

GOOD NEWS

ABOUT RCA RADIOTRONS



VOLUME I

NOVEMBER

NUMBER 9

Just the Thing for Xmas Shoppers



THERE is nothing that your customers, especially women, will appreciate more than one of these handy shopping memos. They are just a convenient size, two by three inches, for the pocket-book. And on the back cover is a calendar of both 1930 and 1931. Inside each contains 24 pages, perforated so that any one may be torn out.

At this time of the year more than any other, it is an item that will be most acceptable to your customers. Not only that, but they are an exceptional value to you—only \$5.50 a thousand, imprinted with your name and address. Send in your order at once—fast deliveries guaranteed. Set these to work for you.

RCA RADIOTRON COMPANY, INC., * * * HARRISON, N. J.

RCA Radiotrons

THE HEART OF YOUR RADIO

GOOD NEWS

About RCA Radiotrons

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25 Cents a Copy — \$2.00 a Year

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When A. D. Peabody, left, Westinghouse Electric Supply Co. Division Manager and Max Sterrett, right, Dallas House Sales Manager, decided that the negro (featured in Westinghouse advertising) needed selling assistance, they turned to the Selling Fool. Soon the Selling Fool was at work in Westinghouse dealer stores but in black face! A little lamp black did the trick. Where's Al Jolson?

IMPORTANT ANNOUNCEMENT!

SUPER SELLING FOOL Now Ready!

ON October 27th the SUPER SELLING FOOL made his bow. Since the close of business on that day, no orders have been accepted for the old Selling Fool. There are no more.

As you might expect, the SUPER SELLING FOOL has many advantages over the Selling Fool. Briefly, these advantages are: superior construction, better balancing qualities, improved finish and new applications. Yet, the price is only 4 for \$5.00 or \$1.50 each. If you liked the Selling Fool, you'll like even more the SUPER SELLING FOOL.

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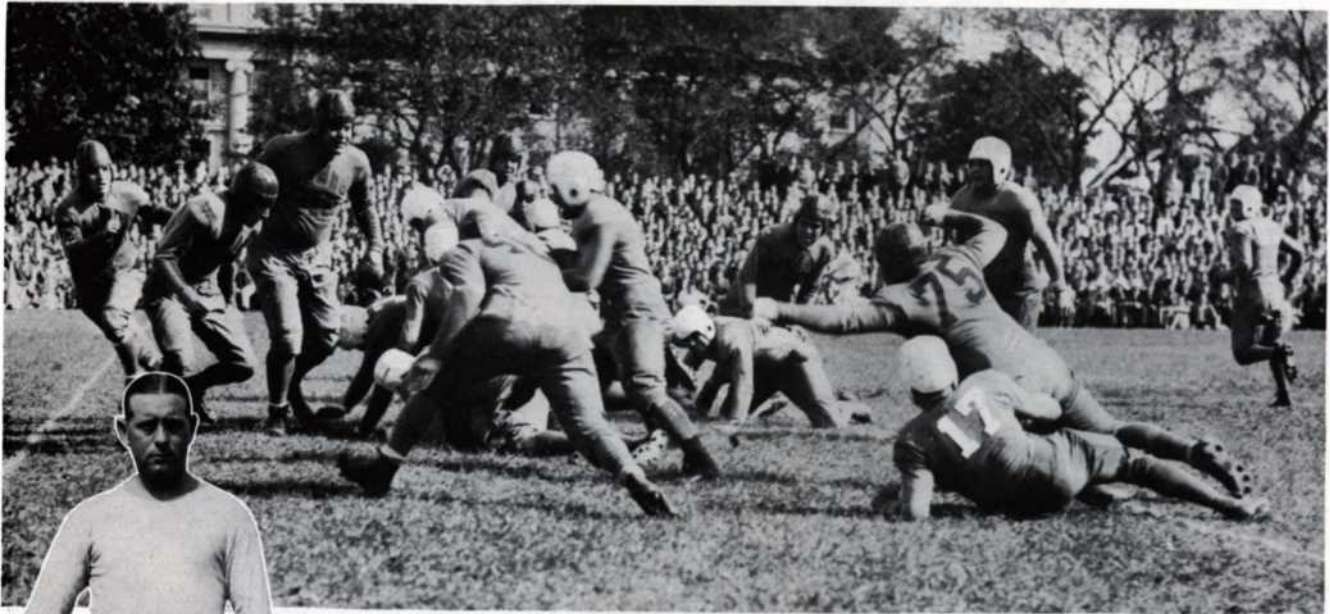
W. H. THOMPSON

F. B. WANSELOW

A magazine of radio merchandising counsel to help distributors and dealers of RCA Radiotrons make more profit.

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N.Y.U. downs Hobart, 35-0. Insert, "Chick" Meehan



WHAT Makes a Leader?

Sincerity, Character, Adaptability and Aggressiveness Are the Four Essentials to Leadership

By "Chick" Meehan

Head Coach, New York University

As told to H. G. Ommerle

John F. "Chick" Meehan was born in 1894. Since his school days he has been active in sports and the head of his teams. He made an enviable record at Syracuse University as quarterback during 1915-'16 and '17. He then enlisted in the Navy and coached and captained the undefeated Naval team. Since 1925 he has been head coach of N.Y.U. Leading his teams to victory from then on he, in 1927 put out the Hall of Fame Eleven that won seven high-score victories, two ties, only one defeat. Here is a leader that has shown many another man the road to leadership.

THE dressing room of the New York University football team is a big room, a broad room, suggesting the strength of the men who use it. High steel lockers, with their doors half open, push against the long benches that are ranged in front of them. Men in jerseys and sweatshirts pull on their

trousers, the cleats on their heavy shoes clicking sharply against the hard floor. A burly trainer carries a bottle of strong-smelling liniment in his hand and a towel thrown over his shoulder.

In one corner, "Chick" Meehan, coach and leader of N. Y. U.'s football team, pulls a battered jersey over his head. As the players dress, they look at "Chick," some guiltily, as though they felt responsible for Fordham's recent victory over their team, and some determinedly. To some of them "Chick" gives a short decisive wave of his hand, to others he nods or smiles. "Chick" Meehan is more than a coach to these men; he is their leader.

"Chick" turned towards us. He smiled. "Glad to see you. Feel almost as though I owe you something for the wonderful things that radio has done for football. You see, radio has made it possible for families that can't get to

the games to hear all about them, and to follow their sons through every play."

"By the way, 'Chick,'" we exclaimed, referring to his prediction that Fordham would beat N.Y.U. by a 7-0 score, "you certainly are a good prophet!"

Profit by Defeat

"Yes," he replied, "and a h— of a football coach! But that defeat isn't going to stop us. Just as in your business, a man can't get every contract he goes after, so in football the perfect season is one in which you have lost one game and let that game show you your faults. The man who will succeed in business is the one who performs a definite service—he doesn't have to land that contract every time but he must continue to render that service. The successful football player,

the leader, doesn't have to make a 5-yard gain on every play, but he does have to keep fighting, trying every moment to successfully *buck that line!*"

"Just what do you consider the characteristics of a leader, 'Chick'?"

"Perhaps," he answered, "I can answer that better if I tell you first what a leader is not.

"A football coach has to be a good judge of men, must be able to recognize true leadership when he sees it. Yet, it is surprising how often our first opinions go wrong—you can't help that in football. Men who look like world beaters in practice often fail miserably in an actual game. Then, too, almost every team has its front runners, men who can't be stopped, who are sensational while their team's ahead—and, yet, have to be yanked out of the game as soon as the opposing team crashes into the lead. We buck up against that sort of thing all the time in football, and the only explanation that we can give is that such teams and players simply 'haven't got the stuff.' They may look great, but they haven't the qualities that make for real success and for real leadership.

"A real leader 'has the stuff'; he naturally possesses the qualities that make

for leadership. Those qualities cannot be imitated. A man either has them or he hasn't. Football players are nothing more than temperamental prima donnas. If you've 'got the stuff,' you can do anything with them, but if you haven't, no matter how you handle them, they'll do as they please.

Moral Character Important

"First of all, a real leader must be sincere. I don't mean that he shouldn't have a sense of humor—for a quarterback's joke and laugh have turned a lot of football defeats into victories. A leader must have moral character. The man who continually breaks training is

kidding himself and not the other members of the team. Immediately, that man loses their respect. It makes little difference whether or not his team-mates like him, but it makes all the difference in the world whether or not they respect him.

"A leader has adaptability; he suits his actions to the situation at hand. When a man gets tough and refuses to obey his orders, he lets that man know that he's just a little bit tougher than



Above: "Ken" Strong,
N.Y.U. halfback



Left: Frank Carideo,
Notre Dame's All
American star



Right: "Albie" Booth,
sensational Yale
quarterback

he is. When a player gets 'down in the dumps,' he walks with him, talks to him, and cheers him up. A real leader is always a jump ahead of everyone else; he senses the approach of such situations and forestalls them. He's the man who, with almost certain defeat staring him in the face, fights harder than he knows how. He's aggressive, he's in almost every play, and he's, bucking that line harder than anyone else on the team.

"Perhaps you think the picture I have painted too ideal, but the real leaders of football have those qualities. I'll name a few and you see if I'm not right. There are—Carideo of Notre

Dame, Booth of Yale, Foster Rockwell, Jack Connor, Ken Strong, and Al Lassman. These men are typical leaders, and, to me, Lassman was the greatest of them all. In all the years that I knew him, I never heard Al Lassman utter an oath. He had the respect of every man on the team. He was a natural leader because of his sincerity and because of his sympathy. Al Lassman was just too good to live, and he gave his life proving he was a leader.

Football and Business a Lot Alike

"Football and business are a lot alike. The same qualities are necessary for success and leadership in both. A football team can be compared to any business organization, for both must function perfectly as a unit. The members of the team and of the company must work together. In football, production is ground gaining, aggressiveness is the line-bucking that makes progress in the face of opposition, and stability is the consistent resistance of your opponents' attacks.

"The same analogy may be carried out in regard to the company's personnel. The quarterback becomes the president, who directs all activities. The flashy halfback is the sales force, while your advertising director, with his continuous battering at customer sales resistance, becomes the powerful fullback who time and again bucks that line.

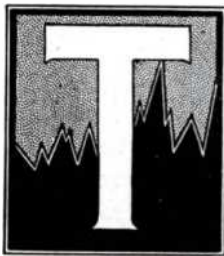
"Finally, in football as well as in business, honest competition is essential to success. A player or even an entire team may 'get away with it' in one or two games, but 'roughing' and unfair playing are always detected. In football, honesty not only pays, it is essential. The real leader knows this, and does everything in his power to develop that spirit of honest competition in his team-mates."

How I Plan For Christmas Business

I Let My Customers Know That Radio is the Best Christmas Gift and That My Store is the Best Place to Buy It

By James H. Luckey

Luckey Radio Co., Allentown, Penna.



THE time from now until the 25th of December is very short. It is, however, a most important time. My experience shows that my net profit for the year is almost exactly equivalent to my gross sales during the last six days of the calendar year. This means that, for the dealer who is out after profits, the next few weeks will be ones of planning and action. The average daily sales of every radio store are probably higher during this period before the holidays than during any other period of the year. A sharp increase in sales at this time will mean a real increase in profits.

Analyze Last Year's Business

From past experience, I know that at this time I should have a large and well assorted stock of merchandise. This stock should be maintained through November and reach its peak on the first of December. There are approximately 45 selling days this year from the first of November to Christmas Eve. Of this time, the most important part is that period of twenty-four selling days from Thanksgiving to Christmas Eve. This is the period during which the public buys almost automatically. The preliminary part is the period from the first of November to the Eve of Thanksgiving. This is the period during which the public

will buy, but requires stimulation. Now, my business does not cease after Christmas, but certainly it is not as brisk as during the three last months of the year. Therefore, my stock of

certain price, or in some years two or three prices, at which I do the great bulk of my business. I also find that there are certain types of accessories, such as RCA Radiotrons, that are



Novelties and direct mail effective at this time

sets are pointed to Wednesday, December 24th, of this year. This gives me 45 selling days in which to accomplish the stock reductions necessary to have a properly balanced stock, adequate for after-Christmas trade.

I have also found that there is a

demand by my customers. Therefore, the bulk of my purchases are in merchandise, that will sell at the prices my customer will pay. That's good business and gives me a larger turnover than I would otherwise get. Of course, everyone gets a greater kick out of

selling a \$500 set than a \$100 one, but if the public prefers to buy \$100 ones, then by all means stock these.

Tubes Within Reach of All

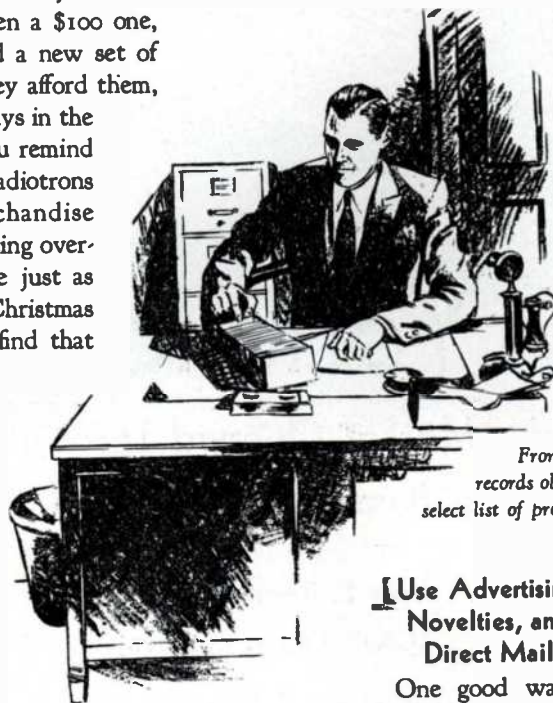
That is why I find RCA Radiotrons are so profitable. Not everyone can afford a \$500 set or even a \$100 one, but everyone can afford a new set of tubes. Not only can they afford them, but they are nearly always in the market for them—if you remind them to buy. RCA Radiotrons are one line of merchandise that I have no fear of being overstocked with. They are just as much in demand after Christmas as before. However, I find that the sale of RCA Radiotrons can be greatly promoted during the holiday season by reminding customers that there is no finer radio gift than a set of new RCA Radiotrons. Furthermore, at the new prices, a complete kit of RCA Radiotrons costs no more than many other gifts commonly bought—a wonderful sales point.

How to Stimulate Christmas Buying

Thousands of people have come to regard a radio set as the finest possible Christmas gift. It is, therefore, up to me to stimulate this desire up to the point of actual purchase. What can I do to make a radio set easy and convenient to buy? And, most important of all, what can I do to convince the people in my neighborhood that my store is the best possible place to buy? Those are the questions I ask myself in planning for Christmas business.

Here are a few pointers gleaned from past experience—speed and convenience for the purchaser are the keynote of them all. The gift of a radio may be the most important and expensive to be made by any one person, but there are many small purchases to be made also. Therefore, only a certain amount of time can be devoted to radio by the prospect. Be-

cause of this, it is my job to make it easy for the customer to understand just what he is buying, exactly how much it costs, and to help him decide quickly. If I do this, I will certainly get my share of Christmas sales.



Use Advertising, Novelties, and Direct Mail

One good way to promote sales is to advertise in the newspapers. I must show the people where to come to buy radio equipment. As radio sets are purchased earlier than other gifts, the bulk of my newspaper copy is placed from November 15th to December 15th. People always allow small gifts to go until last. Therefore, radio advertisements will be lost among the over-crowded pages if placed after December 15th.

I also find I can use direct mail pieces to great advantage at this time of the year. The sales messages must be short and to the point and mailed only to a selected list of prospects.

This year, in order to make the letters more effective and to be in keeping with the season, I shall use some of the RCA Radiotron novelties. A small gift of a pencil, a tape measure, or a shopping memo pad is most acceptable to prospects. Careful

and discriminate distribution of these will boost Christmas sales tremendously. Everyone likes to receive gifts, especially around this period of the year. It will please prospects to have me think enough of their trade to send them a novelty. It will cause them to reciprocate by buying radio equipment from me.

A carefully arranged store interior and attractive windows are very helpful in Christmas selling. Every piece of merchandise should have the price plainly marked and windows should reflect the complete price range of sets. Of course, I shall keep RCA Radiotrons on display in prominent places.

Some of my window cards will suggest that a radio set is a splendid gift for any family. Others will point out that the numerous Christmas bonuses that are distributed each year can be used to no greater advantage than in the purchase of a radio.

My store interior is always arranged so the sets show off to best advantage. Each is completely wired and equipped with RCA Radiotrons to make demonstrations easy. Tubes are pick-up merchandise, and therefore should be prominently displayed in that part of the store where they are always in the customer's view. My sets are



arranged in price groups to make it easier for the customer to decide. And, I always remember, if I can't sell the customer a new receiver I can probably sell him a complete renewal of RCA Radiotrons to put new life in the old radio-receiving set.



From New York to Florida

Million Dollar Tube Market Opened Through the Use of Radio Sets on Buses in the United States

By Gervais F. Reed

Eastern Sales Division, RCA Radiotron Company, Inc.

"GROVE is pitching for the Athletics and Grimes for the Cardinals," came a mysterious voice from somewhere in the midst of a crowded bus. The passengers strained forward, and even the porter, who was gliding down the aisle with a glass of ice water, halted his duties to listen.

The man responsible for that voice was C. D. Johnston, store manager of the Richardson-Wayland Electric Company's branch in Roanoke, Virginia, for it was he who sold the Eastern Public Service Corporation on the idea of equipping their 65 buses with radio. The story behind this installation is an interesting one.

In their effort to excel, and serve the public in the best manner possible, the Eastern Public Service Corporation has equipped its buses with every possible modern convenience. With over-stuffed furniture, running water, a regular porter service and radio, the buses are as finely equipped as the cars of a deluxe railroad train.

"At first, there was considerable doubt about the practicability of installing radio. The roughness of the

southern roads seem to prohibit its use. It was impossible for the executives of the bus company to see how a radio set and, above all, its tubes, could stand the constant vibration that they would constantly be forced to undergo.

Mr. Johnston Sells an Idea

However, Mr. Johnston heard of the opportunity and thought differently than the bus company officials. His thoroughly grounded knowledge of sales principles made him realize that it would be impossible to sell

the company on anything but a practical demonstration. Consequently, he got in touch with E. R. Pflug, manager of the lines. After a short convincing sales talk Mr. Johnston persuaded Mr. Pflug to permit him to install a set in his own car as a means of demonstration.

Now, Mr. Pflug's car traverses much the same routes as the buses, and it was safe to assume that, if the radio functioned satisfactorily in this light,

fast car, it would most certainly duplicate the performance in the heavier buses, which are considerably less subject to vibration and bumps.

Well, Mr. Johnston installed the radio set in Mr. Pflug's car. An important sale rested with the performance of this one set, and you can safely bet that Mr. Johnston took no chances.

He installed RCA

Radiotrons throughout the set, knowing that, if any tubes could stand the test, RCA Radiotrons could. His judgment proved sound. The radio set functioned perfectly, and—we might add, according to latest reports—continues to do so.



Mr. C. D. Johnston, whose salesmanship played an important part in equipping the buses of the Eastern Public Service Company with radio

As a result, the Eastern Public Service Corporation immediately placed order to equip all their De Luxe buses with radio. They recognized its value as a means of keeping their customers satisfied, and, being keen business men they seized the unusual opportunity it presented.

Since the installation of radios in these buses, there has not been one service call required on them. This, in itself, is rather remarkable. Each bus is equipped with an extra set of RCA Radiotrons, but up

to the present time, these spares have been riding from New York to Florida through the historic Shenandoah Valley without working for passage.

RCA Radiotrons in Every Socket

Of course, Mr. Johnston, when installing the sets, realized just as did the bus company, the value of a satisfied customer. He knew customer satisfaction was worth as much, if not more, than the mere sale, and as a result, he employed only superior products. Naturally, RCA Radiotrons were used in every socket of the sets, and if testimony of their service is required, one need only write to the Eastern Public Service Corporation. They will tell you of the unusual service and satisfaction these tubes have given and continue to give.

That the radio has proved successful not only from a purely technical standpoint, but from the point of providing recreation for the users of the lines, is apparent from the fact that people are now willing to sacrifice valuable time in order to ride in a bus which is equipped with radio. They will inconvenience themselves; they will miss dinner rather than the pleasure they derive from Amos 'n' Andy, Phil Cook, or any of the many other outstanding features on the air.

This sale of sets and tubes to the Eastern Public Service Company reveals a gigantic new field for the radio dealer. At present, there are 92,500



The interior of one of the De Luxe buses. It includes all the modern conveniences from overstuffed furniture and radio to running water and porter service

buses operating throughout the United States, according to figures prepared by *Bus Transportation*, the leading publication in the nation on this particular subject. It is apparent that it is only a matter of time before each of these will be equipped with radio.

\$1,387,500 Tube Market Opened by Bus Radio

Assuming that the average automotive radio is equipped with six tubes, and that the average cost of a tube is \$2.50, we have a tube market of \$1,387,500 thrown open to us and possibilities for the sale of 555,000 tubes.

These figures are indeed worthy of notice and especially so when it is realized that this brand new and large tube market lies waiting, unopened and undeveloped, at our feet. Go out after

your local transportation company and show them the value of providing their riders with entertainment as they go. It will be highly profitable for them and equally so for you. Get after the business. It's there! And when you do start selling them entertainment, sell them quality products.

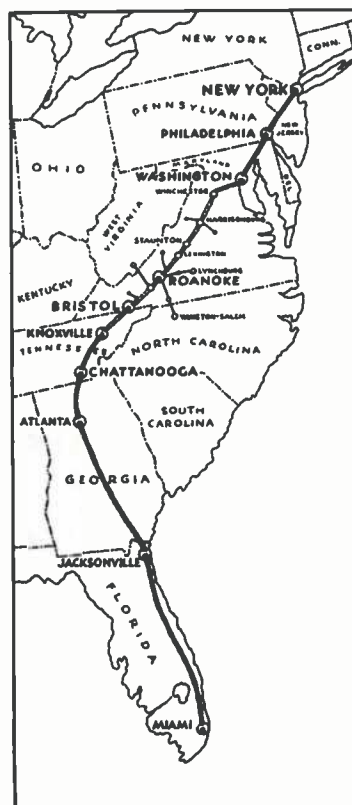
Mr. Johnston recognized the possibilities in buses using radio sets and carried his convictions through to actual sales. He further knew that if there was one place that good tubes, ones that are built to quality, had to be used it was here.

Because of his clear thinking Mr. Johnston has not only proven, beyond a shadow of a doubt, that RCA Radiotrons are the best tubes to use for automobile and bus radio, but he has done much to promote the use of radio sets and tubes as a whole. Thousands of people are being shown the advantages of radio, because of how it helps them while away the hours of otherwise tedious travel. Many of these

people do not have radio sets while others have sets of ancient vintage. In either case, those who travel on these radio equipped buses are now receiving a radio sales talk far more effective than that delivered by any advertisement. They are seeing for themselves the advantages of owning a good radio set. It will also instill in the minds of many, the desire to equip their cars with radio. And whatever the application or use of radio sets, remember that RCA Radiotrons are best by actual test.

RCA Radiotrons have become the standard of the radio industry because they have been designed to give the

best service under all conditions. You can't go wrong using RCA Radiotrons.



From New York to Florida via the historic Shenandoah Valley—this is the route followed by the radio equipped buses

TUNING IN

With J. W. McIver

Manager, Sales Promotion Department

BY far the most anticipated, interesting and hard tackling series of articles that I have read recently, is the series by Knute Rockne in *Collier's Magazine*. (Have you noticed what a perfect position Radiotrons play in that publication?)

While it is exciting and thrilling to follow the words of a much-publicized result-getter in a hitherto unpublished medley of memoirs, I have never before found anything so disappointing, disillusioning and disturbing as these articles.

Knute gives away more secrets in these confessions than any well-defeated opponent would ever expect. Yet—can it be true? Must the confessions and admissions of successful men always be tainted with an abundance of distasteful references to “Discipline”—“Thoroughness”—“Careful Planning” and “Hard Work?” Is there no magic in the tricks of a magician? Can it be true that prestidigitators are unacquainted with fairies? Must success always be the result of being sure that the things that must be done will be done by being thorough in getting them done?



IN selling Radiotrons we have followed this policy of hard work, because we haven't known any other short cut. We have tested ideas carefully. We have searched for and have analyzed the successes of alert, wise and prosperous dealers. And we find, always, that they are using the system Knute

Rockne recommends. That is “Careful Planning, Hard Work, Being Sure That Results Happen.”

This is no cry for pity or sympathy from a spokesman of the Pants Polishers Union. The RCA Radiotron Company has known no other way to get results. But we have hoped that somewhere there might be found a genius with a magical system of short cuts. Evidently we have been using the right system all of the time and didn't know it.



SINCE there are more ways of killing a cat than by trying to make him reach philosophical conclusions, let's go back to what we know about merchandising RCA Radiotrons.

In the first place, we know that, in a recent twenty-five day test, fifty per cent of the people who came in to the store for radio tubes asked for RCA Radiotrons by name. Even with the eye and ear specialists and the cash registers ready to prove this, it is hard to believe—but like good politicians, we are talking from the record.

That is a remarkable and impressive result. No smart retailer can ignore that first necessity. These customers had their minds half made-up to buy Radiotrons because of our tremendous advertising and satisfaction. A carefully planned, well worked out window told them where. A carefully planned and skillfully worked out store arrangement sold them there. The radio tube business of this

store increased 100% during the period of this experiment.



CHAMPION football teams result from the abilities of the individuals, which are made to produce the desired results through planning, hard work and a determination to win.

You can wager the savings bank accounts of the thousands who pass your windows and doors daily that I will be the last to say that none of our dealers has the abilities, most of the hard work, a lot of the planning and some of the determination to win.

When the opposing team comes on the field, it always looks as if it averages about 300 pounds per man. When the game starts, if you follow Knute Rockne's advice and try for a touchdown every time you hit the line, you will find out how much better you are than the appearance of the opposition and your mental attitude led you to believe.

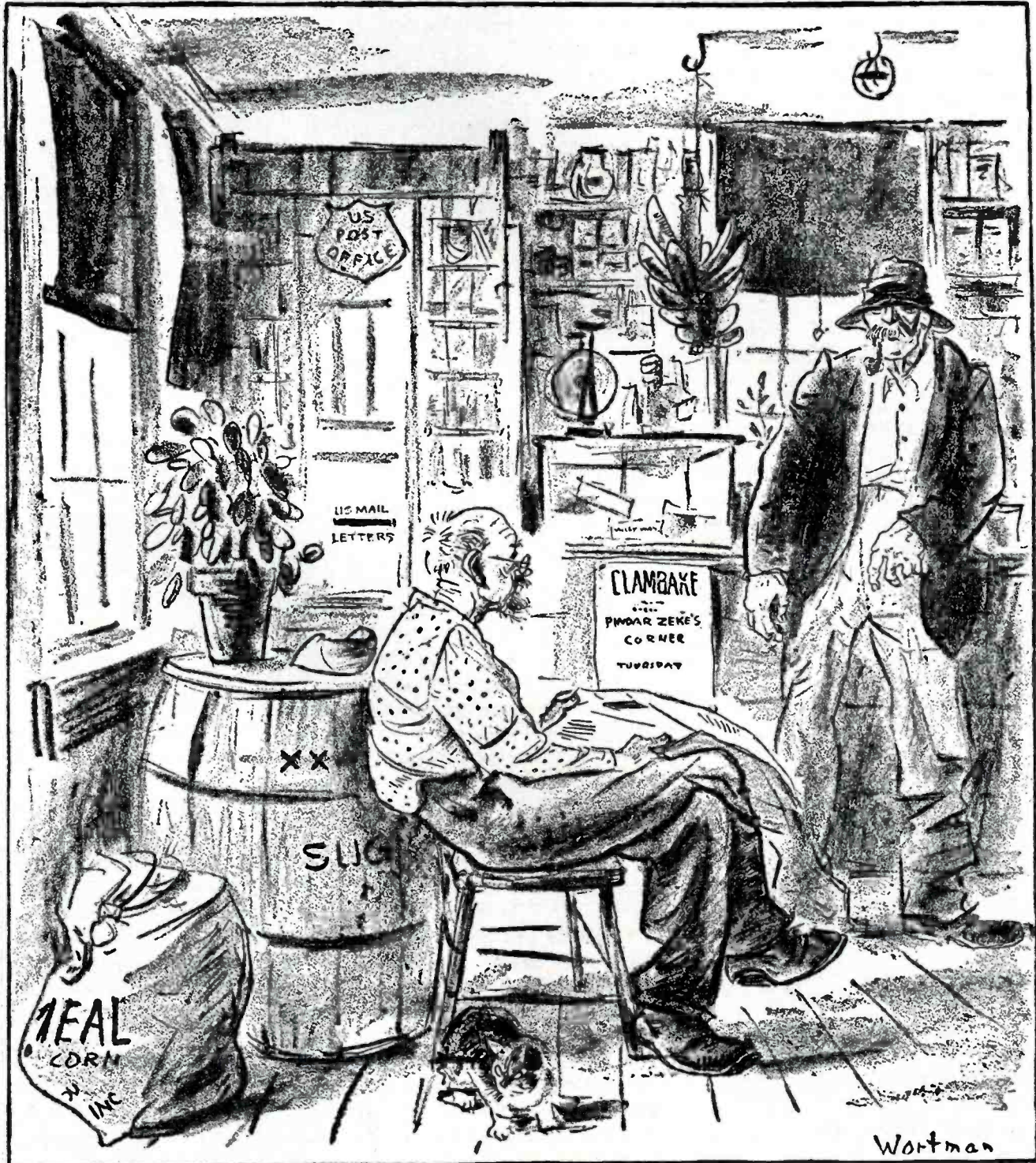


TODAY, the RCA Radiotron Company is supplying the greatest array of point-making, result-getting plays and plans ever known in the circuit. But, none of them will work unless we give our best and our interference takes out the dangerous opposition. Our dangerous opposition today is the assortment of millions of worn-out, old tubes now trying to work in radio sets.

So, now that we have won the toss, the wind is at our back, the populace is cheering as the whistle sounds. Let's go!



Even As You And I



"Wall, yes, I did keep radio-bulbs fer a while, but there was so many calls for 'em that I hid 'em away an' I fergot whar I put 'em"

—Wortman in the New York World

NEW Opportunities on the Air

Popular Fall Features Present Merchandising Opportunities

WITH Old Man Football taking his turn at the microphone on brisk week-ends, and internationally famous opera stars and conductors grooming themselves for guest appearances on pretentious evening features, November promises an auspicious send-off for the National Broadcasting Company's winter season of coast-to-coast entertainment.

The gridiron sport will hold undisputed sway over NBC networks every Saturday until the climax of the season on Thanksgiving Day. An even dozen of the major football contests throughout the country have been scheduled for broadcast during November, with Graham McNamee, who has been describing gridiron clashes for years, and Bill Munday, the "Georgia Drawl," dividing the assignments.

The reign of King Football over the ether waves will begin each Friday evening during the month, when Parke H. Davis, famous football authority who for ten years was a member of the rules committee, forecasts leading games of the following day over an NBC-WJZ network. He will be heard at 7:15 p.m., Eastern Standard Time, every Friday night.

But the atmosphere of touchdowns and goal posts will be dispelled during the week by an impressive schedule of important dramatic and musical happenings on NBC's commercial and sustaining features. The Atwater Kent

concerts, heard through an NBC-WEAF network each Sunday night, have announced an imposing list of guest artists for the month.

On November 2, Beniamino Gigli, tenor of the Metropolitan Opera Company, will be the Atwater Kent soloist. And during the



Lowell Thomas, writer and lecturer, whose adventures have carried him to the far corners of the earth. He has replaced Floyd Gibbons on the Literary Digest Program

same hour on successive Sundays until December 7 listeners will hear Kathryn Meisle, Chicago Civic Opera contralto; Josef Hoffman, internationally famous concert pianist; a vocal quartet; and Rosa Ponselle, Metropolitan soprano.

Another memorable musical event of the month will be the second of this year's special Philco Hours to be broadcast by Leo-

pold Stokowski and his Philadelphia Orchestra. The famous conductor and his symphony will play for a coast-to-coast audience, from 5:00 to 6:00 o'clock Sunday afternoon, November 16.

The Atwater Kent and Philco concerts, coupled with the weekly appearances on Sunday evenings of Madame Ernestine Schumann-Heink as soloist with Enna Jettick Melodies, will ring up the curtain for six days and nights of vivid studio presentations until football fills the air again.

Twenty Million Dollars for Broadcasting During 1931

M. H. Aylesworth, President of the NBC, has estimated that 10 million dollars will be spent for talent to be put on the air during 1931. Added to this will be another 10 million dollars to cover the cost of operation to broadcast the talent.

"We plan to make the year 1931 the most interesting and progressive in the history of radio broadcasting," said Mr. Aylesworth.

"Owners of radio sets can be assured of front seats at a continuous three-hundred-and-sixty-five-day-and-night performance of the world's finest entertainers, together with highlights of public events, sports and public affairs, with impressive programs in religious, educational and agricultural broadcasting. The year 1931 will bring to the people of the United States greater public service through radio broadcasting."

And now for the November gridiron schedule:

The Harvard-Michigan fray will lure McNamee to Cambridge on November 8, while Munday covers the Notre Dame-Pennsylvania struggle at Franklin Field. McNamee's network will include WJZ, and Munday's New York outlet will be WEAF.

The following Saturday, November 15, will bring the powerful Southern Methodist team to Annapolis for a game with the Navy. Munday will watch proceedings with an NBC microphone at his elbow. And simultaneously, Graham McNamee will describe the attempts of Albie Booth and his Yale cohorts to bait the Princeton tiger in its lair at Princeton, N. J.



Graham McNamee, veteran sports announcer, who is doing his stuff for football

Another "Big Three" contest, between Yale and Harvard, will take McNamee to New Haven the following Saturday, November 22, for a description linked with WEAF. Navy versus Maryland at Annapolis is Munday's assignment for the day.

Then comes Thanksgiving, November 27, and two traditional clashes will be described on the networks. Listeners over the NBC-WEAF group will hear McNamee at Franklin Field, as he watches Cornell and Pennsylvania renew their annual feud. At the same time, Columbia and Syracuse, another pair of ancient Turkey Day rivals, will be demanding Munday's attention in New York.

Army-Notre Dame a Headliner

Two games on Saturday, November 29, will close NBC's football schedule for the month. The Dartmouth-Leland Stanford fracas on the Pacific Coast will be heard in the East through a network headed by WEAF. The Army-Notre Dame game in Chicago on the same day will be described by McNamee.



Bill Munday, the boy with the Georgia drawl, who is dividing time with McNamee on football announcing

The veteran sports broadcaster will see his last football game of the year on Saturday, December 6, when Penn meets Navy at Franklin Field.

November will see several old NBC features and their conductors, off the air for the summer, back in the swing of winter routine. Walter Damrosch, NBC's musical counsel and

dean of American maestros, will be heard every Friday morning in the NBC Music Appreciation Hour, and



Ted Husing, who will announce the following games over the Columbia Network

●

Nov. 8	Illinois-Army, at New York City
Nov. 15	Princeton-Yale, at Princeton
Nov. 22	Wisconsin-Minnesota, at Madison, Wis.
Nov. 27	Penn-Cornell, at Philadelphia
Nov. 29	Army-Notre Dame, at Chicago
Dec. 6	Penn-Navy at Philadelphia

in addition will again direct the Saturday night broadcasts by the General Electric Orchestra.

The Lucky Strike Orchestra, led by B. A. Rolfe, has augmented its schedule to three and three-quarter hours of broadcast entertainment every week. And all the other established features, both musical and dramatic, are carrying on toward new standards of program building.

Christmas Day Will Have Many Features

Next month brings turkey, stuffing, cranberry sauce, plum pudding, Christmas, and with this the finest radio programs that we have ever had. It is a never-before equalled chance for radio dealers to merchandise sets and tubes.

The heavy roll of the world's finest music played by a concert orchestra may sound from the living room, or it might be the syncopated rhythm of a master dance band that moves the teeth to a faster tempo. And the music may come from New York or San Francisco or London or Berlin.

Almost anything the listener wants will be available to those who own

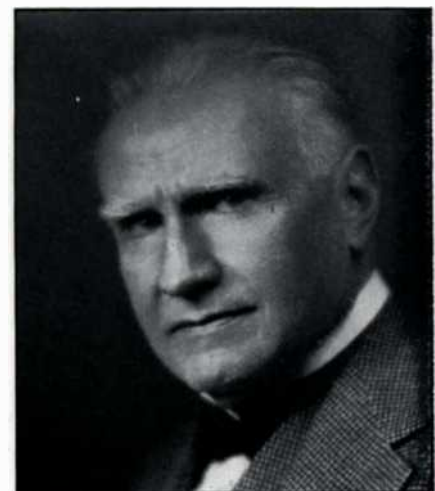
radios at Christmas time and almost every program on the air that day will be presented in the happy spirit of the Santa Claus season.

International Programs Scheduled

There was a time when radio programs did their bit toward a Christmas celebration with the playing of Jingle Bells and like numbers and a few words from an announcer about the holiday spirit. But with the huge international exchange of programs between America, England, Germany and Holland that signalized Christmas in 1929, those who make the programs realized that never again would Yule listeners be content with routine programs.

At the National Broadcasting Company headquarters in New York plans were under way as early as August for a Christmas Day program series that would surpass that epoch-making one of 1929 when four great nations were linked by ether waves and a common feeling of peace toward all.

With the wealth of entertainment that's now on the air, radio offers the greatest dollar value to the American public. We are selling a product which gives more to the public for its money than any other product in the same price range. Possessed with that knowledge, it should not be difficult for progressive radio dealers to close 1930 with record breaking sales. People are ready and willing to spend money for entertainment. Sales effort is all that is needed, plus careful planning.



Walter Damrosch, Dean of American Conductors, who is again leading concerts for the education of eight million school children



Stanley Searle, the author, is an able salesman and a keen merchandiser. As the Radio Sales Manager of the Westinghouse Electric & Supply Company, Los Angeles, he has distinguished himself by helping dealers to make money in radio. He is an ardent advocate of using RCA Radiotrons as a leader—to bring customers into the store and to assure satisfaction.

"I Put Myself in the Customer's Position"

So Says D. I. Wadsworth—The "Radio Doc" of California, an Unusual Story About an Unusual Man

By Stanley Searle

WHEN anything goes wrong with the radio, the first thought that comes to the minds of many of the citizens of Pasadena, California, is to go see "Doc." Dr. D. I. Wadsworth, commonly called "Radio Doc," is probably the most interesting personality in the radio industry of Southern California. He has built up a large following of satisfied customers by sticking to one rule, which is, "Put yourself in the customer's place and give him the service you would demand." Not only has "Doc" built a very successful radio business from this ideal, plus a lot of hard work, but he has done it under most adverse and trying conditions.

Bedridden, Yet Masters Radio

Fifteen years ago, Dr. Wadsworth was a very successful dentist with a large practice in Washington and Oregon. Suddenly, he was stricken with arthritis, a disease which deprived him of the use of his legs and the partial use of his arms and hands. Tedious, bedridden years followed, during which the Doctor took up the study of radio as a hobby, in order to pass the time. Because of his natural love of mechanics and due to the

fact that years of studying for dentistry had highly developed his powers of concentration, he soon mastered the subject completely. Seven years ago, he decided to use his knowledge of radio, and with what little capital he had, establish himself in the radio business.

position of his customers, thereby rendering them the very type of service they desire and which they deserve.

Too Little Attention to Servicing

"I started out," he says, "determined that I would employ only competent service men who knew what they were doing and who were able to correctly diagnose and treat any radio ailment. Since I cannot go into the houses of my clients myself, I must be well represented by my employees. Therefore, no man who cannot qualify as an expert can work for me. To my mind, the average radio dealer pays too little attention to the servicing of a receiver after it is sold. They either don't get a man on the job soon enough or the man is incompetent. It is this part of the business that can either make or break you. I can truthfully say that it has made me.

"I offer no temptations in the way of commissions, but pay straight salaries, top salaries, for my community. I feel that, if I were to employ men at a commission basis, volume, rather than quality of work, might become the actuating motive. Then, also, I have no way of inspecting work done by my men in order to correct possible errors; hence my business strength must lie in hiring the best men available and paying them accordingly."

11,750 Miles and Still Going Strong!

That is the record of a set of RCA Radiotrons installed in an automobile receiver by Mr. Scott Kimes, RCA Radiotron dealer of Galveston, Texas. In February of this year Mr. Kimes equipped his automobile with a Transitone set. So far he has travelled 11,750 miles without changing a tube. And this mileage includes a 20-day trip to California during which the tubes were subjected to a temperature of around 130 degrees while passing through the Salton Sea. This performance of RCA Radiotrons in an automobile set certainly speaks well for their stability and ruggedness of construction. Anybody else got any records like this? If so, let us know about them.

This he did, and opened up a store at his present address—1581 East Walnut Street, Pasadena, California.

The keynote of "Radio Doc's" success is his ability to place himself in the

Finds RCA Radiotrons Best

"Radio Doc" has used RCA Radiotrons constantly from the very start of his business. According to him, the few times that he has tried other makes, the free service calls have cost him far more than the little saving that he made in initial cost. He says, "RCA Radiotrons give me less trouble and are easier to sell than any other make of tube. In fact, there seems to be no sales resistance to them whatsoever."

The seven expert service men "Doc" employs always check the tubes of the set to be serviced first. This is because a large proportion of the service calls are directly resultant from worn-out or impaired tubes. When such conditions are found, the service men recommend a replacement with RCA Radiotrons.

Unique Store Arrangement

"Doc's" store is divided into a display room and a work room. In the work room you will find "Radio Doc" in his wheel chair, because here he does not have to meet everyone

who comes into the display room, yet he is always accessible when needed. In order to facilitate communication, he has fastened to his wheel chair on a level with his head a telephone-microphone set with a switching device. By means of this, he is able to personally answer all incoming telephone calls and promptly switch them to any of his three departments—Sales, Shipping, or Service. Duplicate equipment along with a loudspeaker and microphone, is installed at his bedside in his home, which is just in the rear of the work room. As it is necessary for him to rest two hours in the forenoon and afternoon, the telephone equipment enables him to keep a constant finger on the pulse of his business. By means of the microphone and loud-

speaker, he is able to hear distinctly the faintest whisper in any part of the store or work room. Thus, if "Doc" cannot be active about the store, he at least can bring the various parts of the store to him. The only thing, "Doc" says, that is missing in this elaborate system for giving personal service is television.

Customer Satisfaction Primary Aim

When a customer enters "Radio Doc's" store, he is immediately impressed by the extreme personal interest accorded him by refined, polite employees. All are working in perfect harmony in order to give complete satisfaction along both service and sales lines. The Doctor's admirable personality is reflected in their every word and act—acquired by years of close association. This interest in the customer and desire to make it as easy as possible to buy



Above—Radio Doc's Store and fleet of cars, in Pasadena, Calif.

Doc, as you will find him most any time directing his business by means of his special communication system. Note the well kept stock of RCA Radiotrons

has built up an ever increasing, loyal clientele.

"Doc," for one thing, knows his business completely. Troubles he brushes aside or overcomes. Nothing ever riles him; he never loses his temper—either with the customers or with his employees. His own affliction has made him too much of a philosopher. Naturally, the reputation he has made and is making for himself brings him many customers. There is

no better advertisement than a satisfied customer. It is so true in this case that "Doc" never goes out to seek business, except by direct mail. He is a firm believer in direct mail and uses this quite extensively. Coupled with this is his constant use of the telephone. He sits in his wheel chair with his telephone to his ear, surrounded by the ghosts of long departed radios, and dispenses service. The business just naturally comes to his door to seek him out.

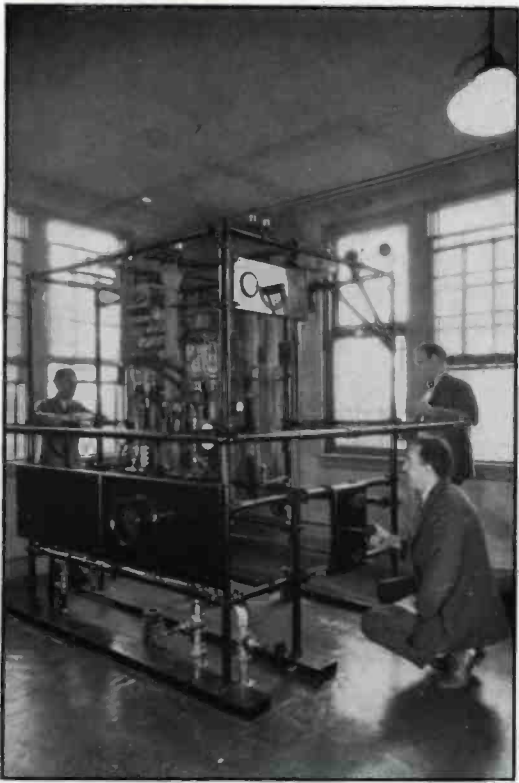
"Doc" doesn't do very much advertising. He doesn't have to. His business has been successful and has been built up because he treats his customers with consideration and sees that they get the best merchandise

and service it is possible to give them.

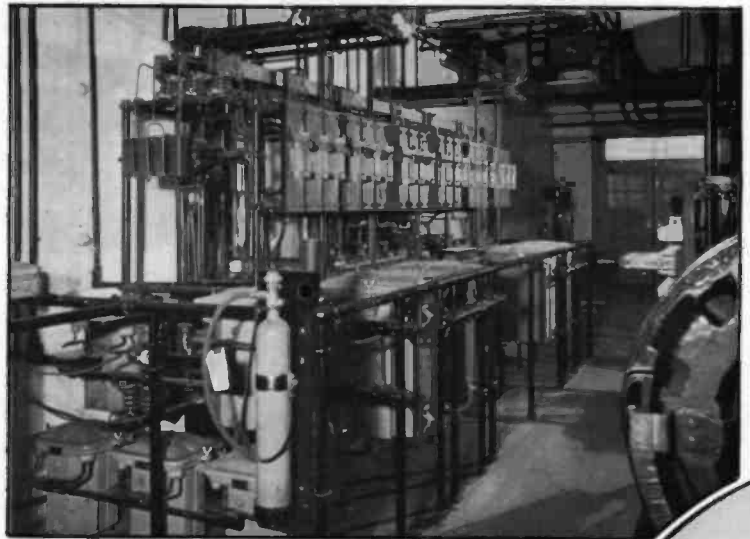
Here is a man who is unable to leave his wheel chair. He spends most of his time in a back room of his store. The only connection he has with the world, aside from his contacts with his own men and those customers that come to his store, is by means of a telephone. And yet he is showing us all a lesson in building a successful business.

This story should be a stimulus to every radio merchant. There is plenty of radio business—if you know how to go about getting it.

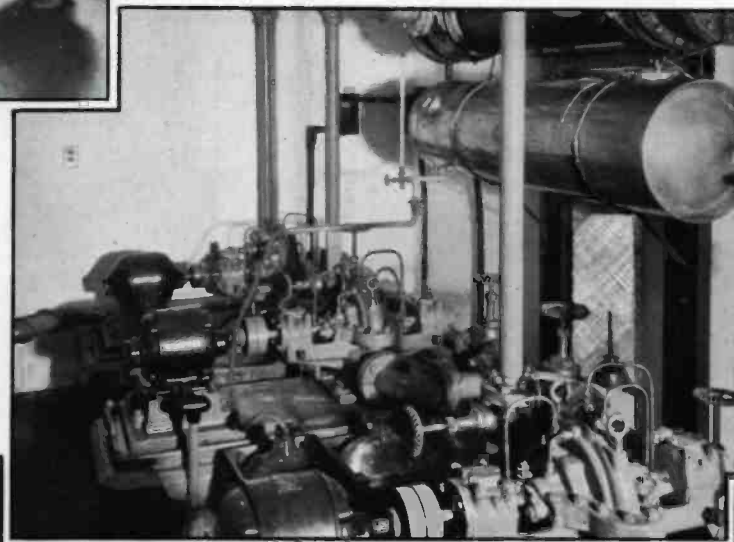
The "Works" of One of America's



The transmitter of W3XAL, at Bound Brook, N. J., being tuned by N. Hagmann. The other two men in the photograph are D. N. Stair (left), Station Engineer and R. F. Guy, NBC Radio Engineer.



Power switching equipment and auxiliary transformers in the basement.



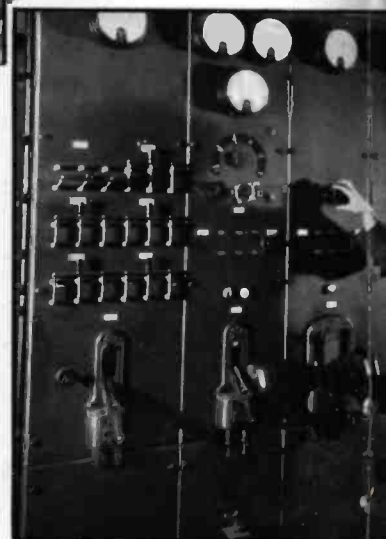
One of the cooling systems at WJZ. This apparatus is used for dissipating the heat generated in the water cooled transmitting tubes, types UV-854 and UV-855, of which there are thirty-eight used in the WJZ apparatus.



Insulated tower footings which are used at WJZ. Four of these footings are used on each tower to prevent ground currents from affecting the field pattern by the tower.

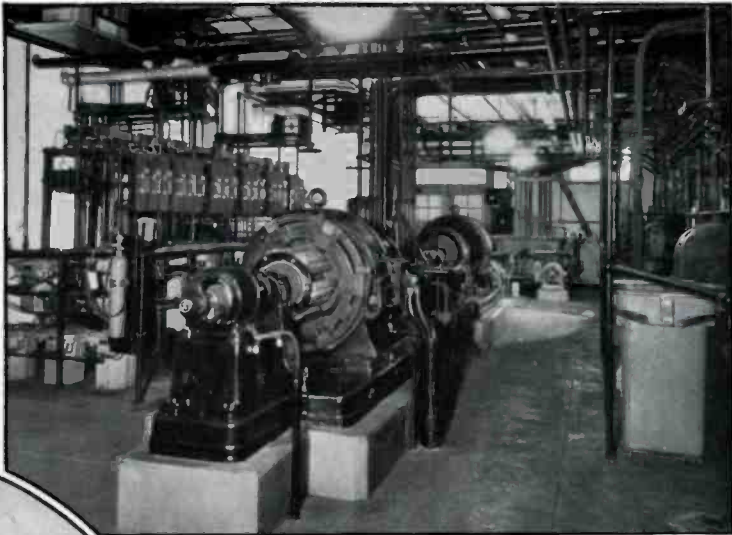


Transmitter of WJZ showing radio frequency equipment, modulators and rectifiers. The large panel on the left controls the incoming power and component parts of the transmitter.

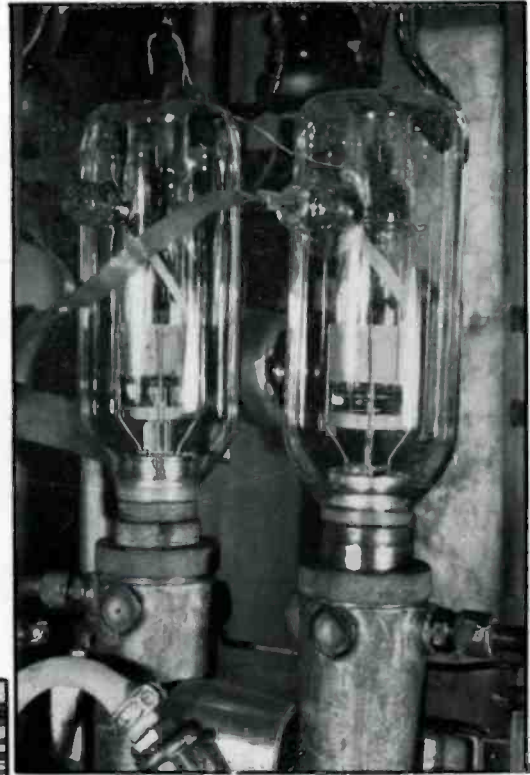


Power control panel at WJZ and WJZ, Assistant Engineer.

Foremost Broadcasting Stations—WJZ



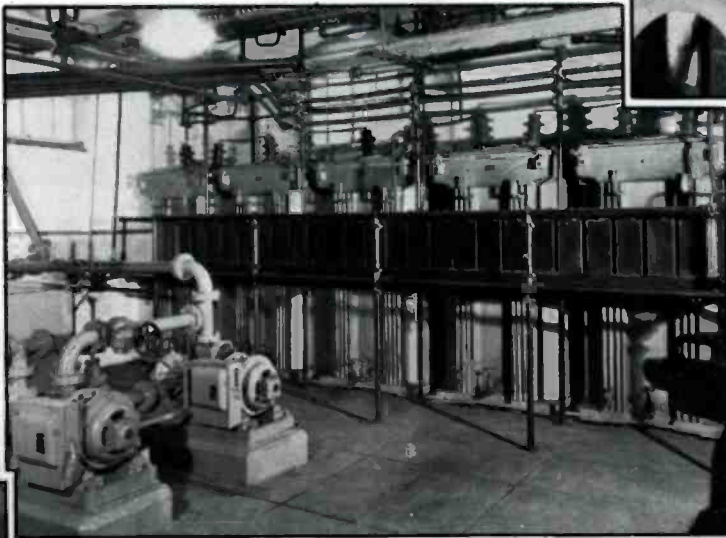
General view of the basement of the WJZ Station showing filament machines and other apparatus.



UV-854 Radiotrons used in the W3XAL transmitter which is consistently heard by a great number of people in the Antipodes. Four of these are used to generate the 12 k. w. at 49 meters used by W3XAL.



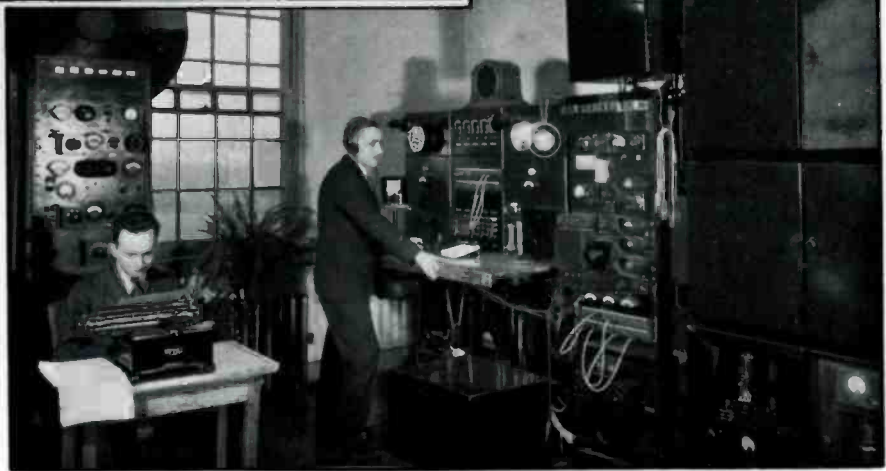
which support the antenna system these footings are employed for prevent distortion of the n by tower radiation.



Rectifier and modulator chokes and filter condensers used at WJZ. These are located in the basement. In the lower left hand corner is an auxiliary water cooling system for the high power Radiotrons.



Z and W3XAL. Mr. N. Hagmann, Engineer-in-Charge.



Control room equipment at WJZ. This is the type used up to 1929. The large tubes in the lower right hand corner are audio amplifiers which actuate the modulator tubes.

Radio Tubes and Talkies

*The Vacuum Tube is the Heart of All Sound Movie Apparatus.
Without It There Would Be No Voice or Music*



THE director calls his actors to places on the "set." Cameras are on the sidelines, microphones are overhead.

Silence! grim, sinister, overpowering silence!

Then, sound! Voices, music, dancing feet, pattering rain, roaring trains, whirring motors! The picture is being made!

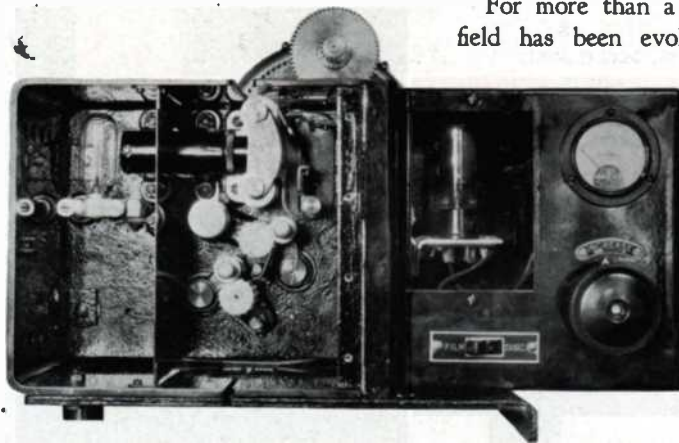
All the factors that go into the making of sound in pictures are possible at RKO Studios, the home of Radio Pictures, because of RCA Radiotrons.

There are so many elements called into play in the making of a motion picture—so many objects and so much equipment it seems almost incredible that a few small objects, not too large to hold in one hand, could be the pivotal point around which the making of a sound picture revolves.

Yet that is true and those small objects are so vital that without them there would be no sound pictures. They are vacuum tubes, RCA Radiotrons.

Microphones may pick up the sounds, but they would never reach

the sound booth in the form of recordable electrical impulses without RCA Radiotrons. The sounds, in the form of



Soundhead for RCA Photophone small theatre equipment

electrical impulses, might reach the booth and sound cameras, but they would never be recorded properly without more RCA Radiotrons.

The microphone picks up sound and makes the transformation to electrical form. This energy is at an almost unappreciable level. Then it is that RCA Radiotrons amplify this energy sufficiently to carry its volume to the sound cameras.

Three stages of amplifications are used. After reaching the sound booth four more stages of amplification may be brought in to play to bring the sound to the desired level.

Radio engineers have en-

tered a new field of activity in the over-night development of the sound motion picture art.

For more than a decade the radio field has been evolving increasingly higher ideals of faithfulness in sound reproduction. Appearing first in the efforts of broadcasting station designers, and extending later to the modern broadcast receiver there has been a constant

urge toward the bringing of more natural and faithful speech or music to the listener. Efforts to commercialize talking motion pictures were made more than 30 years ago; but a real impetus was given to the art when it became possible to secure high quality sound reproduction through the application of some of the principles and devices developed in the radio field.

Radio Makes Talkies Possible

The spread of radio broadcasting had also familiarized the general public with dramatic dialogue and high-grade music to a far greater extent than ever before, and, in a sense made people "sound conscious." Therefore, when synchronized speech and a superior grade of music were introduced in theatres, through the medium of the sound motion picture, not only was success assured from the better entertainment thus provided, but a "sound-receptive" public was ready to welcome the innovation.



Getting ready to take a scene in "The Record Run"

In addition to the psychological kinship between the radio and sound picture fields there exists a considerable degree of technical relationship. In radio the speaker in the broadcasting studio creates sound waves in air, which impinge upon a microphone. They generate electrical currents which are amplified and sent to a broadcasting station for transmission. In sound motion picture recording the sound is picked up in the same manner, using the same type of microphone as in radio, and the current from the microphone is amplified in equipment practically identical with that used in broadcasting station control rooms. However, instead of controlling a radio transmitter from this point onward, it is sent to a machine called a film recorder. The latter is a device for photographing the wave form of this current on a rapidly moving film. This is accomplished by causing the current to vibrate a tiny mirror on which a beam of light is focused, the light being reflected from the mirror to the moving film. As the mirror vibrates, the light flashed to the film vibrates similarly, and there is thus traced upon the film a faithful record of the original sound. In other words, instead of controlling a radio transmitter, the sound now controls a small beam of light.



Interior of portable recording truck of RCA Photophone used on all RKO features made outside studios

Shooting a scene at Atlantic City on the boardwalk

Glass Enclosed Recording Booth

The operator stands at the controls in a recording booth and observes the action on the stage through a glass



An interesting scene from "Leathernecking"

window. The microphone is carried at the end of a long boom, so that it may be swung over the heads of the actors and follow them as they move about. It is customary to keep the microphone within six feet or less of the actors, for the best recording, and in order to keep it out of the picture it is usually suspended overhead.

The sound record is photographed on one film in the recorder at the same time the picture is being photographed on a second film with a motion-picture camera. The camera and recorder are run by electric motors of a special type which cause both picture and sound films to move exactly together at a speed of 90 feet per minute. Later on, after these films have been developed, they are combined by print-

ing from both to a single film, the sound photograph (or "sound track" as it is called) being placed beside the picture. The sound track appears as a series of irregular black peaks beside the picture. The thick peaks represent low tones or low frequency sounds; the thin peaks high frequency sounds.

Soundproof Cameras Used

The cameras are covered with large soundproof hoods, to prevent the noise of the camera motors or the clicking of their mechanism from being

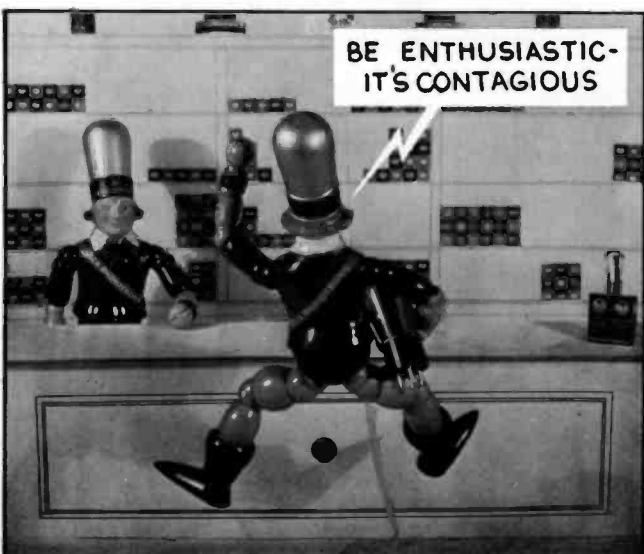
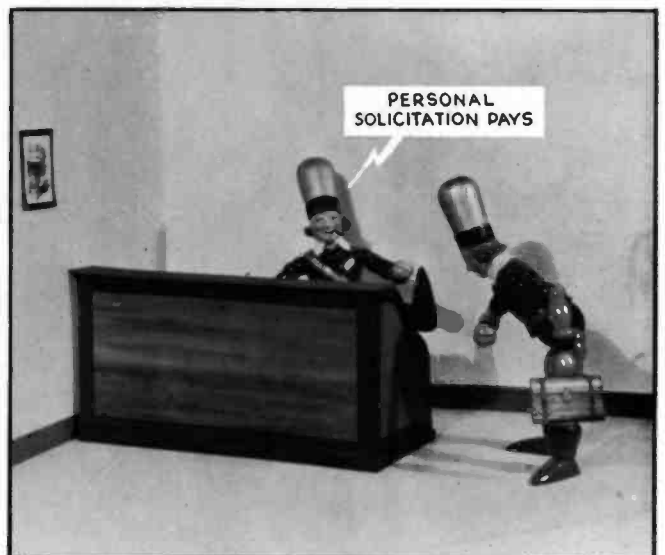
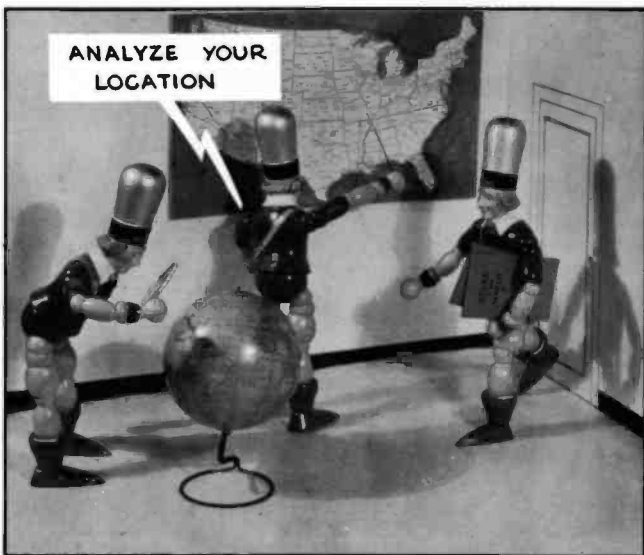
picked up by the microphones. Every precaution is taken in the studios to prevent the entrance of extraneous sounds, other than the speech of the actors, during the recording of a scene.

Turning to the reproduction of sound films, one finds the extension of radio engineering practice in many of the component parts of the apparatus employed. The theater equipment consists essentially of two or more projectors, an amplifier and a group of loudspeakers placed in back of the motion picture screen. The projectors are arranged to reproduce sound as well as to project the picture. The sound reproduction is obtained by moving the film in front of a lamp which throws a thin line of light on the sound track. Behind the sound track is a photoelectric cell which converts light into electric currents.

These currents are, then amplified and supplied to the loudspeakers back of the screen which reproduce them as sound. So it is that RCA Radiotrons make it possible to record sound as used in the movies. They are in truth, the heart of all sound movies. Without them the silent drama would be supreme.



The Selling Fool's Six Lessons



Business Building Sales Aids

Novelties

KEY CASES—Sheepskin cover. Six ring, swivel type, spring steel key clips. Price, \$10 a hundred, with your imprint.

NOTE BOOKS—With red leatherette covers and are refillable. Price, \$10 a hundred with your imprint.

SHOPPING MEMOS—Twenty-four pages—perforated. Handy size, 2 inches by 3 inches. Price, \$5.50 per 1000 with your imprint.

ERASERS—Designed in the form of a carton. Best rubber. Size 1 inch by 2 inches. Price, \$2.50 per 100 with your imprint.

MATCH BOOKS—\$3.50 per 1000 with your imprint.

TAPE MEASURES—Fifty-inch, linen tape with red celluloid cover. Price, \$10 per 100 with your imprint.

PENCILS—Best grade of lead and rubber. Round, wooden pencils. Price, \$3.85 a gross with your imprint.

Sales Promotion Material

PRICE REFERENCE CARD—On cardboard—4¼ inches by 8½ inches; for reference only. Designed to be hung near tube counter. No charge. One per dealer.

PRICE LIST FOLDERS—To be used for envelope stuffers, etc. Unimprinted, they are free; with your imprint, price is 40 cents per 100, minimum order 300.

CATALOG AND PRICE LIST—Description of each RCA Radiotron, list and net prices, standard package quantities and RCA Radiotron characteristic chart. No charge.

BUSINESS BUILDING SALES LETTERS—Twelve suggested letters to build tube renewal business and three typical reply cards. No charge.

TECHNICAL BULLETINS—Technical information on all RCA Radiotrons free.

TUBE RENEWALS—A booklet of 24 pages showing radio's most profitable market, tubes. No charge.

BROADCAST STATION DIRECTORIES—American, Canadian, Mexican and U. S. possession stations, as well as pictures and biographies of 21 leading announcers. Cross-indexed. Price, \$2.50 per 100; in lots of 1000, \$2.25 per hundred; in lots of 2500 or more, \$2 per 100. These prices are with or without imprint.

LANTERNSLIDES—Six, hand-colored slides, with three line imprint. No charge. Just the thing for local theatre advertising.

PERSONALIZED POST CARDS—The very latest in direct mail. Come in sets of three. Hand lettered and hand addressed. Price, \$10.50 for 300 stamped cards. Send names of 100 customers with order.

POST CARDS—Six cards to help build RCA Radiotron sales. Price, 40 cents per 100 with your imprint; unimprinted, free. One cent extra per card for stamped cards. The minimum imprinted quantity is 300—not less than 100 of any design.

BLOTTERS—Featuring popular Good News covers. Four different designs in four colors. Size 3¼ in. by 6 in. Price, 40 cents per 100 with your imprint; minimum order 300.

Utility Material

BINDER FOR GOOD NEWS—Stiff, black imitation leather covers, imprinted in gold letters. Price, \$1 each with name imprinted in corner. Additional imprinted lines are 10 cents each.

ADDRESS LABELS—These are 3½ inches by 5¾ inches and are lithographed in red and black. Supplied un-gummed with your imprint. No charge.

SET PRICE SIGNS—Made of polished celluloid and lithographed in two colors. Size, 3 inches by 4 inches. Slot

in back for the insertion of price card. Price, 10 for \$1.

SET SIGN—Polished celluloid. Red and black. Copy—"This set is equipped with RCA Radiotrons." Size 5 in. by 1¾ in. Price 12 for \$1.00.

TAPE MACHINES—Made of cast iron and steel and are 10 inches long by 2½ inches wide by 4½ inches high. Price, \$4.25 each, including 10 rolls of tape.

TAPE ROLLS—Come in two colors with the slogan, "RCA Radiotrons, the Heart of your Radio." 500 feet, one inch wide. Price, 10 for \$2, unimprinted.

GOOD NEWS—A monthly publication of the RCA Radiotron Company. Free to all RCA Radiotron dealers.

Displays

WINDOW DISPLAY—No. WD-1 "For Better Radio Reception" features boy putting up aerial. Lithographed in full color. Size, 24 in. by 31½ in., for center panel. Two side cards 11 in. by 14 in. "Bring in your tubes and have them tested free" and "RCA Radiotrons plus our service insures satisfaction." 12 special 224 cartons, and 12 special 227 cartons in units of two, as well as two pyramids using 227 cartons. 60 dummy cartons in all. No charge.

NO. 4 DISPLAY—RCA Radiotron man cutout is used as carton holder. Lithographed in six colors. Size, 15 in. by 8½ in. No charge.

NO. 5 DISPLAY—Consists of a carton with a place to insert real tube. Has arrow pointing out tube. Size, 7¼ inches by 5½ inches. May be fastened to window by means of gummed strip. No charge.

FLOODLIGHT SIGNS—A combination floodlight and sign made of bronze. Lettering "RCA RADIOTRONS" silhouetted on glass. Size, 10 inches high, 22 inches long, and 5 feet deep. Price, \$5 each, including 10-foot cord and plug.



There is no better advertisement than a satisfied customer

EVERY radio dealer must know that his service department is an important factor in the success of his store. Unfortunately, very few realize how important it really is. The service department is the greatest builder or wrecker of good will a dealer has. Good service means continued patronage; poor service means that the customer is going elsewhere next time.

In order to gain a first-hand knowledge of the service problems that must be met by a dealer, I recently worked as a service man out in the field. My investigations were carried on in large radio stores in New York City and the West, as I wanted to see how they handled their many service calls.

The first observations I made were a revelation to me. I found that the store manager in many cases had no idea of the importance of service nor did he know what kinds of contacts and impressions his service men were making. It is of the utmost importance that the service man cooperate closely with the store manager so that the latter may know what kind of service the customer is receiving and how this service can be made to lead to future sales. It is a regrettable fact that many

service men approach customers in such a manner as to create ill feeling both towards themselves and towards the store they represent. This leads to the loss of the customer. On the other hand, if the service man knows his business and is courteous, the good will he creates with customers, results in many dollars in sales for the store he represents. My investigation, for the past three months, has been in all types of radio stores. The service problem is common to all.

Service Men Overlook the Obvious

To begin with, I will take the case of a lady whom we will call Mrs. Smith, for the sake of convenience. Mrs. Smith called the store one day and complained that her set tuned exceedingly broadly, receiving several stations at the same point on the dial. I went up to look the set over and see what I could do for her. The set was as broad as she said it was, for she was getting everything from the whistles of the Jersey ferry boats on down, or up, depending on the way you choose to look at it.

She told me that she had called in several service men from various stores to remedy the trouble. The first had told her that her tubes were bad, and she believed him and bought a new set—only to find with new and better tubes she was getting four stations instead of the former three at the same point on the dial. She had tried other stores and other service men, with the same results.

Finally, she had called the store at which I was working and a service man had gone up. He had tried to sell her another set of tubes, but by this

My Experiences

Investigation Shows That Too Little Attention is Given Service Men, Who Are Vital to Store's Success

By E. C. Hughes, Jr.

time she knew better and refused to take them. She complained to me later that this service man had been very uninterested in his work and had not listened to her suggestions at all. It seems that he had turned on the set, jiggled a dial, and pronounced the set O.K. as soon as he had heard a noise. Well, at any rate, she decided to try the same store again (I guess she had run out of telephone numbers at this point), and this time I went up.

Before I went up, I was warned by the service man who preceded me on this particular case that Mrs. Smith would probably eat me alive. I, therefore, arrived at her apartment with considerable misgivings. Upon arriving at the apartment, the first thing I did was to look over the antenna, and there was the source of the trouble. She had an antenna which would be the pride and joy of any transatlantic transmitting station. It was well over 250 feet long, and it was 60 feet above the top of a 20-story apartment building. I cut it off at the lead, where it went over the roof, leaving about 60 feet down the side of the building to Mrs. Smith's apartment.

The trouble immediately cleared up, and the sensitivity of the set was not reduced appreciably. I found Mrs. Smith as nice as could be, after I explained just what was wrong and how I had fixed it. I am sure that the store now has a satisfied customer, for she remarked that she was glad that at last she had found a radio store upon which she could depend.

Customers Lost Through Discourtesy

The moral of this is, of course, that courtesy and politeness are almost

As a Service Man

as important as efficiency. I am positive that the service men who preceded me could have kept Mrs. Smith as a customer, even though they could not locate the trouble at first, if they had been polite to her and at least seemed interested in their work.

Then, there was another case. A certain Mr. Jones called the store and reported that he had had three service calls to repair his set, but without result. He complained that his set would work for a while and then suddenly stop, only to start operating again a day or so later. Service men had been up, messed with the wiring, perhaps tuned in a station, and left, reporting the set O.K. Perhaps it was O.K. when they left, but it didn't stay that way.

By the time the third service call had been made, Mr. Jones was getting rather disgruntled with radio in general and service men in particular. You could hardly blame him, as he had spent considerable time playing host to service men. I went up to see what I could find.

When I arrived, I found that the set was working satisfactorily. I

checked everything I could think of before I came upon a loose speaker lead. There was the source of all the annoyance.

It seems that Mr. Jones liked to move the speaker over beside his bed at night and, in so doing, the contact between the lead and the plug was often broken. The next time the speaker was moved the contact was remade. Sometimes a vibration in the room would break the contact again. The trouble was then quickly remedied by soldering the connection, and Mr. Jones was restored to his genial good nature.

If the previous service men had only taken the trouble to look the set over carefully, they would have doubtlessly located the trouble. They would also have saved the store considerable expense, and they would certainly have improved the customer's opinion of their ability and of the store they represented.



A sloppy serviceman is the store's worst enemy

batteries right off the bat. The service man tactfully remarked that with an all-electric set he would never have to buy new batteries. As he had already won the customer's confidence, it was easy for him to arrange to demonstrate a new set. The set was sold and the service man picked up a nice commission—far better than the one he would have gotten from the sale of a few "B" batteries.

These are just the highlights of a few of the many calls that I made. Each call convinced me more and more that the success of radio stores rests almost entirely upon their ability to give good service. The service man is the only representative the store has in the customer's home after the sale is made. Unless he knows his business and is an ambassador of good will, he can ruin the reputation and business of the store he represents. Good service is the greatest builder of good will that a dealer can employ. In fact, it is more than that—it is the secret of a successful radio business.

The service man of tomorrow must be more than a mere mechanic or electrician. He must truly represent his store by being a service-salesman.

Some dealers have already recognized this, and for them, service is both profitable and helpful.



New tubes make a world of difference in an old set

Good Service Men Asset to Store

However, there are service men who do good work. A Mr. Brown reported that he was no longer able to get WJZ on his set. I went with another service man to locate the trouble, and we found that all the tubes in an old battery receiver were bad. This service man knew his stuff and replaced one tube at a time, showing the customer how the reception improved with each new tube. Finally WJZ was coming in like a "ton of bricks." The customer was delighted and remarked that was the first time a service man hadn't tried to sell him a complete new set of "B"

Radio Tonics

By G. Gerard Clark and T. A. Jolloff
Sales Promotion Dept., RCA Radiotron Company, Inc.

NOVEMBER is a month made to order for the radio tube merchant. It marks the return of the long chilly evenings when the family prefers to sit at home and enjoy the warmth of the fireside. Atmospheric conditions are of the best; the new season's programs are well under way; radio graciously accepts the crown as king of the household.

Daylight broadcasts are also popular—perhaps more popular than at any other season of the year. For this is the month of the most spectacular sporting events in existence—big football games. Since early fall, the American rugby has crowded all other news off the sporting page. Interest has mounted steadily in the teams which have shown themselves to be of championship caliber. Now, everyone awaits the outcome of the final important tests, the games that decide who shall go down in history as immortal.

Thousands have depended on their radio sets for news of the big contests in the past. More thousands will choose this comfortable method of "seeing" their favorite events this year, than in any past year.

Thanksgiving Another Opportunity for a Timely Window

There is another, and perhaps the best reason why November should be a welcome month to the radio tube merchant! It is the season of one of the most colorful holidays of the year—Thanksgiving. Every dealer knows the value of expressing his sales appeal in terms of the season's meaning, and the

feast of the turkey, with its vivid associations, has no equal as a time for coupling the advertising message with the season's message.

Every listener-in on the manifold

Dennison's No. 52, a deep "national" blue crepe paper, is the material used for the background. This is stretched down the back of the window in the manner described in the

August issue of Good News, page 25. The stars and moon are cut out of silver paper. The turkeys, pumpkins and corn shocks are also cut-outs but are pasted on cardboard to make them rigid. The paper for this purpose, on which the figures come ready printed, is Dennison's No. T859.

Orange crepe, Dennison's No. 65, is the material from which the horizontal tube across the background is constructed. The streamers leading from the turkeys are likewise orange, as is also



This window merchandises both a set and tubes, and the message in the foreground will attract the eye of every passing sport fan PHOTO BY DAVIS

entertainment features that will crowd the air during the next few weeks will wish for perfect reception. These fans will be more than ever receptive to the suggestion that they replace their tubes throughout with RCA Radiotrons.

To aid dealers in putting an edge on this suggestion, we have prepared three model window displays that take their inspiration from the November spirit.

Our Thanksgiving window, quite simple in construction, is none the less effective. The fact that it is a night scene is in itself original. It gives an additional touch of the picturesque, while expressing the rich harvest spirit of abundance. The impelling merchandising idea behind it leads right down the streamers to the RCA Radiotron message, which hits the onlooker in the face.

the large lettering on the message cards. The blue crepe used for the background also covers the floor. In the foreground, the Selling Fools, those never-to-be-denied salesmen, form the center of attraction. Pyramids of dummy cartons, furnished with the new display WD-1, are placed as illustrated, and the slogan—"Gather in the Season's Best... with RCA Radiotrons"—completes the picture. Progressive dealers will realize the opportunity to "gather in the season's best" with this impelling window.

Football at Its Height During November

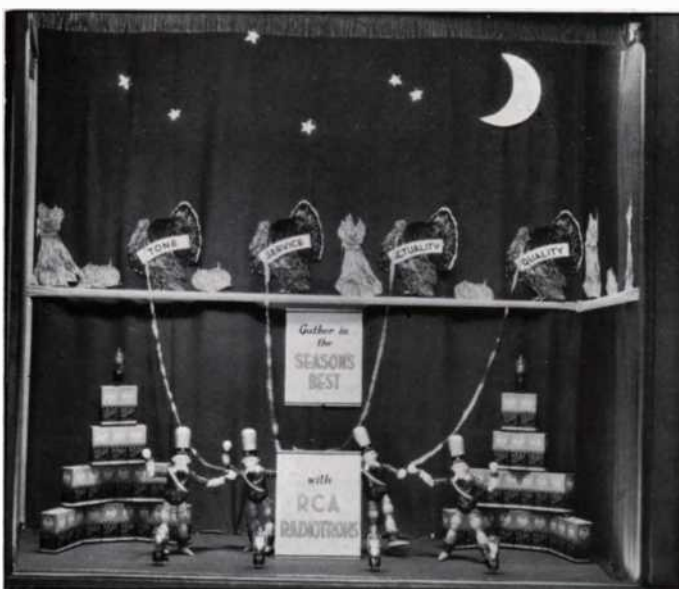
Thanksgiving is a day of feasting—in the stadium as well as at the table. And a bountiful football dish is served upon this occasion. The leading colleges and high schools battle for the final honors of the season. The most

powerful teams engage in intersectional contests and time-worn, traditional struggles are renewed. Dealers may prefer to substitute our football window for the first display, in taking advantage of the Thanksgiving appeal. The window is, of course, appropriate throughout the month.

The "big push" is the large football, labelled "Season's Big Games," in the center of the display. This is an eclipse cut out of cardboard and colored with brown show card paint. It is two feet long and a foot high. Seams and lacings may be added with a crayon or brush. A pair of ever useful Selling Fools are struggling with the ball, and the high-powered message "Score . . . with RCA Radiotrons" clinches the argument.

The background may be any one that has appeared in a previous issue of Good News, while the floor should be covered with paper of some color to harmonize with the background. A console set fits in well as background. Lamps similar to those shown are attractive but not essential. Dummy cartons and RCA Radiotrons, if placed as illustrated, will fill out the window without destroying the balance.

The third window is of the general purpose type, which may be used at



With Thanksgiving falling on November 27th, this window will unquestionably attract attention. PHOTO BY GAYNOR

any time without losing any of its effectiveness. In a season of superlative radio programs, such a window as this will do much to help the dealer increase his tube sales and create good will among his customers.

This is another window which employs simplicity to produce a high degree of effectiveness. The material

The poster is an enlargement of the very attractive Good News cover for April, and is bound to get an appreciative smile from even the most hard boiled passer-by. In the window, it is given prominence by being mounted on a pedestal constructed of cartons placed in a row and covered with crepe paper. The background of crepe paper fringe is constructed according to the manner described in the October Good News. The streamers, light orange interspersed with black, are of Dennison crepes No. 64 and No. 12. RCA Radiotrons are effectively displayed on two-carton bases in the foreground. Price reduction cards may be used as illustrated. When ordering the aforementioned material, refer to it as the WD-1 display.

All three of these windows abide by the principles which



A simple merchandising window using the new RCA Radiotron display piece and carton units. Note the attractive crepe-paper background. PHOTO BY DAVIS

for constructing it consists of nothing more than a large poster, crepe paper for the background fringe, message cards, and price cards, dummy cartons, and RCA Radiotrons. The RCA Radiotron Company, Inc., will send this material free of charge to you.

govern the ideal window display. If your windows are clean and well-lighted, the displays will prove an attraction, if for no other reason than that they are decorative and pleasing to the eye.

Color schemes have been worked out for harmony and the maximum of visual excitability. Contrast is used to good effect. We have attempted to achieve originality in the choice of subjects for illustration, at the same time maintaining our objective of simplicity. Above all, two of the windows were designed with a particular eye to timeliness. All these elements serve to focus favorable attention on RCA Radiotrons.



This excellent window using the idea suggested in Good News was installed by the Jones Music Company of Spokane, Washington

Money Making Midgets

Sell Faster With Most Profit Besides Gaining Greater Customer Satisfaction When Equipped With RCA Radiotrons

A NEW wave of radio business is sweeping over the country. It is the sale of Midget sets. The radio public has taken a liking to these small, compact radio sets and is buying them in ever increasing quantities.

Just as there had to be small sized automobiles running around like scared jack rabbits, midget golf courses, and baby airplanes; so we had to have the small edition radio set. It is not exactly a new idea, as those of you who remember the old Thompson set will know. But, as with many things, the introduction of this idea a few years ago was doomed to failure because it was ahead of its time.

We had to wait until the final development of the a.c. tubes, as we have them today, made it possible to design compact and efficient set chassis.

Now that we have arrived at that stage, the Midget set is due to come into its own.

For some time past, there has been an increasing demand from the public for a small set at a low price. A great many people who want the benefits they know could be derived from owning a radio set can not afford the price of a regular console set. For these, the Midget set has been most welcome.

There is also another market for which the Midget set is ideal. It is for those who want a "second set" in their homes. Here price is not the primary factor, but quality of reproduction and service are. The "second set" customer wants a receiver that is small in size and which will give him good service. Such customers in all probability are already acquainted with

the fact that RCA Radiotrons can be depended upon to give excellent service. When they see that the Midget set they are interested in is equipped with RCA Radiotrons, they at once have confidence both in the set and in the dealer who is selling the set.

It's the Brand That Counts

A glance at the prices of those that are now on the market reveals the fact that they range in price from \$49.50 to \$99.50—complete with tubes.

It is an unfortunate fact that many dealers will attempt to sell the customer a Midget set equipped with a set of inferior tubes. Sets today are designed and built around the tubes. This is done usually in an attempt to get the price a few dollars lower than if it were equipped with quality tubes.

GOOD YEAR TUBES

ALCOA ALUMINUM

HOUDAILLIE
PRONOUNCED "HOOD-YE"

WESTINGHOUSE

TIMKEN BEARING EQUIPPED

GENERAL ELECTRIC

TECHNICOLOR

DUPONT
REG. U.S. PAT. OFF.

FISHER BODY

ETHYL
THE BEST BRAND OF ANTI-KNOCK COMPOUND
ETHYL GASOLINE CORPORATION
NEW YORK, U.S.A.
Knocks out that knock

These trade marks represent products whose quality and service have been proven. That is why other products which use them find immediate consumer acceptance. Manufacturers using these products know this and feature them because it helps to sell their products

This is where they make a big mistake. Price, while it is important, is not everything. Successful operation of the set and customer satisfaction should also be in the dealer's mind. And this is where the brand of tubes used with the set plays a most important part.

Leading set manufacturers use and recommend RCA Radiotrons because they know that they give best results. It is because RCA Radiotrons are the result of years of development and improved manufacturing methods. They represent the last word in vacuum tubes. Customers know this. That is why RCA Radiotrons are the fastest selling tube line. So, when a set is sold with RCA Radiotrons, the customer has greater confidence in the set and the merchant who sells it to him, because he knows the brand "RCA Radiotrons" can be depended upon.

A trade mark or brand name can be made one of the most valuable assets of a manufacturer. Once the public has learned that a certain brand of merchandise is consistently reliable, they will continue to buy that product or any other product using the item which has found public acceptance. Sales resistance is reduced to a minimum.

That is why the manufacturer of an automobile will advertise that his car has a Fisher Body or Houdaille shock absorbers or a Duco finish. He is cashing in on the reputation that has been built up for these products. When people see that the car they like is made up of time proven parts, they have confidence both in that car and its manufacturer. The same is true with any other product. The trade marks reproduced on the opposite page represent a few of many such cases.

That is also why 17 of this country's leading set manufacturers equip and recommend their sets to be used with RCA Radiotrons. They know that RCA Radiotrons can be depended upon, and they know that the public knows this. Therefore a set equipped with RCA Radiotrons has less sales resistance than one which is not so equipped.

The wise radio merchant knows this and uses the reputation of RCA Radiotrons to make his set sales easier. People buy more quickly when they

know a product is to be depended upon. Price in this case is not the primary factor governing the sale.

Success of Operation Depends on Tubes

One of the first questions that arises in connection with a Midget set is, "Are they as efficient and will they give the same results as a larger set?"

In order to build these sets within certain space limitations, six tubes are what most of the Midgets are equipped with. This means that the tubes used are being worked to a fuller capacity than the tubes used in a console set, where you have seven or eight tubes, in order to give the results that these

always more profit in this type of merchandising. It is one of the secrets of many a chain store's success.

You don't have to be troubled with a free home demonstration of a Midget. Most people are sold on the idea before they enter the store. All the dealer has to do is wrap the product up—with RCA Radiotrons.

With the country Midget wild, this development in sets affords dealers an excellent opportunity for greater profits. If the sale of Midgets cuts into the sales of higher price sets, increased turnover will compensate for any loss of volume on the more expensive sets.

Strange as it may seem, a great many radio merchants are not taking to the idea at all. To be sure, it means that it may hurt the sales of more expensive console models some, but certainly many will buy Midgets who would not otherwise purchase any radio set.

Then, too, the price being low—one of the main features—means that most of the sales will be for cash. Most assuredly a cash sale is better these days than one which requires long time payment. People come into the store and purchase a Midget set because they want one. The sales effort and expense connected with them is much lower than that on, say, a \$200 set. Surely this is worthy of any merchant's consideration.

Tube Renewal Market Increasing Rapidly

Here is another angle which means money to the dealer. Every time a Midget set is sold, there is at once created an additional six tubes to the renewal market for next year's sales. And if because of the price attraction you sell three Midgets to every console, you have increased the tube renewal market by 18 tubes instead of the eight or nine used by the console.

All in all, it is a most attractive merchandising proposition for those dealers who cash in on it properly. But let no dealer make the mistake of being penny-wise and pound-foolish. See that the Midgets you sell are equipped with RCA Radiotrons, the tubes of proven quality. Your service costs will be less, your customer satisfaction greater, and your profits ever-increasing.

Making Sales Easier

When 17 of the nation's leading set manufacturers use and recommend RCA Radiotrons in their sets they do so because they know the reputation of these tubes will help to sell their sets.

The public has come to know that RCA Radiotrons are tubes of quality that can be depended upon at all times. When a set is equipped with RCA Radiotrons, whether it be a console set or a Midget, there is at once an added prestige given to that set. Sales resistance is lowered and consumer acceptance raised.

RCA Radiotrons
THE HEART OF YOUR RADIO

sets do give. Therefore, unless only the best tubes are used, something will have to suffer. The thing that will suffer is the quality of the reception.

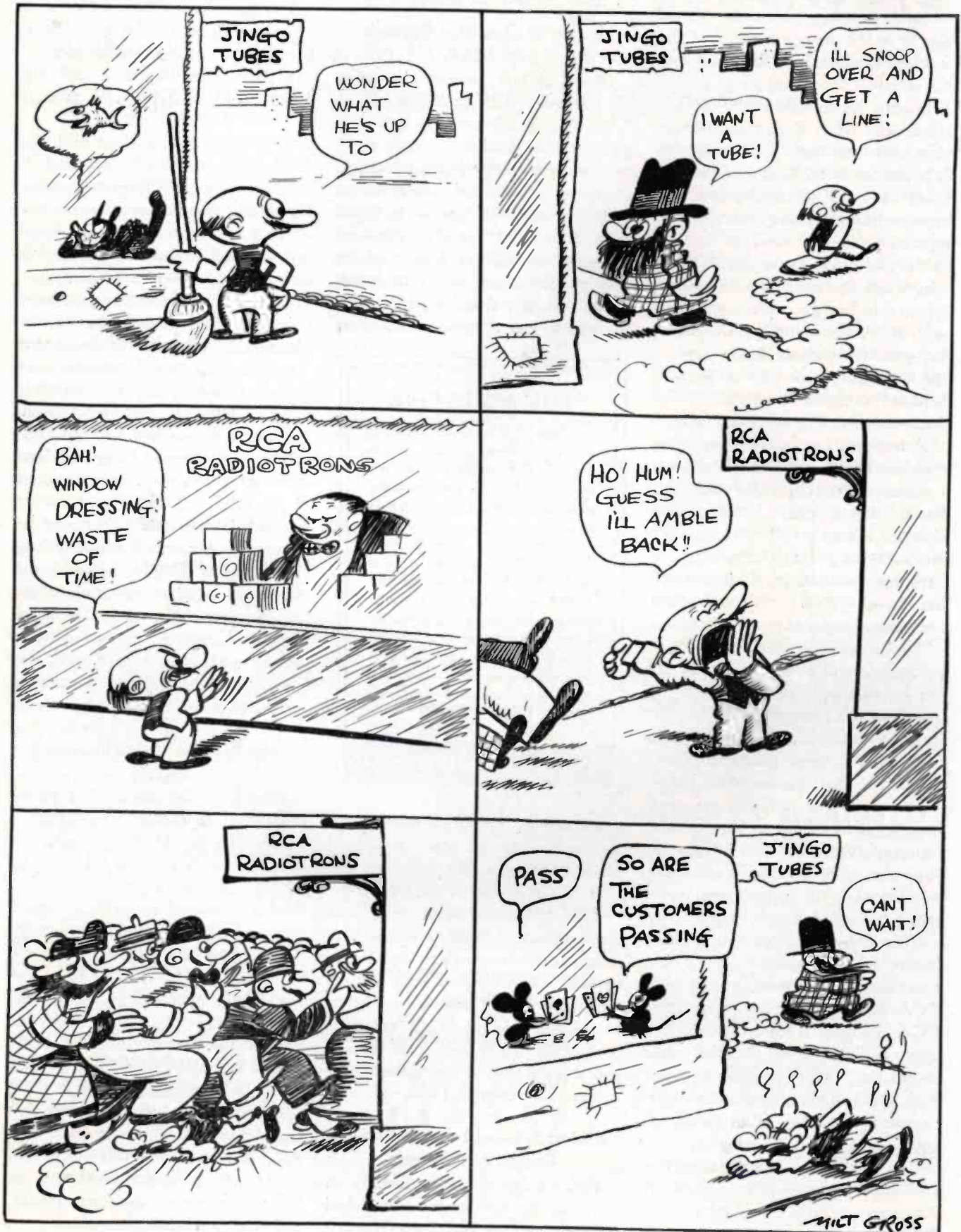
Then, too, the inferior tube will not stand up as will quality tubes such as RCA Radiotrons—which means that the customer will spend more in tube replacements than he may have saved in the original cost. This will react back on the dealer who made the sale and will certainly not tend to gain for him any customer good will.

Midget Sets and Tubes Over-the-Counter Merchandise

Both Midget sets and tubes are, in fact, over-the-counter merchandise. And both are cash propositions. There is

Keep Your Eye on Your Customer—

By MILT GROSS



Electricity Moves the World*

Have You Ever Stopped to Think What Would Happen if Every Electric Motor or Generator in the World Suddenly Stopped?

By L. G. Lessig

Commercial Engineering Dept., RCA Radiotron Company, Inc.

ONE of the principal reasons why electricity has revolutionized the everyday life of mankind is that it may be utilized to produce motion. The reason that an electric current can cause motion is that every electric current is surrounded by a magnetic field. This is easily shown by the fact that any iron which is near an electric current becomes magnetized and as a result has a force exerted upon it which tends to make the iron move. The motion of the iron may be back and forth, as in the telegraph, telephone, or electric bell, or it may be rotary as in an electric motor.



Besides causing or tending to cause iron to move, the magnetic field which every electric current produces is responsible for many other important effects. Whenever a magnetic field changes, in direction or in amount, an electric current is produced in any closed circuit nearby. Thus, a changing electric current causes changing magnetic fields, and this in turn causes another electric current to flow in the original conductor or other adjacent closed electric circuits.

The changing of magnetic fields caused by the variation of electric currents makes radio possible.

Wherever there is an electric circuit in which alternating current is flowing, a magnetic field around the wire is constantly being produced and varied as the current in the wire

varies. This magnetic field spreads farther and farther out, giving rise to an electric wave, just as a wave starts out from a vibrating bell or tuning fork. This effect is responsible for the transmission and reception of radio signals.

When a steady current flows in any electric circuit, the size or amplitude of the current is determined by the electrical force, called "electromotive force," and the resistance of the circuit. In order that we speak conveniently of electrical pressure, current, and resistance, certain units of measure are used. The commonly accepted unit of current is the ampere. The unit of electromotive force (e.m.f.) or electrical pressure is called the volt.

Ohm's Law

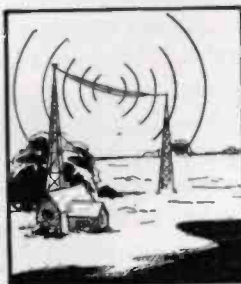
The unit of resistance is called the Ohm. When one volt of electromotive force is applied in a circuit having a resistance of one ohm, a current of one ampere will flow. A simple formula expresses this relation. It is:

$$R = \frac{E}{I} \text{ or } I = \frac{E}{R}$$

or $E = RI$

R represents resistance in ohms, I represents the current in amperes and E is the electromotive force expressed in volts.

The resistance of the whole circuit can be found by dividing the voltage by the current. The current can be found by dividing the voltage by the resistance. The e.m.f. is equal to the product of the resistance and current flowing. It is at once evident that, if



any two of the quantities are known, the other may be found by applying the formula for Ohm's law.

Electricity a Curiosity 150 Years Ago



Only about one hundred and fifty years ago electricity was considered a mere curiosity, a toy for the clever scientist. Practical application

is barely fifty years old and has been increasing by startling expansion up to the present time. It is not necessary to list the modern manifestations wrought by electricity. Its universal use is so common today that we no longer consider the fact that electricity affects our very life in myriad ways.

What would happen if everything operated or driven by electricity ceased to function? General chaos would prevail. Our modern civilization would go back several centuries. Electrical power has largely replaced brawn and muscle in modern manufacturing. Similarly the radio vacuum tube is more and more assisting or replacing certain of our senses and mental functions.

Nearly fifty years ago Edison made a discovery now recognized as the most epochal in all his career. While working on his incandescent lamp, he discovered that a faint stream of electricity flowed from the hot filament to a metal plate sealed inside of the bulb. There the basic phenomena of the electron lay disclosed, although

* The third of a series of fundamental articles on radio.

Mr. Edison at the time did not realize the significance of his disclosure. For a generation the phenomenon remained but a scientific curiosity.

Electron Put to Work

Finally, Fleming in England and DeForest in America harnessed the feeble electron action and put it to work—Fleming in his rectifying tube which opened up new worlds of possibilities; DeForest in his three-electrode tube with its "grid" control.

The way once pointed, inventors, physicists and engineers rushed in, until today a far-flung army numbering thousands of workers, is engaged in diverse fields of electronic applications, in laboratories and industries throughout the world.

The usefulness of the radio tube in radio communication and broadcasting stands unquestioned. It is becoming equally important in other fields of endeavor.

Vacuum tube amplifiers carried on trains strengthen feeble signals picked up from the rails. These signals supply the locomotive engineer with constant information regarding track conditions ahead.

Combinations of vacuum tubes are being employed in efforts to increase the safety of aviation; first, in keeping the flier on his course; second, in reporting weather and landing conditions, and third, in giving indications of height of plane above ground.

Vacuum tubes can be used in electric furnaces to melt metals. They also make possible an electric knife for the surgeon which simultaneously cuts and cauterizes.

Cathode-ray tubes, X-ray tubes and photo-electric tubes are all cousins of the radio vacuum tube. Cathode ray devices are of great interest in the treatment of materials for the purpose of examining the genuineness of gems, producing acceleration of chemical reactions and causing particular physiological

effects. By their use ultra-high speed electrical phenomena may be examined.

The value of X-rays is being appreciated more and more as their field of application is being extended. They are no longer limited in their uses to the production of shadowgraphs depicting the imperfections of the human body



in searches for damaged bones and foreign substances. The study by X-rays of the structure of the elements and of compounds is producing results of inestimable value to science. It is assisting the metallurgist to a better understanding of why metals behave in certain ways as the result of special heat treatments or rolling operations. Scientists have found that certain kinds of X-ray treatments stimulate cell growth while others inhibit or actually destroy plant or animal life.

Photo-electric cells assist in counting objects; in controlling ventilation to meet the requirements of vehicular tunnels; in detecting fires, in giving warning of a burglar, in measuring the intensity of illumination and even in matching colors.

Experiments have been made on very high frequencies (short waves) with radio tubes which have proved highly interesting. In these experiments, mice lost their tails, flies were revived at zero temperature, metals were melted, cold feet were heated and insects were killed.

Almost superhuman is the vacuum tube. It brings us entertainment, both sound and pictures. It halts machinery and counts objects. It locates ships and guides airplanes safely through fogs. It is super-sensitive to color. It hears the faintest sound—sees the slightest variation of light.

In the daily life of the world, during the next decade, vacuum tube devices are destined to create changes

as sweeping and revolutionary as those of the past 50 years.

Vacuum tube devices are already changing alternating current to direct current, and direct into alternating. They are changing frequencies from one value to another. They are cutting off or heading off currents in place of switches, circuit breakers and lightning arresters.

Future applications of vacuum tubes is an unlimited field. Vacuum tubes and their kindred open a field for research in physics, chemistry, electricity, heat and light, beyond imagination. Not only will vacuum tubes supplement and replace tons of moving machinery for converting and transforming power, but they will supply the senses of the mechanical robots of tomorrow.

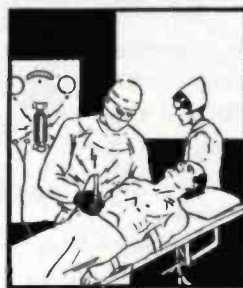
Already they have many applications which have become so commonplace to us that we no longer give them a thought. Should they suddenly be taken away however, then would we realize what a firm place they have taken in our everyday existence.



Electricity is making it easier for the human race to perform its daily tasks. It is opening up new fields for accomplishments and new roads for industry. In one hundred and fifty years it has grown from a curiosity and toy of the scientist to one of the most powerful forces in the world. Indeed, it is probably the most powerful force.

The use of electricity has affected the lives of every human being of the civilized nations. It is used in so many ways that a real true and full appreciation of its presence and help could probably only be had by taking it away, if that were possible, for even so short a time as an hour.

If every generator and electric motor in the country or in the world were to stop this instant, chaos would result. Our civilization today depends upon electricity for so many of its necessities. And now the vacuum tube brings great promise for the future.



Personalized Post Cards



HERE is the very latest thing in direct mail. They are hand lettered, personalized post cards. Each one of the series is addressed specifically to a customer. When the prospects, to whom you send these cards, see that the card is talking directly to *them*, you can be sure they are going to read it. And, they will come to your store for merchandise. The price for this service is very low,

\$10.50 for 300 stamped cards, all filled in and addressed by hand. There are three designs, as illustrated, and you get 100 of each. All you have to do is send the names of 100 customers or prospects, and your check or money order for \$10.50. Then you will receive the series all ready to drop in the mail. Take advantage of this unusual opportunity NOW. Mail your order TODAY!

RCA RADIOTRON COMPANY, INC., * * * HARRISON, N. J.

RCA Radiotrons

THE HEART OF YOUR RADIO



“Don't gamble with your radio enjoyment **USE RCA RADIOTRONS**”

says

MCMURDO SILVER

President

SILVER - MARSHALL, INC.

“Radio owners cannot be too often warned against careless vacuum tube buying. Exhaustive tests by our engineering staff have demonstrated that RCA Radiotrons have the quality which provides the best insurance of the fine performance built into every Silver Radio. RCA Radiotron quality and dependability safeguard against interference, weak signals, fading and other troubles caused by inferior tubes. We say to all owners of Silver Radio: ‘Don't gamble with your radio enjoyment by using inferior tubes when genuine RCA Radiotrons are easy to get anywhere.’”

RADIO ENGINEERS ADVISE:

Replace all the vacuum tubes in your radio set with RCA Radiotrons at least once a year. This is the only sure way to maintain good performance and minimize disagreeable noises and other troubles caused by inferior tubes. RCA Radiotrons will give you the maximum in selectivity, sensitivity and tone quality.

Old tubes may impair the performance of the new.



This is the 25th in a series of endorsements of RCA Radiotrons by the leading radio manufacturers.

RCA RADIOTRON CO., INC.

HARRISON, N. J.

RCA Radiotrons

THE HEART OF YOUR RADIO

This advertisement will appear in the Saturday Evening Post, November 29th; Literary Digest, December 13th; Collier's Magazine, December 6th; Liberty, December 20th; Popular Science Monthly, December; Country Gentleman, December; Cappers Farmer, December; and general farm papers, December

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