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# GET READY FOR A GREAT FUTURE IN RADIO-TELEVISION F.M.-ELECTRONICS

THE GREAT ..SHOPS OF ELECTRICAL AND RADIO SCHOOL..

# TRAIN AT COYNE IN CHICAGO ... IN THE HEART OF AMERICA'S RADIO INDUSTRY



# COYNE is right in the center of everything

COYNE is located in Chicago, one of the world's greatest Radio and Television centers. As this aerial photograph proves, our School is surrounded by nationally famous Radio and Television plants, Broadcasting stations, Television and F.M. studios, and many other activities that mean much to your future in this great field of Opportunity!

Hundreds of our graduates have found worthwhile jobs and a big future here in the Radio hub of America. Coming to COYNE IN CHICAGO will broaden your outlook, give you an experience to be remembered for a lifetime, and a training you KNOW is up-to-the-minute.

Now read the story of COYNE as told on the following pages. Then picture yourself here in the busy SHOPS OF COYNE preparing for a wonderful career in Radio and Television.

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by B.W.COOKE, President

S PRESIDENT of Coyne, let me thank you for this opportunity to tell you all about our world-famous school and what it

can do for you. YOUR FUTURE is the most important thing in the world to you. This book, "The Story of Coyne," is dedicated to your future.

It has large sized pages so we can show you big, clear pictures-to give a true conception of every department and every step in your training. It is printed in easy-to-read type because we want you to read every word.

Please, for your own sake, don't skip any part of this book. It will take only a little of your time-and it will be time well spent. Ask any of the thousands of successful Coyne graduates who got started on the road to better jobs and bigger pay through these pages!

#### YOUR THREE BIG QUESTIONS

Today you stand at the crossroads. The decision you make now will affect all your future happiness. You have three vital ques-

tions to settle in your mind: 1. SHALL I MAKE RADIO-TELEVI-SION MY LIFE WORK?

- HOW WILL COYNE PREPARE ME FOR SUCH WORK?
  IS COYNE THE QUICKEST AND BEST WAY TO GET READY?

Each of these questions is answered. frankly and fully, on the following pages. When you finish reading this book, we feel sure you will know how to decide.

#### COYNE HAS GROWN WITH **RADIO AND TELEVISION**

Our school of practical training was established in 1899, fifty years ago, and has been in continuous operation ever since Coyne pioneered the "Learn-by-Doing" method of instruction. Here you are told, you are shown, and you actually do the practical jobs on real equipment—just as if you were out working in the Radio-Television field.

This practical experience is backed up with necessary theory that you get by interesting lectures and equipment demonstra-tions. No student has to recite in class.

At Coyne you learn to work with your head as well as your hands. That's why our students make such rapid progress, both here in our shops and out on the job.



This modern fireproof building—over 60,000 square feet—is entirely by Coyne. Our light, airy shops contain one of the outlays of Radio training equipment anywhere in America! is occupied



Above you see a picture of B. W. Cooke, President of the Coyne Electrical and Radio School. Mr. Cooke has been iden-tified with Coyne for more than 30 years. He is an inspira-tional leader and executive with a deep interest in the welfare and progress of every Coyne student and graduate. He is a member of the American Institute of Electrical Engineers, an Associate Member of The Society of Automobile Engineers, and an Associate Member of The American Society of Mechan-ical Engineers, and one of America's leaders in the field of practical training.

S. C. NARLAND, Vice Pres. & Gen. Mgr.

When Radio was in its very infancy, Coyne saw its huge possibilities and began preparing men for this great field.

We have kept pace with the tremendous growth of Radio and Television, constantly adding new equipment and including the latest developments in our training.

Before Åmerica entered World War II, the Government recognized Coyne's outstanding position in the field of Radio training, by selecting us as one of the first schools to train men for Radio work in the United States Army. During the war we trained many thousands of soldiers as specialists for the Signal Corps, Anti-Aircraft and Army Air Force.

#### **PREVIOUS EXPERIENCE** UNNECESSARY

You don't need previous experience in order to take Coyne training. The Coyne "Learn-by-Doing" Method takes the place of previous experience in Radio or Television. Some Coyne graduates have told us that when they left Coyne and went to work it was like stepping from one job to anotherthe work they had in school was so much like that out on the job.

On the other hand other students had experience in some branch of Radio, but lacked the all-around knowledge for real success. They were not satisfied with being halfway Radio men—they wanted to have an all-around training to equip themselves for the better jobs and opportunities in Radio and Television.

Experienced or not, you'll make rapid strides here at Coyne. You'll start with the simple jobs and progress step by step to the more advanced work. You'll cover Radio and other important branches of Electronics, such as Television, Sound, Public Address Systems, etc. Then you'll be ready for a lifetime of opportunities! NOW—come with

-come with me in the great shops of Coyne. See how we train men and young men by the famous Coyne "Learn-by-Doing" Method. Read the facts. See what Coyne Training can mean to you in the field of Radio-Television.

[1]



### You do Actual Jobs on Actual Equipment ..... One of the Largest Outlays of its Kind in America

THE fellows in the picture above are getting practical Radio training the COYNE way—the "Learn-by-Doing" way.

Every one of them is doing real Radio work with the latest full-size testing equipment. In this case they are shooting trouble on Radio receivers. But the same real-job training is given all through our Course. Thousands of our graduates have proved that this is the easy, streamlined way to learn Radio and Television.

#### What You DO, You Remember

At Coyne you work in the midst of a vast array of Radio, Sound, F.M. and Television equipment. You are TOLD how and why the equipment or apparatus works, with all important facts and theory explained in simple language. Then important points are SHOWN in demonstrations on the equipment itself.

Then—you actually DO practical work on equipment with your own hands. There's no substitute for doing the job yourself. You'll be surprised how easy it is to remember things learned this way. Each step is fixed in your mind, and when the same problem comes up out in the field, you'll know exactly what to do.

You are also shown how to make brief, practical notes and diagrams from the lectures and shop jobs, to keep in your notebook for reference after you graduate.

#### Instructors Work with You

One of the outstanding features of Coyne "Learn-by-Doing" Training is the individual assistance given each student by our instructors. You will find that students and instructors are real friends here at Coyne. They work together, side by side, throughout the course of training.

course of training. YOU GET ALL OF YOUR COYNE TRAINING HERE IN OUR BIG CHICAGO SHOPS under the guidance of experienced instructors. WE DO NOT TEACH BY MAIL, nor do we have you study printed lessons at home and then have you come here for a couple of weeks for a smattering of practical work.

I'm sure you agree with me when I say, YOU CAN'T BECOME A PRACTICAL RADIO-TELEVISION MAN BY JUST READING LESSONS AT HOME OR PLAY-ING WITH LITTLE TOY OUTFITS. That's why we have here in the Big Shops of Coyne, a tremendous outlay of Radio Equipment for students to work on—everything from simple Receiving Sets on up to Superheterodyne Sets, F.M., Television and Sound Equipment. THAT'S THE ONLY REAL WAY TO LEARN RADIO AND TELEVISION RIGHT.

#### YOU Advance Step by Step

As you go through our course, each job you do leads to the next one. Almost before you realize it, you are doing work that a few days before may have been a mystery to you. But so thoroughly have you been trained, with our "Learn-by-Doing" method, that you can take on these advanced jobs with complete confidence.

plete confidence. You will be literally amazed at your rapid progress. Right now it may seem hard to believe that, within a few short weeks, you can prepare for a real job in Radio and Television at Coyne. But thousands of fellows just like yourself HAVE DONE IT—and Coyne offers you the same opportunity when you "Learn-by-DOING."

### These are the **3 EASY STEPS** in Coyne's Famous"Learn-by-Doing" Method





YOU ARE TOLD. Interesting lectures, including sound movies and slide films, teach you the "why" and "how" of Radio principles and how they apply to equipment.



YOU ARE SHOWN. The instructor, who is an expert in his particular field, demonstrates typical jobs with the equipment, clearly and carefully explaining all details.





YOU DO PRACTICAL JOBS YOURSELF. You work out practical jobs on actual shop equipment, and your jobs are checked to make sure you have everything right.

# **IMPORTANT** to you who live in Chicago and Suburbs









A S YOU read the COYNE SCHOOL CATALOG, you will notice frequent references to certain details WHICH CONCERN STUDENTS WHO LIVE IN OTHER CITIES and therefore must make their home in Chicago while attending COYNE SCHOOL. Naturally, these details do not apply to the student who lives in or near Chicago and CAN ATTEND COYNE EVENING SCHOOL. Men and young men come to Chicago FROM ALL OVER THE COUNTRY to get COYNE'S famous "LEARN BY DOING" training. Those from distant points pay money for transportation to and from Chicago. In addition, they pay for room and board while here. Sometimes they give up their jobs to prepare at COYNE for a brighter future. So you see it costs them considerable MORE than it will cost YOU to get COYNE training. YOU WHO LIVE IN CHICAGO ARE FORTUNATE. YOU DON'T HAVE TO PAY RAILROAD FARE .... YOU DON'T HAVE TO PAY FOR ROOM AND BOARD IN A DISTANT CITY .... YOU DON'T HAVE TO LEAVE YOUR HOME. This means that YOU CAN ENJOY THE ADVANTAGE OF COYNE TRAINING at a small cost.

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### THOSE WHO CANNOT ATTEND OUR DAY SCHOOL — CAN GET THEIR TRAINING IN OUR EVENING SCHOOL

F COURSE, it is better if you can arrange to attend our DAY SCHOOL, as you finish your training much sooner and you have your choice of either our Shorter Practical Course or our Technicians Course. However, if you cannot attend day school, you should not allow this to prevent you from attending our EVENING SCHOOL and getting our Practical Course. At the present time we do not have facilities for giving the Technicians Course in our EVENING SCHOOL. Many of our leading men could not attend day school when they were young, but that did not stop them from getting ahead. They took part of their spare time in evenings to attend school. That is the reason we have evening school, so the fellow who cannot attend school during the day can get his training in the evening.

**I** F YOU WILL TURN THIS CIRCULAR OVER, YOU WILL FIND THE DE-TAILS OF OUR EVENING SCHOOL. SO READ THEM AND IF YOU WANT FURTHER INFORMATION — Drop in at the COYNE SCHOOL OFFICE for a friendly chat. A member of the COYNE staff will gladly talk things over with you ... show you through the school ... answer any questions you may wish to ask .... give you full information as to tuition cost and our easy payment plan. We will tell you, too, about Coyne graduates the school has helped to get good jobs. You will not be under the slightest obligation ... and you will not be urged to enroll, against your wishes.

BEING located so near to Coyne, you can conveniently come in and see Coyne for yourself. YOU ARE WELCOME AT ALL TIMES. The field of opportunity is tremendous for men who qualify by training. Don't fail to learn AT FIRST HAND about the remarkable COYNE training course offered right here in Chicago. Become familiar with the Coyne "Learn-by-doing" method of training. Visit Coyne when school is in session—any week day from Monday to Friday inclusive—or, on any Monday or Thursday evening. Watch the students at work on real equipment in the big Coyne training shops. You'll get a real thrill out of your trip through Coyne. Bring your relatives or friends along if you wish—they'll enjoy it too. If you cannot come on a day or evening when school is in session, you will find the COYNE OFFICE open on Saturdays from 8:30 A.M. to 12:00 o'clock noon.

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CHICAGO 12, ILLINOIS

#### COYNE ELECTRICAL AND RADIO SCHOOL 500-526 SOUTH PAULINA STREET

**TELEPHONE SEeley 3-7722** 

(See Other Side)

# IF YOU CANNOT ATTEND DAY SCHOOL COME TO OUR EVENING SCHOOL

**F** YOU work during the day, there is no need to give up your plans to get training. Come to our EVENING SCHOOL and get your TRAINING, in our Practical Course.

Many fellows have family obligations and cannot afford to quit their present job. To these fellows, we offer our EVENING SCHOOL training.

The EVENING SCHOOL is in session TWO EVE-NINGS A WEEK, MONDAY and THURSDAY EVENINGS FROM 6:30 to 9:30.

The training method in this course is basically the same as the day, individual instruction method and every student takes the time necessary for him to complete the course. THIS USUALLY AVERAGES ABOUT NINE TO TEN MONTHS.

The training in Electric Refrigeration in the Evening School, will require eight weeks' additional time.

### NO NEED TO QUIT YOUR DAYTIME JOB TO PREPARE FOR A BETTER JOB AND ADVANCEMENT

K EEP your present daytime job; come to Coyne two evenings a week, then in a short time you can step right out into the field and be ready for a job as a *Coyne Trained Man*. You can continue earning an income while you are laying the foundation for bigger things. The policy of the COYNE ELECTRI-CAL AND RADIO SCHOOL is shaped to meet the needs of men who have not had the chance to get a training because they could not quit their jobs — to men who appreciate the better things in life — You

can use some of the spare evening hours to get training, to make your services of real value.

A great man once said, "Tell me what you do with your evenings, and I'll tell you what you are." Now, I don't ask you to spend all your evenings at COYNE; just two evenings a week can make you a Coyne Trained Man in just a few short months — 2 evenings of highly interesting, fascinating work—work which will be a real recreation for you after your regular day's work.

### **COYNE STUDENTS ARE ALL AGES**

**R** EGARDLESS of your age you can make a success with Coyne training. We have students all ages, some as young as 16 years, others as old as 40. If you are really sincere it makes no difference what your age may be. It is not how young or how old you are, but what you know and can do, that counts.

### VETERANS

**C**OYNE is authorized to train veterans who qualify for training under the G.I. BILL OF RIGHTS in either the DAY SCHOOL or the EVENING SCHOOL. If you want more information about getting COYNE training under the G.I. BILL, feel free to come in and talk it over with a member of our staff.

### HOW TO GET TO COYNE

T AKE any Logan, Humboldt, Douglas, or Garfield Elevated. Get off at Marshfield Station. Walk west to Paulina Street, then one block south to our front door. Or take a Jackson Boulevard Bus to Paulina Street and walk two blocks south. Or take Harrison Street car to Paulina, and walk  $\frac{1}{2}$  block north. Or take Van Buren Street car to Paulina, and walk  $\frac{1}{2}$  blocks south. Ashland Street cars pass our door, on Paulina Street.

CHICAGO 12, ILLINOIS

### COYNE ELECTRICAL AND RADIO SCHOOL

**TELEPHONE SEeley 3-7722** 

(See Other Side)

# COYNE HAS ADDED TRAINING IN ELECTRIC REFRIGERATION

To Their Courses

# This extra training added to our training leads to many additional opportunities



Here is a view of part of the Refrigeration Department. Instructors give personal assistance to students on these shop jobs. This type of training helps students acquire confidence and ability on a job out in the field.



This picture, taken in our Electric Refrigeration Department, shows Coyne students carrying out the series of operations involved in the overhaul on a compressor and motor combination unit.



**B** ECAUSE we believe every Coyne graduate should be equipped by our training to add to his opportunities as a trained man whenever possible, we have added this training in ELECTRIC REFRIGERATION to our training.

ELECTRIC REFRIGERATION has enjoyed a tremendous growth since being introduced to the public and many trained service men are needed in this field. Training in this work included, should open up many additional opportunities to Coyne graduates for good jobs or a business of their own.

The training in the Electric Refrigeration Department takes three weeks additional time. So, in taking our RADIO AND REFRIGERATION COURSE you should plan on spending 18 WEEKS HERE AT SCHOOL ALTOGETHER instead of 15 weeks if you are taking the practical Radio-Television Course, or 33 weeks ALTOGETHER, instead of 30 weeks, if you are taking the practical Radio-Television Technicians Course as outlined in our catalog.

WE STRONGLY RECOMMEND THAT YOU TAKE THIS ADDI-TIONAL THREE WEEKS TIME REQUIRED TO GET THIS ADDI-TIONAL TRAINING BECAUSE WE ARE CONVINCED THAT IT WILL INCREASE YOUR OPPORTUNITIES FOR JOBS AND BETTER EARN-INGS AFTER YOU GET OUT IN THE FIELD.

#### Here is a brief outline of our training in ELECTRIC REFRIGERATION

**E**LECTRIC REFRIGERATION is a great industry in itself and offers many additional opportunities to fellows with training in this field in addition to our Radio-Television training. THE TRAINING YOU HAVE HAD IN THE RADIO-TELEVISION COURSE WILL HAVE PREPARED YOU FOR THE WORK IN THIS DEPARTMENT. For instance, a knowledge of the principles of Electricity, wiring, controls and switches is essential, and you will have had training on such equipment in the first department of our course. This, of course, saves time and enables you to cover the training in this department much faster.

Here you get training in the operation, care and repair of many types of interesting Refrigeration units under the personal supervision of an experienced instructor who shows you step by step how to do the work on well-known units of different types. You will learn about refrigerant liquids, about reciprocating and rotary compressors, dry and flooded type evaporators, expansion valves, thermostatic switches, etc.

You also get practical shop work on tube flaring and connections, vacuum and pressure tests and gauges. Overhaul and repair of compressors, controls, valves, motors, seals, thermostats, etc. Assembly, disassembly and test of various household and commercial units.

You learn about common Refrigerator troubles and their symptoms. High and low side pressures, condenser temperature, condenser air circulation, stiff compressors operation, low oil, low refrigerant, defects in motors, fuses, control valves; air in system, clogged strainers, moisture in system, dryers, purging, charging. Service tests and service methods and equipment. Multiple installations. Installation methods, trouble shooting and repair. You will be taught modern methods of servicing and testing of Electric Refrigeration units.

THE PICTURES ON THE LEFT SHOW TYPICAL SCENES TAKEN



#### **OUR 30 WEEKS' COMBINATION COURSE** Prepares You For Many Types Of Jobs In The Field

HILE only some of the subjects covered in our COMBINATION COURSE can be listed below they give you an idea of the wide variety of jobs this training prepares you for, and how this practical all-around combination course can make your services more valuable to an employer or to yourself if you go into busi-

#### **BELOW ARE A FEW OF THE MANY** FIELDS YOU CAN PREPARE FOR BY TAKING OUR COMBINATION COURSE

- Signal and Alarm Wiring and Maintenance
- **Light and Power Wiring**
- **Electrical Appliance Repairs**
- Illumination Equipment Installation and Maintenance
- **Armature Winding**
- **Stator Winding**
- **Direct Current Motors and Equipment**
- **Alternating Current Motors and Equipment**
- **Electric Sign and Display Lighting** Industrial Electronic Equipment Installation and
- Maintenance **Television Installation**
- **Radio Servicing and Television**
- Aligning, Phasing, Inspection, etc., on Radio-Television Equipment
- Sound and Public Address Equipment Maintenance and Operation
- Auto Radio Installation and Service
- **Frequency Modulation Sets**
- **Mobile Radio**
- Inter-communication Systems

**Electric Refrigeration Service and Repair** 

HE above are some of the many opportunities for good jobs in the Radio-Television—Electrical—and Electric Refrigeration fields. By taking our combination course you can make yourself more valuable to an employer or more valuable to yourself if you operate a business of your own.

COYNE also offers a Practical Course in ELECTRICITY and a Practical ELECTRICAL TECHNICIANS COURSE. We'll be glad to send detailed information upon request.

### **COYNE COMBINATION COURSE** INCLUDING OUR PRACTICAL TRAINING IN **RADIO – TELEVISION – ELECTRICITY** and **ELECTRIC REFRIGERATION**

MANY times we have fellows who would like to take both the PRACTICAL RADIO-TELEVISION COURSE and the PRACTICAL ELECTRICAL COURSE. A fellow may want to start a business of his own where he will be called upon to handle work in both fields.

FOR INSTANCE-he may want to start a RADIO-TELEVISION SERVICING BUSI-NESS, but he finds he can also do a lot of Electric Motor or Appliance work if he has a knowledge of Electricity too.

ELECTRICITY AND RADIO ARE CLOSELY ALLIED and by having a training in both fields a fellow greatly increases his opportunities for better jobs and advancement.

ELECTRICITY alone is full of vast possibilities. So, too, is the tremendous fast-growing field of RADIO and TELEVISION. Now our 30 WEEKS' COMBINATION COURSE puts you in line for the opportunities in BOTH of these fields and also in-cludes training in the fields of INDUSTRIAL ELEC-TRONICS and ELECTRIC REFRIGERATION.

Training in these fields makes an excellent combi-nation as it opens up many additional opportunities to graduates for better jobs and advancement in the years ahead.

So I want to outline the features of our 30 WEEKS' COMBINATION ELECTRICAL, RADIO and REFRIGERATION COURSE.

In taking our 30 weeks' Combination Electrical, Radio and Refrigeration Course, you would first take the Departments in the Practical Radio-Television Course in their regular order as outlined in

#### INCREASE YOUR OPPORTUNITIES IF YOU START A BUSINESS OF YOUR OWN

MANY Coyne Graduates are independent in a business of their own, and I can think of no

combination field that offers a fellow greater oppor-tunities for establishing a business of his own. This combination training in Electricity and Radio-Television plus Electric Refrigeration pre-pares a fellow to handle a much greater variety of service jobs and, of course, the more types of jobs a fellow can handle in his shop, the greater his volume of business will be and the greater will be his opportunities for increasing his income.

With a background of the combination all-around training offered here at Coyne, plus the helpful

#### TIME REQUIRED FOR

NOW in taking our Combination Course, it is not necessary to spend double time in school.

In the first Department of either Course you cover the principles of Electricity, Wiring. Testing and many other things that apply to both Electricity and Radio.

The added training in Refrigeration is the same for either the Electrical or Radio-Television Course. SO THE TOTAL TIME YOU WOULD NEED TO SPEND IN SCHOOL TO TAKE OUR COMBINA-

#### SELECT THE COURSE THAT BEST MEETS YOUR NEEDS THEN SEND YOUR ADVANCE ENROLLMENT APPLICATION

A FTER you have gone over our Catalog and the information in this Circular, I want you to compare the different courses and consider them as they apply to you and your plans for the future— then decide which course meets your needs the best. If you decide that the Practical TECHNICIANS COURSE in RADIO and TELEVISION meets your needs the best, then fill out the enclosed Advance Enrollment Application for that course. Or, if you feel that the Practical COMBINATION

RADIO-TELEVISION and ELECTRICAL COURSE is the one that will best prepare you for the future you have planned for yourself, then send in your Application for that course.

ON THE OTHER HAND, if you decide that the shorter, practical Radio-Television course is the one you want, then send in your Advance Enrollment Application for that course.

Whatever your decision is, I assure you a hearty welcome awaits you as a student here at Coyne.

The tuition rates for all of the above courses are shown on the Advance Enrollment Application. If you are short of funds, you can take advantage of our "Pay After Graduation" Plan, which is explained on Page 4 of the Advance Enrollment Application enclosed.

our Radio-Television Catalog. After completing all of the Radio and Television Departments, you would then take the Departments in our Practical Electrical Course in their regular order. Then you would take our added training in Electric Refrigeration. After satisfactorily completing the training in the Radio-Television Departments and the Electrical Departments and the added training in Electric Refrigeration, you would then be entitled to our Combination Electrical, Radio-Television and Re-frigeration Course Diploma.

You can, of course, eliminate the three weeks' training in Electric Refrigeration. If you do this, you would then be entitled to our Combination Radio-Television and Electrical Course Diploma. IF YOU HAVEN'T GOTTEN OUR ELECTRI-

CAL CATALOG WE'LL BE GLAD TO SEND IT TO YOU.

Graduate Service rendered by the School, many graduates have been able to establish themselves in a successful business of their own, handling a wide variety of service jobs in the installation, maintenance and repair of such equipment as Motors, Wiring for Light and Power, Home Appliances, Radios, Sound and Public Address Equipment, Television and F.M. Sets, Refrigerators, Industrial Electronics Equipment and other types of equipment in the fields of ELECTRICITY-RADIO-TELEVISION - INDUSTRIAL ELECTRONICS and ELECTRIC REFRIGERATION.

COMBINATION COURSE TION ELECTRICAL, RADIO-TELEVISION AND

**REFRIGERATION COURSE WOULD BE 30** WEEKS ALL TOGETHER. This would include all of our training in Electricity, Radio-Television, Industrial Electronics and Refrigeration.

In taking our COMBINATION ELECTRICAL AND RADIO-TELEVISION COURSE, not including the training in Electric Refrigeration, the total time you would spend in school would be 27 weeks.

If you are a VETERAN entitled to training under the G.I. Bill, you can, of course, get this training at no cost to you for tuition and with subsistence allowance paid while attending school.

Now, even though you may not be able to start your training right away, you can reserve your pres-ent tuition rates and reserve your Starting Date simply by filling out the ADVANCE ENROLLMENT APPLICATION BLANK, indicating the course you want and mailing it to me with your Advance Enrollment Fee of \$25.00. This \$25.00 will be credited on your tuition on the Cash Plan or the "Pay After Graduation" Plan. If you enroll on the G.I. Bill, this \$25.00 will be available for your personal use.

As soon as your Advance Enrollment Fee of \$25.00 is received, all the features of our present offer and all the features outlined in our catalog and other literature will be reserved for you until you can come to school.

Our Money Back Agreement applies to this Advance Enrollment Fee, of course, so if for any reason whatsoever, you do not come to school and complete your enrollment, your Advance Enrollment Fee would be returned to you.



# *let's visit the COYNE SHOPS* ••• Department by Department

THE RADIO-TELEVISION training here at Coyne is di-vided up into five departments: 1. Elementary Principles and Circuits; 2. Basic Radio; 3. Radio Construction and Repair; 4. Radio Service; 5. Television and F.M. Service. Below and on the next 14 pages I give you a brief descrip-tion of the training covered in each department and show you many pictures taken in our shops so you will understand how practical and thorough Coyne training is whether you take our PRACTICAL RADIO-TELEVISION COURSE of 15 weeks or our PRACTICAL RADIO-TELEVISION TECHNICIANS COURSE of 30 weeks. On page 18 you'll find a description of these two courses and also some practical suggestions to help you decide which course best meets your needs.

NOW, AS YOU GO THROUGH THE FOLLOWING PAGES, I WANT YOU TO PAY PARTICULAR ATTENTION TO HOW OUR STUDENTS ARE GETTING THEIR TRAINING. As you go through these different departments, I'm sure you can't help but agree with me when I saythe way to get a practical training in Radio-Television is the way it is taught at Coyne.

NOTE: Each illustration of the shops is from an actual photograph taken at Coyne.

### FIRST...You start with Elementary Principles and Circuits (even this Training is Practical)



• The students in this picture are receiving instruction and practice on Wire Splicing, Soldering, and Taping, which is an important founda-tion for Radio Construction and Repair jobs which they will do later.

HE RADIO and TELEVISION TRAINING here at COYNE is designed to give you a practical knowledge of the things that are important to your future success whether it will be in Servicing Radios, Sound Equipment, Television, Public Address Equipment, or other Electronic Equipment.

First, we give you an understanding of the principles of Electricity, Magnetism, Conductors, Insulators, Units, Symbols, Electrical Laws, etc., and how they apply to Radio.

and how they apply to Kadlo. The student then covers such subjects as fundamentals of electricity, magnetism, static and dynamic electricity, conductors and insulators, units and symbols, Ohm's Law, Watt's Law, Kirchoff's Laws, series and parallel circuits, permanent magnets, electro-magnetism, electro-magnetic induction, dry cells and storage batteries, relays, rheostats, switches, buzzers, bells, lamps, annunciators, principles of generators, transformers, meters and telephones, blue print reading and circuit tracing, wire splicing and soldering. Instructors explain the construction, operating prin-ciples, circuit diagrams and test procedure of the various electrical devices during class discussions in which fre-quent use is made of demonstrating equipment and visual

quent use is made of demonstrating equipment and visual training aid films.



Here is a general view of part of our circuit equipment. You see students wiring up and testing burglar alarm, door bell and signal systems. This type of training helps you to understand Radio circuits and testing in following departments and shows you how relays and telephone parts apply to Radio.



Students testing telephone units and low voltage generator, proving and applying their knowledge on actual equipment. This is what makes your training at Coyne so practical.

<sup>(</sup>Please turn to next page)

# *Next,* You Receive Thorough Training in BASIC RADIO and Electronics.



INTERESTING LECTURES WITH BLACKBOARD DRAWINGS AND EQUIPMENT DEMONSTRATIONS INTRODUCE YOU TO THE FASCINATING MYSTERIES OF RADIO. While Coyne training is practical shop training, it does not mean that you do not get necessary theory. There are laws and principles of Radio that you must know and this is given by Lectures, Blackboard Drawings, Equipment Demonstrations, Slide Films, and Sound Movies. The Photo above was taken in one of our several Lecture Rooms.

The picture below shows an instructor explaining the various parts that go to make up a Radio Parts Kit that is issued to each pair of students as they enter the Basic Radio Department.



#### <sup>(Continued)</sup> Students Work On Actual Equipment

T HE SHOP WORK is organized progressively with the student beginning with simple jobs of making various types of wire splices, soldering and wiring up a variety of devices such as doorbells, buzzers, lamps and switches.

As the student progresses he is introduced to advanced jobs such as the circuit wiring of relays for remote control of annunciator systems, railway safety devices, burglar alarms, etc. The student performs his shop jobs with the guidance of job procedure and diagram sheets.

This lays a very important foundation for all of your Radio training, for as you know, in order to understand Radio and other Electronic equipment and to do Radio and Television work, you must have an understanding of Electrical Laws and Principles and how they apply to Radio.

Even the training here in the first department is practical. Necessary theory is made clear to the student in practical and understandable lectures and THE STUDENT THEN PROVES THE LAWS AND PRINCIPLES HE HAS LEARNED BY PRACTI-CAL WORK ON THE EQUIPMENT AND APPA-RATUS ITSELF, JUST AS PICTURED ON PAGE 3.

#### You Start With Basic Radio-Television Fundamentals

A FTER you have finished your elementary training in the first department, and both you and your instructors feel that you understand it thoroughly and can pass the examinations, you come to the BASIC RA-DIO DEPARTMENT.

Here you learn the fundamental principles of Radio Reception and Transmission. The Instructor demonstrates various parts that go to make up a Radio Receiver such as the different types of Tubes, Resistors, Condensers, Coils, Resonant Circuits, Transformers, Speakers, Rheostats, Volume Controls, and explains their construction, action and application. In this way you are made thoroughly familiar with the various RADIO parts and their functions so YOU WILL BE READY TO START BUILDING RADIO EQUIPMENT.

THE SUBJECTS COVERED INCLUDE: Construction, operation, circuit tracing, characteristics and practical use of universal Test Meters, Vacuum Tubes, Electric Soldering Irons, Radio Transformers, Capacitors, Power Supplies and Audio Oscillators. Principles of A.C., pulsating D.C., electron flow, frequency, cycle, and their application to radio circuits.

PRINCIPLES OF SOUND and its conversion into electricity impulses. Methods of obtaining power for receivers.

PRINCIPLES OF RADIO TRANSMISSION and PRINCIPLES OF RADIO RECEPTION. Purpose of the antenna. The means of tuning a receiver. The function of the head-set and speaker.

#### This Work, Too, Is Practical

A COMPLETE kit of parts is issued to you and after explanation of important principles by your Instructor, you wire up and put into operation an A.C.-D.C. power supply of the type used in table model radios, A.C. Power supply used in Console Radios, Audio Oscillators, Audio Amplifiers and other Electronic equipment.

[4]



#### Now You're Ready To Work With Radio Test Instruments

YOU are also issued a Multi-meter of a type used in Radio Service Shops and you get instruction on the care, application, circuit and technique of reading this meter.

Resistance test and voltage analysis are made by the student on all units that he builds. The student breaks down a tube and identifies all the elements. He also plots characteristic curves from tests made on tubes in the shop.

ALL OF THE NECESSARY PARTS AND TOOLS THAT YOU NEED IN DOING SHOP JOBS ARE FURNISHED BY THE SCHOOL AT NO EXTRA CHARGE.

The shop jobs are laid out and explained according to schematic diagrams so you learn to READ BLUE PRINTS OR DIAGRAMS and how to wire systems from different plans and how to make various tests on this equipment.

The pictures on page 4 and page 5 show you COYNE students working in our BASIC RADIO DEPARTMENT. These pictures taken in our Radio and Television Shops illustrate how PRACTICAL COYNE "LEARN-BY-DOING" TRAINING IS. A step by step procedure is employed throughout the entire course. Each job is checked by an Instructor before you go to the next job. In this way you become familiar with each step as you go along so that almost before you know it you are doing work that even ten days before may have been a mystery to you.

When you complete your training in our BASIC RADIO DEPARTMENT, you are then ready to apply this knowledge in lay out, building, connecting up, and testing various types of Radio equipment in the NEXT DEPARTMENT which is our RADIO CONSTRUCTION AND REPAIR DEPART-MENT.



The modern Vacuum Tube has been rightly called "THE MARVEL OF OUR AGE". Greet industries have been built around the developments of the Vacuum Tube. The greatest and best known of these industries include the opportunity fields of Radia, Sound and Television.

With this sound foundation, you are now ready to step into one of the most fascinating Parts of our Training.. RADIO CONSTRUCTION



# *Now*. You're Ready for Shop Training in RADIO CONSTRUCTION and Repair



### Experienced, Helpful Instructors Show You Just What to Do

**O**NE of the outstanding features of COYNE SHOP TRAINING is the individual assistance given to each student by our instructors. You will find that STU-DENTS AND INSTRUCTORS ARE REAL FRIENDS HERE AT COYNE and they work with each other, side by side, throughout the course of training. COYNE instructors are selected, not only for their superior knowledge and experience, but also, because in addition, they possess the qualities of patience, kindliness and sympathetic consideration for all students.

Because of this personal contact and friendly feeling, every instructor, within a

short time, has an intimate knowledge of his students and is therefore better able to instruct them so they can get the most from their training in the shortest possible time.

Now before you entered the RADIO CONSTRUCTION AND REPAIR DEPART-MENT, you were given the fundamental training and instruction needed to understand the purpose and application of various radio parts in preparation for the actual building of Radio sets which you do in this Department.

HERE YOU BUILD UP A COMPLETE T.R.F. RADIO RECEIVER as well as a COMPLETE SUPERHETERODYNE RE- CEIVER. These jobs are pictured and described in detail on the opposite page. The more simple rules and methods that you learned and applied in the preceding department were stepping stones to these interesting and highly important jobs. This work, in turn, enables you to work out other more complicated jobs. It also helps you to understand the purpose of various tests that you will perform in the more advanced departments.

That is why we have gone to so much trouble and expense in making this work so interesting and getting such complete equipment for you to work on.

### IN THIS DEPARTMENT... You Actually Build 2 RADIOS, Step-By-Step



The following series of 5 pictures show various steps in the procedure of building a complete T.R.F. Receiver. Be sure to read the captions under each picture as they describe the progress made in each photo.



The two students pictured above are beginning to build a T.R.F. Receiver. They have checked the Circuit diagram and they are now soldering the first wire.



Here the power supply has been completed and the students are making resistence and voltage tests. Before proceeding, an instructor checks the work and gives them a chance to ask questions.



In this photo about half the wiring is complete. Notice that a large number of the parts have been removed from the board on the table and have now been soldered into their proper places.



The next series of 5 pictures show various steps in the wiring of a complete Superheterodyne Radio Receiver. These pictures illustrate the COYNE practical 'LEARN-BY-DOING' training method designed to prepare the student for actual work out on the job.



The picture above shows the Superheterodyne Receiver completely wired and the students are making final tests. These tests give the student practice in the proper use of Test Instruments.



This picture shows the wiring of the T.R.F. Receiver completed. The students are now preparing to install the tubes and begin testing the receiver for actual operation.



In the picture above the students are preparing the first steps in wiring up a Superheterodyne receiver. Wire, solder and parts are at hand and the next step will be soldering these parts in place.



Here the students are aligning and making further tests on their Receiver. The methods taught in aligning and testing are universal and can be applied on all makes of Superheterodyne Receivers.



Here the finished set is being put into operation. Final adjustments are made to get the best performance from the receiver. Standard test instruments are used in making these tests and adjustments.



In this picture the wiring of the set is well along. Several tests have already been made as the circuit is wired one stage at a time, and it will soon be ready for final testing.



Here the students are detecting and correcting difficulties put into the receiver by the Instructor. This procedure is repeated several times to give the students experience in Trouble Shooting and Repair.

# and REPAIR

#### (Continued)

IN THE CONSTRUCTION AND REPAIR DEPARTMENT THE STUDENT CON-TINUES TO WORK WITH VACUUM TUBES, by adding to the metal chassis previously used in Basic Radio, other vacuum tube circuits, such as A.F., R.F. and I.F. amplifiers, demodulators, R.F. oscillator and mixer tubes. He wires up one circuit at a time and makes resistance, voltage analysis and operation tests which the instructor must check before the student can wire the next circuit.

USING THE PROCEDURE GIVEN ABOVE, THE STUDENT BUILDS A COM-PLETE T.R.F. RECEIVER, then tests and operates it. He experiments with the receiver by substituting incorrect values of resistors and capacitors for the correct ones and then by testing and operating the students learn the importance of having correct parts in the receiver.

A COMPLETE SUPERHETERODYNE RECEIVER IS WIRED by the student using the "one stage at a time—testing" procedure. Both receivers are wired on a metal chassis and special emphasis is placed on the proper location and layout of all parts and circuit wires. Its construction is similar to and uses the same circuit as used in a large number of commercial radios. The student gains practical experience by aligning and trouble shooting these receivers. The construction of these sets is further pictured and described on page 7.

Troubles are placed in the Superhet receiver and trouble shooting experience is obtained when the student makes exhaustive resistance tests and voltage tests. Signal generators and tube testers similar to those used in Radio Service Shops are used extensively by the student. Special emphasis is placed on the point to point method of trouble shooting with a volt-ohm milli-ammeter.

Other subjects covered are: automatic volume control, tone controls, push-pull audio amplification, phase inversion, high fidelity I.F. amplifiers; resistance, transformer and impedance coupled audio amplifiers, circuit tracing, etc.

#### There Is No Substitute for Practical Shop Training

C OYNE has always believed that a fellow can learn a thing much quicker and better if he can actually SEE, HANDLE,





AND OPERATE THE EQUIPMENT HIM-SELF.

We know that a fellow wants the training for one reason—to get a job—a job that has a future.

We know too, that a fellow wants to prepare for that job in the shortest possible time.

That is why we have developed a streamlined, highly practical course of training and designed our training methods around the idea that a fellow who wants a training doesn't want a lot of frills, but wants a course of training that can fit him as quickly as possible for his place in the industry for which he trains.

Here at COYNE our purpose is to give you such a training and give it to you in such a way that you can grasp and remember.

They say a picture is worth a thousand words. If this is true, then doing the actual job is worth even more.

That is why we combine necessary theory given by practical lectures, film slides, blackboard diagrams, and equipment demonstrations with "LEARN-BY-DOING" training.

I am sure you must admit this method of training—BY EYE, EAR, AND HAND— IS THE MODERN AND MOST EFFICIENT WAY TO GET YOUR TRAINING.

#### Now You Are Ready For Radio Servicing

T HE training you get and the practical jobs you do in this department in actually building your own Radio Receiving Sets and in Testing and Trouble Shooting on the sets you build prepares you for the work in the next department which is the most important branch of the entire Radio field, which is RADIO SERVICING. Before you reach this department you have already learned to shoot trouble by the "Point to Point" system. You have had actual practice in testing Tubes, Capacitors, Transformers, Resistors, Power Supply Units, Filters, and other parts of Radio Receiving Sets with modern Test Instruments.

# *Then* You Move on to the Vital Field of **RADIO SERVICING**

### Including

**TESTING & TROUBLE SHOOTING AUTO RADIO SERVICING** SOUND INSTALLATION **PUBLIC ADDRESS SYSTEMS INTERCOMMUNICATION SYSTEMS AIRPLANE & MARINE RADIOS OPERATING YOUR OWN SHOP** 



factory **Radios** from our stockroom on which they will do certain jobs and then exchange for other types of sets.



#### This Is Where Your "Learn-By-Doing" Training **Really Pays Off**

N THE RADIO SERVICE DEPARTMENT you begin to do the same kind of jobs that pay good money out in the field.

You get practice in handling Modern Analyzers, Vacuum Tube Voltmeters, Output Meters, Signal Generators, Signal Tracers, Oscilloscopes and other up-to-date Test Equipment. You'll see some of this equipment in the picture at the bottom of page 11 which shows students working with these instruments. You make complete ANALYSIS CHARTS on many types of Receiving Sets. You make VOLTAGE AND RESISTANCE ANALYSIS TESTS and familiarize yourself with SIGNAL TRACING and other modern SHORT CUT METHODS OF FAULT LOCA-TION IN RADIO EQUIPMENT.

The picture to the left is a general view of our Radio Servicing Department showing Coyne Students testing, aligning and repairing various types of Home Radios. Each student works on various different types of Radio.

[9]

# *More Views* in our **RADIO SERVICING DEPT**. You Do <u>Real</u> Trouble Shooting with <u>Real</u> Testing Equipment, Just Like You'll Use Later On the Job



These Coyne students are testing Auto Radios. This branch of Radio service offers excellent opportunities for profit to the trained Radio service man.



In this picture you see a group of Coyne students getting instruction on Airplane Radios. Almost all of the larger planes today are equipped with Radios.

IN THE RADIO SERVICE DEPARTMENT you devote your shop time to Trouble Shooting and Servicing factory made receivers with modern test instruments identical to those that you will use or work on if you are operating your own shop, doing Radio Service work for an employer, or work in a factory doing phasing, line testing, or repairing factory rejects.

A stock of various types of factory built receivers is maintained in our stockroom. Instructors place practical troubles in these receivers and you get actual experience in the technique of Radio Servicing by servicing these sets.

#### YOU LEARN TROUBLE SHOOTING STEP-BY-STEP

BEFORE entering the Radio Service Department the student has been taught how to trouble shoot with the "point to point" system using a volt-ohm milli-ammeter. In this department he learns to service various types of commercial receivers using the latest up-to-date testing instruments.

#### WORK ON MANY HOME TYPE RADIO RECEIVERS

H ERE in our Radio Service Department you will have an opportunity to work on many popular types of A.C. Superheterodyne sets and Tuned Radio Frequency receivers. You get actual practice in testing Tubes, Condensers, Transformers, Resistors, Speakers, Power Supply Units, Filters and all parts of RADIO RECEIVING SETS with Modern Test Instruments. This is the type of practical shop training you get in the shops of COYNE to prepare you for a good job in Building, Testing, Servicing, Aligning, Adjusting and Repairing Radio Receivers and other Electronic Equipment.

#### AUTOMOBILE RADIO INSTALLATION AND SERVICE

YOU get instruction on popular types of AUTOMOBILE RADIOS including instruction on INSTALLATION, INTER-FERENCE ELIMINATION, NOISE SUP-PRESSION, SERVICING, TESTING AND REPAIRING, construction, power supplies, vibrators, operation, servicing and maintenance, installation, auto antennae and elimination of ignition interference.





#### SOUND WORK OFFERS OPPORTUNITY

N EW developments are constantly increasing the need for trained Sound men. Many people do not realize that the sound equipment and other up-to-date apparatus in our vast Motion Picture Studios, in Ball Parks, in most places of public assembly, and in thousands of Theatres throughout the country are examples of applied Electronics, and that many thousands of trained Sound Technicians are required to manufacture, assemble, test, install and service this interesting equipment.

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Your training on SOUND AND PUBLIC ADDRESS SYSTEMS includes a study of the nature and characteristics of sound, quality, frequency, volume, the decibel, principles of acoustics, time of reverberation, acoustical feed-back, acoustical treatments.

#### PUBLIC ADDRESS A PROFITABLE FIELD

A NOTHER profitable field for trained men which is closely related to sound work, is PUBLIC ADDRESS and SOUND RECORD-ING. Powerful Public Address amplifiers are used in most all baseball parks, football fields, race tracks, fairs, skating rinks, parks, political gatherings, clubs, schools, churches, stores, factories, hotels, bathing beaches, resorts, amusement halls and other public places.

That's why we include instruction on MICROPHONES, TYPES, CHARACTER-ISTICS, advantages of various types, input circuits including various types of attenuators, channel and main amplifiers, application of class "A," "B" and "C" amplifiers, P.A. speakers, installations, impedance matching, speaker phasing and baffle construction, phono-pickups, phono-oscillators and record changers.

(Continued on next page)

• This picture shows a group of Coyne Students getting instruction on Dynamotors. This equipment is commonly used to furnish the high voltages necessary to operate Mobile Radios. Notice the personal attention these students are getting from the instructor. You will notice, too, that there is plenty of equipment at hand and test equipment for the students to use. This is the type of practical shop training that gives the student confidence in his ability to do the job.



• These students are getting practice in the use of Modern Test Instruments. Instructors place trouble in Receivers that are similar to the type of trouble ordinarily found by the Radio Service Man in the field. These receivers are then serviced by the students using Modern Test Instruments to locate the defect.

# RADIO SERVICING DE



Im the picture above the Instructor is demonstrating Sound on Disc Recording Equipment to a group of students. The voice of one of the students is being recorded on the disc.



In the picture above you see Coyne students getting a demonstration on Automatic Record Changers. This is one of the most popular instruments in the home today both in combination with a Radio or Television Receiving set and as a separate instrument.

#### RECORD CHANGERS AND INTER-COMMUNICATION SYSTEMS

Here at COYNE you will get instruction on and demonstration of Automatic Record Changers, Phono Oscillators and Audio Amplifiers of the type now widely used in Radio-Phonograph Combinations and in the Record Players found in many places of amusement. You will learn how to connect Phonograph Pickups and microphones into the Audio section of the various types of Radio receivers in order to convert them to Announcement and Record Playing Applications.

#### MARINE AND AIRCRAFT RADIO

MARINE, POLICE AND AIRCRAFT RADIO also offers many opportunities for installing, servicing, testing and repairing Radio Receivers in motor boats, yachts, etc.

Your training includes instruction on AIRPLANE AND MARINE TYPE RADIOS, transmitter principles, short wave features, airplane microphones and modulators; receivers, power supplies, dynamotors, trouble shooting and servicing procedure.

(Continued on next page)



Here you see an Instructor giving instruction and demonstration on Public Address Equipment. This profitable branch of the Radio field offers many opportunities.



#### TRANSMITTERS

In this Department you also get instruction on the construction and purposes of the different component stages of Transmitters, the combination of stages needed for different applications, power output, frequency and type of modulation. Information is also given on how to make checks to see that a Transmitter is operating correctly as well as information on general operating maintenance of Transmitters.

#### YOU WORK WITH MODERN TEST INSTRUMENTS

One of the most important features of Coyne practical training is the instruction given students on the operation and use of modern test instruments in testing, checking and trouble shooting on Radio Receivers and other Radio equipment.

You learn how to operate and use Cathode Ray Oscilloscopes, Rider's Chanalysts, Vacuum Tube Voltmeters, Signal Generators, Tube Testers, Universal Test Meter, Philco Dynamic Signal Tracer and other upto-date signal tracing instruments.

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SOME OF THE VARIOUS SUBJECTS COVERED IN YOUR TRAINING ARE: Push-button tuning—Mechanical and capacitor types, remote control and automatic tuning, band selection, aligning procedure, analysis of various present day schematic diagrams and circuit tracing procedure. Interference—natural and man-made static, erection of antennae.

#### OWN AND OPERATE YOUR OWN RADIO SHOP

Your training also includes INSTRUC-TIONS ON OPERATING A RADIO SERV-ICING BUSINESS, business hints, location of store, required instruments and tools and how to select, stock requirements, advertising and business hints.

As one of the various Special Services offered you as a student of Coyne, we give you, in addition to your practical Shop training, instruction in modern business methods and salesmanship. This part of our training will be of great help to you.

We cover such subjects as how to keep records, selecting a location, how to attract customers, rent and other overhead expense, how much you should charge for different types of jobs, and many other important matters.



The above photo shows Coyne students getting instruction on Public Address Amplifiers and Reproducers and other types of sound equipment. This interesting and profitable branch of the Radio field offers excellent opportunities to trained men.



In the picture above, you see a Coyne instructor explaining and demonstrating on an Inter-Communication system. This is a branch of Electronics that is becoming more and more popular. Thousands of them are already in use in business concerns and offices of various different kinds and the demand for this equipment is constantly increasing.



#### YOU ARE NOW READY FOR THE TELE-VISION AND FM SERVICE DEPARTMENT

When you have satisfactorily completed this work already described, you will have had training in BUILDING, TESTING, RE-PAIRING, ALIGNING, ADJUSTING AND SERVICING RADIO RECEIVERS AND HAVE ALSO LAID THE GROUND WORK for the more advanced WORK TO FOLLOW ON OTHER IMPORTANT ELECTRONICS EQUIPMENT, INCLUDING TELEVISION equipment and apparatus that is necessary for ALL-AROUND RADIO TRAINING. THIS PART OF OUR COURSE IS EX-PLAINED ON PAGES 14, 15, 16 AND 17.

# Your final weeks in Our Radio Course are Spent in Our TELEVISION and F.M. SERVICE DEPARTMENT

OW you are ready to enter one of the 1 most interesting Departments of the entire course, equipped with some of the most fascinating Electronic Equipment you have ever seen. Here you get instruction on many of the newest applications of Electronics including F.M. (Frequency Modulation) and TELEVISION. NEW DEVELOPMENTS AND IMPROVEMENTS ARE CONSTANT-LY INCREASING THE APPLICATIONS OF ELECTRONICS, PROVIDING NEW AND ADDITIONAL **OPPORTUNITIES** FOR TRAINED MEN.

#### **Television Is Here And it's Booming**

After many years of waiting Television has entered a boom period. Radio Manufacturers are producing Television sets as fast as it is possible for them to do so, and hundreds of thousands of Television sets are already in daily use. Research organizations predict that over 25 million sets will be in use within the next 10 years.

#### Big Opportunities Ahead For Trained Radio-Television Men

This big growing boom in Television offers thousands and thousands of new op-

portunities for men and young men who will put forth the effort necessary to train themselves to qualify for these opportunities. There aren't nearly enough qualified men to go around.

Even with the many warnings that we had, that Television would soon be here, when it did "break suddenly," manufacturers, distributors, dealers and service organizations were all caught short and have been scurrying around ever since in an effort to find enough trained Radio-Television men to carry on operations.

#### Your Big Chance To Get In On The Ground Floor

This is Radio of the 1920's all over again, only on a much larger and more amazing scale.

Below and to the left you see a general view of the television and F.M. Service Department. Notice the various makes of Television Receivers. The Photo to the right shows two students getting Television Receivers from the Television Department stockroom on which they will make various tests and learn service procedures. The days when a radio set could be repaired merely by changing a tube or a condenser are past and gone. Today's Radio and Television receivers are precision-built instruments that call for expert installation and servicing. With the wide variety of receivers on the market, including the many Radio-Phonograph combinations, Automatic Record changers, etc., a fellow needs training in Radio combined with Television—that's the kind of training you get at Coyne.

#### **Radio and Television Go Together**

Television is broadcast along with sound and Television sets on the market are combined with an F.M. Receiving Set or both an F.M. set and a regular Radio or A.M. Receiving set and sometimes also with Record changing equipment.

#### All-Around Radio-Television Training Needed

That's why you need an ALL-AROUND TRAINING IN RADIO AND TELEVISION to cash in on these opportunities that are opening up for trained men. TO HAVE TRAIN-ING IN RADIO ALONE IS NOT ENOUGH.







Here you see students getting personal instruction in testing and trouble shooting on a modern Frequency Modulation Radio Receiver. This type of all around training prepares students for the better type of opportunities in the expanding Radio-Television F.M. field.



This photo shows you one of the newest, most modern and complete testing panels in use today. This is the same type of testing equipment used in the most modern up-to-date service shops. Students learn how to operate and use this testing panel and make various tests on Television and F.M. Receivers under the supervision of experienced instructors.

#### F.M. Is The Voice Of Television

Television Receivers are usually combined with an F.M. Receiving set to bring in the voice. F.M. Receivers are also manufactured separately and production is already numbered in the millions. So you can see why the all-around Radio-Television man must have training in F.M.

Your training in FREQUENCY MODULATION apparatus and equipment includes comparison of frequency and amplitude modulation, methods of frequency modulation, advantages of F-M, F-M receiver, circuit analysis limiter and discriminator action, F-M receiver alignment and servicing procedure, translators and F-M adaptors, F-M antenna systems.

Notice the students aligning F-M sets in the photo at the top of page 15, and in the picture at the top of page 17 as well as in the picture at the bottom of that page you see students testing and trouble shooting on Frequency Modulation sets. This is the kind of "learnby-doing" training that gives men confidence that they can qualify for these opportunities after they graduate.

#### Television, The "Eyes" Of Radio

Television, the amazing development that can bring to your vision spot happenings that occur hundreds of miles away. **Television**, which was promised to us for years and which "broke" with a boom that is expected to progress into a billion dollar industry. Television, that offers thousands of opportunities to men who will qualify by training for these great opportunities.

Here in the Coyne shops your training on TELE-VISION includes principles of television transmission and reception. Study of image analysis, photo electric effect, and iconoscope, orthicon, television channel, video carrier and video frequencies. Scanning techniques, television receiver analysis, including wideband tuning circuits, separation of video and audio signals, demodulators, synchronizing pulses, clippers and separators, also the multivibrator and clocking type deflection oscillators.

(Continued on page 17)



# **TELEVISION** and **F.M. SERVICE**



The two views above show Coyne students getting real practical experience on various types of Television equipment. These students are working with modern test instruments and modern Tele-

vision equipment. Note the large 20-inch Cathode Ray tube that has been removed from the Dumont Television Set. This is one of the largest tubes of this type available.



This is another general view of our Television and F.M. Service Department. Here you see students getting instructions on the principles of television construction. Notice the students working right on the Television Receiving sets. This type of training on the latest type television receivers gives the student confidence in his ability to step out into the Radio-Television field after he graduates.



#### (Continued from page 15)

The study of video amplifier circuits, D.C. reinsertion, kinescope tubes and image transmission features. Aerial design and construction. Instructions on transmission line matching between the aerial and the receiver. Measurements to determine the receiver sensitivity and measurements of the strength of the signal picked up by the antenna. Trouble shooting by aural and visual means. Adjustment of receiver operational controls, vertical centering and horizontal centering. Troubles in television receivers and their effect on the received image.

#### **Television Installation, Testing** And Trouble Shooting

An all-around Radio-Television man must have more than just training in radio. For that reason, here at Coyne you get the study of television receiver installation problems, location of receiver and position of antenna system, test instruments required to service television receivers, vacuum tube voltmeter, sweep signal generators, wide range oscilloscope, high frequency signal generators. These instruments and a large number of television receivers are available for servicing purposes.

#### You Work With Modern **Television Test Instruments**

Just as a student learns to understand and use modern A.M. and F.M. test instruments for Radio he must also learn to use Television test instruments, and to test, check and service television receivers.

You learn how to use an OSCILLO-SCOPE; you get construction and operating principles of a cathode ray tube, function of the various elements, constructional features of the high voltage power supply, precautions required to safeguard against high voltage shock, operating principles of the vertical and horizontal sweep circuits, application of the oscilloscope as a test instrument for alignment, trouble shooting and distortion checking; emphasis on the similarity between an oscilloscope and television equipment.





Here you see students aligning and testing an F.M. Receiving set under the supervision of an instructor. F.M. service procedure is an important part of Coyne Training.



The students that you see in the foreground of the Radios of the future are incorporating this feature, so it is important that a Radio Service man be familiar with this equipment.



In the above photo you see an instructor giving personal instruction on the characteristics of a 20" Cathode Ray tube; one of the largest direct view Television tubes in use.

#### **Excellent Opportunities For Men** With A Well-Rounded Radio and Television Training

When you have satisfactorily completed the training in RADIO and TELEVISION that has been described, you will be ready to graduate and apply your training in this fast growing, progressive opportunity field-a field that should continue to offer greater and greater opportunities to the trained man in the years to come.

I AM SURE THAT AFTER READING THIS BOOK AND STUDYING THE PIC-TURES IN IT YOU WILL REALIZE THE MANY ADVANTAGES OF COYNE TRAIN-ING AND REALIZE THAT THE FA-MOUS COYNE "LEARN-BY-DOING" SHOP TRAINING COURSE GIVES YOU THE KIND OF TRAINING YOU NEED FOR A BRIGHT AND SUCCESSFUL FUTURE IN THE GREAT FIELD OF RADIO AND TELEVISION.

# Coyne Offers You 2 Great Courses in RADIO-TELEVISION You Have Your Choice Of PRACTICAL RADIO-TELEVISION TECHNICIANS COURSE OF 30 WEEKS 2 PRACTICAL RADIO-TELEVISION COURSE OF 15 WEEKS

OYNE offers to men and young men interested in getting into the RADIO and TELEVISION field a choice of two different courses—A PRACTICAL RADIO-TELEVISION TECHNICIANS COURSE of 30 weeks or A PRACTICAL RADIO-TELEVISION COURSE of 15 weeks.

Each of these courses is separate and distinct in itself and does not conflict with the other. They are designed to fill a different need in the industry and are designed to train men for different types of jobs in industry.

For many years Coyne has offered practical shop training in RADIO and TELEVI-SION. Some students want a shorter practical course and others prefer to spend the additional time necessary to cover more of the theory and mathematics involved in the field of RADIO and TELEVISION.

Coyne therefore offers a shorter practical course of 15 weeks as well as a practical TECHNICIANS COURSE of 30 weeks in RADIO and TELEVISION.

The shorter practical course is specially

laid out for the fellow who can spend a minimum amount of time in getting training and is designed to prepare men and young men quickly for practical jobs involving the installation, maintenance, repair and operation of RADIO, TELEVISION and other ELECTRONIC EQUIPMENT.

Our TECHNICIANS COURSE is designed to meet the needs of the student who has had two years of High School or the equivalent, and can spend approximately one school year (30 weeks) in getting his training and who wishes to go farther into the theory and technical angles involved in these same fields.

The TECHNICIANS COURSE includes the material given in the shorter, practical course. It covers the same general branches of RADIO and TELEVISION. However, it also includes additional advanced theory, applied mathematics and fundamental engineering principles involved in the installation, maintenance and operation of RADIO, TELEVISION, and other ELECTRONIC EQUIPMENT.

#### OPPORTUNITIES IN RADIO AND TELEVISION FOR TRAINED PRACTICAL MEN AND TRAINED TECHNICIANS

One of the outstanding advantages of the RADIO-TELEVISION field is the fact that it offers many different types of jobs, giving the man with training a chance to choose the type of job that meets his qualifications and THE TYPE OF JOB HE LIKES BEST.

Many of these jobs are of a PRAC-TICAL NATURE and call for men with PRACTICAL TRAINING. Coyne has trained thousands of men and young men for good jobs in these industries or a business of their own through the practical course offered here in the shops of Coyne for many years.

Other men take to the more technical applications of RADIO-TELEVISION—these are the Practical Technicians and this industry offers a world of opportunities to fellows whose training includes more of the technical angles of work. That is why Coyne offers both a TECH-NICIANS COURSE of training in RADIO-TELEVISION and a shorter, practical course.

Each course is designed to prepare men and young men to qualify for good jobs with a real future in the opportunity field of RA-DIO and TELEVISION and the type of Course he should take depends upon his circumstances and the type of work that he likes best.

#### SCHOOL HOURS

#### Practical Radio-Television Technicians Course (30 Weeks)

The time devoted to class discussions and shop work in our TECHNICIANS COURSE is  $27\frac{1}{2}$  hours per week, which gives the student sufficient time for the study of his notes and home assignments after school hours and also do part-time work if he needs to do that to help you out with his living expenses.

### SELECT THE COURSE THAT THEN SEND YOUR ADVANCE

When you have gone over our entire Catalog, I want you to compare the different courses and consider them as they apply to you and your plans for the future—then decide which course meets your needs the best.

If you decide that the Practical TECHNICIANS COURSE in RADIO and TELEVISION is the one that meets your needs the

#### SCHOOL HOURS

#### Practical Radio-Television Course (15 Weeks)

The time devoted to class discussions and shop work in our shorter PRACTICAL COURSE is 35 hours per week, which gives the student sufficient time after school hours to do part-time work if he needs to do that to help out with his living expenses. School is in session Monday to Friday inclusive on each course.

### AT BEST MEETS YOUR NEEDS NCE ENROLLMENT APPLICATION

best, then fill out the Advance Enrollment Application for that course. ON THE OTHER HAND, if you decide that the shorter, prac-

tical Radio-Television course is the one you want, then send in your Advance Enrollment Application for that course.

Whatever your decision is, I assure you a hearty welcome awaits you as a student here at Coyne.

# Is It Possible to Learn Radio or Television "ON THE JOB"?

#### A STATEMENT BY J. P. HANAN

#### SHOP SUPERINTENDENT

WE have been asked countless times whether it is possible for a fellow to go into a Radio plant or shop and "pick up" a knowledge of Radio or Television while working on the job.

My answer to this question is—Yes, it is possible to get a smattering of Radio under such conditions. In fact, some fellows have tried it, and after a year or two or three, consider themselves to be trained Radio men.

But it is **impossible** to get an "All-Around" knowledge of Radio and its branches, such as sound, Public Address, F.M. and Television on the job. And you need this All-Around grasp of many branches to take advantage of the bigger opportunities in Radio and Television today.

#### Shop Employes Not Trained to Teach Others

Unless you look into it carefully, the idea of getting your Radio training on the job sounds fine. But it has very serious drawbacks.

Let us say you are assigned as a helper to an "old-timer"—a man with years of experience who presumably "knows the ropes." Can he take the time to explain to you the fine points of each job? Naturally not. He's paid for what he does, and it's easier for him merely to turn over the simple tedious part of the work to you and go ahead on his own hook with the parts that require skill.

Moreover, such a man is not trained in teaching other fellows. He doesn't have the patience to go over and over each step until you master it. Then too, if he "learned his trade" several years ago, he is not apt to be posted on the later, more improved methods. But most important—this plan of learning on the job doesn't give you the basic principles, the "why" of the work as well as the "how." Unless you know that, you can't hope to advance very far.

#### Why Limit Your Future?

Here in the great shops of Coyne you have an opportunity to work on a wide range of Radio and Television apparatus and equipment. You get instruction on Sound, Public Address, and other Radio Equipment.

Now compare this to any factory or shop where you might go with the idea of learning Radio on the job. No matter how large a place it might be, it can't give you the variety of training you get here. If it is a factory, you will work only on one brand of Radio receivers, or whatever the manufacturer makes; you won't become familiar with other brands, nor the other types of equipment covered in our course.

Instead of getting "All-Around" training, you will be tied down to a single branch of Radio. You will be in grave danger of landing in a "one-operation" job with little or no chance for advancement. And should you hear of a better opportunity in some other kind of Radio or Television work, you won't have the necessary know-how to take advantage of it.

#### GREAT OPPORTUNITY NOW IN RADIO AND TELEVISION

Whether you are a young man of 16 or as old as 40—whether you have had advanced education or not—whether you have had Radio experience or whether you have not had Radio Experience—YOU CAN SHARE IN THE GREAT PROSPERITY IN THE RADIO AND TELEVISION FIELD.



Mr. Hanan, our Shop Superintendent, has for many years guided the progress of thousands of students, through the Coyne Shops. Mr. Hanan has been with us for over 15 years and is in direct charge of our training shops. His many contacts with industry through these many years, makes him particularly well qualified to answer the question, "Is it possible to learn Radio on the job?"

BUT I WANT TO EMPHASIZE THIS POINT—the man who benefits must have more than just a smattering knowledge of one or two branches. He must be trained in the principles and fundamentals of the field and he must have all-around training and experience with the real RADIO and TELEVI-SION equipment.

HERE AT COYNE YOU GET THIS TRAINING. YOU ARE GIVEN THE TRAINING THAT WILL GIVE YOU WHAT YOU NEED FOR A REAL SUCCESSFUL FUTURE, FULL OF OPPORTUNITIES IN AN INTERESTING AND FASCINATING FIELD.



# Here are the ANSWERS TO YOUR QUESTIONS



MR. S. C. NARLAND

#### 1. Do you employ salesmen?

Absolutely not! We want the story of Coyne to come direct to you from us. If we were to employ salesmen, we would have to pay them a large commission and in the end our students would have to pay more for our training. We prefer to pass this saving on to our students.

#### 2. When is the best time to enroll?

Our school is in session all year. In addition Our school is in session all year. In addition to the individual practical shop training here at Coyne, there are some very important in-structor's lectures and equipment demonstra-tions, including sound motion pictures, which must naturally be given in logical sequence. So every student can start at the beginning of a period and get this training in logical se-quence, WE HAVE A DEFINITE SCHED-ULE OF STARTING DATES. New students are started on scheduled Starting Dates as shown on our Starting Date Schedule.

#### 3. What do you mean when you say "Practical Training"? Does it mean you do not teach theory?

This is a question that is asked very often. When you went to public school, or if you ever enrolled for a correspondence course—practi-cally all of your work was out of text books. Our instruction, however, is on actual Radio equipment and the theory the student needs is given by practical lectures, blackboard sketches and equipment demonstrations. And of course you have your own notes to refer to. COYNE IS PRACTICAL, BOTH IN PRACTICE AND THEORY, and every student is furnished reference text material that will be valuable to him both as a student and after he is a to him both as a student and after he is a graduate.

#### 4. Is your building modern and fireproof?

Absolutely; our building is of modern steel and concrete construction, light on all sides and ventilated. We occupy every foot of the building for our own use.

#### 5. Is your building centrally located?

Only a few minutes from the loop and still right in the heart of the Radio and Television Industry. Chicago is one of the world's great-est Radio and Television centers.

#### 6. What does your course cost?

Prices and terms are given on our Advance Enrollment Application Blank.

#### What are your educational requirements?

For our Practical Radio-Television Course of 15 weeks all we require is that a student have a common school education. To enroll for our Radio-Television Technicians Course of 30 weeks you should have 2 years of High School or the acquivelent or the equivalent.

#### by MR. S. C. NARLAND

#### VICE-PRESIDENT and GENERAL MANAGER

Throughout this book, we have tried to answer every question you would probably want to ask, but we want you to feel free to ask any other questions you may think of. Also, if our explanations are not perfectly clear to you, don't hesitate to write. We want you to thoroughly understand everything about our school.

Sometimes a fellow has a problem that's different from any other fellow's. So, if you have any problem at all, don't hesitate to discuss it; if it's of a confidential nature, it will be kept confidential.

Mr. Narland's many years of experience in the Educational field, of which more than 25 years have been spent here at Coyne, has given him an exceptional understanding of school operations and the needs of students. You will find him ready and willing to answer any questions you may have as a Coyne Student, just as he is now ready and willing to answer any questions you may have in mind before coming to school.

#### 8. Do I need previous experience?

No! Previous experience in Radio is not neces-No! Previous experience in Radio is not neces-sary and many of our students have had little or no previous experience. On the other hand many of our students had been working in Radio—some of them for years—but they found their knowledge of the field was not broad enough—they had a knowledge of cer-tain branches only—they lacked all around training. They have come to Coyne and then with the knowledge they may have bad before training. They have come to Coyne and then with the knowledge they may have had before PLUS Coyne training, they were equipped for

#### 9. What are your age limits?

What are your age limits: We have students as young as 16 years of age. I have always believed the fellow who decides what he wants to do early in life and follows through while he is young, has a big advan-tage. Many of our students are much older and some are as old as 40. These fellows have learned they should have gotten a training when they were younger, but when they real-ized they needed a training they didn't let the fact they needed a training they didn't let the fact they needed a training they didn't let the fact they needed a training they didn't let the fact they needed a training they didn't let the fact they needed a training they didn't let fore. They CAME TO COYNE AND BECAME TRAINED MEN AND MADE GOOD, even though they had wasted time be-fore. It's not how young or how old you are, but what you should know and can do that counts.

#### 10. Do you grant a diploma?

Yes, a diploma is issued to every student upon satisfactory completion of his course.

#### 11. Do you always have the same equipment shown in your catalog?

As a rule, we do, however, some changes may occur in the field of Radio and Television that we believe would be of more advantage to a student. In this case, we occasionally change a particular section of a Department. However, this is never done unless our Staff feels sure it is going to benefit the student more.

#### **12.** Can a student take extra time if he needs it?

Yes, while the majority of our students are able to complete the course in the prescribed time, some students may need to repeat the

work in a department. Naturally, it is impossible for us to tell a student in advance if he might need addition-al time. However, there is no extra tuition charge if a student repeats the work in any of the departments in his course.

#### 13. Will I live near the school?

Most of our rooming houses are within walk-ing distance of the school, although in some cases we are obliged to use rooming houses a mile or so from the school. In any case we will always do our best to get you a room as near the school as possible. Also, the Y.M.C.A. is

within walking distance, and some students live there

#### 14. What should my expenses be?

It is possible for our students to get comfortable living quarters and wholesome meals at a low cost as explained in the literature I am sending you with this catalog. Then, laundry should not run more than a dollar a week or so. All tools are loaned to you at no extra charge.

#### 15. Do you have facilities for students with physical disabilities?

Yes! See page 22 for further information re-garding our facilities for students with phy-sical disabilities.

#### 16. Do you give courses by mail?

NO! ALL COYNE TRAINING is given here in our big training shops in Chicago. We do not teach by mail. Neither do we have you study printed lessons at home for a part of the course and then have you come here for a short period for a smattering of practical work. ALL OF YOUR TRAINING IS GIVEN HERE IN OUR CHICAGO SHOPS.

#### 17. Do your students go to church?

This, of course, is optional with the student. This, of course, is optional with the student. We do not attempt to influence anyone to go but we feel if you go to church at home, you will want to go here. There are churches of many denominations right in our neighborhood and our Welfare Department will see that you get acquainted in the church you care to at-tend.

#### SPECIAL SCHOOL INFORMATION

Reports-Reports of students' progress and conduct will be sent to parents or guardian regularly, if requested.

Clothing-You don't need to dress up. Many of our students wear work slacks, overalls, or an old pair of trousers and a work shirt while they are getting their training.

Money-We supply students with deposit privileges at the office. Money deposited with the School Cashier may be drawn during school banking hours. In coming to school, don't bring cash or a personal check. Get a cashier's check or traveler's check at your bank; or an Express or Post Office money order.

# **COYNE** was One of the First Schools

CHOSEN BY THE U.S. ARMY

# to Train Radio Men for War

**R** ADIO and other Electronic devices played a tremendously important part in winning the War for America. Many, many thousands of trained men were needed to build, operate and service this vital equipment.

Even before the war started our War Department recognized the important part that Radio and other Electronic Devices would play in Modern Warfare, and recognized the need for increased training facilities to meet the demands of an expanding Army. Plans had already been discussed to make use of established Training Facilities to help train the Technicians needed.

Coyne is mighty proud of having had an important part in this great program. Coyne was among the first schools used by our Government to train Radio men for the Armed Forces.

We began working with Army officials more than a year before Pearl Harbor. Our first trainees in uniform started in October, 1940.

Then when War came, the problem that faced the War Department naturally was tremendously increased. One of the many problems that faced our War Department at that time was the problem of building up efficient training Facilities to provide the various branches of the Armed Forces with the vast number of Technicians and Specialists required. Those entrusted with the responsibility of carrying out this training program solved this problem with almost unbelievable speed and efficiency.

The Coyne Staff worked night and day with Army officers and educators, devising training methods that would enable the student to grasp the work more quickly, thus covering the most ground in the time allowed. Our years of experience with the famous Coyne "Learn-by-Doing" method proved to be of very great value.

Our floor space was enlarged by some 20 per cent, and a great deal of new Radio and Electronics equipment was added to our plant. As a result of all this planning and expanding, Coyne was able to train several thousand specialists for the Signal Corps, Engineers, Anti-Aircraft and Army Air Force.

You'll see the benefits of this war-time experience and equipment when you get your training in the Great Shops of Coyne!

To the right and above are two views showing how hundreds of men in uniform were trained in Radio work at Coyne for various branches of the U. S. Army.

The photo shown below was taken of a Military Training Unit while attending our school.





RE you ambitious to go in business for yourself? Do you look forward to owning and operating a shop or store of your own?

You can make no finer start toward reaching this goal than to enroll for Coyne Radio and Television Training NOW.

Radio is a "young" industry. It is still growing and expanding—it has not yet reached its peak. That means the doors of opportunity are wide open to you.

#### F.M. AND TELEVISION **OPEN UP MANY NEW OPPORTUNITIES FOR TRAINED MEN**

The instruction and training you get on F.M., and Television, as well as on regular Radio, Sound, Public Address, Record Changers, etc., puts you in line for many additional opportunities in the Radio-Television Field.

The training you get in the Construction and Repair Department and in the Radio Servicing Department puts you in line for the many opportunities in Radio Manufacturing Plants, such as Phaser, Aligner, As-sembly Man, Foreman, Final Inspection and Testing.

Manufacturers, Dealers, and Stores are constantly demanding skilled service men. Here at Coyne, you are trained on both new and older type models, so that you should be qualified to handle any type of service call. Your training here at Coyne is one of the

best stepping-stones to a business of your own in Radio and Television sales, installation and servicing.

As one of the various Special Services

offered you as a student of Coyne, we give you, in addition to your practical Shop training, instruction in modern business methods and salesmanship. This part of our training will be of great help to you.

We cover such subjects as how to keep records, selecting a location, how to attract customers, rent and other overhead expense, how much you should charge for different types of jobs, and many other important matters.

Then when you are a Coyne graduate, you can make free use of our Consultation Service. This includes advice with regard to your merchandising problems, as well as technical help on any type of job that may come into your shop where you feel the need of detailed information.

#### MANY COYNE STUDENTS GO DI-RECTLY FROM THE SHOPS OF COYNE TO A RADIO SHOP OF THEIR OWN.

It's easy to see why our graduates do so well when they decide to go in business for themselves. The training here at Coyne is so practical, thanks to our "Learn-by-Doing" method, that it's just like going from one shop to another. You learn to handle each type of job the quickest, best way, so you don't waste time guessing or doing the job over, when you become your own boss. Folks always like to deal with a fellow

who does the work right, on the principle that "one job well done deserves another." Besides, your satisfied customers will tell their friends, and that will help your shop grow.

So if you want a shop of your own, be sure to get Coyne Training FIRST.

#### MANY MEN WITH PHYSICAL DISABILITIES

For many years COYNE has been train-For many years COYNE has been train-ing men and young men with physical disabilities, many of whom got their train-ing at no cost to them for tuition and sub-sistence. IF YOU HAVE A PHYSICAL DISABILITY of any kind WRITE TO US AT ONCE, giving details and we may be able to give you valuable suggestions and help in getting YOUR training here in the shops of Coyne.

We have successfully trained students with disabilities from many causes, some of which are listed here:

Infantile Paralysis Arrested Tuberculosis Impaired Vision Minus Some Fingers Impaired Hearing Curvature of Spine Osteomyelitis Stiff leg or Hip

Brace Cases Diabetes Minus Hand Minus Leg Loss of Eye Back Injury Cardiac Minus Arm

WE ARE MIGHTY PROUD OF THE ACHIEVEMENTS OF THESE MEN who refused to believe their disability was a handicap and have proven it was not, by their accomplishments.

STUDENTS WITH PHYSICAL DIS-ABILITIES ARE NOT SEGREGATED be-cause we have found that working side by side with other students is an encouraging experience for them.

ELEVATOR service is provided if needed and stools are furnished those un-able to stand for any length of time.

So, if you have a physical disability of any kind, be sure to write us at once, giving us all details and we'll extend every possible help to you in getting Coyne training.

### **READ THESE EXCERPTS FROM** Letters From COYNE TRAINED MEN Who Are Making Good

#### PROMOTED TO MANAGER

PROMOTED TO MANAGER "I decided to write you all and thank you for the services rendered me in school and since I finished.... I have been pro-moted to Manager of the Radio Shop since starting with it and have two men to do the Radio Servicing. The course was one of the best things I ever did, so far as getting ahead in this world is concerned. I will say again thanks and hello to the staff at Coyne. staff at Coyne.

Herman N. Ward North Carolina

#### OPERATES OWN SHOP

... I own and operate Para-mount Good Housekeeping Shop mount Good Housekeeping Shop on Main Street, . . . selling and servicing all Radios and Home Appliances, doing about \$130,-000.00 volume last year. We are the largest retailer and service outlet of this type in this city, employing six men, one girl, and one boy after school. one boy after school.

Julius E. Kovach, Wisconsin.

#### HAS TELEVISION JOB

. . At the present time I am installing and servicing Televi-sion sets. It is only thru the fine training that I received at Coyne that I am able to hold a job like this.

. . . I have repaired radios, been field service man, field en-gineer, Supt. of production, Jr. Engineer in a research lab, and now I have joined the world's largest Radio Mfg. Co., and I am only able to do so with the help I received from Coyne.

F. D. Mosser, Michigan.

#### **RADIO ENGINEER**

... At the beginning of the war I was employed as a Radio Technician by the Signal Corp and am now located at the Lex-ington Signal Depot in the cap-acity of Radio Engineer.

My best regards to the Coyne faculty. . . .

C. R. Harris, Kentucky.

#### OWES SUCCESS TO COYNE

OWES SUCCESS TO COYNE ... Since I graduated from Coyne I have been connected with the Radio Service and Manufacturing Industry. I was employed in a service shop in Florida for a time and when the war came along I accepted a position in Indianapolis as Radio Test man on Aircraft Radio. I ... am now in business for my-self selling and servicing Ra-dios... I owe Coyne a lot and it would be good to see you all again. again.

Charles Phillips, Illinois.

#### HAS UP-TO-DATE SERVICE SHOP

... I have a nice up-to-date Service Shop and carry a nice line of Radios including RCA, Zenith, Stromberg Carlson, Mo-torola, Ainslie, etc. I do all my own service but have a partner in now salar in new sales.

Best of good wishes to Coyne. George L. Hobson, New York.



This is an interior view of a Radio Sales and Service Shop showing Coyne graduates at work.

# You...as a COYNEGRADUATE

# will benefit throughout Life from these many important services

A FTER you have completed your Coyne Training and are out in the field, we stand behind you and aid you in many ways. The expression—"ONCE A COYNE MAN, ALWAYS A COYNE MAN" -is based not only on the training we give our students, but on the way we back them up in later years.

That's why our graduates recommend us to their friends. They would not do this if they themselves were not our friends.

We have many services for our graduates. Each of them is designed to help you get more out of your training. THERE IS NO EXTRA CHARGE FOR ANY OF THESE SERVICES.

The most important, perhaps, is our Lifetime Employment Service. We do not guarantee a job to any graduate nor does any other reputable school. However, we give you every assistance in getting located and are very proud of the record made by this department.

Hundreds of calls for Coyne Graduates come to us every year from firms in many parts of the country. Many such requests come from employers who already have one or more of our graduates working for them. We promptly notify you of such a request in your locality, then follow this up with special letters of recommendation.

You can use this service to help land your first job after graduation, or to aid you in getting a better job, or whenever the need arises. Like the other services explained below, it is yours without cost, throughout life.

We want your friendship both as a student and a graduate. That has been the guiding principle of Coyne for over half a century, and it will always remain that way.

## COYNE Lifetime GRADUATE SERVICE

-You Get All These Without Extra Costs After Finishing Course

#### LIFETIME EMPLOYMENT HELP

We supply "leads" on prospective jobs, tell you where new projects are opening up, send letters of recommendation, keep in constant touch with employers who may need men. Scores of Coyne Graduates are in business for themselves or do the hiring for their company. Naturally, they prefer Coyne-Trained men.

#### **REVIEW PRIVILEGES**

Any graduate in good standing may come back to Coyne and review any part of the training for which he enrolled as outlined in our Life Membership Certificate.

#### CONSULTATION SERVICE

This entitles you to technical advice by mail on any problem in connection with your daily work, whether you are in business for yourself or employed in a job. Members of our technical staff give personal attention to all requests from our graduates. Use this service as often as you need it, at no extra charge.

#### COYNE PUBLICATIONS

From time to time we issue Technical Bulletins on new developments, improvements in testing equipment, and other timely subjects. As a graduate you receive these bulletins without cost for life.

#### MERCHANDISING SERVICE

If you go in business for yourself, we are glad to advise you on sources for supplies, as well as your sales and advertising problems. Many times we are able to help our graduates save money or prevent costly mistakes. This service is given without charge whenever a graduate requests it.



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### COYNE "All Around" Training Prepares You for

# rld of Opportunities in RADIO-TELEVISION

RADIO and Television are so rich in opportunities that they offer the trained man practically an unlimited future.

Radio was an enormous field even before the war, and military discoveries and developments have made Radio even greater. In fact, Radio today may be said to stand on the threshold of a most amazing era.

Although the principles of Radio were revealed by Edison, Marconi and other pioneers 50 years ago, it was not until the end of World War I that its vast possibilities were realized. This came about through the introduction of commercial broadcasting, which started over KDKA, Pittsburgh, in 1920.

Today 9 out of 10 U. S. families own at least one radio set. More families have radios than have automobiles or telephones. Radio is the most popular form of entertainment in the country—ahead of movies, magazines and books, hunting and fishing, sports events or any other recreation, as proved in a nation wide study.

Just as the Radio boom started after the first war, the F.M. and Television Boom has started following World War II. Men trained in this field will have thousands of new opportunities, because it's just like the big boom of the 1920's all over.

Whether you are a young man of 16 or as old as 40—whether you have had advanced education or not—whether you have had previous experience or not—you can share in this prosperity.

But it takes more than a smattering of knowledge in one or two branches of Radio. The man who really benefits must be trained in the principles of the entire Radio-Television field, backed up with "All-Around" Training such as you get most quickly and surely here at Coyne.

#### MANY OPPORTUNITIES AHEAD IN RADIO-TELEVISION

TO THE fellow who prepares today, RADIO and TELEVISION offers him the choice of many interesting types of work and many different jobs.

On this page and the next page I outline some of the many lines of work in this great field offered to men and young men who have an all-around training.

However, how much a fellow profits from these many opportunities depends to a great extent upon himself. To the fellow who merely dreams about them and does nothing, they will bring no returns. But to the fellow who prepares himself with an allaround training in RADIO, F.M. and TELEVISION, there should be, in this great field, the interesting and profitable future he has pictured and planned for himself.

#### MODERN RADIO AND TELEVISION SERVICING

- •

THE days when a radio set could be repaired merely by changing a tube or a condenser are past and gone. Today's receivers are precisionbuilt instruments that call for expert servicing. With the wide variety of Radio, F.M. and Television receivers on the market, including the many Radio-Phonograph combinations, Automatic Record Changers, etc., a fellow needs practical shop training—the kind you get at Coyne—to make good in this field.

Skilled Service Men are in constant demand by manufacturers, dealers and stores. Then, too, this is one of the best stepping stones to a business of your own. Coyne "Learn-by-Doing" Training is designed to prepare you for each of these opportunities in Installation, Sales and Servicing.





A STORE OF YOUR OWN

Selling and servicing Radios, Radio-Phonographs, F.M. and Television sets can be a highly profitable business. Many Coyne graduates, as a result of their training in Merchandising as well as Servicing, have been able to open their own shops, and build a great future.



PUBLIC ADDRESS SYSTEMS

Traveling sound cars and trucks are used by advertisers, political organizations, etc. to bring their message to large numbers of people. This is but one of scores of opportunities in the great and growing Sound and Public Address fields.



**AUTO RADIO SALES AND SERVICE** Millions of autos have Radios—and most all the new cars are now Radio-equipped. Thousands of trained Radio men are required for maintenance, servicing and parts replacements. There are splendid opportunities for trained men in selling and installing Auto Radios too.

# BIG BOOM IN F. M. and TELEVISION MAKE YOUR FUTURE BRIGHTER THAN EVER

**B**OTH F.M. and Television have taken tremendous strides. Television alone is expected to be in the billion dollar industry class within a few years. The production of Television Receivers is constantly being increased and still cannot keep up with the demand. More and more Television Stations are going on the air.

Television right now is in the same position regular Radio was many years ago. It offers the same exceptional opportunities to men and young men who will prepare by training for this great chance to get in on the ground floor of a great expanding industry and share in the great prosperity ahead.

But in order to cash in on these opportunities a fellow must have an all around Radio-FM.-Television Training, the kind of training you get here at Coyne.

The days of the screw-driver Radio man are gone. While F.M. and Television are still new, they are much farther ahead in technical perfection than Radio was at the same stage years ago. Trained Practical Radio-Television men are needed for the opportunities today and in the future years ahead.



#### FREQUENCY MODULATION

"F.M." is one of the more recent developments in Radio, resulting in what has been called "staticfree Radio." New research in this method of Radio reception, and an increasing number of F.M. Stations throughout the country both mean greater growth in the field of F.M. Servicing.



#### RADIO AND TELEVISION MANUFACTURING

The Radio plants of America need thousands of trained men for important jobs in the manufacture of sets, tubes, parts. Positions such as Phaser, Aligner, Assembly Man, Foreman, etc., all take special skill and training. Hundreds of Coyne Graduates are employed in Radio factories—a big opportunity for you.



#### **INTER-COMMUNICATION**

The field of inter-communication is rapidly growing in popularity and more and more of these systems are being installed in offices, hotels, hospitals, shops, and other concerns where direct communication between department is important. Trained service men are needed to install, maintain, and service these units.



#### **MOBILE RADIO**

There is a new revival of interest in Mobile Radio which includes Airplane Radio. Marine Radio, bus and train communications, etc. This newer field of Radio Communication will create additional demands for trained Radio men to install, maintain, and service these specially designed Radio sets.



#### FACTORY INSPECTION

Many parts for Radio, F.M., Television Receivers and Electronic instruments must be accurate to the thousandth of a degree. Final inspections and tests cannot be left to unskilled men. Radio manufacturers often look to Coyne to help them in filling jobs in this well-paid, good future line of work.



SOUND EQUIPMENT

Installing and service work in this interesting branch is covered in our Radio Television Course. You learn how to produce, put up and shoot trouble on various types of sound equipment. Amnsement parks, factories, summer resorts, and many other public places all need Service Men.

# Everything has been arranged at COYNE for Your COMFORT and WELFARE

A.Posco



THE Y. M. C. A., just a few blocks away, offers full gymnasium and swimming privileges to Coyne students at special low rate.



EXPERT HEALTH CARE is provided for all Coyne students, with a trained nurse in regular atten. ance. A well equipped clinic is located at the school.



NEARBY CHURCHES EXTEND A WELCOME. Whatever your religion, you will find a church of your choice convenient to Coyne. Church attendance is purely voluntary among our students.



BROOKFIELD ZOO. You'll enjoy visiting this great zoo where wild animals live in their natural surroundings. Easily reached from Coyne by bus or street cars.

THE Welfare Department plays an important part in COYNE School Life. The minute you arrive you feel that you are among friends. Coming to COYNE from a distant town, you are immediately impressed with the friendly atmosphere of your new surroundings. Parents may feel assured that their sons will have the best of care at all times.

#### MAKING YOU FEEL AT HOME

Our Welfare Director is one of those fine, kind, warm-hearted men you enjoy meeting and knowing; nothing stiff or formal about him and no problem is too small or triffling to get his attention, no matter how busy he is or what he is doing.

You will find that every effort has been made to keep you comfortable during your stay with us. You will be surprised that little things you probably would never have thought of yourself have all been planned out and taken care of for you.

#### **RECREATIONAL FACILITIES**

Then, as you know, Chicago is one of the greatest cities in the world for outdoor sports. In the summer, if you like baseball, you can visit either the White Sox or Cubs' grounds.

There are swimming and hundreds of other good, clean recreations. In the fall the biggest football teams in the country play here. Then in the winter there is skating in the Parks, Theaters and great athletic contests going on continually. The Sightseeing Busses, Stockyards, Field Museum and hundreds of other buildings and places of interest afford a fellow hours of good clean recreation at little or no cost without sacrificing any of his school work.

#### LIVING ACCOMMODATIONS

When you arrive at COYNE and complete your enrollment, we will help you get suitable living accommodations. Student rooms are located in houses that have agreed to reserve rooms for COYNE students and some of them take no one but COYNE students. Then within five minutes' walking distance from the school is the Y.M.C.A. where some students like to stay.

If you come with a friend and want to room with him, that too can be arranged. Or if you have friends or relatives in Chicago, with whom you could stay, that will be satisfactory, because COYNE is so convenient to transportation and can be quickly reached from any part of the city.

The Y.M.C.A. is just a few blocks from the school and our students may join while here at a special low rate. There are occasional events given by the Y.M.C.A. and many athletic activities to interest those who like athletics. This membership affords opportunity for full gymnasium and swimming privileges.

#### A Letter from a Mother

"Thanks to Coyne School for all the great success our boys have met with.

May God continue to bless you and your work. I can tell one and all, Coyne is the best school for the young boy to start. If I had other boys, I, as their mother, would advise them to go to Coyne . . .

From the mother of those three boys of whom she feels so proud."

MRS. W. C. EDWARDS, North Carolina.



BIG LEAGUE BASEBALL. The famous "Cubs" and the hustling "White Sox" play here all season. You can see all the great stars.



BATHING BEACHES. Chicago has 25 miles of beautiful sand beaches along Lake Michigan. Here is Oak St. Beach, on the "Gold Coast."



BOAT TRIPS. Lake steamers make daily trips to Michigan or Wisconsin ports and return—an inexpensive, delightful outing.



WINTER SPORTS. Ice skating is popular on the big park lagoons. If you come during the winter, bring your skates along.



RADIO AND TELEVISION STUDIOS. Many noted programs —"National Born Dance," "Quiz Kids," etc.—originote in Chicago. See them go on the airl Visit the many television studios here in Chicago.





### This Composite Photo Shows Some of the Many Attractions You'll See

Start at the Upper Left Hand Corner and Take a "Picture Tour" of a Few of the Features That Make Chicago America's Wonder City

- 1. The Merchandise Mart, world's largest business building.
- 2. View of State Street, home of Marshall Field and other great stores.
- 3. Museum of Science and Industry in Jackson Park, full of fascinating displays where groups of our students are often taken.
- 4. Looking through an arch toward the Campus at world-famous University of Chicago.
- 5. Theater signs along Randolph Street, Chicago's noted "Rialto."
- 6. View north along Michigan Avenue, showing Grant Park and the Lake Front, with the Stevens Hotel, the world's largest, shown at the left.
- 7. The mile-long Municipal Pier.
- 8. Interested spectators at the Chicago Municipal Airport.
- 9. (Below) Night view of the South Chicago steel mills.
- 10. The Chicago Stock yards, location of the large meat packing industries.
- 11. The Chicago Board of Trade, heart of the nation's grain industry.
- 12. A night-time spectacle at Soldier Field, located near the site of the 1933 Chicago World's Fair.
- 13. Sailboating on Lake Michigan.
- 14. Magnificent Buckingham Fountain, looking toward the Chicago Skyline at night.
- 15. The Art Institute, where many of the world's greatest paintings, by renowned artists, are exhibited.

# why you should get your **RADIO-TELEVISION** Training at **COYNE**

WHEN you are choosing a training, there are several important things to consider. But, THE MOST IMPORTANT THING TO KEEP IN MIND IS—YOU ARE MAKING A LIFE TIME INVESTMENT.

For this reason you can't afford to gamble with your future, you owe yourself the best training you can get.

I want to call your attention to the many outstanding features of COYNE, and I believe that after considering each one of these very carefully you will be satisfied that the money you pay for a training in THE GREAT SHOPS OF COYNE is an investment that can pay you dividends all your life. Now I want to give you 10 important reasons why you should select COYNE for your training:

#### COYNE TRAINING IS 1 "LEARN-BY-DOING" TRAINING.

At COYNE you learn by doing actual shop work on real Radio and Television equipment along with the necessary theory only—the same type that you will expect to work on out in the field after you finish training.

#### A TREMENDOUS OUTLAY OF EQUPIMENT.

You are trained on one of the largest outlays of Radio and Television equipment of any similar school in the country—equipment that is modern and up to date, as well as some of the older equipment that you will find is still being used in many places.

#### FIFTY YEARS OF EXPERIENCE.

COYNE was established way back in 1899 and has a background of over 50 years experience in training men and young men for better jobs. Hundreds of successful COYNE Graduates are proof of the thoroughness and value of COYNE TRAINING.

#### ALL COYNE TRAINING IS GIVEN IN OUR BIG CHICAGO SHOPS-NOT BY MAIL.

Here in our great training shops in Chicago, we have a large outlay of Radio and Television Equipment for you to train with. We do not teach by mail. Neither do we have you study printed lessons at home and then have you come here for a short visit for just a smattering of practical work. YOU GET ALL YOUR TRAINING RIGHT HERE IN OUR CHICACO SHOPS, where the a staff of CHICAGO SHOPS, under the guidance of a staff of trained instructors.

#### YOU ARE TRAINED IN ONE OF THE WORLD'S GREATEST RADIO AND **TELEVISION CENTERS.**

COYNE IS LOCATED IN CHICAGO, one of THE GREATEST RADIO AND TELEVISION CENTERS IN THE WORLD and students have the oppor-tunity to get their training in this great Radio and Television Center.

#### COYNE HAS A GREAT ORGANIZATION. 6

COYNE is not a one-man organization. I am mighty proud of the COYNE Staff. They are all real fellows and most of them have been with Coyne for many years. They are practical men, and each is thor-oughly familiar with the work in his department. You will find all of them friendly, sincere, patient and understanding, and always ready and willing to help you with your problems.

#### COYNE OFFERS LIFETIME EMPLOYMENT SERVICE TO GRADUATES.

After you graduate, you are given employment serv-ice whenever you request it as long as you are in good standing . . . not just to help you get a job right after you leave school, but anytime later when you want to change jobs. We don't charge extra for this service. These services are fully outlined on page 23 on page 23.

#### CONSULTATION SERVICE AND **OTHER GRADUATE SERVICE.**

As a COYNE GRADUATE SERVICE. As a COYNE GRADUATE your LIFE MEMBER-SHIP also entitles you to CONSULTATION SERV-ICE whenever you wish it. By this, I mean that whenever you run into any problem connected with your work after you leave school, you can write in to the Graduate Department and explain what you want. Then they will work out a solution and send it to you without any charge.

#### WE VALUE THE GOOD WILL OF OUR GRADUATES.

We want you as a friend today, even though you haven't yet enrolled in our school. We will want you as a friend after you have become one of our stu-dents. But—most of all—WE WANT YOUR FRIENDSHIP AFTER YOU HAVE GRADUATED AND WE EXPECT TO HOLD IT THEN, TOO. Yes, we value very highly the good-will of our graduates, for we know THAT ONE THING is responsible for our success. We are vitally interested in seeing that our graduates make good our graduates make good.

#### COYNE HAS A 10 NATIONAL REPUTATION.

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COYNE is a Nationally known institution with a record of more than half a century of fair and square business methods. As a student and a graduate of COYNE you can rest assured you will get every bit of training and services outlined in this catalog.

WANT you to consider carefully all of these important facts I have told you here. I want you to realize that when you come to Coyne nothing is going to stop us from giving you every help within our power to make you a success, BECAUSE I WILL DEPEND UPON YOU AFTER YOU GRAD-UATE TO RECOMMEND OUR SCHOOL TO YOUR FRIENDS.

# Don't wind up in a "One-Operation" Job!

HERE'S a big difference in jobs—as far as your future is concerned! Some jobs pay fairly well at the start, but as time goes on, the pay stays just about the same. They offer little if any chance for a man to get ahead.

These are the "one-operation" types of jobs where you do one particular thing over and over again. They have practically no future because it's easy to get somebody else to fill your shoes.

On the other hand, certain jobs call for special training. A man who can measure up to the needs of such a job is mighty hard to replace. That's why his earnings keep going up and up. That's why he enjoys steady work, in good times and hard times.

When you have "All-Around" Training-the kind of training you get in the great shops of Coyne-then you never have to worry about winding up in a "One-Operation" job.

It doesn't matter whether you are 16 or 40 years of age. Today a fellow is paid for what he knows, not according to how old or how young he is.

Right now you may be tied down to a "One-Operation" job because you have not had the chance to prepare yourself for the better jobs, the jobs with an assured future.

If so, HERE IS YOUR OPPORTUNITY. The training you need is all planned and ready for you in the Great Shops of Coyne.

Don't let another day go past without taking action! Make up your mind that you can leave that blind alley job! Arrange now to come to Coyne. JOIN THE THOUSANDS OF MEN WHO HAVE FOUND COYNE THE QUICKER AND EASIER WAY TO PREPARE FOR A WORTH-WHILE PLACE IN THE GIANT FIELD OF RADIO AND TELEVISION.



"... THROUGH THE DOORS OF COYNE INTO THE OPPORTUNITY FIELD OF RADIO AND TELEVISION PASS SCORES OF TRAINED MEN EACH YEAR ...."

## Decide *NOW*... for That Future You've Always Wanted!

E HAVE come to the end of this book. But let it be just the BEGINNING of a lifetime of success for you!

Right now you are probably saying to yourself: "Coyne Training is exactly what I need! I know I can't get one of those better jobs in Radio or Television without practical shop training. And where else can I find a school with the outstanding reputation of Coyne, which has been helping men get ahead for over half a century? That Coyne "Learn-by-Doing" method surely looks like the quickest, easiest, surest way to prepare for my future. Yes, I'm really SOLD on Coyne!"

Thousands of men and young men have had those same thoughts after reading this book. They have become enthusiastic about Coyne Training—have seen what it would mean to themselves to be Coyne graduates.

Some of these fellows acted at once. They didn't let lack of experience or lack of money hold

them back. No sir! They and their folks talked it over, and ACTED. These "do-ers" enrolled at Coyne, got their training, and were out in the field working on real jobs with a real future while other fellows were still putting it off.

So I say to you: It isn't how ambitious you are, or how much you want Coyne Training. It's what you DO about it that counts!

The decision is up to you. The training, personal help and services that brought more money and greater opportunities to men just like yourself, are now offered to YOU. Our entire staff is here to help you. Our vast layout of Radio, F.M. and Television equipment is ready for you to work with.

A hearty welcome awaits you at the Great Shops of Coyne in Chicago—your gateway to success in Radio and Television! Decide to send your Advance Enrollment Application today!

- Cooke President

COYNE ELECTRICAL AND RADIO SCHOOL 500 S. PAULINA STREET . . . CHICAGO 12, ILLINOIS

#### TRAINING MEN AND YOUNG MEN SINCE 1899



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