No.	Each.
735	3 in. x 3 1/2 in. ... 1/4	740	6 1/2 in. x 3 1/2 in. ... 1/5
736	6 1/2 in. x 6 1/2 in. ... 1/7	741	9 1/2 in. x 6 1/2 in. ... 1/11
737	9 1/2 in. x 9 1/2 in. ... 1/2	742	12 1/2 in. x 9 1/2 in. ... 1/1
738	12 1/2 in. x 12 1/2 in. ... 1/7	743	12 1/2 in. x 9 1/2 in. ... 1/4
739	15 1/2 in. x 15 1/2 in. ... 2/6	744	12 1/2 in. x 3 1/2 in. ... 1/8

Postage according to weight.



**TABLE LAMPS.**

Handsome and Effective. Complete with Holders and any Voltage Lamp but without Shades, List No. for 1/2 or 3/4 holders.  
1007 Polished Brass Standard 5/1008 Fluted Silk Shades to fit extra ... 4/6



**PLAIN SOLID BRASS BRACKETS.**

Lacquered Old Gold, Well Finished and Polished.

List No. 1004.			List No. 1005.		
6in.	9in.	12in.	3in.	4in.	
1/10	1/2	1/4 with 1/2 thread	1/10	1/11 with 1/2 thread	
1/13	1/6	1/2	1/11	1/11	1/2

To fit miniature or large holders. Postage extra.

**BACK PLATES.**



**HAND LAMPS.**

Brass Wire Guard, Black Ebonised Handle, with Hook, 15in. long by 4 1/2 in. wide, without Lamp or Holder.  
List No. 059 each 2/0  
with Lamp and Holder (any voltage) List No. 060 Each 4/



Polished Brass Each Doz.  
1 1/2 in. diam. by 1/2 thread 2 1/10  
2 1/2 in. " " " " 1/6 5/6  
2 1/2 in. " " " " 1/6 5/6  
suitable for miniature or full-sized Holders.

Postage 6d. extra.

WHEN REMITTING GIVE LIST NO. AND ENCLOSE POSTAGE.

**WORKSHOP TOOLS** (BEST QUALITY.)



**PLIERS.**

Flat or Round Nose.

List No. 748.

Cheap Quality.

each

4 in. 5/8 6 in. 7/8

5 " 7/8 7 " 1

List No. 748A.

Best Quality.

Bright Polished.

each

4 in. 9/10 6 in. 10/10

5 " 10/10 7 " 11/10

Postage 2d. extra.



**Two Hole PLIERS.**

Fluted Holes.

List No. 749.

Cheap Quality.

7 in. each 9/8

8 " " 10/8

9 " " 11/8

10 " " 12/8

List No. 749A.

Best Quality.

7 in. each 13/8

8 " " 14/8

9 " " 15/8

10 " " 16/8

Postage 2d. extra.

**Combination Pliers.**

Inserted Steel Cutters.

Practical & useful Tool.

List No. 751.

8 in. ... each 1/6

List No. 751A.

Better Quality.

6 in. ... each 2/6

7 " " " 2/8

8 " " " 3/8

Postage 2d. extra.



**BELL PLIERS**

With wire cutter and flat nose. List No. 750.

Cheap Quality.

5 in. 7/8 5 1/2 in. 8/8

6 in. 10 each.

List No. 750A.

Best Quality.

5 in. 1/2 6 in. 1/3

7 in. 1/8 each.

Postage 2d. extra.

**BRADAWLS**

Polished Beech

Handles.

Each 2d.

Better Quality.

Ash Handles.

Each 4d.

Postage 1d.



**TINMAN'S SNIPS.**

List No. 1009.

Best Quality, Black, Polished Blades, Cast Steel.

Length 6, 7, 8, 9, 10, 11, 12, 13, 14 in.

Weight 5, 7, 9, 11, 13, 15, 18, 20, 24, 32 ozs.

Each 1/6, 1/8, 1/11, 2/11, 2/10, 2/10, 3/10, 3/10, 3/6. Postage extra.

**GAS PLIERS.**



NOTE SPECIAL ADJUSTMENT.

Length 5 1/2, 9 1/2, 12 1/2, 16 1/2 in.

Weight 3, 1 1/2, 2, 5 lbs.

Each 1, 1/10, 3/6, 5/6

Postage extra.



STRAIGHT PLANE.



BALL PLANE.

**ENGINEERS HAMMER HEADS.**

1 lb. and upwards.  
1/ per lb.  
All weights in Stock.

WE CAN OBTAIN ANY TYPE OF SIZE PLIER TO ORDER.



Registered Telegraphic Address: "ECONOMIC," Twickenham.

**HANDY BIFURCATED RIVETS.**

List No. 674.  
Metal Box, containing 100 assorted Rivets, size  $\frac{1}{8}$  to  $\frac{1}{2}$  inch, per box, 6d.

List No. 672. Containing 100 assorted Rivets, size  $\frac{1}{4}$  to  $\frac{1}{2}$  inch, per box, 1/.

Each Box of above Rivets contains small Hand Tool for Driving. Postage 2d. per box.

**Useful Set of 3 1/2 inch FILES.**  
Best Quality.  
Each 3d. Set of 6 1/4.  
Large sets containing each 6 Files.  
4 1/2 in. 5 in. 6 in. 2/6 3/ 3/6 3/10  
per set of 6. Postage extra.

**SPRIT LEVELS.**  
A Splendid Combination with 4 in. or 6 in. Rule. Guaranteed Accurate.  
List No. 754. 4 in. each 7d. Postage 2d.  
" 755. 6 in. " 10d. "

**BELL HANGERS' GIMLETS.**

12 16 18 24 30 ins.  
List No. 789. 9d. 11d. 1/ 1/2 1/6 each.  
Postage 4d. to 8d. extra.  
One of the handiest tools in this list.

**NETT CASH PRICES** throughout this list.

**GLASS CUTTERS.**  
List No. 788. American Rose-wood Handle, Very Useful. (as illustration).  
Each 8d. Pstg. 1d.  
List No. 760. Real Diamond Cutter. For thin sheet, each 11/; For thick sheet, each 20/; Postage 2d. extra.

**ENGINEERS' AND FITTERS' STEEL SQUARES.**  
Divided in  $\frac{1}{4}$ ths. Hardened Steel throughout, guaranteed accurate.  
List No. 2 3 4 5 6 7 8 9 10 12 18 24 ins.  
768. 1/7 1/9 1/11 1/12 1/2 2/6 3/6 3/9 4/ 4/3 4/9 14/ 21/ each.  
Postage extra according to weight.

**CARPENTERS' SQUARES.** Cheap Quality, Steel Blade.  
List No. 709. 0 8 10 12 ins.  
8d. 9d. 10d. 1/ each.

**CENTRE PUNCHES.**

List No. 765. Cheap pattern, each 4d. List No. 764. Genuine Goodell, each 9d. Postage 1 1/2d.

Telephone— 316 P.O. Richmond THE ECONOMIC ELECTRIC CO. Twickenham, London, S.W.

**Amateurs' Stock and Dies.**  
Cutting  $\frac{1}{8}$  to  $\frac{1}{4}$



**"AMATEURS" STOCKS AND DIES.**  
A useful set suitable for amateurs' use, comprising 6 Tapes and 6 Dies, cutting  $\frac{1}{8}$ ,  $\frac{3}{16}$ ,  $\frac{1}{4}$  inch.  
List No. 1017. Complete set 5/5, postage 4d. extra.  
Larger set with Tap Wrench, cutting  $\frac{1}{8}$ ,  $\frac{3}{16}$ ,  $\frac{1}{4}$  inch.  
List No. 1018. Complete set 9/5, postage 7d. extra.  
"E.E.C." Stocks and Dies for Brass.  
With Taper and Plug Taps to each size, guaranteed reliable and accurate.

List No.	Cutting.	Complete Set.
1019	... $\frac{1}{8}$ , $\frac{3}{16}$ , $\frac{1}{4}$ ...	... 9/
1020	... $\frac{1}{8}$ , $\frac{3}{16}$ , $\frac{1}{4}$ , $\frac{5}{16}$ ...	... 12/
1021	... $\frac{1}{8}$ , $\frac{3}{16}$ , $\frac{1}{4}$ , $\frac{5}{16}$ , $\frac{3}{8}$ ...	... 15/
1022	... $\frac{1}{8}$ , $\frac{3}{16}$ , $\frac{1}{4}$ , $\frac{5}{16}$ , $\frac{3}{8}$ , $\frac{1}{2}$ ...	... 19/6

Carriage forward. Each set contains 6 tapes and necessary dies. There is a cheaper set, but do not recommend for good accurate work.

**HANDY LOCKS.**

List No. 1023 Black Steel Spring Lock (as illustration). Each 4d., postage 1d.  
List No. 1024 Large and Superior Quality. Each 6d., postage 1 1/2d.  
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List No. 1026 Best Quality Letter Locks, 1/11 each.  
List No. 1027 (As illustration) Brass Lock, Hand Made, very secure. Each 1/.  
List No. 1028 Nickel Plated. Each 1/3

**THE "ECONOMY" SOLDERING SETS.**

Very Useful Sets, comprising Soldering Iron, Tin, Solder, and Box of Resin. Complete, with very full printed directions. Any amateur can use after once reading directions.

List No 790 Small size ... .. /6 the set. Postage 3d. extra.  
" " 791 Large " (usually 1/5, recommended) ... /10 " " 3d. "  
" " 790A Superior, small size ... .. 1/ " " 3d. "  
" " 790B " large " ... .. 1/8 " " 4d. "  
Soldering Tool Box, containing Stove for heating Iron, 2 different shape Soldering Irons, 1 Half-round File, 13-square Scraper, 1 bottle Soldering Fluid, 1 Stick of Solder, Salammoniac, and Brush.  
List No. Complete set 5/5. Carriage forward.

**SOLDERING IRONS.**

Strongly made with Polished Handles.  
Small size, 6d. Large size, 1/- each. Postage 4d. extra.

**BLOW PIPES.**  
6, 7, 8, 9, 10, 11, 12 inch.  
3d. 3 1/2d. 4d. 4 1/2d. 5d. 6d. 6d. each.  
Postage 2d. extra.

**SPRIT LAMP BLOW PIPES.**  
Using ordinary spirit, with Rubber Tube and Bone Mouthpiece. Very handy and useful article.  
List No.  
1023 Small ... .. each 1/6  
1024 Medium ... .. " 2/6  
1025 Large ... .. " 3/

**BLOW LAMPS.**  
The "Econ" Lamp, each 10/-  
" "Midget" Lamp, each 12/-  
" "Petroleum" Lamp, each 19/-  
" "Paraffin" Lamp, each 20/6  
" "Roarer" (as illustration) 18/6

**USE ONLY Record Knives**

PRICE	EACH
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...	...
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**POCKET KNIVES.**  
Real Pearl, Horn, or Ivory, German Silver Bolster and Shield, Brass lined, two Blades, very neat and useful.  
The "Record" (as illustration) 1/3. Usual price 1/6.  
The "Record," Type A, 9d. Usual price 1/-  
The "Econ," 2 blades, 5d. Usual price 6d.  
The "Econ," 3 blades (recommended) 1/6. Postage 1d. extra.



“REVERSIBLE.”  
List No. 752A.



List  
No.  
752.

**THE “REVERSIBLE” SCREWDRIIVER.**

Blades of Wrought Steel. Polished Handles.  
Length—4in. /6, 4½in. /7, 5in. /8, 6in. /10 each.  
Postage 2d. extra.

**FLAT STEEL COLD CHISELS.**

Length—3, 3½, 4, 5, 6, 7, 8, 9, 10 inches.  
¼ /5 /6 /7 /10 1/ 1/2 1/5 1/7 each.  
Postage 1d. and 2d. extra.

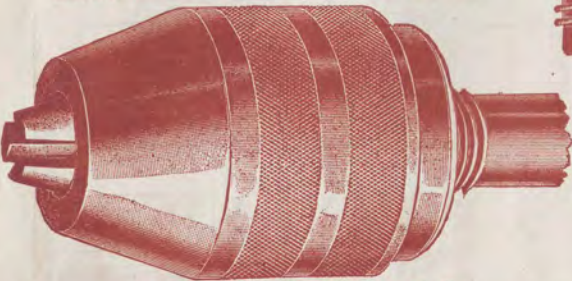
**LONDON SCREWDRIIVERS.**

With Cast Brass Ferrule.  
4 5 6 7 8 9 10 11 12 inch.  
¼ /3 /4 /5 /6 /7 /8 /11 1/ each.  
Postage 2d. and 3d. extra.  
**BEST QUALITY—**  
4in. /10, 5in. 1/1, 6in. 1/2, 7in. 1/6, 8in. 1/10 each.  
Postage 3d. extra. Screwdrivers, Black, Reeded, 1d. each.  
**Yankee Ratchet SCREWDRIIVERS.**  
List No. 1030. Right, Left, and Rigid, Nickel-Plated.  
Length 2 3 4 5 6 7 8 9 10 11 12in.  
1/6, 1/9, 2/3, 2/6, 2/9, 3/3, 3/5, 3/8, 4/ each.  
List No. 1027. Special Cheap Ratchet Driver, 3½in. 1/3



**FRENCH PATTERN CUTTING  
NIPPERS.**

List No. 1032. First Quality, Wrought Steel, Broad Jaws.  
Length—4, 4½, 5, 5½, 6, 6½, 7, 7½, 8 inches.  
/11 1/ 1/1 1/4 1/6 1/8 2/ 2/3 3/ each.  
List No. 1031. 5in. Malleable Cast, Black, each 8d.



**DRILL CHUCKS.** First Quality.

m.m.	... 0-4	0-6.	0-9	0-12
Each	... 5/	6/	8/	12/
Take	... ¼	½	¾	1 inch.

Postage extra.



**FILE CLEANERS.**

List No. 1033. 4 by 1 in. approx. ... each /3. The Wire is secured to Handle by special method  
" 1034. 5½ by 1½ " " " " " /5. so as to secure best results when working.  
" 1035. 6 " 2 " " " " " /6. Postage 2d. extra.



**HANDY FOLDING  
POCKET SCISSORS.**

List No. 1036. Guaranteed  
Steel, Nickel-Plated in  
Leather Case, each 9s.  
Usual price, 1/.

**ADJUSTABLE  
WRENCHES.**

List No. 1037.  
Nickel-Plated (as illus-  
tration), each 9s.  
Usual price, 1/.  
List No. 1038. Better  
Quality, each 1/6.  
Postage 1d. extra.



**TOOLS. BRACES, BREAST DRILLS, &c.**

List No. ... Each.  
782a. Warranted Steel Sweep gin, Brace, Polished Beech Head and Handle ... 1/8  
782b. " " " " 10in. " Octagon Chuck ... 2/7  
782c. " " " " " " " Better Quality ... 3/9  
782d. Ball-Bearing Head, Nickel-Plated, High-Class Finish ... 8/6  
782e. Very Cheap American Ball Brace, Red Head and Handle ... 1/3  
782f. Steel Wagon Braces, 5, 6, 7, 8 or 9in. ... 9/  
784. Breast Drill and 8 Fluted Drills, 3-Jaw Chuck, Cut Teeth, Nickel Plated, Warranted ... 6/6  
785. Best Quality, substantially constructed ... 9/  
786. Archimedeian Drill and 4 Drills ... 1/5  
787a. Best Quality and 6 Drills ... 1/  
787b. Centrifugal Drill with Fly Weights and 6 Drills... 1/6  
Postage extra.

List No. 783.  
10in. Sweep American Ratchet  
Hardwood Head and Handle,  
Nickel Plated. A very useful  
tool. Warranted.

Each, 5/6.  
Higher Grade, Best Quality,  
List No. 783a. ... 8in. ... 9/6  
" 783b. ... 10in. ... 10/  
" 783c. ... 12in. ... 11/6



**TWIST DRILLS.**

Size 1/8 3/8 1/2 5/8 3/4 7/8 1 1 1/8 1 1/4 1 1/2 1 3/4 2 1/4 in.  
Length 2 3 3 3/8 3 3/4 4 4 1/2 5 5 1/2 6 8 1/2 8 1/2  
Price 2/4 3/ 3/3 3/6 3/8 3/9 1/ 1/4 1/7 2/5 2/11 each  
Intermediate sizes all in stock.  
Postage extra.

**SPLIT PINS.**

1 1/4 x 1/8 1 1/2 x 5/32 1 3/4 x 1/8 2 1/4 x 1/4 2 1/2 x 1/16 in.  
/1 /1 /1 /2 /2 2 1/2 doz.  
/9 /1 /3 2/3 3/4 doz.  
Postage 1d. extra.

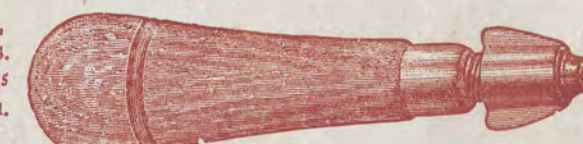


**CUP HOOKS AND EYES.**

Hooks 1 1 1/2 1 1/4 1 1/2 2 2 1/2 size  
only. /1 /1 /1 1/2 /2 2 1/2 3 doz.  
Eyes 1 1 1/2 1 1/4 1 1/2 2 2 1/2 size  
only. /1 /1 /1 1/2 /2 2 1/2 3 doz.  
Postage 2d. extra.

List No. **TOOL PADS.**

789. The "Useful" Tool Pad containing 10  
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790. Better Quality, each 1/6.  
791. American Tool Set, Polished Applewood,  
10 Fine Steel Tools, each Set 2/6 (as illus.)  
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793. Consists 2 sizes Chisels and Gouges, 1  
Taper Reamer, 1 Gimlet Bit and 1 Saw.  
Warranted. Complete Set, 7/.  
The Pad itself unscrews at end in all Sets.  
Postage 3d. extra.



**STEEL  
RULES.**  
List No. 775  
Steel,  
1ft. 4-fold.  
Each 7/  
  
List  
No. 775a.  
Boxwood,  
Arch joint,  
4-fold,  
8in., 9in.,  
10in., 12in.,  
1in. wide,  
each, /10

**STEEL RULES.  
(Engineers'.)**

1/8, 1/16, 3/32, 1/4 in.  
List No. ... Each.  
773. 4in. ... 6/  
774. 6in. ... 9/  
794. 12in. Straight Edge, London  
Made ... 1/  
795. Ditto, both Edges marked 1/3  
796. 2-Fold Steel Rule ... 1/6  
797. Best Quality Rule ... 1/10

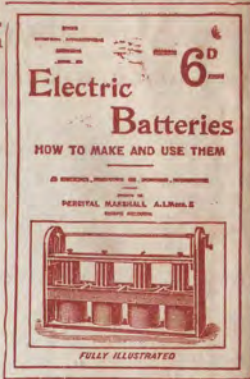


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You will obtain quite satisfactory results from these useful Electro-Plating Sets if carefully used. They are practical and substantially constructed and will compare very favourably with considerably higher priced articles.

Book on "Electro-Plating," by Bonney, Postage Free, 3/4.



List No.

- 1700. Comprising White Flint Glass Box, 4½ in. high, 3¼ in. long, 2½ in. wide, with Nickel Anode, Brass Supporters, Terminals, and Packet of Nickel Salt, with Flexible Connecting Wires. COMPLETE SET 2/6, postage /6 extra.
- 1701. Similar to 1700, but with Glass Box measuring 6 in. high, 4½ in. long, 2½ in. wide, with extra Nickel Salts and Larger Nickel Anode. COMPLETE SET 3/6, postage /8 extra.
- 1702. Similar to 1701 but with Glass Box measuring 6 in. by 5 in. by 5 in. Large packet of Nickel Salts and Stout Nickel Anode, very Superior and Practical Set (recommended). COMPLETE SET 5/, postage 1/ extra.

List No. 1700.

NICKEL PLATING OUTFIT.



In Polished Wood Cases, containing 2 Bunsen Batteries, 1 Glass Box 6 in. by 5 in. by 5 in., Best Flint Glass Brass Suspension Bars, Packet of Nickel Salts, Pumice Powder, Sawdust, Substantial Nickel Anode, Scratch Brush, Washing-out Brush, Patent Chamois Cloth, Connecting Terminals and Connecting Flexible Wires.

List No. 1703.

Complete Set (as Illustration)

35/.

Carriage Forward.

SPARE MATERIALS.

Nickel Anodes	Size	Each
"	1700	/6
"	1701	/9
"	1702	1/3
"	1703	5/

Postage extra.  
Nickel Salts per lb., 1/  
Extra Batteries or parts, see pages 18-24.  
Spare Glass Boxes, /11, 1/, 1/3, 1/6 each.

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We are in a position to quote you VERY LOW PRICES for all Plating in Gold, Silver, Electro or Nickel.

Also Bronzing, Lacquering, &c. Cycle Accessories a Speciality. Write for Quotation.

