

RADIO & TELEVISION RETAILING

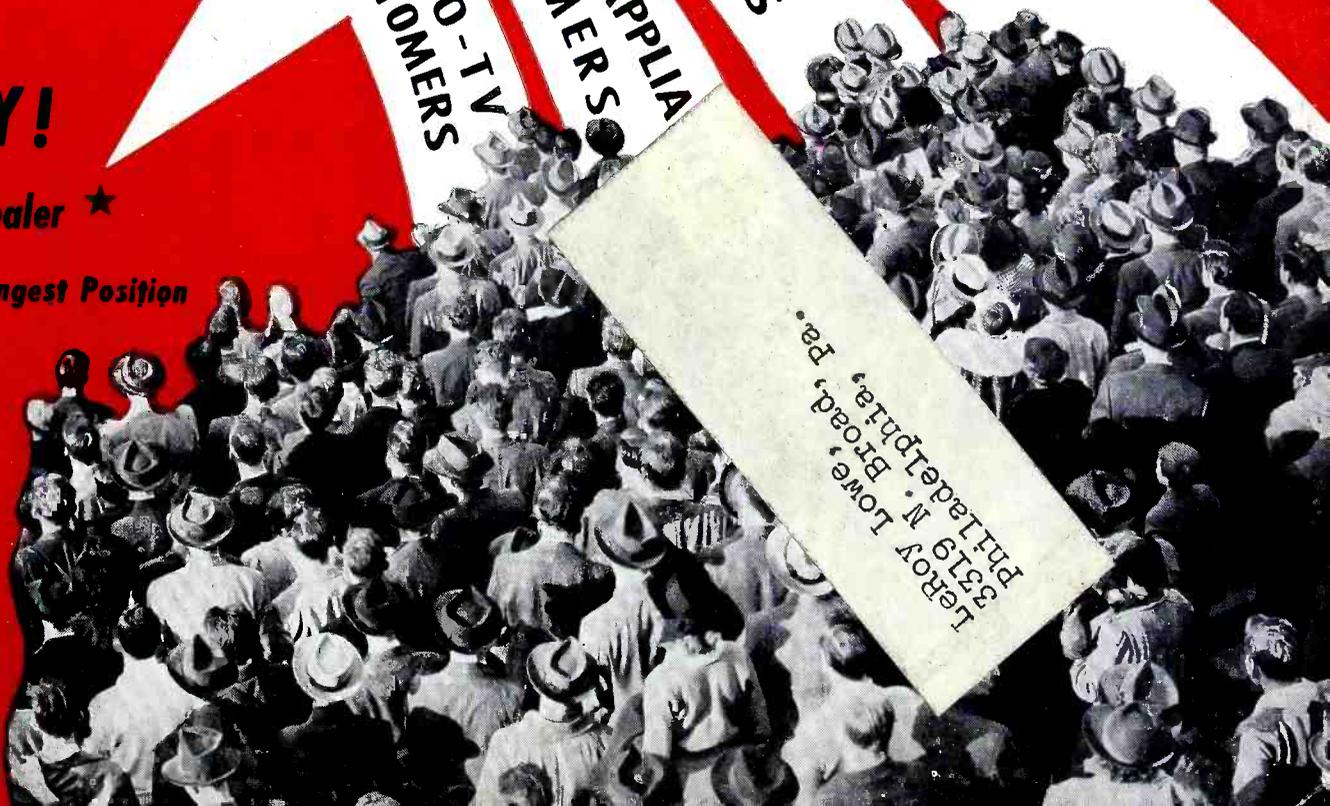


★ CUSTOMERS for
SERVICE & SOUND
★ PHONO RECORD
CUSTOMERS
★ ELECTRIC APPLIA
CUSTOMERS
★ RADIO - TV
CUSTOMERS

DIVERSIFY!

The 4-Way Dealer ★

Is in the Strongest Position



Leroy Lowe, Inc.
3319 N. Broad, Pa.
Philadelphia, Pa.

SURE-FIRE

FOR SPECIAL PROMOTIONS!



MODEL 17C7

Sensationally Priced at only—

\$299⁹⁵*

*Prices slightly higher West of the Rockies

Including Federal Excise Tax

- ★ AIR KING'S FAMOUS PRECISION-BUILT CHASSIS!
- ★ HUGE 17" RECTANGULAR TUBE!
- ★ STUNNING DECORATOR CABINET!
- ★ GLARE-PROOF SCREEN!
- ★ ONE-KNOB TUNING!
- ★ BUILT-IN ANTENNA!

AIR KING

NATIONAL DISPLAY
1454 Merchandise Mart, Chicago

...has everything!

AIR KING PRODUCTS COMPANY, INC., 170 53rd Street, Brooklyn 32, N. Y.

RADIO & TELEVISION RETAILING

Including "RADIO & TELEVISION"
"RADIO & TELEVISION TODAY"
and "ELECTRICAL RETAILING"

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Publishers also of TELE-TECH

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FEBRUARY, 1951

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Photo Credit

The picture on the cover of this issue was adapted from a show-window in an attractive store operated by Herb Names, well-known dealer of Denver, Colorado.

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CALDWELL-CLEMENTS, INC.
480 LEXINGTON AVE., NEW YORK, N. Y.

Admiral

Presents the
Class of '51

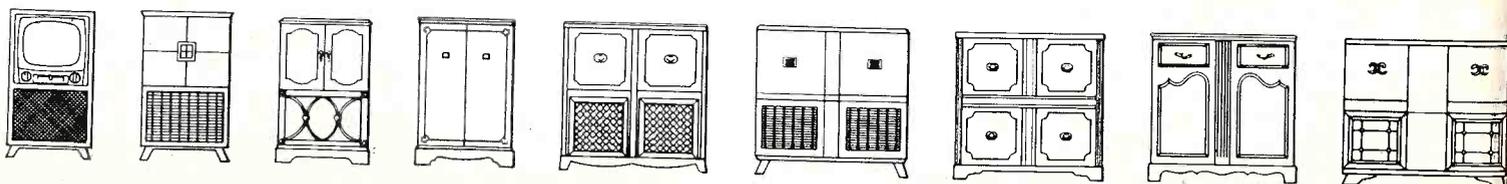
*...a brilliant new series of
television receivers...engineered
for outstanding performance...
superb in cabinet styling...each a
value to challenge comparison*



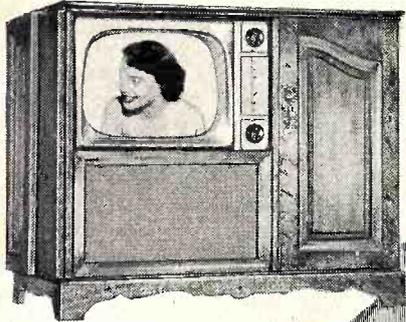
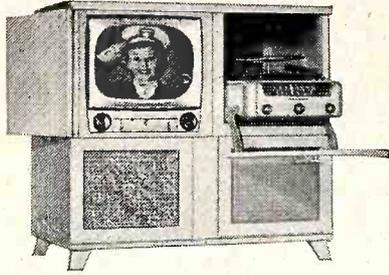
Model 37K35—17" TV Combination. Walnut, \$499.95



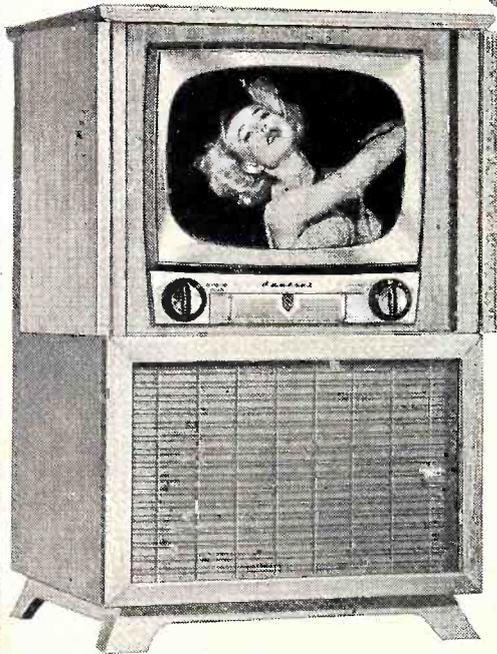
it's Admiral again in '51 with



Model 37K27—17" TV Combination
Blonde, \$499.95



Model 321K18
21" TV Combination
Maple fruitwood finish, \$795



Model 27K27—17" TV Console. Blonde, \$409.95



Model 17K11—17" TV Table Model. Ebony, \$269.95

*with the
Clearest Picture
in Television!*

Sharper ...

... BECAUSE OF FINE DOT PICTURE
DEFINITION with ADMIRAL'S EXCLUSIVE
FLEX-O-MATIC FOCUS CONTROL.

Brighter ...

... BECAUSE OF 44% MORE PICTURE
TUBE VOLTAGE with ADMIRAL'S
AMAZING DYNA-RAY PICTURE TUBE.

Clearer ...

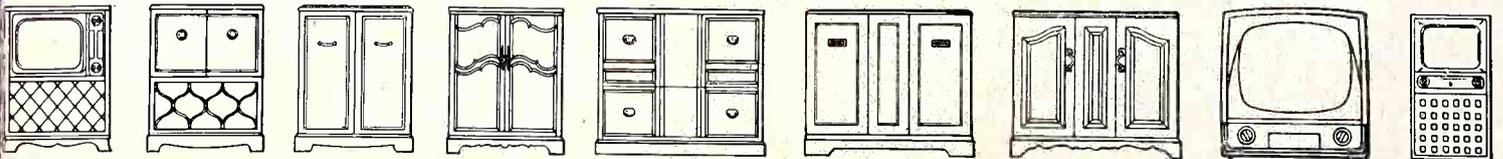
... BECAUSE OF 20% to 50% MORE
PICTURE DETAIL with ADMIRAL'S
New Stagger-Tuned I. F. Peaking Process.

see your distributor

now for complete details

All prices slightly higher in south and west. Excise
tax included. Prices subject to change without notice.

the greatest values in television



WHAT IS GOOD FOR YOUR CUSTOMER IS GOOD FOR YOU . . .
AND WHAT IS GOOD FOR YOU IS GOOD FOR YOUR CUSTOMER

Because the Commercial Credit Plan
has *More* Advantages for both the
Buyer and the Seller *More* Dealers
Use it to Finance *More* Home
Appliance Sales than any Other
National Financing Plan!



To Help You Make
... **MORE SALES**
... **MORE PROFITS**
... **MORE SATISFIED**
CUSTOMERS

Phone, write or wire the Commercial
Credit office nearest you. Our local
representative will show you how
Commercial Credit can serve you better.

8 Ways Better

Commercial Credit Plan Offers *You and Your Customers*
All These Important Advantages

1. Wholesale Financing
2. Fast Credit Approval
3. Life Insurance Protection
4. Property Insurance Protection
5. Automatic Sales Follow-up
6. Tested Collection Service
7. Builds Customer Good Will
8. Nation-wide Facilities

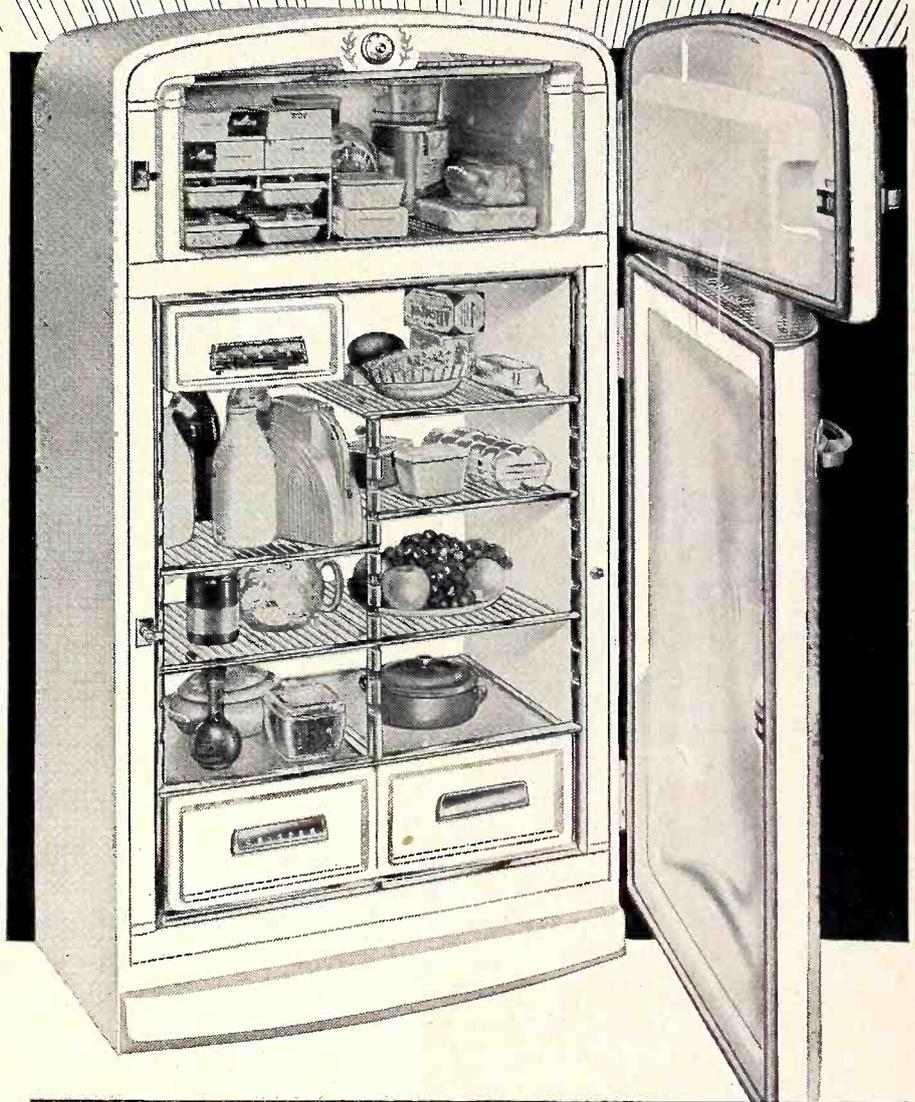
COMMERCIAL CREDIT CORPORATION

A subsidiary of Commercial Credit Company, Baltimore . . . Capital
and Surplus over \$100,000,000 . . . more than three hundred
offices in principal cities of the United States and Canada.

Here from **PHILCO** for '51
A NEW KIND of 2-Door Refrigerator
with FULL AUTOMATIC DEFROST!

**...at
 FAR LOWER COST
 than Ever Before**

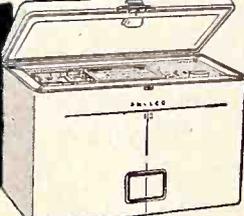
Philco combines in one sensational refrigerator the most wanted features in public demand today . . . *Double Doors* and *Full Automatic Defrost*. Yes, *true, honest* Automatic Defrost of the whole refrigerator *including the evaporator*. It's the Philco Duplex—here in a *choice of three sizes*—all at new low prices that give Philco dealers an unequalled opportunity for volume sales and top-of-the-line profits.

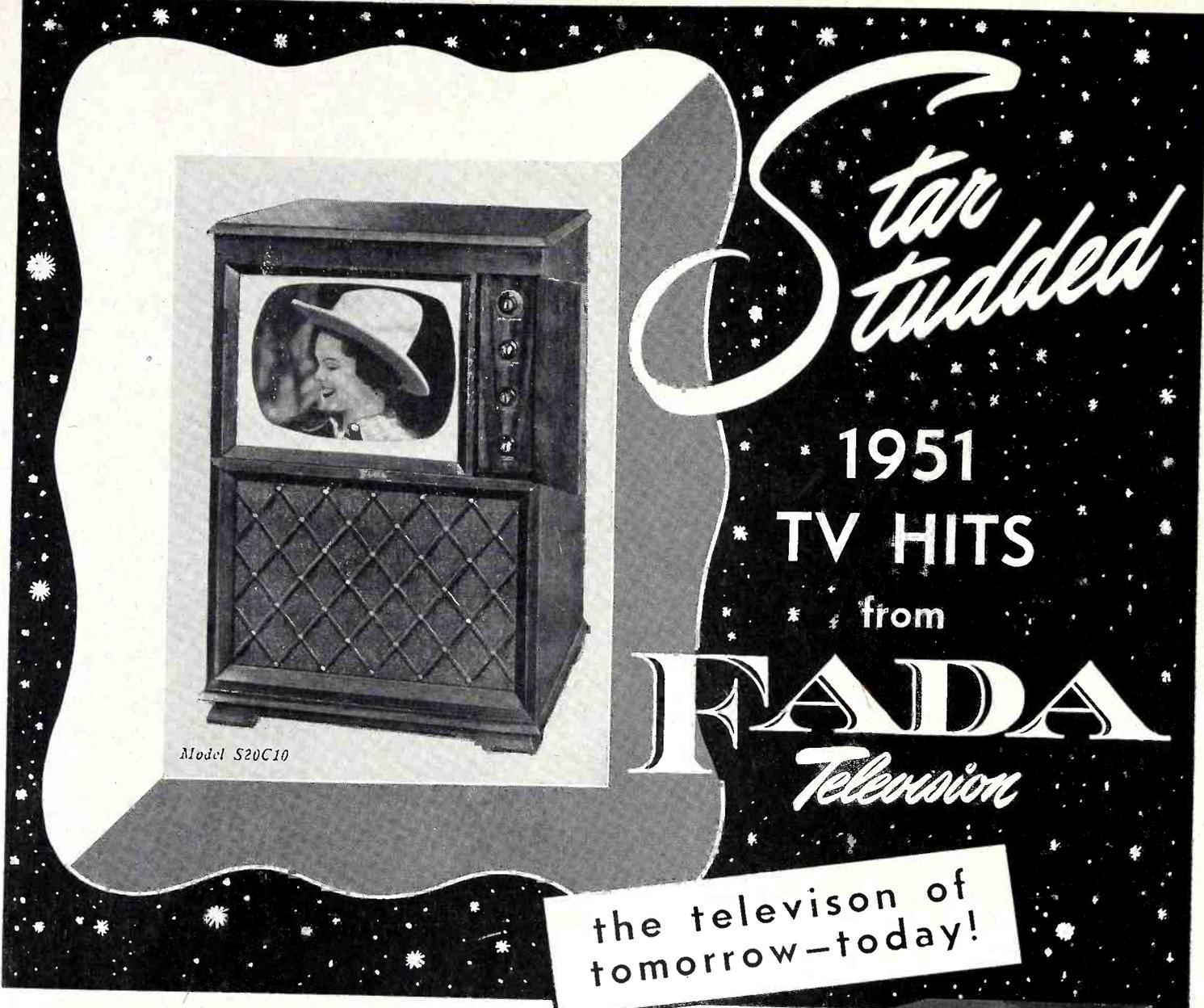


**In Addition, for 1951
 PHILCO Revolutionizes
 the Basic Pattern of
 Refrigerator Sizes!**

In the Philco Refrigerator line for 1951, it's no longer 7's, 9's, and 11's. It's not even 8's, 10's and 12's. It's 9's, 11's, and 13's . . . an increase of as much as a full 2 cubic feet capacity! And the startling news is . . . they are priced in the brackets of smaller competitive refrigerators. Yes, when needed most, Philco gives its dealers extra value to offset higher costs . . . the most powerful sales weapon in refrigeration for 1951.

**Get the Full Story of 1951's most
 saleable Appliance Lines—NOW
 —from your Philco Distributor.**

<p>New for 1951</p> 	<p>New for 1951</p> 
<p>PHILCO Electric Ranges with the BUILT-IN JIFFY GRIDDLE</p> <p>Now added to "Broil - under - Glass"—the greatest combination of exclusive selling appeals in the 1951 range business.</p>	<p>PHILCO Home Freezers . . . now 8 and 12½ cubic foot sizes</p> <p>Philco's revolutionary sloping-front design . . . now in two biggest selling sizes for fast turnover, volume and profits in 1951.</p>



Model S20C10

*Star
tudded*

1951
TV HITS
from
FADA
Television

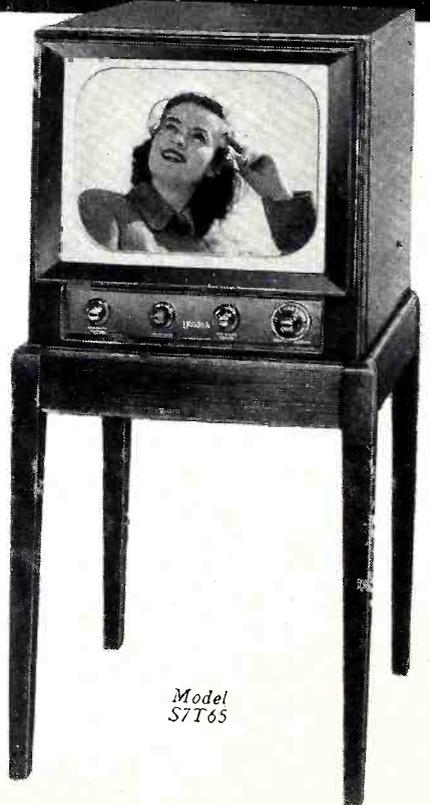
the television of
tomorrow—today!

Model S20C10 with its 20 inch rectangular glare-free filter glass tube is the Console value for 1951. Exquisite front control side door Deluxe cabinet. Clear, sharp pictures with FM sound that is unmatched with its 10 inch concert grand speaker. Built-in "FADA-SCOPE" antenna. It's the last word in BIG screen televising . . . it's the last word in beauty.

*See the new 1951 Fada TV line that
is breaking all sales records . . .
Ask the Fada Jobber in your
territory for further
details.*

**BRAND NEW 17 INCH RECTANGULAR TUBE
TABLE MODEL TV RECEIVER**

Model S7T65—Beauty, superior performance and really BIG, BIG 17 inch rectangular screen televising. Here is a plastic moulded picture frame front with mahogany veneer table model cabinet. Built-in "FADA-SCOPE" antenna. Matching table available. A sensational performer in all areas.



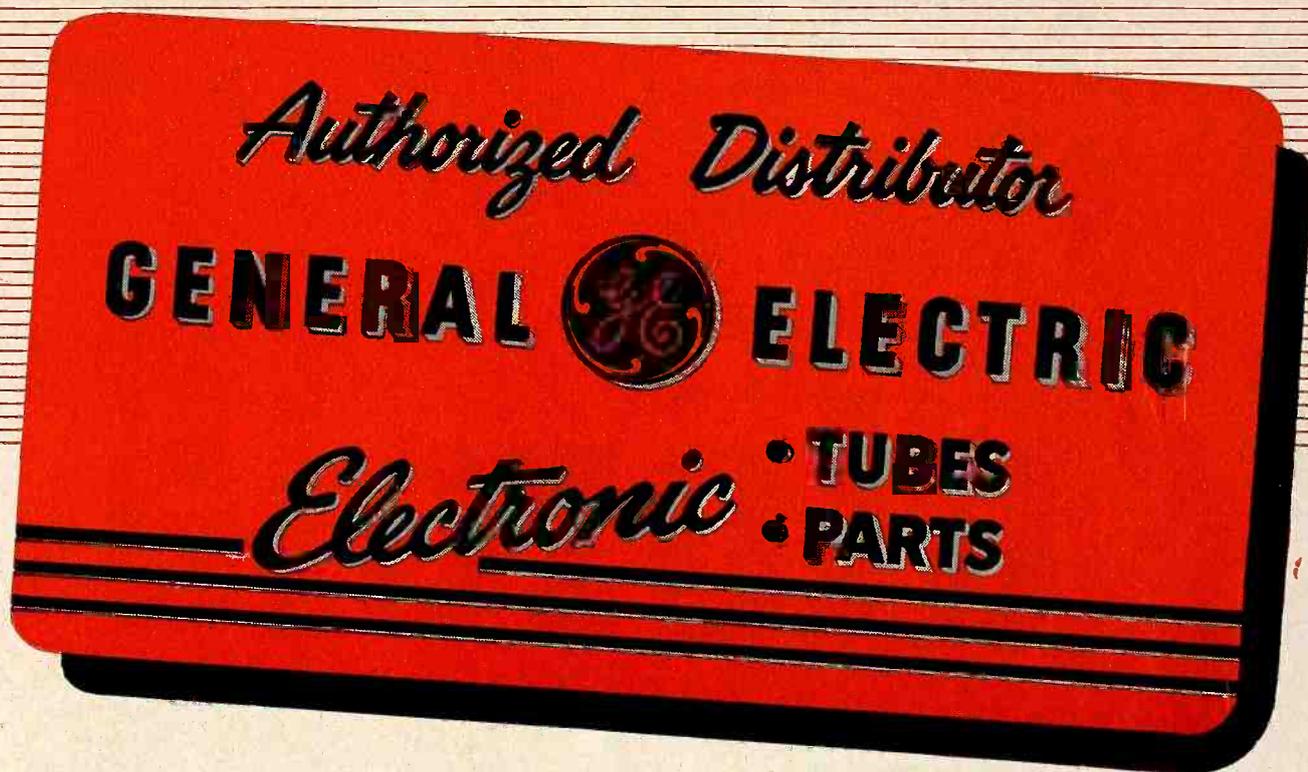
Model
S7T65

"Pioneers in Radio and Electronics Since 1920"

FADA RADIO & ELECTRIC CO., INC., BELLEVILLE, NEW JERSEY

Sure, TUBES ARE TIGHT

... but the man with this sign
remains your best friend!



YOUR G-E tube distributor is interested, first of all, in supplying you, as a serviceman, with the tubes you need—or, when these can't be had for love or money, with types you may substitute.

However, he's under a handicap. Let's be frank: nobody . . . but *nobody* . . . is getting all the tubes they want. That's true also for radio-TV set manufacturers . . . broadcast stations . . . communications and industrial users. Allocation is the order of the day. New millions invested by General Electric in more tube facilities, are helping G-E distributors and dealers—aiding the whole industry. Yet the work

horse, production, can't match speed with a pair of track sprinters, TV popularity and national defense needs, that have taken the bit in their teeth.

Tube shortages exist, and will continue. Meanwhile, your customers count on you to keep their sets operating. Grappling with these facts that oppose each other, isn't easy.

Your G-E tube distributor wants your business tomorrow, next year, five years from now. He'll see you through! That's his job . . . and that's his pledge. *Electronics Department, General Electric Company, Schenectady 5, New York.*

You can put your confidence in—

GENERAL  **ELECTRIC**

181-KA2

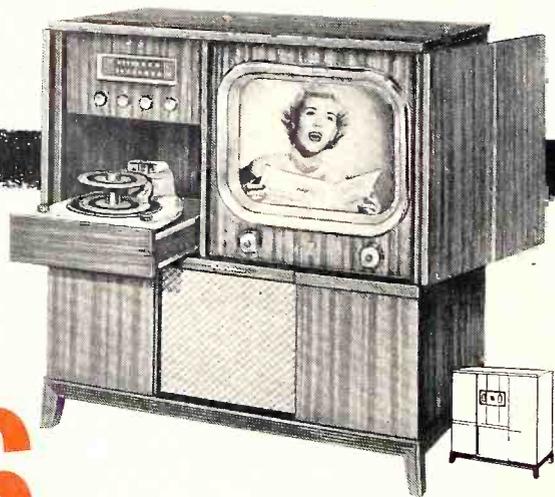


1951 profit Motorola



5 NEW table models

Deluxe wood cabinets or economical Bakelite, there's a table model for every price line and every customer. Screens in every size, too, from 14 to 20 inches — and every set with the features that have sold millions on Motorola TV. . . PLUS new 1951 improvements!



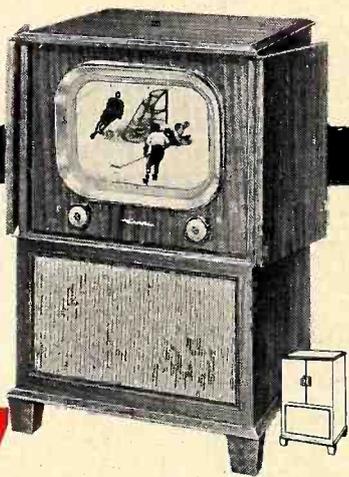
6 NEW combinations

Every entertainment feature in one big set for customers who want the *most* of the *best*! Bright, sharp rectangular 17 and 20 in. screens for the finest TV . . . revolutionary all-speed record player . . . "Golden Voice" AM and FM radio. And all in beautiful new 1951 cabinet designs.

in mahogany  or strikingly modern 

prevue

TV



7 NEW consoles

Big 17 and 20 inch rectangular TV screens — famous Quick-as-a-Wink tuning and improved Bilt-in-Antenna. And every cabinet handsomely styled in the finest hand-polished woods. In mahogany or modern limed oak.

... *limed oak* ...

18 NEW MODELS

PRICED AND DESIGNED TO MAKE EVERY PROSPECT A CUSTOMER

NEW "MUSIC LOVER" SOUND for richer, finer, more true tones in music and voice; positive pitch and note range.

BETTER PICTURES on rectangular black tubes; improved circuits for steadier, sharper, brighter pictures.

LARGER SCREENS including a 20 inch screen in a compact new table model. Larger-than-life pictures that are finely detailed close-up or far.

POWERFUL RECEPTION brings in even fringe stations exceptionally clear and true.

GREATER DESIGN VARIETY offers "Fashion Award" styles for every home — early American, period or modern — in mahogany, maple, limed oak and bakelite.

plus exclusive **NEW GLARE-GUARD***

The curved anti-reflection TV screen that eliminates up to 98% of annoying glare. GLARE-GUARD plus black tube means more seeing-comfort for everyone. An exclusive Motorola selling feature.

*Trade Mark

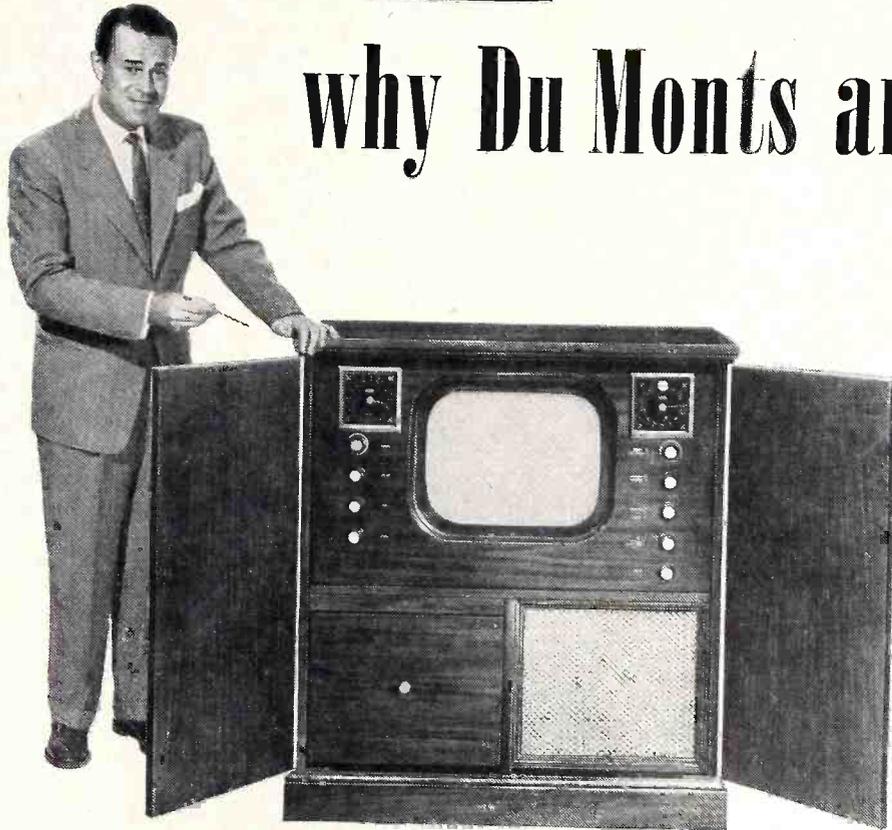


Your **PROFIT** line for '51

Motorola TV

4545 Augusta Blvd., Chicago, Ill.
Write, wire or phone your distributor today!

"I know why Du Monts are better"



"YES, I've been to the laboratories and I've seen them made. In all the years I've sold television, radio, and other electrical goods I've never seen anything to equal Du Mont inspection for toughness. From tiniest resistor to biggest tube, every part gets a *going-over*, first as an individual part, second as a *working* part of a *working* receiver.

"For example, every Du Mont chassis gets a 2-hour 'shakedown run' all by itself. All Du Mont Sensituners* and Selectuners,* patented and exclusive tuning devices, get separate tests, under operating conditions.

"All Du Mont receivers get 'home conditions' tests on outdoor antennae, on all channels. Every tenth Du Mont gets a special 40-hour test. Sample sets come off the line daily for test under extreme conditions of heat, cold and humidity.

"That's why Du Mont is incomparable in fine performance, in sturdy construction, in trouble-free operation, in long life.

"These rigid quality controls pay off for me in customer satisfaction, in word-of-mouth advertising, in lower installation and service costs.

"It's almost as hard for a television dealer to pass the Du Mont franchise requirements as it is for a television set to pass the Du Mont manufacturing standards.

"But when you do get a Du Mont Franchise, you have everything. You have a good product, good price, good profit; and Du Mont's selective dealer franchise policy gives me the protection I want. All backed by a dominating national advertising campaign and the power and prestige of the name 'Du Mont'—the first name in television for twenty years."

DU MONT *first with the finest in Television*

*Trade Mark

Copyright 1951, Allen B. Du Mont Laboratories, Inc., Television Receiver Division, East Paterson, N. J. and the Du Mont Television Network, 515 Madison Avenue, New York 22, N. Y.



MODEL T-100
\$169.50
 COMPLETE

Revere Sells an Untapped Market to bring you extra profits!

Never before has there been anything in the entire recording field to compare with the Revere Recorder in creating store traffic, easy sales, and healthy profits!

Revere's professional quality and superior features combined with a down-to-earth price hits an untapped market of live prospects, and a single demonstration is often all that is needed to clinch the sale.

Revere offers everything your customers want for ideal service, at an amazingly low price. True-as-life sound reproduction . . . easy to operate controls . . . full hour's listening on every reel . . . erasable, re-usable tape . . . powerful constant speed motor . . . are just a few of Revere's outstanding advantages.

Get your share of this profitable Revere Recorder business. Write today for complete information about this sensational new sales producer!

REVERE CAMERA COMPANY • CHICAGO 16, ILLINOIS

Revere
Magnetic Tape
RECORDERS

HOME TALENT
 It's fun to record voices of family and friends.

RADIO BROADCASTS
 Symphonies, comedy shows put on tape for future listening.

INSTRUCTION
 Classroom use, voice, dramatics, musical instruments.

INTERVIEWS
 Revere gets complete story in subject's own voice.

MEETINGS
 Revere is the perfect "secretary" at conferences.

HOME MOVIES
 Recorded titles, voices, background music add enjoyment.



Revere Recorder Radio Combination

Recorder plus radio. Programs recorded from radio by turn of a switch—no cords to connect. Powerful circuit, built-in antenna.

Model TR-200 **\$209.50** complete.

BIG screen sizes



BLACK-



16
INCH

▲ **16K1.** 16" rectangular aluminized black tube. 3-speed automatic phonograph. FM-AM radio. Genuine mahogany or modern blond veneered console. Swivel casters.

▶ **16T5.** 16" rectangular black tube. Very handsome compact cabinet of genuine mahogany veneers, hand-rubbed for enduring beauty.



▶ **16C103.** 16" rectangular black tube. Genuine mahogany or modern blond veneered cabinet mounted on metal glides for easy moving.



You can put your confidence in—

GENERAL



...all BIG values!

DAYLITE TELEVISION



17
INCH

▲ **17C107.** 17" rectangular aluminized black tube. Hand-rubbed, genuine mahogany or blond veneered cabinet with finely figured doors and swivel casters—easy to turn.

WHAT do TV buyers want most? A choice of big-screen sizes . . . superb performance . . . exquisite cabinetry . . . and solid values backed by a name they believe in. That's exactly what you give them with G-E Black-Daylite Television featuring 16-inch and 17-inch tubes. The big-as-life, real-as-life pictures

sell on sight. The cabinets in genuine mahogany or blond veneers are outstanding anywhere. And no name inspires more buyer confidence than General Electric. You know it's always easier to sell the buyer what he wants. That's why it's easier to sell General Electric. See your G-E TV distributor today.

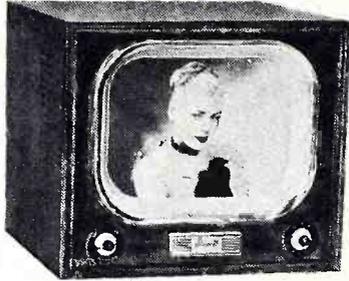
General Electric Company, Receiver Division, Syracuse, New York



▲ **17C109.** Elegant console. 17" rectangular aluminized black tube. Superb, hand-rubbed, genuine mahogany veneered cabinet with full-length doors. Mounted on non-marking swivel casters.

ELECTRIC

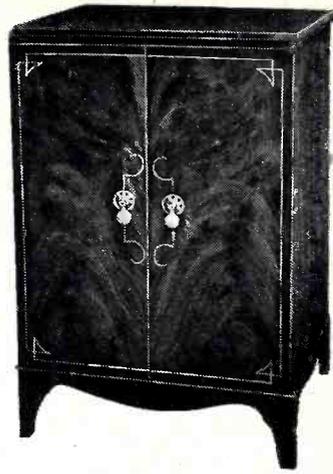
You put a FEATHER in our CAP



**Model 17BM1
JAMES BUCHANAN**
Unexcelled picture clarity
... Super-powered chassis.
Top value in 17-inch
black rectangular tube
table model for 1951!



**Model 20BM1
PETER STUYVESANT**
Giant 20-inch black rec-
tangular tube for extra
power and performance
... in custom styling ...
phono-jack attachment...
most impressive TV value
of all time!



**Model 37BM1
WASHINGTON IRVING**
Richly panelled tradi-
tional cabinet. Brilliant
spot-light focus. 17-inch
black rectangular tube.
A leading performer in
the all-new 1951
STARRETT Line.



**Model 27BM1
PATRICK HENRY**
Classic 17-inch Console
with high-fidelity sound
and eye-fidelity vision.
A new high in open-face
console value and beauty!

FLASH! Starrett 1951 SPRING LINE
A FOUR-STAR HIT OF FURNITURE SHOW
Distributors, Dealers, and Buying Public named the new, sensa-
tional Spring STARRETT Line as TOP PERFORMERS once again.
★ BEST BET FOR BIGGER SALES!
★ PERFECT PERFORMANCE RESULTING FROM
PRECISION ENGINEERING!
★ *Starrett* QUALITY UNLIMITED!
★ DELIVERS DOUBLE DEPENDABILITY ALL-WAYS ...
VALUE, SALES, SERVICE!
Available at dealers everywhere whose reputation has been maintained for selling only the
best in television products.
STARRETT TELEVISION CORP., 601 W. 26th St., N.Y. 1

Never Before a Sales Boosting Campaign Like This—all for You!

This SYLVANIA star-studded program will keep your service business booming during 1951

Appealing Life-Like Window Displays

You'll find prompt expert television and radio service Right Here!

Colorful Counter and Store Displays

You'll find prompt expert television and radio service Right Here!

Call us-for top quality television and radio service

Marie Wilson Says: "I rely on this Emblem for dependable Radio and Television Service"

We Use SYLVANIA Radio and Television Tubes

RADIO TELEVISION SERVICE

SYLVANIA RADIO TUBES AUTHORIZED DEALERS

We Use SYLVANIA Radio and Television Tubes

RADIO TELEVISION SERVICE

SYLVANIA RADIO TUBES AUTHORIZED DEALERS

Bright window streamers

Marie Wilson says THIS EMBLEM IS MY ASSURANCE OF FINE RADIO AND T.V. SERVICE

If your Radio or Television set needs expert attention SEE US WE USE SYLVANIA RADIO AND TELEVISION TUBES

New giant mailers

Sales-getting postal cards

It's ready and waiting for you now . . . the most colorful and appealing Service Dealer advertising campaign ever planned!

Featuring famous stars of screen, television and radio, it ties in with the national advertising your customers will see in *The Saturday Evening Post*, *Life*, *Look*, and *Collier's Magazine*, and with Sylvania's weekly CBS-TV Show, "Beat The Clock"!

So, win with Sylvania in '51. Send for this material NOW . . . and display it prominently. It identifies you as the expert with the super-fine Sylvania tubes . . . the tools and the know-how for the finest radio and TV service.

All of the display material, stickers and radio spots are FREE. You pay only 1¢ apiece for the four mailing pieces you send to your prospects. So, see your Sylvania Distributor or mail coupon NOW!

ATTENTION SET OWNERS

Reminder stickers for every set you service

Radio spot announcements for every month

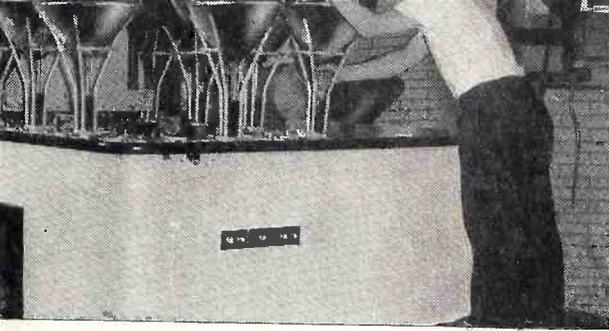
RADIO ANNOUNCEMENTS for the RADIO SERVICE DEALER

RADIO TUBES; TELEVISION PICTURE TUBES; ELECTRONIC PRODUCTS; ELECTRONIC TEST EQUIPMENT; FLUORESCENT TUBES, FIXTURES, SIGN TUBING, WIRING DEVICES; LIGHT BULBS; PHOTOLAMPS; TELEVISION SETS

SYLVANIA ELECTRIC

Sylvania Electric Products Inc.
Dept. R-2202, Emporium, Pa.
Please send me full details about Sylvania's great 1951 Dealer Promotion Campaign.

Name _____
Street _____
City _____ Zone _____ State _____



that uses over 1,000 gallons of water
 n, N. J. plant uses 360,000 gallons of
 wells within the plant.

ra-fast washing and trouble-free efficiency of our newest type glass-blank washing
 take care of the tremendous demand for Sheldon Television Picture Tubes . . .
 perfect screen quality of these tubes.

igned automatic washing machine actually washes our glass-blanks in three cycles:
 of the glass-blank gets an acid wash; then it is rinsed with water. Next, the
 caustic wash, and then rinsed again with water. As the final step, the inside face
 minutes with a high pressure stream of "thirsty water" — water from which all
 substances have been removed by our special equipment and techniques.

ank leaves our washing machine, the inside surface of the glass-blank is bac-
 d medically pure . . . so pure, in fact, that it is "thirsty" or "hungry" to reabsorb
 . PRIMED to receive the phosphor coating. The phosphor coating is applied
 face to consistently produce the uniformly perfect blemish-free, "TELEGENIC"
 ldon Picture Tubes are famous.

the latest "Sheldon 'TELEGENIC' Picture Tubes—General Characteristics
 'Chart'" containing the new Sheldon VITATRON Glass-Metal 19AP4B
 the New Rectangular 20CP4!

INFORMATION NO. 4 is off the
 ur copy today!

ALIED ELECTRIC CO.

RODUCTS INC.
 on 11, N. J.

LL., 426 S. Clinton St. • LOS ANGELES 26, CAL., 1755 Glendale Blvd.

RAY TUBES • FLUORESCENT STARTERS AND LAMP HOLDERS • SHELDON REFLECTOR & INFRA-RED LAMPS
 PRING-ACTION PLUGS • TAPMASTER EXTENSION CORD SETS & CUBE TAPS • RECTIFIER BULBS

AT THE RADIO ENGINEERING SHOW, MARCH 19-22, GRAND CENTRAL PALACE, N. Y. ◀

© 1951—ALLIED ELECTRIC PRODUCTS INC.

RADIO & TELEVISION RETAILING • February, 1951

at

Sheldon



Sheldon
 NATURAL IMAGE

SOFT GLOW
 Picture Tube

Westinghouse Television

CONTINUES WITH THE LEADING HIGH-PERFORMANCE CHASSIS



Westinghouse television earned its reputation for outstanding performance in all areas by direct comparison. Field reports further indicate the need for less service. New Westinghouse Television brings an even better chassis with *nothing taken out, nothing cheapened.*



THE BRENTWOOD MODEL 641K17

One of ten top television models with the exclusive Westinghouse chassis and circuit features. 17-inch rectangular screen, mahogany finish cabinet.

featuring

SINGLE DIAL TUNING

Television's greatest feature practically demonstrates itself. Now ILLUMINATED on most models.



COMPLETE NEW 1951
RADIO, PORTABLES
RADIO-PHONOGRAPH
AT YOUR DISTRIBUTOR'S

YOU CAN BE SURE...IF IT'S

Westinghouse

THE INCOMPARABLE *Capehart*

GIVES YOU

4 OPPORTUNITIES TO SELL EVERY CUSTOMER!

Finest cabinetry offered today
—combining distinguished
designs by Lee Stone with
master craftsmanship

Richer, clearer pictures from
the famous CX-33 chassis

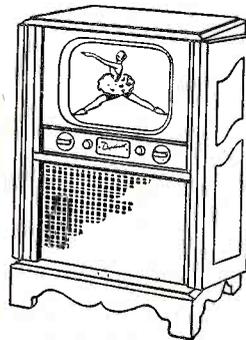
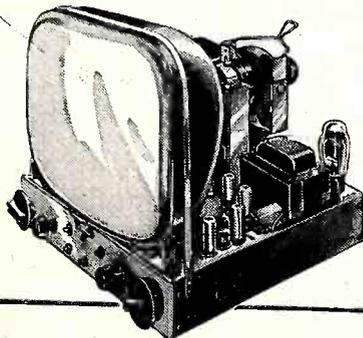
The fabulous Capehart Sym-
phonic-Tone System, giving
breath-taking sound, true
tonal fidelity

Priced realistically to meet
every budget

Whatever they're looking for in television *Capehart has it!* Save time—steer them to the finest instrument of all—first. A short demonstration of its glorious sound... its superb, clear, sharp picture... a quick examination of its fine cabinet work... all at prices that are unbelievably reasonable... will win them fast. So promote Capehart for plush sales... quick profits.

New CX-33 Chassis

Produces sharpest, clearest, steadiest picture yet attained. Establishes new standards of television performance. Gives new service-free operation.



The CAPEHART New Englander
Distinctive French Provincial styling in a cabinet of cherry with fruit-wood finish. A Lee Stone design. Rectangular tube for "full-scale" picture. World-famous CAPEHART Symphonic-Tone System synchronized with clear, sharp, steady pictures.

AN **IT&T**
ASSOCIATE

CAPEHART-FARNSWORTH CORPORATION, Fort Wayne 1, Indiana

An Associate of International Telephone and Telegraph Corporation

Make Sure of Your Profits

ON TV SERVICE CONTRACTS

with a Standard Register System

You know the *bazards* in television sales. Unknown *costs*, in installation and service. What *does* installation cost? What sets require *too many* service calls? What kind of *warranty* is profitable, for each kind of set? Wrong answers to any of these and many other questions can easily destroy the profits on one *or many* television sales.

But you can *know* the facts, *cut* your costs and *protect* your profits, despite the constantly changing conditions in television.

Standard Register has developed special forms and practical systems that simplify the problem. Complete, *accurate registered records* of every transaction . . . sale, delivery, installation, service, collection . . . can give you positive control of your business. As proved by Bedford Radio Sales and Service, of Brooklyn, N. Y., and hundreds of other dealers.

Mail Coupon for Practical System Ideas

Let us give you the facts about the record systems that leading dealers have found take the headaches out of television. There's no obligation. Mail coupon, today.

Standard Registers and Forms provide . . .

- Fast, easy, accurate record writing.
- Useful copies for all purposes.
- Security from loss or alteration: consecutive numbering, locked-in copy.

Standard Register

Kant-Slip, the original marginally punched

Continuous Forms

Simplify record writing

FORM-FLOW REGISTERS • THE REGISTRATOR PLATEN

Offices in all principal cities

THE STANDARD REGISTER COMPANY
1302 Campbell Street, Dayton 1, Ohio

Associated Companies: Sunset McKee Co., Oakland 6, California. R. L. Crain Limited, Ottawa, Ont. W. H. Smith & Son, Ltd., London, England.

MAIL THIS TODAY!

The Standard Register Company
1302 Campbell Street, Dayton 1, Ohio

I would like to see Standard Register Systems for Television—without obligation on my part.

Name _____

Company _____

Street Address _____

City _____ Zone _____ State _____

**NOW...tell the TRUTH about record players...
you'll sell...sell...sell radio-phonographs!**



AMAZING NEW



**COBRA-MATIC . . . THE
FIRST AND ONLY TRULY
ALL-SPEED RECORD
PLAYER IN THE WORLD**

THE ONLY RECORD PLAYER WITH PITCH *and* TEMPO CONTROL

It's here . . . and it's here *right now* . . . the greatest profit-building opportunity any radio-phonograph dealer has ever seen. It's yours in the new Zenith Cobra-Matic that stands alone as a truly All-Speed (10 to 85 r.p.m.) record player. Remember, most "all-speed" record players actually play only 3 speeds . . . 33 $\frac{1}{3}$, 45 and 78 r.p.m. But, you can prove to yourself and customers that the new Zenith Cobra-Matic plays not only the present three speeds (33 $\frac{1}{3}$, 45 and 78 r.p.m.) but ALSO all intermediate speeds including the 16 r.p.m. speed that's already on the way.

You can demonstrate how the exciting new Cobra-Matic allows your customers to select the *exact speed*

that gives their recordings the perfection of pitch and tempo their ear demands. The new Zenith Cobra-Matic plays every record . . . even cherished old records—Gold Seals, Victors, Brunswicks that were recorded at different speeds.

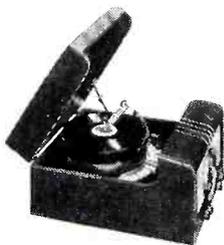
Best of all, when you demonstrate these exciting new Cobra-Matic features, you're selling an entirely new kind of automatic record player, a phonograph that can't ever become obsolete. Over 3000 speeds from 10 to 85 r.p.m. No wonder music experts acclaim the Cobra-Matic.

Don't delay. Be **FIRST** in your area to start spreading the news. You'll find out it's the smartest move ever made to pack your store with prospects!

ONLY ZENITH HAS "Cobra-Matic"—ANOTHER "ZENITH FIRST!"



New Zenith "Thackeray" TV-Radio-Phonograph Console
238 sq. in. "Reflection-Proof" screen. "Cobra-Matic" record player, Super-Sensitive FM, Long-Distance AM. Stunning Period cabinet of Mahogany veneers and selected hardwoods. Model H3477R.



New Zenith "Carleton" Table Radio-Phonograph
The "Carleton" is fashioned in natural-grained Pyroxylin covering. Has Zenith's famous long-distance AM reception, and sensational "Cobra-Matic" record changer. Model H661R.

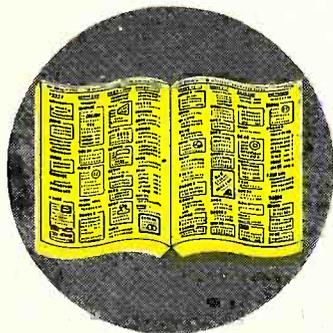
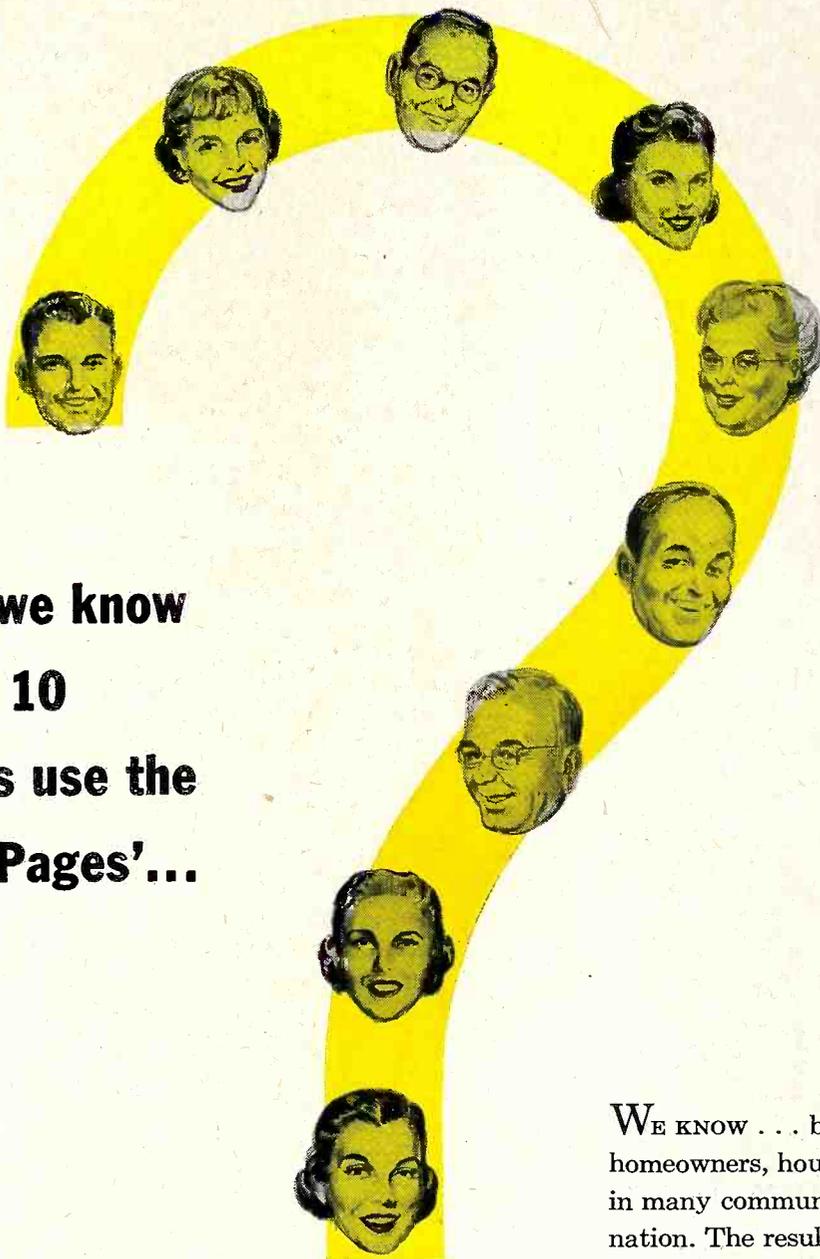
Zenith is No. 1 for 51!



Zenith Radio Corporation, Chicago 39, Illinois • Over 30 Years of "Know How" in Radionics Exclusively • Also Makers of America's Finest Hearing Aids

RADIO & TELEVISION RETAILING • February, 1951

**How do we know
9 out of 10
shoppers use the
'Yellow Pages'...**



WE KNOW . . . because we check with homeowners, housewives and businessmen in many communities throughout the nation. The results . . . 9 out of 10 tell us "Yes, I use the 'yellow pages,' to find where to buy the products and services I need."

For evidence that the 'yellow pages' are the "shopping center" in your community, glance through your local Classified Telephone Directory. Practically every type of business is advertised in them. Radio and television dealers have been using the 'yellow pages' year after year to remind old customers, to bring in new ones, to reach newcomers in town and transients.

Call your local telephone business office and ask for the Classified Directory representative, who will explain how the 'yellow pages' will help direct more business to you.



No other receiver can match the thrilling realism of

24 inch television

by **STROMBERG-CARLSON**

It's the perfect way to enjoy television. Huge 24-inch tube gives pictures as large as a newspaper page—356 square inches of the clearest, brightest television yet . . . Special Stromberg-Carlson circuits permit operation at full-brilliance without distortion . . . Exciting tone with 12-inch concert-type speaker and famous Stromberg-Carlson audio system . . . Compact, graceful cabinet in mahogany veneers, completely hand-rubbed. Dimensions, 46" high, 38" wide, 25" deep.



The RADCLIFFE

"There is nothing finer than a STROMBERG-CARLSON"®

Stromberg-Carlson Company, Rochester 3, N. Y.—In Canada, Stromberg-Carlson Co., Ltd., Toronto

RADIO & TELEVISION RETAILING

Including "RADIO & TELEVISION,"
"RADIO & TELEVISION TODAY,"
and "ELECTRICAL RETAILING"

O. H. CALDWELL, Editorial Director

★

M. CLEMENTS, Publisher

TV SETS IN USE REACHED 11,600,000 as of February 1, with retail activity continuing strong around the nation, even after Christmas. Almost 25% of the total families in the U.S. now own a TV set, with saturation in many TV areas already over 50%.

FEWER MODELS IN TV, RADIO, APPLIANCE LINES the order of the day, with manufacturers carefully weeding out the slow-movers, of which there were just too many in 1950 in some of the makes. Some of the slow-movers mentioned just didn't sell well anywhere; still others sold in some localities, but died in others. Smart manufacturers listen with attentive ears to the expert criticism by dealers and distributors.

APPLIANCE MANUFACTURERS WORKING FEVERISHLY to find acceptable substitutes for scarce materials, pledging the while that products will not be released to consumers unless such items meet high quality standards. "Austerity" models and greatly shortened lines expected by the middle of this year.

ONE OF THE LARGEST ANNOUNCING SYSTEMS ever built is in New York's 24-million-dollar bus terminal. Sound Systems, Inc., of New York City, engineered and designed the system which has 1300 watts of possible output capacity, and utilizes 195 speakers of five varieties. Stromberg-Carlson equipment is used exclusively.

TAPE AND WIRE RECORDERS FOR HOME USE come under terms of Regulation W, the Federal Reserve Board has ruled. Exempted from W are units purchased by commercial organizations, such as radio and TV stations, factories, etc.

"CLOSED CIRCUIT TV, WE BELIEVE, looms as an important new industrial tool—for sales meetings, stockholder get-togethers, plant training courses, new product demonstrations, etc."—Commander Mortimer W. Loewi, director, Du Mont Television Network.

A CRITICAL YEAR FOR THE TV INDUSTRY, accompanied by parts shortages, government production controls, and spiralling prices forecast by Leonard Ashbach, president of Majestic Radio & Television, Div. of Wilcox-Gay Corp.

HOW DEALERS VIEW THE FIRST QUARTER of 1951. The National Association of Music Merchants made a spot survey late last year among some of its members. One of the questions asked was an opinion as to the outlook for the first three months of 1951. Results: 33% said prospects were bright; 42% said prospects were about the same as 1949; 25% said the prospects were cloudy. Of the group, all looked for good demand, but those in doubt named supply, or material shortages as the big "if".

AS MANY INDUSTRY LEADERS POINT OUT, TV and radio will be of the utmost importance in keeping the home front posted on defense information. Service departments set up to take good care of all the sets in their respective communities will be performing a patriotic duty.

"THE PRESERVATION OF A STRONG DOMESTIC ECONOMY is a most important factor that should not be overlooked in the determination of a military budget. Just as in World War II when we were the arsenal of democracy, I believe that victory in any future crisis will depend in large part on the productivity of our economy."—Thomas B. McCabe, chairman, Board of Governors of the Federal Reserve System.



75% DISCOUNT ON TV SETS! Salesmen in a big New York store pinned a bargaining customer down as to how much the latter thought the dealer got off on a television receiver. "Oh, about 75%," replied the would-be purchaser who stated that she'd been offered as much as 40% off elsewhere. "If I told her we got but 28% off, she'd think we were the biggest liars in the whole world," said the salesman.

NEARLY 380,000 CONSUMERS WERE ADDED to Rural Electrification systems during 1950, bringing the total number of consumers to 3,420,000. An average of about 1,462 consumers were connected and 568 miles of line placed in working service each working day during the year.

What's Ahead!—in Radio,

SOME TRANSSHIPPING OF TV SETS going on as certain dealers who carried over quite large inventories after Christmas sell to other retailers in order to raise ready cash. "They're 'gold'," is the way one merchant described some receivers he recently purchased.

THE SAME CONSUMERS WHO PANIC-BOUGHT at the start of the Korean trouble, and who are now faced with almost certain shortages dead ahead, are buying calmly and slowly. However, dealers who have maintained aggressive selling methods, are not finding sales too hard to make.

MANY RETAILERS LOOK FOR A MANPOWER shortage of acute character by mid-summer. However, during the recent slow-down in sales, a number of large outlets laid off many salesmen and servicers. Small organizations, however, are for the most part, keeping their personnel set-ups at or above early 1950 levels.

"SET MANUFACTURERS IN THE TELEVISION-RADIO industry can produce nearly 500 per cent more units now than at the start of World War II."—Paul V. Galvin, president, Motorola, Inc.

"A PARADOX OF A CRITICAL MANPOWER SITUATION is that it increases the need for appliances as more women take employment outside the home. At the same time it makes it more difficult to keep production high. Whichever direction events take, there is no doubt that extensive uses of alternative materials now being used will be developed. Also, it is expected that much of the shiny trim on appliances will be expendable."—James J. Nance, president, Hotpoint, Inc.

CBS UNVEILED A NEW COLOR TV RECEIVER, showing a picture on a 17-inch tube. Employing a color drum, the unit was in a console only 34 inches high and 27 inches wide. No magnifying lens was used.

FINDING THAT NUMBERS OF CUSTOMERS DEMANDED TV sets in "original cartons", one dealer gets a signed release from all purchasers who buy on a cash and carry basis, and insist on receivers in factory packages. In this way he has eliminated losses formerly experienced through claims of damaged cabinets, etc. This merchant operates in a high-signal area where built-in and indoor antennas work satisfactorily.

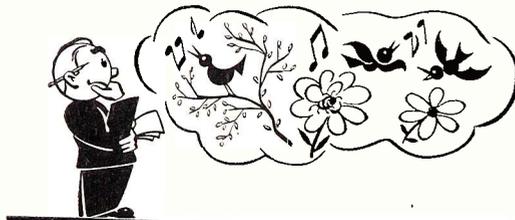
"I CAN ASSURE BOTH THE DISTRIBUTOR AND RETAIL TRADE and the public that the radio-television industry will do its utmost to produce as much civilian goods as possible, including needed replacement parts, throughout this national emergency."—Robert C. Sprague, president Radio-Television Manufacturers Assn.

WHAT'S AHEAD BY MID-SUMMER puzzles many; sees widely differing opinions. Will there be black markets, or surpluses? . . . Unemployment, or manpower shortages? . . . Relaxed regulations or stiffened ones? . . . Increased buying power, or decreased spending? These and many other questions stymie all levels of the industry as answers are sought in order to plan for the future. Some dealers say they are buying from hand-to-mouth now, and will continue to do so, but others feel that it's wise to stock up heavily on well-chosen products.

NEW RTMA PREXY is expected to be Glen McDaniel who has been RCA vice-president in charge of Washington matters. New paid president is to be elected at Chicago meeting Feb. 13, enabling Robert C. Sprague to drop these heavy association activities (in which he has done an outstanding job), while continuing top supervision as chairman of the RTMA board.

THE GREATEST SERVICE THE RETAILER CAN give his customers is to provide the merchandise they want when they want it. He must learn to subordinate his own merchandise likes and dislikes to those of his customers. He must learn what his customers will and will not buy—From U. S. Department of Commerce bulletin (Small Business Aids).

AFTER 19½ YEARS OF RESEARCH and the expenditure of millions of dollars, Zenith Radio Corporation launched its limited commercial test of Phonovision on Jan. 1. 300 Chicago families are participating in the test at a home admission fee for each movie (without advertising) ordered and seen. Top-flight feature films are being offered.



PLAN THESE 5 STEPS FOR SPRING: 1. Keep on selling—civilian production will be heavy during the first quarter of '51. 2. Keep store displays attractive. 3. Gear your service department to increased volume on the way. 4. Buy carefully. Consult suppliers frequently. 5. Try to keep personnel set-up intact.

SOME DEALERS WHO STOPPED OUTDOOR SELLING some time ago have resumed the practice. In TV areas, straight commission men will work hard selling sets for firms having home trial offers. Firms doing the best jobs with outside men seem to be the ones who can process the requests for home trials the fastest. Once the customer has decided to try out a set he is impatient to get it into the house, and will cancel the order, and place it with another firm if delayed too long. Usual procedure is to get customer to sign a conditional bill of sale, then deliver set after customer's credit has been okayed.

Appliances, Records and Television

EARLY IN 1951, RECEIVING TUBE SITUATION improved. . . . New TV and electrical appliance models launched as production continued heavy with no one willing to guess when the real pinch would be felt. . . . Easy sales a thing of the past as dealers work hard to move their fairly heavy inventories. . . . No indication of hoarding of finished products in spite of widespread predictions of acute shortages by mid-summer so far as many producers are concerned. . . . Price controls on the way. . . . Upped taxes will increase resistance to buying.

"TREMENDOUS DEMANDS ON THE ELECTRONIC INDUSTRY for the production of defense items may very well mean a complete shut-off of the manufacturing of television sets by next summer."—*H. A. Bell, president, Packard-Bell Corp.*

MARKET FOR RECORDS AMONG YOUNG PEOPLE is underscoring by recent survey made by "Boy's Life" magazine, 94% of whose readers fall in the 10 to 17 age bracket. 61% of "Boy's Life" families currently own phonographs or record players, 56.6% of boys buy records *personally* (averaging about 2½ records per month) and in addition, 99% of families purchase records requested by the boy.

HOW CAN SOME OF THE BIG OUTFITS cut prices 30% and more to customers on receivers carrying standard discounts of about 28%, and still stay in business and show profits? Preferential longer discounts, some up to 50%, and special deals the answer provided by most small dealers who have felt such competition most keenly in the past few months.

TV SET SATURATION reaching significant proportions already, with ten cities registering over 50%. This means that in these cities, at least one out of every two families has a TV set. The ten cities follow:

Lancaster, Pa.	85%
Milwaukee	65%
San Diego	59½%
Minn.-St. Paul	56½%
Los Angeles	56%
Cincinnati	54%
New York	54%
Philadelphia	54%
Cleveland	53½%
Boston	51½%

Cities of Buffalo, Columbus, Schenectady, Chicago, St. Louis, Phoenix and Detroit are all over 45%.

RECORD BUSINESS YEAR IN 1950 was reported by the U.S. Dept. of Commerce. According to the department, economic activity reached the wartime peak (of World War II) at the end of 1950. Total output, or gross national production approximated \$280 billion for the year—about 9% above 1949. While higher prices accounted for about one-fifth of the rise in dollar value, the physical volume of output was substantially higher than any year other than the two peak war years.

THE KOREAN CRISIS HAS CREATED URGENT DEMANDS FOR NEW WORKERS in eight occupational fields, the Veterans Administration announced in a report to its field workers. Included in the eight categories are electronic technicians.

TV SECOND LARGEST CONSUMER OF MAHOGANY, according to the Mahogany Association, which finds the radio's lusty infant second only to the furniture industry as a market for its product. Due to government restrictions on materials and credit, the Association expects a slackening in home building (which correlates directly with demand for furniture) and TV production this year, and therefore "We do not look for any runaway market in either mahogany lumber or veneer" this year, the Association states.

PLAN ORIGINATED BY W. L. DUNN, vice-president of Belmont Radio Corp., makers of Raytheon TV, would make war-time producers of television distributors and dealers. More about this project appears elsewhere in this issue.



WHEN BIG U. S. ARMY COMMENCES filling up the training centers, watch for a heavy demand for TV sets and phono records to be used in recreation centers of armed forces. Also, there will be a rush to buy portable radios by men going into the various services.

"TRAFFIC COP" MIRRORS that stop and send back only one color, while passing through all others, are being produced by Westinghouse scientists for experimental color TV sets. The mirrors "see" and reflect either red, green, or blue—depending on the thickness of ultra-thin metallic films deposited on clear glass.

FUTURE EVENTS OF INTEREST TO READERS

Feb. 5-8: Automobile Accessories Show, Grand Central Palace, New York, N. Y.

Feb. 5-9: Western Winter Market, Merchandise Mart, San Francisco, Calif.

Mar. 19-22: IRE Annual Convention,

Hotel Waldorf-Astoria and Grand Central Palace, N. Y.

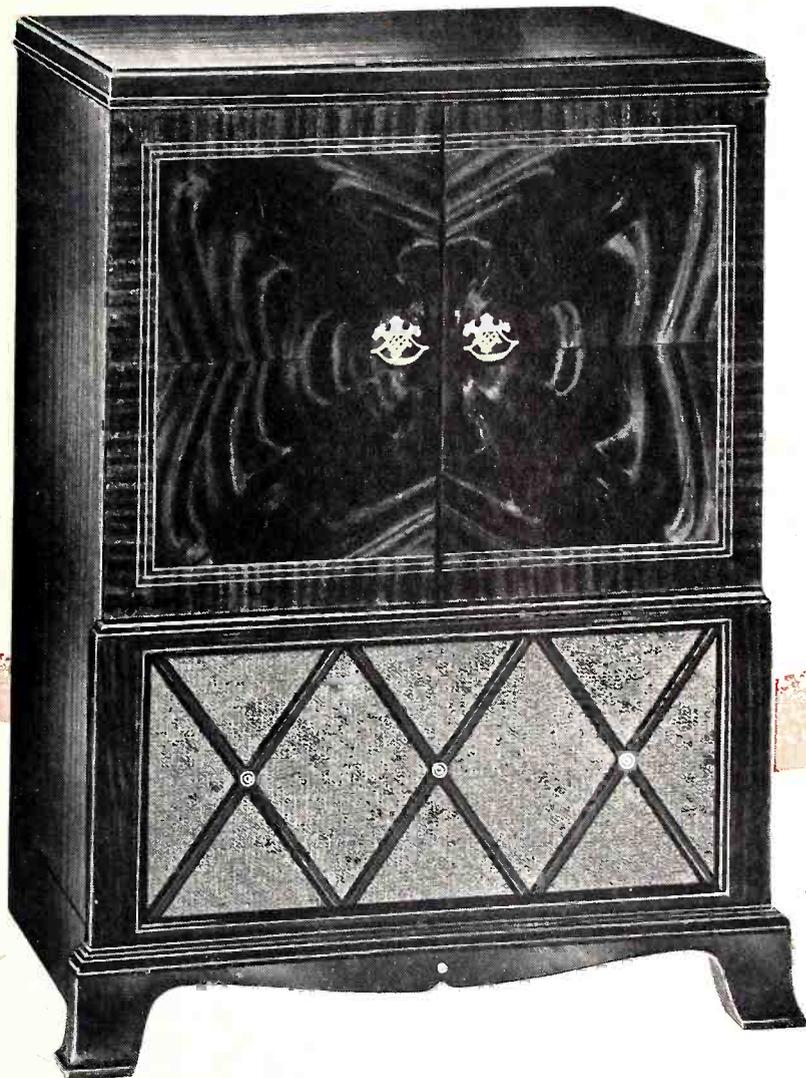
May 21-23: 1951 Parts Distributors Conference and Show, Stevens Hotel, Chicago, Ill.

May 21-25: N.A.E.D. 43rd Annual Convention, Hotels Chelsea and

Ambassador, Atlantic City, N. J.
Aug. 22-24: Pacific Electronic Exhibit, Civic Auditorium, San Francisco, Calif.

Sept. 11-13: Radio Parts Distributors' Convention (NEDA), Cleveland Auditorium, Cleveland, Ohio.

BIGGEST SELLER BY FAR-



ONLY RCA VICTOR HAS
THE "GOLDEN THROAT"

*For fast sales . . .
Show them the New Fairfield first!*

Phono-jack now with control *on front of cabinet* makes it easy to tie in
the "Victrola" 45 record changer attachment for bigger sales.

ONLY RCA VICTOR MAKES THE "VICTROLA"

"Victrola"—T. M. Reg. U.S. Pat. Off.



RCA VICTOR *MILLION PROOF*

17-inch New Fairfield

Better Looking in Every Way

- New Powerful RCA Victor Television Pick-up
- New Beautiful RCA Victor Cabinetry
- Famous "Golden Throat" Tone System

Million Proof Quality

When customers see the 17-inch RCA Victor New Fairfield, they go sales wild. The New Fairfield is loaded with new, improved Million Proof features. It's easy to see why RCA Victor is America's Favorite . . . more RCA Victor television sets sold than any other make. Remember, RCA Victor is Million Proof . . . proven in well over a million homes. And it's value like the New Fairfield that will keep RCA Victor first in the minds of your customers. Display the RCA Victor New Fairfield in your windows and on your floors . . . it's a sensational traffic item.



For fast sales . . . Show them the New Fairfield first!



RCA VICTOR

DIVISION OF RADIO CORPORATION OF AMERICA

RCA VICTOR—World Leader in Radio . . . First in Recorded Music . . . First in Television

Let Them See

What



Equal Promotion and "Display" of All Departments Balances a Business—Brings in More Revenue

• For a number of years, Mrs. Smith had depended on Dealer Jones to keep her radios and appliances in good working order. One day she brought an iron in to be repaired, and while waiting she wandered about the store, finally discovering a couple of TV sets in a corner. The receivers were hidden by a large island display. "I didn't know you sold television, Mr. Jones," she said. "We just bought one the other day. We'd have gotten it from you if we had known that you carried them."

In another store, Mrs. Harris came in to get an electric range from her favorite dealer, from whom she'd bought many products. After Mrs. Harris had decided upon a model, the Favorite Dealer explained that a heavy-duty electric service would have to be installed, and commenced quoting figures. "Why, we had such service installed two weeks ago," explained Mrs. Harris, "and at the same time we put in a number of new outlets, and had all new electrical work

done in the house." And Mrs. Harris was talking to a dealer who was also an *electrical contractor!* In her mind she thought of Mr. Favorite Dealer as a merchandiser, and nothing else.

Mrs. Harrison bought a dishwasher in a nearby city because she'd never seen such appliance in the local store she patronized. The local dealer had sold a few dishwashers, but didn't stock any floor samples, nor did he display any advertising matter calling attention to the fact that he sold dishwashers. It was up to the dealer to impress the customer that such product was obtainable from him. Certainly, the customer couldn't be blamed for following the lines of least resistance. Even if this merchant did not want to stock dishwashers he would have had a good chance of selling Mrs. Harrison from a circular because this customer had confidence in him.

Don't Hide Small Items

Many dealers "hide" small demand items, such as electric light bulbs, cordsets, plugs, fuses and other products with the result that numbers of their customers obtain them in nearby five-and-dime stores and other outlets.

Incidents similar to the foregoing are happening every day, with many a dealer hearing the familiar, "I-didn't-know-you-sold-it (or serviced-it)" cry. *Business they could have had is lost because they are not letting customers know what they sell and what they service.*

In addition to making more money, merchants who promote all departments equally are bringing a greater degree of convenience to their customers. The "Four-Way" dealer who sells radio, TV products; electrical appliances, phono records and service makes it easy for the customer to buy allied merchandise under one roof, but to do a good job he must promote each segment of his business.

It isn't safe to assume that the customer *knows* all about all of the sales and servicing activities carried out by the dealership.

The diversified dealer needs to keep information concerning such diversification before the eyes of all customers

—all store visitors. This technique is equally important to stores of all sizes. The store with a beautiful show-room, for instance, which gives no inkling of the fact that it maintains a large, efficient service department in the basement, may be losing a lot of service business it could well handle.

The small dealer whose capital will not permit him to carry large inventories frequently sells himself "out" of certain products, delivering them directly from the floor. It often happens that a customer comes in at a time when there are no floor samples of an item he has in mind to buy. In many cases the customer will ask the retailer whether he carries so-and-so, but in many other instances he will assume that the product is not in the line carried by this particular merchant, and will leave to visit another store where a display had previously rung a bell.

It must be remembered that customers will not go out of their way to familiarize themselves with all of the products the dealer offers for sale, and this in spite of the fact that it is quite easy for the dealer to *think* they do possess such knowledge because the merchandise is so familiar to him.

The use of manufacturer-supplied counter and wall signs helps to sell all of the products stocked or available to customers. The necessity for

EVERYTHING FOR THE HOME

We Sell

- Radios • Television Sets
- Refrigerators • Freezers
- Complete Electric Kitchens
- Complete Home Laundry Equipment
- Kitchen and Desk Fans
- Vacuum Cleaners (All Types)
- Electric Ranges • Cabinets
- Room Air Conditioners • Fans
- Toasters • Sandwich Grills
- Wafflemakers • Hot Plates
- Lamps • Lighting Fixtures

Drop in and see our big selection or phone if you'd like one of our salesmen to call.

JONES RADIO & APPLIANCE CO.

Main St. Hometown

Complete Service to the Home

WE REPAIR

- Radios • Television Sets
- Refrigerators • Freezers
- Washers • Ironers • Irons
- Vacuum Cleaners • Clocks
- Toasters • Coffeemakers

All Makes

Call Main 4367 and we'll call and give estimate

Jones Radio & Appliance Co.
Main St. Hometown

Speedy, Dependable Service
Since 1925

Shown above and at left are examples of two small attention-getting ads. They can be used in newspapers, classified directories or on the sign mentioned in this article.

You Sell—What You Service

Get Your Share of Sales

- Don't **assume** that customers know all of the lines you handle
- Don't **assume** that customers know all of the products you repair
- When you "sell yourself out of" merchandise
replace with display material
- If your service department is presentable,
show it to all your customers

using this advertising material for all it's worth is only too apparent. A big food-freezer floor sign can temporarily take the place of the product itself.

The arrangement of the merchandise is vitally important in showing off everything to the customer. Many dealers have discovered that products they once considered to be slow-movers sold well when taken out of obscure nooks and corners to be properly displayed and exploited.

Lay Out Displays

One of the best ways to acquaint the customer with the merchandise is to lay out displays so that all products are exposed to view, and in this connection most merchants like to group kindred products together rather than scattering them throughout the store. This is because today's customer demands *selection*, and *buys by comparison*, price and feature-wise. For example, a woman coming into a store to look at an electric iron likes to "heft" a number of makes and models, and she will speed up her decision if they are all in one place. On the other hand, she will be confused if she is led from place to place to view the products. Invariably, in the latter instance, the dealer will have to end up grouping all of the irons in one place in order to make a sale.

Another good way to tell the customer what you sell and what you service is via attractively lettered signs. Though this idea isn't new, it is certainly effective as numbers of merchants will testify. Such signs should be placed in prominent positions in the store, and can be used to good advantage in the show-windows.

For the small store, where space is at a premium, as well as for the dealer who can't stock enough floor samples, signs will be very helpful. Be sure that the lettering on the signs is large enough, and that the signs are placed in strategic positions. Information thus placed before the cus-

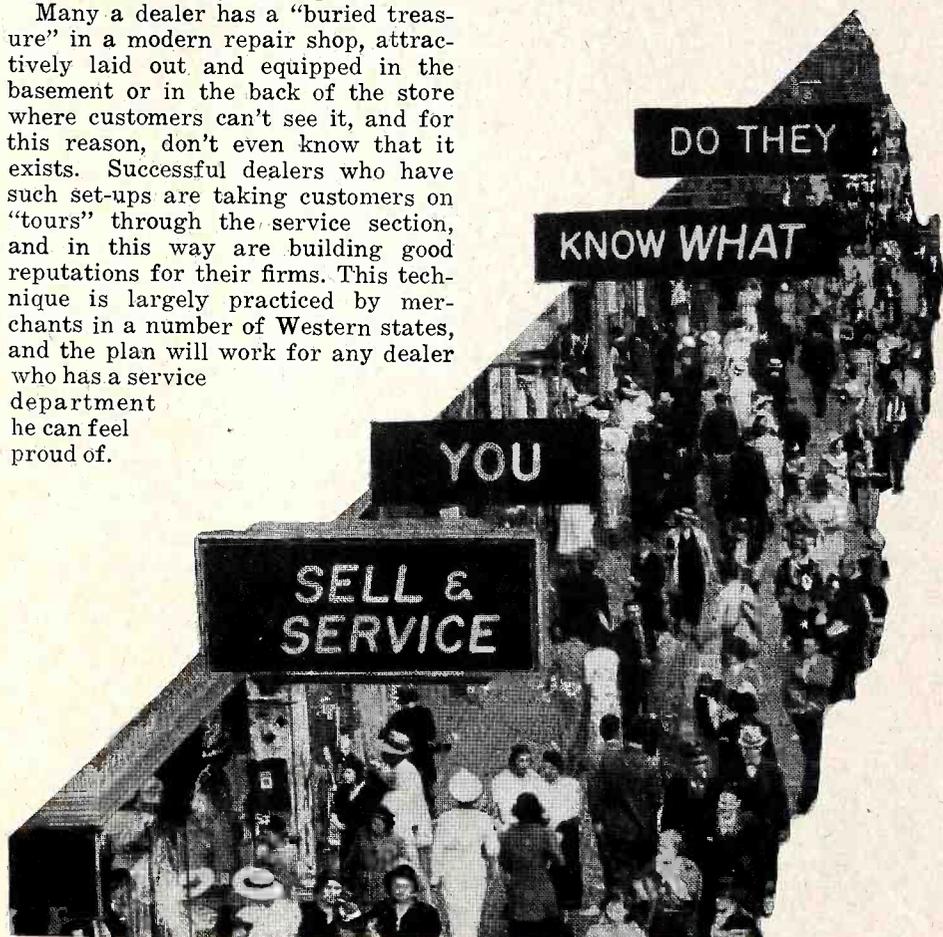
tomers' eyes will often *suggest* some item needed in the home, or some repair service that's necessary.

For the dealer who wants to build up his service volume there are a number of methods at his disposal. In many cases the service department is "out front", where it can be seen by every customer. This is an excellent way to advertise, but physical limitations in many establishments make it impossible to show any part of this section to the store visitor since it must be maintained on another floor. In such cases, the sign listing products serviced will help, as will large signs over the door leading to the section, lettered "Service Department."

Many a dealer has a "buried treasure" in a modern repair shop, attractively laid out and equipped in the basement or in the back of the store where customers can't see it, and for this reason, don't even know that it exists. Successful dealers who have such set-ups are taking customers on "tours" through the service section, and in this way are building good reputations for their firms. This technique is largely practiced by merchants in a number of Western states, and the plan will work for any dealer who has a service department he can feel proud of.

Still another method of promoting all of the products one carries is via newspaper advertising and by direct-mail. Now and then, it's a good idea to run a list of products sold, capitalizing on the idea used by so many at Christmas time in those "For Him," "For Her" ads. There's no reason why this angle can't be profitably used at any time of the year. Service can be advertised much the same way. A sample ad: "Did You Know That We Repair Radios, Television Sets, Phonographs, Washing Machines, Refrigerators, Toasters, Irons, Sewing Machines? Well lots of people here in Hometown do know it, and they'll tell you that we know our business, and are prompt, efficient and speedy. Give us a ring, and we'll call at your home."

In the final analysis, it doesn't pay to take any chances when it comes to trying to familiarize customers with all departments of one's business. The dealer who does all he can to put his whole store operation on public view, and who backs up this physical advertising with sales talks, telling each customer about the many things he has to offer to make home life easier and happier, will keep a lot of that valuable business under one roof—his own.



Direct Results from

What to Send—What to Say—How to Budget—

• When efficiently handled, direct-mail advertising can be a profitable operation for any dealer. Consistent, well-planned campaigns, using the right kind of copy and up-to-date lists will bring good results in any locality. Conversely, hit-and-miss mailings seldom produce profits for the merchant.

The master list, which is the source of names to be used in direct-mail advertising must be kept up to date. There are two reasons for this: 1. A lot of money is thrown away when there are too many deadheads in the list, and 2, when first class mail is employed, certain customers may be offended when they receive forwarded letters from a dealer, since they will feel that he should know their new addresses. Therefore, the need for frequent revision and review of mailing lists is obviously important.

In planning an active mail campaign, the merchant's first step, is that of making sure that his list is timely, (see article in December, 1950 issue, "New Business From Old Customers", for tips on building up a card file of prospects). Following steps should include: 1. Obtaining facilities for printing or mimeographing. 2. Deciding on frequency of mailings of "regular" pieces. (Special mailings, such as announcing arrival of new merchandise, in-store functions, etc., will be handled as they come up). 3. Planning the kind of pieces to be mailed, postal cards, letters, circulars, etc. 4. Budgeting the expense of direct-mail activities, prorated along with other forms of advertising—newspapers, telephone directories, radio time, etc. 5. Determination to send out nothing but "good" copy—messages designed to pull business to the store and create additional customer good-will.

Following are a few tips on the five foregoing suggestions: *Facilities for printing and mimeographing* include such things as making contact with a good printer and perhaps the purchasing of duplicating equipment for handling form letters or postal cards. There are a number of duplicating machines on the market, and

certain efficient models which are inexpensively priced, are capable of reproducing original illustrations as well as text. While the quality of work turned out by the low-priced unit isn't the best it is suitable, nonetheless, for "flash" messages on cards or letters, and for a variety of other purposes.

Frequency of mailing is governed by limitations of the budget as well as by the availability of clerical help. In order to do a good job in direct-mail advertising, pieces should be sent out at frequent intervals so that customers and prospects will keep the store's name in mind, and so that they will be offered specific products often enough to provide the chance that the mailing piece will one day catch them in a buying mood. Frequent mailing of pieces offering repair services pays, particularly when products served are listed, because they also may come into the home right at the psychological moment when some unit breaks down. Many leading dealers agree that once a month should be an absolute minimum for sending out a regular mailing to the store's entire list.

Planning the kind of pieces to be mailed requires considerable thought

on the part of the dealer. One of the best ways to approach this phase of direct-mail advertising is to make up a schedule in advance. Such technique will permit the merchant to get out "seasonal" pieces on time, and will make it easy for him to apportion the expense over a year's time. A certain amount should be set aside for "special" announcements which cannot be calculated at the time the schedule is drawn up. Kinds of direct-mail pieces include *personal letters, form letters, pre-canvassing announcements, manufacturer-supplied folders, etc., postal cards, circulars, folders, etc., prepared by dealer, invitations to functions in store, souvenirs, such as blotters, calendars, dealer newsletters or "news-papers", reprints of ads.*

How Much to Spend

Budgeting the expense is an operation which varies greatly in stores throughout the nation. Some dealers spend major parts of their budgets on one medium, doing so because they have found from actual experience that this practice pays them. Some go in heavily for newspaper space, while others spend the largest sums for ads in telephone directories, for direct-mail or for radio time. However, since this article is concerned only with direct-mail promotion, let us assume that you are the sort of dealer who uses three mediums: newspapers, direct-mail and classified directories. Under such set-up several very successful retailers have apportioned expenditures as follows:

Direct-mail—40%

Newspapers—40%

Classified directories—20%

Finally, there are very few dealers who do not use direct-mail advertising. The competitive angle alone is enough to make any merchant realize that because customers are getting mail from other stores, he too must keep his firm name in front of the public in the same manner. But the chief reason for using this method of advertising should always be for the sales-bringing possibilities it offers.

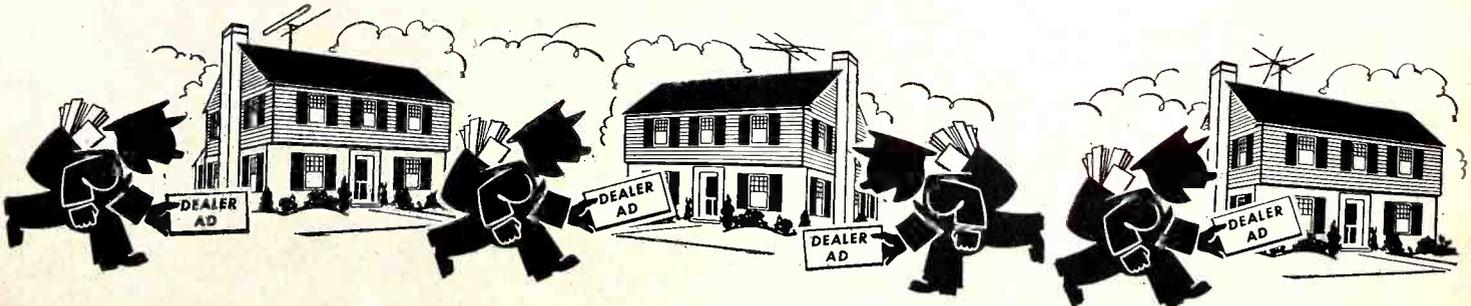
Send out nothing but "good copy."

Various Direct-Mail Pieces

Personal letters • Form letters
Manufacturers' folders • Post cards
Dealer newsletters and newspapers
Calendars, blotters • Invitations
"Way-pavers" for canvassers' calls

TAKE THESE STEPS—

1. Keep list up to date
2. Obtain facilities for printing, etc.
3. Mail as frequently as you can
4. Set up an advanced schedule of mailings
5. Budget expense along with other advertising
6. Determine to send out carefully prepared pieces



Direct-Mail Advertising

How Often to Use—Outlined in This Article

A great many dealers believe that they are not capable of writing pulling copy to be used as direct-mail pieces. Such dealers feel that the writing calls for some "arty" style they do not possess. Actually, there are very few merchants who can't write acceptable, effective copy, which calls for simple, direct statements. In this connection it should be borne in mind that it is easier to "over-write" copy than to "under-write" it. The "specialist's" services are usually required when the copy is to be *humorous* or *spectacular*—the latter for some special promotion such as a clearance sale, and even here, many a run-of-the-mill dealer can do a good job if he will try.

However, no matter who writes the copy, it should be thoughtfully prepared, and read over carefully from the *prospective recipient's viewpoint*. The mailing pieces should never be made up of thrown-together stuff, speeded through solely for the purpose of getting them in the mail and out of the way.

The physical aspects of the mailing pieces can vary according to the type of promotion being undertaken. Form letters, for instance, are of two types. One simulates the personal letter in that it is printed to look like a type-written product, and is sometimes signed personally by the sender. The mimeographed letter or card is "rougher" in appearance, but is generally acceptable under most conditions.

The Personal Letter

A word here about the personal letter, written "to order" on the dealer's typewriter. Such mailing pieces require a lot of time, but are used with phenomenal success by numbers of dealers and salesmen. Of course, such letters must be connected with sales of high-priced products or sets of products, such as make up the complete electric kitchen. The letters are used to "follow up" prospects in addition to being used to sow the seeds of large unit sales.

Getting back to the physical aspects of printed or duplicated mailing pieces, we find the humble postal card out in front as the cheapest method of all, yet highly effective when properly employed. Return postal cards will bring top results when they *offer* something to the recipient, such as a special service check-up on the TV set and antenna system; a liberal trade-in on a specific item, and so forth. Short messages of a general nature can keep the firm name in

front of the customer, and they can be used also to call attention to the fact that the dealer has just received a shipment of exciting new merchandise. Many dealers use postal cards to announce a house-to-house canvassing campaign, thus paving the way for the visit by the salesman.

Invitations to store demonstrations, cooking schools, and the like, work out well for many merchants. The two most effective of such invitations either simulate in appearance the ones usually sent out for social functions, or provide "admission tickets." Both are strong pullers since they accomplish several things, such as arousing the customer's curiosity, giving something for nothing, flattering the recipient, etc.

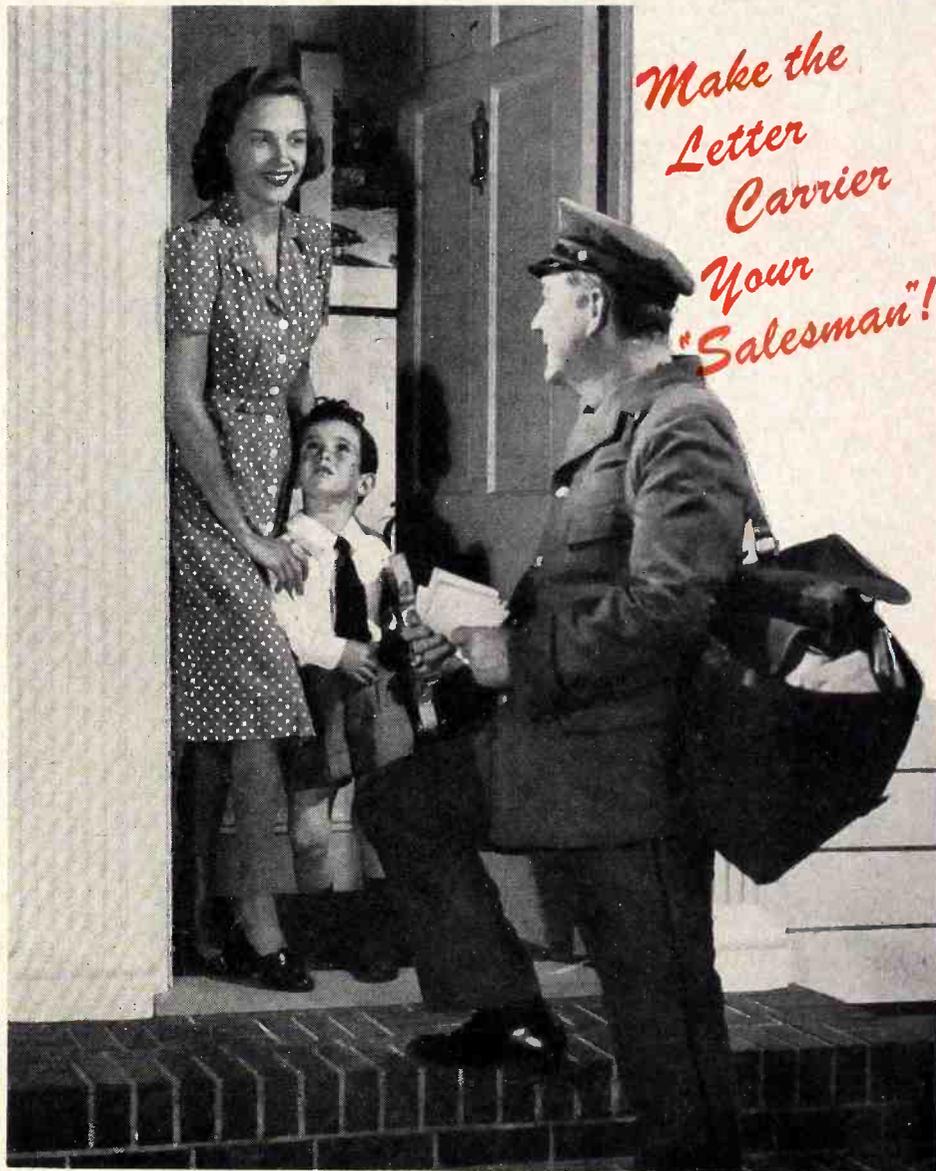
Many dealers claim that the "newsletter" or "newspaper" technique is a prime producer of results. The

"newsletter" can be a simple affair on the firm's stationery, listing, for instance, new products, or new services the firm offers, while the "newspaper", a more elaborate and more expensive affair, often comes to the customer as a shopping guide.

Manufacturers spend a lot of money on literature to be distributed through dealers to customers, and such attractively-prepared material should be used in all direct-mail campaigns, as stuffers with dealer-prepared pieces as well as enclosures in bills whenever sent out.

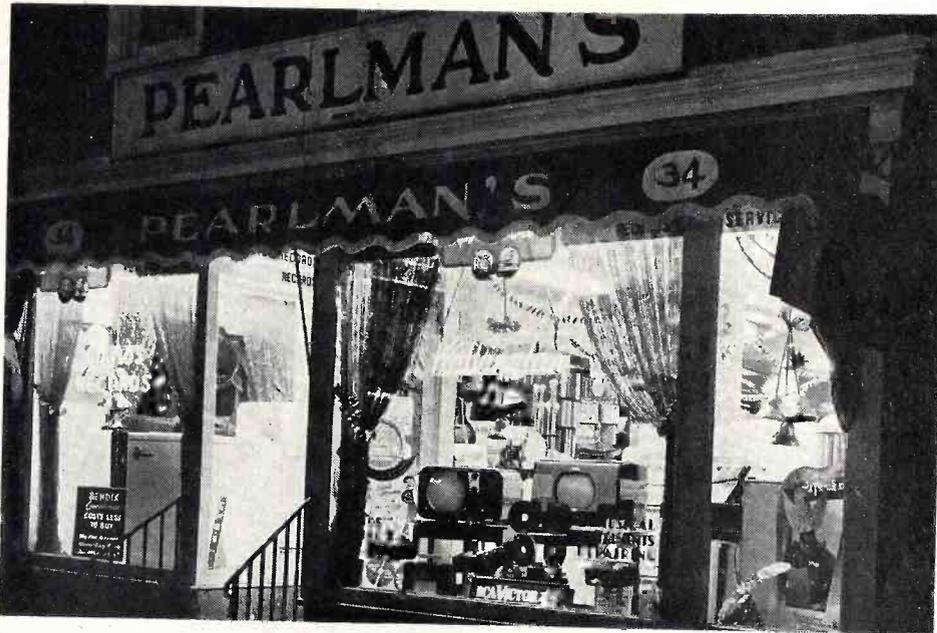
Calendars, blotters and other "souvenirs" pay their way, according to many retailers, who feel that such material creates good-will, and keeps the dealer's name before members of the family. Illustrations and copy on calendars and blotters should be

(Continued on page 100)



Diversification This Dealer's High Volume, Profit Formula

No Seasonal Sales Slow-Downs When Variety of Products Takes Up Slack



The show-windows in this store are not "glamorous"—they're functional. A large variety of products are shown at eye-level. The proprietor wants to show the passerby everything he sells.

• Louis Pearlman, 34 So. Main St., Doylestown, Pa., attributes the steady growth of his prosperous business to the diversified stock he handles, and he backs up this diversification with sound merchandising, display and advertising techniques.

The store sells television, radio, records, large and small electrical appliances, musical instruments and sheet music. Close to a quarter of a century ago which marks Pearlman's entry into radio, he was a musician, and was selling musical instruments. In time he added records and sheet music, radio, and later television, enlarging his store as business expanded.

Today, the store employs 7 people

and enjoys a large volume of business from sales and service throughout Bucks County.

The store does an outstanding job on all of its merchandise, and finds that the varied stock keeps volume on a level keel in spite of seasonal dips and other factors which often affect sales of certain products in the line.

In addition to taking part in a number of civic movements in the locality, including acting as a ticket agent for the straw-hat circuit of the summer theaters operating in this area, Pearlman does a lot of advertising. The store's advertising is well-planned, consistent and hard-hitting. Pearlman uses local newspapers, and radio station WBUX, (a daily 15-

minute broadcast) to reach the numerous towns and hamlets surrounding Doylestown, the county seat. The store believes in the efficacy of direct-mail because of the personalized appeal, and sends out 1,500 pieces each month, stressing products for sale as well as service facilities available to customers.

Pearlman has been very successful in running a weekly contest on football games, using a 2-column ad listing games scheduled, and running names and addresses of winners in following ads.

"Recently," said this Bucks County merchant, "we were advised that there was to be a reduction in cooperative advertising.

"That's not going to stop me from

To Get More Business, This Store—

Advertises consistently
in local newspapers

Uses 15-minute radio program
every day over local station

Sends out 1,500 direct-mail
pieces each month,
stressing sales and service

advertising," he declared. "I've spent too much in advertising my business, to stop because it isn't going to be on a cooperative basis for a while."

Some of this store's TV customers are big-wigs from the literary, artistic and theater world who have moved here from New York. They either have summer homes or week-end retreats. Since this section is in the TV fringe area so far as New York broadcasts are concerned, it takes a pretty good antenna system to get them their home town satisfactorily on their video screens. Pearlman's installation men have been successful in bringing good pictures to this class of customer.

The store goes all out in rendering efficient, fast service, and in keeping customers happy through giving them a little more than they expect. For instance, when a service call on a TV set comes in, the servicers set out in a jeep carrying a TV set, in addition to tools and test equipment. If the men are unable to make a repair at

(Continued on page 94)

Diversification prevents reduction of volume in the Pearlman store, Doylestown, Penna.



Emerson Television and Radio

presents **NEW 1951 VALUES**
FOR YOUR IMMEDIATE
PROFIT and PROMOTION

**Exclusive! Full Screen Focus
and Black Magic Contrast**

*The Greatest Selling Features
In The Industry Today!*



New 17-inch Rectangular Table Model 696. In fine matched grain mahogany cabinet. Only . . . \$299.95

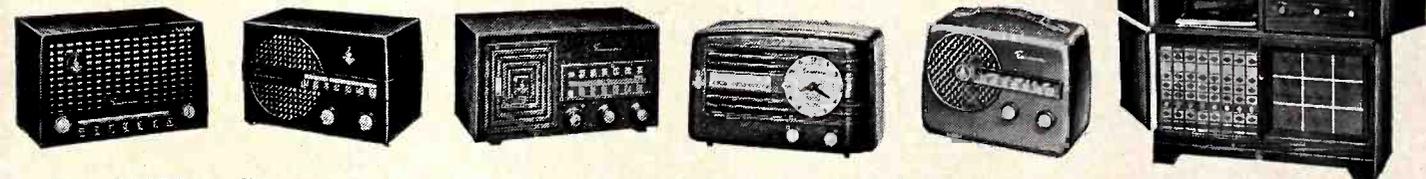


New 20-inch Rectangular screen in superb mahogany console. America's best buy in bigger than life-size television. Model 694, only . . . \$499.95



HEDY LAMARR introduces new Emerson models in Emerson's biggest advertising campaign. Featured is Model 687, 17-inch rectangular screen in magnificent mahogany console. America's best 17-inch buy at \$379.95

Every Five Seconds Someone Buys an **Emerson** Television or Radio



Super-Powered AC-DC Radio. Model 653, \$24.95 Value Leader! AC-DC Radio. Model 652, \$19.95 FM-AM Long Distance Radio. Model 659, \$59.95 Versatile Automatic Clock Radio. Model 671, \$34.95 3-Way Portable. Model 646, \$29.95 Less Batteries. FM-AM 3-speed Phonoradio. Model 679, \$199.95

All prices include excise tax and warranty. Prices Slightly Higher South and West. Emerson Radio and Phonograph Corporation, New York 11, N. Y.

New Radios, Phonos, TV Sets

This and following pages describing manufacturers' new merchandise are compiled by our editors. This information is presented as a news service to our readers entirely without any advertising consideration whatsoever.

RCA 1951 TV LINE

Featuring 14, 17 and 19-inch TV sets, the new line ranges from \$219.95 for a 14-inch table model to \$825 for a 19-inch console with AM-FM radio, 45 RPM phono, and combination 33 $\frac{1}{3}$ and 78 RPM phono. The "Winston", shown



here, features a new design in walnut or mahogany finish. Price is \$495. Also in the new line is the first RCA Victor Provincial set with a 19-inch tube (model 9T128), in a four door cabinet. Price on this model is also \$495. All straight TV models are equipped with phono jacks. Radio Corp. of America, RCA Victor Division, Front & Cooper Sts., Camden, N. J.—RADIO & TELEVISION RETAILING.

Starrett OPTICLEAR TV

The 1951 Starrett TV line includes the "Patrick Henry", 17" black rectangular tube open face console in mahogany; the "Peter Stuyvesant," 19" open console in mahogany (shown here); the "Washington Irving," 17" mahogany console with full length doors; the "James Madison," 19" mahogany console with full length doors; and the "James Bu-



chanan," 17" mahogany table model. Starrett Television Corp., 601 West 26th St., N.Y. 1, N.Y.—RADIO & TELEVISION RETAILING.

Admiral TV & RADIO

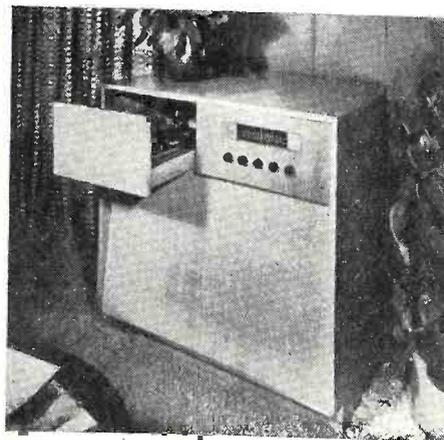
The newly announced Admiral line includes 35 TV models and 12 radios, with prices ranging from \$19.95 to \$895. Topping the TV line is the Tele-Bar model, with 21-inch tube, 3-speed phonograph, radio, and built-in bar. It is available in period mahogany, modern blond, and in a new shade of modern silver fox. 17 and 21-inch tube sizes predominate the TV line. Five of the new models are table models. One of these is a 14-inch set, the others 16 and 17-inch. Fifteen of the new models are consoles, fifteen are combinations. Admiral Corporation, 3800 Courtland St., Chicago, Ill.—RADIO & TELEVISION RETAILING.

Jewel RADIO LINE

Five table model radios, two portables, and one table radio-phono constitute the line. Models 955 (the Nugget), 956, and 960-U are superhets; model 920-A, the Wakemaster, is a clock-radio; model 5057-U, Wakemaster with electric appliance switch; the "All-ways", a 3-way portable designed to be used also as a table model; the model 5010 3-way portable; and the Jewelette, 3-speed, AM, radio-phono. Jewel Radio Corp., 10-40 45th Ave., Long Island City, N.Y.—RADIO & TELEVISION RETAILING.

V&V RADIO-PHONOS

Voice & Vision new radio-phonograph line includes series 1, with 12" Jensen speaker; series 2, with Jim Lansing Sig-



nature 15" speaker; and series 3, with Altec Lansing 15" Duplex speaker. All series include the Voice & Vision tuner and Webster-Chicago record changer. These 3-speed, FM-AM units are available in the cabinet shown here, in natural birch, bleached or dark mahogany, American walnut, bleached oak or custom finishes to special order. Voice & Vision, Inc., 314 N. Michigan Ave., Chicago 1, Ill.—RADIO & TELEVISION RETAILING.

Westinghouse TV LINE

Recently announced TV line by Westinghouse includes seven new receivers. They are three models and four consoles. Prices range from the Stratton, 20-inch mahogany full-door console at \$495, to the Dorset, 17-inch table model at \$259.95. Other sets are: the Andover, 17-inch table model at \$279.95; the Fen-



way, similar model in frosted oak, \$299.95; the Brentwood, 17-inch mahogany console, at \$369.95; the Shelton, 17-inch mahogany console shown here, at \$399.95, and the Warwick, similar model for \$425. Westinghouse Electric Corp., 1354 Susquehanna Ave., Sunbury, Pa.—RADIO & TELEVISION RETAILING.

Jackson TV MODELS

The new Jackson line includes nine new models, all available in mahogany and blond woods. Heading the line is the 520, a 20-inch AM-FM, 3-speed combination console with doors. Another combination, with AM radio and 3-speed changer plus 17-inch TV, is the model 317. Model 20-C is a 20-inch console with doors; the 17C, a 17-inch console, the 17T, a 17-inch table model, and 14T, a 14-inch table model, complete the line. Jackson Industries, Inc., 58 E. Cullerton St., Chicago 16, Ill.—RADIO & TELEVISION RETAILING.

Trans-Vue TV LINE

The new TV line introduced by Trans-Vue includes the "DeLuxe 2000C" 20-inch rectangular tube mahogany console with half doors; the Kenwood, 17-inch table model; the Winfield, 17-inch open face console; the Aristocrat, 17-inch open face console; and the Phoenix, 17-inch table model. Trans-Vue Corp., 1139 S. Wabash Ave., Chicago 5, Ill.—RADIO & TELEVISION RETAILING.

For Raytheon TV dealers only!



This complete,
easy-to-use
"5 POINT PLAN"
for dealer profits!

"Biggest aid to selling I ever saw" say Raytheon dealers who have seen this remarkable Raytheon "5 POINT PLAN" . . . a complete, understandable, pre-tested, easy-to-use plan to increase sales and dealer profits!

Everything you need to know is there. The five separate folders cover: (1) how to advertise profitably, (2) how to use direct mail, (3) how to make displays build business, (4) how to turn "lookers" into buyers, (5) how to push your plan to the pay-off. Plus a special section of 10 tested ideas that help sell *other* merchandise.

And all the material needed to carry this plan through to success is available to Raytheon dealers. If you're a Raytheon dealer, you either have your "5 Point Plan" now or your distributor will get it to you soon. If you're *not* a Raytheon dealer, it may pay you to find out how Raytheon TV helps its dealers sell more and make more. Why not write us?



Raytheon dependability is backed by the famous Good Housekeeping seal.



Raytheon includes a liberal One-year Warranty on parts.



The Underwriters' Laboratories seal says Raytheon is safe.

BELMONT RADIO CORPORATION
5921 W. Dickens Ave. • Chicago 39
Subsidiary of Raytheon Manufacturing Co.

Another proof that



means business!

New Radio and TV Sets

This and following pages describing manufacturers' new merchandise are compiled by our editors. This information is presented as a news service to our readers entirely without any advertising consideration whatsoever.

Philco NEW TV LINE

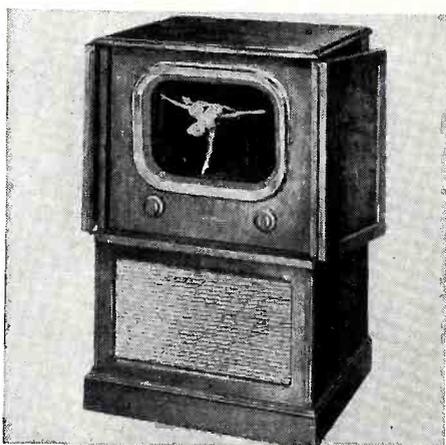
Seventeen new models comprise the new Philco TV line. They include a 17-inch table model, #1800, at \$279.95;



two twenty-inch table models, the 2102, \$399.95 and the 2102-L, \$419.95; twelve consoles ranging in price from \$319.95 to \$569.95; one TV-Phonograph, #1871, at \$399.95; and the model 2170, three-way combination shown here, at \$599.95. Philco Corporation, C & Tioga Sts., Phila. 34, Pa.—RADIO & TELEVISION RETAILING.

Motorola "GLARE-GUARD TV"

Eighteen new TV models, from 14-inch to 20-inch, are in the new TV line. Prices begin at \$219.95 for the 14-inch table models and extend to \$700 for the



deluxe 20-inch combination. Other table models sell for \$259.95 and \$289.95. Four consoles range from \$329.95 to \$399.95; five combinations range from \$499.95 to \$579.95; three other consoles are priced at \$429.95, \$449.95, and \$489.95; and two demountable legs models are priced at \$379.95 and \$399.95. Shown here is the Early American 17-inch console in maple cabinet priced at \$399.95. Motorola Inc., 4545 Augusta Blvd., Chicago 51, Ill.—RADIO & TELEVISION RETAILING.

Raytheon TV SETS

The new line includes twelve TV models, highlighted by the "Starlight" and the "Constellation". The Starlight, 17-inch rectangular open face console, includes AM radio and 3-speed phono. Among the sets' many features are the two-knob control and mahogany cabinet. The Constellation, shown here, is the model C-2006, with 20-inch rectan-



gular black face tube. Modern styled cabinet is of mahogany veneers. Belmont Radio Corp., 5921 W. Dickens Ave., Chicago 39, Ill.—RADIO & TELEVISION RETAILING.

Stromberg RADCLIFFE

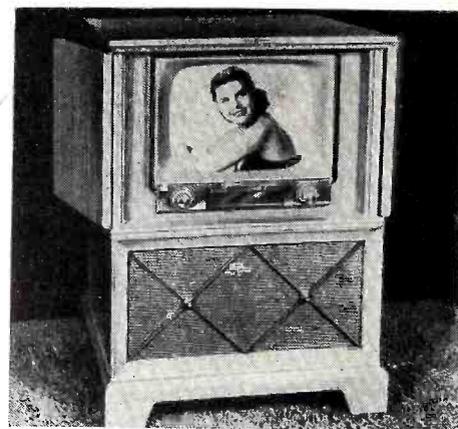
A new TV model, the Radcliffe, has been introduced. Featuring a 24-inch direct-view cabinet and jack for phono



plug-in. List price is \$675. Stromberg-Carlson Company, 100 Carlson Rd., Rochester 3, N. Y.—RADIO & TELEVISION RETAILING.

GE BLACK-DAYLIGHT TV

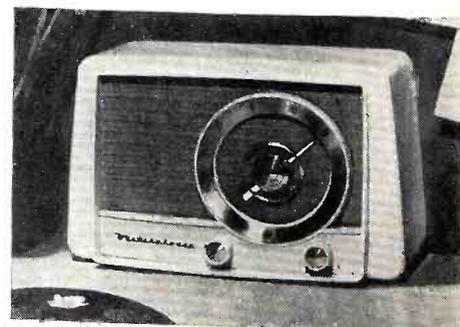
Eleven 17-inch sets, one 20-inch set and one 24-inch set comprise the new TV line. All cabinets are in mahogany



veneers and blond Korina, except model 17T-1 which has a hardwood cabinet with a lacquer finish of mahogany cordovan. It lists for \$269.95. Model 17T-2, mahogany table model, is \$289.95 and in blond Korina, (model 17I-3), \$299.95. All the other sets in the line are consoles. They include two open face sets, at \$319.95 (in Korina, \$339.95), and \$349.95; two half-door sets, at \$370.95 (in Korina, \$399.95), and \$379.95 (in Korina, model 17-C111 shown here, \$399.95); and two full door models, #17C-109, at \$399.95, and the 24-inch model 24C-101, at \$775. General Electric Co., Electronics Park, Syracuse, N. Y.—RADIO & TELEVISION RETAILING.

Westinghouse RADIOS

Nine models are among the newly introduced line. They include four AM table models, two AM-FM table models,



two portables and one AM-FM console with 3-speed record changer. Prices range from \$21.95 for the 336T5, to \$275 for the console. The AM-FM sets list at \$59.95 and \$62.95; AM models at \$21.95, \$23.95, model 338T5, shown, at \$29.95, in ivory, \$32.95; and two portables at \$49.95. Westinghouse Electric Corp., 1354 Susquehanna Ave., Sunbury, Pa.—RADIO & TELEVISION RETAILING.

Alive
with
Features!



Sentinel
Television



Wow!
WHAT A PICTURE!

The picture is clear
for your fiscal year
keep it bright with
Sentinel

Sentinel TV sets
SNUB
Service calls!

Television

SENTINEL RADIO & TELEVISION • EVANSTON, ILLINOIS

Jensen Replacement Needle Chart...



TEAR OUT THIS PAGE AND HANG UP FOR QUICK, READY REFERENCE!

CARTRIDGE MFG.	JENSEN NEEDLE NO.	ILLUSTRATION (Actual Size)	CARTRIDGE NUMBERS	POINT MATERIAL	POINT SIZE	CARTRIDGE MFG.	JENSEN NEEDLE NO.	ILLUSTRATION (Actual Size)	CARTRIDGE NUMBERS	POINT MATERIAL	POINT SIZE
Astoric	Q(M)		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	Standard	Webster-Electric	M		W-02	Omium	Standard
Astoric	Q-33(M)		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	Micro-Groove	Webster-Electric	F-12		W-05	Omium	Dual
Astoric	Q-AG(M)		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	All Groove	Webster-Electric	A-80		W-14	Sapphire	Standard
Astoric	Q-33(J)		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Sapphire	Standard	Webster-Electric	A-81		W-15	Omium	Standard
Astoric	Q-33(J)		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Sapphire	Micro-Groove	Webster-Electric	A-82		W-16	Omium	Micro-Groove
Astoric	D(M)		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	Standard	Webster-Electric	A-83		W-17	Omium	Standard
Astoric	D-33(M)		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	Micro-Groove	Webster-Electric	A-84		W-18	Omium	Micro-Groove
Astoric	D-AG(M)		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	All Groove	Webster-Electric	A-85		W-19	Omium	All Purpose
Astoric	G-78(M)		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	Standard	Webster-Electric	A-86		W-20	Omium	Standard
Astoric	G-78(M)		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	Micro-Groove	Webster-Electric	A-87		W-21	Omium	Micro-Groove
Astoric	G-AG(M)		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	All Groove	Webster-Electric	A-88		W-22	Omium	All Purpose
Astoric	T(M)		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	Standard	Webster-Electric	A-89		W-23	Omium	Standard
Astoric	T-33(M)		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	Micro-Groove	Webster-Electric	A-90		W-24	Omium	Micro-Groove
Astoric	C-3(M)		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	Standard	Webster-Electric	A-91		W-25	Omium	Standard
Astoric	C-1(M)		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	Micro-Groove	Webster-Electric	A-92		W-26	Omium	Micro-Groove
Astoric	U-78(M)		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	Standard	Webster-Electric	A-93		W-27	Omium	Standard
Astoric	U(M)		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	Micro-Groove	Webster-Electric	A-94		W-28	Omium	Micro-Groove
Astoric	C-3(J)		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Sapphire	Standard	Webster-Electric	A-95		W-29	Omium	Standard
Astoric	C-1(J)		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Sapphire	Micro-Groove	Webster-Electric	A-96		W-30	Omium	Micro-Groove
Astoric	A-3(M)		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	Standard	Webster-Electric	A-97		W-31	Omium	Standard
Astoric	A-1(M)		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	Micro-Groove	Webster-Electric	A-98		W-32	Omium	Micro-Groove
Astoric	A-AG(M)		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	All Groove	Webster-Electric	A-99		W-33	Omium	All Purpose
Astoric	Nylon 1-M		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	Standard	Webster-Electric	A-100		W-34	Omium	Standard
Shure	A62A		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	Standard	General Electric	RP1-001		GE-10	Sapphire	Standard
Shure	A-63MG		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	Micro-Groove	General Electric	RP1-003		GE-10-LP	Sapphire	Micro-Groove
Shure	A-64U		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	Unipoint	General Electric	RP1-010		GE-11	Sapphire	Dual
Shure	A-61A		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Sapphire	Standard	Philco	45-1596		PH-10	Sapphire	Standard
Shure	A-63MG		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Sapphire	Micro-Groove	Philco	45-1613		PH-11	Omium	Micro-Groove
Shure	A67U		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Sapphire	Unipoint	Philco	35-2693		PH-12	Omium	Dual
RCA	72345		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Sapphire	Standard	Philco	45-1613		PH-13	Sapphire	Micro-Groove
RCA	74048		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Sapphire	Micro-Groove	Philco	45-1997		PH-14	Omium	Standard
RCA	75044		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	Standard	Philco	45-1651		PH-15	Sapphire	Standard
RCA	75045		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	Micro-Groove	Webster-Chicago	NE-15		NE-215	Omium	Dual
RCA	M-71		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Sapphire	Standard	Webster-Chicago	NE-316		NE-368	Omium	Dual
RCA	M-72		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Sapphire	Standard	American Microphone	S-1		AM-20	Omium	Standard
RCA	38449		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	Standard	American Microphone	CO-3		AM-21	Omium	Standard
RCA	75487		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Sapphire	Standard	American Microphone	CO-1		AM-21-LP	Omium	Micro-Groove
RCA	75486		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Sapphire	Micro-Groove	American Microphone	CO-2		AM-212	Omium	All Purpose
Electro-Voice	S-3		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Sapphire	Standard	Cosley	145720		C-99	Sapphire	Standard
Electro-Voice	E-90		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Sapphire	Twin Point	Magnevox	560102		M-02	Omium	Standard
Electro-Voice	E-91		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Sapphire	Twin Point	Magnevox	560138		M-46	Omium	Twin Point
Electro-Voice	O-13		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	Twin Point						
Electro-Voice	O-3		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	Standard						
Electro-Voice	E-95-LP		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	Micro-Groove						
Electro-Voice	E-92		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Omium	All Purpose						
Columbia	101		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Sapphire	Micro-Groove						
Columbia	102 & 103		Q1-M; Q2-M; Q3-M; Q4; Q5-1	Sapphire	Micro-Groove						

- These needles are handled by all Radio Parts distributors.
- A set of installation instructions is packaged with each needle.
- Ask for them by the Jensen number indicated.

Jensen INDUSTRIES, INC.
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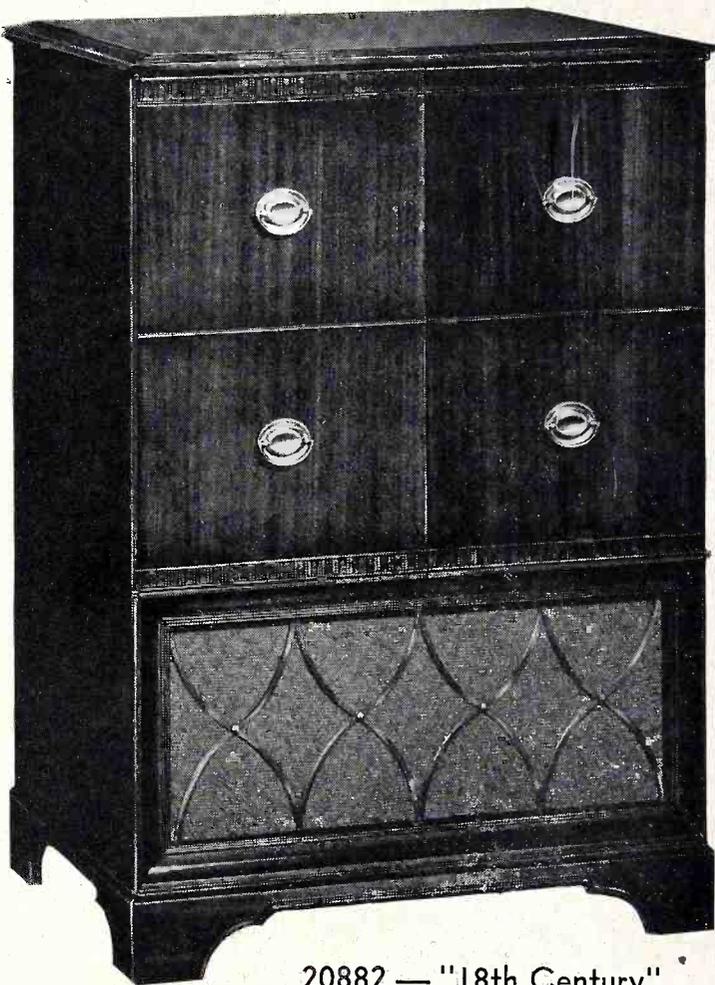


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pleasure, the experts buy
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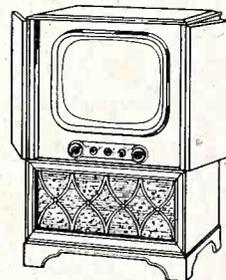
Their judgment is by comparing,
with *their own eyes*. You, too, can see
what the experts see, PRECISION performance!

Hallicrafters exclusive "Dynamic Tuner" brings you
television's **CLEAREST** picture, with 2 to 4 times greater
sensitivity than other leading sets.



20882 — "18th Century"
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Tuner.



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THE SET THE EXPERTS OWN!

WORLD'S LEADING MANUFACTURER OF PRECISION RADIO & TELEVISION • CHICAGO 24, ILLINOIS

Keep Volume Up With

Material Shortages Seen Not Seriously Hampering Disc

• As forecast in our January issue, there will be cutbacks this year in the production of virtually every product which uses metal. This includes the majority of the products sold by the radio-TV-appliance dealer. Will the dealer be able to get enough merchandise to sell in 1951 to keep his volume up to the level to which he has become accustomed? The answer to this question depends on several factors.

First, it will depend on whether the situation gets any worse, or whether it continues along at the pace now outlined for this year. Second, it will depend on whether the emphasis of consumer demand continues to be placed on the same items on which it was based during 1950, or whether it will shift in some cases to different items. This might be due to a partly satisfied demand on some merchandise due to the large volume sold during 1950. Third, it will depend on whether the dealer can find sufficient quantities of items not made of critical materials.

In this latter aspect, the dealer's mind should turn to phonograph records and certain allied items. To the dealers who already sell records, this should mean stepped up promotional and merchandising plans for records in the future, beginning right now. It may mean a redecorated and/or enlarged record department, will probably call for enlarging the inventory, perhaps adding new lines. It means focussing more attention on discs: in displays, in-store and in the windows, and in advertising and direct-mail. And it should include sales training and sales promotional activities among the employees.

To the dealers who do not already carry records, the task is a bit bigger. Before going into the specific steps, some of the reasons for selling records may be discussed.

Discs, Radio-TV Tie-In

First of all, phonograph records definitely belong in the radio-TV-appliance store, and in the department store. The customer expects to find his sources of entertainment and music all in one place. There are natural tie-ins between radio and TV and records, since many of the same artists are employed in all three mediums, and both radio and TV are used to exploit records. In addition, several of the manufacturers are involved in two or more of these mediums (for instance, both RCA-Victor and Columbia control radio and TV

broadcasting stations, MGM owns radio stations, etc.). And another important link between radio and TV and records is the phonograph, which is sold and serviced at the radio-TV-appliance store.

Second, it might be worth more than a passing consideration to note the fact that records are a relatively compact piece of merchandise. As a matter of fact, \$18,800 worth of long-playing records (retail value) could be stored in a space equivalent to that filled by one average-size 7-cubic foot refrigerator. With no more than a normal number of stock turns, this could represent a very sizable income to the average dealer.

Third, records do not need to be "repaired," and do not have even a 90-day guarantee. If you check the condition of a record before wrapping it up for the customer, to see that it is not broken, cracked, or scratched, that is the end of the transaction.

Speed Confusion Over

Fourth, there is nothing complicated about a record. The customer merely has to like the way it sounds, and sells himself on the selection by hearing it, either before he comes into your store (on the radio, jukebox, or in someone else's home) or else he listens to it in the store. Of course, good salesmanship can always increase the average transaction by suggestive selling.

Fifth, the discount on records is fairly good, averaging 40%, whereas the discounts on many radio, TV and appliance lines run considerably less than this.

Sixth, phonograph records help build sales for other products, insofar as they stimulate store traffic. As is well known, many more people will drift into a store to buy a \$1 item than will come in to buy a \$300 one. Good displays and good salesmanship can take advantage of this traffic to stimulate sales of big ticket items.

Seventh, the phono record business is in a rather stable position at this time, after a couple of years of "confusion" which scared many dealers into dropping disc departments. This condition was brought about by two factors: first, the disc business had been terrific during the war, and up to and including 1947. Then it tapered off somewhat. Since this was coupled with the rise of television, many people were led to believe that the record business was "on the skids." 1950 proved that this was not so, however,



Increased Sales of Records

Output; Greater Demand for Music Offers New Profit Possibilities

since the phono record industry recouped to a surprising extent. The second factor was the introduction of two new turntable speeds, 45 and 33 $\frac{1}{2}$ RPM. Up until the introduction of the LP's (33 $\frac{1}{2}$) in mid-1948, the industry had lived with 78 RPM so long that the speed itself was never discussed. These new speeds, along with TV, were thought to be killing the record business. There was more to them than just new speeds, however. They were found to have many salable advantages, such as being more compact, unbreakable and better in sound quality. With the sales pick-up in 1950, the new speeds had passed the crisis. The public was no longer confused, and was buying records of all types in great numbers.

DISCS

1. **Belong where radio-TV sets are sold**
2. **Enjoy public acceptance**
3. **Will be available**
4. **Can furnish substantial volume**
5. **Provide satisfactory profits**
6. **Require no service**
7. **Build store traffic**
8. **Insure repeat business**
9. **Are cash-and-carry items**
10. **Require small storage space**

The final reason we can mention in favor of selling records is the one which started the discussion, namely that records are one of the relatively few items which we can expect to be available in quantity in face of a general shortage due to the war effort.

Supply Seen Holding Up

We mentioned before that record sales boomed during World War II. This is a very significant fact. It would be difficult to name a handful of consumer products whose sales increased every year from 1941-1946 inclusive. Such was the case, nevertheless, with phonograph records. In 1943, with 130 million discs sold, the industry reached the highest point that had been reached at any time during its 30 year history; in 1946, with over 250 million records sold, it was almost twice as big, and in 1947 it was still higher.

These are important facts for any one to consider who is wondering what types of merchandise to stock in the face of shortages due to defense production. We do not mean to imply that the record industry will

not suffer from any shortages. However, the problems which they will face are not insurmountable, if we can judge from past experience, plus the current judgments of industry leaders. In the face of shortages, it may possibly be that records will not be produced with the same quality they have today, but it seems quite certain that they can be produced.

The demand for records during World War II was probably caused by two factors: first, there was a great demand for entertainment of all types, and second, there was a great shortage of merchandise (not, however, accompanied by a shortage of money) and the public bought what there was to buy.

This does not mean that a dealer can hang up a shingle saying, "We sell records," and immediately become a millionaire. Some people can sell dollar bills and lose money. Selling records, like any other type of merchandise, requires know-how, sales ability, promotion, display, etc.

Need Intelligent Selling

And record selling has some special problems. The record dealer has to be prepared to carry an inventory of records. While it is not accurate to say that a record dealer must carry in stock every record for which a customer might conceivably ask, he must have the bulk of the most-often requested items. The record salespeople must (to sell pops) be interested in records themselves, and be familiar with the names of artists, hit songs, and record labels associated with them; and to sell classical music, they should preferably know something about music. But in either case, they must know the musical tastes of their community. The individual prefer-

ences of the salesperson will rarely sell records to someone else.

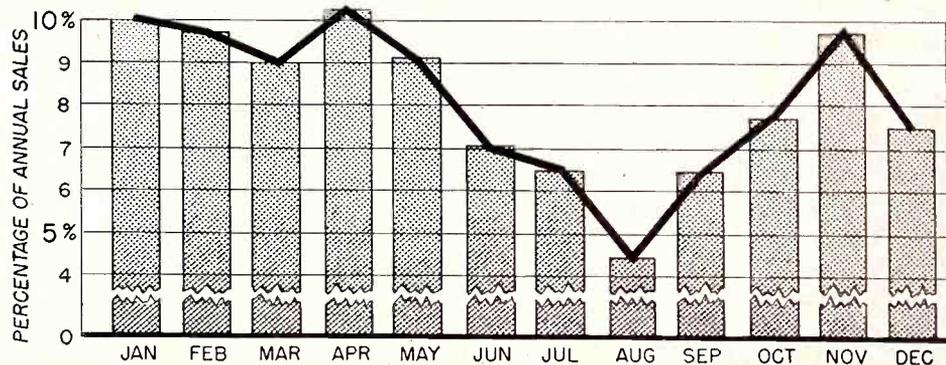
These are no more specialized aspects than one finds with any type of merchandise, and no more difficult to attain. We simply mean to emphasize one fact that applies to all merchandising: when anyone in the trade speaks of an item which "sells itself," he means *relatively* speaking it is fairly easy to move. No merchandise really sells itself—it has to be sold, and sold intelligently. This credo applies to records as to anything else.

Nevertheless, as we have pointed out previously, there are many reasons why it is smart merchandising to get into the record business *today* if you are not already in it, and exploit it more vigorously if you are already in it.

Your local distributors will be glad to talk this situation over with you, giving you advice as to what types of records move best in your locale, what size inventory would be appropriate for a store of your size, what percentage to stock in "catalog" and how much in "hits," and how to properly display and merchandise records. In many cases, some cooperative advertising funds may be available for this purpose, as well.

You will want to size up your market, see how many other people are selling records, find out what kind of a job they are doing; and try to find out if there were any more record outlets during the last war than there are now. This might give some idea of the market potentiality. But remember that as a retailer of radio-TV-appliances and phonographs, you are one of the "natural" outlets for records that customers think of first when they are in the mood to buy. Don't fail to capitalize on this important source of revenue in the question-mark filled months ahead.

Seasonal trends in retail disc sales averaged over the past few years; each bar represents percentage of annual sales which can be expected during that month.



Sales-Boosting New Albums

Collector's Items Reissued by Victor, Decca—New

Shows on Columbia, MGM—Capitol Promotes Dancing

An extensive RCA VICTOR record sales promotion built around an 18-album collection of musical masterpieces recorded by the great classical and popular artists of the era, entitled "Treasury of Immortal Performances," kicks off early this month. The 12-album Red Seal Treasury contains 120 vocal and instrumental performances by 54 of the fabulous artists of music's "Golden Age," the era of Caruso, Galli-Curci, Rachmaninoff and Chaliapin. The six-album Popular Treasury is a series of historic RCA Victor popular records, each representing a phase in the development of jazz, swing, blues, folk music and other popular music forms in this country. The records in both the Red

produced by Saint Subber and Lemuel Ayers, producers of the still running hit show, "Kiss Me Kate," which also



features Cole Porter's music. "Out of This World" is based on the "Amphitryon" legend, and stars Charlotte Greenwood, supported by William Eythe, Priscilla Gillette, Billy Redfield, comedian David Burns, Barbara Ashley and George Jongeyans.

MGM RECORDS has released an album directly from the sound track of the movie "Pagan Love Song," with all the hit tunes, and featuring Howard ("Annie Get Your Gun") Keel with Esther Williams. With the exception of the title song, all the tunes are new ones, penned by Harry Warren and Arthur Freed. As announced



Enrico Caruso

Seal and Popular Treasuries were virtually hand-picked from the thousands of priceless original "masters" in the company's record vaults, and in their new versions are superior to the originals in tonal quality and fidelity. Each album will be available in 45 RPM and 33½ RPM speeds only. The "Treasury" series is designed to provide the dealer with an attractive sales-making package to meet a demand that has long existed. Backing the presentation is an elaborate advertising and promotion campaign breaking February 4.

DECCA RECORDS has released a new series of 8 albums by Bing Crosby, called "Collector's Classics," consisting of 32 songs that Bing has made famous over the years in movies, over the radio and on records. These recordings have not been available since the early 1940's, and will be a welcome addition to "Crosbyana." Each album shows the name of the motion picture or pictures in which Bing originally sang these songs,



practically all of which have been all-time hits, and the songs in the albums are grouped accordingly. Albums are recorded on 45 RPM and 33½ RPM only, and the records are pressed on Decalite so they can truly become Collector's Classics.

in these pages last month, MGM is sponsoring a Pagan Love Song window display contest for record dealers, which will extend to April 16.

CAPITOL RECORDS has released an "Arthur Murray" series of six albums entitled "Arthur Murray Favorites," each of which is devoted to a



different form of the dance: foxtrot, samba, mambo, tango, waltz and rumba. Each album features a different orchestra—Chuy Reyes on rumbas, tangos by Les Baxter and his orchestra, waltzes by Francis Scott and his orchestra, foxtrots by Ray Anthony and sambas by Enric Madriguera. The entire series of albums will be available on all three speeds.

**PACKING 'EM IN
ON BROADWAY...
SURE-FIRE
SELLERS FOR YOU!**

**ONLY ON
COLUMBIA RECORDS!**

The Original Cast
Recording of
Cole Porter's

"OUT OF THIS WORLD"

Starring

CHARLOTTE GREENWOOD

with William Eythe
Priscilla Gillette
William Redfield
Barbara Ashley
George Jongeyans
and David Burns

Musical Director Orchestrations by
Pembroke Davenport Robert Russell Bennett

33 $\frac{1}{3}$ rpm ML 54390 78 rpm Set MM-980
45 rpm Set A-980

ONLY ON COLUMBIA RECORDS!

THE METROPOLITAN OPERA VERSION
OF JOHANN STRAUSS'

Fledermaus

With New English Lyrics
by Howard Dietz and New Libretto
by Garson Kanin

with

Lily Pons
Richard Tucker
Martha Lipton

Ljuba Welitch
Charles Kullman
John Brownlee
and

Eugene
Ormandy
Conducting
The Chorus and
Orchestra of
The Metropolitan
Opera Association

Set SL-108
or 78 rpm Set MOP-32



ONLY COLUMBIA BRINGS YOU RAVE-REVIEW
BROADWAY SHOWS IN THE TRADITION OF

"SOUTH PACIFIC" • "KISS ME, KATE"
"GENTLEMEN PREFER BLONDES" • "PETER PAN"

All magnificently presented on
COLUMBIA RECORDS

First, Finest, Foremost
in Recorded Music

At last—the perfect
REPLACEMENT NEEDLE!



The Genuine...
the Enduring...

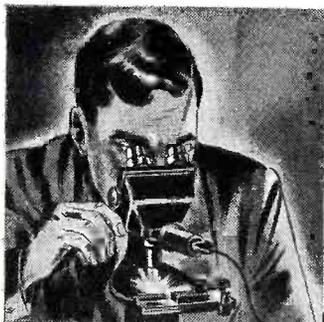
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"diamond"

* FOR POPULAR
TYPE SINGLE NEEDLES
(Others Slightly Higher)

Here's the needle that lasts and lasts and lasts! The new Duotone Diamond Replacement Needle with wear-resisting qualities that protect records from the ravages of "flats" and other wear-distorted needle shapes. The Duotone Diamond is the nearest thing to a really permanent needle ever produced—outplays, outwears and costs less per playing than any other type made. For the first time, Duotone offers these professional quality needles at a price every record enthusiast and music lover can afford!

Duotone offers Needle Replacement Service for any Standard Make Pickup Cartridge!

Duotone will replace worn needles in any standard cartridge with an enduring diamond tip. Send in your needles for prompt, guaranteed service. Remember, every order you get is an extra large profit diamond needle sale!



Experts Agree!

It must be good! Audio and recording specialists are agreed on diamond as the only practical, economical needle for modern record players. Ask now for complete details on Duotone Diamonds, the only professional type needle at a popular price!

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Needles, Recording
Needles, Discs, and
Quality Sound
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**RADIO & TELEVISION
RETAILING**

to be published in May, coincident with the 1951 Parts Distributors Conference and Show, Chicago, May 21-23.

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Great... in its power to increase or improve a manufacturer's distribution.

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**A DECCA ORIGINAL CAST ALBUM
GUYS & DOLLS**

A Musical Fable of Broadway
Music and Lyrics by **FRANK LOESSER**
featuring Robert Alda • Vivian Blaine • Sam Levene
Isabel Bigley • Pat Rooney, Sr. and other Members
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DL 8036 • 12-inch Long Play Microgroove Unbreakable Record • Price \$4.85

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Words and Music by **IRVING BERLIN**

With Dick Haymes • Eileen Wilson and
Gordon Jenkins and His Orchestra and Chorus

Selections Include: The Hostess With The Mostes' On The Ball—Can You Use Any Money Today?—The Best Thing For You—Marrying For Love—You're Just In Love—Something To Dance About—Washington Square Dance—(Dance To The Music Of) The Ocarina—It's A Lovely Day Today—Once Upon A Time Today—Lichtenburg—They Like Ike.

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Words and Music by **IRVING BERLIN**

Dick Haymes • Eileen Wilson and
Gordon Jenkins and His Orchestra and Chorus

Selections Include: The Best Thing For You—Marrying For Love—You're Just In Love—Something To Dance About—It's A Lovely Day Today—Once Upon A Time Today—(Dance To The Music Of) The Ocarina—(1) It's A Lovely Day Today (2) You're Just In Love.

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*America's Fastest
Selling Records*

James B. Conkling has been appointed president of **Columbia Records, Inc.**, replacing Edward Wallerstein, who has resigned but will continue as a consultant. Mr. Conkling has been associated with Capitol Records since 1944, where he was most recently vice-president in charge of repertoire.

Times-Columbia, New York distributors for Columbia Records have announced the appointment of Paul Southard as executive vice-president. Mr. Southard has been with Columbia Records, Inc., as sales manager since 1939, and vice-president in charge of merchandising since 1947.

Doings of Interest in the Disc Field

Executive reorganization of the London Gramophone Corp. (**London Records**) has been completed with the appointment of Harry Kruse as executive vice-president and sales manager. Kruse, with more than 20 years' experience in the phonograph record industry, was associated with the old Brunswick company, leaving there to join Decca at its inception in 1934. He was with Decca until 1948 and has been with Columbia for the last two years. Also named are Joseph P. Delaney, vice-president in charge of art-

ists and repertoire, and Leon C. Hartstone, vice-president in charge of administration, production and finance.

Under a new agreement, **Decca Records, Inc.**, has arranged with Deutsche Grammophon Co. of Germany, said to be the leading classical recording company on the continent, for the exclusive rights to the latter's entire catalog in the U. S. and its possessions, the Philippines, Cuba and in Canada. Deutsche Grammophon will, in turn, have sole rights to the Decca catalog material in Germany, Austria and Norway. Among the well-known artists made available to U. S. record buyers are: Victor de Sabata, Herbert von Karajan, Eduard van Beinum, Erna Berger and Elly Ney. The first release from the Deutsche catalog is being made this month as part of the Decca Gold Label Series.

Recognizing TV's attraction to children, **Peter Pan Records** has participated on several TV programs, awarding sets of records to winners of moppet contests on TV shows. The firm, a division of the Synthetic Plastics Sales Corp., makes records exclusively for children. More than 45 records, comprising 156 titles, are available for kiddies, including rhymes, songs and traditional Christmas hymns and carols. The 7" red vinyl series retails for 25¢, and a 10" series for 49¢. A new line of 45 RPM's, with each record packaged in a 4-color, 4-page album with explanatory text, will retail at 59¢. A number of 7" and 10" albums in full color, retailing at \$1.00, are also offered. A large number and variety of dealers' helps are available for promotional purposes — counter racks, floor racks, animated displays, sign displays, catalogs and brochures.

Coral Records has announced the signing of Herb Jeffries, popular vocalist and recording star, to an exclusive recording pact. Jeffries achieved overnight success a decade ago with his great vocalizing of "Flamingo" as vocalist with the Duke Ellington band. He has done many guest shots on radio and was heard last summer on the Chesterfield Supper Club. Coral Records also announced the appointment of Robert Morgan as Midwestern division manager. Morgan will supervise distribution for the Middle West and the Mississippi Valley areas for both Coral and Brunswick Records. He will make his headquarters at the Decca office in Chicago at 153 W. Huron St.

Columbia has released a new album of Johann Strauss' operetta, "Fledermaus," which was produced for the first time in 45 years at the Metropolitan Opera House on last December 20. The operetta was recorded in English with new lyrics by Howard Dietz, written especially for the current production, with performances

(Continued on next page)



Leading dealers everywhere report: "the Walco C-I PLAN is what we needed!"

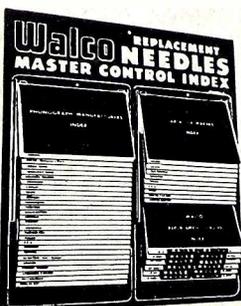
The WALCO C-I (Controlled Inventory) Plan has made selling replacement needles so simple and profitable that dealers across the nation have been generous in their praise of it.

As a result, many dealers now handle WALCO needles exclusively.

If you have neglected replacement needle business and overlooked these important profits for lack of simplification of inventory, it is easy to get on the bandwagon.

Contact us now for your nearest jobber-source and you're on your way to replacement needle profits!

WALCO, the nation's leading supplier to phonograph manufacturers, is the logical source for replacement needles. Most often, the needle being replaced was made in our own plant. Look for quality where the manufacturers themselves have learned it can be found.



Walco MASTER CONTROL INDEX

Complete, specific data, indexed by phono manufacturer, for use by jobbers, dealers, and servicemen. Available FREE with order for Basic Replacement Needle Assortment.

Walco TRADE NAME OF
ELECTROVOX CO., INC.

60 Franklin St., E. ORANGE, N. J.

News of the Record Industry

(Continued from page 48)

by the leading members of the Metropolitan Opera cast including Ljuba Welitch, Richard Tucker, Lily Pons, Charles Kullman and Martha Lipton. Eugene Ormandy conducts, with the Metropolitan Opera chorus and orchestra.

RCA Victor "45" Drive

A 45 RPM promotional drive by RCA Victor includes the company's new radio program, "The \$64 Question," the "Kukla, Fran and Ollie" television program, an intensive newspaper and magazine advertising campaign, and the company's new house organ, "Good News," which is being revived for promotional duty.

Ansley Cabinet Plant

The Arthur Ansley Mfg. Co. of Doylestown, Pa., has completed work on a new building, adjoining their former plant, for the manufacture of cabinets for their line of phonographs. Modern woodworking equipment has been installed and production in the new department is now under way.

New Profit Makers For Disc Merchants

Amberg RECORD FILE

The "Amfile" record case provides storage space for fifty 7" or 10" phonograph records with special cushion dividers to keep records upright at all times, whether case is full or not. Amfiles are available in steel for 7" at \$4.50 and for 10" records at \$6.25; leatherette



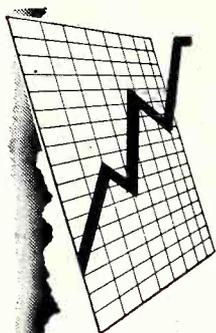
for 7" records at \$2.25. Each case is equipped with a complete filing-finding system, including index card and gummed numbers to paste on the records. Amberg File & Index Co., Kankakee, Ill.—RADIO & TELEVISION RETAILING.

Miller REPLACEMENT NEEDLES

Two new packaging methods are designed to aid jobber, dealer and serviceman. The first is a new individual package for each Miller replacement needle. Specific installation diagrams with instructions are included on the back of each of the colorful gold foil packages. All information necessary for identification of cartridge and speed are on the front. The second package is a handy dispenser box to hold the individual needle packages, including indexing features to eliminate confusion at the sales counter. M. A. Miller Mfg. Co., 1165 E. 43 St., Chicago 15, Ill.—RADIO & TELEVISION RETAILING.

Duotone DIAMOND NEEDLE

The Duotone diamond replacement phono needle is available for most models of standard tone arms, and is said to outlast 90 sapphire needles, and therefore represent considerable economy to the user. In addition, the maker states that the diamond needle offers greater protection to the record, since a worn stylus can effect considerable damage to records before its affect becomes audible. The diamond needle retails for \$20. for popular types of pickups and slightly higher for other than standard models. Duotone Co., Inc., Keyport, N. J.—RADIO & TELEVISION RETAILING.



MORE SALES FOR YOU! ... MORE PROFITS per sale with these outstanding new V-M Portable PHONOGRAPHS!

It's a fact! You make more money, when you stock and sell these two new V-M Portable Phonographs, because of faster turnover and generous profit margin! Designed for maximum eye—and buy—appeal, these new V-M Portables have that sleek, modern "horizontal" look, and are encased in rich-looking Burgundy Leatherette.

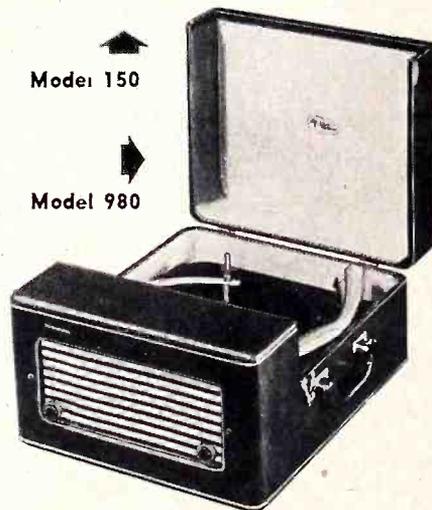
V-M Model 150—Here's a package you've been waiting for! The 150 plays all three speeds of records—reproduces faithfully highs and lows usually found only in high priced equipment. Beautifully encased in a mahogany wood grain leatherette case, the 150 is priced to sell and built to stay sold!

V-M Tri-o-matic* Model 980—completely automatic for all records, all speeds, all sizes. Automatic intermix for 10" and 12" records of same speed; shuts off automatically after last record plays. Superb amplifying system, famous V-M Tri-o-matic* changer. . . . Plugs into any AC outlet.

*Registered Spindle Design Patented.



Model 150



Model 980

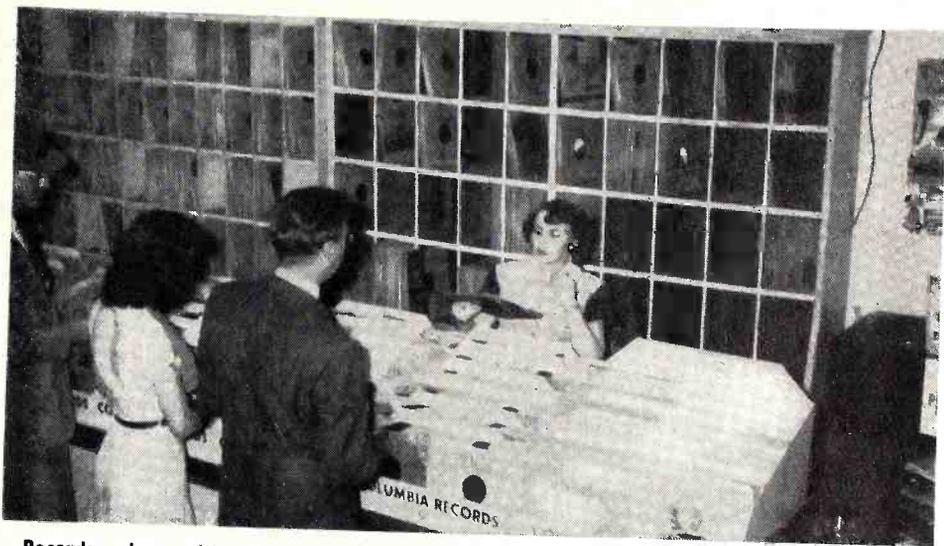
For Complete Details, See Your Representative

V-M CORPORATION

BENTON HARBOR, MICHIGAN

Efficient Installation,

Does Big Selling Job With Modern, Attention-Getting Equipment.



Records, along with other products are actively merchandised by the Beckley Music & Electric Co.

• Located in the heart of the West Virginia Hills, Beckley Music and Electric Company, 110 So. Fayette St., in Beckley, gets excellent reception in spite of the fact that this area is 125 miles from WSAZ-TV in Huntington, W. Va., and 285 miles from WLW-TV in Cincinnati.

Designed Special Truck

Here's how Colin McLuckey, president and manager of the Beckley organization describes the equipment the company uses:

"We designed and built the truck (see accompanying photograph) for TV tower and antenna testing. The truck is equipped with a hydraulic mast, manufactured by Energy Farm Equipment Company, Monticello, Iowa. We use a small geared pump driven by a ½ HP motor. We can extend the mast to 85 feet. We use a Trio double-stacked antenna, and we check our voltage and signal with a National Videometer.

Gets Best Picture

"The special framework on the truck was designed and built in our own shop. One man can perform the whole operation of setting the mast in a vertical position, securing and leveling it, after which it is elevated electrically. We also use an Alliance Tenna-Rotor which we operate from the truck cab, or we can take it into the home.

"We check for signal as mast ascends, and also as it descends. This enables us to find the exact place where we get the best picture. Our

firm has received letters from as far as 85 miles from this town asking us to call with our test truck. We are using the truck a hundred per cent now for testing and installation, and we carry a complete stock of antennas, towers, masts, accessories, and components on the vehicle, finding that we save time having everything on wheels."

Effective Ads Used

Beckley Music & Electric Company uses large space in local newspapers to carry messages to prospective purchasers. Copy written by Colin McLuckey features the facilities and equipment maintained by the firm, and is illustrated with photographs similar to the ones reproduced in this article. Following are excerpts from a typical advertisement:

Picture at the left and below is the Philco TV truck designed by Colin McLuckey, manager of Beckley Music & Electric Co., and built by the store's service department. This equipment enables us to determine the exact height of the TV signal, and the field meter enables us to determine the exact signal strength at your location. From this it can be determined the proper tower or mast to be installed as well as the correct type of antenna.

This eliminates all guess work and assures the customer perfect satisfaction without unnecessary experiments and extra costs.

No additional charge is made for the test, so avail yourself of this service. Don't buy a TV set without having this

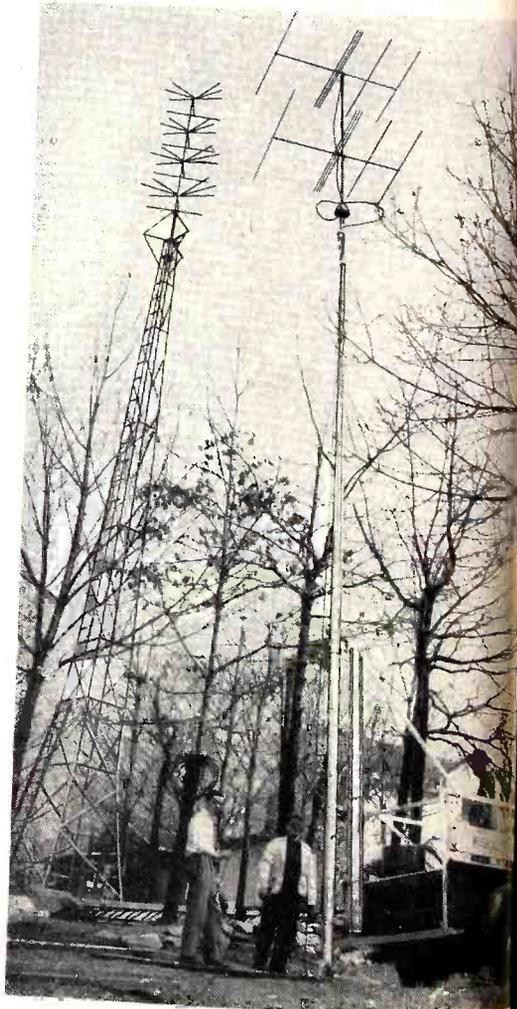
test made. Know what you are buying and why. "Seeing Is Believing."

In buying a TV set be sure that you get the utmost in satisfaction by having your tower and mast installed by us. We carry in stock a full line with heights up to 150 feet. We have tested every type of antenna available and have in stock those best suited to the varied conditions in this area.

Remember, your television can be no better than your antenna installation.

Not only is this dealer located 125 miles from the nearest station, but there are even "fringe areas" in his fringe city. This is due to the fact that it is a hilly area, and some locations in town are as much as 250 feet lower in elevation than others. This is one reason why an exhaustive probe or survey of each potential sale has to be made. In order to cover the time and materials consumed, a charge is made for this survey in case it does not result in a sale.

This dealer has the know-how; makes sales miles around. Note unique antenna set-ups.



Top Sales Methods Pay

Good Servicing Stressed in Large Ads in Local Newspapers

The survey crew makes an exact record on a card form of what equipment was tried and what results were found. Type and height of antenna, length of transmission line, number of boosters, standoff insulators, etc., are recorded on the card, as well as the condition of the picture as to snow, interference, etc. In this way, the sales department can decide whether the sale should be made, and if so, what the cost of installation will be. In addition, the installation crew will know exactly how to make the installation.

Beckley Music & Electric Company

Does a big job selling large and small electrical appliances

Enjoys a big volume of sales in phono records and players

Has a well-equipped and busy service department in store basement.

The principal installation problem in this type of area is to amplify the feeble signal as much as possible without amplifying the noise, and without adding any noise pickup. The best place to do this is, of course, at the antenna. Mr. McLuckey states that at least two bay antennas are used at all times, and very often four bay types. The Huntington station (WSAZ-TV) is on channel 5, and the Trio yagi for channel 5 was found to be very effective when stacked and properly phrased. The store naturally does its selling on the basis of the one closest station. In case the customer wants to try for more, however, all-channel types of antenna are used. Beckley Music and Electric has had good luck with the Vee-D-X RD-13A for this type of installation. This is a four-stacker.

The antenna is, of course, placed as high as possible. The adjustable mast on the probe truck, in combination with the National field strength meter, will show just to what extent height continues to increase signal strength. Most installations are over 50 feet, and many are over 100 feet.

Assuming the best antenna possible, and the optimum height, Mr. McLuckey considers his most important installation technique is his use of a booster. This includes both the choice of a booster as well as the placement of it.

BECKLEY MUSIC AND ELECTRIC CO.

Date Installed.....19..... Television Installation Report..... Rents
 Owner's Name..... Phone..... Owns.....
 Address.....
 T. V. Only—and Serial No..... Model No..... Chassis No.....
 Radio-Phonograph.....
 Picture Tube No..... Make..... Cabinet Type
 Cabinet Finish.....

Check the Following After Receiver Has Been Installed:

	OK	Adjust		OK	Adjust
Sound Quality			Diathermy		
Picture Quality			Ghosts		
Sound Bars			Ignition Noise		
Hum			Audio Noise		
Fine Tuning			Picture Noise		
Brightness			Contrast		
			Focus		
			Other Noise or Interference		

Instruct Owner in Proper Operation, etc., see that they understand about seating and lighting. Not to sit too close. Not to Turn All of the Lights Out.

BECKLEY MUSIC AND ELECTRIC CO.

Date of Test.....
 Location..... Name.....
 Address..... Phone.....
 Pre-Test M. V. Picture Interference Audio Video Noise Level.....
 With Without Booster — Type Booster.....
 ANTENNA: Make Type..... Channel Bays..... Mounted House..... Chimney Tower..... Height Above Ground.....
 Above House.....
 TOWER: Make Type..... Height..... Rotor: Make Type..... Conductor: Type Length.....
 Lead In: Type Length..... Type Lightning Arrestor..... Grounded to.....
 No. of Guys Used, Feet of Wire..... Turnbuckles, Eyebolts..... # Stand off Insulators.....
 Other Material Used.....
 Type Booster..... Signed:..... T. V. Technician Installer.....
 INSTALLATION TIME:
 T. V. Technician..... Hrs. Said Installation is hereby accepted.
 No. of Helpers..... Hrs. Owner.....

One side of this unique card is used to fill in data on test and survey results; reverse is used to list results of performance of set after installation, and contains other valuable information. Card was designed by Colin McLuckey, W. Va. dealer.

Most tunable boosters, Mr. McLuckey states, are narrow band in nature, and especially as operated by the customer. Therefore, the customer loses the sound when he gets the best picture. The answer, this dealer states, is a wide-band, untuned booster, and he has found that the T.E.C. booster fills the bill. With this device, operated by a relay when the TV receiver is turned on, the customer is not burdened with any additional knobs, and is assured of maximum results.

The placement of the booster is all important. Beckley Music places it in a waterproof box right on top of the mast (that is, just under the antenna). This placement solves many problems, according to Mr. McLuckey.

In the first place, noise pickup on the transmission line is no longer a factor, because the signal has been boosted before entering the line, and the signal to noise ratio is already very high. Impedance matching considerations between antenna and line and line and set are also relatively unimportant with a high signal level, they have found. As a result, flat 300-ohm line is almost always used, and sometimes round 300-ohm where additional strength is needed on long runs (one run from a tower on a hill to a house at the bottom is about 5000 feet).

Where additional signal strength is needed, an additional booster is used, placed at the entrance to the house, and in some cases a third one is

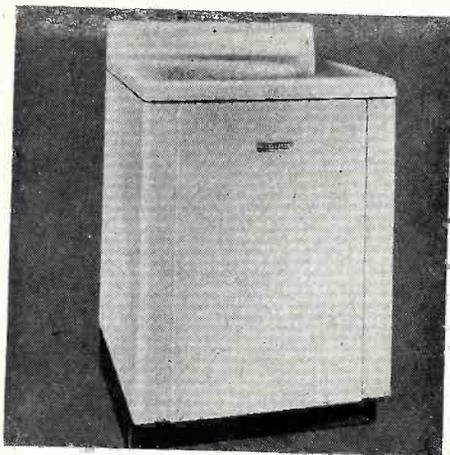
(Continued on page 90)

New Electrical Appliances

This and following pages describing manufacturers' new merchandise are compiled by our editors. This information is presented as a news service to our readers entirely without any advertising consideration whatsoever.

Universal WATER HEATERS

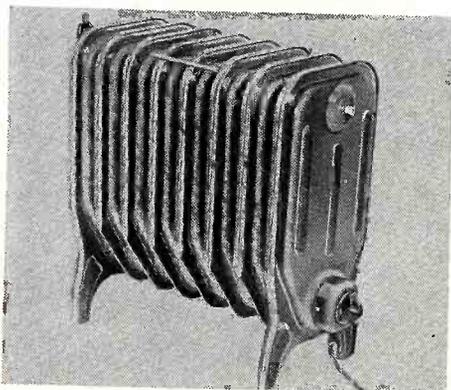
Three new models in twelve different capacity sizes have been added to the water heater line. Table top model (shown here) includes Nos. WHT8136,



30 gallon capacity, and WHT8246, 40 gallon capacity. Another model, the round, tank-type model, comes in five sizes: 12 gallon, 20 gallon, 30, 40, 52, 66, 82 and 100 gallons. Models WHT9352, 52 gallon, and WHT9582, 82 gallon, are large cabinet type units. All heaters carry a ten year guarantee. Landers, Fray & Clark, New Britain, Conn.—RADIO & TELEVISION RETAILING.

Sentry STEAM RADIATOR

A 3-heat, electric portable steam radiator has been announced. Operates on AC or DC, finished in ivory or brown. 900 Watt element. Weight, approximately 39 pounds. List price is \$35.95, for the 8-section unit, \$39.95 for the ten section unit. Also available without 3-way control, 8-section for



\$32.95, 10-section for \$37.95. Sentry Metal Products, Inc., 1917 W. Oxford St., Philadelphia, Pa.—RADIO & TELEVISION RETAILING.

Philco KITCHEN APPLIANCES

The 1951 line of Philco appliances includes eleven refrigerators, two freezers, four room air conditioners, and nine electric ranges. The refrigerators cover seven sizes: 7.2 cu. ft., 9 cu. ft. (model 912, at \$259.95 shown here), 11 and 13 cu. ft., ranging in price from \$209.95 to \$439.95. Two-door models with separate freezer and automatic defrost are 8.2 cu. ft., at \$379.95; 10.2 cu. ft., at \$439.95; and 12.1 cu. ft., at \$479.95. The freezers, 8.1 and 12.5 cu. ft., are priced at \$325. and \$399.95.

The room air conditioners come in sizes to cool rooms of 250, 430, 550 and



1500 sq. ft., and range in price from \$339.95 to \$985.

Two 21" wide ranges are priced at \$169.95 and \$199.95. All the other ranges are 40 inches wide. The "jiffy griddle", "broil-under-glass," and "cooking by color" Philco features highlight the line. 40" models are priced from \$219.95 to \$449.95. Philco Corporation, C & Tioga Sts., Phila. 34, Pa.—RADIO & TELEVISION RETAILING.

GE KITCHEN APPLIANCES

A new line of deluxe wall cabinets has been announced. Designed so that a 5'2" homemaker can easily reach the top shelf, the cabinets feature "under-wall" cabinets which fit directly under the larger wall cabinets. The line will be used in conjunction with GE's present line of base cabinets.

A new electric range has been added to the range line. Called the "Imperial," the new range has two ovens and broilers, two giant surface units, and two standard surface units, one of them an extra-high-speed element for fast cooking starts. Features pushbutton controls, two storage drawers, large back-splash, and full length fluorescent lamps. General Electric, Appliance & Merchandise Dept., Bridgeport 2, Conn.—RADIO & TELEVISION RETAILING.

Cory COFFEE MAKER

A redesigned model has been announced for the plastic upper bowl cover previously used on the model



EAB and ACB automatic coffee brewers. The new combination features a cover and handle, which can be used to remove the upper bowl from the lower. Cory Corporation, 221 North La Salle St., Chicago 1, Ill.—RADIO & TELEVISION RETAILING.

Thor WASHERS

Two new wringer-type washing machines have been introduced. Featuring the "Rocket" styling, one piece skirts and legs made of molded fiberglass, and "loadmaster" control panel mounted on the skirt front, the new models are



designated the V-4 and the V-3. Both machines have white porcelain-enamelled steel tubs. Thor Corporation, 2115 South 54th Ave., Chicago 50, Ill.—RADIO & TELEVISION RETAILING.

Hitch Your 1951 Sales Plans to Television's Fastest Rising Star!

Tele King is away out in front for '51! It has the styling that sells on sight ... the performance that keeps every set sold ... the values that convert shoppers into immediate buyers. Plan now to hitch your 1951 sales plans to television's fastest rising star ... **TELE KING PERFECTED TELEVISION.**



Your Tele King Distributor has a real big profit plan for every dealer, big or small. It will pay you to see his representative without delay.

*From Coast to Coast,
The Buying Swing
is to Tele King!*

TELE KING CORP.
601 W. 26th St.
New York 1, N. Y.

SALES WILL BE



with **UNIVERSAL'S**

Feature Leader of the Year!

Exclusive 2-Speed Washer

Two speeds in one washer. High for heavy laundry... Low for delicate pieces.

Timer automatically stops washer when washing cycle has been completed.

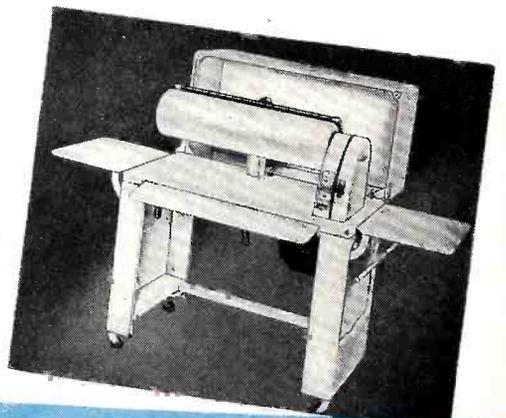
Safe-T-Switch automatically shuts off washer if overloaded or stalled.

Super-Safe wringer stops rolls instantly at a light, instinctive tug on clothes.



- Efficient Sterilator Action
- Direct-Drive Everlast Mechanism
- 24 other big features

Deluxe 2-Speed Ironer saves time — reduces fatigue. Automatic control gives correct heat for all fabrics. Two ironing speeds to choose from. New master control switch.



*A Big Line
for every Purse
and Purpose!*

WON IN '51!



Big Home Laundry Line!

Packs a terrific sales wallop with a Big New Promotion



National magazine advertising program in Saturday Evening Post, Look, Woman's Home Companion and other leading publications!



Over 40,000,000 impressions to create new consumer interest in the Universal line!



Retail-minded local program builds year 'round business for you!

UNIVERSAL gives you 2 great sales advantages in this 1951 program: an aggressive promotion that's geared to today's selling . . . and the biggest, most complete home laundry line in the industry.

Call your Universal Distributor right now and ask for the details of this program. Make your plans now to tie in to this volume building campaign.



Quality and Value Since 1842



UNIVERSAL

LANDERS, FRARY & CLARK, NEW BRITAIN, CONN.

More Appliance Sales via Inventory Control System

Dealer Finds Plan Solves Many Current-Day Problems

• A smoothly operating system for keeping accurate, down-to-the-minute records on what appliances are in stock, on a day-to-day basis, has completely done away with the embarrassment, ill-will and "headaches" of selling appliances which the store cannot deliver, at Bragdon's, Inc., large appliance dealership of Denver, Colorado.

The system was developed by Warren Bragdon, president of the firm, primarily to cope with the allocation situation brought about by the Korean War. "For the first time in several years, we faced the possibility of displeasing customers by selling them an appliance which could not be delivered," Bragdon said. "With all appliance deliveries cut down sharply, this is a very real hazard in everyday operation, and can mean the loss of valuable customers where the store fails to make good on a promise."

Under the plan, Bragdon's sells all

of its appliance volume from samples, distributed in sharply-segregated departments, around the sales floor. The samples are held for an average of 60 days on the floor, when they are replaced by new stock, and the samples sold off. All other deliveries are from the large, central warehouse, serving the two Bragdon stores. Under allocation, it has been necessary to keep a much closer check on what is actually available in the warehouse than in the past.

Used to accomplish this point is a column of inventory control sheets, which appear on the rear of a partition wall at the rear of the store, immediately next to the entrance.

They are mounted in a vertical column, each of 4 sheets listing all major appliances carried in stock by the store. A close examination of the individual sheet reveals that listed down the left side on ruled lines are all major appliances, with the model

number, stock number, and general description. Immediately to the right of this are 3 columns headed "On Hand"—"Sold"—"Received". The remainder of each sheet is made up of 31 columns, representing the days of the month.

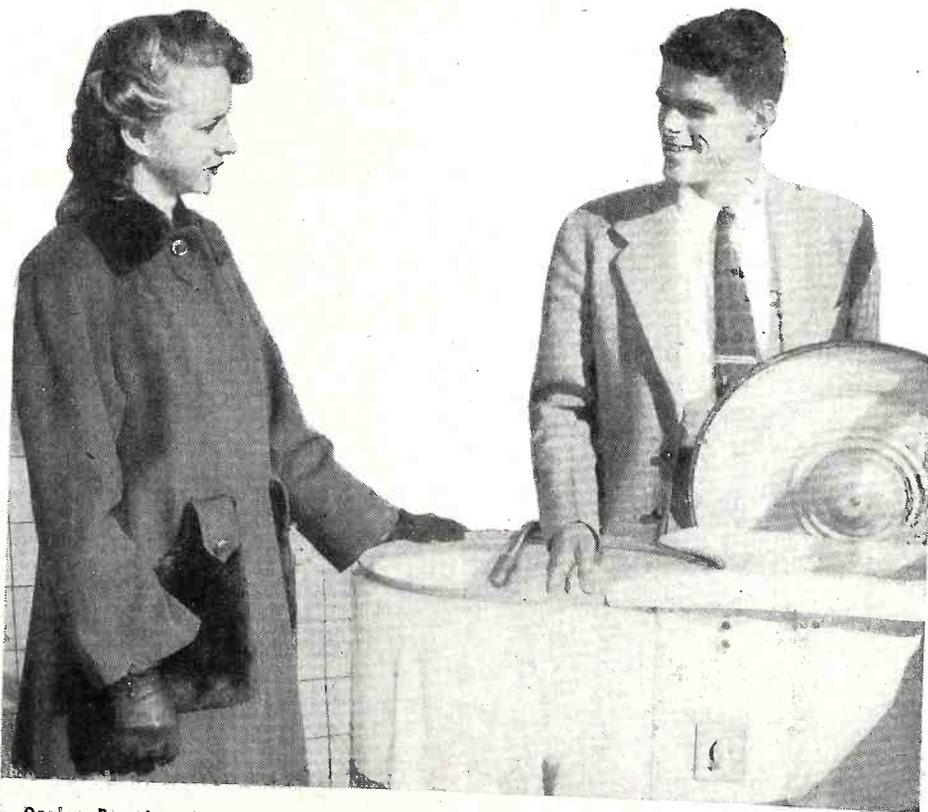
How It Works

The sheets are posted from daily sales records, every 31 days, and at the first of the month are an accurate representation of how many refrigerators, ranges, washing machines, electric blankets, sewing machines, washing machines, etc., are actually on hand, and available to be sold. The sheet shows precisely how many were on hand at the first of the month, the number of sales which have been made on the original stock, with spaces for adding the receipt of new appliances in the same category, as they are received. "Every salesman has to do a simple bit of addition or subtraction, in figuring whether he can promise delivery," Bragdon said.

As any major appliance is sold by the store, the salesman must enter in the proper "day of the month" column the appliance sold and initial it. This sequence is followed by carefully singling out the model number in the proper column, and adding the initial opposite, under the 12th, 13th, 14th, 15th, or whatever date of the month the sale arises. Then, whenever the next salesman has a prospect for the same appliance, he checks closely across the "on hand" and other columns, determining whether there is still an appliance ready for delivery. Actually, he counts up the number of initialed sales entries by the sales staff, the amount on hand at the first of the month, those promised for delivery, and subtracts the number received at any point during the month, to replenish the stock. The result gives a salesman a total which informs him accurately whether or not he can make the delivery.

"We have worked this out for some 60 appliance models carried in stock," Bragdon said, "and find that because of its day-to-day accuracy, we have never run into any embarrassment, or possible source of ill-will. One of the best features of the system is that it gives us an accurate record of turnover. Through use of the control sheets we have been able to keep our

(Continued on page 96)



Dealer Bragdon demonstrates a washing machine to a customer. Through unique control system, all Bragdon salesmen know exactly what is in stock, and are therefore in a position to promise delivery without delay. Some 60 appliance models are carried on the inventory sheets designed by this Denver dealer. Bragdon's method takes on new importance as shortages loom in civilian production of electrical appliances.

Presenting The Fiftieth Anniversary Set

by SYLVANIA

ASK your distributor to show you this latest Sylvania sensation!

Sylvania celebrates the Fiftieth year of Sylvania engineering—

—by offering a quality set within the financial reach of millions—designed to bring you the maximum picture for the size of the cabinet. Twenty inch rectangular picture tube, distinctive golden-hued frame! Dual antenna built-in!

See the great big MOVIE-CLEAR* picture! See how Sylvania's exclusive "Triple-Lock" keeps out interference! See its true blacks, grays and whites! Hear the quality of its unmatched tone!

SYLVANIA'S 50th Anniversary Table Model with GIANT 20" picture tube. High-luster mahogany cabinet and exclusive theatre-styled picture frame. New wide-angle, non-glare viewing. Built-in, dual antenna with hi-low band switch. Twenty-one tubes, plus four rectifiers, behind the picture-tube help give dependable Rock-steady, Movie-Clear* pictures and unmatched tone quality.

Are you using Sylvania Sets to demonstrate Television to your customers—as so many successful dealers are doing? You'll find it pays!



SYLVANIA 19" Mahogany DeLuxe Console Combination. Your "concert-grand"! Designed by Cedric Errol Millsbaugh. Life-size BIG pictures, Rock-Steady, Movie-Clear*. Three built-in antennas. AM-FM radio of unmatched tone quality. Automatic "pull-out" record changer for all speeds. This is the ultimate in home entertainment!

SYLVANIA



Established 1901—Fiftieth Anniversary Year
GREAT OLD NAME IN ELECTRONICS
GREAT NEW NAME IN TELEVISION

Sylvania Electric Products Inc.
Radio and Television Division
254 Rano St., Buffalo, New York
*Sylvania Trademark

Radio Tubes; Television Picture Tubes; Electronic Products;
Electronic Test Equipment; Fluorescent Lamps, Fixtures,
Sign Tubing, Wiring Devices; Light Bulbs; Photolamps; Television Sets.

Are You Making Money

"Separate" Accounting System Better Than "Composite" One in Figuring Out Where You Stand. How to Handle Maintenance Income—Outgo on the Balance Sheet

• We have found some dealers who question the statement that radio-TV service can be a profitable department in their stores. On the face of the matter, this attitude doesn't make much sense, since there are many dealers who make a living from service alone. Actually there are several reasons why some dealers are not making money from service, or, who feeling that the department was a loss, gave it up. (1) The department was inefficiently operated as a "step-child" of the store. (2) A lot of service was given away as a "convenience" to the customers. (3) There was no effort made to solicit service business and build up the department, and (4) No separate accounting records were kept for the service operation to determine its exact profitable or unprofitable nature.

Service Helps Build Sales

Since it can definitely be established that service *can* be profitable, it would be in order to make a few remarks as to *why* it is advisable to conduct such an operation. It might seem obvious to state that one should exploit every possible source of profit, especially where the item is related to one of the principal lines carried. Yet some dealers do not find this so "obvious" when the item is service, and therefore we shall bring forth some evidence to substantiate the idea. This will be taken up later on in this article, when the actual effect of service profits on overall gross margin is discussed. A second point to mention in connection with service is that technical service (repair work) is part of the "service" which the customer expects from the merchant who sells to him. It is a continuing contact with the customer which can be important in maintaining good-will and insuring future sales. It also enhances the dealer's reputation to be able to point out that his organization has the know-how to maintain the products that he sells, and that he can "stand in back of" these products. This additional security (that is in addition to the manufacturer's reputation) is the basis of many a sale across the country. It is often the deciding factor in a sale, as well as a builder of future sales.

Another important factor is that the operation of a service department contributes to the dealer's understanding of the products he sells, and

therefore to the ease of selling those products. The problems of service are *his* problems, and he learns how to anticipate some of them, as well as to explain them.

Finally, it is (rather unfortunately) necessary to mention the war. The importance of service grows tremendously in such a period when new materials and products are in scarce supply, and old ones must be maintained and "made to do." Also, service revenue becomes an important substitute for income lost due to the scarcity of new products. Finally, service is, again, an important means of maintaining good-will in the face of an absence of products to sell.

Since it can thus be established that repair service is a must for radio-TV dealers, we can go into the details of how to determine the influence of this operation on the overall profit picture.

But first, in passing, a word on profitable servicing. We have pointed out several ways and means to insure profits on servicing in a series of articles entitled "How to Charge for Profitable Servicing," and it is not possible in this space to go over the whole ground. But a few of the points can at least be delineated. First of all, to be profitable, all servicing operations must be conducted efficiently with a minimum of lost time and waste motion. Advantage must be taken of all tools, equipment, techniques and shortcuts which will lead to a rapid turnover of work. This is necessary because service is essentially a "small ticket" item, and profitable and efficient operation lies in volume. Secondly, all time must be spent in the execution of a predetermined overall plan, which is to make a profit. This plan must include time spent giving estimates, making home calls, making repeat calls, warranties, collections, etc.

Service Accounting

In this connection, it is important to observe that if it is the policy of the dealer to "give away" a certain amount of service in order to maintain customer good-will, this should be recognized as a policy and charged up as an expense. It is not fair to the service department to cause it to spend time for which the customer is not charged, and then accuse it of operating in the red. Nor is it good business practice. There is nothing

wrong with using the service department as an aid to sales, so long as the practice is recognized and accounted for.

And now for the bookkeeping aspects of service income and expense. Most dealers who have experimented with both methods agree that it is more conducive to an efficient and profitable operation of the store as a whole to keep the service account separate than it is to lump it in with the rest of the income and expense. A specific example of this will be shown below. As an accounting practice, it is considered most sound to show the net profit or loss from the service operation as an addition or deduction against the gross profit. An example of this is as follows:

Sales	\$80,000 (100%)
Cost of sales..	52,000 (65%)
(A) Maintained markup	28,000 (35%)
Income from servicing....	\$7000
Service costs	6000
(B) Profit on service.....	1000
Gross margin (A plus B) ..	\$29,000
Expenses	23,000 (28.7%)
Net profit	6,000 (7.5%)

The items in the table are abbreviated for the sake of clarity. The item "service costs" would include wages of service employes and/or amounts paid to others for such services, and also the cost of service parts and supplies. "Expenses" would therefore not include either of these items (wages or supplies due to service).

The advantage of this method is that the records show clearly the true nature of the business in three ways: first, the maintained markup based on the merchandise sold at retail would not be confused or distorted by the inclusion of service charges and the sale of parts included in servicing; second, the true profitable or unprofitable nature of the service operation would be revealed at a glance; and third, the contribution of the service department to the gross margin of the store would be readily apparent.

Let us see how this same statement would look if it were kept, as some

from Service?

stores do, by adding the income into "gross sales," the cost of parts into "cost of merchandise sold," and the labor, overhead and supplies into "expenses."

Sales\$87,000 (100.0%)
Cost of sales . 54,989 (63.2%)
Gross margin 32,011 (36.8%)
Expenses 26,011 (30.0%)
Net profit ... 6,000 (6.8%)

Notice that the whole complexion of the P & L is changed. Dollarwise, the sales are up, gross margin is up, expenses are up, and the net profit is the same. Percentagewise, however, the net profit is smaller.

Since, as we have often said in these pages, you pay your bills with dollars, not percentages, the reader might say, "What difference does it make that the percentage of net profit shows up smaller this way?" The difference is that with this "lumped together" type of statement, the store owner has no idea of the effect of his service department on his financial condition. The fact is that the service department, with an income less than 1/11 as large as sales, produced 1/6 of the profit. This example, incidentally, is not meant to indicate what service will *always* do. It happens, rather, to be an actual case of a real retail store. Some firms might consider this store, with its 14% profit on service (which happened to be 70% TV service) a novice in that respect. Another store showed us a statement revealing a 40% profit on service. This latter instance, however, involved 90% radio service and only 10% TV.

Let us take a different instance this time, and show the same store as in the first example, but now showing a loss on service. The statement would then appear as shown in the panel at the right.

In the "lumped together" type of statement, this information would show up as shown at the bottom of the panel.

The true value of the "separate service account" can now be seen. In this type of statement, the dealer's profit on the sale of merchandise (let us say that this is TV and radio sets, appliances and records) is the same, whether he shows a profit or a loss on service. But in the "composite" type of statement, the gross profit fluctuates according to the fortunes of the service department, from 36.8 with a profitable service operation, to 35.7 with an unprofitable one.

Although the swing indicated there is rather small, it could be larger

with a different set of figures, giving a false indication to the dealer concerning his sales operation. At the same time, it would give him no indication that the seat of the trouble was in the service end.

It might turn out, as mentioned earlier in this article, that a good portion of the service department's labor and parts was "given away" as an adjunct to sales, or was included in 90-day warranty. If the service manager kept adequate records, it would be possible to deduct this amount from the service operation altogether, and enter it as an expense to sales. Then the true profitable or unprofitable nature of the service department would be revealed.

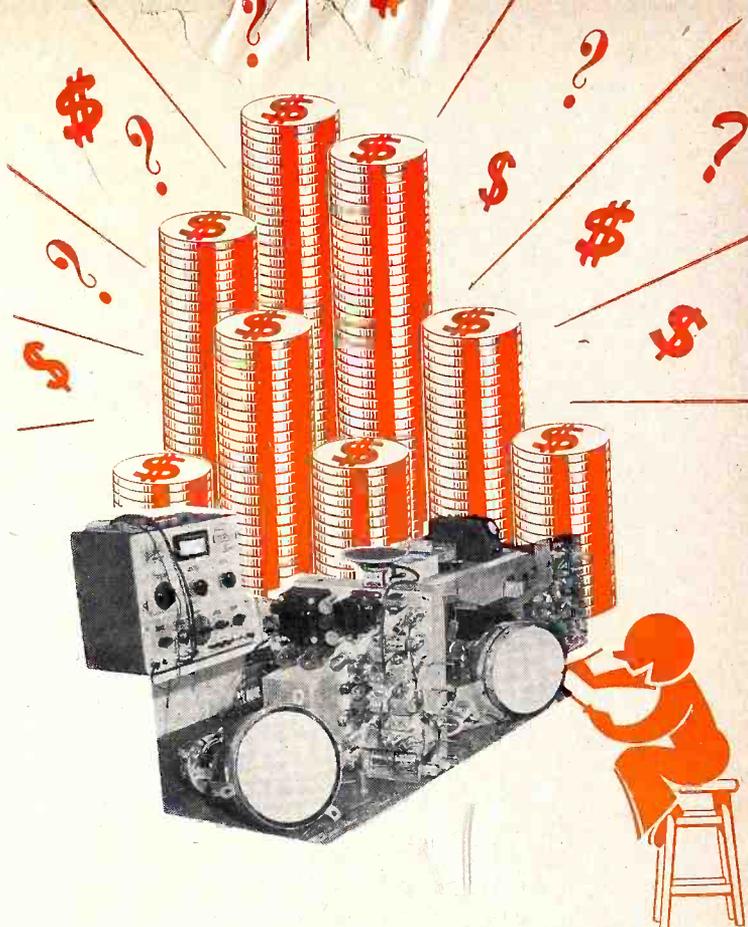
We have shown several reasons why it is advantageous to enter the profit or loss from servicing separately on a P & L statement. Perhaps it would be a good idea to justify this point of view. The reason why it is justifiable to so enter this income is that it is a horse of a different color from the ordinary sale of merchandise.

Effects of a Loss From Service a: The "separate" system

Sales\$80,000
Cost of sales... 52,000
(A) Maintained markup 28,000 (35%)
Income from servicing\$7000
Service costs 8000
(B) Loss from service 1000
Gross margin (A minus B)...\$27,000
Expenses 23,000
Net profit 4,000 (5%)

b: The "composite" system

Sales\$87,000
Cost of sales.. 55,920
Gross margin . 31,080 (35.7%)
Expenses 27,080
Net profit 4,000 (4.6%)



To prove this point, let us take a sample piece of merchandise which the dealer buys for \$65 and sells for \$100. The \$35 "profit" left covers all expenses, overhead, salaries, etc., incurred in the normal course of selling the merchandise and returns him a net profit of, say, \$10. Now let us suppose the item were, instead, a tube for the service department, and it cost 65¢. It is not sold as merchandise, but rather is a replacement part used in the course of a repair job. To "sell" it for \$1 would not by any conceivable stretch of the imagination cover the cost of the work done. In other words, what we are selling now is labor, and the "part" is an incidental extra expense to this sale.

To include income from service in "gross sales" would therefore be adding the sale of labor to the sale of parts; but the "cost of goods sold" would not include the cost of this labor, and therefore the gross margin would be abnormally inflated. This is exactly what we found in the first example, where the gross went from 35% (on the "separate" system) to 36.8% (on the "composite" system). The expenses, being increased by the service labor, would also be abnormally inflated, since this item was actually a cost of the labor, the income from which was included under "sales."

The conclusion is, therefore, that it makes sense to keep the service accounting separate, and that there are many advantages to be obtained from doing so. And we believe that any retailer who is not now doing this, and who switches over, will find that his service department is an important source of plus profit.

You're 7 jumps ahead with **Magnavox**

• **Count 'em up**—there are as many positive and exclusive dealer advantages to the Magnavox franchise as days in the week!

One: Magnavox dealers enjoy a partnership in selective distribution! **Two:** Magnavox offers dealers the longest discounts—up to 38 $\frac{1}{3}$ per cent on television receivers, up to 45 per cent on radio-phonographs! **Three:** Every Magnavox dealer enjoys an undiluted market, free from unfair trade practices.

Four: Magnavox dealers reap full benefit of Magnavox national advertising in their own markets!

Five: Magnavox deals directly with the dealer and ships directly to his door, absorbing freight costs! **Six:** Magnavox prices are Fair Traded wherever such laws are in force! **Seven:** Magnavox dealers reap the benefits of the staunchest owner loyalty in the television-radio-phonograph industry!

The Magnavox Company,
Fort Wayne 4, Indiana.



BETTER SIGHT...BETTER SOUND... BETTER BUY

Magnavox

*One of a series of advertisements in business papers on
"Why Magnavox Is Your Best Profit Opportunity"*

RADIO & TELEVISION RETAILING • February, 1951

Frances Langford's first choice..

IS THE OVERWHELMING CONSUMER CHOICE, TOO!

Frances Langford, singing star of television, radio and screen, was quick to see the value of the new Model 288 Electronic Memory Wire Recorder.

With its newly-designed *natural voice* play-back sound chamber, Miss Langford can now hear herself as her audiences do.

Add to the 288's exceptional fidelity the amazing new non-spill recording head and you have a magnetic recorder to sell that leads the field in quality, performance, price and consumer preference.

No wonder the Webster-Chicago Electronic Memory Wire Recorder is the choice of consumers, too!

WEBSTER-CHICAGO

5610 W. Bloomingdale, Chicago, Ill.

Electronic Memory  the Ultimate in Magnetic Recording



Dictation Machines



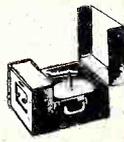
Home Fonografs



Tape Recorders



Diskchangers



Portable Fonografs





*The Same
Low Price
\$38.95*

**the Volt-Ohm-Milliammeter
that needs no introduction!**

SERVICE & SOUND

Section of **RADIO & TELEVISION RETAILING**

New Importance for PA

Gradual Switch to War Economy Cues Stepped-Up Solicitation of Industrial Accounts

The possibility of an all-out war is an eventuality which none of us wishes to consider at this time. Nevertheless, we are entering into a period in which our economy and our lives will be affected by all the symptoms of war, if not the actual fact itself. Industrial output for defense purposes is being greatly accelerated, and civil as well as military defense plans are the order of the day.

The implications of this program for the PA dealer should be obvious; they are three: (1) Existing PA systems should be put in good working order, and expanded and/or modernized where necessary. (2) Many of the many hundreds of new plants which have been built or opened since World War II will need complete new systems. (3) And in addition to the paging-plant music features which are provided in both old and new systems, an alert or alarm feature should be included in every business establishment (not necessarily an industrial plant) where all employes cannot be immediately reached by the sound of one's voice. This would preferably include an AM tuner so that public announcements and speeches from the government over the radio can be broadcast directly to the employes. For the purpose of alert, alarm or radio broadcast, an automatic break-in feature would be desirable so as to save the time usually required to switch over from one function to another.

There are three reasons why all PA dealers must actively solicit this

type of business. First of all, although many wide-awake businessmen will of their own accord go out and purchase this work, it doesn't necessarily follow that you, as one of several sound dealers available, will get the business. Second, many prospective customers are so busy with their own activities that they will not think of taking care of this important feature of their plants. And third, you as the dealer will need this extra source of business in view of shrinking supplies of ordinary civilian goods for resale.

Finding Prospects

As a starter, a direct mail canvass of all business establishments is in order. In ordering such material, it probably won't save you much money quantity-wise if you try to limit yourself to certain types of businesses or certain sizes of businesses. Almost every salesman has learned that it doesn't pay to try to "size up" prospects in advance where the purpose is to decide who *not* to call on. It almost invariably turns out that the one person he considers least likely to buy anything is the one who places the largest order with a competitor. In addition, as we mentioned before, every business large or small, industrial, professional or mercantile, is a prospect for a PA system of some type.

It might help, in an effort to get replies from such an initial campaign, to include some sort of gimmick, such

as a return postcard-questionnaire. This might have blanks to fill in, such as: "We already have a (paging-plant music) system," "We do not feel we have any need for a PA system," "We have (number of) employes," etc. Or the gimmick might be to offer a free check-up on the condition of the existing system, or a free survey and estimate on the installation of a system. Or, to really get down to cases, the solicitation might offer to "show you how you can help protect your plant and employes in the event of emergency due to disaster or war."

It is very likely that even if you sent out a card offering \$10 to everyone sending in his name, probably not more than 25% of those solicited would respond. In other words, step two is to start calling on people: old customers first, likely but unknown prospects second.

In all mailings and personal calls, be sure to point out firms that you have already serviced, and where possible include photographs and/or testimonial letters.

Also, be sure to bring out where possible the capabilities of your organization and equipment — experience, know-how, facilities, etc. — in order to inspire confidence in the prospective purchaser.

In making a solicitation, it is wise to be in a position to discuss money. Everyone in the PA business knows that, as they used to say in the army, "it depends on the tactical situation."

(Continued on page 86)



How to Recognize Faults

Part 1—Causes of CRT failure or unsatisfactory operation, analysis of

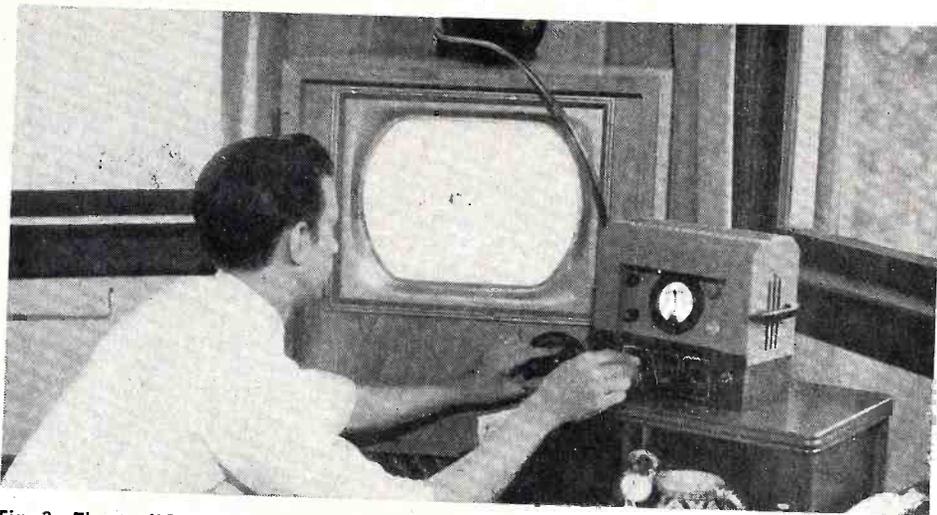


Fig. 2. Thomas "Catho-Chek" in operation with CRT not removed from set.

One of the big bugaboos in the early stages of postwar TV servicing (and perhaps still a worrisome thing to some dealers) was the likelihood of picture tube failure. The reason for alarm was the relatively high cost of these tubes in comparison to the total price of the set (and to the price of a service contract).

After our fourth year, however, most of us feel a bit more secure on this point, as the percentage of failure has not been high.

In another respect, though, our concern has increased. In the beginning, when we spoke of "failure," we were thinking of burnouts. We have discovered, as more experience has been gained, that replacement may be ne-

cessitated by much more subtle troubles, some of which have all the earmarks of being trouble somewhere else in the set (such as sync circuits, etc.).

A serviceman could spend a lot of wasted time tracking down an obscure trouble which is actually due to a faulty picture tube. As a result, it was felt highly desirable to be able to test picture tubes. There are some checks a technician can make, both by eye and with instruments. In addition, some manufacturers have in recent months made available to the service trade instruments designed especially for this purpose.

Before going into specific troubles and methods of testing, it would be well to briefly review the methods of testing ordinary receiving tubes.

A receiving tube can wear out gradually (low cathode emission), burn out suddenly (open heater), or operate improperly (due to shorts, leakage, gas, intermittents, etc.).

We have tube checkers which can check for shorts, opens, leakage, gas, emission and amplification, and the operation of such instruments is relatively simple and well understood (overlooking the sometimes complicated switching arrangements necessary to accommodate a multitude of types) with the possible exception of the last-named, for which we need a dynamic mutual conductance tester.

Most servicemen are aware of the fact that their tube tester cannot be 100% infallible in pointing out faults, nor does it usually give an objective evaluation of the tube under test, but rather a *relative* evaluation (compared with other tubes known to be good). Or, as it says in the RCA Tube Manual, "The tube tester cannot

be looked upon as the final authority in determining whether or not a tube is always satisfactory." The proof of the pudding . . .

Nevertheless, a tube tester is very useful and can save a lot of time. And it would be even more useful to be able to test picture tubes. The purpose of this installment is to attempt to remove some of the mystery from CRT's, and to show how they are comparable to receiving tubes, and where they are not.

A picture tube is an indicator tube (comparable to a "magic eye") and as such is more or less equivalent to a rectifier for testing purposes. That is, emission (rather than amplification) is its most important function. It is more complicated because it has more tube elements, because the anode voltage is considerably higher, and because the emission current is considerably lower (this latter point will be more fully dealt with below).

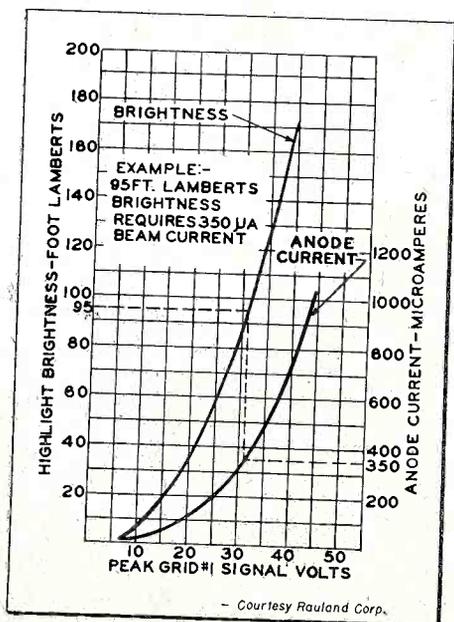
There is one additional item in a picture tube which we do not find in the average receiving tube, and that is the fluorescent screen. Replacements, due to screen faults are a relatively small percentage of the total replacements, however.

As a matter of fact, the reasons for replacement are roughly divided as follows: screen troubles-9.8%, low emission-40%, gassy-35%, element shorts or leakage-15%, open heaters-.2%.

Screen troubles can be seen with the naked eye, and take such forms as burns, spots due to pieces of the interior dag being deposited on the screen, light or dark bands near the perimeter of the face, etc.

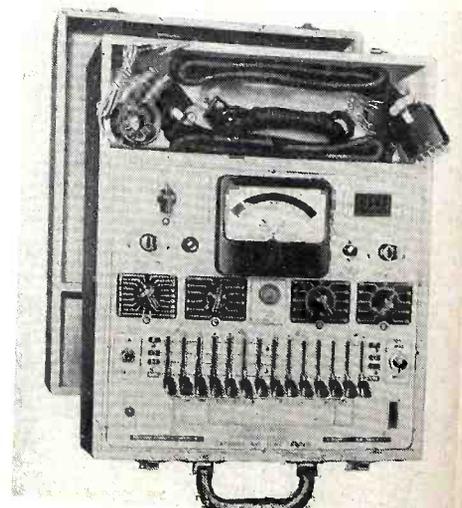
The other 90% of the troubles are in the gun. Obviously, we could check

Fig. 1. Typical values for TV picture tube Anode Current.



- Courtesy Rauland Corp.

Precision CR-30 CRT Tester.



in Television Picture Tubes

requirements for testing, and some test equipment designed for picture tubes.

for element shorts or opens, and open heaters with an ohmmeter, or with a tube checker with the proper socket adaptor.

But the largest percentage of the troubles require a sensitive meter measurement due to the small quantities involved. The graph in figure 1, showing the emission characteristics for the Rauland 12UP4, is approximately representative for picture tubes in general in that the anode current runs in the neighborhood of 300-1000 micro-amperes (.3 to 1 ma.). This is in comparison to receiving tubes, of which probably less than 1% run as little as 1 ma. Leakage currents, which might be negligible in a receiving tube when compared with the cathode current, could be serious in a picture tube when compared with a beam current of very small magnitude. Therefore, the measurement of very small amounts of leakage current would be desirable.

As an example of how leakage could cause picture trouble, imagine the not uncommon case of leakage current from G_2 to G_1 , where the video signal is fed to G_1 . This would cause the grid to go in the positive direction, which would have an effect comparable to putting a bias on the DC restorer, which would in turn reduce the amplitude of the sync being sent to the sync amplifier. It is possible, therefore, for leakage in the pix tube to cause weak and even unstable sync.

If there were leakage from G_2 to the anode (of a considerable magnitude), the picture would bloom and blank out as the contrast was turned up.

A gassy tube, on the other hand, might present a condition where it would not be possible to get sufficient brightness without the picture going negative or blanking out altogether.

Heater-Cathode leakage would, of course, cause hum bars (for whose cause you might search in the low-voltage power supply or even the vertical amplifiers) and in extreme cases, sync clipping (for a similar reason to that described under G_2 - G_1 leakage).

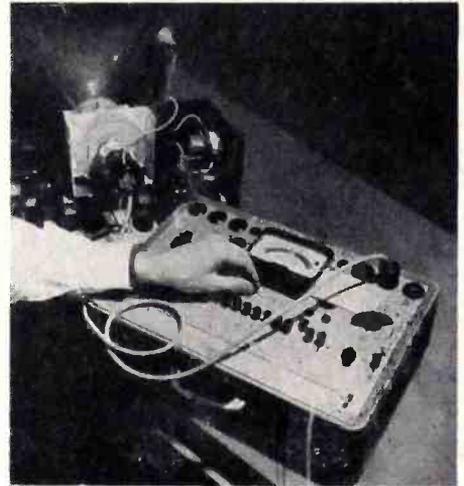
These are but a few of the troubles which might crop up in a TV set due to a faulty picture tube.

Checking the Tube

A visual inspection will reveal damage to the fluorescent screen, of course; and, where the tube is in a set, can show whether the filament of the CRT is lit, whether there is high voltage present (most servicemen will find that it is definitely worth while to be able to measure the high voltage to make sure that there is enough), and whether the proper voltages are present at the pins of the kine socket. After having seen a number of pix tube guns, it is also possible to see if the elements look normal, in proper position, and not loose. A critical ear can also hear the whistle of the horizontal deflection system.

But assuming that the routine checks have been made, and a more detailed analysis is deemed desirable; or that the tube is not in a receiver—then some sort of test equipment is indicated.

The first step in this direction might

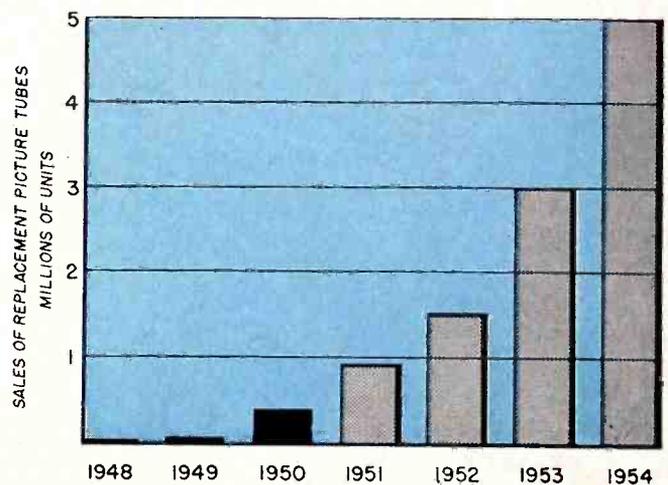
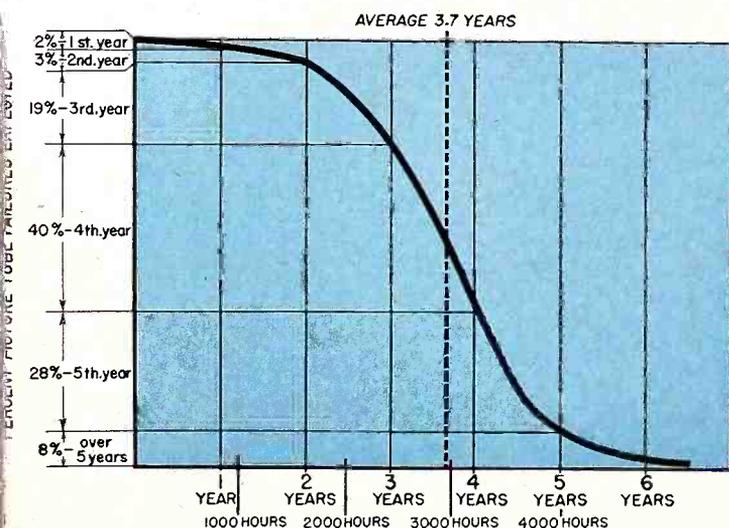


Sylvania adaptor is used in conjunction with existing tube tester.

be to use an existing tube checker. The Sylvania 228 CR Tube Test Adaptor is designed for use with Sylvania tube tester models 139, 140, 219 or 220, and makes it possible to perform certain checks on most electromagnetic picture tubes while the tubes are in the set. With the set turned off, the adaptor is plugged into the tube tester, and the socket on the other end of the adaptor cable is plugged into the pix tube. Following the directions and settings which accompany the adaptor, comparative readings may be made on the tube tester. According to the manufacturer, "There are a few picture tube defects, such as gas, that show up only with high voltage, but this tester will determine 85% of the cases where the picture tube should be replaced. Shorts, leakage,

(Continued on page 84)

Right) Estimated future sales of television picture tubes for replacement only, based on an average life expectancy of 3.7 years. These figures are based on TV sets produced through and including 1951 only. Assuming a continuing production in the years ahead, the replacement sales will continue to mount. (Left) Estimated life expectancy of television picture tubes based on average home use.



Aligning FM Discriminators

First of a series of articles designed to simplify the serviceman's task in

by Solomon Heller

Part I—ABC's of Vector and Phase

• The subject of vectors is, to many servicemen, what long-hair music is to the Be-bop fan. This vital difference must, however, be pointed out: The Be-bop fan will feel no pain if he never hears Brahms, Beethoven or Bach. The serviceman who doesn't understand vectors, however, is apt to reach for the aspirin bottle when he tries to figure out how discriminators and ratio detectors work.

In this series of articles on FM detectors, the writer hopes to lead the reader into the realm of vectors with a minimum of unpleasantness. The object will be to present, simply, clearly and interestingly, the ABC's of vectors. Enough information will be given to enable the serviceman to understand the operation of FM discriminators and ratio detectors. Servicemen must have a basic understanding of these circuits, if they are to service them intelligently and rapidly.

"Exactly why are vectors needed?" the reader may ask at this point. "Can you give me a real snappy reason for burdening my circuit-happy think-box with complicated radio theory?" Yes, friend, can do.

In the conventional detector circuit used in broadcast receivers, one i-f signal is applied to a tube element. In the FM detector, however, two voltages are applied to a single tube element. If two signal voltages are simultaneously present, we want to know what happens when they combine. Does the total voltage get larger, smaller, or remain the same? Only if we know these facts, can we foresee how the tube affected will operate.

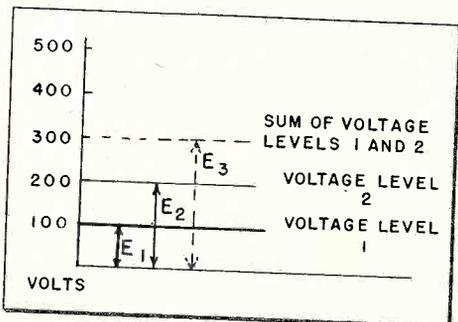


Fig. 1—Two DC voltages may be added arithmetically. Thus in the sketch above, $E_1 + E_2 = E_3$.

Now, if the voltages we are interested in were DC in nature, both the problem and the solution would be simple. If +100 VDC, for example, was combined with +200 VDC, the total would be +300 VDC (see fig. 1).

When the voltages to be added are AC, however, the problem becomes more complicated.

We can't say, as in the case of the DC voltages, that the sum of two AC voltages will be some fixed number, like 300 v. We can't make such a statement because the amplitude of an AC signal is *changing all the time* (see fig. 2). Contrast this with the case of the two previously mentioned DC voltages, which do not change at all.

Since the instantaneous amplitudes of the two signals to be added are constantly changing, the *sum* of the two signals will also constantly change. It is therefore obviously impossible to add the AC signals like DC voltages, and obtain a single, fixed voltage.

Now, if we can't add the two AC voltages arithmetically, how *can* we add the slippery little things?

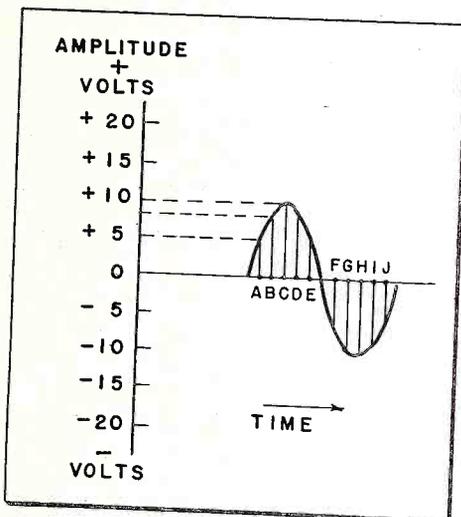


Fig. 2—The amplitude of an AC wave varies constantly during its cycle. Note, for instance, that the amplitude of the wave shown is +5v at time A of its cycle; it is about +7v at time B, and +10v at time C.

Well, if we had time, patience, devotion to duty, and no need to hustle for a buck, we could make a waveform addition, as indicated in fig. 3. In such an addition, the two waveforms are added point by point—that is, the height of wave 1 at point A, is added to the height of wave 2 at point A, and the total or resultant height is plotted as the height of wave 3 at point A. The same is done with points B, C, D, etc., into the wee hours of the morning.

Now, this method is obviously an impractical one. It becomes even more impractical when the voltages or currents to be added do not have the same phase, as they do in the case just cited, but differ in this respect

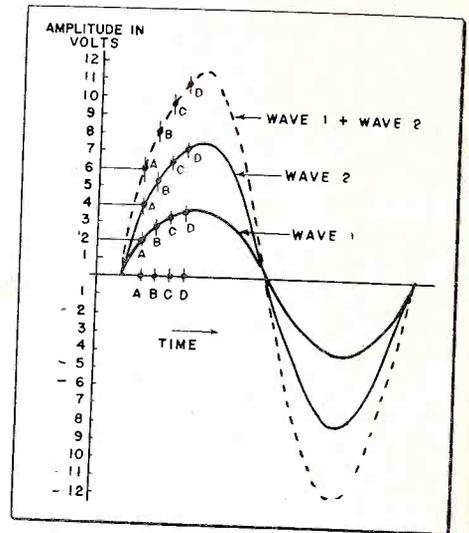
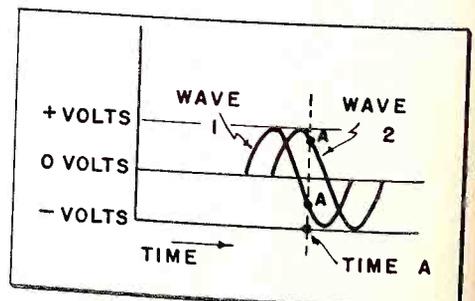


Fig. 3—When a waveform addition of waves 1 and 2 is made, the amplitude of wave 1 at some instant of time (time A) is added to the amplitude of wave 2 at the same instant. The sum of the two amplitudes is plotted as point A of wave 3, or the resultant waveform. The same is done for other instants of time throughout the cycle, like times B, C, D etc. Only a very few of these points have been indicated here. When the points are connected, wave 3 is traced out.

(see fig. 4). We won't even try to plot the result of a point-by-point addition of the two out-of-phase waveforms illustrated in fig. 4. It should be obvious that it would be rough. *By using vectors, however, the problem becomes as simple as taking candy from a day-old baby* (taking candy from babies two days old or more is apt to present difficulties).

We mentioned phase a moment ago. The question may have flashed through your mind (no need to be ashamed of it) just exactly what is phase? And what does the guy mean when he says the two signals differ in phase is indicating an understanding of phase is indi-

Fig. 4—When 2 out-of-phase voltages are to be added, it becomes more difficult to make a waveform addition. This is true because one voltage may be positive at some instant of time (wave 1 at point A for instance) while the other voltage is negative at the same instant of time (wave 2 at point A), necessitating a subtraction, instead of an addition, to obtain the net voltage at that point. Thus if the amplitude of wave 1 at point A is +5v, and that of wave 2 at point A is -2v, the net voltage at point A is +3v.



and Ratio Detectors

eliminating one of the most frequent causes of trouble in FM receivers.

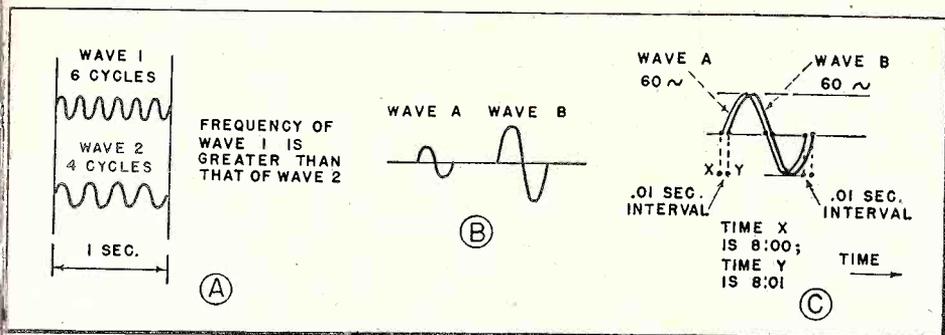
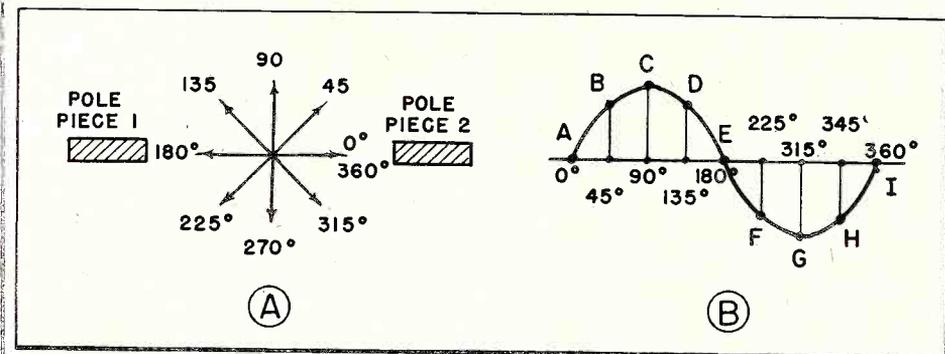


Fig. 5—Radio waves may differ from each other in frequency (A), amplitude (B) or phase (C).

Fig. 6—A) Movements of the armature in a two-pole generator. The armature rotates counterclockwise from 0 degrees to 360 degrees. B) Output of generator. When the armature is in its 45-degree position, the output wave is at point A, or the 45-degree point of its cycle; when the armature is in its 90-degree position, the output wave is at point C, or the 90-degree point of its cycle; and so on.



sensible to an understanding of vectors, it would seem wise to spend some time on it.

Phase may be explained simply, without any of the usual bushwah inflicted on long-suffering radiomen, as follows:

Radio waves may differ from each other in frequency, amplitude and phase. Frequency differences are simple to understand. If two signals differ in frequency, it merely means that one signal will repeat its cycle a greater number of times per second than the other one (see fig. 5A). An amplitude difference between two signals is even simpler to understand. In fig. 5B, where such a difference is illustrated, it is perfectly obvious that signal A is larger in amplitude than signal B.

For an illustration of a phase difference, consider fig. 5C. Signals A and B in this figure have the same frequency. Signal B, however, starts its cycle a short time after signal A does so. Similarly, signal B completes its cycle a short while after signal A does so. Signals A and B are therefore said to be out of phase. If they began and finished their respective cycles during the same interval of time, they would be described as *in phase*.

Differences in phase between two signals are taken into account only

when the signals are of the *same frequency*. If they are of *different frequencies*, such a big difference exists between them (frequency), that a little difference like phase is unimportant.

The question most apt to rear its unbarbered head at this time is: How do phase differences arise?

Well, suppose we consider two 60-cycle AC generators, located in a commercial power plant. One is turned on by a mechanic at exactly 8 a.m. one Monday morning. A second mechanic, whose father never instilled in him the importance of promptness, turns on *his* 60-cycle generator at 8.01 a.m. The frequencies of the two AC output voltages are exactly the

same—60 cycles. The phase of the voltages with respect to each other is *not* the same, however, since the voltages didn't start developing at the same instant (see fig. 5C).

Phase differences arise in more important ways, and we will go into them at the proper time. For the present, however, this simple illustration should suffice.

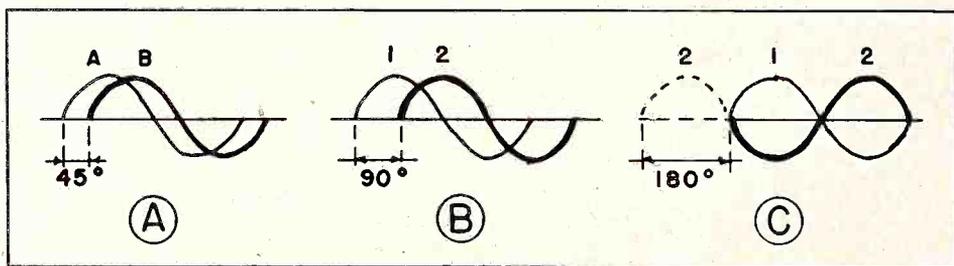
The question that next arises is, how can the difference in the phase of two AC voltages or currents—say the two voltages just referred to—be measured? (We need such measurements, when two out-of-phase signals are to be added vectorially.)

Well, we could measure this difference in microseconds (a microsecond is a millionth of a second), and say that wave B (fig. 5C) arrives 10,000 microseconds (0.1 sec) after wave A. We *could* use such a method—but we don't. The method actually used measures the difference between two out-of-phase signals in *degrees*—the same unit of measurement used for angles. Let's see why such a system of measurement is logical.

Now, the rotating armature of an AC (2-Pole) generator moves 360 degrees during the course of one rotation (see fig. 6A), causing an AC voltage similar to the one indicated in fig. 6B to be developed. The divisions, in degrees, indicated on the voltage waveform, correspond to the angles swept out by the armature during its rotation. Thus when the armature has rotated 90 degrees, or $\frac{1}{4}$ of its cycle, the generator's output voltage is at the 90-degree or quarter-cycle point. Similarly, when the generator's armature has rotated 180 degrees, or $\frac{1}{2}$ its total rotation, its output voltage is at the 180 degree or half-cycle point. When the generator armature has completed one rotation, or 360 degrees, it starts a new rotation, and a new voltage waveform, identical with the preceding one, begins.

(Continued on page 98)

Fig. 7—Examples of phase differences. The 45-degree and 90-degree phase differences in sketches A and B are readily apparent. To make the 180-degree phase difference between waves 1 and 2 of (C) more obvious, we have extended wave 2 by means of dotted lines, to a previous half cycle. This makes more clear the fact that wave 2 has finished a positive half cycle, or has passed through 180 degrees, by the time wave 1 starts its positive half cycle.



New Tubes

Catalogs, Bulletins & Books

RCA RECTANGULAR TUBE

RCA has announced the first rectangular metal-cone TV picture tube, the 17-inch rectangular tube 17CP4. The tube is said to be stronger and lighter than a similar all-glass tube. Picture area is 14 $\frac{1}{8}$ by 11 inches. The tube is a "short" wide-angle deflection tube with a maximum overall length of



19 inches. (The 16AP4 was 22 $\frac{1}{4}$ inches long.) The tube incorporates a frosted filter-glass face plate for improved viewing, said to eliminate annoying room reflections as well as halation and reflection within the faceplate itself. A single-field ion trap is employed, as well as magnetic deflection and focus. Tube Department, RCA Victor, Harrison, N. J.—RADIO & TELEVISION RETAILING.

Sylvania RECEIVING TUBE

Type 6BL7 is a double triode designed for wide angle vertical deflection. It provides unusually high plate current, and its high mutual conduct-



ance and low plate resistance also suit it for coaxial cable line amplifiers and medium power audio output tube service. Radio Tube Div., Sylvania Electric Products, Inc., Emporium, Pa.—RADIO & TELEVISION RETAILING.

GE RECEIVING TUBE

Type 12BH7 is a 9-pin miniature double triode designed primarily for vertical oscillator and amplifier service in TV sets with large, wide-angle picture tubes. Maximum DC plate potential is 500 volts, maximum DC negative grid potential 50 volts, maximum heater-cathode potential 180 volts. Tube Divisions, General Electric Co., Schenectady, N. Y.—RADIO & TELEVISION RETAILING.

Allied Electric Products Inc., 76 Coit Street, Irvington, N. J. The new 24-page catalog #161 covers many new Allied and Sheldon products not shown in previous catalogs, including cord sets, the new "Tapmaster" extension cord sets, aluminized reflector Sheldon lamps, and new photoflood and photospot lamps. In addition, the catalog covers the full line of plugs, cube lamps, lamp starters, Sheldon picture tubes for TV, etc. Copies may be had by writing direct to the firm.

Standard Wood Products Corp., 43-02 38th St., Long Island City 4, New York. The complete "Standard" line of TV cabinets and 5-way (AM-FM-TV-phonorecord storage) console cabinets is fully described and illustrated in the new 14-page catalog. Types of cabinets are available in Modern, Traditional, Period and Custom styling, and to accommodate 16, 17, 19 and 20 inch rectangular and round tubes. For a free copy, write direct to the firm.

Lamp Department, General Electric Co. A "Sketch Book of Home Lighting Display Suggestions" has been prepared for the guidance of appliance dealers. The booklet contains eight display suggestions on the following subjects: home or school study center, lighting for hand sewing, portable lamp promotions, fixtures and portable lamps, dining room lighting, dresser lighting for facial makeup, and booklet holders. The booklet is available without cost to persons addressing requests to Inquiry Bureau, General Electric Co., Nela Park, Cleveland 12, Ohio.

Snyder Mfg. Co., Philadelphia 40, Penna. A new book on TV antenna installations is being made available without charge to authorized servicemen through Snyder distributors. Titled "TV Tenna Tips," the book has been prepared by Edward M. Noll, faculty lecturer at Temple University's Technical Institute, and Matthew Mandl, Director of Electronics at the same school, in cooperation with Charles A. Trowbridge, chief design engineer at Snyder. The book is designed to furnish a good working knowledge of fundamental antenna types, and includes chapters on basic antennas, helpful hints, installation do's and don'ts, the yagi antenna, dimension guide, channel frequencies and proper feed methods for stacked arrays.

Sylvania Electric Products, Inc., Emporium, Penna. A new 40-page "Tube Substitution Manual" has been made available free on request to the Advertising Dept. of Sylvania at Emporium. The manual is arranged in nine sections, providing informative texts and charts on general tube classifications; circuit modifications in which additional resistors are needed; substitute battery type tubes; substitute 150 ma tubes; substitute 300 ma tubes; substitute transformer and auto types; substitute TV receiving types; substitute TV picture tube types; and frequently needed change-over diagrams.

"Making Money in Television Servicing," by Eugene Ecklund, former manager of the national service department of Allen B. DuMont Labs., has been published by Howard W. Sams & Co. of Indianapolis. The 150-page book, which takes into consideration that the average TV technician must superimpose business management on his technical background to conduct a successful business, goes into detail on business techniques in TV servicemen. "To anyone in the TV servicing field, or who is considering entering it," Sams said, "this book is a must—for it tells how to make TV servicing profitable." The book lists at \$1.25.

"Receiving Tube Substitution Guide Book," by H. A. Middleton, published by John F. Rider, Publisher, Inc., 480 Canal St., New York 13, N. Y. This 224 page book is 8 $\frac{1}{2}$ x 11 inches in size and is a greatly enlarged and revised edition of the book "Wartime Radio Service" published in 1944. This new book lists about 750 receiving tube types and their bases, including all of the following series: 4, 5, 6, 7 and 7L old style base, octal, loctal, 7-pin and 9-pin miniatures and subminiatures tubes. In addition, the book includes a compilation of TV receiver filament circuit arrangements. A group of servicing suggestions are also included to help in repairing the filaments of burned out tubes, making adapters, and for the change over of battery operated receivers to electric operation. A complete listing of the characteristics and bases of cathode-ray tubes is also provided. The book is priced at \$2.40.

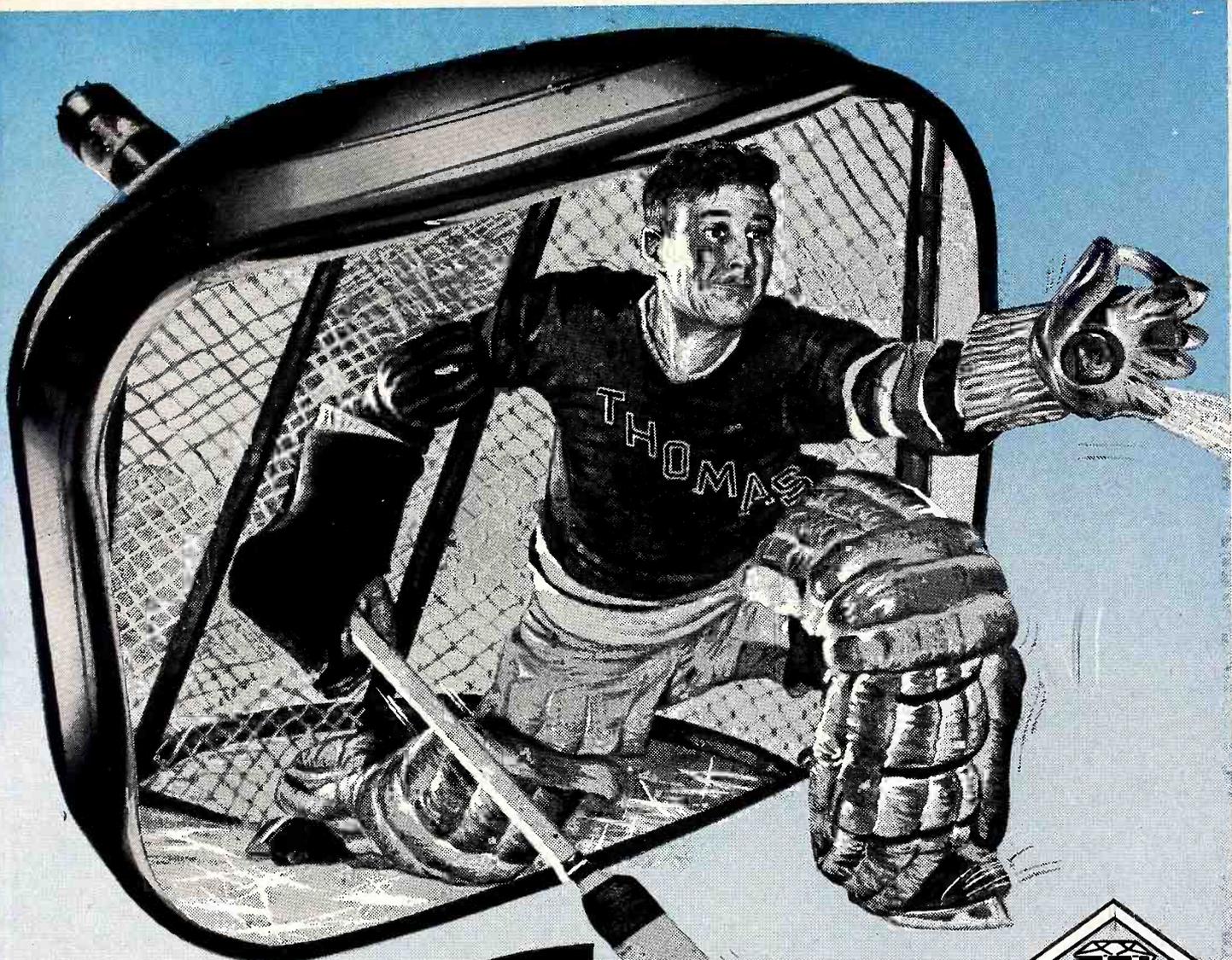
"Father of Radio"

Autobiography of Lee de Forest, Published by Wilcox & Follett Co., 1255 S. Wabash Ave., Chicago 5, Ill. 502 pages. Price \$5.

Writing with remarkable literary skill, Dr. de Forest tells interestingly of his boyhood and origins, his inventions, his patent struggles, and his romances and marriages. His life has so touched every phase of radio and television development, beginning with the very foundation of the three-element tube itself, that this book is not only a fascinating human biography but a reference volume of dates and eras in the development of today's multi-billion-dollar electronic industries.

Dr. de Forest's many historic "firsts" commend the admiration of those who have come after him:

1. First wireless transmission overland—1904.
2. First wireless telegraph between moving trains and fixed stations—1905.
3. First three-electrode vacuum tube—1906.
4. First broadcast—1907.
5. First transmission of voices without wires—1907.
6. First use of radio knife in surgery—1907.
7. First broadcast of Grand Opera—1910.
8. First successful telephone amplifier—1912.
9. First feed-back, or oscillator, circuit—1912.
10. First use of oscillating tube in broadcast—1915.
11. First electronic musical instrument—1915.
12. First electromagnetic phonograph pickup—1916.
13. First transmission of voice by radiotelephone from airplane in flight—1916.
14. First theatrical presentation of sound-on-film talking motion pictures—1923.



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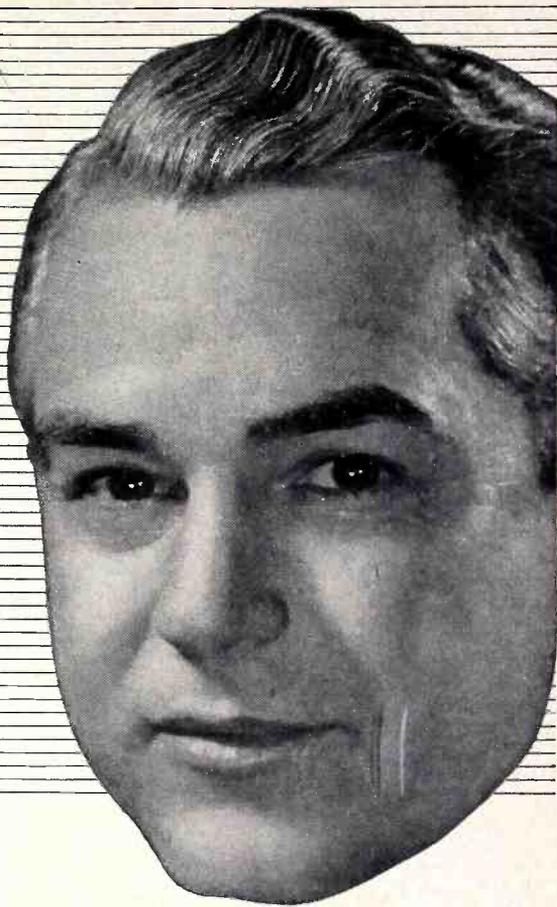
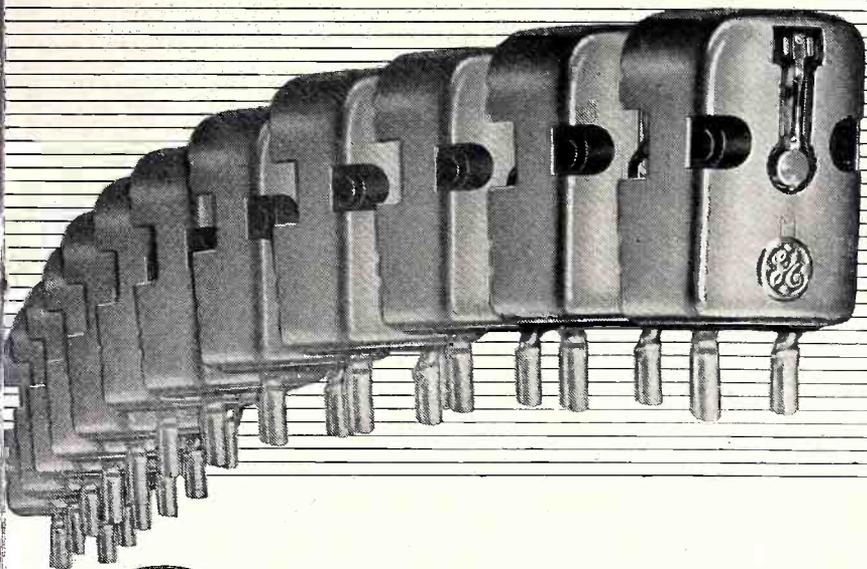


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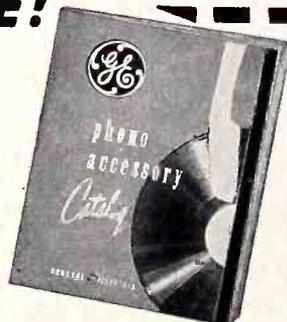
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Sylvania Television Award Foundation Established



Don G. Mitchell (second from right), president of Sylvania Electric Products, Inc., welcomes O. H. Caldwell, editorial director of RADIO & TELEVISION RETAILING and TELE-TECH, at a recent meeting at the Hotel Pierre, announcing the establishment of the Sylvania Television Awards Foundation. Mitchell stated that the top award, the "Sylvia", would go to the program best illustrating creative television

technique. Other awards would be given to the writer, producer, actor, cameraman, etc., considered to have made the greatest contribution to television in the period from January 1st to June 30th, 1951. With Mitchell and Caldwell are (left) Bernard O. Holsinger, assistant general sales manager and J. K. McDonough (right), general sales manager, Radio & TV Div., Sylvania Electric Products, Inc.

Representing Thomas

Thomas Electronics, Inc., Passaic, N. J., announces the appointment of Gassner and Clark, 6349 N. Clark Street, Chicago, Illinois, as jobber sales representative. M. J. Alexander, the television tube firm's sales manager, said that the new representative will conduct sales throughout the entire state of Illinois.

New Du Mont Department

Establishment of a cabinet styling department under the auspices of the receiver sales division, Allen B. Du Mont Laboratories, Inc., is announced by general manager Ernest A. Marx. The establishment of the new department is effective immediately.

Philco Appointment

O. O. Schreiber, who has been with Philco for the past 17 years and during the past year has been assistant secretary, has also been appointed assistant to the president, it has been announced by William Balderston, president of Philco Corporation.

Etraco Company Expands

Etraco Manufacturing Co., Inc., of Flemington, N. J., manufacturers of transformers, wire and cable assemblies, have completed their new addition. This new space will house the transformer division. New automatic equipment has also been installed for a more efficient and economical manufacture of the company's wire and cable business.

V-M Promotion Campaign Aimed at Consumer



Giving the final akays to an advertising campaign by V-M Corp., Benton Harbor, Mich., designed to establish consumer recognition of the Tri-O-Matic record changer line, are: E. Klann, art director, Mayard Advertising; J. Mayer, account executive, Mayard; R. Grose, distributor sales manager, V-M. Signing: E. Rush, general manager of V-M.

Universal Has New Sound Slide Films on Ranges

Landers, Frary & Clark has prepared two new sound slide films on its Universal Select-A-Range and 1951 Speedliner electric ranges. The Select-A-Range film shows typical kitchen arrangements including Royal Barry Wills sketches; actual installations and suggested kitchen arrangements for "L", "T", and square shaped kitchens designed with the use of scale model Select-A-Range blocks. The film also features the Society of Motion Picture Art Directors award for the Select-A-Range.

Schirmer Takes On Scott

The four stores of G. Schirmer, Inc., one of America's leading music houses, have been franchised as retailers of Scott radio-phonographs and television sets, it has been announced by L. M. Sandwick, Scott sales manager. Schirmer operates stores in New York, Brooklyn, Los Angeles and Westwood, Calif.

New Pyramid Displays

A legible poster type display for Pyramid Instrument Corporation's Amprobe, the pocket-size, snap-on volt ammeter is announced. It measures $12\frac{3}{4} \times 20\frac{1}{4}$ inches, and is made with an easel back, which makes it equally valuable for window or interior display. The background color is yellow and red. Also available unmounted for use as a wall poster, window streamer, and so forth. For complete details, address inquires to: Pyramid Instrument Corporation, 49 Howard Street, New York 13, New York.

Trad Trains Guns on TV Black Marketeers

Dealers who may participate in the expected TV black market, or who in any other way may hinder the all-out effort to hold the price line during the critical national emergency, will not receive inventory allocations, announced George Trad, vice-president and national sales manager of the Trad Television Corporation, manufacturer of the Giant Tradivision TV set, which is now installed on the Battleship Missouri.

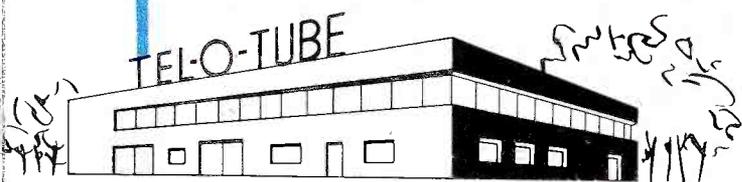
"Obviously," said Trad, "TV sets will soon be at a premium and already the pinch is being felt. In the next few weeks, vital materials will be almost impossible to get, and television sets will be rationed like water from the only canteen on the desert.

"Certainly we are going to have the usual number of chisellers and black marketeers, but should we learn of any such unpatriotic practices among dealers of Trad sets, we will immediately cancel all shipments to them. We hope the rest of the industry does the same."

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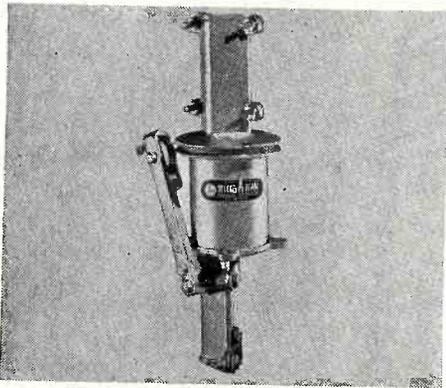
TV Antennas, Accessories,

ITI MULTIBOOSTER

The "Multibooster" is a new broad-band TV antenna amplifier for use with multiple installations. The Multibooster features the same uniform response circuits of the Auto booster with additional features needed for multiple antenna system use. Separate high and low band gain controls are provided. The Multibooster (like the Auto booster) is designed for unattended continuous operation. Complete specifications and application information are available from Industrial Television, Inc., 359 Lexington Ave., Clifton, N. J.—RADIO & TELEVISION RETAILING.

Neo Products ROTATOR

"Select-A-Beam" is a low-cost, hand-operated TV antenna rotator of aluminum, weatherproof construction, with sealed ball-bearings and is said to be fool-proof and trouble-free. A small worm-gear control box for attachment to



the outside of the house easily turns the antenna 360 degrees and may be operated from either outside or inside. A weight of only three pounds is added to the mast. Neo Products Corp., Erie, Michigan.—RADIO & TELEVISION RETAILING.

Taco MAST STANDOFFS

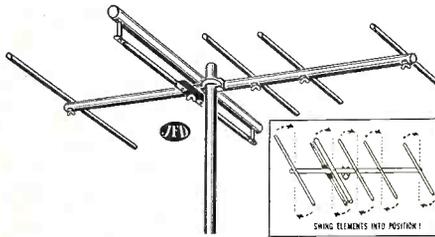
For TV installations where it is desirable to have two leads from antenna to receiver, the Taco "Double Mast Standoff" will mount on 1"-2" masts and accommodate either ribbon or RG type transmission line, maintaining a separation between the two lead-ins. A larger size is also available for masts up to 5". Technical Appliance Corp., Sherburne, N. Y.—RADIO & TELEVISION RETAILING.

Brach WALL PLATE

No. 433 wall plate for TV installations is complete with male and female coaxial fittings and is designed for use with standard single gang flush or surface mounted wall box. This plate may be used for single installations for the Brach Mul-Tel master TV installations. Brach Mfg. Corp., 200 Central Ave., Newark, N. J.—RADIO & TELEVISION RETAILING.

JFD YAGI ANTENNA

A new line of "longer range" 5-element Yagi antennas for fringe TV features "Quik-Rig" construction, and is said to match 300-ohm transmission line. Construction is of aluminum, with a 1"



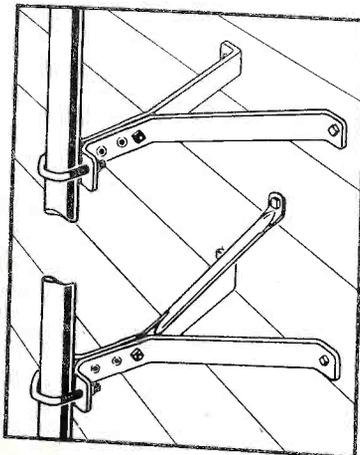
OD collector element and crossarm. Models are available for all low and high band channels, and a stacking harness is available where required. JFD Mfg. Co., Inc., 6101 Sixteenth Ave., Brooklyn 4, N. Y.—RADIO & TELEVISION RETAILING.

Channel Master TV ANTENNA

The "Clamp On" TV antenna is designed to clamp anywhere, simplifying mounting problems. It may be used indoors or outdoors, on furniture, fixtures, windows, etc. It consists of ball-mounted telescoping dipoles which swing out in a 360 degree arc. The elements can be set to form a horizontal Vee for any channel in any direction. Channel Master Corp., Napanoch Rd., Ellenville, N. Y.—RADIO & TELEVISION RETAILING.

South River WALL BRACKETS

Model WB-12 wall bracket is made of heavy gauge steel, with a tubular aluminum tripod leg. One piece construction simplifies installation. Includes U-bolts designed to fit masts up to 1 1/2"



OD. Brackets with wider spread base legs also available to accommodate rafter spacing in roofs. South River Metal Products Co., Inc., South River, N. J.—RADIO & TELEVISION RETAILING.

Airflyte SERVICE MIRROR

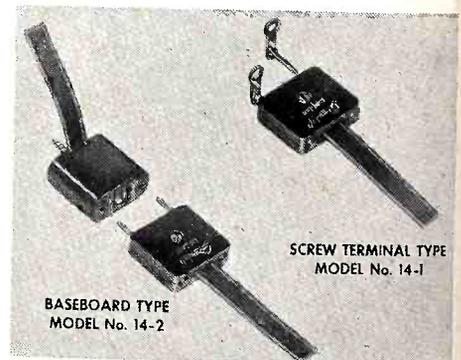
The "Serviscope" is designed to simplify the installation and adjustment of sets where it is necessary to adjust rear apron controls while observing the screen. A stand is provided to bring viewing mirror up to the proper height, and the whole unit folds flat into a handy carrying carton. Airflyte Electronics Co., 22 Evergreen St., Bayonne, N. J.—RADIO & TELEVISION RETAILING.

All-Channel ANTENNAS

The firm offers a complete line of TV antennas featuring rugged construction and quick-rig assembly. The line includes conicals, fans, folded and straight dipoles, inlines, window antennas and Yagis. Stacking kits and other accessories are also available. All-Channel Antenna Corp., 70-07 Queens Blvd., Woodside, N. Y.—RADIO & TELEVISION RETAILING.

Grayhill CONNECTORS

Two new types of connectors are available for simplifying TV installations using 300-ohm twinlead. On model 14-1, two male lugs are designed to mount on the antenna terminals of the TV set so that the lead-in can be plugged in



and out, instead of screwed on. On model 14-2, the female receptacle contains a wood screw which can be mounted on a baseboard for easy termination of a lead-in. Grayhill, 4524 W. Madison St., Chicago 24, Ill.—RADIO & TELEVISION RETAILING.

Jerrold DISTRIBUTION BOX

A new antenna distribution box, ADO-10, is for use with the Jerrold MC-1 master amplifier and any combination of up to 10 300-ohm or 72-ohm receivers. The unit is designed to give added flexibility in multiple installations. Isolation between receivers is accomplished with 6AK5 tubes as cathode followers. Circuits are heavily loaded to provide broad-band response. Jerrold Electronics Corp., 121 North Broad St., Philadelphia 7, Penna.—RADIO & TELEVISION RETAILING.

Audio Equipment, Parts, Tools

Sun SPEAKER SYSTEM

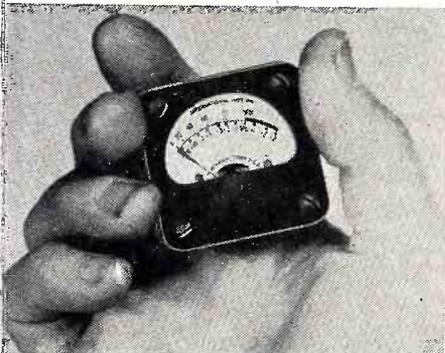
The "Realist" is a corner speaker system featuring a woofer and a tweeter placed back to back. According to the firm, this results in no hang-over of the bass notes, while the treble tones are reflected from the corner and distributed throughout the room. A wide selection of speakers is available for use in the system. The cabinet is available in modern or traditional styling. Sun Radio & Electronics Co., Inc., 122-124 Duane St., New York, N. Y.—RADIO & TELEVISION RETAILING.

Racon PA DUAL SPEAKER

Model RR-40 is designed to meet the rigorous requirements of railroad and industrial uses. Two weather-proof steel bell re-entrant speakers are connected back-to-back to the driver unit. Response is 350-6000 cycles, capacity 40 watts, impedance (two speakers in parallel) 8 ohms. Racon Electric Co., Inc., 52 E. 19th St., New York 3, N. Y.—RADIO & TELEVISION RETAILING.

International VU METERS

A 1½" VU meter and a 1½" DB meter are made to conform to the applicable sections of specifications JAN-5-6 for VU and DB meters and are said to give performance comparable to 2½" and 3½" instruments. These instruments are available in three case styles:



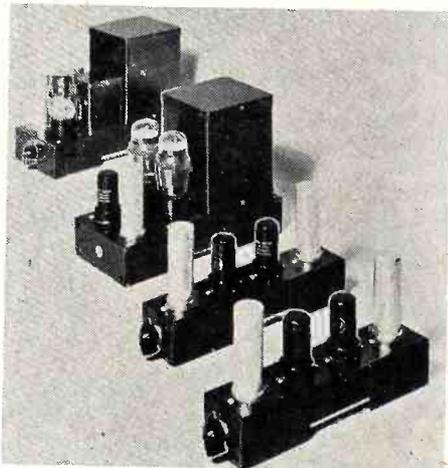
square waterproof case (shown), round waterproof case, and round flange mounting case. These instruments are claimed to be the smaller and lightest such instruments made, and both are completely self-contained, ready for installation. International Instruments, Inc., 31 East St., New Haven 11, Conn.—RADIO & TELEVISION RETAILING.

Aerovox Resonant CAPACITORS

Designed to meet the requirements of bypass functions, Type RC resonant capacitors are wound so as to increase the inductance, so that the capacitor will be resonant in the IF frequency band (25-485KC) and are said to improve filtering while at the same time decreasing cost and bulk of components. Units are available in .05, .1 and .2 mfd., 400 VDC ratings. Aerovox Corp., New Bedford, Mass.—RADIO & TELEVISION RETAILING.

Modular AUDIO AMPLIFIERS

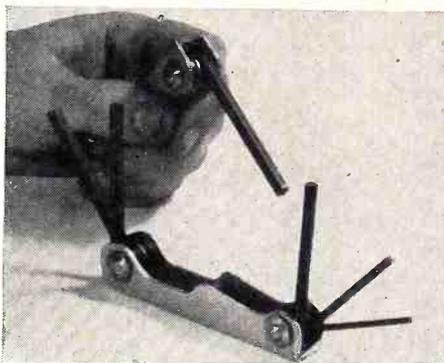
A new line of unitized amplifiers are designed in the form of block units which, when grouped together, permit versatility and variety in the assembly of audio equipment. Chassis include an equalized preamplifier, power amplifier, power supply, tone control chassis,



switching chassis, etc. All are of standardized lengths and widths which are multiples of 2⅛ inches. Terminal blocks and cables are available for interconnections, and the units are adaptable for use in custom built music systems for home, commercial and professional use. Modular Audio Corp., 1546 Second Ave., New York 28, N. Y.—RADIO & TELEVISION RETAILING.

Hunter 5-in-1 TOOL

The "Smitty" is designed to meet the need for a single tool that fits all popular size socket-head screws and bolts. The Smitty has five of the most popular



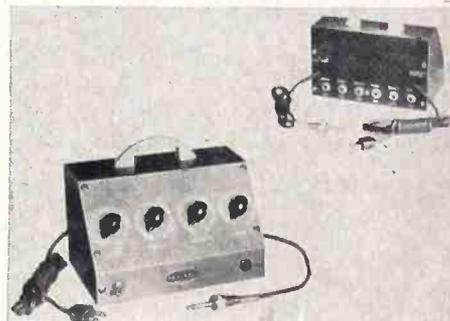
standard size socket-head wrenches, which fold knife-like into a sturdy handle. H. D. Hunter Co., 3499 East 4th St., Los Angeles, Calif.—RADIO & TELEVISION RETAILING.

Burgess BATTERIES

New dry cells introduced include the Giant No. 6 in two styles with screw terminals and with spring clips; the No. S461 Giant 6-volt battery consists of four No. 6 cells sealed in a weatherproof "Metalclad" container with strap handle and insulated terminals. Burgess Battery Co., Freeport, Ill.—RADIO & TELEVISION RETAILING.

Pentron AUDIO MIXER

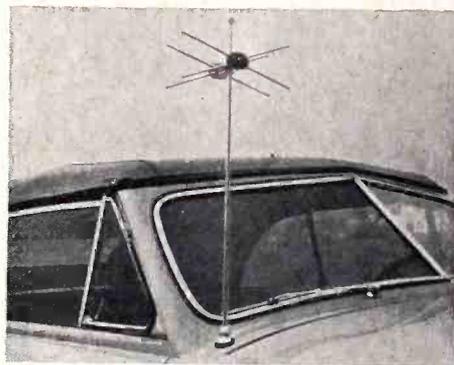
"Audio Mix" is a professional type electronic mixer for all types of audio systems, and is designed to meet requirements of multiple mike recording on tape, wire or disc, or for public address systems. Called model MM-1, the



unit has four controls for a wide range of blending on its four channels. The six inputs include four mike and two phono. Frequency response is 20-20,000 cycles, hum level is said to be extremely low. Pentron Corp., 221 E. Culbertson St., Chicago 16, Ill.—RADIO & TELEVISION RETAILING.

Insuline AUTO ANTENNA

The "Tele-Con" is a miniature double conical auxiliary auto aerial patterned closely after a TV antenna. The assembly clamps onto any vertical auto antenna and can be installed in a minute.



The unit is designed to be eye-catching accessory, and in addition is said to improve reception because it adds an appreciable "top loading" effect to the aerial. Insuline Corp. of America, 3602 35th Ave., Long Island City 1, N. Y.—RADIO & TELEVISION DETAILING.

JFD VARIABLE CAPACITOR

Tubular in design, the new Piston Type variable trimmer capacitor is designed to meet the requirements of VHF and microwave electronic equipment, having small physical size and continually uniform change in relation to rotation. Three units of this type are available, with capacities of .3 to 3 mmfd., .5 to 5 mmfd., and 1.5 to 11 mmfd. JFD Mfg. Co., Inc., 6101 Sixteenth Ave., Brooklyn 4 N. Y.—RADIO & TELEVISION RETAILING.

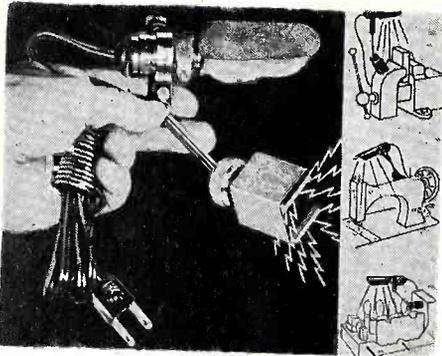
New Aids to Servicers

Perma-Power POWER SUPPLY

Perma-Power units make possible electrification of battery radio sets. Universal sockets are available to fit any radio. Models are available for various types of A and B supplies and sets from 4 to 8 tubes. Uses selenium rectifiers, no tubes. Perma-Power Co., 4721 N. Damen Ave., Chicago 25, Ill.—RADIO & TELEVISION RETAILING.

Enco FLEXIBLE LIGHT

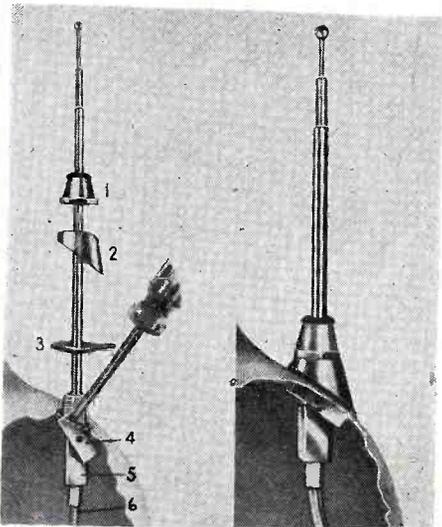
The "Miti-Mite" is designed to make light available close to work while working on any machine shop equipment. The portable light is equipped with a permanent magnet base which



can be attached to flat or curved metal surfaces, saving time and eliminating clamping. It can also be used on refrigerators, oil burners, electronic equipment, etc. Retail price complete is \$7.50. Enco Mfg. Co., 4522 W. Fullerton Ave., Chicago 39, Ill.—RADIO & TELEVISION RETAILING.

Belnord AUTO ANTENNA

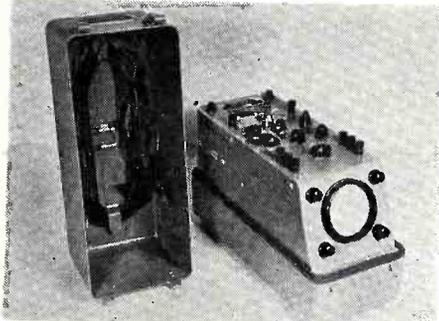
The "Quick-Mount" auto radio antenna is designed for quick, easy installation by one man. It may be mounted from



the top on cowl or fender, and is constructed entirely of brass and chromium. Length closed is 20", open 60". Retail price is \$5.95. Belnord and Co., 474 Sterling Place, Brooklyn, N. Y.—RADIO & TELEVISION RETAILING.

Hycon OSCILLOSCOPE

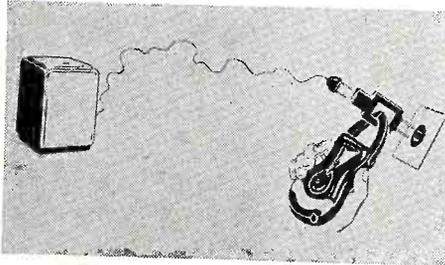
Miniature oscilloscope of laboratory quality, this unit measures 9 x 6 x 14 1/2 inches and weighs 17 pounds. Vertical amplifier response is said to be flat



within 3 DB from DC to 2 MC. Faithful reproduction of square waves is claimed. Other features include fast return sweep, sensitivity .5 volts per inch. Hycon Mfg. Co., 2961 E. Colorado St., Pasadena 8, Calif.—RADIO & TELEVISION RETAILING.

Amprobe ACCESSORIES

Two accessories are available for use with Amprobe snap-on volt-ammeter for testing appliances and other electrical devices. The split plug permits current readings without separating the conductors of a sealed appliance cord. The device plugs in between the appliance



and the outlet. The Sensitizer is similar in appearance to the split plug, but contains windings which increase the sensitivity of the Amprobe 10 times. Pyramid Instrument Corp., 49 Howard St., New York 13, N. Y.—RADIO & TELEVISION RETAILING.

Clarostat POWER RESISTORS

Type H3ON "Greenohm" power resistors feature insulated safety knob construction and convenient Edison screw base. Can be used as an easily replaceable resistor or heater. Wide range of wattages and resistances available. For general specifications, write for bulletin 113, Clarostat Mfg. Co., Inc., Dover, N. H.—RADIO & TELEVISION RETAILING.

Philco ISOLATION XFORMER

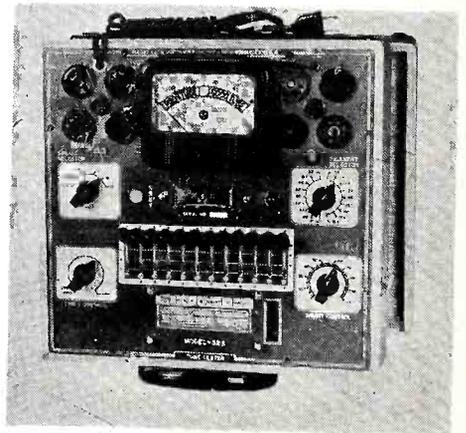
Transformer #45-9600 is designed for service bench testing of "line connected" TV receivers to eliminate shock hazard and damage to test equipment. Available through the Accessory Division of Philco, and through the company's distributors, the transformer is conservatively rated at 250 VA. Philco Corp., Philadelphia, Pa.—RADIO & TELEVISION RETAILING.

Hickok SIGNAL GENERATOR

Model 292X "microvolt signal generator" covers all AM, FM, TV and mobile frequencies in 7 ranges. Modulated and unmodulated output from .2 to 100,000 microvolts is indicated on a DB meter for faster servicing. Self-contained crystal oscillator circuit, with 500KC to 20-MC crystals available. Range is 125KC to 220MC. Over 100 inches of scale length are provided for easy readings. 0-2 volts of 400 cycle audio output are provided. Hickok Electrical Instrument Co., 10514 DuPont Ave., Cleveland, Ohio.—RADIO & TELEVISION RETAILING.

RCP TUBE TESTER

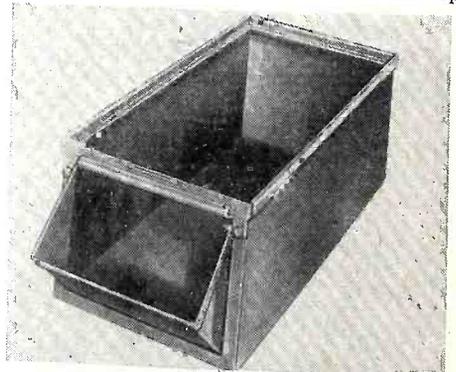
Model 323-C tube tester provides independent circuit and switching system for every possible tube element and is designed to be obsolescence-free. Two additional unused element circuit switches and socket blanks are provided



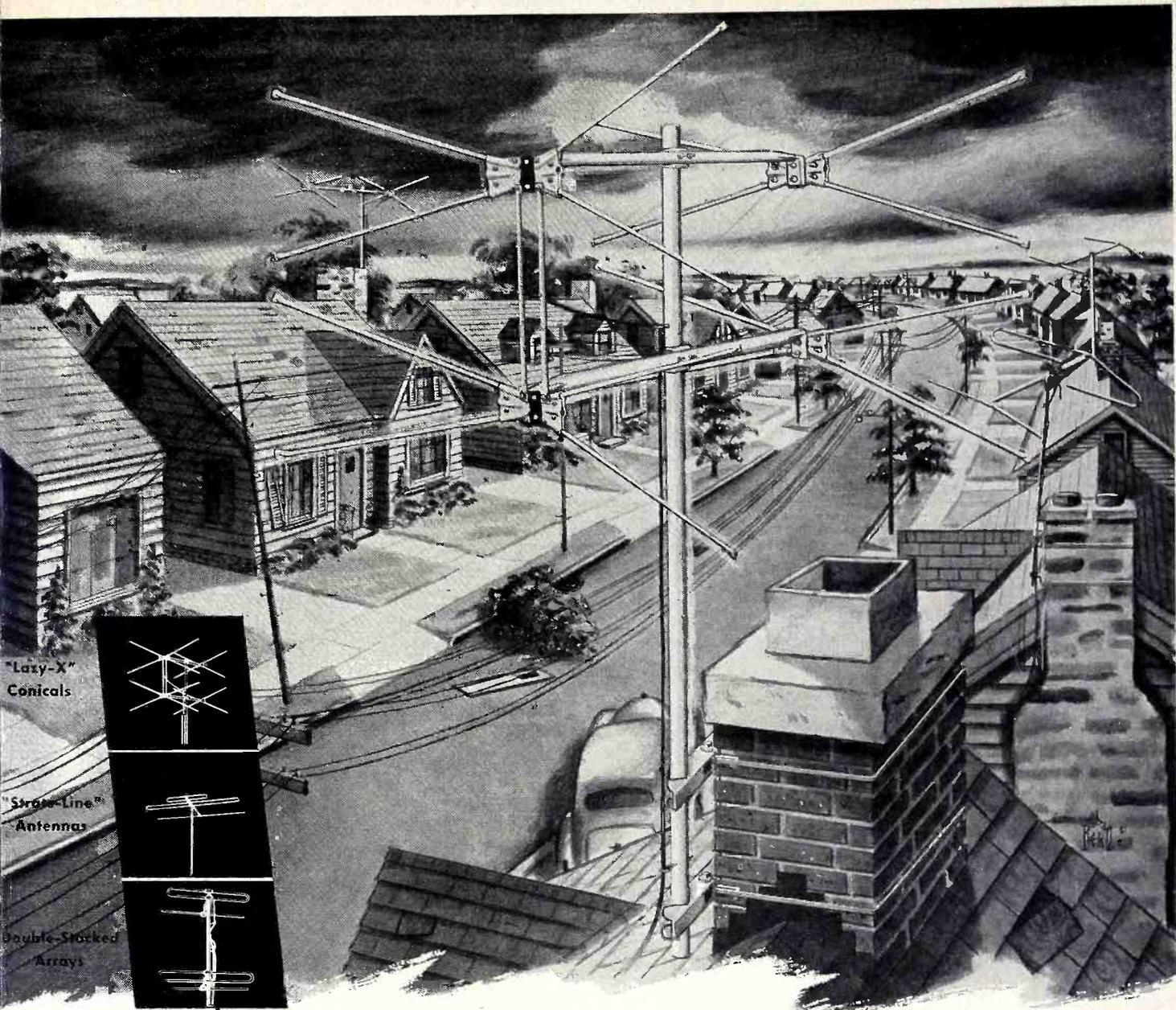
as a protection against future developments which might not now be provided for. All types of tubes now in use can be tested on this unit. Unit is priced at \$54.95, and with wood carrying case \$57.95. 323M counter merchandiser is \$87.95. Radio City Products Co., Inc., 152 W. 25th St., New York 1, N. Y.—RADIO & TELEVISION RETAILING.

Lyon PARTS BIN

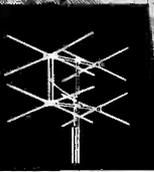
Model RB steel bin type storage unit can be stacked on the floor. Hopper end permits easy removal of contents from boxes when stacked. The front top



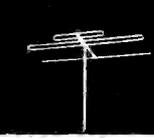
rail is rounded for use as a handle. The opposite end has a drop handle. Size 10" x 20" x 8". Lyon Metal Products, Inc., Aurora, Ill.—RADIO & TELEVISION RETAILING.



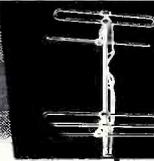
"Lazy-X"
Conicals



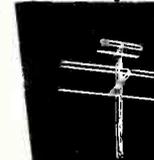
"Straw-Line"
Antennas



Double-Stacked
Arrays



"Hi-Lo"
Antennas



Indoor
Antennas



FM
Antennas



"Super-Vee"
Antennas



Antenna
Rotators



When It's Needed the Most . . .

RADIART Quality Meets the Challenge

STORM warnings mean nothing in the life of a RADIART antenna! Designed and engineered to deliver maximum pick-up of the TV signal, RADIART antennas have an added PLUS built into them that has caused them to be stamped as the outstanding line in the field. Recent storms across the nation saw thousands of antennas torn, mangled and twisted . . . BUT NOT A SINGLE CASE OF WIND DAMAGE DUE TO INFERIOR DESIGN OR POOR QUALITY WAS REPORTED ON A RADIART ANTENNA. If proof were needed . . . this, then, is positive evidence of RADIART supremacy. Again, RADIART QUALITY MEETS THE CHALLENGE . . . and there is a complete range of antenna types for any and every application.



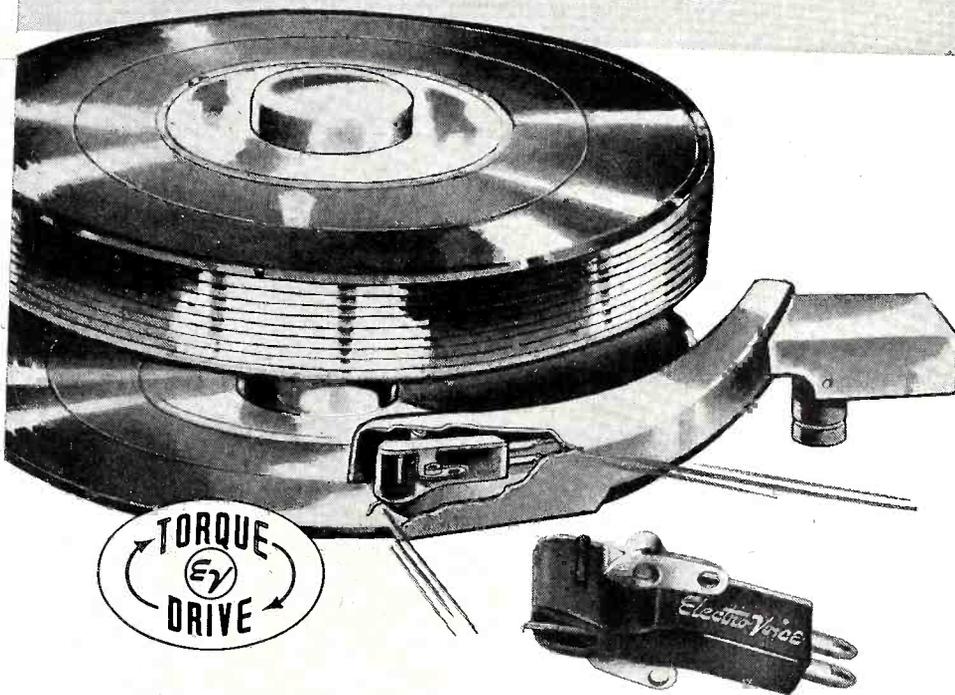
THE RADIART CORPORATION CLEVELAND 2, OHIO

VIBRATORS • AUTO AERIALS • TV ANTENNAS • ROTATORS • POWER SUPPLIES

USE E-V "34"

FOR BEST CARTRIDGE REPLACEMENT

IN RCA "45"



NO OTHER CARTRIDGE so clearly demonstrates the high calibre of your service. Gives unsurpassed fidelity.

And it's so simple to install. $\frac{1}{2}$ " and $\frac{5}{8}$ " hole spacing saves you time and work. Ideal for replacement in RCA type "45" rpm changers. Just as good, too, for $33\frac{1}{3}$ rpm changers.

Has high compliance, wide range, low-tracking pressure and other TORQUE DRIVE advantages. Replaceable needle.

Model 34. With Osmium tip needle, List Price, \$6.50

Model 34-S. With Sapphire tip needle, List Price, \$7.50

Replace now. Your customers will approve. Order from your E-V Distributor.

FREE!
Send for complete easy-to-use REPLACEMENT CHART

E-V MODEL 34 REPLACES		
ASTATIC	SHURE	
AC-J	W53MG	P73R
CQ-J	P93MG	P73AR
CQ-AG-J	P95MG	P73
CAC-J	W21AR	P73A
R.C.A.	WEB. ELEC.	AMERICAN
74067	F13M	CR5

Electro-Voice

412 CARROLL STREET • BUCHANAN, MICHIGAN
Export: 13 E. 40th St., New York 16, U.S.A. Cables: Arlab
PHONO PICKUPS • MICROPHONES • HI-FI SPEAKERS • TV BOOSTERS

Critical Year for TV

A critical year for the TV industry, accompanied by parts shortages, government production controls, and spiralling prices, was forecast by Leonard Ashbach, president of Majestic Radio & Television, Division of The Wilcox-Gay Corp. in a statement recently. Although present operating conditions are continuing favorably with a healthy outlook for the first quarter of 1951, it is likely that conditions will change radically in the early spring, he said.

Sheldon Expands Plant

The Sheldon Electric Company plant of Allied Electric Products Inc. is rushing its building expansion program with the erection of a two-story addition to its main building, James Schrope, works manager of Allied announced. Mr. Schrope said the two-story addition with a half basement would add 15,000 square feet to the manufacturing facilities of the company in Irvington, N. J.

Parts Show Drawings

Exhibitor members of all four associations co-sponsoring the 1951 Parts Distributors Show, May 21-23, at Chicago, have drawn booth and display room space for the event. Drawing was held in the North Ballroom of the Hotel New Yorker, New York. A total of 144 booths and 95 display rooms at the Hotel Stevens, Chicago, were assigned, with an additional 20 booths to be allocated to suppliers who were not present or represented at the drawing. Directors of the Show Corporation officiated at the drawing, with Jerome J. Kahn, Chicago, presiding, assisted by Arthur Stallman, Ithaca, N. Y. (NE DA); Lew Howard, Los Angeles (WCEMA); John H. Cashman, Chicago, and Charles A. Hansen, Chicago (EP&EM), Herbert Clough, Chicago (RTMA) and the Show Corporation staff headed by Kenneth C. Prince.

Starrett Promotes Krieger

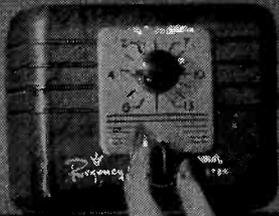
The promotion of Jack Krieger to the position of vice-president-in-charge of production, was announced by R. D. Burnet, president, Starrett Television Corp., 601 West 26 St., New York.

Forms New Company

Formation of a new company under the name of Anchor Industrial Co., 533 Canal St., New York, N. Y. has been announced by Richard A. Fisch, owner of the concern. The new organization will take over all sales in the television field from Anchor Plastics Co. Inc., in order to serve the rapidly expanding television industry more efficiently.

Largest Selling Booster

AT ANY PRICE !



Regency

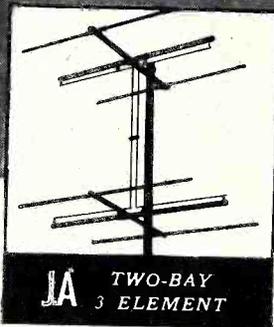
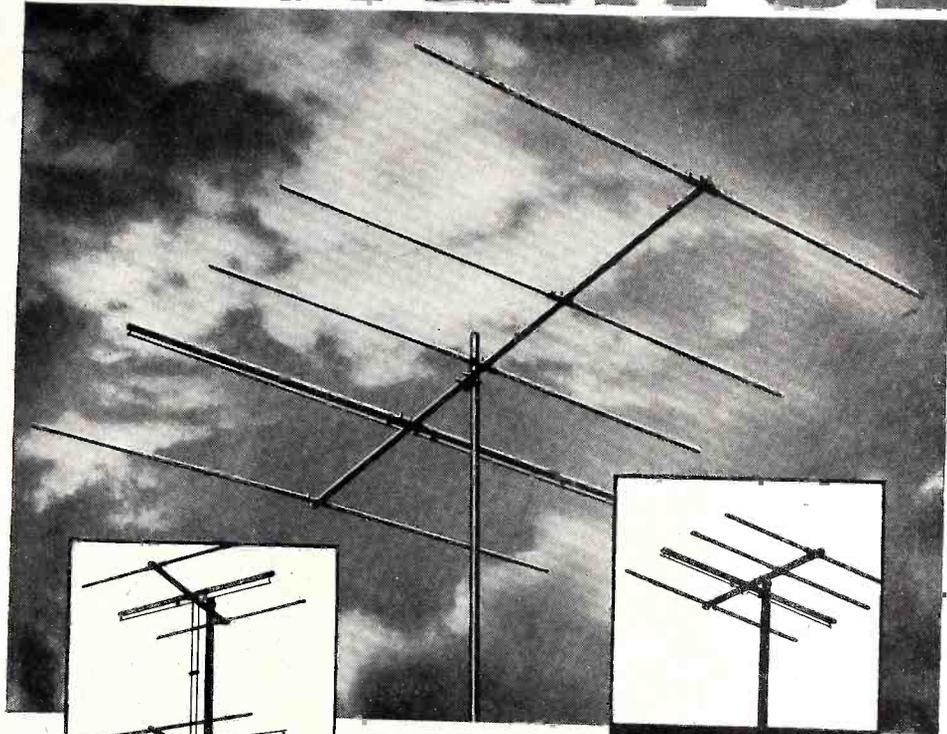
POPULAR

MOST

BECAUSE THEY ARE

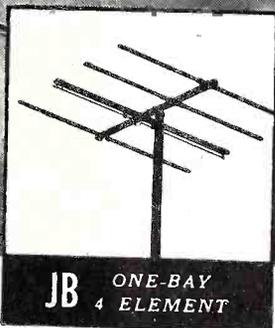
POWERFUL

MOST



JA TWO-BAY
3 ELEMENT

JC ONE-BAY
5 ELEMENT



JB ONE-BAY
4 ELEMENT

"J" Series Yagis

The VEE-D-X "J" series were the first preassembled, low cost Yagis to gain national recognition. They were developed to meet the demand of TV owners in areas where maximum signal pick-up from only a few channels was required. Each of these famous Yagis is cut for a specific channel and will provide extremely high forward gain, excellent front-to-back ratio, and nearly complete immunity to man-made noise, ghosts, etc. They can be used singly or stacked and are engineered to match standard 300 ohm line. For further information write the LaPointe-Plascomold Corporation., Windsor Locks, Connecticut.

VEE-D-X

THE WORLD'S MOST POWERFUL ANTENNAS

TV Pictures Tubes

(Continued from page 65)

open circuits and relative emission are easily determined. Most other defects, such as damaged screen coating, can be determined by observing the picture."

Among the tube testers specially designed for use with TV picture tubes are those made by the Weston Manufacturing Co. ("Raytester"), Precision Apparatus Co. (CR-30 Cathode Ray Tube Tester) and Thomas Electronics, Inc. ("Catho-Chek"). No doubt by the time this article is in print, there will be even more. These devices vary somewhat in their complexity, versatility and capability according to the feelings of their designers.

The Weston Raytester checks emission according to JAN specifications, checks leakage between elements, and checks continuity of inside coating to anode button. It will check all tubes with RMA type 12D basing.

The Thomas Catho-Chek reads emission directly in micro-amperes (rather than relatively on a good-bad scale as on most receiving tube checkers), checks gas ratio, shorts, and leakages (reading directly on a 0-100 micro-amp meter). Removal of the tube from the chassis is not necessary. This unit will test any electromagnetic tube which has an accelerating anode, and incorporates a VTVM for reading small currents.

The Precision CR-30 is perhaps the most complete tube tester for CRT's available at the time of this writing. It will test all TV picture tubes (electromagnetic or electrostatic) as well 'scope tubes and industrial types. It incorporates a free-point 14 lever element selection system for short check, leakage testing and quality test, and reads beam current by means of a sensitive bridge type VTVM. A roller chart is built in, indicating proper settings.

According to the maker of this instrument (Precision), small quantities of gas present in the tube will cause full scale deflection of the meter, while large amounts of gas will cause reading in the "replace" sector. Therefore, gas can be detected from interpretation of the tube merit (emission) reading. As with the other units mentioned, this tester can be operated with the tube in the set.

In considering the operation of CRT testers, we find that a socket is substituted for the regular socket, and the test socket applies the appropriate voltages to the filament, control grid and accelerating anode (and in the case of the CR-30, to the deflection plates). With the exception of the differences in parameters and of the magnitudes of currents involved, the testers can from this point be considered comparable to normal tube

(Continued on page 88)



**.....quality
controlled!**

**eureka meets the demand
for the perfect TV tube**

when it comes to unex-
celled picture tube per-
formance, just one great
name stands out for —

- ✓ **greater clarity**
- ✓ **longer service**
- ✓ **proven quality**
- ✓ **technical skill**

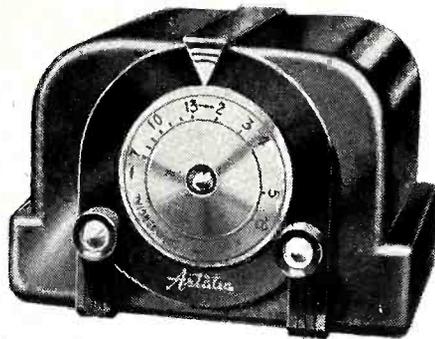
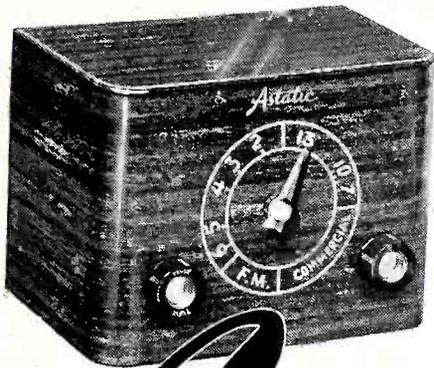
The name "Eureka" is your personal guarantee of the finest in picture tube production. The sum total of Eureka's vast electronic skill and resourcefulness is aimed squarely at ultimate customer satisfaction. Every component part is carefully prechecked for maximum efficiency. That's why Eureka Cathode-Ray Tubes are truly dependable.

Write or phone for
complete informa-
tion on 14, 16, 17,
and 20 inch rec-
tangular tubes.

EUREKA TELEVISION and TUBE CORPORATION
Manufacturers of Cathode-Ray Tubes and Electronic Products
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ASTATIC IS FIRST IN PERFORMANCE FIRST IN CABINET STYLING

Booster Model BT-1
List Price \$32.50



Booster Model BT-2
List Price \$34.95

Compare:
the ability to
improve reception
of these two NEW
ASTATIC TV and FM
BOOSTERS with ANY
others

Note these Quality Features

- 1 Mallory Inductuner for continuous variable tuning.
- 2 High gain, very uniform on both high and low channels.
- 3 Simplified controls—single tuning knob with continuous tuning through both TV and FM bands.
- 4 Band width adequate over entire range.
- 5 Low noise design and construction.
- 6 No shock hazard to user.
- 7 Off-on switch for easily cutting in and out of circuit.
- 8 Selenium rectifier.
- 9 Single 6AK5 Tube.
- 10 Provide for either 72 ohm or 300 ohm impedance input and output.
- 11 Model BT-2 has handsome, dark brown plastic cabinet.
- 12 Model BT-1 has metal cabinet in rich mahogany woodgrain finish.
- 13 Large dial face is easy to see in tuning.
- 14 Model BT-2 has recessed pilot light to show when booster is on.

● Yes, forget their low cost, and make your own comparison of these new Astatic Boosters with others at any price! You'll be amazed at the difference . . . the higher gain and greater reduction of interference and distortion . . . provided by the Astatic BT-1 and BT-2. Astatic engineering leadership has given these new units an unequalled ability to improve both TV and FM reception. But, the final proof is in your own results. Why not put them to the test and see why these new low-cost models are taking the field by storm?



Sell P.A.

(Continued from page 63)

No two jobs are apt to cost the same amount.

Nevertheless, the average purchasing agent or owner of a business is an average human being, down inside. He wants to get "some idea" of what this is going to cost.

One "out" for this type of question is to prepare one or two sample estimates for installations which could be used as yardsticks for other jobs under consideration—and if possible, bring cost sheets on jobs already done. With such ammunition, it is apropos to say, "Now, of course, it would not be possible to say exactly or even approximately what your job would cost until we had arrived at a pretty definite plan of what you need and then had surveyed your plant to see what problems such an installation would involve. However, I happen to have here an estimate of a job involving a plant similar to yours in many ways. If you will look it over with me you will get some idea of how such jobs are figured and what yours might be in the neighborhood of."

In this connection, it is well to say "what you need" rather than "what you want," since it is easier to sell on the former basis than on the latter. The customer "wants" to spend as little as possible, as a general rule, and it will be your job to show him what he needs so that he will feel he is getting the irreducible minimum.

The burden of this article has been to show the PA dealer that a new potential source of business exists, and to give him some idea of how to go about getting his share of it. Subsequent articles will go into more detail concerning the technical layout of typical systems.

Oak Ridge Appointments

Oak Ridge Products, manufacturer of "miniature" precision television testing equipment, announce the appointment of Forest Valentine to handle sales in Indiana and Kentucky. Also, Harry A. Cole has been designated to cover Florida, Georgia, and North and South Carolina.

Web-Cor TAPE RECORDER

A new tape recorder, retailing at \$179 has been introduced. Records at both 3¾ and 7½ inches per second. Uses five tubes and a rectifier; six-inch speaker. Weighs 40 pounds complete with carrying case. Webster-Chicago Corp., 5610 W. Bloomingdale Ave., Chicago 39, Ill.—RADIO & TELEVISION RETAILING.

Hiawatha was a PIKER!



"Go out into the world," said Pops*
"and don't come back 'till you're proved tops!"



The water test he passed with ease,
Earning a feather was just a breeze...



Heat was applied to test his worth
In "hot spots" he then won a berth...



The life test took a long, long time
Though others quit—he kept his prime...



His leads proved strong—his casing tough
It did no harm to treat him rough!

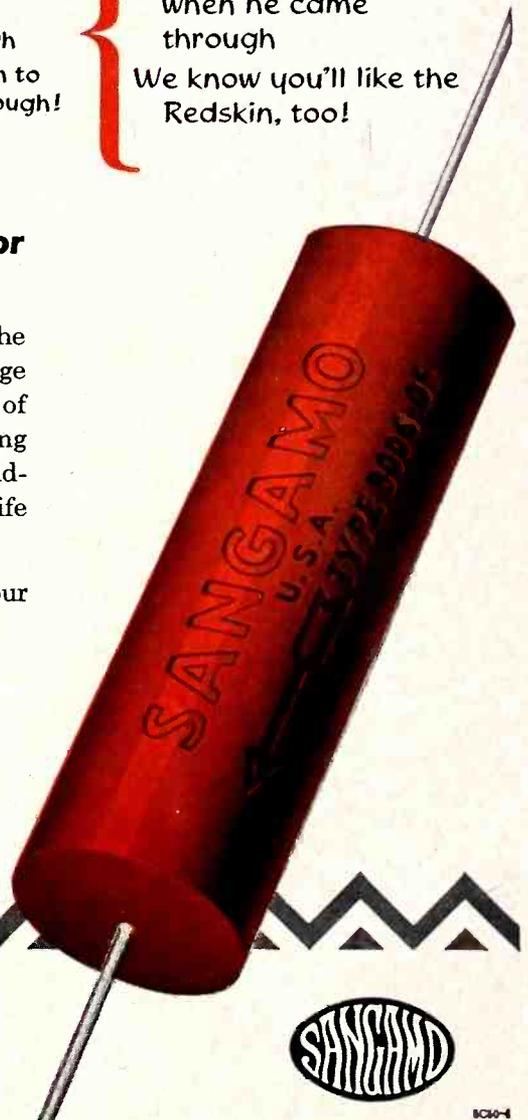
His Pops was pleased when he came through
We know you'll like the Redskin, too!

Sangamo's New Molded Paper Tubular Capacitor gives LONG LIFE under severe conditions!

The REDSKIN is easy to work with—on production line or on the bench—because the especially designed flexible leads resist breakage and can't pull out! It offers greater mechanical strength because of its plastic construction. It is molded under *low* pressure, assuring elements undamaged in fabrication, longer life and greater dependability. It is an 85° C tubular which offers assurance of long life under television and other severe operating conditions.

A trial of these *better* molded tubulars will convince you. See your jobber—if he can't supply you, write us.

* Big Chief Sangamo



SANGAMO ELECTRIC COMPANY
SPRINGFIELD, ILLINOIS

In Canada: Sangamo Electric Company Limited, Leaside, Ont.

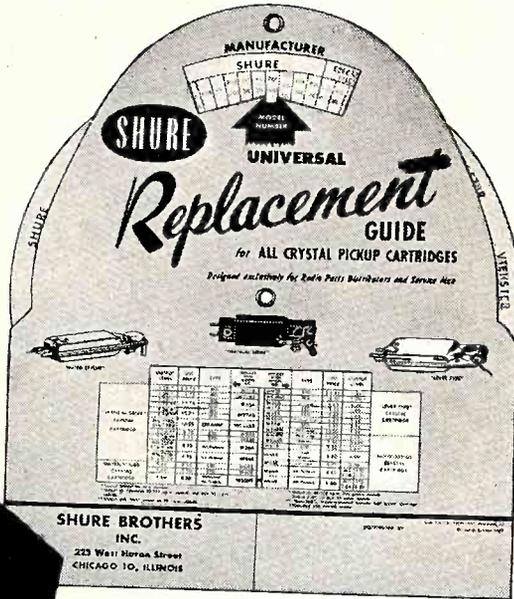


SC6-4

FREE

to Servicemen

**New SHURE
phonograph pickup
cartridge
replacement guide**



**Instantly guides
you to the correct
cartridge
replacement . . .**

A turn of the dial gives you the correct replacement model of all Shure Cartridges and practically all other types. Ask your Shure Distributor for a "Guide" or write, giving us his name.

How does it work? Fast and easy. Just turn the wheel clockwise. Numbers increase numerically and alphabetically, making it easy to locate all model numbers. Simply line up the manufacturer's model number with the large arrow at the top of the Guide. Look below and you'll find the correct replacement indicated by an arrow. Simple, isn't it?

The Shure Replacement Guide gives you the correct cartridge replacement for most of the cartridges in use today. It also gives you the output level, type and list price of the replacement cartridge. The Guide saves you money by filling all the standard requests for replacements—with only a small but complete standardized line.

SHURE

Write to Department "R"

SHURE BROTHERS, Inc.

Microphones and Acoustic Devices

225 West Huron Street, Chicago 10, Ill.

Cable Address: SHUREMICRO

Troubles in TV Picture Tubes

(Continued from page 84)

checkers. Emission from the cathode to G_2 is considered to be an appropriate measure of the beam current which would reach the screen (even though there is no high voltage present during the test). The exact figure of merit (good-fair-replace) is subject to some variation due to various minimum standards maintained by different tube manufacturers, and the tester manufacturers have established their own limits according to a compilation of the best information available (on the Thomas Cathode-Chek, however, the exact emission in micro-amperes can be read, according to the manufacturer). Element short and open checks are conventional. Gas tests are made on the Thomas unit by meter reading, and are not made on the Sylvania, Precision and Weston sets. Leakage checks are made on the Thomas and Weston units by meter reading, and on the Sylvania and Precision testers by neon flash. Of the four testers discussed above, only the Precision will test electrostatic tubes. It seems likely that a great many servicers will ultimately use one or another test unit for testing picture tubes due to the important element of time saving (in testing sets), as well as the convenience in being sure about suspected tubes.

Correction

In the January, 1951 Distributor Directory in this magazine, listings of distributors of Sylvania Electric Products, Inc., distributors in Indiana, were transposed with those of Standard Coil Products Co., Inc. The corrected listings follow:

Sylvania—Indiana:

EVANSVILLE—Ohio Val Sound Serv 11 NW Riverside
FORT WAYNE—Warren Radio Co 1716 S Harrison St
INDIANAPOLIS—Radio Distributing Co 1013 N Capitol
MARION—Myers Radio Supply 1609 South Boots Street
RICHMOND—Rinehart Inc 511-13 Main Street
SOUTH BEND—Comm Sound & Radio Co 528 E. Colfax
TERRE HAUTE—Archer & Evinger 1348 Wabash Ave

Standard Coil—Indiana:

BLOOMINGTON—Stansifer Radio 343 S Rogers St
EVANSVILLE—Indian Artophone
FT. WAYNE—Warren Radio Co 1716 S Harrison Street
INDIANAPOLIS—Radio Distr Co 1013 N Capitol Ave
Van Sickle Radio Supply 102 S Pennsylvania Street
KOKOMO—George's Radio & Appli 125 N Buckeye St
MUNCIE—Standard Radio Parts 1104 S Walnut St
SOUTH BEND—Radio Distr Co 432 S Carroll St

WHAT YOU GAIN WHEN YOU BUY...

HYTRON

Studio-Matched

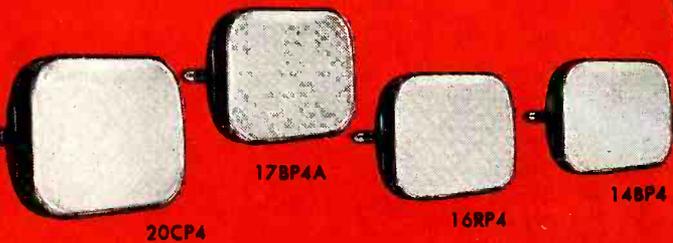
RECTANGULARS



1 **You get THE ORIGINAL.** The *studio-matched* rectangular tube is Hytron's baby. Its logically designed screen matches the 4 by 3 aspect ratio of the studio picture. Quite naturally, Hytron's new rectangular is fast becoming the most popular picture tube.



2 **You get UNIFORMITY.** Hytron's new picture-tube plant is the most modern in the world. It was designed especially to mass-produce Hytron *studio-matched* rectangulars of uniform dependability.



3 **You get A COMPLETE LINE.** Hytron offers you 14-, 16-, 17-, and 20-inch *studio-matched* rectangulars. All the popular rectangulars (and the popular types of round tubes too).

4 **You get THE QUALITY LEADERS DEMAND.** Nine out of ten leading TV set makers choose Hytron. More and more leading service-dealers pick Hytron. Because their own experience proves Hytron *studio-matched* rectangulars give "amazingly clearer, sharper, more brilliant pictures." Demand this same performance for yourself. Demand original Hytron *studio-matched* rectangulars.

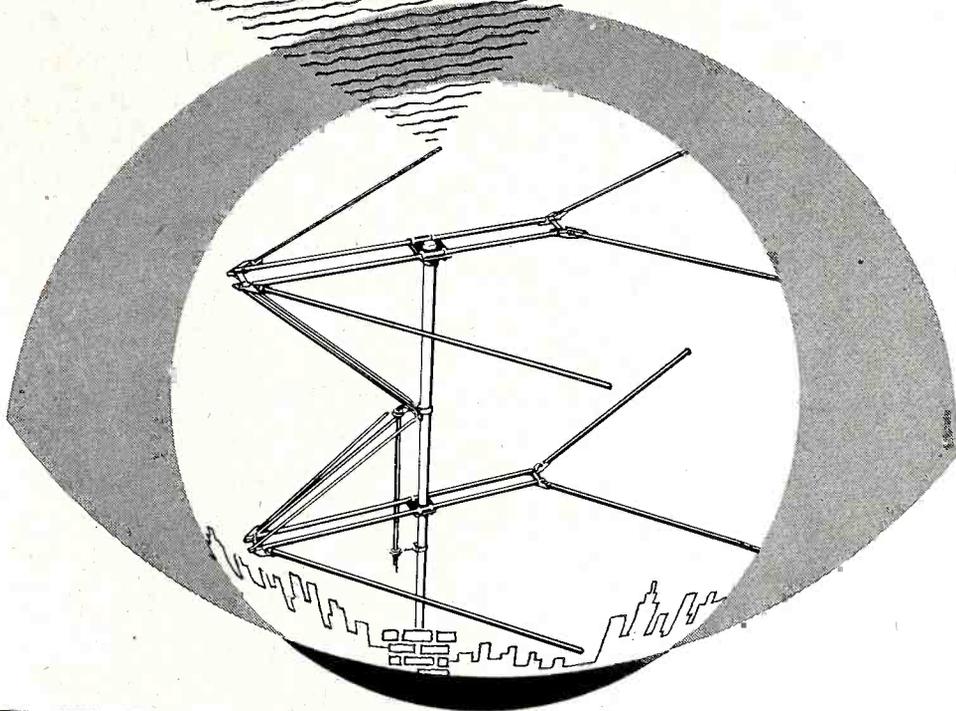
LEADING TV SET MANUFACTURERS PICK HYTRON RECTANGULARS:
ADMIRAL • AIR KING • BENDIX • CROSLEY • EMERSON
HALLICRAFTERS • HOFFMAN • MOTOROLA • NATIONAL
OLYMPIC • SENTINEL • SETCHELL-CARLSON • SPARTON
STROMBERG-CARLSON • TRAV-LER • WESTINGHOUSE
AND OTHERS

OLDEST MANUFACTURER OF RECEIVING TUBES
HYTRON
RADIO AND ELECTRONICS CORP.



MAIN OFFICE: SALEM, MASSACHUSETTS

CLEARER PICTURES



WORKSHOP

DUBL-VEE TV ANTENNA

PATENT PENDING

By applying the proven "end-fire" principle to TV antennas the WORKSHOP DUBL-VEE set the pace for 1950. Its quick acceptance — over 80,000 installed in three short months — is a testimonial to WORKSHOP'S acknowledged leadership in antenna design and engineering.

The DUBL-VEE is typical of WORKSHOP antennas in other fields — commercial, amateur and aircraft. In every instance, advanced engineering and outstanding performance have established ready acceptance. You know when you specify the DUBL-VEE, or any other WORKSHOP antenna, that you are getting the best.

Write for Bulletin B



THE **WORKSHOP ASSOCIATES, Inc.**

135 CRESCENT ROAD, NEEDHAM 94, MASSACHUSETTS

Sales Methods

(Continued from page 51)

placed at the set (but out of sight of the customer).

The showroom sets at Beckley Music are so equipped: that is, with three boosters, in addition to a high mast and a stacked array.

An interesting technique is used in the showroom. The strong signal which is fed into the store from this installation is fed around the showroom on 300-ohm line but is not connected to any set. With a signal of many thousands of microvolts radiating around in the store from the unshielded transmission line, it is possible to operate demonstration sets with their own built-in antennas. This simple technique, according to Mr. McLuckey makes it unnecessary to use any expensive distribution systems. Operated in this manner, he states, he has had no problems of radiation between sets.

Due to his good results with these specialized installations, plus the difficulties posed by some locations in his city, Mr. McLuckey has experimented successfully with multiple installations. That is, one tower-booster combination on a high hill has been fed to several homes in the bottom. A series AC line from house to house, with a relay in each house, makes it possible for any one home to turn on the booster at the tower by simply turning on his set. Results obtained have been good, and he is trying to obtain permission (at this writing) from the power company to use their poles for his distribution system.

As with many fringe dealers, Mr. McLuckey had to convince the set manufacturers that he could get results before they would ship sets to his area, so far from a station. By a bold, aggressive program, plus know-how and a lot of experimentation, he has licked the reception problems to the point where he can get salable pictures and therefore cut himself in on the profits from TV sales being enjoyed by dealers located more fortunately close to stations. Many dealers can take a leaf from his book to get this additional revenue and increase their gross sales.

Fidelity Tube Plans

The Fidelity Tube Corporation of East Newark, N. J., has announced plans for the manufacture of miniature receiving tubes and radar tubes for use by the armed forces. In making the announcement, Benjamin Ozaroff, president of the company, declared that the new production policy grew out of President Truman's recent request for increased electronic equipment for the nation's mobilization effort.



Quality checks and tests make
RAYTHEON PICTURE TUBES
Right for Sight!

Raytheon Television Picture Tubes must pass 101 rigid tests and inspections before a tube is allowed to be shipped. Every component, every assembly and every tube is precision tested for quality of material, accuracy of dimensions, and electrical performance by skilled workers using the finest checking and control system.

That's why Raytheon picture tubes are Right for Sight — right for you to choose and use for replacements and conversions.

101 basic tests make Raytheon Picture Tubes mechanically and electrically perfect; Raytheon's vast background in the pioneering and manufacture of almost every type of electronic tube keeps them ahead of the field in design and performance. Use Raytheon picture tubes with complete confidence that you are giving your customers the finest quality Picture Tubes money can buy.

See your Raytheon Distributor today.

RAYTHEON

®

Excellence in Electronics

**RAYTHEON
MANUFACTURING COMPANY**

Receiving Tube Division

Newton, Mass., Chicago, Ill., Atlanta, Ga., Los Angeles, Calif.

RADIO AND TELEVISION RECEIVING TUBES • CATHODE RAY TUBES
SPECIAL PURPOSE TUBES • SUBMINIATURE TUBES • MICROWAVE TUBES

COPYRIGHT 1951

Westinghouse Offers New Display Material

A new plastic drapery material, which serves as both an attractive background material and dealer identification media, is now available from Westinghouse Electric Appliance Division. Called Sho-Cloth, the material is printed in rich mocha brown and brilliant chartreuse colors with an overall design of the Westinghouse trade-mark and company slogan.

The display material can be used with present display backgrounds, for display booths, wall coverings and

pillars as well as for selling centers and spot displays. Washable and flame resisting, it can be folded or draped in a variety of shapes. Sho-Cloth is available by the yard or in standard size drapes.

Cory Names W. S. Sheldon

Announcement of the appointment of Walter S. Sheldon as advertising manager of Cory Corporation, Chicago, manufacturers of Cory coffee brewers, coffee brewing equipment, Fresh'nd-Aire fans, circulators, heaters, and humidifiers, and Nicro stainless steel products, has been announced.

Lewyt Ad Campaign

Advertising appropriations for the Lewyt vacuum cleaner, which have been jumping by leaps and bounds since its introduction three years ago, have been doubled for 1951, it was announced by Donald B. Smith, Lewyt's advertising and sales promotion manager.

Mitchell Sales Aids

Mitchell Manufacturing Co., Chicago, Ill., is distributing a three-section folder to its dealers which contains samples of many various pamphlets, releases, mats, window streamers, etc., which are available to Mitchell dealers. The folder represents one facet of Mitchell's new promotional campaign being readied for the spring season on room air conditioners.

Andrea Appointment

The appointment of Lynn Eaton, general sales manager of Andrea Radio Corp., Long Island City, N. Y., as mobilization director in charge of all Government contracts for the company, is announced by Frank A. D. Andrea, president.

Bona Fide "Lay-Away Plans" OK Under Regulation W

The following statement has been given by the Federal Reserve Bank of New York in answer to a question asked by RADIO & TELEVISION RETAILING editors concerning the legality of "lay-away" plans so far as Regulation W is concerned:

"The provisions of the regulation do not restrict the use of a bona fide "lay-away plan" or other similar plan by which a purchaser makes one or more payments on an article before receiving delivery thereof. The provisions of Section 3(c) provide, in part, that the down payment shall be obtained at or before the time of delivery of a "listed article" with the exception of certain requirements in the case of a Group D "listed article." For purposes of the regulation the extension of instalment credit involving other than Group D "listed articles" is considered to be the date of delivery.

"Section 6(b) provides in effect that in calculating the maximum maturity of an instalment sale obligation a Registrant may, at his option, use any date not more than 15 days subsequent to the actual date of the delivery of the 'listed article' sold; except as may be permitted by Section 6(a) the first instalment shall be scheduled for payment not later than one month or, in accordance with such option 1 month and 15 days subsequent to the actual date of delivery."

The wise choice for better TELEVISION PERFORMANCE



REGISTERED
TRADE MARK

telrex
"CONICAL-V-BEAMS"

The Nation's Leader from Coast to Coast

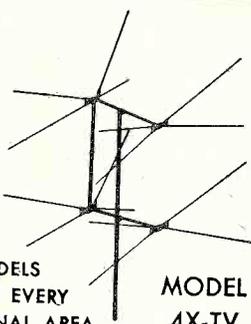
Three basic factors contribute to the superior performance of Telrex Conical-V-Beams. Experienced engineering, exhaustive laboratory and extensive field tests and, most important, conservative factory ratings. Remember — if there's a usable TV signal, Telrex will deliver it to the receiver with picture quality that let's you —

"See the Difference

WRITE FOR COMPLETE CATALOGS

Conical-V-Beams are produced under Patent No. 2518297.

MODELS
FOR EVERY
SIGNAL AREA



MODEL
4X-TV

telrex INC.
CONICAL-V-BEAMS

AMERICA'S
STANDARD OF
COMPARISON

ASBURY PARK 2, N. J.

THE SKILL
TO DESIGN
THE FACILITIES
TO PRODUCE
THE ABILITY
TO DELIVER

NEW INDICATOR ION TRAP

*A
Rauland
"Exclusive"*



Speeds Service — Builds Profits

Rauland's new Indicator Ion Trap is winning the cheers of more service men and dealers every day—because of the time and trouble it saves in Ion Trap Magnet adjustment, and because it eliminates mirrors and guesswork.

Now it's a matter of seconds to adjust the ion trap magnet with absolute precision. The service man simply moves the magnet until the signal glow is reduced to minimum.

This important new Rauland development is incorporated in all Rauland tubes produced today—as a feature of Rauland's new Tilted Offset Gun. This gun offers the additional advantages of using only a single Ion Trap Magnet and of maximum sharpness of focus.

Only Rauland offers this advanced feature—one of half a dozen post-war developments from Rauland.

For further information, write to . . .

RAULAND

The first to introduce commercially these popular features:

Tilted Offset Gun

Indicator Ion Trap

Luxide (Black) Screen

Reflection-Proof Screen

Aluminized Tube

THE RAULAND CORPORATION



Perfection Through Research

4245 N. KNOX AVENUE • CHICAGO 41, ILLINOIS



Diversification

(Continued from page 34)

the home they leave a good receiver until the yanked set has been repaired and returned. Pearlman performs this service in all cases, no matter where the set was purchased. According to the owner, this extra service feature makes a big hit with customers, particularly with the rural folk in the far reaches of this sprawling countryside. "They never forget it," he says.

The owner does all in his power to keep cordial relations with customers

Makes Service the Backbone of Sales

This dealer leaves a TV set on loan when customer's receiver is taken in for repairs

This dealer keeps his service customers happy by settling differences speedily, intelligently

who have servicing done. Any friction that arises in his service department is intelligently handled. "I just get everybody together," said this storeowner, "and we thrash the matter out to the satisfaction of all concerned. I don't care to wait until someone blows his top."

Pearlman plans to move his service

shop upstairs from its present basement location and he intends to move his office there from its present spot at the rear of his store.

"In that way," he said, "customers who come in with repair work or to make payments, will climb the stairs to the second floor where they will be exposed to an eye-catching view of a mass merchandise display."

An example of this merchant's kind of merchandising policy is reflected in his window displays which are selling displays, instead of just glamorous—which they couldn't be, since Pearlman sticks in as much of the varied stock as possible. And they are all arranged at eye-level where they are easy to see.

Music lovers of all ages like to shop at this merchant's because Pearlman has a very complete stock of sheet music as well as every record they could want.

Says he: "I hate to tell a customer I don't have the record requested. So I keep them all, even if I have but one apiece of some numbers. At least, I have it—and the moment it is sold, I get another."

Thus his trade grows on the basis of service, careful selection of items and close personal care of customers' wants and preferences.

He has other "aces in the hole" that act as a buffer when business falls off on any item. He handles musical instruments, and he sells anything from a harmonica up to a \$655 spinet-type piano. A complete line of radios, TV, and electrical appliances of all sorts, completes a store devoted to supplying the customer just about everything he needs for entertainment and labor saving in the home.

All employees work on a salaried basis. "I tried incentive plans—but they just didn't work," said the merchant. "I also tried outside salesmen on a commission basis, and that didn't work out, either. It just seems that they prefer a guaranteed weekly salary rather than risking the hazards of straight commission."

Not long ago, Pearlman took over another building to serve as an additional warehouse for his expanding stocks.

Heads Fidelity Tube Corp.

Benjamin Ozaroff has been named president of the Fidelity Tube Corp., of East Newark, N. J. Mr. Ozaroff, an industrial engineer, was formerly vice-president and general manager of the Benrus Watch Co., which he left, after 20 years, to become division manager of the Elgin American Co., in 1948. He is a 1922 graduate of Cornell.



STOP!

and GO with EICOR in '51

Sell Eicor in 1951—the new standard in tape recording quality and economy. The demand for Eicor is now greater than ever! No other magnetic recorder in the low priced field has all these features: two speed recording (with *extra profit* adapter kit); smart luggage styling, simplicity of operation, service-free performance, plus the type of professional quality recording demanded by radio stations. No wonder more and more of your customers are specifying Eicor for home entertainment, school and office use. Yes, this is the year to sell Eicor for bigger and better profits. Write for complete details today.
Address Dept. 12.

WATCH FOR OUR NEW MODELS

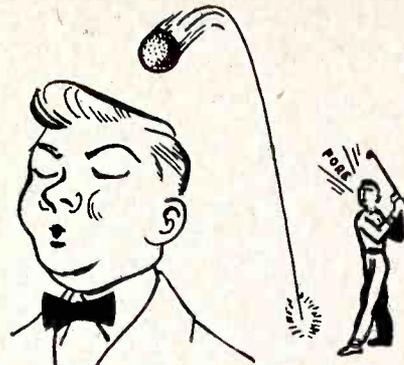
EICOR INC.

1501 W. CONGRESS ST. CHICAGO 7, ILL.

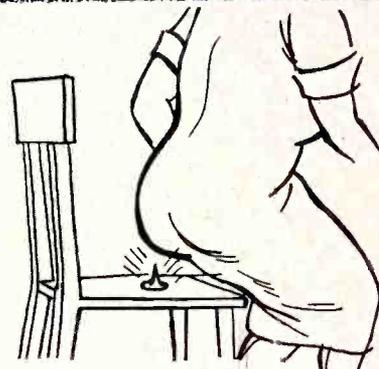
*new
cure
for
old
ailments*



ghosts



low signal strength



rear pickup

YAGIS

by CHANNEL MASTER

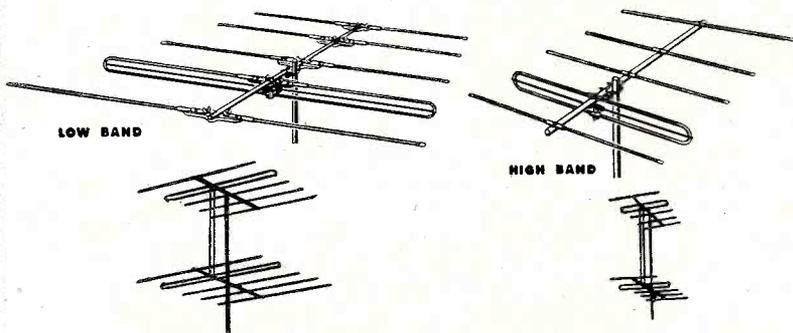
NEW "500" SERIES

STRETCH YOUR TV MARKET BEYOND PRESENT LIMITS

Now—say goodbye to reception problems common to fringe and sub-fringe areas. Get "up close" to those distant TV transmitters—*stretch* your market—open up new TV areas with Channel Master's new line of 5 element Yagis.

Precision cut for every channel, the "500" series combines high gain with high directivity at amazing low cost.

- Aluminum elements and crossarm.
- High impedance step-up dipoles of seamless tubing.
- **Actual** gain of single bay, 8 DB (*not* theoretical).
- Front to back ratio, 26 DB.
- Matches 72 or 300 ohm line.
- Reflectors and directors of 3/8" butted tubing, 1/2" external sleeve.
- 1" crossarm on channel 2 and 3, 3/4" crossarm on all other channels.



LOW BAND

HIGH BAND

Ch.	No.	List Price
2	502	\$17.65
3	503	16.67
4-6	504-506	7.65
7-13	507-513	7.65

Completely pre-assembled for instant set-up.

Sold only through Channel Master distributors.

CHANNEL MASTER CORP.

NAPANOCH ROAD, ELLENVILLE, N. Y.



RCA Victor Reassigns Executive Duties

The RCA Victor Div. of the Radio Corp. of America has reassigned the duties and responsibilities of several of its executives, it was announced by Walter A. Buck, vice-president of RCA and general manager of the division. Mr. Buck also disclosed RCA Victor's establishment of a Mobilization Planning Department to plan and coordinate all activities the division may be required to undertake to meet the needs of the Government.

Among the reassignments is the appointment of Robert A. Seidel, vice-president in charge of RCA Victor distribution since October 1, 1949, to

a newly created position as vice-president and special assistant to the vice-president and general manager.

Mr. Buck announced that the responsibility for supervision and administration of RCA Victor Distribution, heretofore assigned to the distribution department under Mr. Seidel, has been reassigned as follows:

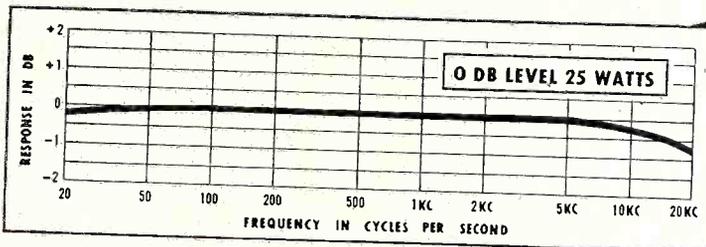
Harold M. Winters has been assigned to Mr. Elliott's staff as director of consumer products distribution, and H. V. Somerville has been placed on Mr. Teegarden's staff as director of technical products distribution. Administration of the Regional Offices has been assigned to Charles M. Odorizzi, operating vice-president for

the division.

The reassignment program also specifies that Mr. Elliott, Mr. Teegarden, and Mr. Odorizzi, will coordinate and supervise the advertising and promotion work of the product departments and subsidiary companies under their supervision.

To implement this phase of the program, Ralston H. Coffin has been assigned to Mr. Elliott's staff as director of consumer products advertising and sales promotion, and Julius Haber has been appointed director of technical products advertising and sales promotion, on Mr. Teegarden's staff. Mr. Coffin will also have the responsibility for RCA Victor's radio and television programs and the Division's institutional advertising.

STANCOR High Fidelity OUTPUT TRANSFORMERS



Curve represents an average response of the ten transformers in this series. Units used for this test were drawn at random from current Stancor stock.

±1db FROM 20 TO 20,000 cps

Premium Quality at Low Cost

Stancor has taken advantage of the most advanced design and manufacturing practices to bring you a series of output transformers combining outstanding audio response with very moderate cost.

Extensively interleaved "trifilar" windings, extremely tight coupling, and careful electrical balance result in audio fidelity to please the most critical specialist. An inexpensive, but thoroughly practical, type of mounting is used since elaborate shielding is not required at the audio output power level.

Listed part numbers have a maximum power level rating of 50 watts and provide a wide selection of impedances for popular amplifier applications.

PART NO.	PRI. IMP. (P-P) IN OHMS	SEC. IMP. IN OHMS*	MAX. PRI. D. C. PER HALF	NET PRICE
A-8050	1500	8, 16	200 ma	\$10.86
A-8051	2500	8, 16	150 ma	10.86
A-8052	3000	8, 16	175 ma	10.86
A-8053	5000	8, 16	150 ma	10.86
A-8054	9000	8, 16	100 ma	10.86
A-8060	1500	500	200 ma	10.86
A-8061	2500	500	150 ma	10.86
A-8062	3000	500	175 ma	10.86
A-8063	5000	500	150 ma	10.86
A-8064	9000	500	100 ma	10.86

For complete specifications and prices of more than 450 stock part numbers, including other high fidelity transformers, see the current Stancor catalog. Ask your distributor for a copy or write direct.



STANDARD TRANSFORMER CORPORATION 3586 ELSTON AVENUE, CHICAGO 18, ILLINOIS

Controlled Inventory

(Continued from page 56)

turnover at twice per month, or one and a half times per month, on the entire major appliance inventory."

The stores take an actual physical inventory every three months, which forms an accurate check against the bulletin board sheets. Under normal conditions, Bragdon's, Inc., maintains its entire appliance stock on a "perpetual inventory basis", which means simply that there is a predetermined minimum number of each model, which must be in stock at all times. With allocation chopping down the amount of delivery to the store, the "predetermined minimum" has been cut sharply in almost every category, down to nothing in some. "The whole weight of determining our inventory, our ordering, and actual sales on the floor now hinges on the bulletin board inventory control sheets," Bragdon stated.

To stimulate salesmen to utilize extreme caution in selling their customers, as well as to keep sales up, there is another chart below the vertical column, which lists all 9 salesmen of the two Bragdon concerns, with their total sales by model number, on each appliance carried in stock. Whenever the salesman posts an entry, indicating a sale of any of the items listed in the left-hand column of the inventory control sheet, his glance is bound to be directed at the "salesmen's comparative volume" sheet. If he is low on any aspects he is naturally spurred to get out and work more diligently to make additional sales.

Another valuable feature of the inventory control sheets is the fact that Bragdon's, Inc., knows to the penny, exact profits being earned each day through the selling year. These are kept up in a daily record ledger sheet, bound in a cloth-covered book, which forms a "double check" on the information contained on the bulletin board sheets.



*We're Doing Our Best
to Keep Up With the Demand*

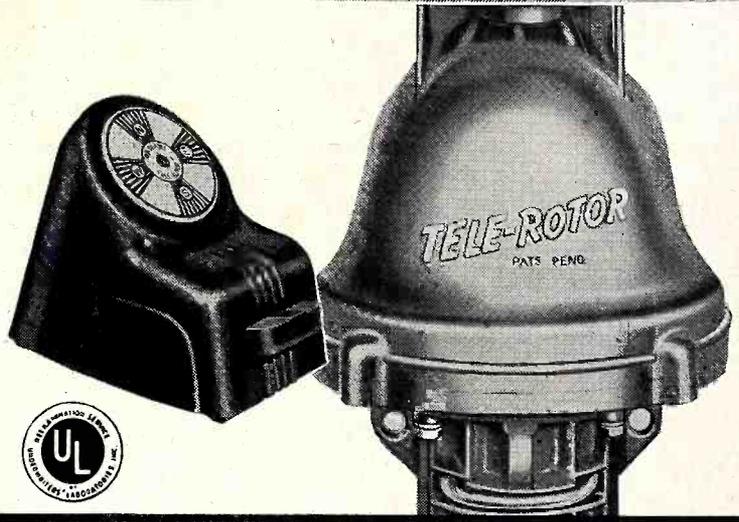


AND THE DEMAND IS PHENOMENAL — far beyond our material limitations
... but be patient and your order will be delivered. We are distributing
TELE-ROTORS uniformly throughout all TV areas ... so wait ... don't
compromise with quality: **YOU CAN'T BEAT A TELE-ROTOR!**

TELE-ROTOR

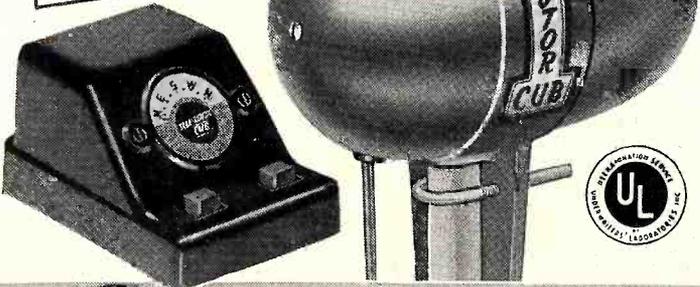
This heavy-duty TELE-ROTOR has no match! It's more powerful ... will turn any TV antenna array under any weather conditions. Easily installed ... it is trouble-free in performance. Easiest of all to operate!

MODEL TR-2 rotator with "compass control" cabinet having illuminated "perfect pattern" dial ... (uses 8 wire cable) **\$49.95**



TELE-ROTOR

CUB



The new TELE-ROTOR "CUB" is ideal for average installations. The same husky motor as the Heavy-Duty model ... the "CUB" is the fastest and easiest of all rotators to install. All-In-Line design ... with true in-line thrust between antenna and mast. The 3/4" STEEL shaft rotates on a case hardened steel ball ... with inline reamed oilless bearings.

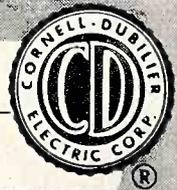
MODEL 502A rotator with plastic control cabinet having indicating meter for "hairline" tuning. (Uses 5 wire cable) **\$44.95**

MODEL 501A rotator with control cabinet having end-of-rotation signal. Light flashes every 7.2° showing antenna is turning. (Uses 5 wire cable) **\$34.95**



CORNELL-DUBILIER SOUTH PLAINFIELD, N. J.

THE RADIART CORPORATION CLEVELAND 2, OHIO

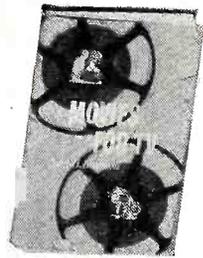


Valuable guides for television technicians

Just published!

MOVIES FOR TV

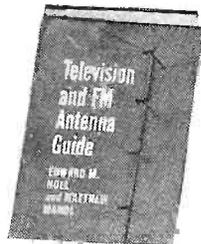
This complete, practical book gives you all the information you need to choose the best equipment, operate it most efficiently, and make the most effective use of movies on TV programs. It explains the operation of all leading makes of cameras, projectors, sound and kinescope recording equipment, different types of lenses, etc., giving the advantages, disadvantages, and relative costs of each. It shows what may go wrong and how to avoid trouble, what type of picture is good on television and what is not, how to light movies for best TV reception, how to insure good shots on location, combine live scenes with movies, produce special effects, titles, newsreels, different types of commercials, and much else that will be of utmost practical aid to station personnel and program planners. *By J. H. Battison.*



A practical how-to-do-it guide for technician and program director alike.

TELEVISION & FM ANTENNA GUIDE

This excellent handbook will save you much testing and readjusting and insure the best reception from any antenna system. It gives you the characteristics, dimensions, advantages and disadvantages of all VHF and UHF antennas and allied equipment, including heretofore unpublished information on new types recently tested by the authors. It tells how to determine the right type of antenna for a specific location, locate space loops, determine signal strength, etc.; how to mount various types of antennas on different kinds of roofs or window sills; how to minimize noise and avoid standing waves in transmission lines, and all other installation procedures. Handy tables give comparative data, and there is full, clear instruction in all fundamental antenna principles. *By Noll & Mandl.*

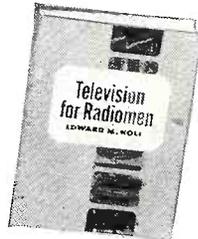


How to get the most out of the antenna system at any location.

Outstandingly helpful references

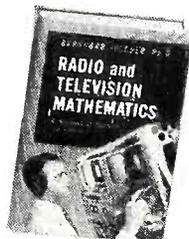
TELEVISION FOR RADIOMEN

The outstanding book on television for servicemen. Explains in clear, non-mathematical terms the operating principles and function of every part and circuit in today's TV receivers, and the chief principles of transmission. Complete, practical instruction in installation and alignment procedures, testing equipment and how to use it, adjustment, and trouble-shooting. *By E. M. Noll.*



RADIO & TELEVISION MATHEMATICS

This unique handbook of 721 problems and solutions shows you what formulas to use, what numerical values to substitute, and each step in solving any problem you are likely to encounter in radio, television, or industrial electronics. Conveniently arranged and fully indexed for quick reference. *By Bernhard Fischer.*



Aligning FM

(Continued from page 67)

In other words, the phase angle of the generator's voltage output at any instant, corresponds to the angle through which generator armature has passed at that instant.

Now, the 60-cycle AC voltage we have been considering is put out by an AC motor-driven generator. In the case of radio signals, the generator is a vacuum tube. No armature actually exists in the latter instance. Imagining that the vacuum tube is really a motor-driven 2-pole generator with a rotating armature will however prove helpful, in relating the phase of the voltage put out by the generator, to the angle through which the armature has traveled. Measurement of phase in degrees will, in consequence, seem a logical procedure, rather than an arbitrary one dictated by a secret conclave of engineering despots.

Now that we know something about the measurement of phase, let's clinch matters by inspecting several out-of-phase waveforms. In fig. 7A, two waveforms are 45 degrees out of phase. In 7B, the waveforms are 90 degrees out of phase. In 7C, they are 180 degrees out of phase.

Note that a phase difference exists only between *two* signals. It is not a fixed characteristic of a signal—it is rather a *relationship* between *two* signals.

Let's go back to fig. 7A for a moment, and clarify two terms commonly used in discussing phase differences, or phase angles, as they are known: the two terms are *lead* and *lag*.

Voltage B (fig. 7A) is said to *lag* voltage A by 45 degrees, since B starts 45 degrees later than A. We can also say that voltage A *leads* voltage B by 45 degrees, since A begins its cycle 45 degrees sooner than B. Lead and lag are thus terms that indicate whether one or two out-of-phase waveforms starts its cycle sooner, or later, than the other.

Well, unwrinkle that knitted brow for a while, and relax on some nice, easy fading job. Next month, we guide you through the perils of Vector-land.

Till then, don't let phase faze you.

New Capehart Showroom

A permanent showroom in which the entire line of Capehart television receivers and phonograph-radio combinations will be displayed has been opened by Capehart-Farnsworth in the Merchandise Mart, Chicago, according to E. Patrick Toal, director of sales. The showroom, in Space 1118, is designed not only as a sumptuous setting for Capehart products, but as a completely staffed Chicago headquarters for Capehart distributors, offering telephone, secretarial and conference room services.

CHECK THE ONES THAT CAN HELP YOU MOST AND SEE THEM ON APPROVAL

USE THIS COUPON

to get FREE examination copies. If you're not fully satisfied, you may return them without further charge.

The Macmillan Company, 60 Fifth Avenue, New York 11

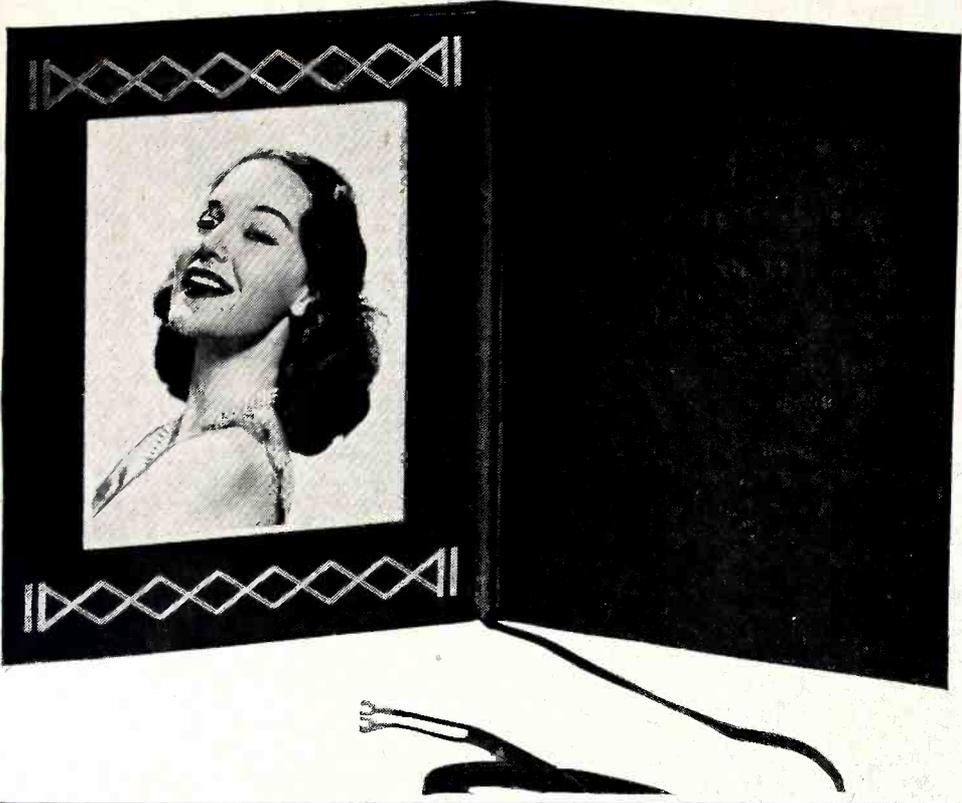
- Movies for TV \$4.25
- Television & FM Antenna Guide. \$5.50
- Television for Radiomen \$7.00
- Radio & Television Mathematics \$6.00

Please send me the books checked. I will either remit in full or return the books in 10 days.

Signed

Address

R



Could you use an extra man—to work FREE?

Men are scarce. *Good* men, much scarcer. But in some respects, your handling *Radion* is like adding a good man—an expert who not only works “for free” but even pays you a tidy profit.

An extra installation man?

In areas where most TV set sales are made, *Radion* often makes installation a one-man, instead of two-man, job. *Faster* installation, too. Almost like an extra installation man!

An extra salesman on TV sets?

Radion on your demonstrators—*Radion* as part of a “no installation charge” offer—*Radion* to bring in beautiful images when built-in antennae fail—yes, *Radion* may easily increase sales as much as adding a man!

An extra sales clerk for parts, etc.?

As a traffic item—a “pick-and-pay” profit maker for you—*Radion* saves clerks’ time. Needs no explaining, no wrapping. Shows many dealers a surprisingly good volume!

This coupon brings EXTRA help – mail it NOW!

Radion

THE RADION CORPORATION
1137 Milwaukee Ave., Chicago 22, Ill.

THE RADION CORP., 1137 Milwaukee Ave., Chicago 22, Ill. R-3
Please send complete details on Radion products and dealership.

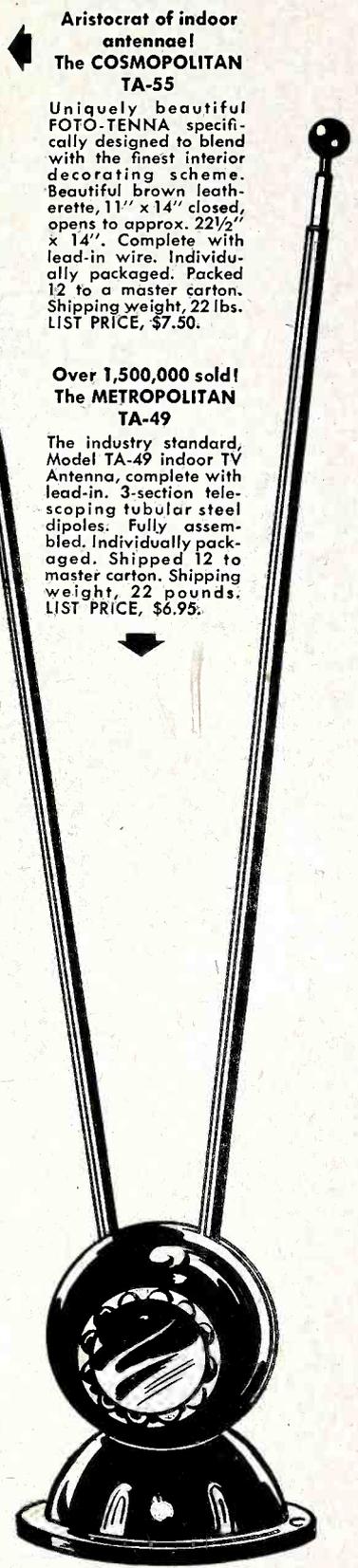
Metropolitan No. TA-49 Cosmopolitan No. TA-55

Name.....

Company.....

Address.....

City.....Zone.....State.....



**Aristocrat of indoor antennae!
The COSMOPOLITAN
TA-55**

Uniquely beautiful FOTO-TENNA specifically designed to blend with the finest interior decorating scheme. Beautiful brown leatherette, 11" x 14" closed, opens to approx. 22 1/2" x 14". Complete with lead-in wire. Individually packaged. Packed 12 to a master carton. Shipping weight, 22 lbs. LIST PRICE, \$7.50.

**Over 1,500,000 sold!
The METROPOLITAN
TA-49**

The industry standard, Model TA-49 indoor TV Antenna, complete with lead-in. 3-section telescoping tubular steel dipoles. Fully assembled. Individually packaged. Shipped 12 to master carton. Shipping weight, 22 pounds. LIST PRICE, \$6.95.

TV Awards Committee

In a national poll conducted among TV editors, John C. Swayze, TV newscaster was named the Mighty Monarch of the Air for the month of January, 1951. The citation and award was made by Leonard Ashbach, president of the Majestic Television & Radio Division of the Wilcox-Gay Corp., at a special dinner given at the Waldorf-Astoria Hotel. The Committee consists of ten outstanding personalities in the TV and allied industries and is headed by Harry Hershfield, veteran newspaper man,

humorist and entertainer. Each month, The Mighty Monarch of the Air Television Awards Committee will poll the TV editors from coast to coast and name the Mighty Monarch of the Air for the month based upon those findings.

Air King Appointee

D. H. Cogan, president of Air King Products Co., Inc., Brooklyn, N. Y., has announced the appointment of Robert K. Roulston as assistant to the president to coordinate a new expansion program.

Sparrow Named Senior VP of P. R. Mallory

Ray F. Sparrow, recently named senior vice-president of P. R. Mallory & Co., Inc., Indianapolis, Ind., has been vice-president in charge of Mallory sales since 1931, and also has been a member of the Mallory board for many years. In 1923, Mr. Sparrow joined the Yaxley Manufacturing Company of Chicago and in 1931 brought that nationally-known organization to Indianapolis, consolidating it with P. R. Mallory & Co., Inc. At the time Mr. Sparrow joined the Mallory company gross sales were \$2,000,000 annually. Under his guidance as executive in charge of sales, that figure has risen to more than \$35,000,000 in 1950.

Kuneau in Philco Post

John Adams Kuneau has been appointed director of public relations of Philco Corporation and its subsidiaries and named to the management operations committee, it was announced by William Balderston, president of the Corporation.

Ben-Her Names Sturtz

Ben-Her Industries, Inc., 11 W. 42 St., New York, N. Y. distributors of Natalie Kalmus Television, Hollywood, Calif., have announced the appointment of Phillip B. Sturtz as district sales manager in the Metropolitan area.



SIR JOHN AMBROSE FLEMING

Invented the first electron tube, 1904, known as the Fleming Valve, opening the field for present day electronic developments.

Famous for Firsts

Many electrical and mechanical designs, now accepted as "musts" in antennas are firsts . . . developed by Ward. Experience gained through years of exclusively building antennas pays dividends to jobbers, dealers and installers through Ward's leadership in engineering and design. Only at Ward do you find a complete line of antennas for TV-FM-Automotive-SPP and AM.

WARD
WORLD'S LEADING EXCLUSIVE
MANUFACTURER OF
ANTENNAS

THE WARD PRODUCTS CORP.

Division of The Gabriel Co.
1523 East 45th St., Cleveland 3, Ohio

Direct Mail

(Continued from page 33)

studied carefully in order to come up with pieces designed to please the variety of tastes existing among any dealer's customers. A happy medium should be sought, with the dealer steering away from the bizarre and the corny. Many manufacturers have calendars, blotters and similar pieces available to their dealers.

While first-class mail is by far the best way to send messages of all kinds to customers and prospects, it is quite expensive, and, therefore, is seldom used. Nowadays, it is believed, the throw-away rate of mail below first-class is considerably smaller than it was some years ago, due, say experts, to the new interest people are taking in the home, and their natural desire to look over everything new that's offered.

Direct-mail advertising is an investment for any dealer who employs a planned program. Direct results can be obtained if the right copy is used, and the master list properly processed. Many merchants are getting set right now to step up mail campaigns because this advertising method will pay off in the future as it has always paid off in the past.

Has Plan to Keep Dealers, Jobbers in Business

Television dealers and distributors, as well as many other small businesses, were given the chance of survival without goods to sell during all-out mobilization with the announcement of a dispersed manpower plan designed to add millions of man-hours to military production.

Called the "Belmont Electronic Dispersed Manpower Plan," the proposal received enthusiastic reception at its initial nationwide presentation to this company's distributors by the author, W. L. Dunn, vice-president, Belmont Radio Corp., manufacturer of Raytheon television, Chicago. As written, the plan would make war-time producers out of television distributors and dealers in their present places of business.

Simple sub-assemblies called for in military contracts would be sub-contracted to the company's present television distributors. The distributors, in turn, would assign the work to be done on these subassemblies to those dealers with establishments and neighborhood manpower available to do the simple work.

Thus, in time of all-out mobilization the plan suggests quick conversion of thousands of dealer and distributor establishments across the nation to military production. Dunn estimated that use of this plan by the electronics industry alone would yield at least 100 million manhours a year.

"We are prepared to shift our management and factory personnel from civilian to military production as quickly as that becomes necessary," Dunn told his distributors. "Under the dispersed manpower plan, the same kind of shift could easily be made by each distributor company.

"Our company's director of the dispersed manpower program and his staff would be chosen from men already working with our distributor and dealer organization. Our field representatives would contact the same people they are contacting today. Distributor salesmen would become production co-ordinators and expeditors, contacting many of the dealers now on their lists; others would be made inspectors trained by the factory. The distributors' accounting departments would charge material out to the dealer-producers, and credit their completed work.

"This plan will enable you to keep your employees traveling the same roads and meeting the people they know while serving our country's immediate defense needs," Dunn said.

New Quarters for EMC

Electronic Measurements Corp., formerly of 423 Broome St., New York City, has announced the removal of their offices and factory to 280 Lafayette St., New York 12, N. Y.

Heads GE Fan Sales

David T. Meskill has been appointed sales manager of the General Electric Company's fan division, it has been announced by R. E. Boian, manager of the heating device and fan divisions.

Fan Sales Display Kits

To help retailers prepare now for the fan selling season, Westinghouse Electric Appliance Division fan distributors are offering two fan display kits free with specified quantities of initial fan orders.

One, a Livelyaire promotion kit, is

offered free to each dealer placing an initial fan order for eight Westinghouse fans, including four model 10LA2 fans. The other, a Poweraire window ventilator promotion kit, is offered free to each dealer placing an initial order of three model 10PWV window ventilators.

Two Maytag Reps

Assigned to territories in two Maytag branch sales areas recently are George Engelmann who will be a regional sales manager in southwestern Michigan and David A. Johnson, a regional sales manager for southern Indiana.

NEW, ADVANCED DEVELOPMENT in Radio Switch-Timers

SESSIONS

"TRU-BEL" ten-minute reminder

that sounds like this...

instead of this...

Here's your chance to offer your customers something new and better in alarm clock radios. The new Sessions switch-timer clock movements feature the "Tru-bel" ten-minute reminder—a pleasant sounding bell specially tuned to penetrate right through the sound of radio music or speech. "Tru-Bel" gently coaxes the soundest sleeper to rise and shine ten minutes after his radio turns on—if he should "cat-nap". It's a great improvement over harsh, rasping buzzers.

These new Sessions Switch-Timer movements have no center disc—dial is handsome, easily readable. The low

speed motor is "kitten-quiet" without annoying buzz from high speed gears.

Other features include: "Sleep-Slector" lullaby switch on some models to turn radio off automatically at any preset time up to 90 minutes; automatic radio shut-off 1½ to 2 hour after timer turn-on (for the forgetful), 10 and 15 amp. switch (UL approved). Manufacturer can choose front or back controls, round or square bezel, etched or screened numerals, luminous or in any color. Dial and hand styling to specifications. All movements factory tested and guaranteed for one year.

Ask your distributor's salesman about the availability of these new Sessions movements on his line of alarm-clock radios.

Sessions

SWITCH TIMERS

FORESTVILLE, CONNECTICUT

Sentinel Secretary

R. S. Lawton, for 3½ years assistant to the president, E. Alschuler, at Sentinel Radio Corp., has been made secretary of the corporation.

Tele-Tone Radio Moves

The Tele-Tone Radio Corp. is moving its entire New York City operations to the Bayway Terminal, Elizabeth, N. J., it was announced by Sol W. Gross, president.

Tele-Tone, which produces about \$40,000,000 worth of radios and television sets annually, is making the

move for two major reasons, Mr. Gross declared: the need for increased and more efficient space and the need for decentralization from the crowded metropolitan area.

New Web-Cor Distributor

Lincoln Radio and Television Corp., 231 S. Green St., Chicago, newly formed distributor of electronic products held a public showing of Webster-Chicago wire and tape recorders, phonographs and other products recently in the Tally-Ho Room of the Sheraton Hotel, Chicago.

Raytheon Vice-President

C. F. Adams, Jr., president of the Raytheon Mfg. Co., Waltham, Mass., has announced the election by the board of directors of Captain David R. Hull, USN (Ret.), as a vice-president of Raytheon.



Captain David R. Hull

Also elected as a director was Stanley P. Lovell of Newtonville, Mass., chemist, inventor, and 1948 recipient of the Presidential Medal for Merit.

Oxford Appoints Moore

John Proctor, Jr., general sales manager of the Oxford Electric Corporation, announces the appointment of Harry A. Moore, 4142 North 18th St., Phoenix, to serve the Arizona territory.

Vee-D-X Names Warner

J. E. Respass, president of the La Pointe-Plascomold Corp., manufacturers of the Vee-D-X television antennas and accessories, has announced the appointment of Sidney E. Warner as director of engineering and research. Mr. Respass stated that Warner would be in complete charge of the Company's expanded program in development and research of electronic products.

Named General Manager



D. H. Cogan, president of Air King Products Co., Inc., Brooklyn, N. Y., has announced the appointment of "Ed" Berliant, above, as general manager of Air King Distributors Corp., 5302 Second Ave., Brooklyn, N. Y. Air King Distributors is a wholly owned subsidiary which distributes Air King television sets, radios and wire recorders in the New York City area.



with General Industries' Model 250 TAPE-DISC RECORDER ASSEMBLY

There's literally no end to the merchandising possibilities of all-purpose recorders in which this GI Tape Disc Assembly is used. In home entertainment units . . . in straight recorders for professional men . . . as an aid to overall business efficiency . . . it has excellent profit potential.

Designed and built to General Industries' customary high quality standards, the Model 250 incorporates many novel, fool-proof operating features. Its cost is amazingly low.

Write *today* for a catalog sheet containing a full description of *all* the recording and play-back features of this popular new tape-disc recorder assembly.

When connected with suitable amplifier, the Model 250 records on discs . . . records on tape . . . records from tape to disc or disc to tape . . . plays back both tape and discs . . . plays 78 R.P.M. records. A complete service manual, included with each unit, contains a suggested amplifier circuit and complete amplifier parts list.

The GENERAL INDUSTRIES Co.



Department 1 • Elyria, Ohio

To Sylvania Electric Post



Sylvania Electric Products Inc., has announced the appointment of Arthur L. Chapman, above, as general manager of the radio and television division. Also announced were the appointments of Curtis A. Haines as general manager of operations of the radio tube and television picture tube divisions, John B. Merrill as general manager of the tungsten and chemical division, and Howard L. Richardson as director of industrial relations.

Wickman Named by GE

Paul Wickman has been appointed district representative for General Electric's Tube Divisions, according to an announcement by G. E. Burns, field sales manager of replacement tubes. Mr. Wickman will have his headquarters at 75 Federal St., Boston, and will be responsible for the sale of replacement tubes, component parts, test equipment and germanium diodes in the Boston, New Hampshire, Maine and Vermont areas.

TV Antenna Production

Radion Corp. of Chicago, reported that as of January 1, this year, its sales of portable TV antennas passed the 1,500,000 mark and that as fast as production can catch up with orders, the 2,000,000 figure will be announced. In spite of production difficulties, Radion anticipates a full schedule of shipments for several months ahead.

I.D.E.A. Appoints Morris



I.D.E.A., manufacturers of the Regency Booster, has appointed Major Ray A. Morris, above, former factory representative for Edwin I. Guthman Co., Inc., of Indianapolis, as assistant sales manager.

Thomas Expands Space

Thomas L. Clinton, president of Thomas Electronics, Inc., Passaic, N. J., announces that as a result of negotiations which have been underway for some months, 100,000 square feet of additional floor space have been obtained by the company in its present location. This new addition to manufacturing capacity will be devoted to expanded facilities for the production of cathode-ray picture tubes, and several new items, also in the electronic field, which have not yet been announced by the firm.

Meck Names Peterson

Curtis L. Peterson has been named merchandising promotion director of John Meck Industries, television set manufacturer, it was announced by John S. Meck, president.

Estersohn a Senior Rep

Harry Estersohn, 395 East Cliveden St., Philadelphia 19, has been elected to senior membership in the Mid-Lantic Chapter of the Repts, announces chapter secretary, R. F. Brookfield.

SENSATIONAL TRIO TV YAGI PROVIDES HIGH GAIN ON 2 CHANNELS

Here's the New TV antenna everyone is talking about — the most desirable antenna for two band operation. Unlike customary yagis, where gain falls off sharply on adjacent channels, the new and revolutionary development by TRIO actually provides full 10 DB gain on each of two channels — in a lightweight, compact array. It's the reason it's the most sought after antenna in America today! It's available for channels 4 and 5, in the low band, and channels 7 and 9 in the high band. If it's dual channel performance you want for local or fringe area reception, here's the antenna that out performs them all — in better picture quality, cost and weight.

COMPARE THESE ADVANTAGES

- Provides gain on both channel 4 and 5 (or 7 and 9). Equal to Any Two conventional 4-element yagis!
- One bay replaces bulky stacked array!
- One lead replaces old-style 2-lead systems!
- Less weight-per-gain than any other TV antenna!
- Greatly reduced installation costs for complete TV coverage!
- Can be stacked for additional gain.

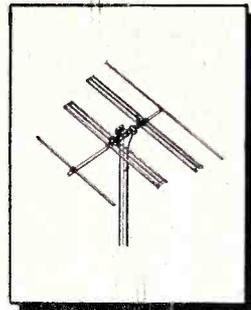
HOW IT WORKS

Antenna consists of 4 elements whose functioning is different on the two channels. For example: in Model 445, the elements, on channel 4, act as reflector, dipole, director, director, in that order; while on channel 5, the same elements act as reflector, reflector, dipole and director. Careful design insures proper impedance match with standard 300 ohm lead.

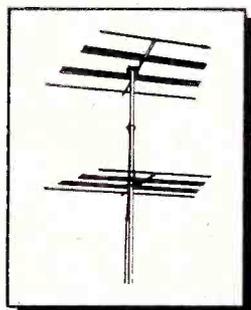
Eliminates Co-Channel Interference — Venetian Blind Effect . . . When used with TRIO "Controlled Pattern" System

Because of the high gain and front to back ratio of the new 2-channel single or stacked yagi, most co-channel interference is eliminated. When the problem is unusually difficult, such as when the TV receiver is located in the center of several TV stations operating on the same channel, co-channel interference CAN BE COMPLETELY eliminated with the use of the "Controlled Pattern" system. This unique system uses 2 bays, off-set stacked and tuned with the remarkable TRIO "Phasitron". TRIO antennas will give you TV reception when the rest fail.

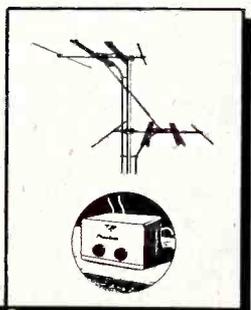
- Model 445—Single bay Yagi for Channels 4 and 5.
- Model 445-2—Conventional 2 bay stacked array for Channels 4 and 5.
- Model 479—Single bay Yagi for Channels 7 and 9.
- Model 479-2—Conventional 2 bay stacked array for Channels 7 and 9.
- Model 645—"Controlled Pattern" System for Channels 4 and 5, and Model 679 for Channels 7 and 9.



Single 4-element yagi with dual purpose elements. Provides high gain on two channels.



Two of the new TRIO yagis may be stacked to get up to 12 DB forward gain.



The "Controlled Pattern" System — eliminates "Venetian-Blind effect" when caused by co-channel interference.



Trio

MANUFACTURING CO.
Griggsville Illinois

BEAT THE TUBE SHORTAGE!

Receiving tubes are getting scarcer every day! This book shows you how to keep sets working... even though exact replacements are unavailable.

RECEIVING TUBE SUBSTITUTION GUIDE BOOK

BY H. A. MIDDLETON
for TV-AM-FM Receivers and Allied Equipment!



★ 2500 Radio and TV Substitutions are Listed! ★ TV Receiver Filament Wiring! ★ Heater Substitution Wiring Instructions! ★ Tube Types Classified by Functions! ★ Other Priceless Data!

Place your order today! First printing sold within 21 days! Second printing is now off press and will sell as fast! Make sure of your copy!

224 pages. 8 1/2 x 11 inches. Heavy, durable paper cover. Only \$2.40

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This practical book tells you everything you should know about an oscilloscope! WHAT it is... what it can DO... and HOW to use it properly!

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by John F. Rider and Seymour D. Uslan

The FIRST and ONLY book that so fully and clearly describes the 'scope... its construction... its capabilities... its applications in servicing, engineering, research... with thousands of time-saving and labor-saving references, charts, waveforms, etc.



All oscilloscopes produced during the past ten years, a total of more than 70 different models, are accurately described—with specifications and wiring diagrams.

Planning to buy a 'scope? This book will help you select the type best suited to your needs! If you already own one, the book will

show you how to increase your instrument's usefulness and, naturally, its value to you!

We GUARANTEE that it will SAVE and EARN many, many times its cost for you!

992 Pages • 500,000 Words • 3,000 Illustrations
8 1/2 x 11" Size • 22 Chapters • Completely Indexed
Easy to Read • Cloth Bound And only \$9.00

with ANTENNA SYSTEMS

TV MASTER ANTENNA SYSTEMS



by Ira Kamen and Richard H. Dorf

50 million dollars will be spent in 1951 for TV Master Antenna Systems installed in apartment buildings, hotels, hospitals, etc... in both new and old buildings. In TV

MASTER ANTENNA SYSTEMS, the authors provide a practical working manual which deals with installation, maintenance, usage, etc. This book shows how the Master Antenna is installed, how it works, and how you can capitalize on this fast-growing field.

368 pages. 234 explanatory illustrations. Cloth bound Only \$5.00

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Please send me the following books on your 10-day MONEY-BACK GUARANTEE.

RECEIVING TUBE SUBSTITUTION GUIDE BOOK \$2.40

"ENCYCLOPEDIA ON CATHODE-RAY OSCILLOSCOPES AND THEIR USES", 9.00

"TV MASTER ANTENNA SYSTEMS" 5.00

Name

Address

City..... Zone..... State.....

SAVE POSTAGE. If you enclose check or money-order WITH coupon, we will prepay postage charges.

Money back if you return books within 10 days.

Check Encl. Money-Order Encl. C.O.D.

Insuline Sales Reps

Two new regional sales representatives for the Insuline Corp. of America have been announced by Bernard L. Cahn, sales manager of the Long Island City, N. Y. radio-electronics parts manufacturing firms. They are, Ed Schulz of Indianapolis, Ind., and Robert Milsik, of Detroit.

To New Quarters

The James Vibrapowr Company has moved its offices and factory to new quarters at 4036 N. Rockwell St., Chicago 18, Ill.

Freed Names Axmacher

The appointment of George Axmacher as sales manager for Freed-Eisemann television consoles in the metropolitan New York area has been announced by Arthur Freed, president, Freed Radio Corp., New York.

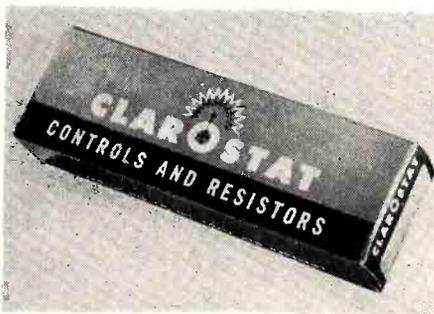
National Union PICTURE TUBE

Type 17BP4A is a rectangular face, direct-view, magnetically focused and deflected TV picture tube (all-glass) with a "filter" glass face-plate to increase picture contrast. Provides a picture 1 1/4 by 14 1/4 inches, and incorporates a tilted-beam gun utilizing a single-field ion trap. The 17BP4 is said to be electrically similar to the 16KP4 and therefore a suitable replacement where cabinet dimensions permit. National Union Radio Corp., Orange, N. J.—RADIO & TELEVISION RETAILING.

GE RECEIVING TUBES

The 1X2A is a half-wave (high-voltage) rectifier for TV sets. It is similar to the 1X2 except that it has a higher output and input voltage rating. Maximum inverse peak plate voltage is 20 KV. Type 6W6-GT is a beam power amplifier for audio output. When triode-connected, it may be used as a vertical amplifier in TV sets. Maximum peak positive pulse plate voltage is 1000 volts, plate dissipation 10 watts. General Electric Co., Electronics Park, Syracuse, N. Y.—RADIO & TELEVISION RETAILING.

New Clarostat Carton



Clarostat Mfg. Co., Inc., Dover, N. H., manufacturers of resistors, controls and resistance devices, has changed from its standard "Kelly green" carton, used for many years, to a bluish green and black. The Clarostat jobber line is being packaged in the new cartons as rapidly as they become available in all necessary shapes and sizes.

SERVICEMEN ARE SOLD

Yes, SOLD on RIDER MANUALS! And for good reason, too! Check for yourself... RIDER MANUALS give you ALL the information you need! COMPLETE coverage of the manufacturers' ENTIRE receiver output! ALL production runs (not just pilot models)...with ALL of the changes!

Yes, and ALL of the data is ACCURATE, AUTHENTIC, FACTORY-AUTHORIZED! ALL of it comes direct from the service departments of the receiver manufacturers themselves, and is compiled by RIDER into these indispensable television servicing manuals... giving you, in this ONE course, ALL of the priceless information that you MUST have

...and you can see WHY

For in the FIRST FIVE RIDER TV MANUALS, containing 10,544 pages:

731 pages are devoted to understandable descriptions of circuit action... telling you HOW the circuit functions. NOBODY, but RIDER furnishes you with so much of this necessary information!

293 pages are on signal waveforms... so vital to any rapid trouble diagnosis in picture i.f., sound i.f., video, sync and sweep circuits. Nobody, but RIDER, offers anywhere near this amount of important data!

337 pages have factory-issued unpacking and installation instructions. Nobody, but RIDER, brings you as many of these helpful, time-saving notes!

ONLY IN RIDER TV MANUALS

NOWHERE else can you get as much... in such easy-to-find format... so very easy-to-understand... so accurate... so thorough... so complete... so efficient...

★ ★ ★ ★ ★

RESERVE YOUR COPY OF TV MANUAL No. 6

Despite severe production difficulties, this new "BIG" TV Manual is being scheduled for delivery in March. However, due to paper shortages, we can print only a limited quantity. And since the contemplated curtailment of television receiver production makes the information contained in this volume absolutely essential to servicing technicians, we suggest that you order your copy IMMEDIATELY.

NOW AVAILABLE! RIDER MANUAL Vol. XXI

Factory-authorized servicing material from 61 manufacturers... AM-FM, auto radios, record changers, disc and tape recorders... Coverage from December 1949 to October, 1950. 1648 pages plus Cumulative Index Volumes XVI through XXI..... \$18.00

John F. Rider Publisher, Inc.
480 Canal Street New York 13, N. Y.

Complete your Rider Manual Library! If any volumes are missing, order a replacement today!

RCA Victor Names Haber

The appointment of Julius Haber as director of advertising and sales promotion for RCA technical products has been announced by L. W. Tee-garden, vice-president in charge of Technical Products, RCA Victor Division, Radio Corp. of America.

Unique Arvin Promotion

Frank Merritt, Arvin TV and radio district manager in Florida, together with Chas. B. Moyd, sales manager for McDonald Electric Co., Arvin distributor in Miami, Fla., have devised a "Hopalong Cassidy Western Round-up" promotional tie-in arrangement with local theaters. They supplied a live show to go with the Hoppy movies being shown. Arvin Hopalong radios were offered as door prizes. Tickets for the show were sold only through the stores of two local radio dealers, Lawrence Radio & Electric Co., 2422 Ponce de Leon Blvd., and Coxy Radios & Appliances, 2208 Ponce de Leon Blvd. The promotion worked so well that an additional supply of Hopalong radios had to be rushed in.

Stromberg Ups Prices

Price increases on four 1951 Stromberg-Carlson radio and television models have been announced by C. J. Hunt, general sales manager, Radio-Television Division. Those affected include: table radios 1500-HB, \$34.95; 1500-HI, \$37.50; and 1500-HR, \$37.50; 17-inch table TV, 17-TM, \$329.95; 17-inch console TV, 17-CM2, \$389.95; and 19-inch console TV, 119-CM, \$499.50.

New Book by Dunlap

"Radio and Television Almanac," by Orrin E. Dunlap, Jr., published by Harper and Bros., N. Y. This new book takes the reader through the intriguing history of the radio-TV industry from the earliest times, recording the milestones of development and the great names associated with these events. Among the facts and figures are such as Crookes and his cathode ray tube (1878), Nipkow and his scanning disc for TV (1884), Baird and his "radio shadowgraphs" (1925). Postwar development of monochrome and color TV is delineated up to Sept. 1, 1950. Mr. Dunlap is well qualified on the subject, having started in radio himself as an operator in 1912. Now RCA vice president in charge of advertising and publicity, the "Almanac" is his twelfth book in the field. This 200-page illustrated book is priced at \$4.00.

Air King Receivers

The Air King line of television and radio receivers is as follows: TV: model 17M1, \$249.95; 17T1, \$279.95; 17C7, \$299.95; 17C5, \$339.95; 17C5, \$354.95; 17C2, \$399.95; 17K1 (combination), \$499.95; 20C1, \$399.95; 20C2, \$469.95. Radios: A-511 (table) \$21.95; A-512 (table) \$23.95; A520-A, (portable) \$28.95, comes in ivory or maroon. Air King Products Co., Inc., 170 53 St., Brooklyn 32, N. Y.—RADIO & TELEVISION RETAILING.

CIRCLE X ANTENNA

ENGINEERED TO PROVIDE
**CLEAR SHARP
PICTURES ON
ALL CHANNELS**

COMPARE CIRCLE-X
TO ANY OTHER TV ANTENNA

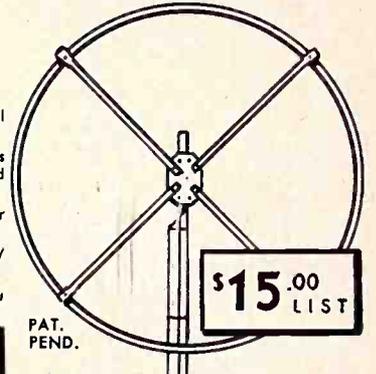
No other antenna combines all the mechanical and electrical features engineered into the Circle-X.

The high gain of the Circle-X is equal to stacked arrays. It is made of light weight corrosion resistant aluminum alloys that stand up in all atmospheric conditions.

When you use Circle-X you stock only one type of antenna for all jobs.

We urge you to compare Circle-X TV Antennas to any other TV antenna on the market.

Use Circle-X on your next tough TV installation. It may save you a lot of "no profit" call backs.



PAT.
PEND.

DEALERS: Air Express or Parcel Post Special Delivery direct from factory to you through your jobber, if he cannot supply you with the Circle-X from his stock.

CIRCLE-X ANTENNA CORP.
507 MARKET ST., PERTH AMBOY, N. J.



opportunity
knocks
... for
you!



Write for
new free
TECHNILOG

A comprehensive UNIVERSITY handbook on sound casting technique and equipment. Shows all you need to know about selection and installation of University loudspeaker equipment.

BUSINESS OPPORTUNITIES

WANTED—Radio, Music, and Appliance dealers and service stores. Earn substantial extra income. Sell and install high fidelity and public address equipment to present customers, local merchants, church, town hall, etc. Negligible investment, use present facilities. No special equipment required, only imagination and initiative.

Giving any thought lately to new sources of revenue, now that mainstay goods are getting scarce? There is a way you know! Alert dealers are finding local merchant friends, as well as neighborhood civil, social, and religious services responsive to the obvious advantages of SOUND. Besides, every radio, TV, record, or service customer is a hot prospect for the sale of a high fidelity loudspeaker—at the right price! No expansion of sales force necessary, big volume sales possible through regular channels. University loudspeakers make the job easy—a real profit opportunity for which you are already tooled up.

ADDRESS INQUIRIES TO DESK 24

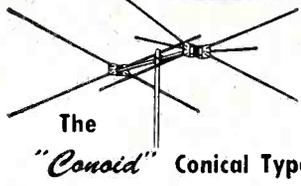


UNIVERSITY LOUDSPEAKERS · INC

80 SO. KENSICO AVE., WHITE PLAINS, NEW YORK

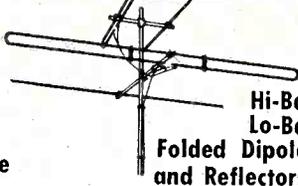
insuline Challenger TV ANTENNAS

Better 3 ways!
 1 - precision engineered
 2 - outstanding performance
 3 - competitively priced



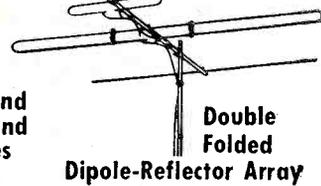
The "Conoid" Conical Type

Precision designed features that add up to flawless television reception on all channels. High forward gain and excellent front-to-back ratio. Perfect matching to transmission line . . . minimizing "ghosts."



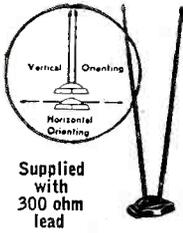
Hi-Band Lo-Band Folded Dipoles and Reflectors

Outstanding reception over entire high band and low band television range. Ideal for "fringe" areas. Antenna sections rotate separately. Easy to install.



Double Folded Dipole-Reflector Array

Uni-directional broad band system for all-channel, high band-low band reception. High sensitivity for building up weak signals from distant TV transmitters.



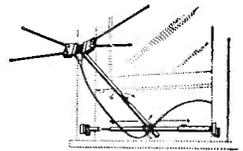
Meteor Indoor TV Antenna

Simple to install. Adjustable to all channels.

IMMEDIATE SHIPMENT FROM STOCK
 necessary 300 ohm cable available for all INSULINE TV antennas.

Conical Window Antenna

Adjustable from 30 to 50 inches.



Illustrated is just a representative group of the INSULINE family of TV antennas. Write Dept. RR-2 for new catalog including Metal Goods, Radio Parts, Tools, Hardware, Accessories, TV Antennas, etc.

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 INSULINE BUILDING • 36-02 35th AVENUE • LONG ISLAND CITY, N. Y.
 West Coast Branch and Warehouse: 1335 South Flower Street, Los Angeles, Calif.
 Exclusive Canadian Sales Agents: CANADIAN MARCONI COMPANY, Montreal

Admiral Line Announced

The Admiral TV line lists one 14" table model, 14R12, \$199.95; two 16" table models, 16R11, \$239.95 and 16R12, \$249.95; and two 17" table models, 17K11, \$269.95 and 17K12, \$279.95. Consoles include one 14" model, 24R12, \$219.95; two 16" models, 26R12 at \$269.95 and 26X65 at \$359.95; ten 17" models, 27K12 at \$299.95, 27K15 at \$339.95, 27K16 at \$349.95, 27K17 at \$359.95, 27K25 at \$369.95, 27K26 at \$389.95, 27K27 at \$409.95, 27K35 at \$379.95, 27K36 at \$399.95, and 27K46 at \$419.95. One 19" model is in the line, 29X25 at \$475. Five of the consoles are 20" models, 221K16 at \$439.95, 221K35 at \$469.95, 221K36 at \$489.95, 221K26 at \$509.95, 221K28 at \$525. Combinations in the new line include two 14" models, 34R15 at \$349.95 and 34R16 at \$369.95; six 17" models, 37K15 at \$449.95, 37K16 at \$469.95, 37K27 at \$499.95, 37K35 at \$499.95, 37K36 at \$519.95, and 37K28 at \$525. AM-FM is available on the latter four models at \$30 additional. Normal price includes AM only. Nineteen inch combos announced were the 39X35 at \$599.50 and 39X36 at \$619.50. Twenty inch combos include the 320R25 at \$695, 320R26 at \$725, 321K35 at \$599.50, 321K36 at \$619.50, 321K15 at \$695, 321K16 at \$725, 321K27 at \$795, 321K18 at \$795, 321K46 at \$845, 321K47 at \$895, and 321K49 at \$895. The latter seven models are available with FM-AM at \$30 additional. The normal list price includes AM only.

TV Accessories Plant

It has been announced that the General Cement Mfg. Co., 919 Taylor Ave., Rockford, Ill., has added a second plant to its Rockford operation. The new plant, over 30,000 sq. ft., is intended for the manufacture of television accessories.

Air King Ad Manager

Edwin Weisl, Jr., has been appointed advertising manager of Air King Products Co. of Brooklyn, it was announced by Richard Payne, sales manager of Air King. Weisl was formerly advertising manager of Tele-King Corp. and before that with RADIO & TELEVISION RETAILING as district manager.

Kinney Bros. Move

Kinney Brothers, Los Angeles, West Coast wholesale distributors, announces that it has moved its operations to the San Joaquin Valley in mid-California. Headquarters have been moved to Fresno, which has long been one of the major branches of Kinney Brothers.

To Engineering Firm

Mitchell Fein has announced his return to active practice with his engineering firm, Consolidated Management Consultants, 521 Fifth Ave., New York City. The prime reason for his return to consulting engineering is the greatly increased industrial activity.

NEW ALLIED 1951 CATALOG



FREE!
 212-PAGE BUYING GUIDE
 COMPLETE UP-TO-DATE
 Send for it!

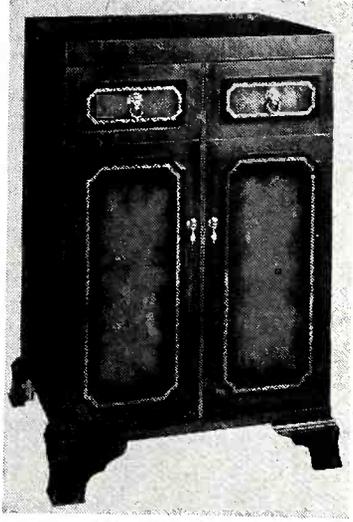
EVERYTHING IN RADIO, TV and ELECTRONICS

Service Technicians and Engineers: ALLIED's latest Catalog brings you all the newest equipment and money-saving values—from the world's largest stocks of test instruments, amplifiers, P.A. systems and equipment, tubes, parts, tools, books and accessories. Send today for your FREE 212-page ALLIED Catalog.

ALLIED RADIO

ALLIED RADIO CORP., Dept. 25-B-1
 833 W. Jackson Blvd., Chicago 7, Ill.
 Send FREE Catalog No. 126.

Name _____
 Address _____
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Just between us . . .

When customers demand *quality* in television cabinets, TV manufacturers naturally turn to **TELECABINETS** for the finest in craftsmanship and distinctive design. And you'll be pleased to find that quality **TELECABINETS** are *competitively priced!*

All sturdily constructed of 3/4" stock throughout, **TELECABINETS** are available in uniquely styled walnut, mahogany, Chinese Chippendale and inlaid leather models.

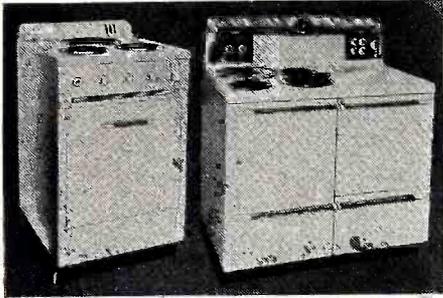
Tell us your requirements
 Visit our showroom

TELECABINETS, Inc.
 155 Suffolk Street, New York, N. Y.
 ORegon 3-3527

New Appliances

Universal RANGES

The new line of electric ranges, called the "Speedliner" ranges, include the model RA7828 (shown, right), with seven heat control, Lift-Up unit, Controlled oven, and other features; model RA6812 (shown, left), for 25 x 21½"



floor space, wired for lamp and timer connection; model RA7818, with one oven and controlled warming cabinet; model RA7819, with two Tru-Bake ovens, Select-A-Trol, etc.; and model RA7813, with large size controlled oven, combination economy cooker and Lift-Up unit, seven heat control, etc. Landers, Frary & Clark, New Britain, Conn.—RADIO & TELEVISION RETAILING.

GE LAUNDRY APPLIANCES

A new line of washers has been announced. One new automatic washer, model AW5-B4 announced, is a top loading machine with agitator action. It lists for \$329.95. Redesigned wringer washers include the AW462 and the AW362, both with timers, at \$179.95 and \$149.95, respectively, and AW-162 at \$139.95.

A new clothes dryer with time and temperature controls was also announced. Operating on 230 volts AC, it will damp-dry an average washer load in 20 minutes, and completely dry them in 45 minutes. List price is \$249.95.

Also announced was a new line of ironers. Heading the line is a "toe-touch" automatic ironer featuring "no hands" operation. Called model AF-20A, it lists for \$249.95. Three cabinet rotary models, with controls for hand or knee operation, list at \$219.95, \$189.95 and \$159.95. A portable rotary ironer, model AR-30, lists for \$59.95. General Electric Company, Bridgeport 2, Conn.—RADIO & TELEVISION RETAILING.

IH REFRIGERATORS

Seven new refrigerator models have been announced. Ranging in size from 7.4 to 9.5 cu. ft., the new line features X-braced full length doors; porcelain enamel interiors; large bottle space; adjustable temperature controls; built-in bottle openers; and hermetically sealed refrigerating units with five-year warranty. Ten different colors of door handles are available. Featured is the model AK-2379, 9.2 cu. ft. size with full-width freezer locker and covered meat drawer. Butter keeper in the door has a separate temperature control. International Harvester Company, 180 North Michigan Ave., Chicago 1, Ill.—RADIO & TELEVISION RETAILING.

Still **BIGGER** and **BETTER** than ever!

THE NEW 1951 LINE OF

DEWALD

High Definition TELEVISION and Superformance RADIO

Bigger screens . . . better pictures . . . finer performance . . . lovelier cabinetry. 14", 16", 17", 20"—choose your picture size. ALL WITH BUILT-IN ANTENNAS.

There's a full selection of Superformance RADIOS, each an outstanding value.

DeWALD's proven quality and time-tested dependability are your assurance of satisfied customers, increased sales volume and greater profits.



Model ET-190-D
20" TV
CONSOLE
with Doors

Proven
Quality
Since
1921

JOBBERS—REPRESENTATIVES: Some choice territories now available. Write for full information.

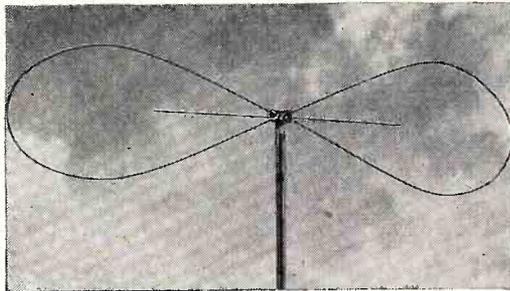
in
RADIO
and
TELEVISION

for
SOMETHING
BETTER,
it's

DEWALD

DEWALD RADIO MFG. Corp. 35-15 37th Ave., Long Island City 1, N. Y.

13 channels and fm radio



\$2.95

SUGGESTED LIST

Here's the quality antenna that solves all your primary area problems! The Tel-a-Ray Butterfly requires no assembling or adjusting — just mount it to the mast. Built for endurance, the Butterfly eliminates call-backs — builds new customers by keeping old customers happy. All 13 TV channels and FM radio — at a suggested list of \$2.95! Write for information today.

- Send information about the Tel-a-Ray Butterfly
- Send information about the complete Tel-a-Ray line

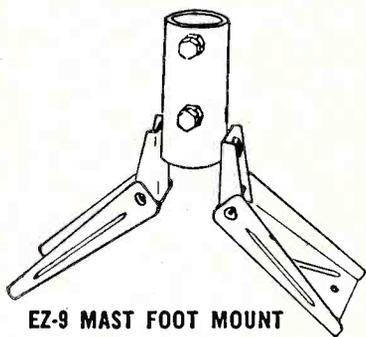
NAME.....
ADDRESS.....
CITY..... STATE.....

Tel-a-Ray

ENTERPRISES, INC.

P. O. BOX 332R • HENDERSON, KY.

TV'S MOST POPULAR ROOF MOUNT



EZ-9 MAST FOOT MOUNT

BY . . .

Easy-Up

MAKERS OF THE FAMOUS
ROTA-TOWER
AND POLE ACCESSORIES

- ★ Extra-heavy duty—all steel with no welds
- ★ Hot-dip galvanized for positive weather-proofing
- ★ Fits peaked, pitched or flat roof
- ★ Tip mast up from any of four sides
- ★ Anchors all masts up to 1½" OD. For masts up to 2", specify EZ-9A (slightly higher)
- ★ Comes to you at very attractive dealer price of only

\$195

Sold Only Through Jobbers

Easy-Up Tower Co.

RACINE • WISCONSIN

On Du Mont Panel

Names of five distributor representatives selected as members of the Du Mont distributor panel during recent regional meetings held by the receiver sales division, Allen B. Du Mont Laboratories, Inc., were announced by Walter L. Stickel, national sales manager, as follows: Southeast: Fred Bottom, Arthur Fulmer Co., Memphis, Tenn.; East: H. G. Beard, Moto Radio Distributing Co., Pittsburgh, Pa.; Midwest: Leonard Turnbull, Specialties Distributing Co., Detroit; Southwest: J. W. Derr, J. A. Walsh Co., Inc., Houston, Texas; Far west: Jack N. Smith, Quality Television Corp. Los Angeles, Cal.

Big Order by All State



Irving Russell of All State Distributors, Newark, N. J., shown signing the first order for 1951 delivery of Webster-Chicago products recently—eleven carloads of phonographs, record-changers and wire recorders. Expressing satisfaction at the event are W. S. Hartford (left), vice-president in charge of sales of Webster-Chicago, and Norman C. Owen (right), sales manager of the distributor division.

Where Do We Go in '51?

D. H. Cogan, president of Air King Products Co. Inc., Brooklyn, N. Y., said recently, "1951 will undoubtedly be a series of nightmares to the entire radio and television industry. The manufacturer will be faced with a host of obstacles that will have to be hurdled, and it will require all the ingenuity his organization can command to maintain any semblance of radio or television production. If he is exceptionally successful, he may produce up to 70% of 1950 rate of production during the first quarter of 1951 . . . beyond that, it is inevitable that further substantial reduction in production must take place despite anyone's best efforts."

Scott CHIPPENDALE

Latest addition to the line is the "Chippendale," 21-inch TV, AM-FM radio, 3-speed phono combination in chippendale mahogany cabinet. Features black-face rectangular TV tube, push-button controls on AM and FM, and provision for remote control attachment. List price is \$1495, or \$1095 for the "Add-A-Vision" model.

Philco Remote Control



Harry Babbitt, television and radio star, demonstrates Philco full remote control to newly elected "Miss Philco" (Diane Dyer). With her are her attendants.

New Rep Members

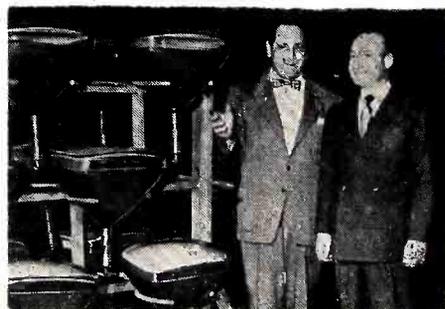
Three members of the Frank W. Taylor Co., Box 316, DeWitt, New York, have been elected to membership in the Empire State Chapter of "The Representatives," announces chapter secretary, Leonard D. Allen. Mr. Taylor, who was an associate member in 1943 and now heads his own corporation as a manufacturers' representative, was elected to full, senior membership. Harry R. Murray and Victor F. Nicholson, salesmen for the Taylor firm, both joined Empire State ranks as new associate members.

Reps-NEDA Dinner

The evening of Saturday, February 17th, has been selected as the "Get-Together Nite" for a dinner and dance to be held at the Vanderbilt Hotel, 34th St. at Park Ave., N. Y. by the New York Chapter of the Representatives of the Radio Parts Manufacturers, Inc. and the New York Chapter of NEDA.

The dinner and entertainment committee consisting of Milton Fischer, Max I. Epstein, Philip Wilk, Herbert Schneur, Dan Bitten, Jules Bressler, James M. Pickett and Frank Brennan have made preparations for a gala evening of fun.

New Zetka Officials



From the moment Murray M. Shindel, sales manager, and Meyer Bonuck, president, (above), took over the leadership of the Zetka Television Tube Corporation, they have figuratively lived with their product in an effort to maintain Zetka's claim to picture tube fame. Each innovation has been a step forward in increased production and in improving Zetka's performance potential.

Watch
MERIT
for TV in '51

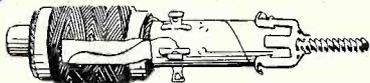
Merit is meeting the rapidly rising demand for TV replacements with a TV line as complete as current and advance information will permit
TRY MERIT FIRST FOR TV CONVERSION OR REPLACEMENT!



HV06—Universal Ferrite core "FLYBACK" permits widest coverage.

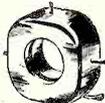


MDF70—70° high efficiency Ferrite yoke for tubes up to 19"



MWC-1—Width linearity control with AGC winding (Automatic Gain Control).

FOCUS COILS



Free!

Write today for:

- MERIT TV REPL GUIDE AND CATALOG**
—Dec. 1950 issue. Up-to-date listing of all replacements.
- MERIT 1951 CATALOG No. 5111**
Show specs. on complete line of TV, Radio, Amateur and Industrial Transformers.

REFER TO MERIT'S LISTING
IN HOWARD SAM'S PHOTOFACTS

TAPE-MARKED TO HELP YOU!
Handy tape marking on every Merit Transformer shows permanent hook-up data for quick reference. ORIGINATED BY MERIT.

MERIT
TRANSFORMER CORP.

4419 NORTH CLARK ST., CHICAGO 40, ILL.

Stancor Sales Manager



Jerome J. Kahn, president of Standard Transformer Corp., 3580 Elston Ave., Chicago, recently announced the appointment of Gilbert C. Knoblock, above, as general sales manager. Mr. Knoblock has been associated with Standard Transformer Corp. for several years as advertising and sales promotion manager.

Brunswick New Home

Brunswick Radio and Television Division of Radio and Television, Inc., has moved its general offices to 119 West 57th St., New York 19, N. Y. Its new offices occupy more than double the space formerly used. Production facilities have also been substantially increased to meet the growing demands for Brunswick TV, according to Herbert L. Weisburgh, president.

3 Million TV Sets for '51

"Although manufacturers produced nearly 7,500,000 television sets in 1950, we believe that under present conditions only 3,000,000 can be built by the industry this year," F. M. Sloan, manager of the Westinghouse television-radio division, forecast. He spoke at a meeting of Westinghouse distributors from the East at the Barbizon Plaza. J. M. McKibbin, vice president in charge of consumer products, outlined Westinghouse policy in the face of the critical international situation. He emphasized that Westinghouse quality would be maintained, if necessary at the sacrifice of volume.

To Tung-Sol Post



R. E. Carlson, vice-president of Tung-Sol Lamp Works Inc., Newark, N. J., has announced the appointment of J. D. Van der Veer, above, to the position of sales manager for electron tube initial equipment.

For AC CURRENT
ANYWHERE . . .
NO MAGIC just
use **ATR**
INVERTERS



STANDARD AND HEAVY DUTY INVERTERS



For Inverting D. C. to A. C.

Specially Designed for operating A. C. Radios, Television Sets, Amplifiers, Address Systems, and Radio Test Equipment from D. C. Voltages in Vehicles, Ships, Trains, Planes and in D. C. Districts.

NEW MODELS NEW DESIGNS
NEW LITERATURE

"A" Battery Eliminator, DC-AC Inverters
Auto Radio Vibrators
See your jobber or write factory



AMERICAN TELEVISION & RADIO CO.
Quality Products Since 1931
SAINT PAUL 1, MINNESOTA—U. S. A.

Wilcox-Gay Movie Tie-in



Superior Appliance Company of Wichita, Kansas, staged a promotion recently in cooperation with the Fox Orpheum Theater during showing of "Kiss Tomorrow Goodbye" which features the new Wilcox-Gay Recordette. An attractive lobby display with live demonstrators was also arranged at the theater.

Hoffman Appointments

Hoffman Radio Corp., Los Angeles, has appointed two new Mid West key dealers, according to R. J. McNeely, director of sales. Younker Brothers, 312 West 8th St., will handle the Des Moines area, with George's, 1003 West 4th St., Davenport, in that section. 555, Incorporated, Little Rock, Ark., has been appointed Arkansas distributor for Hoffman Radio Corp., Los Angeles, according to Dean Benton, Hoffman district manager in Dallas.

Aerovox Names Marshall

Aerovox Corp. of New Bedford, Mass., has announced the appointment of Frank Marshall as director of manufacturers' sales for Aerovox Corp. and Electrical Reactance Corp. A. E. Quick will succeed Marshall as sales manager of Aerovox Corp., manufacturers' sales division, and will make his headquarters in New Bedford.

Littelfuse Dispenser

Littelfuse Inc. of Chicago adds to its merchandising aids for parts jobbers, a new revolving counter dispenser which will hold up to 3,600 fuses. The dispenser consists of two metal frame drums with slide channels which dispense fuses from either top or bottom. The two sections revolve independently in order to make easy selection of the 72 varieties of fuses which can be displayed when both units are used.

There are four ways to buy the new dispenser: (A) Double drum (no fuses) for a nominal sum—(\$8.00); (B) Double drum with \$50.00 net order of fuses—25% discount on drums; (C) Double drums with \$100.00 net order of fuses—50% discount on drums; (D) Single drum at a slightly higher cost than double unit. (\$4.50)

Emerson Appoints Light



The appointment of Gerald Light, above, as sales promotion manager of Emerson Radio & Phonograph Corp., New York, was announced recently by Benjamin Abrams, president. Light succeeds Harold Dietz, who recently resigned to engage in his own business as head of the new Emerson distributing company, Emerson Mid-State, Inc., Newburgh, N. Y.

Magnavox at the Mart

Permanent Chicago display headquarters have been leased by The Magnavox Company in Space 1115 of the Merchandise Mart, Frank Freimann, president, has announced. The importance of the Chicago market and the accessibility of the Merchandise Mart to buyers from all sections of the country were cited by Freimann as reasons for establishment of the permanent display headquarters.

RADIO AND TELEVISION SUPPLIES

UNITED EASTERN ELECTRIC SUPPLY CO.
205 Main Street, Hempstead, L. I., N. Y.

No Experience Needed to PRINT YOUR OWN POST CARDS

The GEM STENCIL DUPLICATOR saves money . . . gets results quickly! Hundreds of uses for every type of business and organization. We ship the GEM complete with all supplies, Guide Board for accurate printing and 60-page Book of Ideas of the special low price of only \$8.50 (a \$15.00 value)



FREE TRIAL OFFER

Our 21st Year

Use the GEM FREE at our expense! SEND NO MONEY. Write and complete GEM outfit will be sent you postpaid. After ten days, send us only \$8.50 or return the GEM. You must be satisfied! WRITE TODAY.

Bond Equipment Co. Dept. 53 • 6633 Enright St. Louis Mo.

SELL Your Surplus TUBE ALLOTMENT

Get 100% Turn Over On Your Stock. Send List and Best Prices. Immediate Payment.

SPECIAL! TV Twinex 300 Ohm Twin Lead, 10 strand All Copper wire\$36.95 per 1,000 ft.

CRITICAL TV TUBES. LARGE QUANTITIES IN STOCK. Write for Prices. TV Conical Antennas.

DUBL-X—Sturdy prefab const versatile 72, 150 or 300 ohm match. incl. 8 elements & 100 ft. all copper twinex, cross bar & hardware. Brand New, Only....\$8.49

DUBL-STACKED X—As above but with 16 elements & 100 ft. twinex.....\$12.98

TAB Dept. R, 6 Church St.
New York 6, N. Y.
That's A Buy **WORTH 2-7230**

WANTED

Highest cash prices paid promptly for your over-stock inventories of television sets, radios and electrical appliances. We buy in any quantity. Let us know what you have.

MID-AMERICA CO., INC.

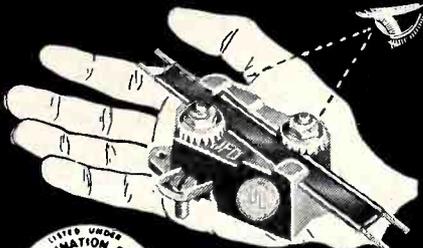
2412 S. Michigan

Chicago 16, Ill.

Victory 2-0702

JFD TWIN LEAD LIGHTNING ARRESTER

Protects TV Sets Against Lightning and Static Charges



SEEING IS BELIEVING!

ONLY JFD Lightning Arresters offer you these exclusive patented features . . .

1. Patented strain-relief Retaining Lip which prevents pulling or straining against contact points.
2. You actually see positive contact made with lead-in wire.
3. Lead-in contact remains fully visible at all times.
4. No wire stripping. No Arrester Cover to Hide Poor Contacts!

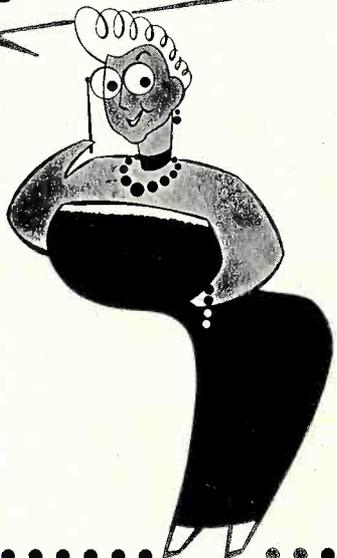
No. AT105
\$1.25
List

For Regular Twin Lead

At Your Jobber or Write Direct

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22nd & Ontario Sts., Phila. 40, Pa.

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City..... Zone..... State.....

Zenith Store Sign



Shown above is a new black light display for Zenith Radio dealers. Designed by Paul Resinger Designer Inc., of Chicago, the sign has an unusual effect in daylight due to the ultraviolet rays on the ordinary pigmented backgrounds.

1951 Rep Officers for Missouri Valley Chapter



Shown above are Zell Myers, vice-president; Courtney Roes, president; and Clyde Schryver, secretary-treasurer, all elected to the reservations committee of the Missouri Valley Chapter of the Reps at their recent annual meeting at Excelsior Springs, Missouri.

New Receivers

Magnavox TV LINE

Sixteen cabinet styles make up the 1951 TV line. 17-inch models are: the Metropolitan, \$289.50; the Biltmore, \$298.50; the Playhouse, \$359; the Shoreham, \$359; and the Cosmopolitan, \$395. 20-inch models are: the Hepplewhite, \$398.50, \$450, and \$525 (3 models); the Normandy, \$398.50, \$450, and \$525 (also in 3 models); the Modern Theatre, \$525; and the Windsor Bookcase, for addition to base cabinet that houses radio-phono, \$495. Combinations with 17-inch TV, AM and FM radio and 3-speed record changer: the Contemporary, \$498; the Wedgewood, \$525; the Provincial, \$525. Combos with 20-inch tubes: the American Modern, \$695 and \$795 (2 models); the French Provincial, \$695 and \$795 (also 2 models); and the American Traditional, \$695 and \$795. Also in the line is the Embassy, combo which includes shortwave radio, \$95. A newly designed record changer being incorporated in all Magnavox models. The Magnavox Co., Fort Wayne 4, Ind.—RADIO & TELEVISION RETAILING.

Bendix TV LINE

In addition to carrying over a 17-inch mahogany table model at \$279.95 and a 17-inch mahogany console with doors at \$399.95, the new TV line includes a new table model at \$279.95, and a new open face console at \$299.95, both with

17-inch tubes; a console in mahogany cabinet with doors, with 20-inch tube, priced at \$479.95; and the French Provincial model, with 17-inch picture tube, at \$399.95. Bendix Radio, Division of Bendix Aviation Corp., Baltimore 4, Md.—RADIO & TELEVISION RETAILING.

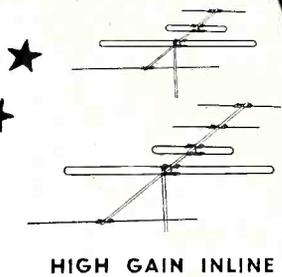
Capehart NEW MODELS

Leading the new line is the model 335 AM, the "Berkshire," 20-inch TV, AM-FM radio, and 3-speed record changer combination. Cabinet is mahogany in 18th century English style. Also in the line is the "Spinnet," 320-B, bisque-finish 17-inch set; the "Californian," 17-inch set in korina or mahogany; the "Chippendale," model 1008M, radio-phono with AM-FM radio and 3-speed phono; the "Futura," model 1010B, phono-radio in korina cabinet; and the model T-30 table model clock-radio. Capehart-Farnsworth Corp., Fort Wayne 1, Ind.—RADIO & TELEVISION RETAILING.

Air Marshall TV SET

A new TV set has been introduced, a 17-inch table model listing at \$199.95. Chassis has fourteen tubes; weighs slightly over 13 pounds. Optional equipment includes attachable legs. This model will be followed shortly with a half-door console, also with 17-inch tube. Air Marshall Corp., 12 East 44th St., New York, N.Y.—RADIO & TELEVISION RETAILING.

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MAKES THE
5-STAR LINE



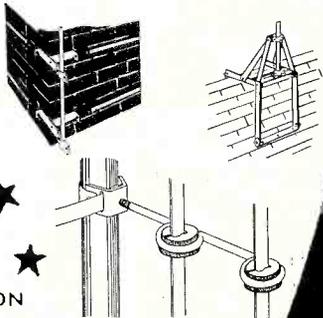
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- ★ CLEARER SHARPER PICTURES
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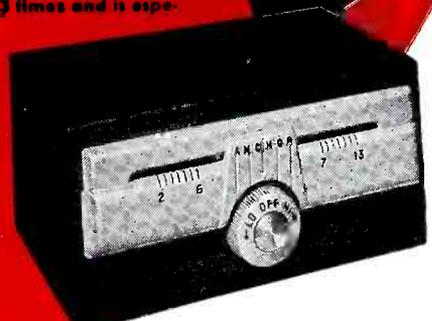
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 ... better TV reception
 ... satisfied customers
 ... simple, easy installations
 ... fringe area TV sales



The Pulverite

ANCHOR'S SINGLE-STAGE BOOSTER—Model ARC 101-73 will increase original TV signal strength 3 times and is especially recommended for low signal areas in or near cities where there may be any number of interference problems. Assures consistently good reception up to 75 miles. **\$37.50** List Price.



The Granger

The ANCHOR TWO-STAGE BOOSTER—Model ARC 101-100 increases original TV signal strength 5 times and is recommended for distant rural areas. Consistently good reception over 100 miles. **\$49.50** List Price.



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Only ANCHOR can provide your customers with ALL of the most Ultra-Modern advantages for consistent, top-notch, long-range TV reception. Here's why!

- ANCHOR has the highest gain of any TWO-STAGE BOOSTER.
- ANCHOR has the highest Signal to Noise Ratio.
- ANCHOR is the only non-regenerative unit available. The unit that is not returned.
- ANCHOR'S Single Knob Construction is so convenient for Booster is turned on and can be switched and tuned all on the same knob.
- ANCHOR'S New and Revolutionary method of construction of the RF Stage (Pat. Pend.) is the only real engineering advance in Boosters in recent years.
- ANCHOR'S TWO-STAGE BOOSTER is modernly styled with streamlined plastic escutcheon, soft mahogany leatherette finish.
- IMPORTANT ANCHOR'S TWO-STAGE BOOSTER is often the answer to installation difficulties well within the normal TV areas where their New Single Stage Model fails to give complete satisfaction.

Expensive high towers—still unsatisfactory reception.

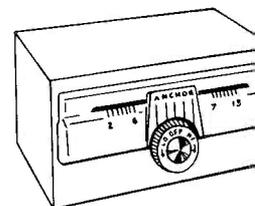
Hazardous installations subject to damage and repair.

Many trips to repair or maintain faulty installation.

Dissatisfied customer complaints costly.



SAME \$ PROFIT



- ONE SALE
- ONE UNIT
- ONE CALL
- ONE satisfied customer.

If you are a dealer and have your own service men who make the installation on the TV sets you sell, it stands to reason that an installation of one of the many fine simple-to-install antennas, plus an ANCHOR BOOSTER will make a faster and more profitable installation for you, or your service agency, as well as a completely satisfied customer. REMEMBER, return calls due to dissatisfaction cost you money. **SERVICE MEN: take an ANCHOR BOOSTER with you on every installation**

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THE QUALITY OF RCA TUBES IS UNQUESTIONED



Extra Performance

as a matter of course... with RCA tubes

EXPERT ENGINEERING and careful quality control are inseparable ingredients that contribute to the *extra* performance of RCA tubes. A case in point is the *double helical coil heater* developed by RCA. By its use, hum level is greatly reduced. This feature made possible the design of amplifier tubes having greatly increased sensitivity.

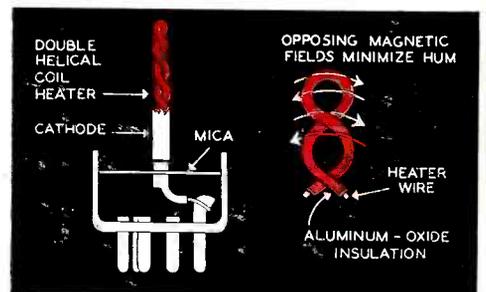
The double helical coil heater—shown in red—is designed so that the heater current flows in one circular direction to the top of the heater and in reverse circular direction to the bot-

tom of the heater. Thus, the current flowing through the heater sets up opposing magnetic fields which effectively neutralize each other.

In addition to the helical coil construction, each tungsten or tungsten-alloy heater is coated with a pure aluminum oxide having extremely high insulation qualities, and pioneered by RCA. The use of this insulation is a major factor in reducing heater-cathode leakage—another cause of hum.

Though it adds to the complexity of manufacture, the double helical coil heater is incorporated in the design of

all RCA high-gain tubes of the 6.3-volt, 0.3-ampere, heater type intended for audio use. This is another reason why you can count on *extra* performance and long life from RCA tubes.



Keep informed—stay in touch with your RCA Tube Distributor



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