The Radio Dealer

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The Radio Trade Journal

For the Radio Retailer

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VOL. I NO. 2

MAY, 1922

ONE DOLLAR THE YEAR

EMSCO RADIO PRODUCTS

Made By Experienced Electrical Manufacturers

If We Can't Make It Better. We Won't Make It At All

Just a Few EMSCO Products

Binding Posts—Single and Double Square Rods—Cut and Drilled

3-16 x 8 3-16 x 10 -extension threaded 3-16 x 7 3-16 x 7 3-16 x 12 1-4 x 12 1-4 x 7 1-4 x 8 1-4 x 10

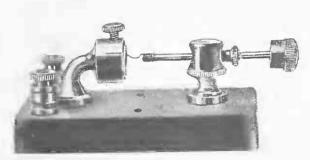
Wound Rotors Single Slide Tuners

Double Slide Tuners 6"-8"

Enamel Wound Coils 6" x 3" 8" x 31/2"

Vario Couplers Weatherproof Strain Insulators Slider Knobs

Loose Couplers



Turret - Top Detector

Decidedly the best detector so far produced. You can see even from the illustration the sturdy, well-made character of the instrument. "Turret-Top" swivel adjustment permits the greatest range of adjustment and holds the phospher-bronze "cats whisker" steadily in any position. Thumbscrews take up wear on side and forward adjustments. Locking-notch feature of binding posts exclusive with this detector. Unbreakable base. A fair example for MSCO Unbreakable base. A fair expression MSCO quality and value.



Experienced in

Serving Electrical Dealers and in the Requirements of Electrical Instruments.

Equipped for Quality and Service

We had the factory ready when the wave of radio popularity began. We didn't have to learn how to make radio supplies—we knew. With practically no advertising, three whole floors of our large factory have been humming, turning out supplies for dealers who knew our standards.

Sell radio products made by regular electric manufacturers. You can make a better profit, your customers will be better satisfied and you will be allied with a high-grade, reliable manufacturer.

Write to-day for our catalog of radio supplies and liberal discounts.

ELECTRIC MFG. & SALES

L. Beller, Proprietor

90 Academy St., Newark, N. J. Phone Mulberry 2901

200,000 in 2 Weeks

"THE A. B. C. OF RADIO"

A Non-Technical Book

Dealers all over the country are saving their salesmen's time by selling "The A. B. C. of Radio" to customers who ask instruction and explanation.

Over 200,000 copies sold.

Now in the third large edition.

Why don't you get your share? ORDER NOW

THE N. Y. GLOBE SAID ON APRIL 15th:

* * * * "The A. B. C. of Radio contains more nour ishing essential food for the Wireless beginner than any thing that has yet come to our attention * * * * and it is well worth buying and keeping as a handbook of ready reference."

DEALERS—Write now for our proposition on "The Easy Course in Home Radio." (Seven volumes)

Edited by a Staff of Experts under the personal supervision of General Squier, Chief of the U. S. Signal Corps.

MARTIN H. RAY

165 Broadway

New York

The STANDARD The Best Sell Special Crystal

A New Scientific Achievement

Treated in a new scientific process which imparts extraordinary powers of rectifying the wireless impulses. Stays sensitive for the life of the set. Disinterested radio engineers of high standing have subjected Standard Special Crystals to most severe tests and proved their vast superiority to all other crystals on the market.

Radiophone Twice-Tested

Each crystal tested twice on radiophone equipment, once before mounting and again after mounting. Every one is perfect. No crystal more rigidly inspected and tested.

Guaranteed

The positive results obtained by processing and thorough testing enable us to guarantee each crystal.



Mounted and Un-Mounted

Immediate Delivery on Any Quantities

More Profits Easier to Sell

Why sell ordinary, little-known crystals of uncertain qualities? Amateurs resent inferior crystals. The Standard Special Crystal guarantees satisfactory results and insures better business from all angles.

Satisfied Customers

The ability of so superior a crystal to increase the prestige of your store and bring reorders is an important asset,

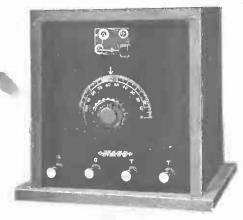
Associated Sales

The crystal is only the start with the radio novice. Satisfy him on his first purchase and you will stand an excellent chance to sell him the balance of his supplies. Start him right with Standard Special Crystals.

STANDARD CRYSTAL CO.

274 Halsey St., Newark, N. J.

NACO RADIO RECEIVING SETS



\$20.00 complete without condenser For clear hearing and pleasing tone use a NACO set.

Naco Radio Accessories



\$25.00 complete with condenser

Telephones. Knocked down sets. NACO long distance sets are of the highest quality. STATE MANAGERS WANTED.

"We are building our radio business for the future, not only for today. Courtesy and discretionate prices prevail"

NATIONAL MOTOR ACCESSORIES CORPORATION 1446-1448 Woolworth Bldg. New York City Albert J. Morris Eugene J. Scanlon Southwestern Representative: Joe B. Hoffer, Dallas, Tex.

MORSCAN RADIO COMPANY

Manufacturers and Distributors

196 MARKET STREET

NEWARK, N. J.

WE CARRY FOR IMMEDIATE DELIVERY:

Morscan 4-inch
Insulators
"Best" Insulator With
Bracket
Hydrometers
Sliders

Honey Comb Coils

Mounted and Unmounted

Mounting Coils

600 to 2,000 metres

Galena Cups

Screws

Variable Condensors
13, 21, 43 plate
Switch Levers
Knobs and Dials
Jacks
Contact Points

Sole Distributors

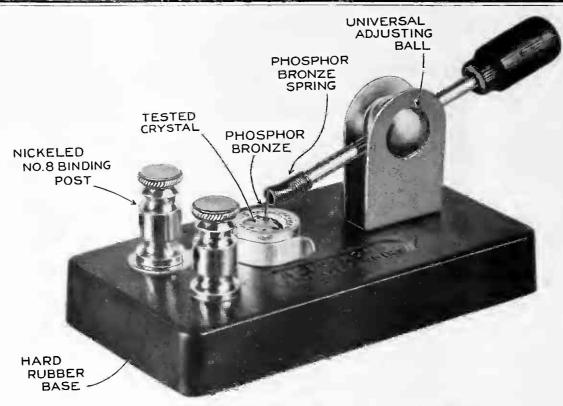
In New Jersey and Pennsylvania, for the complete Everett Electric Corporation of New York Line of Radio Equipment, featuring the Everett (Splitdorf-Made) 3,000 Ohm Double

Radio Receiver, Model E-2, \$8.50 list; the Everett (Splitdorf-Made) Crystal Detector and Everett (Splitdorf-Made) Fixed Condensor.

CRYSTAL DETECTORS \$1.00, \$1.25, \$1.50, \$2.25, \$2.50 LIST MORSCAN CRYSTAL DETECTOR \$1.50 LIST EVERETT (SPLITDORF-MADE)
CRYSTAL DETECTOR, \$1.50 LIST
SWITCH LEVERS
75 CENTS LIST

Federal One-Step Detector and Amplifier Federal Receiving Transformers Federal Phones—Federal Jacks

Selling Only to Retailers and Jobbers Twenty-four Hour Daily Service



AEROPHONE

Prize-Winning

DETECTOR

THE remarkable efficiency of the Aerophone Detector will amaze you! Wherever it has been exhibited, radio experts have unhesitatingly declared it: "Simply Marvelous."

Hits every spot on the crystal! Light or heavy tension! Stays put! Cannot be jarred out of position! Easy to operate! Nothing to get out of order!

The Aerophone Detector is mounted on a hard rubber base. Can be attached to any set! Absolutely guaranteed. List price \$1.25. Liberal discounts to Jobbers, Retailers and Manufacturers. Quick delivery!

We Also Manufacture Complete Sets

AEROPHONE-Type A and B with or without head phones

BLOCKED TUNING COILS CRYSTALS

SLIDERS KNOBS AND DIALS

Advertising Matter Free to Dealers WRITE—PHONE—OR WIRE

ESSEX SPECIALTY COMPANY, INC.

Berkeley Heights

New Jersey



CO-OPERATIVE BUYING

Supplying the Retailer with Radio Sets, Parts and Equipment at a Saving of 10 to 25%

CO-OPERATIVE BUYING, as illustrated by chain store successes, is the *one* way to secure the manufacturer's *lowest* prices for the average dealer.

What applies to drug, cigar, furniture and other chain stores applies also to RADIO.

New York is the greatest Radio manufacturing and supply center in the world.

THE RADIO BUYERS' SYNDICATE has been formed to bring under one buying head a great many dealers in Radio. By adding your order to many others it is possible to obtain from the manufacturer his jobbers' prices, thus saving for yourself the 10 to 25% which is the jobber's profit.

THE RADIO BUYERS' SYNDICATE maintain offices, stenographers, Radio experts, messengers, etc., to serve you and are at your command at all times.

Your share of the overhead will be \$12.50 for a period of six months from the date of your check, during which time we will act as your New York Buyer and maintain your offices.

Send in your initial order — large or small — with your check for \$12.50 and become a member of the syndicate and buy Radio equipment at prices which will allow you a big profit from this wonderful business.

Your interests are best served by prompt action.

RADIO BUYERS' SYNDICATE

145 West 45th St., (Suite 803)

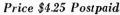
NEW YORK

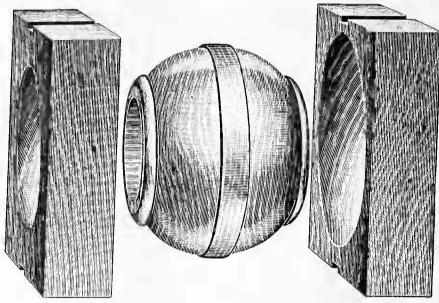
SELECTOR

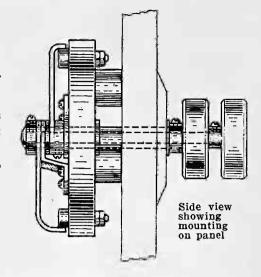
A selective radio contact switch. For varying the number of turns in any kind of radio tuning coil.

The SELECTOR can be mounted on coupler or coil direct, thus reducing leads to a minimum. Short leads and positive contact in radio instrument wiring are not only necessary, but are imperative for highest efficiency.

The SELECTOR combines these essential features and in addition is compact, positive and will give that commercial appearance to your panel,







ROTORS AND STATOR SECTIONS

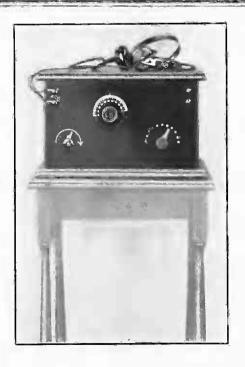
Carefully and accurately made from specially selected and treated woods. Not "mere wood turnings," but manufactured to pattern makers standard.

Rotors packed 50 and 100 in package. Stator sections packed 100 and 200 in package.

> Dealers! Send for interesting ciroular and attractive proposition.

Norris Electrical Specialties Co., Inc. 126 Liberty Street, New York

TELEPHONE RECTOR 6669





RADIO RECEIVING

Sturdy Stock — Finest Instruments

Scientifically Correct—A Price for All

\$20 to \$250

LIST PRICE

Including Aerial Equipment and

Stromberg-Carlson \$7.50 Head Set

ALSO MANUFACTURERS OF

SWITCH LEVERS CRYSTAL DETECTOR PANELS GUARANTEED GALENA, ETC.

ROSENTHAL LIGHTNING ARRESTER, distributed solely by ourselves is the only Lightning Arrester discharging at 220 volts. Protects against lightning and internal wiring short circuits—List price

DEALERS AND JOBBERS!

Due to Large Increase In Our Production We Are Today Able to Make Immediate Deliveries. Orders Are Rolling In. Bon't Delay. WRITE OR WIRE FOR PARTICULARS





PHONE CHELSEA 7923

The Radio Dealer

THE RADIO TRADE JOURNAL

Edited and Published at

1133 Broadway, New York, N. Y. FOR THE RADIO RETAILER

VOL. 1. NO. 2 MAY, 1922

ONE DOLLAR THE YEAR

Let's Go with the National Association

The Definite Need of a National Association of Dealers, Jobbers and Manufacturers Is Established

By AMPLIFIER AL

There is a definite need for a National Association of Dealers in Radio Equipment, including dealers, jobbers and manufacturers. I said so last month, and this month I say so a lot louder.

Last month I had talked to a very few radio business men, and was basing my statements on past experiences in industries without national organizations. This month I have the definite backing of some of the leading figures in the trade.

A well-known Philadelphia house writes:

"The need for an association of jobbers and dealers in radio equipment is most apparent, and we welcome the opportunity to support any movement you are taking to form an organization for the promotion of better business among radio dealers."

The Sayre-Level Company of Philadelphia, continuing their letter, point out one of the most

important reasons for organization now.

"The condition of extreme shortage that exists now is certain to be followed by a period of over-production of both standard and inferior merchandise. . . . There must be aid from the dealer, service to the consumer, aid in developing the industry and fostering the interest on the part of the consumer or user. . . . An association can do much to foster a spirit of dealer aid without giving us any competitive sales effort. An Association can also regulate the character of retail outlets, thus giving some protection to the authorized retailer who merchandises radio along approved lines.

"Any business in which there is an exchange of ideas and co-operation in meeting merchandising problems, is better for such mutual action, and an ASSOCIATION IS THE ONLY PRACTICAL MEANS FOR DEVELOPING SUCH A CONDI-TION."

I like that last line—an association is the only practical means for developing such a condition. Think it over, fellow business men. There's a world of meat in that statement.

While we've been talking about associations others in the trade have gone ahead and done Tentative plans for the organization of the National Radio Chamber of Commerce were discussed at a dinner in New York during the month. Mr. Jos Freed, president of the Freed-Eiseman Company, is temporary head of the organization, and in an interview with a representative of THE RADIO DEALER explained that his organization would be composed solely of manufacturers of standard radio equipment.

The National Radio Chamber of Commerce can be counted on to back up any organization of dealers and jobbers. They are anxious to see the higher standards established in the trade and can be counted on to back up any association with this

end in view.

The National Retail Dry Goods Association, in a series of conferences at New York late this month, organized the Radio Section of their

(Continued on page 28)

The Fable of The Galena and The Radio Robber

By FRANK P. HARRIS Of the Harris Laboratories, New York

In the second chapter of Genesis we read of Gold and the Onyx Stone but not of Galena and so must try to overlook the failure of connecting this precious mineral with the formation of the Earth. It is a long geological period from the creation of the World to the days of Radio and a revision of the Bible will perhaps include Galena in the first chapter.

Our radio editors, our newspaper experts, our equipment salesmen, have now all become experts in wave length and mineralogy even to a point where we may soon broadcast the truth that many minerals have found successful usage as detecting minerals. Included in this list is Pyrite, Zincite, Chalcopyrite, Bornite, Silicon, Galena, Carborundum, and others.

The minerals vary greatly in their relative power and sensitiveness and each mineral yields but a small amount, in some special crystalline form, that makes it really useful in Radio work.

Pyrite and Galena, the two in most general use, occur in large amounts throughout the world and normally have a value of not over \$50.00 a ton. The very small per cent of the special form of the mineral that can be used for crystal detectors is worth whatever one has to pay even in the days of war time prices for radio material.

Crime waves are periodically with us. Robbery of pay-rolls and holdups in New York are matched by the mystery of the Crystal Crime. Let us tell it as a bed-time story from WJZ

Once upon a time a man sold a ton

of Galena for fifty dollars, the bad buyer sold it by the pound at 25c. (\$50.00 a ton) to the Radio Robber. He broke it into small bits, mounted each piece into a Crystal, packed it in a nice box to sell at 30 to 50 cents, (price per ton of the Galena now \$200,000.) He grew very rich and married a foreign princess or a warwidow and thereafter was loved by all except the Radio Bug who paid 50c. again and again for a perfectly sound but yet a soundless crystal.

These days are past and we may soon reach the time when each crystal buyer is protected and satisfied. He will find that there are many types of crystals and will buy from the dealer that can supply him with one that is guaranteed to be satisfactory by its maker and not from the dealer who sells him ten crystals that he may find one that can be used. The dealer cannot long buy the cheapest, soon he must select the best.

The successful crystal maker of the future must use only the best material that money can buy whether it be Pyrite, Silicon, or Galena. He must carefully mount and test each individual crystal and finally guarantee its quality to the buyer who will be the final court of appeal on the merit of the best mineral to use in spite of its price. One-point or billion-point will

not fool the public long, ten points are aplenty for any man, and even two points will save many from committing a crime and perhaps make longer and happier the life and business of many a dealer.



Showing a Well Laid Out Radio Store Interior. A View of "The Radio Store," Pasadena, Calif., Operated by Paul F. Johnson, Also Owner of the Altadena Radio Laboratory, Which Sells Exclusively at Wholesale. Mr. Johnson Will Shortly Open Up a Broadcasting Station at Altadena, Operating Under Call KGO

VACUUM TUBE SELLERS ARRESTED BY U. S. DEPT. OF JUSTICE

Department of Justice agents last week swore out warrants for Jewell and Carl Van Dyke, proprietors of the Van Dyke Electrical Store and Asbury Park Radio School, on charges of having unlawful possession of and selling vacuum tubes belong-

session of and selling vacuum tubes belonging to the United States.

These tubes, it is said, were stolen from Camp Alfred Vail at Little Silver, N. J.

The vacuum tubes figuring in the case, it is said, were manufactured expressly for the government and, by agreement, were sold only to the government during the war. Since the war the company has permitted several hundred employees to use the tubes

several hundred employees to use the tubes at their homes, with the distinct understanding that the tubes remain the property of the Western Electric Company.

The released tubes are dipped in yellow paint and the words "Signal Corps" ground away. A few of the tubes treated in this manner have also been released by the Radio Corporation of America, who observed the several testing and the several testing of America, who observed the several testing the several testing and the several testing testing the several testing testing the several testing testi Radio Corporation of America, who obtained a surplus stock manufactured for the government which it failed to take.

There is said to be disagreement among the parties as to who has the right to dispose of surplus stock.

An effort will be made it is a second to the pose of surplus stock.

An effort will be made, it is said, by the Department of Justice to confiscate every

Government tube in use.

It is said many storekeepers have been selling these stolen tubes.

A RETAIL FAKER

A Milwaukee "wise bird" radio retailer, selling crystal sets, gave concerts at all hours of the day until it developed that while he was showing and selling crystal sets he had a phonograph working providing the concerts. A Milwaukee newspaper put this fraud out of business.

DETROIT SHOW

The Detroit Radio Exposition, staged by the American Radio Exhibitors, was a success.

Among the features were special lectures by Thomas E. Clark, a recognized wireless expert.

EDELMAN'S NEW ADDRESS

Philip E. Edelman, E. E., has moved his offices to 9 Church street, New York, which is at the corner of Cortlandt, opposite the Hudson Tubes. Their new phone number is Cortlandt 4708.

LIGHTNING ARRESTERS

Keystone Lightning Arresters are sold by the Electric Service Supplies Company of Philadelphia, who have recently issued a dealers' hand-out folder printed in two colors. These folders will shortly be in the hands of all dealers handling this line, so we understand.

ASK OUR SERVICE BUREAU see advertisement on page 31-it's free. ASK OUR SERVICE BUREAU.

Why Shouldn't Radio Equipment Be Pleasing to the Eye?

By HARRY BOTSFORD, Publicity Manager

Lyradion Sales & Engineering Company, Mishawaka, Ind.

Remember the early days of the phonograph and the automobile? Just to recall the queer looking monstrosities made and sold years ago makes one chuckle. I am not a prophet, but I do feel safe in making a prediction that before two years are past radio equipment is going to be made with an eye to beauty.

At present radio is in its swaddling clothes and is in a more or less hectic or faddish phase. So long as this condition prevails there will be a certain portion of the public who will be content to buy and install in their homes radio equipment which turns the room in which it is installed into something which resembles a miniature and untidy machine shop. They feel results justify this condition.

The change is coming, however, and it is going to be due to the same group who were responsible for the refinements in design of the phonograph and the automobile. The woman of the house-your house, my house and your customer's house—is going to emphasize the demand which without a doubt exists but has not been manifested. She is the supreme authority and the absolute arbitrator of what constitutes furniture in her home and she is going to demand several things of the radio equipment

which comes into her home. Among other things she is going to demand that the radio equipment be housed in a cabinet form which will harmonize with all of the surroundings of her home-period cabinet designs are going to be in great demand. Secondly, she is going to demand that such a cabinet reproduce the broadcasted selection in the same volume as broadcasted. She wants her machine to be equipped with a horn which will do away with all of the choked, metallic and rasping sounds one hears on the ordinary radio receiving sets. She wants a machine which will clarify the tone entirely and eliminate the blurring or mashing of individual sound waves and continue to amplify for long distances which will permit of dancing to the broadcasted selection. She is also going to require a versatile machine and one which will combine in one cabinet the two most versatile existing instruments of entertainment-wireless telephone and the phonograph. The machine must be a dual-purpose machine, because if one hears a pleasing selection by radio the phonograph will give one the opportunity to make that selection permanent by the purchase of that selection in record form.

There is no reason in the world why



SOCIETY OF ARTS AND SCIENCES

Guests and Speakers at HOTEL PENNSYLVANIA Radio Dinner, April 30

HUDSON MAXIM Inventor and Scientist "The Amateur and the Radiophone" DAVID SARNOFF

General Manager Radio Corporation of America "Radio Broadcasting Now and to Come"

WILLIAM WADE HINSHAW
President and General Manager Society of American Singers
"Music and Radio Broadcasting"
JACK BINNS
Wireless Here of the Stormship "Page

Wireless Hero of the Steamship "Republic"; now with N. Y. Tribune
"Wireless on Sea and Land"
RAYMOND FRANCIS YATES
Editor The Evening Mail Radio

Magazine

"The Future of Radio"
JOHN V. L. HOGAN
Past President Institute of Radio Engineers

"The Radio Marvel and the Public"
JASON ROGERS
Publisher of The New York Globe
"Wise Planning for the Radio
Future" Future

J. L. GOLDMAN
Former U. S. Navy Wireless Operator. Inventor of Lyradion Concert Grande Machine used at this dinner. MILLER REESE HUTCHISON Inventor, and former Chief Engineer Edison Laboratory TOASTMASTER

radio equipment should not be pleasing to the eye. Given all these qualities, the radio, which is essentially an instrument of entertainment, will in reality become "the theatre of the home." And the time is here now for this type of machine.

SAYRE-LEVEL MOVES

The Sayre-Level Radio Company of Philadelphia have moved from their former quarters at 905 Filbert street, "around the corner" to 41 North Tenth, where they occupy the "largest radio store" in Philadelphia. They are prepared to give complete jobbing and retail service, and express the utmost confidence in the future of the Quaker City as a radio center. The firm was among the first to go into the radio game on a large scale, and take pride in the service they have been consistently giving their customers.

FIRST RADIO ROBBERY

The first report of the robbery of a retail radio store" is reported from Atlantic City, where the William Johnson store, near the Reading Depot, was robbed on the evening of April 20 and several hundred dollars of radio equipment was stolen.

Radio Shows and Radio Manufacturers

Will the Multiplicity of Radio Shows Continue —or Not?

By M. W. THOMPSON

Advertising Manager, De Forest Radio Telephone and Telegraph Co.

The sudden flood of radio shows that has overtaken the radio field during the past month is equalled in unexpectedness and strength only by the demand for radio equipment. Radio clubs, newspapers, dealer organizations, individuals, and radio exhibition companies all are trying to put on radio shows in their respective localities within a period of a few weeks. Radio shows are intended to accomplish two things—keep the interest in radio at white heat and sell radio apparatus. Of course, the second naturally follows if the first object is achieved.

The local radio show gives to distributors and dealers a chance to make themselves known to the buying public and the opportunity to gain leadership in the community as a place to purchase dependable radio equipment. Dealers and distributors in the territory affected take booths, take space in the printed program, place advertising in the newspapers and print special give-away folders. Their best radio men are in the booths afternoon and evening for several days. Apparatus for which their best customers are clamoring is sent to the show and put on display, often it is connected up and put in operation with a loud speaker.

But before all this effort and money is expended—the moment, in fact, that the news is received that a radio show is going to be held—the thought occurs, "The -- Radio Manufacturing Company ought to come in and back us up." And off goes a wire that a show is going to be held and that the manufacturer is expected to take a booth and place considerable advertising in local publications. To the dealer the show is a big thing and important, and if he has been pushing one line he sincerely believes what he says in his wire. But this thing must be looked at from a bigger angle from the point of view of the manufacturer working night and day to supply frantic demands from distributors and dealers all over the country.

Every day the mail brings to the manufacturer of radio apparatus.

Mr. Thompson's article explains the attitude of many manufacturers in this field who are daily turning down invitations to spend their money at radio shows throughout the country.

The Radio Dealer does not wish to take the attitude of condemning every radio show, or any radio show. However, the manufacturer must draw the line somewhere—that's certain

Not every so-called "exposition" helps the radio business—some of them hurt. A real exposition takes time to properly lay out the necessary entertainment for the fans, and no "hurry-up" show can be the success that one would be if properly planned and advertised.

Not every one knows how to manage an exposition, and we urge the builder of radio equipment to investigate the men back of a show before he spends good money for space.

Good shows help. Poor shows hurt. Let's make the show people assure us good expositions, properly planned, conducted and advertised before we encourage them.—Editor.

form letters, printed matter, floor plans and application blanks of radio shows. And almost invariably a letter goes back regretfully declining to enter. Back comes a flood of indignant, expostulatory, exhortive letters—from dealers, from the managers of the show, from newspapers. The final answer, however, must be "No."

The expense of radio shows is either rightly or wrongly, placed against the advertising and publicity department. Just so much money and so many men are available to this department, and the question came up before the various manufacturers some weeks ago, "Is our advertising appropriation going into advertising or into a road show?" It had to be one or the other, for no maker of wireless equipment can afford an extensive advertising campaign and a traveling booth with a crew.

Considerable ill-feeling resulted re-

cently over our declining to go into a radio show held in New Jersey. The same was true in connection with another show held in New York State. But why should this company go into these two shows and not into those held in Pittsburgh, Cleveland, Detroit, Chicago, Atlanta, Philadelphia, Boston and Brooklyn? It is not even physically possible, were the manufacturer willing. Many of these shows overlap in days they are open; many are so close to each other that a booth and equipment could not be moved. But most important fact of all-men and equipment cannot be spared. Production, and greater production, is the manufacturer's sole aim today.

Then here is one more thought. Three thousand dollars put into five shows benefits the dealers and strengthens the manufacturer in five localities, but—dealers in fifty other localities are justly angry, and fifty other territories are in no way helped. How much better to put that three thousand dollars into national publications, boys' magazines, radio periodicals and dealer helps, where it will benefit all equally. No, the producer of apparatus must stay out of all shows—all but two—the New York City and Chicago shows. To these shows come dealers, in one case from the entire East, and in the other from the entire Middle West. These two shows give the manufacturer, as can no others, a chance to make distributor and dealer connections over wide areas. So be not too harsh on the maker of equipment if he does not come into your show, does not co-operate with you as fully as you would like. If he does not send you all the equipment you think you should have for display, remember he is hundreds of thousands of dollars' worth of orders behind, that hundreds of other dealers are writing, wiring and phoning him for apparatus, and that every set counts. And, last of all, consider this: Would not a radio show in your locality be of more value next fall, when this present first frenzy is over, than one right now? Think it over.

De Forest Moves to 2 Much Larger Plant

Several years ago, the De Forest Radio Telephone and Telegraph Company, a pioneer in the radio field, settled itself up in the Highbridge section of New York City, prepared to turn out high grade radio apparatus for amateurs, laboratories, foreign governments and others who must needs cover great distances dependably but could not use wires. The factory at 1391 Sedgwick Avenue seemed more than adequate to handle the demand and presumably the company would stay there indefinitely. And for years, dealers and experimenters saw at the bottom of all De Forest advertising, " Highbridge, New York."

Then came broadcasting and its attendant flood of orders. Production doubled, then it tripled, finally it was quadrupled over the corresponding periods in 1920 and 1921. Competent men had no difficulty in getting employment; overtime until late at night became an everyday affair. Finally no more men and machines could be crowded into the once "amply sufficient "plant. A move was absolutely necessary. The sales force, which had not dared go on the road for fear of getting orders, was sent out to find a new location. It was found in Jersey

The plant formerly occupied by the Franco-American Soup Company contains 75,000 square feet of floor space and is so located that it can be conveniently reached from New York by tube and street car. With some alterations, it was decided, this would make an excellent radio manufacturing plant and the moving was started at once. The week-end of April 9th, the offices went over. The following week-end the stock room, glass department and laboratories were transported across the Hudson by truck and ferry. April 22, 23 and 24 saw the machine shop with its lathes, drills, screw-cutters and punches make the trip and last of all the assembly and shipping departments.

Today the entire organization is again settled, turning out radio equipment to fill the steady stream of orders that comes in with every mail. The new home is of red brick, two stories high, each floor being 20 feet from floor to ceiling, and fronting on Central Avenue extends from Franklin Street to Manhattan Avenue.

This plant is but one of two which build De Forest equipment. In Michigan, another twice as large and employing hundreds of men builds Everyman, Radiohome and Radiobest Receivers, the popular sets of this company's complete line of equipment. Moving is costly and is to be undertaken only in emergency but we expect to see other manufacturers doing likewise in the near future.

Everybody Happy

The makers of electrical aparatus appear to believe that the future radio retailer will be the present retailer of electrical supplies.

The makers of talking machines appear to believe that the future radio retailer will be the present retailer of

talking machines.

The makers of hardware supplies, sold to hardware stores, appear to believe that the future radio retailer will be the present hardware retailer.

The exclusive makers of radio apparatus appear to believe that the future radio dealer will be the retailer who opens a real radio retail shop.

Is anything more simple? could anything be fairer?

U. S. EARNS 16%

The Naval Radio Service has earned \$1,853,270 for the government, from the transmission of commercial and private messages, since the installation of the service at a total cost of \$25,159,116.15.

No charge was made for government messages, the value of which is estimated at \$3,649.947.56 for 1921.

\$75,000,000 Radio Business Awaits Folks in Our Trade

How "big" is the radio business today?

No one knows—despite the many estimates.

The radio industry has developed. There are between six hundred thousand and one million sets in operation. Estimate this as you like—average as you please, say 750,000 sets at \$50—and you have the nice sum of \$37,-500,000

Right now the market is opening for more business. Within a year from this date there'll be at least one million more sets, at an average of

This means \$75,000,000.

The department stores will get at least ten per cent. of this total volume of retail business.

Who will get the balance?

The manufacturer will produce apparatus, for these million sets, if sold at \$75,000,000 to the public at close to \$45,000,000.

Jobbers and retailers will profit to the extent of \$30,000,000.

The mercantile development of radio telephony is a merchandising op-

portunity of the first order.

Are you going to "cut in" on the immediate business available?

The total of this is really \$75,000,-

You cannot disprove it!

What part of it are you going to get?



The New Home of the De Forest Company in Jersey City

THE RADIO DEALER

THE RADIO TRADE JOURNAL
Published monthly at 1133 Broadway, New
York, N. Y., in the interest of Dealers in Radio
Supplies.
Telephone: Watkins 8926-7

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Claire D. Hoenig Service Bureau
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THE ONLY PUBLICATION OF ITS CLASS IN THE WORLD

Chicago office: 60 West Washington Street. Coast office: Flatiron Bldg., San Francisco, Cal. Southern office: 730 Gravier St., New Orleans.

Advertising Rates, \$90 per page of 30 inches. Detailed Statement of Circulation and Other Information for Advertisers Furnished on Application.

Application for entry as second class matter pending.

MAY, 1922

Radio Literature

Because of the constantly increasing demand for books on wireless there is reported the fact that many public libraries, throughout the land, are adding to their supply of radio literature.

The Detroit Public Library reports that "the rush" began in November of last year and they now have almost four hundred radio books in circulation.

It is a sure sign, if another is needed, that radio is a thing of interest—not only to present fans but to thousands of mechanics who are scientifically inclined, as well as to business men who are reading up to properly acquaint themselves with wireless information.

Jobbers Organizing

The Radio Dealer is pleased to report that Pittsburgh will soon have a real, honest-to-goodness association of radio wholesalers. The leaders in the Pittsburgh trade have been meeting and talking organization.

Word is received from Dayton, Ohio, that the dealers in that city are about to get-together for mutual protection, to offset the price-cutting program of department stores.

Newark, N. J., will soon have a radio jobbers association. It is agreed that "too many cooks spoil the broth," but minus a cook what's a meal? So, Newark without a strong, stand-up-and-fight organization is "pie" for cut-throat dealers. Get together.

Planning for the Future

The reports of incorporation in New York State and Delaware, as secured by The Radio Dealer, indicate that companies organized for the purpose of manufacturing radio apparatus exceed all other corporations in number.

This is an evidence that many business men foresee the future in the radio field, and are planning accordingly.

Experienced business men are not apt to experiment with real cash "for fun" and now that they are engaging in the radio trade some of the present fly-by-night concerns will die a proper business death—proper because these get-it-quick chaps are not properly appreciative of the future and are not now conserving their opportunity to establish a proper trade name.

The radio industry is to become a permanent industry, but that doesn't mean that every one now in the trade will make a lot of easy money.

Radio equipment is in demand, it is true, due in large manner to the fact that new centres of radio activity are being established almost daily and due to the fact that old-timers are buying better equipment, and so worth-while makers of radio apparatus will not only make a proper return on their investment, but will establish themselves as factors in a modern field of business endeavor.

No one can cheat the public all the time! That's admitted, but some of the present crop of "radio manufacturers" and "wholesalers" seem to disagree with the above-referred to business axiom. They're making every effort to cheat the public all the while! It cannot be done and the proper kind of retailers are already beginning to "show the door" to the improper kind of manufacturers and wholesalers.

The real retailer and jobber is beginning to ask for and wants to sell "standard" apparatus. That is the open door to the legitimate manufacturer. The legitimate tradesmen in the radio field are honest business men, not afraid to put their name and brand upon their product. They back it up by advertising, to the trade and to the public, by dealer show cards, by pamphlets and by other ways.

Legitimate manufacturers stake their reputations upon their branded products and the retailer will do well to scrutinize the offerings lest he, by mistake, purchase an article not only without merit, but not made by the right sort of a business house.

If every retailer and jobber will remember that he—in the final analysis—is the victim of a poorly-made product; that his retail trade reputation is at stake, then the dealer will seek and sell standard products.

And by "standard" one doesn't mean "made by a large electrical concern." Indeed not. Standard parts, standard apparatus, standard equipment can be made by a "former brass or wire manufacturer," but when you buy from a "former wire or brass manufacturer" ascertain whether he was a reliable manufacturer in his previous trade effort.

No one manufacturer, no group of manufacturers, can have or should have a monopoly for the exclusive production of radio apparatus. No one has a "divine right" to the industry, and that goes for any part of it, and that includes the largest capitalized manufacturers of equipment.

The reliable electrical manufacturer of yesterday is positively going to make the reliable radio equipment manufacturer of today.

(Continued on next page.)

Planning for the Future

(Continued from preceding page)

The reliable "brass parts" factory is certain to produce reliable radio parts if such factory makes radio parts.

The sudden in-the-cellar "manufacturer of radio parts" who has seized a "golden opportunity" to enrich himself isn't going to count in the near future. The sword of the business world is over his head; the decapitation will follow, as is just and proper.

Reliable manufacturers have nothing to fear, as the retailer in radio equipment develops. As conditions are today he is buying from "every Tom, Dick and Harry," but that's being done today. Tomorrow is another day, and when tomorrow comes there'll be another object lesson.

This lesson will disclose the important business fact that retailers and jobbers are ever ready to promote the sales of honestly-made goods, properly guaranteed by reliable concerns.

The important question today is: "Who is a reliable manufacturer?" That's not a very difficult question to answer today—if one is a business man.

HARRY M. KONWISER.

Radio Accidents

"Accidents frequently reveal leaders who are thoroughly capable of filling the positions in which they are thrust, and when such accidents happen we call them 'opportunity.'"—
Forbes' Magazine

The flash of business lightning that developed into the present radio industry has brought out some big figures.

Will they remain "on top" when the real merchandising business men of the land reach out for the radio business?

Some of the present leaders are of the accidental type. They happened to be around when the radio industry began to develop.

Some of them cannot face the big game when that game is on the alert. Some of the present big fellows are riding on a wave of prosperity, but 'they're headed for certain oblivion.

Some of the present trade leaders are not real business men, because real business men employ real business methods with an eye to the future—no matter how prosperous their business may be for the moment.

Some of the present trade leaders are of the get-it-quick type. They're the bootleggers of the industry. They have no desire to aid in building up. They have but one object—to purchase at low price and to sell at once for a high price. This applies, at this

writing, to some manufacturers as well as jobbers and retailers. (This paper has refused their advertising orders.)

Opportunity — accidental commercial opportunity, if you please—created these leaders and some of them have been found wanting.

In the years to come all of us will naturally look back and we will note that the leaders of, say, 1930 will be the men who in 1922 operated their business with indomitable persistence, but with the thought of giving every one a square deal.

The present leaders who are in the get-it-quick class only disgust the honest business men who are at present in the radio industry. These grabit-all fellows are not highly regarded now and their future standing in the radio trade is nil.

THE RADIO DEALER has received written complaints about jobbers who are over-charging, and even manufacturers who, apparently, could "help" their customers get certain articles from other jobbers—but at five per cent. above the factory price. (And we know of dealers who are not satisfied with a good margin of profit.)

These disgusting trade practices must be eliminated. The reliable manufacturers, jobbers and retailers must be protected. Let's get rid quickly of these get-rich-quick fellows. Let's drive them out of the fold.

Watch Out For Cancellations Next?

By P. E. EDELMAN, E.E.

The radio boom has brought with it a large number of irresponsible and inexperienced small dealers of temporary character, to the annoyance of established manufacturers accustomed to normal radio trade. That there has been widespread overbuying by a few stores is common gossip. Wild because makers fell down on large volume deliveries, many small men ordered without rhyme or reason from all directions and now that real deliveries are coming in against written orders, there are too many instances where unethical cancellations are being attempted on weak excuses as a backdown. The few cases of this character hurt the radio trade and should be stopped promptly because many orders were filled special at large expense in the effort to accommodate urgent requests for spot deliveries.

Commenting on the situation, E. T. Maharin, General Sales Manager, Phillip E. Edelman, R. E. Manufacturers, New York, says that the radio trade as a whole is on sound basis and a permanent part of the business life of the United States so that the few cases occurring of dishonest practices are to be regarded as much the same as happen in any rapidly expanding business. "We urge our trade not to overbuy but to order only what they actually need for their own requirements, as we will be able to care properly for all re-orders through our established jobbers."

Business men generally concede that popular radio broadcasting is here permanently. Indeed the largest companies hesitate to erect more projected broadcasting stations until manufacturing production catches up with back demand. Outside of Edelman apparatus which is coming on the market daily in large volume, there is now very little high grade spot radio supplies available for new orders. Over purchasing works two damages; it cheats others in the trade from proportionate shipments while a few get a speculative bulge on spot deliveries.

The sensible plan is to order what you need and insist on nearby deliveries, not fairy tales for next Fall, etc.

QUESTIONS AND ANSWERS

Conducted by A. L. KONWISER, B.S.

I have a tube set in my store and seem to have a lot of trouble with the vacuum tube.—W., Albany.

Beginners (and suppose you're in that class) usually have "trouble," to the extent of burning out the first V. T. These tubes have been tried out before you purchased same and if used with care should last a long time.

Are you certain you installed your vacuum tube correctly? The tube has four contacts. If not properly connected the tube will not operate. May burn out.

Look at the socket that comes for the tube. Note the four binding posts. They are marked G, F, F, F. "G" stands for the grid; "P" for the plate. The points for the connection of the filament are indicated by the two "F's."

The tube fits into the socket. It's called the bayonet socket and if the binding-posts are connected up properly you should have no trouble.

I am told a double 50-foot aerial will "do the work" and so informed a customer. The customer reported back I was wrong. What do you say?

—Mass.

Assuming a 100-foot long aerial will "get" your customer the broadcasting station he is interested in, a "double 50-foot aerial" is not "the same thing." Doubling the wire does not bring the result desired. It is the distance in one direction that counts.

In this connection, may I suggest that retailers should "go easy" on giving technical advice? Refer your inquiries to the nearest expert—or better still read the books advertised in this paper and become an expert.

Does the _____ Mfg. Co. really make the sockets they advertise in their dealers' catalog?—Albany.

Our belief is that this concern does not manufacture these sockets.

Please advise me as to the Brach Vacuum Gap Lightning Arrestor. Can it be used without a 600-volt switch? What is the best spacing for the gap? What is the substance used in the fuse-like cartridge in a lightning arrestor?

We take pleasure in advising what L. S. Brach says about this query. The answer is:

"The Brach Vacuum Gap Lightning Arrestor referred to above can be used in place of the 600-volt lightning switch. We refer you to the report of the Underwriters' Laboratory, dated January 10, 1922, Electrical No. 3962, the conclusion reading as follows:

"'Protection afforded. These protectors are judged to be suitable for

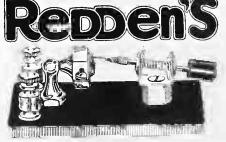
use in lieu of the grounding switch as provided for in rule 86-C of the National Electrical Code, and when properly installed to provide the required protection against lightning damage. While it is impossible to duplicate lightning discharges in the laboratory, and no attempt has been made to approximate such conditions in the investigation of the protectors. Tests have shown that they will break down at comparatively low voltages and much more readily than small gaps in air with which they may be connected in multiple.'

"The report is signed by Robert B. Shepard, E. E.

"Within the cartridge is an air gap maintained by dumet wire, a product of the General Electric Co. The wire is patented, and we are licensees of the wire and pay a royalty. The wire is held at approximately three-sixteenth inch, spacing in a glass tube from which the air has been exhausted, and a small amount of inert gas had been admitted. The effect of this is to reduce the air gap equivalent to discharge so that discharge of the tube will be between .001 and .004, or at approximately 380 volts. This is sufficient to absorb from the line any static accumulation or lightning inductive discharges and pass it into the earth.'



A REAL GOOD INSTRUMENT



IRVINGTON

IT TALKS

NEW JERSEY

\$150 Detector

To The

DEALER—"IT SELLS ON SIGHT"
To The

JOBBER—WE CAN MAKE DELIVERIES

MANHATTAN ELEC. CO., DISTRIBUTORS FOR NEW YORK AND NEW JERSEY 17 PARK PLACE, NEW YORK CITY

WRITE FOR DISCOUNTS

A. H. REDDEN

IRVINGTON

N. J.

"FOOL - PROOF" CRYSTAL DETECTOR MADE BY REDDEN

A "fool-proof" crystal detector is one of the features of the A. H. Redden line, and this new detector is "going like a house afire."

This attractive detector has a base of shellacked composition, the galena being screwed in a solid hexagon bar of brass, the whole highly polished, nickel finish. The handle is made of hard rubber.

The parts are milled out, are solid and the detector, once set, cannot be jarred out of adjustment.

KENTONE RADIO AMPLIFY-ING HORN

The Kentone radio amplifying horn is an instrument of precision, scientifically constructed as the result of careful, painstaking experiments and research. It is drawn from seamless brass tubing and in such form that there are no sudden angles with their consequent sound reflections, but only easy curves which insure a natural and pronounced amplification of sound, without distortion, that pleases and gratifies the listener. Skill-fully fashioned, beautifully finished and gracefully modeled, it is as pleasing to the eye as, in performance, it is agreeable to the ear. Stands fifteen inches high with a bell six inches in diameter. Acoustically perfect, it is not excelled by any similar device at any price. Will fit any of the popular makes of radio receivers, is readily set up and rigidly and sturdily constructed. Requires no batteries. The base is ingeniously fashioned so as to insure an airtight connection. A little slot is provided in the base through which the wires of the receiver are inserted, and such wires are held in place by a patented clasp which also contains a loop to which the strings of the wires are tied so as to relieve all strain. Patent has been applied for. It is fully guaranteed by the manufacturers.

SAYRE-LEVEL RADIO CO.

Philadelphia

Distributors For the Leading Manufacturers

"Everything in Radio"

Richtone)

A marvelous creation perfected on a new principle and protected by basic patents

Carries every sound to the ear as clearly as a bell. Positively eliminates all distortion, harmonics and metallic sounds. We invite comparison for beauty of tone and fidelity of reproduction, with any loud speaker on the market. The RICHTONE is beautifully finished in brass or nickel. Any make of headphone readily attached.

Retail price, \$12, with wide margin of profit for live dealers. For further information, wire or write

International Radio Corporation 42 Branford Place Newark, N. J.

Battery

Where Quality Reigns Supreme

Non-Spillable Vent Caps protecting your rugs and

Mahogany Finished Case matching your finest furni-

Nickel Base Handles make carrying it a pleasure.

Rubber Feet for resting on the varnished floor and table. Concealed Connectors insuring against short circuits.

Large Capacity allowing long use per charge. A First Cost that makes buying it a pleasure.

> 6860—90 Amp. Hrs.—45 lbs.....\$18.00 6880—110 Amp. Hrs.—52 lbs.....\$20.00

> > Immediate Delivery from Stock Wholesale and Retail

Manhattan Storage Battery Co., Inc. 204 West 76th Street, New York City Schuyler 1950-1

Phone Us Your Order!

Who Owns the Ether?

The air is already being employed for advertising purposes.

Unostentatiously the Westinghouse folks, at their Newark broadcasting station, startled the New Jersey radio fans on April 19th when these fans were asked to listen to "an interesting story on pipes and pipe smokers."

The listeners were told to take down the story and to submit a written report to Wm. Demuth & Co., reliable makers of pipes. The first prize is to be \$50; the second, \$25, and five \$5.00 prizes-making a total of \$100. Prizes will be awarded on May 10.

This is an experiment, of course, and is the beginning of an effort, somewhat concealed, it is true, to make possible the use of the air for advertising purposes. (It would so appear, at any rate.)

Will the radio enthusiasts, the public, permit this?

It is purely up to them—it appears. Who owns the ether?

There is a possibility that some of the members of Congress will take note of this recent advertising stunt, because some of the folks at Washington are genuinely interested in preserving the air for the general public.

At this very moment Representative Wallace White of Maine is preparing a bill to cover this matter.

Congressman White is quoted to the effect that no private interest is going to get the use of the ether. "It is agreed," says Congressman White, "that the ether belongs to the public."

The legislative committee of the House is also of that opinion, it is said.

The Government has been keenly appreciative of the interests of the public up to the present time, without proper legislation, and it is expected that the proposed laws will make impossible all efforts aimed at control of the ether for selfish personal purposes.

In other days the government "gave away" all sorts of property rights, but the viewpoint of the general public has been changed in recent years and it is not likely that the members of Congress will lend their support to any monopoly of the air-no matter how strong the pressure.

The Congressman who votes to give the air" to any "interest" will have a happy time explaining when he runs for re-election!

It is expected that the measures to be presented to Congress will give the Department of Commerce the right to issue licenses and to revoke same; to designate wave length permissions so that no one individual or concern acquires title to the right of the ether.

The secretary of the Department of Commerce should be authorized to classify radio stations; to state the kind of service to be rendered by each class; to assign wave lengths, and in general to keep order in the ether.

MURDOCK HEAD SETS

Wm. J. Murdock Co. are advertising 2,000 ohm head receivers for \$5.00 and 3,000 ohm receivers at \$6.00. HARDWOOD. Perfect made. Variometer stators and rotar. Variocoupler Rotars, Tubing.

Prices considerable lower than from other sources.

THE R. C. MILLS
Offices, 30 E. 23d St. New York City
Trade "RALCOEN" Mark

ANTENNA WIRE

50% Stronger Than Copper

Better than Solid Copper or Strands

> Less Sagging and Stretching

Adopted by Largest Radio Corporations

Buy it in Cartons

At All Dealers and Jobbers

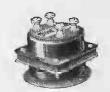
100-Ft. Cartons 150-Ft. Cartons 200-Ft. Cartons

Copper Clad Steel Co. Radio Dept. Braddock, P. O. Rankin, Pa.

MATER RADIO APPARATUS







THESE Variometers and Transformers have been developed in the research laboratory of the Atwater Kent Manufacturing Company. Twenty years' experience in the manufacture of electrical instruments of accuracy and precision, assures the highest possible standard of quality and performance in these sets.

Manufactured complete in our own plant, from the moulding of the condensize forms to the winding of the fine wire coils.

Correspondence solicited

2941 Stenton Avenue

ATWATER KENT MANUFACTURING COMPANY RADIO DEPARTMENT

Philadelphia, Pa.

Educating Jersey Dealers For Better Retail Sales

By J. S. GOLON

Of Newark Electrical Supply Co., Manager Radio Department

When the wireless craze spread over northern New Jersey many electrical contractors and dealers were forced into selling Radio supplies without knowing a Condenser from an Aerial. Consequently, due to the fact that the man behind the counter was not familiar with technical terms and appliances used in Radio Telegraphy, when asked by prospective purchasers for a Grid Leak would try to sell a Crystal Detector.

Realizing the existing conditions and knowing that the electrical contractor-dealers would welcome a course of instructions on elementary wireless telegraphy and telephony, the Newark Electrical Supply Company of Newark, inaugurated a course of instructions covering a period of eight weeks, not only on elementary theory, but also a series of sales-help lectures

were given.

These lectures were open to all contractor-dealers free of charge. This course was conducted on Monday evening of each week, each evening being divided into two periods, from 8 p. m. to 8:50, and 9 to 10 p. m. Lectures were given on the following subjects:

1st week, First Period: Principals of Wave Motion. Communication by Wave Motion.

Second Period: Aether Waves. Communication by Aether Waves. Production of Electric Waves.

2nd week, First Period: Production of High Frequency Oscillations. Energy and Power in Oscillator Circuits.

Second Period: Open and Closed Oscillatory Circuits. Increase of the Wave length of an Aerial. Reduce the Wave Length of an Aerial. Variation of Wave Length of Closed Oscillatory Circuits.

3rd week, First Period: Production of Oscillatory Currents in an Aerial. Direct Excitation of the Aerial. Factors. Spark Coils.

Second Period: Length of Electric

Second Period: Length of Electric Waves (B). Wavemeters. Review. 4th week, First Period: Wireless Telegraph and Telephone Receivers. Essentials of a Receiver. Two Circuit Receiver. Proportion of Inductance and Capacity in Secondary and Oscillatory Circuits.

Second Period: The Telephone Receiver. Audio and Radio Frequencies (B). Rectifying Properties of

220 Volts D. C.

Mineral Substances. Relation between the spark frequency of the transmitter and the sound production produced in the Head Phones.

5th week, First Period: Tune Crystal Receivers. Atmospheries. Aerials. The advantage of using an aerial of a large capacity. Distribution of Potential and Currents along Aerial. Harmonies.

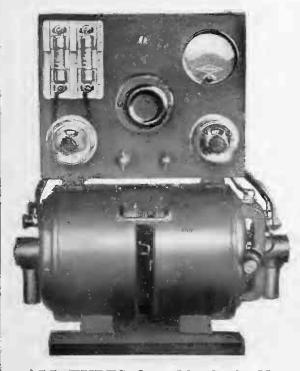
Second Period: Vacuum Tubes. Electrons. Fleming's Discovery. The oscillation of Valve Rectifying Properties of V. T.

6th week, First Period: Practical Appliance of V. T. Action of the simple valve. Fleming Valve Circuits in simple form. The three Electrod Valve as an Electron Relay.

Second Period: Relay Action. Use of the Electrod Valve with Grid Condenser. The Tuned Plate Circuit. Review.

On the opening evening about seventy dealers or their employees were present. Since the opening night the auditorium of the Newark Electrical Supply Company has been crowded on each Monday evening.

Reports have reached the writer from various sources that Radio sales at individual electrical dealers' stores have tripled due to the instructions received. These lectures not only help the dealers to give intelligent service, but also enables them to give common information to the layman. So let's get together and help the other fellow. When helping the other fellow he will help you in the long run.



ALL TYPES OF MOTORS IN STOCK

Motor - Generator - Sets

for Charging Storage Batteries

Operating electro-magnets, bells or any form of signals

MOTOR END
32 Volts D. C.
85 Volts D. C.
110 Volts D. C.
24 to 30 Volts

A. C. 110 Volts, 25 to 133 Cycles 220 Volts, 25 to 133 Cycles

PREMIER EMERGENCY CORP.
767 Third Avenue

Vanderbilt 7500

New York City

BOUGHT, SOLD and REPAIRED

Advertising for the Retail Dealer

Advertising Copy for the Radio Retailer

Many retailers in many cities are using space in daily newspapers in the radio sections in great proportion, but are not getting "results" in accordance to the appropriation.

A careful survey of many newspapers develops the thought the retailer is not advertising properly. It it obvious—the evidence is conclusive —that the retailer is not receiving proper advertising service.

In most radio "ads" the retailer is careful to feature his name in big type and this is due to the fact that the retailer—up to now a non-advertiser —has been solicited by a commission man on a daily newspaper to advertise.

The strongest "argument" this newspaper solicitor advanced ran something like this:

"Now, Mr. Fink, you're a good business man; you do enjoy business almost exclusively from this neighborhood. You can branch out in the radio field—that's not a sectional business. Get your name known to the radio people. You know that Newark your city-has 50,000 radio sets, and think of these enthusiasts who never heard of you.

"Let's see. Do you prefer to be known as 'The Fink Radio and Elec-trical Store' or as 'The Fink Radio Service Corporation.'

"Yes, I think your selection is the best. On second thought I like 'The Fink Radio Research and Sales Corporation.'

And so the appropriation starts and the first advertisement will run something like this:

"The Fink Radio Research and Sales Corporation offers receiving sets, batteries, galena, vario-meters, tuning coils, etc., etc.'

Sometimes the second ad will read: "Radio-Sets and Parts. Our motto: Quality at the Lowest Price."

Take our word for it, we saw an ad exactly like the above, and it was PROVED to have been written by an advertising agency.

Another recent ad featured the

name and this:

"For reliability and satisfaction buy at a radio shop. We sell nothing else.

Get the knock? Why didn't the ad writer say: "Don't go elsewhere to be

cheated." It would bring a smile and mayhap business.

The present crop of retailers are being indifferently handled by the agencies, who have rough-necked each other into their accounts.

And by the same token some of the manufacturing accounts are being handled in a terrible manner by their

agencies.
"Schoolboy copy" is being sent forth in the hope of creating a brand name and good will. No effort appears to be made to "start the thing right" on the part of business men

The Editor of the Retail Advertising Department of the RADIO DEALER will be glad to receive copies of advertisements that have successfully aided retailers in building up their business. Where personal criticism is desired stamped addressed envelope should be enclosed for reply.

who are spending considerable sums of money.

In great measure this meaningless copy is due to the fact that many of the factories advertising have been looked after by high-grade technical advertising agents, whereas the radio equipment manufacturer needs an advertising agent that knows a selling punch.

The technical man is great, but if he is no salesman the advertiser must suffer.

And for the retailer, if he has an agent who is more interested in acquiring 15 per cent from the newspapers than in anything else, we'll, the retailer might better prepare his own copy with the aid of a high school boy who knows radio.

This phase of the "art of retailing" will be discussed in our next issue. Advertising agents who are producing real copy are invited to submit same for comment.

This department will also write copy, without cost, upon request, FOR ANY RETAILER.

NOTE TO THE TRADE:

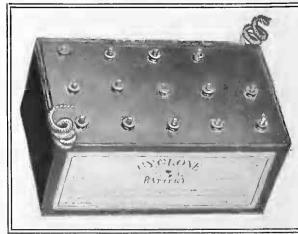
Quote us prices, terms, discounts and deliveries.

WE ARE DISTRIBUTORS, exclusively via mail order.

Complete sets Radio Equipment **SPECIALTIES**

RADIO EQUIPMENT **SERVICE**

500 FIFTH AVENUE NEW YORK CITY



Jobbers Attention THE FAMOUS CYCLONE

The World's Best B Battery Each and Every One Guaranteed STANDARD EVERYWHERE

Standard Electric Novelty Co. 324-8 Lafayette St. N. Y. City

Serifi Colembers

RADIO CO.

Standard Receiving Sets.
Federal and Western Electric Radio
Apparatus. Adjustable, portable, indoor Antenna.

Immediate Delivery! !Dealers!

Cyclone Batteries, ground clamps, insulators, wire, crystals, binding posts, switch points, etc.

NEW YORK RADIOPHONE CO.

Union Square, New York City

PAPER TUBES WIRELESS
ALL SIZES ON HAND
FOR IMMEDIATE DELIVERY WHOLESALE AND RETAIL BAEHM PAPER CO., Inc.
Fulton Street New York 219 Fulton Street

Bet. Church and Greenwich Sts.

MANUFACTURERS OF GUARAN-TEED RADIO PRODUCTS

ATTENTION.

Our services as Factory Selling Agents open for a few more connections.

Branch offices being established in all leading cities.

R. C. COMPANY

Executive offices
30 E. 23rd St., New York City Eastern Territory under personal saleswork of Ralph Coen.

DEALERS

Send for free samples of our WINDOW DISPLAY SIGNS AND CARTOONS featuring RADIO EQUIPMENT.

THEY ARE REAL RESULT **GETTERS**

Merchant's Sign Service 48 Zabriskie St. Jersey City, N. J.



U.S. Eagle Galena

PRICE EACH, 25 CENTS

Marvelous Crystals of Sensitivity; Improve your Radio Reception by the use of this Crystal. No better Galena on the American market. Each Crystal is packed in a tin container, labeled U.S. Eagle Galena, the galena itself being wrapped in tin foll and packed in cotton. DEALERS: Write for our proposition and catalogue, listing all popular makes of Apparatus.

'If it is anything in Radio, we have it."

U. S. Radio Co. of Penna., Inc.

Manufacturers, Distributors and Importers Corner Ferry and Diamond Sts.

Pittsburgh, Pa., U. S. A.

Pittsburgh News

The Robbins Electric Company are distributors and jobbers for many of the leading makers of radio apparatus.

Doubleday-Hill Electric Co. have a well equipped radio service and have a corps of experts to aid the fan, as well as the dealer. They operate Station K Q V at Pittsburgh and W M V at Washington for broadcasting.

The United Electric Stores Co. have everything on sale from cat whiskers up, and ship the same day they receive orders.

Amrod, Murdock and Westinghouse apparatus are the mainstays of the big business being done by the Devon Electric Co.

Ludwig Hommel & Co. are distributors for over forty manufacturers of radio equipment, and can make regular deliveries on many standards. They are proud of their large and complete line, and during the recent show period were visited by many out-oftown retailers.

The Westinghouse batteries are very popular in these parts. That's obvious as one wanders around town. Ouite proper, too, for we do know these batteries are being properly built for radio requirements.

The National Phonograph Co. are using space in local papers and advertise "no shortage of phones here."

Frank & Leder's radio department has been offering Federal phones at Other advertised specials are: Holtzer phones, \$8; Kellogg phones, \$10.25; Argola detectors, \$1; rheostats, \$1; Keystone lightning arrestors. \$1.95.

Hipco batteries and other Hipco articles were well presented at the Hipwell Mfg. Co. booth at the local show. The Hipco folks from the elder Hipwell and H. H. Hipwell to the famous G. James Dotterwich, local salesman, are all reg'lar folks and good people to trade with.

Hitch a wireless to a Vic." That's the Johnson Music Co. slogan, and it's bringing business. A lively retail shop.

The U. S. Radio Co. of Pennsylvania advertised as follows: "If your Galena crystal is not satisfactory, regardless of brand, bring the empty container to our store and we will exchange it free of charge for a piece of U. S. Eagle Galena." This was the offer during Show Week. This concern certainly has a winner in the U. S. Eagle Galena.

The Triangle Light Co. have been advertising as follows: Kellogg phones, \$10.25, and Trico phones, \$7.

DEALERS!

We Manufacture

Crystal Sets

Crystal Detectors

Variometers

Varicouplers

Inductance Switches

Binding Posts

Dials-3"

2 Step Amplifiers

Short Wave Tuners (Unwired)

Sockets—single, double, triple

And are Distributors for

Formica Company Crosley Mfg. Company Continental Fibre Jefferson Transformers New England Wire Co. Atlantic & Pacific Co. Tubes Frost Plugs & Jacks **Eveready Battery** Novo Mfg. Company

Immediate deliveries from stock

Wholesale Exclusively

Bronx Radio Equipment Co.

Manufacturers and Distributors

687 Cortlandt Ave., at 154th St. NEW YORK CITY

Melrose 1613 Radio Call 2-BXA

Amplifying Units

This Equipment Marks a Forward Step, Is Claim

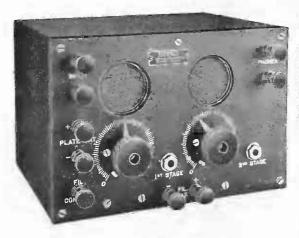
The Federal Detector and Amplifier Units, made by the Federal Telephone and Telegraph Co., mark steps forward in the development of the vacuum tube equipment.

In these units are incorporated improvements that are distinct achievements in the art and innovations which make them superior to devices de-

signed for the same purpose.

The Federal apparatus, it might be mentioned, has been properly designed for the past twenty years. This bespeak engineering skill and careful attention to electrical and mechanical detail.

The Federal amplifier and detector units make possible the most sensitive detector action and greatest amplification without critical adjustment and without the possibility of "howling."



The tube, transformer, tube socket, telephone jack and filament rheostat, constituting each stage of amplification, is enclosed in its own grounded metal housing, and the parts of each stage and their interconnections so arranged that magnetic or electrostatic fields between successive stages, tending to produce "howling" and other objectionable noises are entirely eliminated.

The illustration herewith is a No. 9 Two Step Amplifier.

To Dealers: IN STOCK

for Immediate Delivery

De Forest Apparatus, A. P. Tubes. Headsets, \$6.00, \$7.50, \$8.00, list. Acme Apparatus. And all parts.

Wholesale Only

Greenfield Electrical Supply Corp. 1096 Bedford Ave., Brooklyn, N. Y.

CHANGE OF NAME

The General Apparatus Company, Inc., New York City, announces they will now be known as the Sleeper Radio Corporation. A. M. Sleeper is president of the company.

DEALER FOLDER READY

The New York Radio Apparatus folder, published by the New York Coil Company, manufacturers of radio equipment, in a small space lists a variety of equipment. These folders will be valuable to dealers handling the quality line made by the New York Coil Company, the descriptions of the products listed being quite complete.

RAYMOND ENGINEERING CORPORATION

Manufacturers
To the Radio Industries

PARTS AND ASSEMBLIES
ON CONTRACT

Executive Offices: 309 LAFAYETTE STREET, N. Y. CITY Works: FARMINGDALE, LONG ISLAND

LATEST and MOST POPULAR

Radio Books

Radio Hook-Ups, by M. B. Sleeper
Radio Design Data, by M. B. Sleeper
Construction of New Type Trans-Atlantic Receiving Set, by M. B. Sleeper .75 Tells how to listen to the high-power telegraph stations of foreign countries.
Construction of Radiophone and Telegraph Receivers for Beginners, by M. B. Sleeper
How to Make Commercial Type Radio Apparatus, by M. B. Sleeper
Wireless Telegraphy and Telephony Simply Explained, by A. P. Morgan
Experimental Wireless Stations, by P. E. Edelman, 3.00 A book describing all modern improvements.
A B C of Vacuum Tubes Used in Radio Reception, by E. H. Lewis, 1.00 A book explaining in detail all about vacuum tubes.
FREE! Catalogue of Wireless, Automobile and Other Books Sent Free on Request

The Norman W. Henley Publishing Co.

2 West 45th Street, New York

Liberal Discount to Supply Houses. Write for full particulars and dealer's proposition.

Weiller's Unsurpassed **Detector Crystal**

IT is just what the name implies.

IT is the best, that can be commercially produced.

IT is sensitive on the entire surface.

IT will work equally well under light or heavy contact pressure.

IT is therefore easy to adjust.

We will offer CASH PRIZES for long distance records on phone broadcasting reception with our crystals.

Prices, information, and samples furnished on request.

We furnish all known crystals for radio use, mounted and unmounted, crystal detectors and complete crystal

PAUL G. WEILLER

320 Market Street

Newark, N. J.

STANDARD RADIO EQUIPMENT

In our next issue we will print a list of "Standard Radio Equipment" to give retailers in radio equipment knowledge of standard radio apparatus.

Listings will be made without cost or obligation, manufacturers being required to "stand behind" their branded products to the extent of guaranteeing same.

Manufacturers of radio equipment are invited to tender us a list of their products.

THE RADIO DEALER

Who Gets the Patent?

Was Squier's Multiplex Invention Given to All?

If an inventor, when he takes out a patent, announces that he has dedicated his discovery to the people and is not interested in royalties or rents accruing therefrom, can he prevent a corporation from adapting the idea without asking his permission and without paying for it?

"Yes." That's the answer made by Major-Gen. George Owen Squier, Chief Signal Officer of the United States Army, who patented the principle on which multiplex telephony is based.

" No." That's the answer of the American Telephone and Telegraph Company, which has put the multiplex telephone into commercial use.

The Federal Court of the Southern District of New York will settle the problem—for a suit is pending.

General Squier, about twelve years back—then a Major—discovered means whereby ten conversations could be carried simultaneously over one wire, and it was noted that this new system of multiple telephony could be applied to telephone exchanges without any modification of apparatus then in use.

It was described broadly as "wired wireless" or wireless telephony guid-

ed by a wire.

Four patents were granted Major Squiers and the litigation developed hinges on the wording of a patent act passed in 1883.

Officials of the A. T. & T. Co. base their case on three points. First, that General Squier was not the first to discover the principle of multiple telephony; second, that the company did not infringe on his patent, and third, because the general himself freely "gave away his patent."

ROBERT BRISBANE DEAD

Robert Brisbane, who died at New York recently, after an operation, was senior construction superintendent for the J. G. White Engineering Corporation. He recently completed the station of the Radio Corporation of America at Bolenas, Cal. Ĥe was born in Scotland in 1885 and came here in 190б.

BATTERY SALES DECLINED

The annual report of the Electric Storage Battery and its subsidiary, the Willard Storage Battery Company, for the last year, shows gross sales of \$10,015,812 as compared with \$12,-132,814 in the previous year.

Write for Pamphlet

VARIOMETER Type A

Designed with the object of reducing the electric hysterics to a minimum. Not only is the instrument striking in appearance but it is highly efficient in design.

SHORT WAVE Unit, Type E

Also embodies the same features. This instrument will regenerate, oscillate and detect over all wave lengths, when loaded with honeycomb or similar coils in the primary, secondary and plate circuit.

NELSON RADIO PARTS CO.

89 Academy St., Newark, N. J.

Stanton's WIRELESS Bulletin



The Authority on Wireless Stocks

Radio Corp. of America Spanish Marconi American Marconi Canadian Marconi Federal Tel. & Tel. English Marconi De Forest Radio Tel. & Tel.

We make firm markets in all the above stocks Send for Free Bulletin

FRANK T. STANTON & CO. 35 Broad St., N. Y. C. Broad 5819

GANAERITE

Detector Crystals

Twenty years of practical mineralogy gave us the material to the highest quality produce crystal.

We are now undertaking the largest single order for mounted crystals in the market.

We individually test and guarantee to replace or refund on any unsatisfactory Ganaerite crystal,

The Harris Laboratory 26 Cortlandt St., New York City

RETAIL ADVERTISING

Many dealers who advertise appear to employ a circular showing the broadcasting station locations. Is that the only thing to feature with one's The RADIO name and address? DEALER knows better. Ask us if you want a suggestion.

SCOUTS LIKE IT

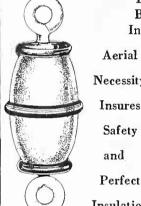
Boy Scouts, for whom radio classes are being formed by amateurs, are showing a lively interest in this new addition to their training.

RADIO CABINETS

We build Special Cabinets and Cases your order. Tell us what you want to your order. Tand get our price.

NATIONAL CABINET COMPANY Dept. R-3, Dayton, Ohio

WIRELESS DISTRIBUTORS



Handle B. & P. Insulators

Necessity

Safety

and

Insulation

Immediate Delivery Write for Exclusive Territory and Quotation

Banister & Pollard Co. 206-208 Market St.

Newark, N. J.

New Manufacturers

Radiogem Corporation, to make wireless apparatus; capitalization, \$10,000; incorporators, T. Banilower and S. Holtzman.

Standard Radio Corporation, receive and utilize electromagnetic waves; \$500,000.

Benson Co., Wilmington, \$100,000, radio equipment.

Beaumont Radiophone Corporation, Wilmington, \$250,000, apparatus.

Omnus Electric Corporation, Brooklyn, \$50,000, radio parts.

Manhattan Radio Sales Co., New York,

Radio Sales & Service Co., Wilmington, \$100,000.

Instrument Co., Wilmington, Radio transmission, \$900,000.

Clarkson Radio Equipment, Wilmington, \$2,000,000.

High Tension Transformer & Equipment Corporation, Hoboken, N. J., \$400,000.

Radio Engineering Co., Wilmington, \$50,000.

Aerophone Radio Corp., Wilmington, \$1,000,000

Radio Electric Co., New York, increased capitalization from \$1,000 to \$275,000.

Superior Radio, Inc., Philadelphia, \$100,-

Pioneer Radio Corporation, New York, \$20,000.

J. Fisher Electric Co., New York, \$5,000. Feck Radio Corp., Brooklyn, \$7,500; G. B. Peck, W. E. Donavin, (Attorney, H. J. Defavin, 23 Flatbush Avenue, Brooklyn).

Radio Industries, Inc., Manhattan, 20,-000; H. Gitlin, J. H. Faulker (Attorney, J. M. Hergberg, 2 Rector Stfeet, N. Y. City).

M-G BULLETIN

The Marshall-Gerkin Co., Toledo, Ohio, have issued a supplementary bulletin showing high-grade radio apparatus, featuring variocouplers, variometers, binding posts, detector panels, etc.

Radio dealers who mention THE RADIO DEALER in writing to RADIO Dealer advertisers will be doing us a

ATTENTION—DEALERS

We Are the Pioneers Manufacturers of All Radio Parts

ASK US FOR QUOTATION

We Ship to Any Part of the Coast

Positively Prompt Shipments Jobbers for De Forest Radio and Equipment

WIENER WIRELESS SPECIALTY CO.

21 ACADEMY STREET

NEWARK, N. J.

PHONE MARKET 5668

The GARDNER **HEAD SET**

Made Expressly for Radio by Radio Experts

The GARDNER PHONE is a high-grade super-sensitive instrument approved by leading throughout the country. authorities

List Price \$12.00

Immediate Delivery

Liberal Terms to Dealers

Gardner Electric Co.

38 Park Place

NEW YORK

Tel. Barclay 1540

Dealers and Jobbers

The FAMOUS DICTOGRAPH HEAD SETS

are ready for delivery

Write or wire for proposition

Federal, Jr. with Head Sets

De Forest Everyman with Head Sets

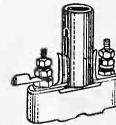
De Forest Radiohome with Head Sets and Tubes

RADIO STORES CORP. 150A W. 34th St., New York City

BIG SELLER

This Spring and Summer

The Best Protection



Against LIGHTNING and STATIC

JACOBUS VACUUM Aerial Protector Type J.S.W.

Approved by the National Underwriters to replace Lightning and Ground Switches.

Write for Our Proposition

APEX ELECTRICAL SPECIALTY CO., Inc.

79 Orange St., Newark, N. J.

"BLAZE THE WAY TO BETTER BUSINESS" CALL CHELSEA 9485

"ARCY" SIGN WORKS

Gold Silver Brass Electric SIGNS

Metal Wire Wood Oil Cloth

GILDING ON GLASS
112 WEST 16th STREET, At 6th Ave.,

NEW YORK

Manufacturers and Manufacturers to Be

We have machinery for manufacturing RADIO METAL PARTS. We have the men to operate this machinery. We have shop room and it is properly equipped for assembling. We are also fully equipped to do high grade NICKEL PLATING AND POLISHING.

If interested call or write, We shall be glad to talk it over and see if we can get together.

A. HENKEL & SON 782-786 So. 18th St.

Newark

New Jersey

DUGDALE

CRYSTAL

IT TALKS

GUARANTEED SUPER-SENSITIVE RADIO PHONE

TESTED

DUGDALE

CRYSTAL DETECTOR

MOST SENSITIVE ON EARTH

DEALERS
OUR PROPOSITION WILL
SURPRISE YOU

DUGDALE LABORATORIES

55 HALSEY STREET

NEWARK, N. J.

HY-SE RADIO MFG. CO. Distributors of

Genuine "Bakelite-Delecto"
All size panels to order

U. S. Condensers 3-11-21-43 Plate

DEALERS' DISCOUNTS

139-141 Charles Street New York, N. Y.

Ask Our Service Bureau

.a.es?

manufacturers and jobbers—and others.

Germany and Austria have many large factories capable of producing large quantities of radio equipment and apparatus of every conceivable type, at lesser prices than in our own land.

Many wholesalers are making efforts to acquire German and Austrian-made radio equipment, but the present condition is that the big German and Austrian factories making electrical equipment are already under contract to a certain group of American manufacturers whereby these foreign factories have agreed to make these American folks their exclusive customers.

That's the way it's told.

Anyway, at least one New Yorker has been receiving radio apparatus from Germany and has employed same in conjunction with U. S.-made articles, and it is believed one of the big companies in the radio field does employ foreign-made parts in their equipment.

The German factories, it is obvious, cannot swamp the American market with radio equipment—to the damage

of our own factories.

It is understood that the present buyers of German and Austrian-made radio apparatus are not selling their importations at prices other than the present American scale. One might conclude their profits are considerable. Mr. Dealer

we manufacture everything in radio

FROM A TO Z

AMERICAN RADIO SALES AND SERVICE CO. MANSFIELD, OHIO

Ask Our Service Bureau

Special Proposition on Variable Condenser

PLATES

To Manufacturers and Dealers:

We are prepared to supply manufacturers with heavy aluminum variable condenser plates. Conscientiously made by skilled workmen. Unusually low prices. Prompt delivery on any quantity.

DIETZ RADIO CO.
30 Sterling St.
Newark, New Jersey

INCREASE YOUR SALES

DEALERS

With Our Detailed Drawings on How to Make

A Super Selective Regenerative Tuner

A Crystal Receiving Set

A Loop Aerial Receiver

A V. T. Detector and One or Two Step Amplifier

Drawings give complete list of parts needed and instructions

Dealers' helps furnished

S. NEWMAN & CO.

Radio Designing and Drafting

74 Dey St., New York City-Phone Cortlandt 5660

MANY HEADSETS

There are about nineteen different headsets on sale in the East. A few months back there were not even six.

Among the 'phones now offered to the retailers are the following:

Everett, Murdock, Western Electric, Manhattan Electric, Kellogg, Browne, Federal, Aero Fone, A.B.C., Dreyfus, Stromberg-Carlson, Red Head, Firth (German), Brown (English), Brandes and Gardner.





EDI. Broadway, IVE.

EXPERIMENTERS' MANUAL

THE WIRELESS EXPERIMENTERS'
MANUAL. E. E. Bucher, 340 pp.
300 ill. Wireless Press, Inc., 1920.
For those who have passed through

For those who have passed through the ABC stage of Radio this Manual serves as the next step into the advanced theory and design of Radio Transmitting and Radio Reception sets. Starting with the design and construction of spark transmitters it brings the reader along a direct and enlightened path to rotary gap transmitters. Receiving sets from the simplest crystal to the most up to date tube sets are treated progressively so that when the reader has finished he is up to the minute on wireless information.

The book is not only suitable for those who desire a thorough study of wireless, but for the sub-amateur who wishes to construct his own set it will prove of great value. Construction of the various parts and numerous hook-ups are treated in text and completely illustrated. The book as a whole should be part of any reference library on Wireless.

TESTING TELEPHONES

A good way of testing telephone receivers is told by M. B. Sleeper in his latest book, "Radio Telephone and Telegraph Receivers," published by the Norman W. Henley Co.

"When the telephones are received they should be tested in the following

way:

"Put a piece of wet blotting paper between a penny and a quarter. Touch the cord tips across the miniature battery. If a click is heard the telephones are all right. Then connect the telephone to the set, adjust the detector and see if the signals are interrupted when the cord is moved about. This shows up any loose connections. Do not think there is something wrong until you have made sure. Then send the telephones back. Do not try to repair them yourself."

RAY'S A B C

"The A B C of Radio," by Waldemar Kaempffert, published by Martin R. Ray, is real nourishment for the beginner and is selling everywhere. Retailers should carry this big seller in stock.

Books Make Paying Side Line for Dealer

Radio Fans Will Buy Books from Dealer If Properly Displayed

Books make a profitable side line for dealers in radio equipment, selling at a fair margin of profit without an extra heavy investment.

The average radio bug, especially the beginner amateur, is not going to visit the book stores and department stores in search of books about his favorite hobby. But when those same books are placed on the counter of his favorite retail dealer in radio equipment the bug will buy them, every one.

A varied assortment of books of interest to radio users, running from A B C for the beginner, to building transcontinental sets, for the experimenter and engineer, can be stocked by the retailer with a very small investment. The publishers are making daily shipments and lines that sell fast can be re-ordered daily if desired.

THE RADIO DEALER does not believe in side lines. We do not think it a wise thing for a drug store to try to sell radio sets, but we do believe it will be for the betterment of the industry and for the benefit of the retailer, if radio books are sold wherever radio equipment is merchandised.

Several reliable book publishers are advertising in this issue, a neat assortment of books can be made up from their ads, or the Service Bureau of this publication will be glad to aid any dealer in selecting a stock varied enough to meet all demands. Tell us how big an investment you want to make and we will submit a sample order that you may send to the publishers direct. There is no charge for any work done by this Service Bureau for our readers.

Detroit Electric Company 434 Shelby Street Detroit, Mich.

Radio
and
Electrical
Equipment

Established 1886

RADIO DEALERS

We have the following parts in stock for prompt shipment:

Variometers
Variocouplers
Variable condensers—43 plate and 23 plate

Vernier condensers

Fixed condensers Sockets Switch stops

Switch stops
Switches
Switch points

Binding-posts, metal Binding-posts, rubber knob Copperweld antennae wire Home radiophone receivers

"Solder-Rite." Ready to use solder in paste form.

CLARK & TILSON

51 East 42nd St. New York

Wholesale Distributors of Radio Supplies and Equipment

It pays to advertise—ask our advertisers.

If you have something to sell the Radio Trade, fill in the blank below—an ad this size would only cost \$18 per issue

ADVERTISING ORDER

HARRY M. KONWISER, Publisher, THE RADIO DEALER, 1133 Broadway, New York City.

You may insert our advertisement, copy attached, in the next four issues of the RADIO DEALER, to occupy space of inches, for which we agree to pay you at the rate of three dollars per column inch monthly after publication.

(Signed)	wi	997 P	¥c.	•.44	٠	76	2075a	٠.	16	Ļ	

(Address) ** Till the same and the same and

Advertising rates, three dollars per column inch. \$90 per page,

Minimum order, four inches

Loop Aerials and How They Work

Explaining the Workings of This New Equipment

By C. M. HUNT

Of Raymond Engineering Corporation

Practically every radio dealer is familiar, to a certain extent, with the functioning of a loop aerial. It is realized that a loop aerial is never as efficient as an outside antenna, from the standpoint of signal strength, but that, on the other hand, its directional qualities and the advantage of portability are apparent. Up to the present the average dealer was satisfied to realize the truth of the above and let it go at that.

Today we are confronted by a rather serious situation, particularly as regards the apartment house dweller who is interested in radio. One will find on practically every roof from one to four antennæ. This situation is resulting in two things. First of all, each owner of an aerial, erected under such conditions, will be dissatisfied with the results which are obtained with his receiving The most important point to be borne in mind, however, is the fact that the owner of the building will, very shortly, realize that such installations are becoming a nuisance. Coincident with this change find not alone the Board of Fire Underwriters, but also the principal insurance companies are becoming very much interested in the possibility of danger from lightning, due to the erection of outside aerials. The upshot of the whole matter will be that very shortly the problem of erecting an outside antenna will become a pretty difficult one. The alternative will be to buy and use some form of loop aerial.

At the present time there is a very efficient loop aerial designed and in the process of construction by a radio firm in New York City. This loop aerial has all of the advantages of a device of this type, and, in addition, may be supplied in a knock-down or portable shape. The use of this device will remove all possibility of lightning danger, will make it unnecessary to apply either to the landlord or any other authority for permission to install a wireless receiving set. One of these devices might be located on every floor of a building without unnecessary interference with the other nearby devices.

Any radio dealer is obviously progressive enough to look to the future. This article is written with the idea of bringing a fact to the attention of radio dealers in order that they may the better prepare for a market which will probably come rather suddenly.

COLUMBIA RHEOSTAT

The Columbia rheostat has been especially designed for vacuum tube work and is made for back panel mounting. The resistance of six ohms gives unusual close filament temperature adjustment on either 4 or 6 volt vacuum tubes, an essential feature, if efficient sensitiveness is to be had in tube control.

Manufacturing Possibilities

Screw Machines—Lathes—Punch Presses — Winding Equipment, Etc. — All Available for the Manufacture of

RADIO APPARATUS

and

RADIO ACCESSORIES

Submit Blue Prints or Specifications for Estimates

We Can Manufacture It for You

STEEL PRODUCTS MFG. CO.

4613 Roosevelt Road Chicago, Ill.

X-Ray Insulator Adapter

fills a long felt want for a lead in insulator — approved, up-to-date, complies with every regulation, both national and local, made in two styles—one for lead in, one for lightning arrester.

Aeroplane Wire

19 Strand Silicon Bronze Aerial Wire. Each strand (tinned.)

Guaranteed to give 100 per cent satisfaction.

This wire was used during the war by the U. S. Government for aeroplane and trench work and was the only wire to stand up under these conditions.

We have the entire supply and are prepared to make immediate shipments.

Liberal Dealers Proposition

HINTZ BROS., Inc.

459 Central Ave. Newark, N. J.

Trade-Mark Department

The Radio Dealer takes pleasure in announcing that it has made arrangements with the Washington Trade--mark Specialist, Chauncey P. Carter, in accordance with which Mr. Carter will conduct a Trade-mark Department for this publication, comprising each month a list of radio trade-marks accepted by the Patent Office at Washington and an article dealing with some phase of trade-marks of general interest to all dealers in radio equipment. Mr. Carter is prepared to answer inquiries concerning trade-marks addressed to him by any of our readers, and will also investigate trademarks from the novelty standpoint and otherwise and register them in any country where this is desired.

TRADE-MARKS RECENTLY ACCEPTED BY THE PATENT OFFICE

ABC STANDARDIZED RADIO— Jewett Manufacturing Corporation, Newark, N. J. Use since Feb. 1, 1921, claimed.

AIROPHONE-A. W. Bowman & Company, Cambridge, Mass. since Nov. 15, 1921, claimed.

ACMEPHONE—Acme Apparatus Company, Cambridge, Mass. since December, 1921, claimed.

GENERAL ELECTRIC MAKES REGULAR PROFITS

The General Electric Company is one of the few big industrial corporations that reported larger earnings for the past fiscal year than for the pre-

ceding year.

Its annual report shows this concern to be in good shape. Its funded debt —by the way—is \$34,695,400 and in the last eleven years it has earned interest charges on this debt on average of more than twenty times annually.

Part of the debt consists of \$2,-285,900 employees' investment bonds and the remainder is three issues of

various bonds.

AT PITTSBURGH

The Lyradion Sales & Engineering Co. exhibit at the Pittsburgh show was one of the high spots, and the many beautiful cabinet sets were the source of great interest to the throngs who were attracted.

Under the supervision of Kenjoy W. Mix, sales director of the organization, a crew of real salesmen explained the beautiful sets and caused many a check book to be employed.

This concern sells to dealers only, and is employing proper business methods to place their product before

the buying public.

Some of the "new comers" in the radio field ought to study the Lyradion merchandising policy, for it is about 100 per cent perfect.

JERSEYITES WANT 270 METRES

Jersey radio amateurs have made requests to be allowed to use wave lengths up to 270 meters for continuous wave transmission and that spark transmission be restricted to wave lengths below 200 meters.

EXCELLENT SHOW

L. T. Davies, vice-president and general manager of the American Radio Exhibitors' Association, which association operated the Pittsburgh Radio Exposition, deserves a great measure of approval for the excellent show put over at Pittsburgh.

Mr. Davies may be "new" in the exhibition industry, but he is a man of proper business sense, and before the Pittsburgh show had been conducted a few hours he was being warmly commended for his great work.

The Detroit show went over-as was expected—and now the folks are looking forward to the Philadelphia show in May.

CAP SCREW AND NUT CO. OF AMERICA

318 West 47th Street New York

Manufacturer of Screw Bolts, Nuts of Every Description Immediate Delivery

SELL RADIO CHARTS

Retail 50c Each Liberal Discounts **BIG SELLERS**

WARNAX COMPANY Dept. H 101 Crosby St., New York

≋ HERTZIAN WAVE **₹** ANTENNA PACKAGE

Complete in every detail The best Antenna Package on the market

The explicit copyrighted direction sheet is alone worth price of package. Retail price \$6.00. Conforms with Underwriters

Dealers and Jobbers send for literature. J. H. HERTZ, Manufacturer Hertzian Wave Radio Apparatus 231 W. 58th St. New York, N. Y.

Convenient profitable merchandising.

SEND FOR OUR PRICE LIST

We are manufacturers of

SLIDERS

Threaded Brass Roding Crystal Cups Headless Brass Screws

Niglo Associates Box 15, Millvalle P. O. Millvalle, Penna.

RADIO DEALERS:

We are Jobbers for many manufacturers of high class Radio Apparatus and supplies, including

DeForest Radio Tel. & Tel. Co. Federal Tel. & Tel. Co. Western Electric Company General Radio Company

Weston Electrical Instr. Co. Thordarsen Mfg. Co.

King Am-Pli-Tones

We are prepared to co-operate with responsible Dealers in Radio Apparatus and Supplies, and to furnish expert Radio Sales Service.

Correspondence solicited.

EAGAN RADIO SUPPLY SERVICE

Eagan Building

66 Hudson Street

Near Hudson Tube Terminal HOBOKEN, N. J. Telephones, Hoboken 105 and 106

Don't Try to Do Business Without a Trade-Mark

The firm that tries to do business to-day without a trade-mark is a back number and may be compared to a ship without an anchor. Of what value is good-will if it isn't secured in any way? The only way to secure your good-will is to tie it up to a good trade-mark that will stick in the memory of customers, will make it easy for them to obtain your service or products, and will make it difficult if not impossible for competitors to foist their services or

products on your customers.

The more distinctive a trade-mark is, the more valuable it is likely to become and the better service it will render its owner. By distinctive, I mean unlike other trade-marks. Some people see to think that the proper thing to do in starting in business is to get a trade-mark as much like that of the most successful firm in the same line of business as can be with the idea that this will inherit some of the value attaching to the other trade-mark. This is a fallacy, and if it does not bring painful and costly consequences as it most probably will, it will certainly not reap any rewards that are not earned.

An honest and capable workman or firm can take a trade-mark that is of itself worthless and make it worth a fortune while a dishonest or incapable workman or firm can take the best trade-mark available

and not make a penny out of it.

The essential thing is the quality of the service or product, and there is no trademark in use or available for use that can bring its owner success where this quality of service or product is lacking. Given a man or firm, however, with the ability to turn out a product of merit and an honest marketing of same, such a man can do better with one trade-mark than with another.

It behooves a man, therefore, to get the best trade-mark he can and while each proposed trade-mark should be considered from several different angles, the chief consideration should be its novelty or distinctiveness. KODAK is often pointed to as an excellent trade-mark and it is not difficult to see why this is so. In the first place, it is easy to pronounce; is pro-nounced practically the same in all languages; is practically impossible of mispronounciation; is meaningless; is short; and is symmetrical in appearance. It is impossible for anyone else to get a name anything like this without infringing the original and for this reason there are at this late date no other photographic articles or supplies on the market anywhere bearing a trade-mark at all like this except those of the Eastman Kodak Co.

"ELECTRA" ANTENNA COPPER CABLE

We are large manufacturers of seven strand No. 22, No. 20 and No. 18 stranded Antenna Wire put up on 5000 ft. spools, 100 ft., 200 ft., 500 ft. and 1000 ft. coils.

Immediate shipments by parcels post, express or freight.

Write now for Dealer's prices and state quantity to be purchased.

"ELECTRA" LIGHTNING ROD COMPANY Manufacturers

30 No. LaSalle St. Chlcago, Ill. 212 Market St. Cresco, Iowa is, therefore, no possibility of a prospective purchaser of the products of the Eastman Kodak Company being sold like products of another company without his knowledge.

Where six or eight firms, however, manufacturing like articles, each adopt a name or trade-mark that is somewhat similar to one or more of the others, as for instance where manufacturers of radiophone apparatus adopt the names AEROPHONE, S M I T H O P H ONE, JONESOPHONE, EVERYPHONE, MARSOPHONE, etc., it is difficult for the consumer to detect the difference in the name where he does not see them together.
Copyright, 1922—Chauncey P. Carter.

PATENTS

on radio inventions apply to OTTO K. ZWINGENBERGER 38 Park Row, New York Cortlandt 3207

Prompt Shipment

made to Bethlehem, Allentown, Easton, Nazareth, Lehighton, Bangor, Catasauqua, Slatington, Coplay, Lansford, Bangor, Emans, Hellertown and all other points in the Lehigh Valley and United States.

OUR MOTTO IS "All orders must leave the same day they are received. Satisfaction guaranteed."

FEDERAL, ACME, DEFOREST. MURDOCK, FADA. PARAGON, GREBE, BRANDES, BALDWIN, RADIO CORPORATION, WESTINGHOUSE, etc. Products carried in STOCK at all times.

Send us a Trial Order. Catalog mailed postpaid \$.10 Bell phone 2548J

LEHIGH RADIO CO. BETHLEHEM, PA.

Center & Fairview St. A. F. BREISCH, Gen. Man.

MANUFACTURERS

Send us Your Catalogs, Price List and Date of Delivery We are an Established Firm. Ready to Distribute. Good Quality Sets and Equipment.

MANUFACTURERS' ENGINEERING CO. 520 FIFTH AVE., NEW YORK

Ask Our Service Bureau

Manufacturers of

GRID CONDENSERS VARIABLE GRID LEAKS VERNIER-VARIABLE CON-DENSER

PHONE CONDENSERS FIXED PHONE CONDENSERS BAKELITE DIALS

BUNNING STAMP CO.

Pittsburgh, Pa. 713 Liberty Ave.

SPECIAL DEALER **PROPOSITION**

on

Federal Juniors and complete stock of all Radio parts and apparatus.

SIGNAL SYSTEMS SERVICE CO.

1 East 42nd St., New York City

DEALERS! JOBBERS!

We are Manufacturers of Binding Posts, Switch Points, Switch Parts, also any other screw machine Products.

IMMEDIATE DELIVERY

Let Us Quote

ARJAY RADIO PRODUCTS

Elizabeth, N. J.

N. Y. Office, 50 Church St.

Phone Cort 4477-4478

Let's Go with Nat'l Association

(Continued from page 7)

association. Over five hundred department stores handling radio equipment or preparing to enter this business were represented. The Radio Section of the National Retail Dry Goods Association can be counted on to boost a national organization of radio men. Their association branch devoted to radio will soon grow big enough for an association all its own. We do not think we are misstating facts when we say these department store men will be glad to join a national jobber-dealer-manufacturer association.

Down in Pittsburgh the local jobbers have a strong organization. There is no doubt but this association as a body would join a national association. The same is practically true of other associations of jobbers throughout the country.

A Virginia advertiser-reader writes: "We believe this association should be started at the earliest possible moment." We agree with the Virginia Radio Co., and are ready to start the ball rolling RIGHT NOW.

ALL HANDS — NOW — DO YOU WANT TO GET IN ON THIS NATIONAL RADIO DEALER - JOBBER - MANUFACTURER ASSOCIATION? THE RADIO DEALER IS READY TO HELP ORGANIZE — WILL YOU COME IN? WRITE US NOW AND WE'LL SEND YOU INFORMATION ABOUT THE PROGRESS WE'RE MAKING WITH THE ORGANIZATION.

Several broadcasters who are temporarily not using their station for broadcasting because of press of other affairs, are urging the establishment of a national organization of broadcasters. The Radio Dealer is ready to help organize this also. Our suggestion is that this be made a subcommittee on organization of the national association.

Letters from firms owning broadcasting stations lead us to believe the broadcasters as a body would help put the national organization over. Lend their time, moral support, and, yes, money, too.

The radio press as a body can be expected to co-operate with us in our effort. The Radio in San Francisco, one of the better known publications reaching the amateur, in a very friendly letter endorses our proposed association and offers to aid in every

way possible. Radio World, weekly, of New York, writes a cordial letter and has already published an article endorsing a national association, while the daily press can be counted on to aid in every was possible.

H. Gernsback, president of the Experimenter Publishing Company, publishers of *Radio News* and other publications, writes as follows:

We think the idea is a splendid one, if the head of the association appoint a vigilance body which, the writer thinks, important for the following reasons:

The function of the National Association of Business Men interested in Radio would naturally be only to promote business and to further all interests in Radio. The most important function of that body, therefore, to the writer's mind, would be a vigilance

body, who would investigate every new Radio concern.

This at the present time is highly important because of the mushroom growth of the new industry, and in every such case many undesirables are entering the field, and if they are not turning out poorly constructed apparatus that will be a detriment to the entire trade, they are selling stocks and robbing the public in that manner.

A technical committee should be appointed to safeguard the public from such concerns.

Henry F. Vortkamp, president of the National Motor Accessories Company, speaking for the manufacturer of Crystal sets, writes interestingly asfollows:

You no doubt realize that there are times when "necessity knows no law," and (Continued on next page)

P. & E. BREWER RADIO CO., Inc.

Manufacturers, Wholesalers and Retailers

"PEBRACO"

Wireless Telephone Receiving Sets

PARTS SUPPLIED AERIALS ERECTED GENERAL REPAIRS 62 GREENWICH AVE. New York City PHONE: CHELSEA 7059

RADIO PANELS

And other insulation for Wireless Work

BAKELITE-DILECTO

Grade XX Black was used by the Government during the war for this purpose. It is the

Standard of the World

THE CONTINENTAL FIBRE COMPANY

NEWARK, DEL.

New York, 233 Broadway Pittsburgh, 301 Fifth Ave. Los Angeles, 411 S. Main St. Seattle, Wash., 1927 First Ave., South Chicago, 332 S. Michigan Ave. San Francisco, 75 Fremont St. Rochester, N. Y., 85 Plymouth Ave., South

LET'S GO WITH ASSN.

(Continued from preceding page)

that applies absolutely in this case. There positively must be an organization to protect the dealers from the inroads of pessimistic worms, from manufacturers who have no scruples by charging one price to one dealer and another price to his next door neighbor, from the wholesaler who overdoes his discounts, enabling his customers to undersell the other radio dealers unfairly, and from the mushroom concerns who spring up overnight, selling their inefficient products at high prices and disappearing as quickly as they came.

There are many other reasons, but these

are very pertinent ones.

"There is good in the worst of us." That is very true as to the large reputable manufacturers who live up to their prices regardless. If all were like them, I admit that there would be no need for an association. However, I have yet to find a per-

cation. However, I have yet to find a perfect anything as yet.

We must look at the bad side of things and not shut our eyes and say "Everything is wonderful" and only open them when the racket of the crash strikes the ears. They do say it is always best to "Prepare in peace for war." The same applies here. We must prepare an association of national scope which will act as the tion of national scope which will act as the doctor of all ills in the radio business.

There must be a fountain head, to whom we can all look for assistance, for advice

and protection.

Are we all going to sit back and let the other fellow do it, or are we going to jump right in with sleeves rolled up and remedy the situation quickly before the mistakes become too many and we all are engulfed?

You know a rolling snowball gathers more substance and more momentum, so will the rolling ball of mistakes increase in volume and speed on its way to the de-

struction of our radio business.

I say stop, look and listen. Analize the situation and apply remedies at once to elevate the business out of the mire and bring it forward before the world as the cleanest commercial business existing, and make everyone happy from the manufacturer down to the consumer through the dealer. It can be done.

government at Washington has The before it at this moment suggestions which will remedy much of the trouble existing in the sending out of messages and music, speeches, etc. They propose to take all senders, except music senders, out of the 360-meter wave length and place them in others; they propose to place the Morse code senders in still higher wave lengths, etc. However, if we had an association of radio realers we could go much farther in our influence to hurry matters along and make still better changes than is anticipated at present. The old story is "United we stand, divided we fall." The same applies to us. I refuse to fall; will you refuse with me? Will you join those for better radio conditions, generally speaking?

Now is the time to come to the aid of your radio party.

BUNNELL'S DEALERS' CATALOGS

The catalog of the Bunnell Company which their distributors are now using is a neat booklet of 48 pages which fully lists the complete line of equipment for this industry sold by this live wire company

RECEIVING SETS

Long discounts to dealers

AIRFONE JUNIOR

Crystal set requiring very little adjusting\$13.50

AIRFONE MASTER SET

Reported range 700 miles AIRFONE MASTER SET

AIRFONE MASTER SET
With two step amplifier...... 85.00
AIRFONOLA
The Wireless Phonograph in
period design cabinet....... 250.00

Write for descriptive circular

LAURENCE RADIO-LECTRIC CO.
4 Locust St. Cincinnati, Ohio

WHOLESALERS WANTED

Our entire distribution in the future will be through jobbers. We desire to appoint jobbers in all sections of the country to distribute stocks of

≋ HERTZIAN WAVE ≋ LIGHTNING ARRESTERS

ANTENNA OUTFITS

The best on the market See our ads in this issue.

Write to J. H. Hertz, Manufacturer Hertzian Wave Radio Apparatus W. 58th St. New York, N. Y. 231 W. 58th St.

NOVO "B" Batteries



NOISELESS—DEPENDABLE—GUARANTEED 19 Sizes—Plain and Variable 221/2 to 105 Volts

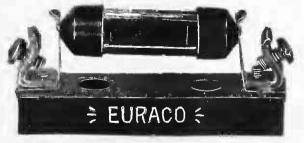
NOVO MANUFACTURING CO.

424 W. 33rd St. **NEW YORK**

531 So. Dearborn St. **CHICAGO**

"Euraco" Mica Grid Condensers

Price 60 cents (Designed to fit Standard Grid Leak Base)



"Euraco" Condensers are composed of Copper Sheet and Best Grade India Ruby Mica, and are entirely Hand Made.

Manufactured in following capacities:

.000025 Mfd—Correct for Myers Radio-Audion RAC-3
.0001
.00025 Correct for Special or Experimental Circuits
.00025 Correct for Super-Hetrodyne & UV 201
.0005 Correct for Radiotron UV 200

Condenser—Leak Mountings Bakelite Base with Single Mounting. \$.40
Bakelite Base with Double Mounting .60
Bakelite Base with Triple Mounting .80

INTERESTING PROPOSITION TO DEALERS

EUROPEAN RADIO COMPANY

1342 East 22nd St.

MANUFACTURERS

BROOKLYN, N. Y.

A Real Radio Store

R. Nelson Stoddard, of Pittsburgh, Opens New Place

R. Nelson Stoddard, manager of the Electrical City Radio Company, is to be congratulated upon his recent activities, for he has just established "a real radio store" at 539 Wood street, Pittsburgh.

This store is a real radio store and has but few equals, and Mr. Stoddard and his association are justly proud of their retail shop.

The entire store is devoted to radio supplies, while the newly-built balcony is for the display and demonstration of complete sets. Booths are to be built. Everything is to be handled in this model store, but quality merchandise will be the specialty.

Before his entrance into the retail field Mr. Stoddard was in charge of the sales division on radio equipment, made in the Westinghouse factory, for the Pittsburgh district.

That he made friends while "on the street" is evidenced by the fact that almost every jobber in Pittsburgh volunteered to "help out" in any manner Mr Stoddard might require. R. N. S. is a real business man, and

R. N. S. is a real business man, and the new radio store is certain to meet with the success it deserves.

ONE RADIO FAKER

"This is what you hear with this set."

That's the slogan that was used in selling a crystal set, not many thousand miles away from the Times Square section of New York.

A shameless, unscrupulous dealer employed that slogan and while showing the advertised set, gave concerts via a loud speaker attached to a threestep amplifier.

The inevitable disillusionment developed when the crystal set purchased failed to receive concerts—like the retailer featured.

COAST TO COAST

Radio-phone concerts from Newark, N. J., were reported heard in San Francisco on April 19 through a repeating device at the Rock Ridge radio station at Oakland. Henry M. Shaw, in charge of the station, says that he "manifolded" the sounds that had traveled about 3,000 miles.

MR. RETAILER

Don't buy equipment from any one who cannot prove his reliability. Beware the fakers. Their name is legion. Buy standard brands. If in doubt consult us.

NO ORDERS BOOKED!

WE MAKE DELIVERIES

DE FOREST SETS AND PARTS

BRANDES—FEDERAL—DICTOGRAPH STROMBERG-CARLSON

PHONES

TRANSFORMERS, VARIABLE CONDENSERS, RHEOSTATS
Write for Our SPECIAL PROPOSITION on Supplies
DEALERS' CORRESPONDENCE SOLICITED

McPHILBEN RADIO-ELECTRIC CORP.

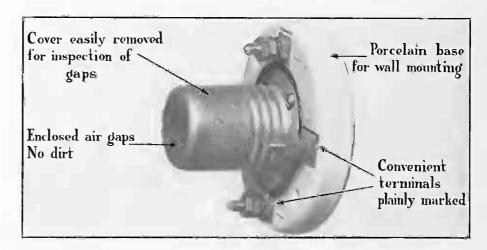
15124 Jamaica Avenue JAMAICA, L. I.

=HERTZIAN WAVE=LIGHTNING ARRESTER

Most Reliable Arrester on the Market

Retail Price

200% Efficient Has 2 separate air gaps \$2.25



No Vacuum to Lose! Lasts Longer than a Lifetime! CONFORMS TO UNDERWRITERS RULES. EACH ARRESTER PACKED IN INDIVIDUAL CARTON

To Dealers and Jobbers—The new Underwriters' rules are causing a great demand for approved reliable arresters. We advise your ordering stocks of *Hertsian Wave Lightning Arresters* Now.

J. H. HERTZ, Manufacturer HERTZIAN WAVE RADIO APPARATUS

231 West 58th Street

New York, N. Y.

LET OUR FREE SERVICE BUREAU HELP YOU SUPPLY YOUR NEEDS

Tell us your needs and we'll put you in touch with reputable firms to the end that you will receive information on the latest and best equipment. A post card will do.

Check off the following items that you are interested in.

Aerial wire alloys, electrical ammeters amplifier detectors amplifier tubes amplifying head sets amplifying horn amplifying transformers antenna switches antenna connectors antenna, loop antenna wire attachment plugs audible transmitters transaudio frequency formers automatic transmitters

Batteries, dry ("B")
batteries, storage ("A")
battery chemicals
battery charges
battery clips
battery handles
batteries and tube circuits
battery potentiometer
bakelite parts
binding posts
books
brass parts
buzzers
bulbs

Cat whiskers cabinets cap nuts carbon walls cardboard tubes clips coil mountings coils, honeycomb coil plugs coils, spark complete receiving units complete sets condenser parts condensers connection block connectors, antenna control panels copper ribbon copper wire cords for receivers cord tips crystals crystal detectors

crystal detector holders crystal receiving sets

Detectors
detector panels
detector tubes
detector minerals
detector and two stage cabinets
dials
dial and knob sets
double speed keys
dry cells

Ear cushions ear 'phones electrose knobs engraving

Fan switches filter reactors fixed condensers flashlights fore rectifiers formica parts

Galena gaps, spark generators goldite grid condensers ground clamps ground pipe fittings ground switches ground wires

Headsets and bands high potential condensers hookswitches horns hydrometers Inductances insulators

Jacks Keys

insulation

Learners sets levers, switch learners books lightning arresters loose couplers loud speakers locked lever switches lock nuts

lock nuts loop antenna lugs Magnetic modulator mica mica diaphram telephones microphone transformers millimi-meters milli-voltmeters motors mounting coils minerals

Name plates nickeled screws nuts

Omnigraphs oscillation transformers

Panel plugs
panels control
panels detector
paper tubes
patent wire
patent wire terminals
plans
plate circuit reactor
phones
plugs, panel
plugs, telephone
pointers
points, switch
posts, binding
potentiometer, battery
professional equipment
power tubes
power transformers

Range finders radio books radio schools radio publications reactor, plate circuit receiving head sets receiving sets receiving transformers receptors receiver magnets receiving transformers rectifiers, fore rheostats rheostat wire rods for sliders rotary lever switchers rotary spark gaps rotary variable condensers rubber pads rotors

Stator sections scales

safety switches safety fuses sending apparatus short wave regenerative sets silicon sliders and rods sockets soft metal shielded dials special apparatus spark coil selectors spark gaps storage batteries sectional receiving sets switches switch levers switch points symbols

Telephone jacks
telephone plugs
telephone receivers
telegraph teachers
testing clips
thermometers
tools
trade marks
transformers
transmitters
tuning coils
tubing, flexible
tube sockets
tuner and detector cabinets
two stage cabinets

Unit type receiving sets

Vacuum Tubes
vacuum tube sockets
variable condensers
vario-meters
vario-couplers
variable grid leak
vernier adjusters
vibrators
vocalouds
voltmeters
vulcanized fibre sheets

Washers
watch case receivers
wattmeters
wave meters
wave tuner
wire
wire, magnet

SERVICE	BUR	EAU,	THE	RA	DIO	DEALER,
1100	T)	7	* T.	7 1	a	

1133 Broadway, New York City.

We are interested in the items checked above. Please have firms selling them quote us prices and terms. We are dealers in radio supplies and apparatus.

Name	180	. ÷	ď,	2.5		• •	\$75	# 8	٠.	à di		ï	٠,	*	ía.	•;	ė e				ě,	•.	•	9 1	÷	•		(m)		Ť		. «			•	ď	•	ě
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What the Manufacturers Are Doing

EVERREADY TESTED BY WOR AND WJZ

The Adbrin Laboratories, 469 Broad Street, Newark, N. J., are a well organized concern and are in position to supply all dealers with as many crystals as they may

They offer a special sort of guarantee-

they offer a special sort of guarantee—that every piece of crystal is quality crystal, tested by WOR or by WJZ.

"Our Everready Sensitive Detector Crystal," says Thomas W. McBrinn of this concern, "means just what the name implies. It is sensitive all over and will stand either light or heavy contact pres-

sure.
"It is recommended by us," says Mr. Mc-Brinn, "to set manufacturers. A good set with a bad crystal is of no value to anyone. "We invite the closest scrutiny.

"We manufacture all kinds of detector crystals and are ready to meet any kind of demand.

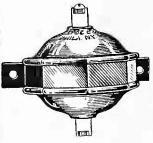
In addition this concern acts as selling agents for a number of reliable accessory manufacturers and are open for propositions to add to their varied line.

Radio dealers who mention THE RADIO DEALER in writing to RADIO Dealer advertisers will be doing us a favor.

KEYSTONE RADIO

LIGHTNING ARRESTER

Approved by Underwriters Retail Price, \$2.00



Type B

You can sell hundreds of Keystone Ra-dio Arresters. Every Receiv-ing Set must protected with one of these lightning arresters which are approved by the Under-writers. Don't overlook this opportunity to

make quick profits. Get your order in before the first lightning storms create an un-precedented demand for them.

You should standardize on the Keystone Arrester for these reasons—Small in size, weatherproof, entirely enclosed and sealed, foolproof, constructed by a Company having 30 years' experience in lightning arrester design, low capacity and high resistance, no carbon plates to disintegrate and short-circuit gap, no fuses to blow nor vacuum to lose and so reduce the efficiency of the arrester to a point where it is practically valueless.

Write for Complete Information

ELECTRIC SERVICE SUPPLIES CO.

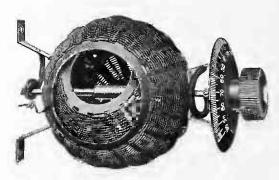
Mfgrs. of Lightning Arresters for 30 Years 17th and Cambria Sts., Philadelphia

CRYSTAL NEW AMRAD BASKETBALL VARIOMETER

The new Amrad Basketball Variometer, as illustrated herewith, is of the basket weave type of winding in spherical forms, making for lightness. It is rigid and mechanically rugged and may be mounted in any position.

It's a Variometer which brings signals up to the maximum peak of intensity in a Regenerative Receiver.

The indestructible minimum of distributed capacity has been attained by the "wavy" wound inductances and



Amrad Variometer

the exclusive Amrad method of connceting rotor and stator windings.

The Basketball Variometer is the result of engineering experimentation, and the makers, the American Radio & Research Corporation, maintain this product is the finest Variometer that can be bought.

The retail price is \$6.75, as illustrated. Without the knob and the dial the price is \$6.10.

\$30 TUBE SET

The Corona Electric Company of 265-267 Canal Street, New York City, is now taking orders for their Corona Sr. Receiving Set. This set is a vacuum tube detector and is made to meet the demand for a popular priced set, that is free from technical attachments and mysterious trappings. It retails for \$30.

This company is headed by Sidney M. Knapp, an electrical engineer, who is president, and the inventor of many electrical devices. Chester B. Kohn, formerly of the Radio Division of the Signal Corps of the U.S. A. and late of the United Advertising Corporation as advertising counsellor, is manager of the company.

MOVE TO NEW PLANT

The Montrose Manufacturing Co., of 519 St. John's Place, Brooklyn, are moving this week to open a complete plant at 1200 Bedford Avenue, Brooklyn, where they will be in a better position to meet the demand which has their present plant pressed to the limit of production.

Mr. Dealer

Write us for quotations on

Variable Condensers Magnet Wire

Tuning Coils Crystal Detectors

Mounted Galena

Treated Tubing Sliders and Rod

We quote only on parts for prompt delivery

Ask for our weekly bulletin

Nestor-Blodgett, Inc. 51 Halsey Street Newark, N. J.

Ask For



Receiving Sets Varicouplers Variometers **Tuning Coils** Detectors Condensers Lightning Arresters and Appliances

Manufactured by THE MORELAND SALES CORP.

30 Ogden St.

Newark, N. J.

Make High Class Radio Goods

Pittsfield Machine & Tool Co., of Pittsfield, Mass., are manufacturing high-grade radio apparatus for other New York firms and for the general market, and is especially equipped to manufacture this class of work. The Pittsfield Machine & Tool Company has one of the best equipped factories anywhere in the East, having manufactured automatic player-pianos, submarine detectors for the United States Government during the war, and of recent date telegraph printers for one of the largest electrical concerns in the country.

It was reported in the April number of RADIO DEALER that the National Automobile Accessories Co., of New York City, had taken over the entire output of the Pittsfield Machine & Tool Co., of Pittsfield, Mass., on

wireless equipment.
Mr. H. R. Lanning, the General Manager of the Pittsfield Machine & Tool Co., wishes to deny this statement as entirely unfounded,

EDUCATIONAL EXHIBIT

One of the unique exhibits at the Pittsburgh show was arranged by the Copper Clad Manufacturing Co., who erected two miniature houses and strung an antennæ between them.

An engineer of the company was constantly on hand to explain the same and explanations were given as to the methods to be applied to prevent improper wiring.

DEALERS!

We can make immediate delivery on:

Brach Lightning Arresters Puritone Detectors Ideal Condensers Bake-o-lite Panels Homecharge for Radio Batteries Cat-whiskers Selectors and Rotors

(Made to any measurement)
Spaghetti and Paper Tubing Radio Cell Tubes (all sizes) Kellogg Phones Mesco Phones Dials

United Sales Radio Co.

Manufacturers and Distributors 167 W. 53rd St., N. Y. C.

Co-operative Buyers

At this time the usual dealer does not know a great deal about radio he imagines that a very few factories are manufacturing; this was right sixty days ago, but now hundreds are coming into the business weekly—new parts and improved equipment is announced daily.

Unfortunately the dealer, especially in remote sections from the heart of the industry-New York-knows little of newer concerns or improve-

There is no doubt that now since we have established the RADIO DEAL-ER and our free service system that we may be able to keep our subscribers better informed than heretofore.

Since our first issue, an enterprising concern whose advertisement appears on another page has conceived the idea of Co-operative buying or rather has applied an old idea to the radio dealers and has already made enough progress to convince them that they are on the right track.

The Radio Buyers Syndicate at 145 West 45th St., New York City, have arranged to pool the buying of a great number of concerns to obtain jobbing prices from manufacturers. prices they pass on to their clients.

The "Awsco" Crystal Detector

The only detector in which the catwhisker does not jump.

THE AWS MFG. CO., INC. 400 Harman St. Brooklyn, N. Y. EVERGREEN 1960

Jobbers and Dealers

Attention

STEEL—COPPER—BRASS BRONZE—ALUMINUM NICKEL SILVER NICKEL-MONEL DIAPHRAGM STEEL MAGNETIC IRON MAGNET STEEL

GUIDE RODS—SLIDES—TUBE SOCKETS — CORES — METAL PARTS — STAMPINGS, ETC. used in the manufacture of RADIO EQUIPMENT "COPPERWELD" ANTENNA WIRE

Immediate Shipment

Steel Sales Corporation

129 So. Jefferson St. Chicago, Ill.

Dealers ATTENTION Manufacturers ADBRIN EVERREADY SENSITIVE **DETECTOR CRYSTALS**

Up to date the Crystal game has been a matter of PRODUCTION, regardless of QUALITY.

We have considered the problem thoroughly and find that the manufacturer that depends on production alone, will not receive repeat orders from the dealer and the BUCK will be passed along accordingly to the consumer, CONSEQUENTLY the manufacturer that produces a REAL BROADCASTED TESTED CRYSTAL will receive the benefit of the repeat business.

A customer may enter your place of business and request a GOOD crystal. At the time you may have Galena, Silicon, Radiocite or Zincite crystals in stock, but do you know in your own heart and soul that they are all sensitive and will bring that same customer back to your place to repeat?

From long, past experience we know that the public will buy an advertised brand. BUT they will not repeat UNLESS it measures accordingly. So DEALERS, GO GET that repeat business.

The ADBRIN LABORATORIES are situated close to W.J.Z. and each crystal is tested with same and a guarantee goes with each crystal or exchanged.

The EVERREADY CRYSTAL is packed in attractive cartons and the name signifies what it really is.

We are supplying different manufacturers of sets with this crystal and according to their information it has increased their business.

It would be a pleasure to us to furnish DEALERS or MANUFACTURERS with samples and prices upon request.

ADBRIN LABORATORIES

469 Broad Street,

Newark, N. J.

WITH THE WIRELESS ON STATEN ISLAND

The Square Electric Radio Supply Company of Staten Island, which has been taking a great pride in furnishing a complete line to the Richmond Borough consumer, announces that soon they will be in a position to put their own set on the market. They will then be ready to do a large jobbing business in the Metropolitan area and Eastern Pennsylvania.

F. E. Drucker, who sprang a surprise on Staten Islanders by showing how the telephone circuit could be used in receiving broadcasting without the use of antennæ or ground wire, is ready to give the island another jolt. He has set up a transmitting station in his store on Castleton avenue, and promises to give Staten Islanders a real treat by furnishing broadcasting with a touch of local color. It will do much to make Richmond a live radio center.

A NOVEL SALES POLICY

The dealer who has gone through the only too familiar process of placing many large orders in the hope of some day securing a few small shipments, and has even then been disappointed, will be agreeably surprised to find a jobber with a different idea.

In brief, it is that of requesting the dealer to supply a detailed list of his immediate wants, and then replying to it with a definite list of when deliveries can be made on each and very item. Of course, it is not always possible to specify exact dates, but very close approximations can be made.

close approximations can be made.

The psychology of this sales policy is rather evident. Although some immediate business will of necessity have to be sacrificed, yet in the appreciation of the dealer for this kind of treatment a solid foundation for future business will most surely be built up.

The jobber in question is the Mc-Philben Radio Electric Corporation of Jamaica, New York. It will be interesting to watch the working out of their policy—"No Orders Booked—We Make Deliveries."

FIGURE IT OUT

It is estimated that 10,000,000 radiophone sets will be installed in American homes in the near future.

That's the way a Consolidated Stock Exchange house advertises their Wall Street Bulletin, giving a résumé of companies "that are in a position to profit mostly."

Trade-Marks Secure Trade Registrations Secure Trade-Marks I Secure Registrations

CHAUNCEY P. CARTER

Radio Trade-Mark Specialist

4907 Potomac Avenue, N.W. Washington, D.C.

Correspondents in all countries

MR. RADIO RETAILER!

Here's our second issue. How do you like it? Think it will be worth a dollar to get THE RADIO DEALER every month for the next year? Use the blank below, rubber stamp or print your name and address, then mail to us. Do it today.

 ${\bf HARRY\ M.\ KONWISER}, Publisher,$

The Radio Dealer, 1133 Broadway, New York City.

Please send THE RADIO DEALER to the following address for one year beginning with the June, 1922, issue,

for which { we enclose one dollar we will send one dollar on receipt of bill.

(Name)	* * * * *	£ • :	* #	. 1	k ery	• •	6 6	•	滂	3 5	90	¥ }	E 8	100	ψė,	.80	•	拼	34	y 36	e)	¥	e,, °•	No.
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(City and State)....

Make remittance by check, money order or registered mail

DEALERS—Write us for our special circular on the following radio supplies:

Aerial wire. Antenna switches and connectors. Batteries, Dry "B."
Bakelite dials. Binding posts—Cat whiskers. Cabinets—Buzzers. Complete sets.
Crystals—Condenser parts. Crystals—Condenser parts.
Crystal detector holders.
Crystal Receiving sets.
Detector panels—Detector minerals.
Detector and two stage cabinets.
Galena—Gap sparks—Sockets.
Ground clamps—Insulators.
Jacks—Horns—Knobs. Lightning arresters. Loud speakers-Loose couplers. Panels formica. Phones-Plugs. Rectifiers fore. Rotors-Rods for slides, Stator sections. Special apparatus. Switch points—Switch levers.
Testing clips—Tuning coils.
Variable condensers—Variometers. Variable grid leaks. Wire, magnet.

Immediate delivery on all orders

Chicago Salvage Stock Store

509 S. State St. Chicago, Ill.

"AT DELO

Radioize Your Talking Machine

Let your family and friends enjoy the Wireless Broadcasting on your phonograph.

Attach your Wireless Receiving set to your phonograph with the ESX attachment.

Write for Particulars

Essex Wireless Specialty Co. 31 New Street Dept. A Newark, N. J.

A. T. & T. ARE OUT OF R. C. OF AMERICA

The American Telephone and Telegraph Company has disposed of its interest in the Radio Corporation of America, according to an announcement last week. Officials of the telegraph company explained that the move was taken because of the company's policy to hold only the securities of its associated companies in the Bell system.

The Radio Corporation of America was incorporated in October, 1919. The American Telephone and Telegraph Company's interest in the concern dates from about 1920, it is understood. The interest was purchased to accompany with the General Elec-

cern dates from about 1920, it is understood. The interest was purchased to co-operate with the General Electric and associated companies in avoiding duplication in research work and to allow all the companies to use various patents. Radio Corporation stock is traded in on the Curb, where it has shown considerable activity for the

past weeks.

OPENS REAL STORE

Newark, N. J., has a number of "good radio stores," meaning that these stores sell proper radio equipment in good business style, and now is graced by the establishment of the Randel Wireless Co., at 9 Central Avenue.

This store features an unusually wide selection of dependable radio apparatus and supplies, and the show room is featured by a comfortable corner furnished with green wicker chairs, where one may listen in comfort.

John G. Arsics is in charge of the free radio information bureau and is ready to serve at all times.

TWO GOOD ITEMS

The X-Ray Insulator Adapter seems to fill "a long-felt" want for lead in insulator and is approved, right up to the minute, according to Hintze Bros., Inc., by both national and local regulations.

The 19-Strand Silicon Bronze Aerial Wire, each strand tuned, guaranteed to give 100 per cent satisfaction, a Hintze Bros., Inc., feature, was used during the war, by our government, for aeroplane and trench work and proved very reliable.

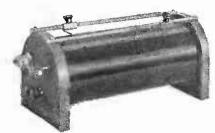
and proved very reliable.

Hintze Bros., Inc., 459 Central avenue, Newark, N. J., are exclusive distributors on both the "X-Ray" and Aeroplane Wire.

AUTOMATIC SENDERS

A London inventor has perfected an automatic transmitter for the use of airplane pilots. They can send certain messages by simply pressing a button.

Reliance Crystal Set



Price \$5.00

Wound with No. 21 enameled wire—a very efficient receiving set.

A two-slide tuning coil, \$3.50.

Unmounted tuning coils, 3 sizes.

 6×3 —\$1.00 8×3 —\$1.25 $8 \times 3\frac{1}{2}$ —\$1.50

IMMEDIATE DELIVERY

Dealers—Write for Discounts

RELIANCE MFG. CO.

354 Mulberry Street NEWARK, N. J.

E. M. Wilson & Son

DISTRIBUTORS

PARAGON

PRODUCTS

We are also the manufacturers of the

Lafayette Detector

A STURDY DETECTOR THAT HAS AN ADJUSTMENT ON THE CRYSTAL CUP, AS WELL AS ON THE CAT WHISKER SHAFT.

List Price, \$1.50

11 Lafayette St. NEWARK, N. J.

IMMEDIATE DELIVERY Marvel Sets.....\$15.00 Federal Junior Sets. 25.00 Federal Head Sets..... 8.00 Atlantic Sets...... 18.00 Brachs Arresters..... 2.50 E. S. X. Phono Attach.... 3.00 Copperweld Wire (100 Ft. Package)60 Novo B Batteries..... 1.50 Antenna Kits..... 2.50 Tube Sockets(Aluminum) .75 Crystal Detectors..... 1.00 Crystal Cups..... .10 Full Discount to Dealers SELF SERVICE PHONOGRAPH CO., Inc. 167 West 18th St, at 7th Ave., New York City

Ask Our Service Bureau

Dealers!

We Offer for Immediate Delivery in Quantity Orders

Federal Jr.

With Head Sets

De Forest Everyman With Head Sets

De Forest Radiophone
With Head Sets and Tubes
TELEGRAPH FOR PROPOSITION

Radio Stores Corp.

150 W. 34th Street NEW YORK CITY

Keep Your Battery New

Eliminate the waste of the ordinary "B" Battery that cannot be refilled. One Single Unit Cell may save you the cost of a whole battery by using

SUPER

ENCO

"B" Batteries

You can quickly refill these "B" Batteries with Standard Flashlight unit cells.

For best service insist on ENCO units obtainable at leading dealers.

NOISELESS

Send for descriptive circular DR 1

Dealers—Write for proposition in your territory.

ENCO ELECTRIC NOVELTY CO., Inc. 603 West 130th Street New York

BIG CHICAGO SHOW IN OCTOBER

A. G. Herrmann, the famous Cincinnati baseball magnate, having acquired a ten-year lease on the Coliseum at Chicago, intends to conduct a complete radio show at the Coliseum October 14 to 22.

Mr. Herrmann told The Radio Dealer the October show would be carefully planned and that no expense will be spared to make this show a real radio show.

It is the intention of Mr. Herrmann to operate a big show for buyer and seller, as well as novice and expert.

RAC-3 BULLETIN

The Radio Audion Company are notifying the trade, via circular, that its position regarding the Fleming two-element rectifier patent has been sustained and the R A C-3 Audion can be legally manufactured and sold by them for use as an amplifier or as an oscillator generator. They are, therefore, continuing their policy of manufacturing audions for use only as amplifiers and oscillation generation for amateur or experimental purposes, *i. e.*, where communication by radio is conducted without pay.

JEWETT IN NEW FACTORY

Activity in radio circles has caused several of the leading radio equipment manufacturers of Newark, N. J., to increase their production. One of the latest to expand is the Jewett Manufacturing Corporation, now on Austin street, makers of electrical and radio specialties. They have just leased the entire three-story building at 226-228 Sherman avenue and are already in possession. They now have approximately 15,000 square feet.

NEW QUARTERS

Mr. Goldman, of the Self-Service Phonograph Company, has moved from his former shop at 137 Seventh avenue to occupy the entire building at 167 West Eighteenth street, around the corner. He makes a specialty of jobbing for phonograph dealers who are taking on a radio line, or contemplating getting into the wireless field.

NEW YORK HOTEL NOTE

According to the New York Hotel Record, a trade paper, the Hotel Astor, the McAlpin, Claridge, Belleclaire, the Waldorf-Astoria and other good hotels are placing radio sets in these first class hostelries.

ALL RADIO PARTS FOR IMMEDIATE DELIVERY



VARIOMETERS
DIALS
CABINETS
BATTERIES
SWITCHES

COMPLETE EQUIPMENT

BEACON RADIO & ELECTRIC CO. 246-248 GREENWICH ST. NEAR PARK PLACE

Ask Our Service Bureau

CORONA SR.



The Corona Sr., is a vacuum tube detector set capable of a longer range and stronger signals than our Corona Jr., set. Complicated adjustments have been eliminated and any one can operate the set without technical knowledge. The panel is of Radion and the cabinet is mahogany finished. The set may be enlarged at any time by the addition of vacuum tube amplifiers and a loud speaker. It operates on two batteries, a 22½ volt "B" battery for the plate and a six volt "A" battery for the filament.

List Price \$30.00 Immediate Deliveries

Corona Electric Corp.

Radio Division

Manufacturers
Dependable Radio Equipment
Corona Radio Receiving Sets
Corona Radio Head Telephones

265-7 Canal Street New York

At the Pittsburgh Show

The General Radio Mfg. Co. booth was made doubly attractive by the "lucky ticket contest," which enabled everyone to have a chance at winning a Radiola Type F. H. R. This was awarded, by drawing, on the last night of the exhibition.

The Wireless Electric Co. are distributors for the Presto-Lite batteries, and are proud indeed of this wonderful line, which was shown at the show to the many fans who visited the

Wireless Electric Co. booth.

The Copper Clad Steel Co. exhibit displayed antennæ wire, and their two booths were always well patronized. Every effort was made to explain the proper method of erecting an aerial. The Copper Clad folks are proud of the fact that the largest radio manufacturing concern in the world use and recommend copperweld antennæ wire in preference to copper or strands.

The Everett Electric Corporation

made something of a stir at the show with their 3,000 ohm head receiver, selling at \$7.50. This is really a wonderful phone and the manufacturers and engineers who tried it out are loud in their praise of the Everett. This is not a makeshift head piece, but was built by real experts after mature deliberation. The result is that the Everett has become a standard.

The Crosley Mfg. Co. had a nice exhibit and featured their large line, which includes complete sets, as well as parts such as Detector Units, Variometers, Vario-Couplers, Variable Condensers, Knobs and Dials, V-T Sockets, Cabinets, Panels, Rheostats, Binding Posts and the Crosley Storage Battery.

Bakelite-Delecto, manufactured by the Continental Fibre Co., is manufactured in the form of sheets, tubes and rods. Acknowledged to be most es-

sential in the radio industry.

The Columbia Radio Corporation, in their booth, featured the Mellowtone Receiving Set—an efficient receiving set. They also make condensers and amplifying transformers of excellent type and many other highgrade parts.

Hopewell Radio Insulators of the supporting type, as well as Lead-In, were exhibited and properly explained.

The American Radio & Research Corporation exhibition was one of the centres of constant attention. These folks know how to exhibit and do it in a manner most commendable.

The Penn Electric Service Co. offer the "K D K A—the tested Galena,"

and are making many friends with this galena.

The General Radio Mfg. Co. have a new complete set, the Radiola F. H. R., at \$225 and another at \$70, also a \$20 set. They are manufacturers.

Trico paper tubes are said to be heavy and seamless and will not absorb moisture. These are featured by

the Triangle Appliance Co.

The Automatic Electrical Devices Co. distribute their Homcharger through most of the dealers in this section. This is a popular rectifier.

Keystone Radio Lightning Arresters, selling at \$2, and Keystone Ground Fittings, retailing at 90 cents, are made by the Electric Service Supplies Co. Their show booth was well managed.

Exide batteries have been made for thirty-four years and the "fans" were pleased to see them exhibited by the Electric Storage Battery Co.

The Radiograph Corporation made their bow to the folks via the Pittsburgh exhibition, and their many products were on display to the appreciation of everyone.

The Universal Light Co. booth at the show featured a most complete line of standard apparatus and was the centre of great interest to the amateurs and dealers.

The Dragon storage battery—" a battery backed by principle"—is a special battery for radio purposes, making for greater audibility.

Fireside Radiolas, complete at \$167.50, were shown by the West Penn Radio Co., as was their Junior Set, which retails at \$67.50.

The Pittsburgh Radio & Appliance

Co., looked after by Mr. Kunkel, is one of the live Pittsburgh distributors and caters to the retail trade in good style.

The Anchor-Lite Appliance Co. offer receiving sets at \$5, \$10, \$15, \$20, \$25, \$35, \$50, \$75, \$100 and \$125. They specialize on standard materials.

The Phonola, a combination of talking machine and radio receiving set apparatus, includes tuner, detector, two stage amplifiers, storage battery, three B batteries, detector and amplifying tubes and loud speaker and is in a mahogany cabinet, selling at \$250. The talking machine is complete and plays all records. It is distributed in the Pittsburgh territory by the Allied Electric Supply Co., who also feature the Bowman Airophone, a good \$25 set.

WANTED

Jobbers and Distributors Throughout the U. S.

To distribute territorially the most beautiful, efficient and POPULAR PRICED crystal receiving set on the market. Sets include phones and antenna equipment.

This is a proposition for big live jobbing organizations only. In reply give full information regarding your sales organization.

Write Box B, care RADIO DEALER.

RADIO DEALERS

We are Jobbers for many manufacturers of high class Radio Apparatus and Supplies

CITY SUPPLY CO.

56 Warren St.

New York City

Tel. Barclay 6613

DUBILIER CONDENSER AND RADIO CO. STOCK SOLD

Prichitt & Co., members of the New York Stock Exchange, have purchased and resold a block of the no par value common stock of the Dubilier Condenser & Radio Company, formed to take over the Dubilier Condenser Company, the Federal Mica Company and the Cambridge Manufacturing Company, all controlled by William Dubilier, inventor of the Dubilier condenser. The capital of the new company comprises \$500,000 of 8 per cent. non-cumulative preferred stock of \$100 par value and \$160,000 shares of no par value common stock.

The stock of the new company was admitted to trading on the New York curb market on a "when, as and if issued" basis on April 26. The incorporation total of this concern is \$16,500,000.

\$5 RECEIVING SET IS MADE BY KRAUTER

Otto Krauter, an electrical engineer of much experience and skill of the studious type and after many experiments has produced a wonderful little crystal receiving set—the Reliance—retailing at \$5. This set is very efficient and should give a good impetus to beginners and is really worth offering by the retail trade.

"Start with a little set and you develop big business" is the Krauter slogan to the retail trade.

Mr. Krauter's firm, the Reliance Mfg. Co., 354 Mulberry St., Newark, also makes a 2-slide tuning coil at \$3.50 list and unmounted coils, in three sizes, to sell at \$1, \$1.25 and \$1.50.

Get in touch with these live folks.

STORAGE "B" BATTERY IS USHERED IN RADIO FIELD

Various types of storage "B" batteries for the plate circuit of vacuum tubes are making their appearance on the radio market. Some of these are: McTighe, alkaline battery; Edison, alkaline; Biesmann, acid cell; Kico, acid cell; Chi-Rad, acid cell; all of which can be charged by a rectifier connected to the house lighting circuit.

WIRELESS BULLETIN

Frank T. Stanton & Co., 35 Broad Street, New York, stock brokers, are specialists in Radio stocks, and are prepared to quote "bid and asked" prices and to execute orders on all radio stocks.

Their April bulletin features the last report of the Radio Corporation of America and this bulletin is really worth reading.

WONDERFUL

Some of the daily newspapers are featuring pictures of famous persons receiving or transmitting radio messages. One wonders how they get these long-distance messages without bulbs.

'PHONE WARNING

Owing to the recent scarcity of the better-known telephones for radio purposes, many quickly gotten-up head 'phones have made their appearance.

made their appearance.

Some sell at less than those already known to the trade and some sell at prices similar to present standard types.

similar to present standard types.

The head 'phone part of your sale, Mr. Retailer, is very, very important—so be careful to properly test all phones you buy; and what is better—buy only reliable-made 'phones.

Don't fall for "the bunk" about where you can make 35 per cent., while on the others you make only 25 per cent.

It's better to make \$2.12 on a \$8.50 sale

It's better to make \$2.12 on a \$8.50 sale and make a store customer, than to make \$2.83 on the same sale and lose prestige.

If you don't know the standards—insist that your manufacturer give you a written guarantee to the effect that he will return your money for every 'phone returned to him—when they are proven of no value

him—when they are proven of no value.

And then, at the same time, ask your bank to tell you whether the guarantee is good.

Let's all be careful and we'll avoid being sorry.

THINGS TO TALK ABOUT

Portable sets for the country.—Every rural visitor will welcome the radio.



Our Radio Department is conducted by electrical engineers which assures you with dependable and highly efficient Radio equipment, either in complete sets or separate units, such as Head Receivers, Varicouplers, Variometer, Cabinets, Detectors, Antennas, Rotary Spark Gaps, Sliders, Panels, Dials, Knobs, Condensers, Grid Leaks, Contacts, Galena Crystals, etc.

For a popular home receiving set we recommend the **RESODON**. This set comes in a beautiful mahogany finished cabinet. Write for literature.

PAUL G. NIEHOFF & CO., Inc.

Electrical Laboratories and Manufacturers

238 E. Ohio Street Chicago

IMMEDIATE DELIVERY

Grid Condensers Phone Condensers Grid Leaks Grid Leak Condensers

Variable Condensers
43 Plates
23 Plates

ATLAS TOOL CO.

799 Greenwich St. NEW YORK

NOW AVAILABLE FOR IMMEDIATE DELIVERY

CASCOMADE

WATERPROOF PLYWOOD

(a trade name)

SUITABLE FOR RADIO PANELS

WATER— WARP— WEATHER

PROOF

Made in all standard woods. Cuts with an ordinary saw. Is the standard panel of the "big companies" in the radio field. Comes in 3 and 5 ply, from ½th inch up. Cemented together with Casco waterproof glue, which resists electric current.

DEALERS—WRITE FOR PROPOSITION

UNITED STATES PLYWOOD CO., INC.

3 WEST 14th STREET

NEW YORK CITY, N. Y.

RADIO CORP. OF AMERICA DENIES SPECIAL PRICE TO DRY GOODS MEN

The Radio Corporation of America denied the statement carried in the New York Times of April 28th to the effect that they had promised to give a discount of 35 or 40 per cent to department stores members of the National Retail Dry Goods Association. This denial was made to the editor of the Radio Dealer.

The article in question referred to the recent conferences held by the National Retail Dry Goods Association where matters regarding the possibilities of selling radio equipment in department stores were discussed. The newspaper account went on to say that the department store men had the assurance of the Radio Corporation that they would receive a discount of 25 per cent now, with larger discounts in the fall, deliveries in four months or less being promised. The stores were supposed to buy in quantities of \$2,500 or more at one time.

The National Retail Dry Goods Association is not a buying organization and even were their members to buy co-operatively, it would have to be through another organization which would be separate from the Dry Goods Association. At the offices of the Association at 200 Fifth Avenue, New York, the report carried in the Times was denied, the officials interviewed expressing curiosity as to where the report could have

originated.

AEROPHONE DETECTOR SELLS AT \$1.25 AND IS GUARANTEED

The Aerophone Detector is guaranteed to stay "put," which is a new idea in Crystal Detectors, and the many public demonstrations of this detector have astonished the radio fans.

This detector is made properly, is mounted on a hard rubber base and can be attached to any set.

It's guaranteed!
That's "a new line" for the radio trade and well worth the retailer's investigation.
The Aerophone Detector retails at \$1.25,

and the makers offer liberal discounts to retailers and jobbers.

These detectors are made by the Essex Specialty Co., Inc., of Berkeley Heights, N. J., and their general manager, M. M. Adler, is doing "something new" when he guarantees every detector.

"The Best in Radio" E M L M E D ٧ I E A R E Binding Post No. HOI, Full Size

This nickel plated composition Knob Binding Post, list 20c. To the trade, 1 to 24, 25%. 25 to 99, 30%. 100 up, 40%.

Virginia Radio Corporation Manufacturers Jobbers

Charlottesville

Virginia

PLYWOOD NOW AVAILABLE

The United States Plywood Company of 3 West 14th St., New York City, is now accepting orders for immediate delivery of their famous cascomade waterproof plywood. This material has found favor with all the big companies in the Radio field and is being used for panels and cabinets. This plywood is cemented with the famous casco glue which was used on all of the aero-planes of the U. S. government and the allies during the late war.



A NEW AND BETTER LOUD SPEAKER

at a very low cost

The PHONOTACH connects the receivers with the tone arm of your Phonograph.

No damage or alteration to the

phonograph
Utilizes the Scientifically designed
tone amplifier of the talking machine to secure mellowness and
beauty of tone in Musical programs received over radio apparatus.

Price—\$3.00

Advertised in Leading Radio Papers Liberal Discount to Dealers

Order at once to insure prompt delivery

WM. A. MILLS

Manufacturer

103 Park Ave.

New York

COMPLETE SETS

\$1000 up PETER SPILGER

West New York, N. J.

E. P. RADIO CO.

We design and manufacture all sorts of Radio Parts, Condensers, Variocouplers, Crystal Detectors. We also conduct various experiments and desiring research for firms service.

Write, phone or call.

E. P. RADIO CO.

134 Joralemon St.

Main 1285

Brooklyn, N. Y.

WHAT YOU WANT WHEN YOU WANT

PRODUCTS RADIO

Acme Brach Klosner Federal Riley-Klotz General Electric Cungar (Rectifier) Thordarson Adams-Morgan Tuska

Ever-American Ready De Forest Westinghouse Electric and Manufacturing Company (Rectifier) Western Electric Lefferson

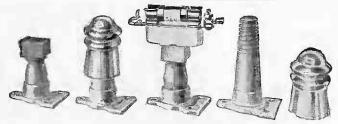
We are distributors only

A highly satisfactory service for Radio Dealers. Good stocks of practically all the most important manufacturers. Immediate shipment made on all items.

Write for catalog and list of liberal discounts.

TEST OUR SERVICE.

Wholesale Radio Equipment Co. 24 William St. Newark, N. J.



X-RAY INSULATOR ADAPTER

fills a long felt want for a lead in insulator—approved, up-to-date, complies with every regulation, both national and local, made in two styles--one for lead in, one for lightning arrester.

Aeroplane Wire

19 Strand Silicon Bronze Aerial Wire. Each strand (tinned.)
Guaranteed to give 100 per cent satisfaction.
This wire was used during the war by the U.S. Government for aeroplane and trench and was the only wire to stand up under these conditions.
We have the entire supply and are prepared to make immediate shipments.

Liberal Dealers' Proposition

HINTZE BROS., Inc., 459 Central Ave., Newark, N. J.

Announce Tentative Underwiters Regulations

The National Board of Fire Under-writers has made public tentative regula-tions covering radio receiving installations, that disclose considerable modification as compared with the requirements previously issued by fire underwriters.

The specifications that follow were drawn up by a special committee of the National Fre Protective Association, which is the authority for the National Electrical Code and whose findings are standards of en-gineering practice. Besides the underwriting organizations represented upon this special committee, engineers acting for the American Radio Relay League, American Telephone and Telegraph Company, Radio Corporation of America and the Independent Telephone Association, also participated.

The new rules are being published as proposed amendments to be included in future editions of the Electrical Code. It is stated that the requirements contained in the current edition of the code were based largely on the hazards incident to the equipment of wireless telegraph transmitting stations where antennæ of considerable height and length were used and where the hazard of high potential equipment had to be considered.

The recent widespread installation of radio telephone receiving sets has necessitated a revision of the regulations. The receiving set having an indoor antenna is considered devoid of hazard. With any receiving set, the publication says, the principal danger is from lightning brought in over the antenna to the equipment, or to some part of the building. Where there is no exterior antenna this hazard is removed.

The following specifications are for receiving stations only:

Rule 86-National Electrical Code

Specifications: (For Receiving Stations Only)

Antenna

a. Antennæ outside of building shall not a. Antennæ outside of building shall not cross over or under electric light or power wires of any circuit carrying current of more than six hundred volts, or railway trolley or feeder wires, nor shall it be so located that a failure of either antenna or of the above mentioned electric light or power wires can result in a contact between the antenna and such electric light or power

Antennæ shall be constructed and installed in a strong and durable manner and shall be so located as to prevent accidental contact with light and power wires by sagging or swinging.

Splices and joints in the antenna span, unless made with approved clamps or splic-ing devices, shall be soldered. Antennæ installed inside of buildings are

not covered by the above specifications.

Lead-in-Wires

b. Lead-in-wires shall be of copper, apmetal which will not corrode excessively, and in no case shall they be smaller than No. 14 B. & S. gage except that approved copper-clad steel not less than No. 17 B. & S. gage may be used.

Lead-in wires on the outside of buildings shall not come nearer than four (4) inches to electric light and power wires unless separated therefrom by a continuous and firmly fixed non-conductor that will maintain permanent separation. The non-conductor shall be in addition to any insulation on the wire.

Lead-in wires shall enter building through a non-combustible, non-absorptive insulating bushing.

Protective Device

c. Each lead-in wire shall be provided with an approved protective device properly connected and located (inside or outside the building) as near as practicable to the point where the wire enters the building. The protector shall not be placed in the immediate vicinity of easily ignitible stuff, or where exposed to inflame the or where exposed to inflammable gases, or dust, or flyings of combustible materials.

The protective device shall be an approved lightning arrester which will operate at a potential of five hundred (500) volts or less.

The use of an antenna grounding switch is desirable, but does not obviate the necessity for the approved protective device required in this section. The antenna grounding switch if installed shall, in its closed position, form a shunt around the protective device.

Protective Ground Wire

d. The ground wire may be bare or insulated and shall be of copper or approved copper-clad steel. If of copper the ground wire shall be not smaller than No. 14 B. & S. gage, and if approved copper-clad steel it shall be not smaller than No. 17 B. & S. gage. The ground wire shall be run in as straight a line as possible to a good permanent ground. Preference shall be given to water piping. Gas piping shall not be used for grounding protective devices. Other permissible grounds are grounded steel frames of buildings or other grounded metallic work in the building and artificial grounds such as driven pipes, plates, cones,

The ground wire shall be protected against mechanical injury. An approved ground clamp shall be used wherever the ground wire is connected to pipes or piping.

Wires Inside Buildings

e. Wires inside buildings shall be securely fastened in a workmanlike manner and shall not come nearer than two (2) inches to any electric light or power wire unless separated therefrom by some continuous and firmly fixed non-conductor making a permanent separation. This non-conductor shall be in addition to any regular insula-tion on the wire. Porcelain tubing or approved flexible tubing may be used for encasing wires to comply with this rule.

Receiving Equipment Ground Wire

f. The ground conductor may be run inside or outside of building. When receiving equipment ground wire is run in full compliance with rules for Protective Ground Wire, in Section d., it may be used as the ground conductor for the protective

DEALERS WANTED

For POOLINN PHONO-LOUD phonograph and loud-The most speaker adapter. efficient on the market.

AND — RADIO PHONE RECEIVING

A complete, practical, and authentic book for everybody.

Liberal Discounts

POOLINN RADIO COMPANY

604 Bergenline Avenue West New York, N. J.



ON THE

PARCO Tested Phone Condenser

GET OUR PRICES **BEFORE YOU BUY**

Phone Condenser .002 M. F. Grid Condenser .0005 M. F. Grid Leak Condensers

UNGAR BROS.

337 Market Street PATERSON, N. J.

BIG BOSTON SHOW

The Boston Radio Exposition is scheduled for May 3, 4, 5, and 6, and will be held at the Mechanic's Building. S. H. Fairbanks is manager and the indications point to a big show.

Final Report By Radio Conference

The Radio conference, called by Secretary of Commerce Hoover, on Friday, rendered its final report, on which will be based control legislation to be asked of

Congress.

Congress.

Under this report a wave-band of 150-275 meters is assigned for amateur telegraphy and telephony and for technical schools, the amateur having exclusive rights to 150-200 meters, while schools must use 200-275. There is also a restricted special wave of 310 meters for special amateur radio telegraphy, this to be used by a limited number of inland stations, and only where it is necessary to bridge sparsely populated areas or to overcome natural barriers.

The conference passed resolutions de-

The conference passed resolutions declaring radio communication a public utility that should be controlled by the Government, and recommended that "the type of radio apparatus most effective in reducing interference should be made freely avail-

able to the public without restriction."

There was such a demand for wave bands that the conference "disapproved of the elimination of essential services by the introduction of indirect advertising which might be expected to require extensive as-

signment of wave bands if permitted at all. It decided that indirect advertising should be limited to a statement of the call letter of the sending station and of the name of the concern responsible for the matter broadcasted, even this to be subject to further regulation under the proposed

control.
"Point to point" communication, or communication between two fixed points, instead of general broadcasting, is discouraged by the conference, which says this method should not be used when other means are available—for instance, the land telephone and telegraph. The conference thinks too much air space is used in "point to point" work.

Recommendations are made that the Secretary of Commerce assign to each radio telephone broadcasting station a power range of 600 land miles for Government stations, 250 miles for public broadcasting stations, and fifty miles for private and toll broadcasting stations; that the same wave band or overlapping wave bands should not be assigned to stations within these distances of each other: Government, 1,500 miles; public, 750 miles, and private and toll, 150 miles.

NEW SETS

The Kny Scheerer Corp., of New York who for thirty years have been prominent in the surgical supply business announce that they will bring out their own radio set in a very short time.

The experience of this company in electro-medical apparatus should be helpful to them in the radio business.

SCHOOL FOR SALESMEN

The new radio school for salesmen and dealers in radio equipment operated by Philip E. Edelman, E. E. of New York City. opened April 18th with a good attendance. Instructors have been secured from some of the largest radio manufacturers in the country as well as some experienced instructors who saw service during the war instructing soldiers in this new science.

Reports received from this school point

to its continued success.

RADIO PHONE RECEIVING

Radio Phone Receiving, published by the Poolinn Radio Co., of West New York, is not a book by any one author but includes eight well-known names in this field. The following list of chapters from this book, showing the outhors will give a good idea. showing the authors, will give a good idea of this non-technical, technical volume.

CONTENTS

Foreword—Michael I. Pupin, Sc. D.—Professor of Electro-mechanics, Columbia University.

Chapter I.—How Radio-telephoning is Accomplished—Alfred N. Goldsmith, Ph. D.—Director, Research Department, Radio Corporation of America; Professor of Electrical Engineering, College of the City

of New York.

Chapter II.—Tuning the Simple Receiving Circuit—Erich Hausmann, Sc. D.—Professor of Electrical Communication, Polytechnic Institute of Brooklyn.

Chapter III.—Receiving the Waves by

Crystal Detectors-Frank E. Canavaciol, E. E.—Instructor in Electrical Engineering, Polytechnic Institute of Brooklyn.

Chapter IV.—The Vacuum-tube—John H. Morecroft, E. E.—Associate Professor of Electrical Engineering, Columbia Uni-

Chapter V.—Amplifying the Music or Speech—Robert D. Gibson, E. E. and Paul C. Hoernel, E. E.—Research Laboratories of the American Telephone and Telegraph Company and The Western Electric Com-

Chapter VI.—Regenerative and Hetero-

Radio Hints-CEMCO CRYSTAL DETECTORS

SELL AT SIGHT 75c and \$1.00 Dealers' Discount 50 per cent. Cash with Order Not Less Than 100.

CORUBIA ELEC. & MFG. CORP. 149 East 23rd St., New York City

"Maidrite"

Radio Boxes and **Blocks**

Exclusively by

JOHN C. McCLURE

PATTERN MAKER

21 Hackett Street Mulberry 2552, Newark, N. J.

MY MOTTO:

Prompt and Best Service, Quality and Satisfaction Guaranteed

Write for Prices

dync Reception—Louis A. Hazeltine, M. E. —Professor of Electrical Engineering, Stevens Institute of Technology.

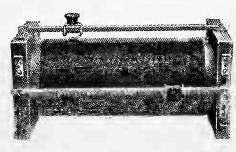
Chapter VII.—Radio-telephone Broad-casting—John V. L. Hogan—Consulting Engineer, Past-President, Institute of Radio Engineers.

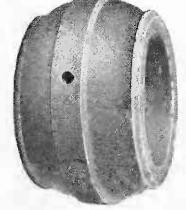
Immediate Delivery

Attractive Discounts on High-Grade RADIO ACCESSORIES

Essex 3/16 in. sliders	\$.:
Essex 3/16 in. x 83/4 in. slider rods	
Essex mounted crystals	
Lightning arrestors	2.
Contact switch points, doz	
001 fixed condensers	'
Crystal detectors	
Crystal detectors (glass tube),	
Inductance switches	

Send in Your Order Now!





ESSEX POLISHED WOOD ROTORS Magnet Wire in 1/4-1/2 lb. Spools. Large Stocks

ESSEX TUNING COILS—Double Slide UNWIRED, 3 inch diameter. List price. 50 cents

Good for Loading Coils-List Price \$3.00

Essex Manufacturing Co.

110 Mulberry St.

Newark, N. J.

WE WILL INVESTIGATE!

In view of the fact that many retailers and jobbers are desirous of acquiring the proper sort of knowledge about manufacturers, the RADIO DEALER offers investigation service to the retail and jobbing trade.

The Radio Dealer will answer all questions about manufacturers in the East.

The RADIO DEALER will tell you whether your manufacturer is real.

The Radio Dealer will tell you whether your manufacturer is also a mail order retailer.

This service is to be confidential and will be given to our subscribers only.

Our Service Bureau is also at your beck and call.

Is there anything else? Thank you.

IMMEDIATE DELIVERY

Grid Condensers
Phone Condensers
Grid Leaks
Grid Leak Condensers
also

Variable Condensers
43 Plates 23 Plates

ATLAS TOOL CO.

799 Greenwich St.

New York

MAIL ORDER HOUSES

Reports are coming in to the RADIO DEALER that "mail order houses" are not doing the "land-office-business" they were a year ago.

This is due to the advent of the retailer—for your radio fans like to look before they buy and do not prefer to send away their money and then await the receipt of the equipment they order.

All of which is just and proper.

It behooves the manufacturers, who have been selling direct to the consumer, to change their policy. They must merchandise their products.

The Radio Dealer offers its services to the manufacturers of reliable equipment, because this paper reaches the greatest number of real radio retailers.

TRADE

HPMCO

MARK

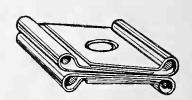
Reg. U. S. Patent Office

Made of high dielectric especially processed varnished paper, 001 M.F.D. capacity and each condensor is tested at 110 volts before being released. Our No. 20 Fixed

Our duplex and multiplex phone clips permit four or more sets of phones to be attached to two binding posts. These duplex clips list at five cents each.

condensor lists at seventy cents each.

No. 20 Fixed Condensor



HEDDEN PLACE MACHINE COMPANY

"Largest Fixed Condensor (Insulator Type) Manufacturers in the U. S." Office and Factory, 44 Hedden Place, East Orange, N. J.





Complete Receiving Sets.
Detectors—2 step Amplifiers
Variable Condensers
Vacuum Tube Sockets
Potentiometers
Variocouplers
Variometers
Rheostats
Horne Lightning Arresters
Grounds and Insulators
Meet all requirements of the Board
of Fire Underwriters.

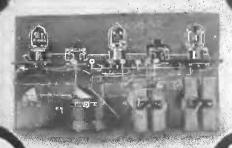
Carried by Leading Jobbers

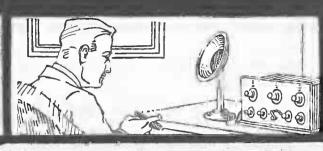
Horne Manufacturing Company

General Offices: Hudson Terminal Building, 30 Church Street, New York City Factory and Works: Jersey City, N. J.

10 cents brings catalog

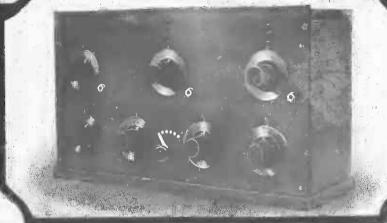
The MAN'S Set—







A view showing interior arrongement. Note the compactness and utter simplicity. The variometers are of special mahogany, designed for moximum inductonce ratio from minimum to maximum. The detector circuit includes copper foil and mica grid and plate condensers with tubulor grid leok. General rodio sockets. grid le



Exterior view of rear of set. Exterior view of rear of set. Note the hinges, the entire top may be swung back, thus giving easy access to everything inside. Note the insulated panel in the rear center, to which all connections are mode; thus freeing the front of unsightly wires. Note also the sturdy thickness of the leavy gumwood cabinet frame.

erative receiver set type A-P

Manufactured by The Radio Shop, Sunnyvale, Cal.

Exclusive distributors—Atlantic-Pacific Radio Supplies Co.

If you would get a man's enjoyment from radio, you don't want a toy, you want a man's set. The new Regenerative Receiver Set, Type A-P one, is designed as a man's set. A real practical serviceable and efficient outfit for a man's office, his amateur station, or his home.

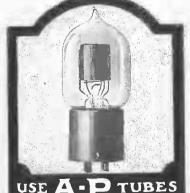
The cabinet is of grained gumwood, with a beautiful piano finish. The panel is of heavy Formica, on which all lettering is machine engraved in white. The dials are of polished German silver,

with black engraved divisions in figures, and fitted with large tapering knobs, enabling fine tuning. The 180° rheostat matches the other dials. All wires and all metal parts, both exterior and interior, are nickel plated.

The set is designed especially for short-wave lengths of from 150 to 450 meters, to insure maximum audibility and clearness for concert

and amateur use. Particularly is it ideal for home entertainment in receiving radio music, radio news, and other broadcasted features. But with real man-like versatility it operates with equal efficiency in receiving spark and C W. A-P vacuum tubes used throughout.

Whether you **know** radio, or simply know you are interested, Type A-P One is the set you want. Simple in adjustment, and extremely selective, yet highly sensitive. When you buy a set, make sure it's—"A MAN'S set."



USE A - D TUBES EFFICIENCY

Dealers and jobbers!

As a member of the Pacific Radio Trade Association, we will distribute this set through regular trade channels as recommended by that Association. We have a real man's proposition for you on "The MAN'S Set." Write us NOW!

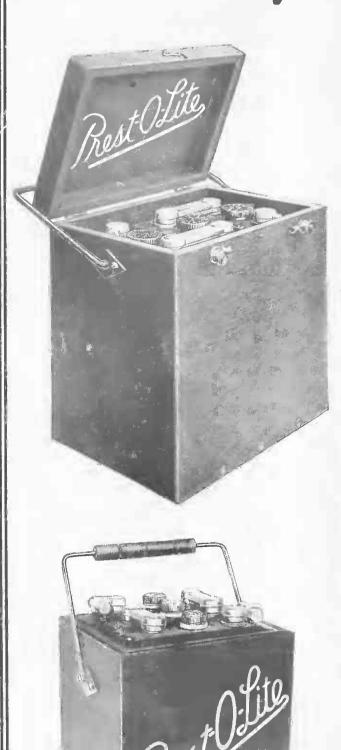
ATLANTIC-PACIFIC

38 MISSION STRELT

Operating (KZY) Rock Ridge Ridge Station, Oakland Cal.

PASILEN OFFICE AT 5 LIRE PHACE NEWARK, N I

There is a Prest-O-Lite Battery for Radio Use



Especially designed for radio purposes, but embodying the same battery principles that have made Prest-O-Lite automobile batteries so popular.

It comes in a handsome mahogany finish to match the furniture of the home, with rubber feet that will not scratch the parlor table.

Because it is a Prest-O-Lite Battery, with the famous Prest-O-Plates, its life in service will be long. Prices \$15.85 to \$37.50.

Prest-O-Lite enters the Radio Field with its reputation established. Push a battery that already enjoys the buyers' confidence and just watch your turnover multiply. Write for our proposition.

THE PREST-O-LITE COMPANY, Inc.

Carbide and Carbon Building 30 E. 42nd Street, New York

Prest-O-Lite BATTERY FOR RADIO USE