

# CATALOG OF USED APPARATUS

THE apparatus listed in this catalog and covered by patents owned by the Marconi Wireless Telegraph Company of America is sold with a license for experimental and private use only and not for commercial purposes.

#### TERMS

PRICES ARE GENERALLY F. O. B. NEW YORK.

Cash to accompany orders amounting to twenty dollars or less.

Orders amounting to more than twenty dollars will be sent C. O. D. upon receipt of one-half of the purchase price.

Remittance should be made by postal or express money order or New York draft.

Orders should state quantity and name of article.

Prices subject to change without notice.

All orders must be made out on special form enclosed and license agreement signed by purchaser.

We have a limited supply of apparatus at the following storerooms. Deliveries F. O. B. the storerooms nearest the customer will be made wherever possible.

BOSTON BALTIMORE PHILADELPHIA NEW ORLEANS GALVESTON CLEVELAND CHICAGO SAN FRANCISCO SEATTLE



### CATALOG

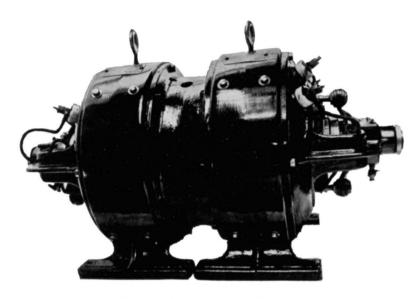
OF

# — USED — APPARATUS

PRICES AND DESCRIPTION OF A LIMITED NUMBER OF USED WIRELESS TELEGRAPH SETS REMOVED FROM MARINE SERVICE

Marconi Wireless Telegraph Company of America

WOOLWORTH BUILDING, 233 BROADWAY, NEW YORK



Motor Generator No. 214

Specially designed to meet the rigid requirements of a wireless telegraph transmitter, giving constant A. C. voltage under variable load. Generator has accumulative compound winding; motor, shunt winding.

When used in connection with field rheostat, described on page 5, 20 per cent regulation of the speed is allowed and 40 per cent regulation of A. C. voltage. Both armatures are supported on two bearings.

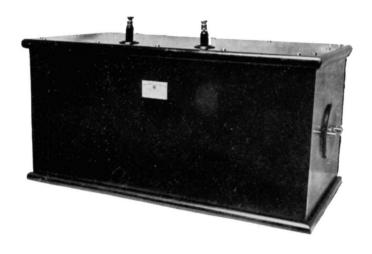
Special Sale Price..... \$50.00



### Marine Switchboard No. 215

A heavy slate slab mounted on an angle iron frame includes all the necessary controlling appliances for I K. W. or 2 K. W. sets. Equipment comprises pilot lamps, Weston Eclipse o—150-volt voltmeter, Weston Eclipse o—25-ampere ammeter with meter protection switch, D. C. and A. C. line switches, two D. P. S. T. fused switches, motor and generator field rheostats, and motor starter. Starter can be mounted near the machine, if more convenient. The switchboard illustrated is arranged to operate a I K. W. set. If operation of 2 K. W. set is desired a small additional charge will be made to cover cost of increased capacity instruments.

Special Sale Price ..... \$35.00



High Potential Transformer No. 216

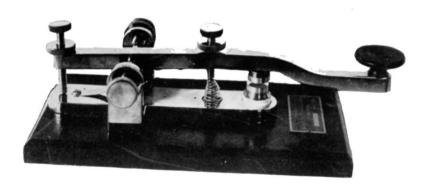
The design of this transformer is such that an external reactance coil is not required. The transformer may be directly connected to 110-volt mains having a frequency of 60 cycles. Of great value to amateurs, as the high value of a secondary voltage permits a greater amount of energy to be handled on 200-meter wave lengths. A note of musical characteristics is secured when employed in connection with the non-synchronous

spark discharger illustrated and described on page 13.

A thoroughly reliable and satisfactory transformer, particularly suited to the production of powerful Oudin discharges.

Primary voltage				. 110	
Secondary voltage				. 25,000	
Energy consumption					
Frequency	 			. 60	cycles

Special Sale Price \$31.00



Type A Transmitting Key No. 217

Made to handle energy in primary circuits of high potential transformers up to 4 K. W. capacity. Large contacts of silver and easy action permit constant use without showing wear. Both key and base are beautifully finished and will be found thoroughly satisfactory in every respect.



High Potential Condenser No. 218

Acknowledged the most popular and efficient condenser unit ever designed. Case contains twelve copper-plated Leyden jars having a capacity of .003 microfarads each. Arranged for series parallel connection, but readily changed to parallel connection if desired. The rack is constructed of mahogany with special insulating bushings. An especially good purchase for experimenters who have met with difficulties in constructing a satisfactory high potential condenser unit.

Special Sale Price \$26.70

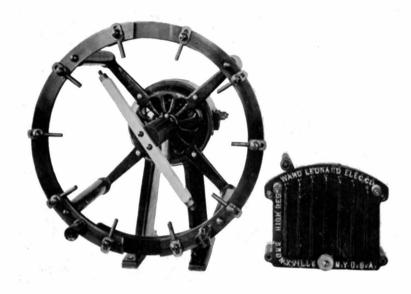


#### Protective Resistance Rods No. 204

For the protection of the motor generator circuits when exposed to the transmitter field. Fully described

and illustrated as part of 2 K. W. equipment on page 5. Complete in sets of five blocks with six rods.

Special Sale Price ..... \$5.00



Non-Synchronous Spark Discharge No. 220

May be used with either 60-cycle or 120-cycle transmitting sets, producing a more uniform note than these sets ordinarily afford. Furnished complete with regulating rheostat. Will give about 400 spark discharges

per second. Motor operates on 110-volt source of supply.

An unusual opportunity for the amateur field to secure rotary gaps of better construction than those ordinarily offered in the open market.

Special Sale Price...... \$18.00

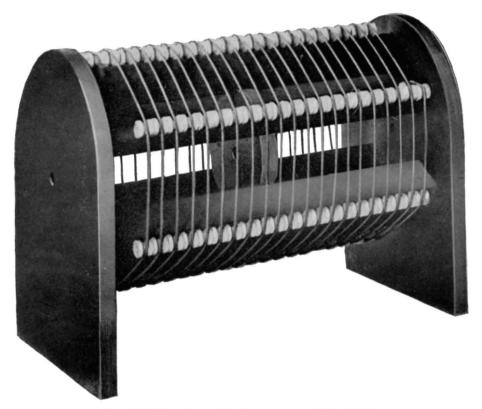


### Oscillation Transformer No. 221

This is known as Type B oscillation transformer, or 10-turn helix with coupling coil and standards. The primary consists of 10 turns of copper tubing wound on insulating supports and supplied with clips for varying the number of turns in circuit. The secondary is a wire-wound mahogany ring attached to mahogany uprights for varying the coupling.

The requirements of the Government regulations have all been met with in this instrument's design. Inductance, 20,000 centimeters.

Special Sale Price \$10.00



Aerial Tuning Inductance No. 209

Designed for increasing the wave length of the antenna system of a transmitting set. Inductance, 70,000 centimeters (approximately).

Special Sale Price......\$2.75

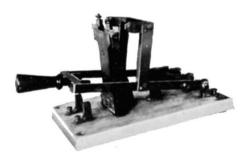




Insulated Bushings No. 223

Useful where it is necessary to run leads through a table or wall. Made of best grade of wet-process porcelain, brown glazed.

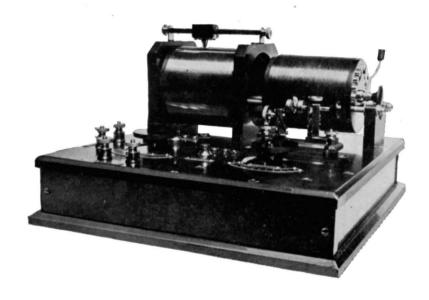
Special Sale Price, set of 2... 50c



Aerial Change-Over Switch No. 213

Mounted on a marble base and of staunch construction throughout. Allows complete control of transmitting and receiving circuits and will withstand high potentials. In one operation it disconnects the transmitting apparatus and connects the instruments for receiving. Essential to a complete station and of better design than those ordinarily supplied to the amateur.

Special Sale Price...... \$3.50

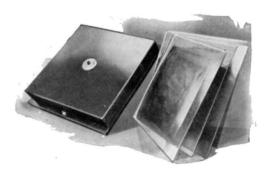


Type E Receiving Tuner No. 211

Excellence of mechanical construction and efficient design makes possible with this tuner the reception of wave lengths between 300 and 3,000 meters. Fitted with binding posts for antenna and ground, binding

posts for receivers, detector stand, variable condenser, potentiometer battery and reversing switch. Sold complete with box-mounted crystals.

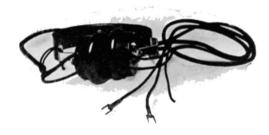
Special Sale Price...... \$40.00



Short Wave Condenser No. 210

Designed to withstand heavy voltages and of special value to owners of sets operating on 200-meter wave lengths. Comprises four high potential plates connected in series for reducing wave lengths to value below natural period of antenna, and is supplied with mahogany case or open rack.

Special	Sale	Price.	 		*	\$3.00
Open T	ype (	Rack).				\$1.00

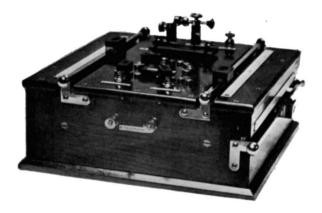


Head Telephones No. 212

Resistance, 2,000 ohms. As the standard type for a number of years they have given full satisfaction on signals of various frequencies and strength. Not obsolete or inefficient, but sold to make storage room for standardized Marconi equipment, quantities of which must always be kept on hand.

Special Sale Price.......\$4.50

### Alternative Receiving Set



Type D Tuner No. 224

This tuner is designed to operate on looped aerials, but may be used as a direct coupled receiver on the ordinary antenna. When so used, the best results are obtained by slight alteration in the connections.

The tuner is fitted complete with crystal holder and mounted carbondum crystal detector. When used in connection with an ordinary antenna having a natural period of 200 meters or more, and with one of the coils of the tuner used as a loading coil, the range of wave lengths runs to about 4,000 meters. Used with a looped antenna of about the same size the range of wave length is about 2,000 meters.

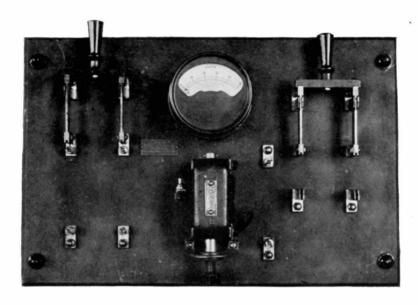
The case contains battery, switching device and potentiometer for energizing the crystal. All parts are nickel-plated. The slider rods are removable, so that the instrument may easily be kept clean.

This type of tuner has been in general use for some years in the American merchant marine, and with proper handling will give good results. While the Type E tuner, illustrated on pages 8 and 15, is greatly to be preferred and is specially recommended for use with the I K. W. and 2 K. W. sets, this instrument may be substituted where a cheaper instrument is essential.

# 10-INCH COIL AUXILIARY SET

DESCRIPTION OF INDIVIDUAL PARTS TO BE FOUND ON PAGES 18 AND 19

Special Sale Price \$100 Complete

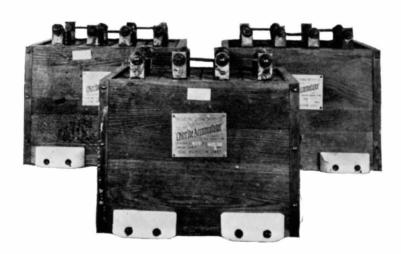


Charging Panel for Storage Cells No. 228

Designed for use in connection with the Marconi standard auxiliary sets, these switchboards are suited to storage-cell installations in which the charging current does not exceed 6 amperes. The current flow to the cells is regulated by four resistance coils of fixed

value, mounted on rear of frame. Complete set comprises a fused 50-ampere switch, a D. P. D. T. throw switch, special cartridge fuse, underload circuit breaker and voltmeter, o to 50 volts.

Special Sale Price...... \$15.00

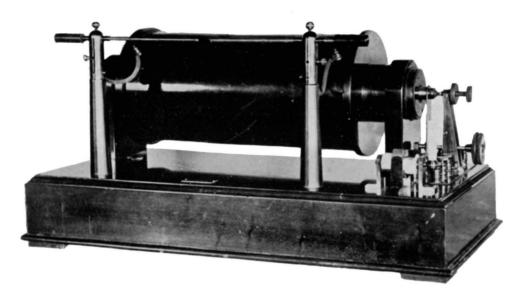


Accumulators No. 229

Thoroughly reliable portable storage batteries which may be used for a variety of purposes in radio stations. Current output sufficient for 10-inch spark coils.

Capacity, 60 ampere hours. Sold in sets of three.

Special Sale Price ...... \$30.00



10-Inch Induction Coil No. 230

An induction coil in which the usual weak features have been eliminated and proven thoroughly reliable under the strain of commercial wireless working. The spark gap may be connected directly in series with the aerial or employed in connection with a condenser unit of .0025 microfarads capacity.

Coil may be operated from 16 to 30 volts storage battery or D. C. mains at 110 volts with special series resistance.

Fitted with magnetic interrupter, reversing switch and large interrupter condenser contained in mahogany base. Finished in highly polished hard rubber and lacquered brass.

Specially recommended to physics laboratories for general experimental work with high potential apparatus.

Special Sale Price ...... \$65.00



Key Condenser No. 231

### Aerial Flexible Terminal No. 232

For making connection from the lead-in insulator to the transmitting helix or spark coil.

Special Sale Price 60c



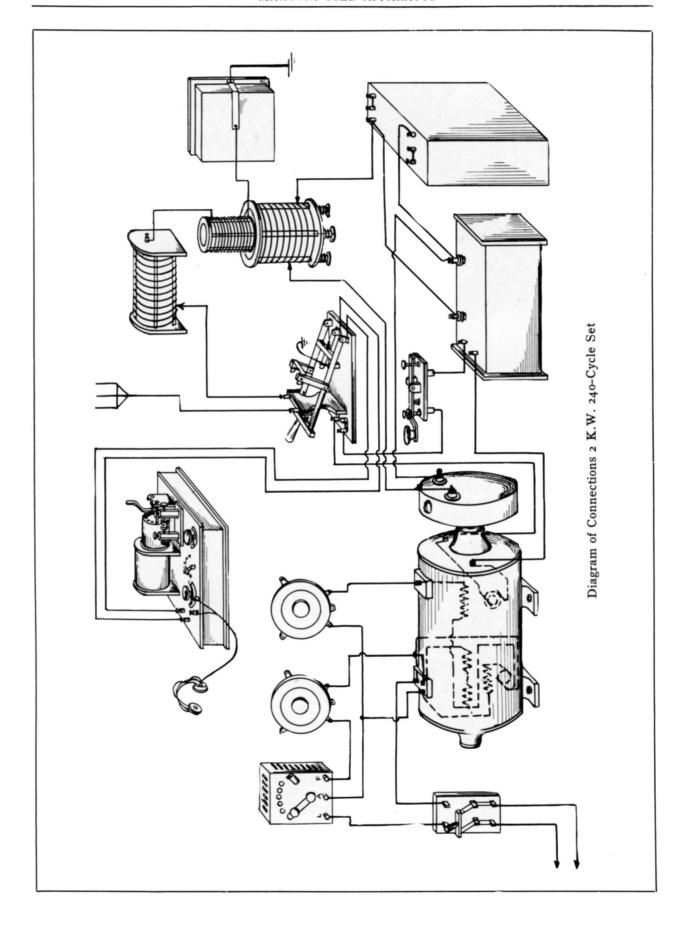
The apparatus described in this catalog consists of complete sets and integral parts of commercial wireless equipment which has been removed from ships to be replaced by standardized designs developed by Marconi engineers. In every case the apparatus will be found in first class mechanical and electrical condition, having been under the direct supervision of Marconi and Government inspectors during the period of commercial use. Three types of sets are offered: (1) Standard 2 K. W., 240-cycle synchronous transmitting sets, including motor generator and auxiliary appliances; (2) 1 K. W., 60-cycle transmitting sets, including motor generator and necessary appliances; (3) Standard marine auxiliary sets with storage battery cells, charging panel, and necessary appliances.

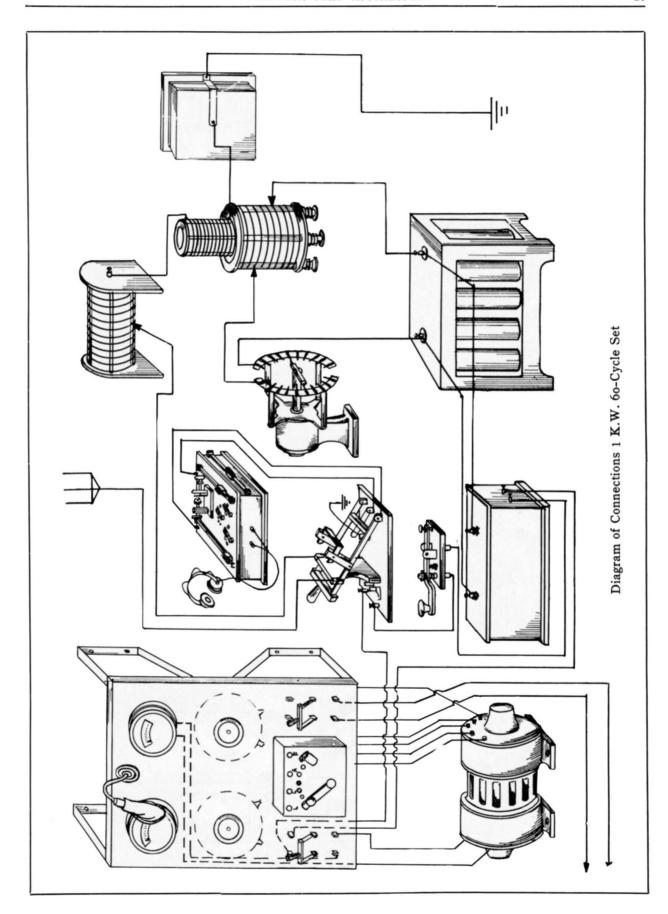
Aside from the wide appeal of this equipment to amateurs, their associations and clubs, apparatus of this type should be of value to colleges and universities, in the laboratories of ordinary high schools, in technical high schools, wireless telegraph training schools, Y. M. C. A's and the National Guard and State Naval Militia. Both the 1 K. W. and 2 K. W. sets may, by a slight reduction of condenser capacity, be made to operate on wave lengths of 200 meters, to comply with amateur license restrictions. If desired, the wave lengths may be extended to 1,200 meters; and, by the insertion of an extra inductance in the condenser circuit, wave lengths above 1,200 meters may be obtained.

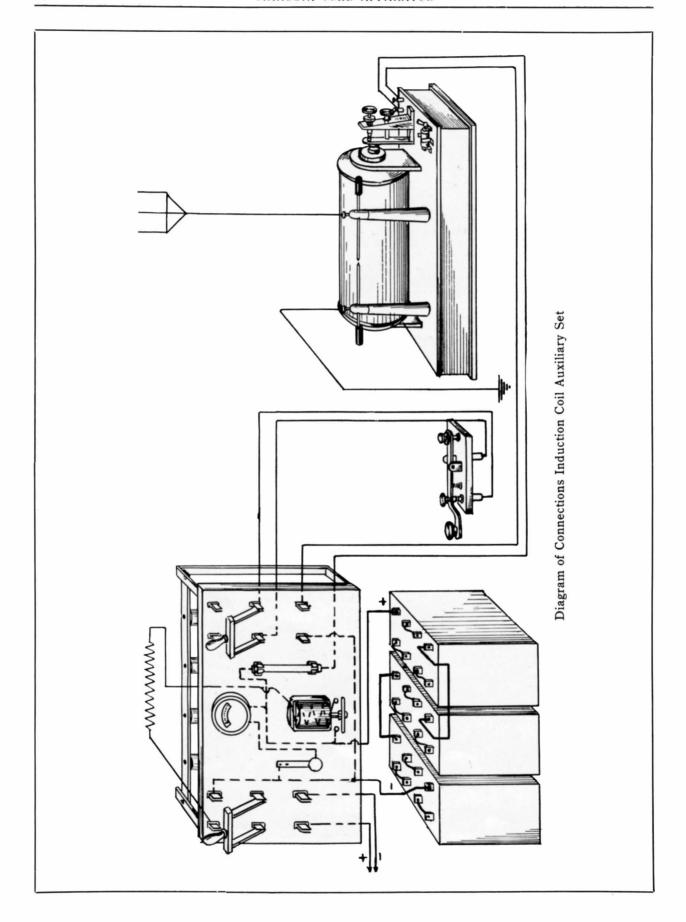
The apparatus listed may be employed for purposes other than wireless telegraph operation. For example: the production of powerful high-frequency discharges by means of an Oudin coil; the operation of ozone generating apparatus; and general experiments with high-frequency currents.

At the considerably reduced prices quoted, this used equipment should prove particularly attractive where purchases of alternating current wireless telegraph apparatus by individuals or organizations have been deferred through heretofore prohibitive costs.

The arrangement of the catalog clearly shows the prices at which the sets may be purchased complete as well as by individual parts.







### **NEW APPARATUS**

A limited quantity of unused apparatus on hand in our storerooms may be purchased by special arrangement. Quotations of all items listed in the foregoing pages will be furnished on request.

### MAST AND AERIAL EQUIPMENT

Prices of mast material, aerial equipment, leading-in insulators, etc., will be supplied upon request. Full details must be given in asking for quotations on this material.

### NEW COMMERCIAL TYPE SETS

Recently developed 500 cycle transmitting apparatus complete, in 1/2, 2, 5 and 10-kilowatt capacities, receiving equipments, decremeters, etc., for educational institutions and high grade experimental work. Quotations upon request. In asking for figures on transmitting apparatus state clearly the kind of power available.

Cost and Sales Department

### Marconi Wireless Telegraph Company of America

Woolworth Building

New York

### Of Course You Read

### THE WIRELESS AGE

#### Because:

It is the only magazine in this country devoted exclusively to radio communication. Each issue records the most recent developments and each step of progress in the art.

The Wireless Age is indispensible. Its special articles are prepared by world-famed experts. College professors write on the mathematical and highly technical subjects. Commercial developments are reported by the Marconi Company's experts. No other magazine can secure these contributions—or these contributing editors.

The "Queries Answered" department is invaluable. Your personal perplexities are cleared away in this clearing house of ideas.

For those who help themselves cash prizes are offered each month. \$18.00 given away with every issue for reports of experimenters' experiences!

Announcements of all new inventions and developments appear first in The Wireless Age.

If you are to keep up to date in the rapidly developing wireless art you *must* have it.

Single copies, 15 cents; subscription, \$1.50 a year.

THE WIRELESS AGE 450 Fourth Avenue, New York

# STANDARD 2 K.W. MARINE SET

DESCRIPTION OF INDIVIDUAL PARTS TO BE FOUND ON PAGES 4 TO 8 INCLUSIVE

Special Sale Price \$235 Complete



Motor Generator and Disc Discharger No. 200

This motor and generator is the 2-bearing type, both armatures mounted on a common shaft, which, through perfect balance, reduces vibration and noise to the minimum. Each machine has been subjected to a 3.500-volt test before acceptance. The motor is 4 H. P., 110-volt direct current, of the interpole type, giving constant speed under variable load, a very desirable feature for wireless working. Fifty per cent overloads may be carried for short periods without undue heating. The generator is the revolving armature type, 2 K. W. capacity at 80 per cent power factor, 500-volt, 240-cycle single phase. With the com-



Motor Starter No. 201

 plete set the rheostat, illustrated on page 5, allows a 50 per cent reduction of voltage. The disc discharger mounted on the end of the shaft is enclosed in a muffling drum. The terminals of this synchronous muffled rotary spark gap are porcelain-bushed and the revolving arm is fitted with blades for air circulation and cooling.

Special Sale	Price	\$100
Frequency	240	Cycles
Speed	2,400	R. P. M.
	500	
Motor voltage .		
	t 2	K. W.

### D. C. Starting Switch No. 202

Required for interrupting the D. C. circuit to the motor. This type has sufficient current-carrying capacity for use with 2 K. W. motor generators. Mounted on slate base and supplied with cartridge fuses which may be renewed.

Special Sale Price. 75c





### Field Rheostat No. 203

Cutler-Hammer design, with resistance-proof against disintegration even though rheostat is subjected to heavy loads. Supplied in two sizes: one for regulation of the speed of the motor, the other for variation of the A. C. voltage produced by the generator.



### Protective Resistance Rods No. 204

An absolute necessity where the power circuits of the motor generator are exposed to the powerful electro-static field of the transmitter; through them, field and armature windings are protected from puncture and high frequency surges of nearby circuits, neutralized, and conducted to earth. Specially designed for the severest conditions and complete in sets of five blocks with six rods.

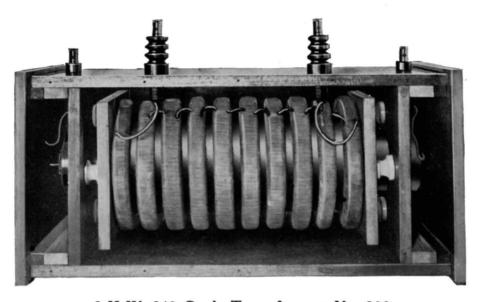
Special Sale Price ...... \$5.00



Transmitting Key No. 205

A thoroughly satisfactory model with sufficient curent-carrying capacity for 2 K. W. transmitters, or may be used with sets of all types with equal satisfaction. Absolutely free from arcing. Contacts are made of silver and will last indefinitely.

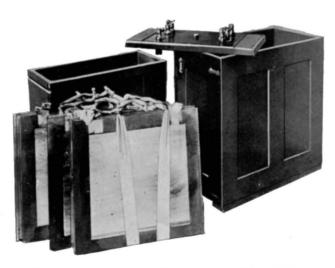
Special Sale Price......\$2.00



2 K.W. 240-Cycle Transformer No. 206

The open-core type of transformer is used in 90 percent of commercial wireless telegraph installations. Rugged construction allows for continuous service without fear of breakdown. High potential terminals are well insulated by special bushings. Will not overheat.

Primary											
Secondar	y volta	age							٠	18,000	
Frequenc	y									240	cycles
Current	consum	pti	on			٠	*	•		2	K. W.
Special	Sale	P	ric	: €	100		70			\$	35.00



High Potential Condenser No. 207

Suitable for transmitting sets of all types. Plates are made of specially selected glass, coated with foil on both sides. The complete unit comprises special earthenware condenser tank, mahogany container case, 36 condenser plates 14" x 14", 2 guard plates, 5 gallons condenser oil and 40 feet of binding tape.

Series parallel or parallel connections of plates may

be employed. When divided into units of 12 plates each, the combined capacity is .008 microfarads. With all plates connected in parallel the capacity is .072 microfarads. This condenser is specially recommended for amateur use with sets of 200-meter wave-length. Will withstand continuous use; free from overheating and moisture.

Special Sale Price ...... \$25.00



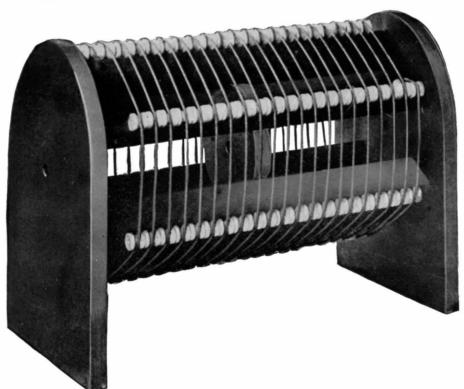
### Transmitting Oscillation Transformer No. 208

Of the very finest mechanical construction throughout, this oscillation transformer is suitable for sets of all powers up to 4 K.W. Coupling may be varied from nearly zero value to maximum, allowing complete control of the emitted wave. Used in connection with the condenser described on page 6, wave length adjustments from 200 to 1,200 meters may be made. Secondary winding has a fixed valued of inductance, but when used in connection with the aerial tuning inductance, illustrated below, the wave length of an aerial system may be altered over a considerable range.

Very desirable apparatus for research laboratories desiring a transformer of maximum efficiency.

Primary inductance25,000	centimeters
Secondary winding 30,000	centimeters

Special Sale Price ..... \$30.00



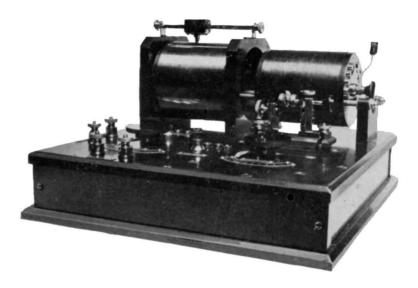
### Aerial Tuning Inductance No. 209

Designed for increasing the wave length of the antenna system of a transmitting set.

Inductance.......Approximately 70,000 centimeters

Special Sale Price ..... \$2.75

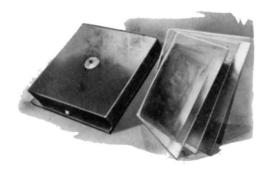
Special Type With Genuine Mahogany Frame No. 225 Special Sale Price......... \$5.50



Type E Receiving Tuner No. 211

Excellence of mechanical construction and efficient design makes possible with this tuner the reception of wave lengths between 300 and 3,000 meters. Fitted with binding posts for antenna and ground, binding posts for receivers, detector stand, variable condenser, potentiometer, battery and reversing switch. Sold complete with box-mounted crystals.

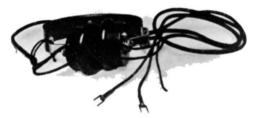
Special Sale Price ..... \$40.00



Short Wave Condenser No. 210

Used for reducing the wave length of the antenna system to a value below the natural period. The type shown has been carefully designed to withstand considerable voltages. Condenser includes four high potential plates connected in series. Recommended to amateurs who wish to make their sets comply with Government regulations.

Special Sale Price ..... \$3.00



### Head Telephones No. 212

Sensitive and reliable 2,000-ohm receivers with adjustable headband. Equal to any on the market.

Special Sale Price \$4.50



### Aerial Change-Over Switch No. 213

Substantial and complete; controls both transmitting and receiving circuits, allowing the antenna to be employed for transmitting and receiving as desired.

Special Sale Price.......\$3.50

# STANDARD 1 K.W. MARINE SET

DESCRIPTION OF INDIVIDUAL PARTS TO BE FOUND ON PAGES 10 TO 16 INCLUSIVE

Special Sale Price \$200. Complete

### **WORLD-WIDE WIRELESS**



### Marconi Wireless Telegraph Company of America

forms with its affiliated companies the most extensive wireless system in existence, covering

Great Britain Belgium Italy Russia Chile New Zealand France Holland Spain Argentina Canada India Sweden Portugal Brazil Australia Alaska

and serving ships in all waters. Trans-oceanic service at reduced rates. Direct wire communication with Western Union.

### Messages must be marked "Via Marconi."

Rates and other information may be obtained from any Western Union or Marconi Office.

### WIRELESS APPARATUS

Over 1,800 ships of the mercantile marine are equipped with Marconi Apparatus, enabling the public to keep in touch with ships at sea.

This company installs modern Marconi equipment on yachts, railway trains, commercial plants, etc.

### WIRELESS INSTRUCTION

The Marconi School of Instruction at 25 Elm Street, New York, is in charge of efficient instructors and is thoroughly equipped, fitting graduates to pass examination for U. S. Government license. Send for circular.

## Executive Office: Woolworth Building, New York

Branches at

San Francisco Seattle Chicago Cleveland Boston Baltimore New Orleans Galveston