

COYNE IN CHICA

C

IN THE HEART OF AMERICA'S ELECTRICAL-ELECTRONICS,

TRAIN AT



COYNE is right in the center of everything

COYNE is located in Chicago, one of the world's greatest Electrical, Electronics and Television-Radio centers. As this aerial photograph proves, our School is surrounded by nationally famous Electrical and Electronics plants, Substations, Power plants, Radio and Television plants, Broadcasting stations, and many other activities that mean much to your future in this great field of Opportunity! Coming to COYNE and getting your training here IN CHICAGO, one of the greatest centers of

Coming to COYNE and getting your training here IN CHICAGO, one of the greatest centers of ELECTRICITY, ELECTRONICS and TELEVISION-RADIO in America, will broaden your outlook, give you an experience to be remembered for a lifetime, and a training you KNOW is up-to-the-minute.

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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 the field of your choice. World Radio History

Why you should prepare for the great opportunity field of ELECTRONICS and why you should get your training at COYNE

by B. W. COOKE, Jr., President

AS PRESIDENT of Coyne, let me thank you for this opportunity to tell you 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, "Guide to Careers," 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 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 Covne graduates who got started on the road to better jobs and bigger pay through these pages!

Your Entire Future Depends on the Decision You Make Now

TODAY you stand at the crossroads. The decision you make may affect your entire future. You have two very important questions to answer.

- You have two very important questions to answer. No. 1 Shall I make Electronics my life's work?
 - No. 2 Shall I get the training I need at Coyne?

Electronics offers you, as a trained man, a world of opportunities, whether you qualify for Electricity-Electronics, Radio-Television Electronics — OR — the General Electronics Field, which includes both branches.

To qualify for the greatest opportunities in this field, you need the best possible preparation and training you can get.

So, you'll find that both of these important questions are answered fully, frankly and clearly on the following pages. When you finish reading this book you'll have all the information and facts to make this important decision which can mean so much to your future success.

The Oldest, Largest and Best Equipped School of Its Kind in America

OUR school was established in 1899, and has been in continuous operation ever since.

During this period we have trained over 200,000 students from all parts of the U.S. and other countries. The record of our many Graduates is living testimony to the efficiency of the Coyne Method of Training.

This more than sixty years of training experience has established Coyne's reputation in industry and with the public.

We have kept pace with the tremendous growth of Electronics, constantly adding new equipment and new features to the training offered in our school, to meet the requirements of industry.

There Is No Substitute for Coyne's Background and Experience

E are chartered under the laws of the State of Illinois as an Educational Institution Not For Profit and licensed and Registered by the Illinois Department of Registration and Education.



B. W. Cooke, Founder



This modern fireproof building houses our New Shop-Labs and is occupied entirely by Coyne. Our light, airy quarters contain one of the greatest outlays of Electronics training equipment anywhere in Americal

World Radio History

During World War Two, Coyne was one of the first schools to train men for the United States Armed Forces, and we trained over 8,000 soldiers and specialists for the Signal Corps, Anti-Aircraft and Army Air Force.

Since the inception of the Veterans' Training Program, Coyne has been an approved Training Agency for the training of veterans, and for many years we have been training students for State Divisions of Vocational Rehabilitation.

This is the institution behind your training, so you can enroll at Coyne, confident in the knowledge that this is training designed to meet field standards, and confident in the knowledge that you get the benefit of the many years of experience of the Coyne School Staff—men who not only know their subject, but also know how to teach it—men who take personal interest in your progress and future success.

DESCRIPTION OF TRAINING

ELECTRICAL-ELECTRONICS: On pages 3 through 19, we picture and describe our Electrical-Electronics training. The training in Refrigeration and Electric Appliance Repair, which can be included, is described on pages 20, 21 and 22.

TELEVISION-RADIO ELECTRONICS: The description of our Televisian-Radio training starts on page 23. From page 23 through page 37 we picture and describe our Television-Radio training. The training in Refrigeration and Electric Appliance Repair described on pages 20, 21 and 22 can also be included.

HERE ARE THE 3 STEPS IN COYNE'S FAMOUS PRACTICAL-TECHNICAL TRAINING

First You Get Your Technical Training and Theory— Which You Apply to the Jobs You Do in the Shops

THE students shown in the 3 pictures on this page illustrate the 3 important steps in Coyne Practical-Technical Training. The photo illustrating step Number One shows students in a class room getting their technical training and theory through an instructor's lecture and class discussion.

The use of sound films and strip films together with blackboard illustrations, diagrams and the instructor's explanations make this step-by-step instruction easier for the student to grasp and remember.

There are well lighted and ventilated lecture rooms with comfortable arm type seats to make it more convenient for students to make notes.

As you go through your training you follow this practical-technical method, worked out by over a half a century of training experience. You are told the "HOW" and the "WHY" of the equipment and the subject matter involved and then you understand what you are doing and why you are doing it, when you work out the actual jobs yourself in the training shops.



Equipment Demonstration Is the 2nd Important Step in Coyne Practical-Technical Training

STEP Number Two, illustrated in the picture to the right continues your important step-by-step method of training. You are shown how and why typical pieces of key equipment or apparatus works, with all important facts and theory explained in simple language. The important points are shown in demonstrations on the equipment itself by an Instructor.

You are taught how to make notes and diagrams from the instructor's lectures, equipment demonstrations, and shop jobs. This material together with the specially prepared required text material is an important part of your training here at Coyne and is valuable for reference purposes after you graduate. Step number 2 continues your technical training with the instructor demonstrating typical jobs on the actual equipment and carefully explaining the various parts and details of operation.



2] rld <u>Radio H</u>istory Instructors Work with You

HILE fully half of your training here at Coyne is devoted to working out actual jobs in the training shops, equipment demonstrations by the instructor are a very important part of your training. Demonstrations on various pieces of equipment and apparatus are given by the instructors both during lectures and classroom discussions and also during shop work periods.

These equipment demonstrations, with the various parts and operations explained by the instructor, sometimes supplemented with slide films, make it easier for students to grasp and remember this important part of the training and helps them in their actual shop work.

Naturally, the easier we can make it for our students to learn, and the more help we can give them, the better qualified they will be for a good job and a real future.

In step number 3 you apply this technical training and theory by working out practical jobs yourself on the actual apparatus and equipment. Your jobs are then checked to make sure you have everything right.



The 3rd Important Step is doing Actual Jobs on Actual Equipment—One of the Largest Outlays of its Kind in America

T HE photo to the left illustrating Step Number Three, shows how students apply their technical training and theory by doing actual work on the apparatus and equipment. 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.

At Coyne you work in the midst of a vast outlay of equipment and apparatus, one of the largest outlays of any school of its kind. All of this equipment is here for you to train on.

As you go through our course, each job you do leads to the next one. Almost before you realize it, you will be doing advanced jobs. It is this practical and thorough method of training that helps students take on these advanced jobs with confidence in their ability to do the jobs.

This three-way method of training is employed in all phases of our training. In Step No. 2 we show a typical piece of Electrical equipment to illustrate that point, and in Step No. 3 we show a TV receiver. However, whether a student takes our Electrical-Electronics Training, our Television-Radio Training, or our Combination Training, he gets the full benefit of Coyne's three-way method of training.



C OYNE training is divided into two general Divisions of Electronics—ELECTRICITY-ELEC-TRONICS and TELEVISION-RADIO ELECTRONICS. Training in these divisions can be taken separately OR IN COMBINATION to prepare for THE GENERAL ELECTRONICS FIELD. A description of our Training in Television-Radio Electronics is given on Pages 23 to 37 inclusive.

A large number of our students want to prepare for the GENERAL ELECTRONICS FIELD so are interested in our COMBINATION TRAIN-ING, which incorporates all phases of COYNE training in ELECTRON-ICS. This covers the broad field of Electronics and prepares a student for greater job opportunities and gives him a solid foundation for advancement and success in the field as an Electronics Technician.

However, it may be that your greatest interest is in one of the two principle divisions of Electronics. If so, Coyne offers courses of training to meet your needs.

The broad and varied applications of ELECTRONICS makes it TODAY'S TOP OPPORTUNITY FIELD, so, whether a man qualifies for ELECTRICITY-ELECTRONICS, TELEVISION-RADIO ELECTRONICS OR GENERAL ELECTRONICS, which includes both branches, he'll find a world of opportunities awaiting

includes both branches, he'll find a world of opportunities awaiting. THIS BOOK AND OTHER MATERIAL WILL HELP YOU DECIDE ON THE COURSE OF TRAINING THAT BEST MEETS YOUR NEEDS AND WILL PREPARE YOU FOR THE FUTURE YOU HAVE PLANNED FOR YOURSELF.

Starting on this page and the following pages up to and including page 19, we picture and describe our training in Electricity-Electronics, which includes: Basic Electricity and Wiring; D. C. Power and Motor Repair; A. C. Power and Maintenance; and Industrial Electronics. The training in Refrigeration and Electric Appliance Repair is shown on pages 20, 21 and 22. This training will give you practical, well-rounded knowledge of Electricity-Electronics based on practical, first-hand experience. You'll be able to step into many different types of Electrical-Electronics work with the "know-how" to do the job right!

be able to step into many different types of Electrical-Electronics work with the "know-how" to do the job right! NOW, AS YOU GO THROUGH THE FOLLOWING PAGES, I WANT YOU TO PAY PARTICULAR ATTENTION TO HOW OUR STUDENTS ARE GETTING THEIR TRAINING. When you do, I'm sure you can't help but agree with me when I say the way to get a practical training is the way it is taught at Coyne.

Your Electrical-Electronics Training Starts in BASIC ELECTRICITY and WIRING

T HE Electrical-Electronics training here at Coyne is designed to give you the technical and practical knowledge that will be important to your future success whether you go into Electrical Service Work, Maintenance Work, Wiring for Light and Power, D. C. Power or Maintenance, Armature Repair, A. C. Power Plant or Sub-station Work, Industrial Electronics, Refrigeration, or any other type of Electrical Work.

You first get your technical and theoretical training through interesting lectures. Then you get instruction through demonstrations and explanation of equipment on typical jobs and then you apply this knowledge by working out practical jobs on the actual equipment. These are the "THREE STEPS" in the COYNE PRAC-TICAL-TECHNICAL METHOD of training as illustrated on Page 2.

Coyne training is designed to prepare students quickly for the opportunities in Electronics. Experience proves that it is easier for a student to learn and remember if he can see, handle and operate the equipment himself. Each step is fixed in his mind. When the same problem comes up on the job, he'll know what to do.

Previous Experience Not Needed

Y OU don't need previous experience in order to take COYNE training. The COYNE PRACTICAL-TECHNICAL TRAINING method takes the place of previous experience. Some graduates have told us that when they left COYNE and went to work it was like stepping from one job to another—the technical training and practical work they had gotten fitted them so well for the job. Then again, some students have had some experience in one or two branches of the field but lacked the technical training and general knowledge for real success. They were not satisfied and wanted the technical knowledge and training to equip themselves for the better jobs and opportunities. So whether you've had experience or not you can take Coyne training and progress step by step to prepare for a lifetime of opportunities in this great field.

You Start with Electrical Fundamentals

A S you know, in order to do any type of Electrical work properly, you must have an understanding of the Fundamental Electrical Laws and Principles and how they apply to various Electrical Equipment so that you can do the job better because you understand what you are doing.

So, you are given instruction on Electrical Laws and Principles. You then continue with such subjects as Fundamentals of Electricity, conductors and insulators, units and symbols, Ohm's Law and other important electrical laws, series and parallel circuits, magnetism, electromagnetism, dry cells and storage batteries, relays, rheostats. switches. buzzers, bells, annunciators, generator principles, transformers, meters and telephone principles, circuit tracing, wire splicing and soldering: fundamental principles of Wiring for Light and Power, National Code rules. inspection requirements, three wire Edison system, polarized systems, illumination principles, light and wiring layouts, calculations and tests, etc.

> [<u>3</u>] World Radio History

The Shop Work Is Laid out on a Step-by-Step Basis

A FTER the subject has been explained to the student in lecture, he then applies this knowledge by working out the jobs in the Shop-Labs, starting with the basic jobs, such as making various types of wire splices, soldering, and wiring up various types of Equipment such as doorbells, buzzers, lamps, and switches.

As the student completes each job he moves on to the next one. This makes his progress so natural and gradual that almost before he knows it he is working on more advanced jobs such as the circuit wiring of relays for remote control of annunciator systems, railway safety devices, burglar alarms, etc.

Wiring for Light and Power

W IRING for Light and Power is a most important branch of the Electrical Field and offers splendid opportunities in working for contractors, or in a contracting business.

for contractors, or in a contracting business. In order to give students real practical training, a model framework has been set up where they learn how to pull wire, install service connections, and make installation of lighting equipment under conditions very much the same as they would do this same type of work out in this branch of the Electrical Field.

The pictures on page 7 show students working on wiring jobs. In these pictures you also see students getting special instructions and demonstrations on bending and cutting electrical tubing, and the use of proper tools and fittings for this kind of work.





The next few pages show students training in **BASIC ELECTRICITY** and **WIRING**

This photo shows a group of students listening to a lecture illustrated with strip films. When you start your training, the instructor explains the principles and laws of electricity. Then by blackboard drawings he illustrates how these principles work. After you have learned these principles and laws, you are given tools and then work out your jobs and see how these principles apply in your practical work. The same principles apply all during the training.



The picture above shows Coyne students connecting various switches and lamps using electrical circuits commonly applied to home, office and factory lighting applications.



Above you see a close up view of a Circuit Wiring bench showing an Instructor giving a new student personal help in working out a relay circuit wiring job.



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In the photo shown above you see a Coyne instructor explaining an important point to students who are becoming familiar with the construction of a small D.C. Motor by disassembling, checking, and reassembling. Students also check operation of motor by using a relay in wiring a motor circuit for remote control.



General view of a section of Basic Electricity and Wiring. Notice the large and well lighted shop. The men are wiring and testing light control circuits in their first small conduit layout, and getting real practical experience in the handling of tools and the use of various kinds of switches.



This picture shows students getting practical training in the connecting up, testing and operation of a model Electric Flasher Sign. This sign is operated by a motor driven Flasher Control which operates the "on" and "off" flasher mechanism and animates the sign.



The picture above shows Coyne students making voltage drop tests on lamps connected in series and parallel circuits. Notice the personal help they are getting from the instructor who is checking their jobs. Here in the shops of Coyne you'll always find instructors ready and willing to give you personal help when you need it.



In this picture you see an instructor showing students how to connect up, test and operate the large Electric Sign you see at the top of the photo, by remote control hook-up.

World Radio History



Coyne students receive instruction on fluorescent lighting units, and the wiring operation and care of these interesting units. Millions of these lights are in use now, and millions more are installed yearly in the big industrial plants.



This picture shows a group of students getting started with their jobs that will give them practice in wire splicing and soldering with gas heated soldering coppers. This is the kind of training that fits a fellow to do practical work out on the job.



Instructor explaining principles and operation of new type fluorescent lighting units to students, as they perform shop tests on these units. This type of lighting equipment is becoming more popular every day for factories and industrial plants. It is frequently used to provide day-light working conditions to night workers.



Here you see an instructor giving a demonstration on different makes of low voltage house wiring control systems. These controls are being used more and more in modern buildings.



The picture above shows an instructor explaining the operation of an automatic telephone. Students wire up telephones and test out their work by talking over them. This is an important branch of the Electrical-Electronics field and thousands of trained men are employed by Telephone Companies throughout the country.



In this Coyne shop picture, you see students getting practical experience in the use of instruments in making tests on ballasts and starters used in various types of Fluorescent lighting units.







On certain house wiring jobs, the installation of BX, or armored cable is permitted in place of conduit.



This instructor is giving a demonstration on handling EMT (Electrical Metallic Tubing). Much of the modern wiring for Light and Power is run through "thin wall" tubing of this kind. This training is designed to prepare graduates for work in the wiring of houses, buildings, etc.

This is a picture of a Model Framework of a Bungalow which has been set up for students to get training under similar conditions as they will find out in the field. Here you see students getting instruction on the proper installation of a Service and Meter System.



Another important part of house wiring is pulling the wires through the tubing after it has been installed. Here you see students getting practical experience on wire pulling.



D.C. POWER and MOTOR REPAIR

Direct Current Power is a Vitally Important Factor in Modern Industry

D irect Current Motors and Power have many applications in modern Electricity and are becoming more and more important. Variable speed Motors are increasing rapidly for use in Aviation, Mining, Railroading, Steel Mills, Textile Plants, and for many other applications.

Industrial Electronics, the great new coming industry is also responsible for the increased use of Direct Current Motors and Power. The Direct Current Motor and Industrial Electronics application work together in bringing variable speed power to industry in any part of the world where electric power is available.

So you see the training and knowledge you get of Direct Current Motors and Power is very valuable to you and will fit right in with your training in Industrial Electronics which you get later on in the course.

IN DIRECT CURRENT POWER AND MOTOR REPAIR, you get into the most fascinating work of your course so far. You are now ready to apply many of the things you have been taught, to the actual operation, care, testing, and repair of real DIRECT CURRENT POWER EQUIPMENT.

Your work on Direct Current equipment includes motors and generators of many types from the most simple, to the automatic controls and starters as you will see in the pictures on this page and pages 9, 10 and 11.

First your instructor explains the operation of D.C. Motors, using the actual parts of a machine and interesting blackboard sketches. He explains how to connect up, operate, and repair different types of motors. Then you connect up, run, and repair actual D.C. equipment.

You'll Find Plenty of Full-Size Electrical Equipment in the Coyne Training Shops

Y OU get training on the principles, characteristics, applications and voltage control of shunt, series, and compound wound generators as well as instruction on efficiency and horse power tests, and connecting up, testing, paralleling, and load adjusting of generators. In the shop jobs, the student actually wires up, tests, operates and maintains many different types of electrical apparatus and equipment.

You get instruction on the principles of D.C. Meters and their use in making voltage drop and current measurements on armature and field coils, and the use of meter and high voltage power supply for testing insulation resistance. The use of growlers in locating faults in armatures. The care and repair of commutators including undercutting and turning down on a lathe.

You Work on Direct Current Power Equipment

N your practical shop jobs, you wire up, test, and operate different kinds of generators and motor generator sets, D.C. Motor Starters and speed controls. You learn the care of coils, contactors, overload devices, etc. You work on Direct Current power plant Switchboards and are taught their circuits and operation. You learn how the meters and switches are attached, also switchboard circuits and arrangement of Bus-Bars and control wiring.

You get instruction in common Power Plant operating rules. Then you learn about meters, and recording instruments. Then you operate the switchboard and parallel generators.

Armature Testing

AS you will see in the pictures on page 11, Coyne students get practice in Armature Testing and Armature Circuit Tracing.

Growler tests are made for such faults as opens, shorts, grounds, reverse coil leads etc. Armature circuit tracing jobs enable students to understand various circuits that make up the armature. In these jobs, students perform an industrial installation such as connecting a D.C. motor and 3 point starter to the line.

modestrial instantion such as connecting a Die. motor and 3 point starter to the line. THIS IS THE TYPE OF PRACTICAL TRAINING DESIGNED TOGIVE STUDENTS THE KNOWLEDGE AND CONFIDENCE TO HANDLE PRACTICAL MAINTENANCE JOBS OUT IN THE FIELD.

Testing and Repair of Motors

T HE training also includes the application, testing, overhaul, repair and maintenance of many different types of Electrical Equipment including Fractional Horsepower Motors, Single and Double Voltage Capacitor Motors, Single and Double Voltage Split Phase Motors, Double Voltage Capacitor start and Capacitor run Motors.

One of the most common troubles found in servicing motors is worn bearings. Therefore, we include instruction and practice in methods of determining allowable wear and procedure for replacing and fitting, reaming and aligning bearings. The Service Man in the field will find this training a mighty valuable feature.

There is no Substitute for Practical Job 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 HIMSELF.

Here at COYNE our purpose is to give you such a training and give it to you in such a way that you can understand 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 the technical training and theory, given by practical lectures, film slides, blackboard diagrams, and equipment demonstrations with "practical" 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.

The pictures on this page and on pages 9, 10 and 11 illustrate the practical training methods employed throughout the entire course. Be sure to read the explanation below or at the side of each picture. In that way you get a "picture story" of the training in Direct Current Power and Motor Repair.





Here are students getting real operating experience on a large power D. C. Switchboard. They are taught to connect and operate generators in parallel, and to take care of circuit breakers, switches and instruments. This kind of training is valuable in power plant or substation operating work, and many of our graduates have good jobs doing this work.



These students are operating and testing motor generator sets and measuring the output of these units.



Upper view shows students connecting an automatic starter to a 15 H.P. D. C. Motor. In the lower view students are checking the performance of a motor generator set under various loads.





These students are checking the operation of an automatic controller and compound motor. They are making the same test and repairs they may be called upon to make in the field.

The picture above shows an Instructor giving instruction on a special growler designed to test armatures with specialized windings. This growler was invented by a Coyne Graduate and is produced by a nationally known Manufacturer.

Many Years of Training Experience

COYNE has a back-ground of over HALF A CENTURY of train-ing experience in training men and young men for better jobs. It was established in 1899 and established in 1899 and has been in continuous operation ever since. We have kept pace with the tremendous growth of ELECTRICITY, con-stantly adding new equipment and new fea-tures to the training offered in our school, to meet the requirements of industry. of industry.



Here you see several students testing and operating D. C. machines. The large machine at the right is used to make practical demonstrations of dynamic braking on large motors. These students doing work on various jobs are fellows who a short time ago may have known nothing about this work. But this is now easy for them, because they have reached this stage of their training step-by-step.

COYNE TRAINING PROVIDES FINE OPPORTUNITIES



Henry A. Lau, Iowa



These Coyne students are testing the efficiency of a motor with a modern Dyna-mometer, a type used extensively in industry for testing A.C. and D.C. motors.



This photo shows an instructor giving a student special help in checking the wiring and testing the operation of a magnetic controller.

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This photo shows an Instructor explaining a rotating system for producing variable volt-ages used in obtaining a wide range in motor speeds. These units are used extensively in Textile, Food, Metal, Paper, Printing, Rubber, Machine Tool, Wire and Cable industries.

COYNE TRAINING BRINGS ADVANCEMENT



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The students in this picture are shown getting instruction and practice in the use of growlers to test Armatures for such faults as shorts, open circuits, grounds, reverse coil leads, reverse loops, etc.

EMPLOYED AS MAINTENANCE MAN

EMPLOYED AS MAINTENANCE MAN "I was a graduate in the May class of last year. And my training there has certainly come to handy in the past few months. At the present. I at telephone main-tenance man for a large Coal Com-pany and am doing quite well at it. due to the all around training I received at Coyne." Joseph L. Jarrett W. Va.

TRAINING GOT HIM HIS JOB "I have become employed by the ...as an Installer-Repairman. It is a very good job and I can sin-cerely say that the training I re-ceived at Coyne put me in that position," Troy Rakes, Va.



WENT TO WORK AT ONCE

WENT TO WOR "Went to work on April 22nd and have worked six days a week ever since. I work at the...in the Elec-tric Shop. I ap-preciate your school a lot and all it did for me." O. J. Pierce, Tenn. O. J. Pierce



This picture shows how students get training in Disassembly, Testing and Reassembly Techniques on Motors, under the personal supervision of an instructor.



Here you see an Instructor working with a pair of students who are connect-ing up a reversing type starter for a compound motor, one of the important applications of D.C. equipment in industry.

A.C.POWER and MAINTENANCE One of the Most Popular and Profitable Fields in Electricity

O N THIS and the next three pages I give you a brief description of our training in ALTERNATING CURRENT POWER AND MAINTENANCE.

The many applications of A.C. equipment constitutes one of the most popular and profitable lines of work in the Electrical field. Here you learn to service, operate, and repair equipment that is used in thousands of great electrically equipped factories and industries. You will have actual A.C. Power apparatus to work on and you will learn and remember what YOU LEARN, MORE EASILY, BECAUSE YOU HAVE DONE THE WORK WITH YOUR OWN HANDS, RIGHT ON THE EQUIPMENT.

A. C. Power Motors and Power Equipment To Work On

Y OU start wiring and testing small motors and then gradually progress to the larger machines. You change the connections and reverse the motor; make tests to determine how a motor acts when a connection comes loose. You will test an induction motor for efficiency and power factor.

The practical work you get on motors, controllers, generators, transformers, switchboards, transmission lines, lightning arresters, circuit breakers, ALL HELP TO MAKE THIS TRAIN-ING FASCINATING, ENJOYABLE AND EX-TREMELY VALUABLE.

You learn how Alternating Current Generators operate, how to care for them, wire, test, and repair them. You get real Switchboard

operating practice on a large power Switchboard, operate the generators and control the power for the equipment associated with the

switchboard. You are given valuable training in modern maintenance methods. How to locate and correct faults before they become serious and perhaps cause an actual shutdown and loss of time and money in some plant where you may work.

Experienced Helpful Instructors Work With You

W HEN you finish a job, your instructor asks questions about it to check up and help you to be sure you know the important points.

Making sure that you thoroughly understand each job you work on before you move on to the next one is an important phase of Coyne training. That's why you'll find that an instructor is always ready to explain any part you may not thoroughly understand.

The assistance given to students by our instructors is one of the important features of our training. Our instructors are selected for their patience, understanding and consideration to students, in addition to their knowledge, experience and ability to teach as well as work right with and help our students throughout the course of training.

It is this, plus the large outlay of Electrical training equipment, along with our many years of experience and our system of the combination of technical training, theory and practical training, that has made COYNE so successful.

A Popular Field of Many Opportunities

A S I said at the beginning of this page, the many applications of Alternating Current equipment constitutes one of the most popular and profitable lines of work in the Electrical field. Almost every large and modern Factory, Industrial plant, Railroad, Textile mill, Packing plant, etc., uses from dozens to hundreds of Electric motors and controls in the operation of their machinery.

Most of these plants employ several Electricians and other large plants employ from several dozen to several hundred maintenance men, motor inspectors, trouble shooters, and repairmen. Electrical Utility Companies and Generating stations employ many thousands of Power Plant and Sub-station Operators to operate and maintain their switchboards, generators, transformers, and auxiliary electrical equipment. YOUR ACTUAL SHOP TRAINING IN THE OPERATION AND CARE OF REAL POWER EQUIPMENT HERE AT COYNE IS DE-SIGNED TO PREPARE YOU FOR THIS INTERESTING LINE OF WORK.

After you go over the explanation of our A. C. POWER AND MAINTENANCE Training and read the descriptions of the pictures on the next 3 pages, you will then realize how valuable this training can be in helping you to qualify for the great opportunities in electricity that are open to trained men.





The students above are getting actual operating practice on a large A. C. Switchboard. Here they are taught the operation and care of meters, circuit breakers and switches, and how to synchronize and operate alternators in parallel.

The photo to the left shows students learning care and adjustment of automatic and remote controlled A. C. motor starters, relays, contactors, coils and other equipment used in training students at Coyne.

In the photo above students are getting practice in overhauling and repairing an A.C. induction motor. An understanding of the working parts of such equipment develops a student's self confidence.





Here you see students making Power Factor and Efficiency test for three phase induction motor. These tests are used to determine horse power output of motor and Power Factor correction necessary to obtain minimum power rates.



These students are connecting up a bank of power transformers for 3 phase operation, of a type commonly used in outdoor type substations.





In the Coyne Shop-Labs we make extensive use of cut-away equipment to enable students to see for themselves where the parts are located and how they are electrically connected. The Instructor above is describing the windings, lighting arrestor and overload disconnect switch in a Power Distribution Transformer.



Here you see a view of the Stator Winding section. Notice that real wire is used in winding these stators. Actual winding and testing of Alternating Current motors gives you the practical training you need in this work. Motor repair work of this kind is often necessary in Electrical maintenance jobs in Power Plants, Factories, Stores, Office Buildings and, in fact, wherever Alternating Current motors are used.



Here we have different types of automatic, remote control equipment for A. C. motors. These men are getting acquainted with the care, operation and maintenance of this type of equipment.



The above photo shows an Instructor explaining the operation and adjustments for synchronous type motor and students preparing to make tests. This unit is used for correcting Power Factor. Every trained maintenance man should be familiar with this type of work.

[14] World Radio History



The picture above shows an instructor explaining the operation of an A.C. Motor and Control equipment with which these students are working. Actual experience on such interesting equipment is of great value to the student.



This is an outdoor type Substation Structure and these students are becoming acquainted with this type of equipment.







These students are getting practical instruction in the use of Lamps and Meters employed to synchronize A. C. Generators.

[15] World Radio History

Then You Move On to **INDUSTRIAL ELECTRONICS**

I NDUSTRIAL ELECTRONICS gives you some of the MOST INTERESTING AND FASCINATING TRAINING of the entire course—this is the tremendous new development that has grown up almost over night around the Electronic Tube.

ELECTRONICS has been rightly called "THE MARVEL OF OUR AGE." It can HEAR, FEEL, TASTE, REMEMBER, MEASURE, COUNT AND TALK. It can't think, of course, but in most of its applications it is more keen and more accurate than the human senses.

In sight, for example, we can't see beyond the horizon, we can't see through fog, through clouds or in the dark. But, the Electronic Tube can—in fact, it can "see" through wood walls, trick, steel and stone, and detect flaws, for example, that nobody could see with the naked eye.

Amazing New Developments Perform "Magic" for Industry

T HE many new amazing developments in the field of INDUSTRIAL ELECTRONICS has changed production methods in almost every industry.

Now, AUTOMATION ELECTRONICS, one of the newer applications of INDUSTRIAL ELEC-TRONICS, which includes many applications of automatic control of Electric Power in industrial processes, promises increasing demands for trained men.

In factories, cotton mills, printing plants, steel mills, railroads, knitting mills, fruit packing houses and many other various industries, THE MAGIC ELECTRONIC TUBE is assisting industry to increase production.

ELECTRONIC DEVICES, for example, analyze and detect colors; ELECTRONIC devices control high-speed wrapping of packages, fill bottles to the proper level, inspect candy, check packaged goods, grade fruits according to size, check golf balls, fill tooth paste tubes, check tires for flaws, sterilize foods, inspect razor blades and perform dozens of other industrial operations.

ELECTRONIC CONTROLS open and close circuits, open doors, stop or start machinery, reverse rolls in steel mills, control heat, air, smoke, dust, and temperature. ELECTRONIC TUBES turn on highway lights when darkness appears and turn them off when daylight returns. Other types of ELECTRONIC TUBES inspect metals, classify cotton, wool, silk and other natural and synthetic fibers.

Development of Electronics Creates New Opportunities

T HE DEVELOPMENT OF ELECTRONICS HAS NATURALLY CREATED NEW OPPORTUNITIES IN THE ALREADY GREAT OPPORTUNITY FIELD OF ELECTRICITY, as trained Electrical men with a knowledge of Industrial Electronics are needed for installation, service and maintenance of this equipment.

Here in INDUSTRIAL ELECTRONICS you get an explanation of the application of vacuum and gaseous type tubes that do the testing, sorting, comparing, counting, processing, rectifying, alarm protecting and control problems encountered in industry.

You learn about electronic tubes and their functions. Basic operating principles of electronic tubes of the various types. Discussion of the varied constructional features that adapt tubes to different applications; the use of high vacuum and gaseous type industrial tubes to determine their characteristics and their suitability for certain control applications.

You get instruction on vacuum tubes, gas filled tubes, thyratron tubes and ignitron tubes.

You learn about timing circuits and time delay by electronic means. Types of time delay devices and electronic trigger circuits; the function of the resistor and capacitor combination in effecting time delay. Time and Phase shifting circuits and their applications to timing and control. Testing and adjusting of time delay units.

Photocell Controls

T HEN you are given instructions on the photocells and photocell controls, the construction and operating principles of vacuum and gaseous type photocells, the study of the characteristics and application of different types of photocells; the application and construction of photocell controls to alarm systems, electronic counting devices, door openers, labeling machines, sorters, smoke detectors and various control and processing operations and the testing and repairing of Electronic equipment.

Knowledge of Industrial Electronics Essential

B ECAUSE of the importance of INDUS-TRIAL ELECTRONICS today, any fellow who is training and preparing for a future in the Electrical Field, SHOULD HAVE TRAIN-ING IN INDUSTRIAL ELECTRONICS. That is why we include instruction in this vital branch of Electricity with our course to open up greater future opportunities to Coyne Graduates.

Excellent Opportunities for Men with a Well-Rounded Electrical-Electronics Training

W HEN you complete the training in the Industrial Electronics department you will realize how valuable this training is and how it can add to your opportunities in the fast growing, progressive opportunity field of ELEC-TRICITY-ELECTRONICS—a field that should continue to offer greater and greater opportunities to the trained man in the years to come.



The picture at the bottom of this page and those on the next three pages show you how Coyne students, by working on the various apparatus and equipment are able to gain their knowledge and get practical experience in the tremendous new field of INDUSTRIAL ELECTRONICS. THERE IS NO BETTER TRAINING THAN PRACTICAL EX-PERIENCE-SUCH AS YOU GET AT COYNE.





^[17] World Radio History



These students are building and testing Carrier Current Remote Control units, with which Electrical equipment, located some distance from the operator, may be turned off or on by means of high frequency impulses sent over Alternating Current power wires.

The Ignitron Tube has proved invaluable for use in Electronic Switches, welding controls, and many other applications. The photo below shows students getting practical experience and instruction in the operation of this Electronic Tube.

Thankful for Coyne Training



I am so thankful and happy I took your electrical course. I finished my course on January 3rd, and on January 5th, I went to work for Super Electric Construction Company, . . . at a new laboratory located north of Kankakee.

After Super Electric was about finished with construction, I was asked to come and work at the new lab-

oratory as a 2nd class electrician, of which I did and am still working—and I am very happy over my course I studied at your school.

I remain as ever, Daniel Hansen, Ill.

"Trained Man Gets Ahead"

I would like to take this opportunity to say that I am deeply grateful for my training at Coyne and thank you for the excellent job the school is doing. During the time I was going I did not realize the full importance of putting forth the most effort in order to receive the utmost benefit from my training, but since that time I have come to realize that only the trained man will get ahead...



Thanking you again and hoping to hear from Coyne soon, I am,

John N. Stewart, N. Car.

Gets Electronics Job



I wish to take this opportunity to thank you for the assistance given to me in obtaining my present position. I am radio teletype maintenance electronic technician (GS-6) at a large airport in Ohio. My experience obtained at Coyne is of great help to me now.

Yours very truly, Tom T. Bracken, Ohio





This picture shows students getting instruction on the operation of a Dielectric Heating unit used in plastic moulding and sealing of Vinylite material for raincoats, aprons, tablecloths, etc.



This photo shows students working with an Electronic Side Register Control with the personal help of an instructor. Personalized instruction and practical "Learn-By-Doing" training helps you make rapid progress in Industrial Electronics here in the Great Shops at Coyne.



The above photo shows an instructor explaining the operation of an Electronic Resistance Welder Sequence Timer. Industrial Electronic equipment is becoming more and more important and is being used extensively in various industrial operations. That's why the training you will get in Industrial Electronics is so important to you.



The unit shown above is a commercial High Frequency Induction Heater of the type used for soldering and heat treatment of metals.

The Students below are testing rectifiers of the type used in Resistance Welding equipment, Magnetic Chucks and Electronic Instruments. Solid-State Rectifiers are replacing vacuum and gaseous type Rectifiers in many Industrial Electronic Circuits.



There Are Unusual Opportunities for Trained Men in the Electrical Field

I am sure that after reading about the Electrical training and studying the pictures of our training shops you will realize the many advantages of Coyne practical-technical training and realize that this is the kind of training you need for a bright and successful future in the great field of Electricity. On page 38 I tell you about just a few of the many opportunities in various branches of the Electrical Field that are available to trained Electrical men.

TRAINING IN REFRIGERATION AND ELECTRIC APPLIANCE REPAIR Men training for the fields of Electricity-Electronics or Television-Radio, can greatly increase their opportunities by including training in Refrigeration and Electric Appliance Repair. Training in this interesting and profitable field offers many additional opportunities when combined with training in Electricity or Television-Radio.

[19] World Radio History

REFRIGERATION and ELECTRIC APPLIANCE REPAIR

Training for This Important Allied Field Can Be Included With Any of Our Courses

B ECAUSE we believe every Coyne Graduate should be equipped with training to add to his opportunities wherever possible we have arranged for students to get this training in Refrigeration and Electric Appliance Repair with our Electrical-Electronics or Television-Radio Training.

Home Appliances

N this section of the Refrigeration and Electric Appliance Repair Department, you will be able to apply your technical knowledge to the techniques involved in testing and checking various different types of Electrical appliances commonly found in the home. This includes the electrically heated appliances such as Electric Irons, Toaster, Waffle Irons, Electric Ranges, Hot Water Heaters, Electric Dryers and others. You also study the construction, testing and repair of fractional horsepower motors of the type used in appliances such as Fans, Mixers, Washing Machines, Refrigerator Units, etc., as well as thermostatic controls and timing devices, such as used in Furnace Controls, Automatic Washers and other automatic devices.

A KNOWLEDGE OF THE ELECTRIC APPLIANCE FIELD OFFERS ADDITIONAL OPPORTUNITIES TO OUR GRADUATES to work for modern service organizations or to operate a business of their own.

Many Types of **Refrigeration Units**

HERE too, you get training in the operation, care and repair of many types of Refrigeration units under the personal supervision of an experienced instructor who shows you step-bystep how to do the work on well-known units of different types. The photo at the bottom of this page pictures many various types of appliances on which students get training.

Students Do Actual Refrigeration Jobs

THE photo at the bottom of this page and those on page 22 show Coyne students get-ting training in many types of Refrigerators which includes the PRINCIPLES OF REFRIG-ERATION, nature of heat and cold, heat-transfor and absorbtion commution of liquidar transfer and absorption; evaporation of liquids; pressures and temperatures, heat insulation, refrigerant chemicals and their properties, Refrigeration cycles. Types of Refrigerator units and systems, reciprocating and rotary type compressors, dry and flooded evaporators, condensers condensers, control valves, thermostats and switches, shaft seals. Practical shop work on tube flaring and connections, vacuum and pres-sure tests, gauges. Overhaul and repair of compressors, controls, valves, seals, thermostats, etc.

COMMON REFRIGERATOR TROUBLES AND THEIR SYMPTOMS. Condensers, stiff compressors, 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 installation methods, trouble shooting and repair.

Students Work on Actual Equipment

Y OU follow the same "Practical Method" of training in Electric Refrigeration as you do elsewhere in the training. First you get your technical training and theory through interesting lectures, supplemented with blackboard diagrams, equipment demonstrations, etc. Then after each lecture period you apply this knowl-edge by working jobs right on the Refrigeration equipment.

We have provided many types of Household Refrigerator units for you to work on.

Excellent Training for Graduates Going into Business

HE training you get in Refrigeration and L Electric Appliance service and repair is particularly valuable to the Graduate who wants to work for a Service Organization or has in

to work for a Service Organization or has in mind, sooner or later, going into business for himself and opening up a Sales and Service Or-ganization to handle home Refrigerators and Electric Appliances along with other things. In addition to servicing and repairing Re-frigeration and Electric Appliances, ADDI-TIONAL INCOME CAN BE MADE FROM SALES of new Refrigerators, Deep Freeze Units, Room Cooling Units and many other types of appliances. types of appliances.

types of appliances. Many Coyne Graduates have opened up Sales and Service Shops with just a small out-lay of capital to handle Refrigeration and Ap-pliance Units ALONG WITH Electrical Con-tracting or Television-Radio Service. Other Graduates WHO HAVE TAKEN OUR COM-BINATION TRAINING have qualified them-selves to HANDLE BOTH ELECTRICAL AND TELEVISION-RADIO work along with home type REFRIGERATORS and ELECTRIC AP-PLIANCES.

So, you can readily see why STUDENTS WHO INCLUDE THIS TRAINING in Refrig-eration and Electrical Appliances with their course, HAVE MANY ADDITIONAL OPPOR-TUNITIES for a better job and a real future, and to the Graduate who goes into business for himself it offers MANY OPPORTUNITIES FOR ADDITIONAL BUSINESS AND PROFIT.

It is because we want you to get THE BEST POSSIBLE TRAINING and because we want you to be prepared FOR THE GREATEST NUMBER OF OPPORTUNITIES that we make this valuable training available, WHETHER YOU TAKE OUR ELECTRICAL TRAINING, OR OUR TELEVISION-RADIO TRAINING, OR OUR COMBINATION TRAINING.







This photo shows students making a Lock-torque test on A.C. Motors to determine the effect on the starting torque when various size capacitors are used.

Here is an Electric Range with automatic temperature and timer equipment. Students are getting instruction on making efficiency tests and where to look for troubles that might develop in such equipment.



Here you see students reaming bearings and checking motors of the types commonly used on many popular Household Appliances.



tion. These students are tracing the electrical circuits on Rotary Refrigeration units with latest types of Hermetic Analyzers. This gives them the knowledge and practice in the technique of locating faults in the electrical portion of Refrigerators. Notice the Hermetically Sealed units in glass domes in the upper left part of the photo.

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This photo shows a section of Refrigera-

Here you see students getting practice on inspecting and testing various controls on Automatic Washers, and other units visible in the background.

The photo to the right shows students charging a Refrigerator unit under the supervision of an instructor. This type of experience gives students the confidence to do these jobs out in the field.



THIS VALUABLE TRAINING IN REFRIGERATION AND ELEC-TRIC APPLIANCE REPAIR CAN BE INCLUDED WITH EITHER OUR ELECTRICAL-ELECTRON-ICS TRAINING WHICH YOU HAVE SEEN PICTURED AND DESCRIBED ON PAGES 3 TO 19 INCLUSIVE, OR OUR TRAINING IN TELEVISION-RADIO WHICH FOLLOWS ON PAGES 23 TO 37 INCLUSIVE.

WE'LL NOW CONTINUE ON OUR TRIP THROUGH THE TEL-EVISION-RADIO SHOPS OF COYNE.

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Here is a Window Room Cooler unit, an application of Refrigeration principles that is becoming very popular in many sections of the country. Students get instruction on where to look for troubles that might develop in refrigeration units of this kind.



Here you see a group of students getting instruction and practice in setting Pressurestats, (Cold control) for various pressures and temperatures. Training in Refrigeration prepares students for many additional opportunities.

Mow let's visit the **TELEVISION-RADIO SHOPS**

The Great Field of Television-Radio Offers Unusual Opportunities

TO men and young men who will get training and prepare themselves, Television-Radio today offers the opportunity of a lifetime for a GOOD JOB OR INDEPENDENCE IN A BUSINESS OF THEIR OWN, because for some time now TELEVISION has been the fastest growing industry in America.

Television is in the billion dollar industry class today and is already one of our major industries.

Now, the advent of COLOR TELEVISION will further stimulate this already great field and offers additional opportunities in TV for years to come.

This big growing boom in Television offers the chance of a lifetime to get in on the ground floor in this fascinating field that can offer unlimited opportunities for a real future to men and young men who prepare now by training to qualify for these opportunities. BUT, TO QUALIFY FOR THE BETTER JOBS AND ADVANCEMENT IN THIS FIELD,

A THOROUGH KNOWLEDGE OF BOTH SOUND AND PICTURE REPRODUCTION IS NEEDED WHICH INCLUDES A.M. AND F.M. SOUND REPRODUCTION. A.M. or Ampli-tude Modulation is the type of reception we've had in Radio for many years and F.M. or Fre-quency Modulation is the more recent static free type, which is the voice of the Television Receiver.

We have laid out our courses so that students first get a thorough training in Basic Radio and Television. This basic training gives them the fundamentals they need to advance step-by-step on up through the MORE ADVANCED TRAINING IN A.M. and F.M. SERVICING, TV CIRCUITS AND CONSTRUCTION, TELEVISION SERVICE AND REPAIR AND TV CIR-CUITS and COLOR CIRCUITS.

COMBINATION ELECTRICAL-ELECTRONICS AND TELEVISION-RADIO TRAINING AVAILABLE

Many Students are interested in both the fields of Electricity-Electronics and Television-Radio. For these students we have arranged combination courses which are explained on the material en-closed with this catalog.

TO UNDERSTAND TELEVISION YOU MUST HAVE A THOROUGH TRAINING IN FUNDAMENTALS

TELEVISION is within reach of practically every city, town and community in the United States. Present plans call for the construction and operation of more and more new Television stations, and many stations are now being built. To be pre-pared for these great opportunities, plan to get the best training and knowledge possible, to step into this expanding field. This includes a thorough training in Television fundamentals SUCH AS YOU GET AT COYNE.

THE TELEVISION-RADIO training here at Coyne is pictured and described on pages 23 to 37 inclusive, which includes:

Basic Radio-TV:

A.M. and F.M. Servicing;

T.V. Circuits and Construction;

Television Service and Repair.

T.V. Servicing and Color Circuits.

Below and on the next 14 pages we give you a brief description of the training covered and show you many pictures taken in the Television and Radio training shops.

NOW, AS YOU GO THROUGH THE FOLLOWING PAGES, AND SEE HOW OUR STUDENTS ARE GETTING THEIR TRAINING, I'm sure you can't help but agree with me when I say—the way to get a practical training in Television-Radio is the way it is taught at Coyne.

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

Jist ... You Start Your Training n BASIC RADIO

To explain briefly, Television Transmitters send out both LIGHT modulated and SOUND modulated high frequency waves. Television Receivers pick up these waves and convert them to SIGHT and SOUND signals. The SIGHT signals are amplified into the picture you see and the SOUND signals are amplified into the voice or sounds you hear. The Television Receiver is equipped with a frequency modulated Radio to pick up the sound and voice. So to thoroughly understand Television, it is also necessary to understand frequency modulation, an adaption of A.M. or Amplitude Modulation. So you start getting this training and knowledge in Basic Radio and Television. The important basic instruction you get here gives you the foundation necessary for your advanced training in A.M. and F.M. Servicing, T.V. Circuits and Construction, Television Service and Repair and TV Servicing and Color Circuits. (please continue on following page)



This is a general view of Basic Radio and Television, where students build power supplies, study basic power circuits and familiarize themselves with fundamentals.

A good knowledge of fundamentals is needed to help students on more advanced A.M., F.M. and Television Training.

BASIC RADIO-TV

Here Students Get Their First Training in the Application of <u>Electronics</u> as Applied to Television and Radio.



INTERESTING LECTURES WITH BLACKBOARD DRAWINGS AND EQUIPMENT DEMONSTRATIONS INTRODUCE YOU TO THE FASCINATING MYSTERIES OF TELEVISION AND 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 Television and 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 students in the picture below are receiving instruction and getting practice on soldering, which is an important foundation for Television, F.M. and A.M. Service and Repair jobs which they will do later.



Students Work on Actual Equipment

The TELEVISION-RADIO TRAINING here at COYNE is designed to give you a practical knowledge of the things that are important to your future success in the great field of Television-Radio which includes A.M., F.M., Sound, Television, and other Electronic Equipment.

Working on the actual equipment gives you the experience and knowledge you need and helps you when you get into the more advanced training.

Instructors explain the construction, operating principles, circuit diagrams and test procedure of the various devices during class discussions in which frequent use is made of demonstrating equipment and visual training aid films.

Even the training here in the first department is practical. Technical Training and theory are made clear to the student in practical and understandable lectures and THE STUDENT THEN PROVES THE LAWS AND PRINCIPLES HE HAS LEARNED BY PRACTICAL WORK ON THE EQUIPMENT AND APPARATUS ITSELF, JUST AS PIC-TURED ON THE NEXT FEW PAGES.

The pictures on pages 23, 24 and 25 show you COYNE students getting training in BASIC RADIO AND TELEVISION. These pictures illustrate how each COYNE STU-DENT gets real PRACTICAL TECHNICAL TRAINING. A step-by-step procedure is employed throughout the entire training. 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.

There Is No Substitute for Practical Shop Training

C OYNE has always believed that a student can learn a thing much quicker and better if he can actually SEE, HANDLE, AND OPERATE THE EQUIPMENT HIM-SELF.

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

We know too, that he 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 man 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.

(please continue on page 25)

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(continued)



This is a view of a section of Basic Radio and Television, where students study basic power circuits and familiarize themselves with fundamentals of Radio and Television

(continued from page 24)

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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 practical training right on the equipment.

The shop jobs are laid out and explained along with easy-to-read drawings and diagrams so you learn to READ PRINTS OR DIAGRAMS and learn how to follow a diagram in wiring systems and making tests on the equipment.

All of the necessary parts and tools that you need in doing shop jobs are loaned by the school at no extra charge.

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.

* * * * * *

Today's TV Receivers, such as the one pictured below, are precision built instruments that call for expert service. Coyne training is designed to prepare graduates for good jobs or a business of their own in this fascinating field.



receivers. A good, sound knowledge of fundamentals is, of course, vitally important in preparing students to do more advanced work in A.M., F.M., and Television Servicing.



This photo shows an instructor giving a demonstration and explanation on how basic principles are utilized in the electron gun of a Television Picture Tube. The electron gun is the heart of a Cathode Ray Tube used in Television.

[**25**] World Radio History

Then You Move on to AM-FM SERVICING

You Do <u>Real</u> Trouble Shooting with <u>Real</u> Testing Equipment, Just Like You'll Use Later On the Job

IN A.M. and F.M. Servicing, you get servicing practice similar to the work you will do out in the field. This type of training also prepares you for the interesting and advanced training in Television which follows. The training you get in A.M. and F.M. Servicing combined with training in T.V. Circuits and Construction, Television Service and Repair and T.V. Servicing and Color Circuits qualifies you for your start in the opportunity field of Television-Radio and leads to the kind of jobs that pay good money and offer a real future in the years ahead.

You Get Actual Servicing Practice to Give You Experience

YOU start your training here by getting practice in handling Modern Analyzers, Vacuum Tube Voltmeters, Output Meters, Signal Generators, Signal Tracers, Oscilloscopes and other up-to-date Test Equipment used in testing and trouble shooting on A.M., F.M. and Television Receiving Sets.

On this and the following pages you'll

see pictures showing students working with many of these instruments. You make complete ANALYSIS CHARTS on many types of Receiving Sets. You make VOLTAGE AND RE-SISTANCE ANALYSIS TESTS and familiarize yourself with SIGNAL TRACING and other modern SHORT CUT METHODS OF FAULT LOCATION IN A.M., F.M., AND TELEVISION EQUIPMENT.

You Learn Trouble Shooting Step-by-Step

BEFORE entering A.M. and F.M. Servicing, the student has been taught how to trouble shoot with the "point to point" system using a volt-ohm milli-ammeter. Here he learns to service various types of Radio receivers using the latest up-to-date testing instruments.

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 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 servicing procedures by working on these sets.

Work on Many Home Type Receivers

HERE in A.M. and F.M. Servicing you will have an opportunity to work on many popular types of receivers. You get actual practice in testing Tubes, Condensers, Transformers, Resistors, Speakers, Power Supply Units, Filters and all parts of RECEIVING SETS with Modern Test Instruments. This is the type of practical shop-training you get in the shops of COYNE that prepares you for Testing, Servicing, Aligning, Adjusting and Repairing Receivers and gives you the knowledge and foundation you need for further training in Television Service and repair in the departments to follow.

(please continue on next page)





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

These Coyne students are testing Auto Radios. This branch of service

offers excellent opportunities for profit to the trained service man.



This photo shows you students using modern testing instruments to locate faults in various types of F.M. Tuners and Receivers. F.M. Circuits are employed in the sound reproduction in Television Receivers.

(continued from page 26)

F.M. Is The "Voice" **Of Television**

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

Notice the students aligning F-M sets in the photo at the top of this page. This is the kind of practical training that gives men confidence that they can qualify for these opportunities after they graduate.

Video Is The "Eyes" **Of Television**

ELEVISION, the amazing development that can bring to your vision spot happenings that occur hundreds of miles away has a world of opportunities for good jobs or a business of your own.

As a business, Television today is one of the fastest growing industries in America. This great industry will continue to grow and progress for many, many years, offering great opportunities to those who have the foresight to plan and prepare for them.

This is the opportunity of a lifetime to get into a new and progressive industry and advance with its growth to a real successful future in the years ahead. The practical-technical training in TELEVISION-RADIO at COYNE is designed to prepare ambitious men and young men for this great opportunity. (continued on page 28)

OWES SUCCESS TO COYNE TRAINING

"When I graduated from Coyne, I started right into business for myself and I got along good. There were three other Radio-Television service businesses in my home town when I started in, but I got my share of the business when the people found out that I am a Coyne graduate and really knew how to do service work. I put my diploma in a frame and hung it in my shop for everybody to see.

"I owe my success to the training I received at Coyne in Chicago. I would advise any fellow to train at Coyne if he wishes to become successful in the Tele-vision-Radio field."

Sincerely yours, Floyd P. Holden, Mich.

HAS GOOD POSITION

"I took your Radio-Television course last year. I now have a good position so I owe a lot to your fine school. I had a little previous radio experience before then but found the practical training very valuable and helpful."

Sincerely yours, Robert E. Steintz, Ind.

Here you see an instructor showing students the operation and giving instructions on the use of an oscilloscope. These units are used extensively in servicing Television and F.M. Receivers. Here in the Coyne Shops students learn the use of many of the latest, most up-to-date testing units.

World Radio History



This picture shows you a aroup of Covne students aetting training in the latest servicing and trouble shooting methods at one of the specially constructed service benches in A.M. and F.M. Servicing. Notice the many different types of Test Instruments which are available for students to work with. This is the type of practical shop training that gives the student confidence in his ability to do this work out in the field.



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 Service Man in the field. These Receivers are then serviced by the students using Modern Test Instruments to locate the defect. (continued from page 27)

You Are Now Ready for Training in **TV Circuits and Construction**

WHEN you have satisfactorily completed this work already described, you will have had training in BUILDING, TESTING, REPAIRING, ALIGNING, ADJUSTING AND SERVICING A.M. and F.M. EQUIPMENT AND HAVE ALSO LAID THE GROUND WORK for the more advanced WORK TO FOLLOW ON TELEVISION equipment and apparatus that is necessary for ALL-AROUND TELE-VISION AND RADIO TRAINING. THIS PART OF YOUR COURSE covers some of the most interesting and important Television Applications.

DOES TV REPAIR WITH CONFIDENCE

Many thanks to Coyne. I was able to get a job in T.V....

Many thanks to Coyne. I was able to get a job in T.V. here in Toronto as a Service Man. I have worked here over four months now and already my pay has been raised twice. I believe that without the practical work at Coyne I would never have been able to tackle this job with so much confidence. I now have a chance to do T.V. re-pairs as well and learn more about running a shop, which I hope to have someday in the future. I wish to thank again the instructors and the staff for a pleasant stay at Coyne and the wonderful method of teaching from which I was able to benefit so much. Sincerely yours

Sincerely yours. Unto A. Hendrickson, Ontario, Canada

TRAINING BEST INVESTMENT

I have been so happy since I came home, that time has seemed so short.

seemed so short. I am very glad I did go to your fine school, and wish to thank everyone at Coyne that made it possible to get my train-ing. I had no trouble finding a job. The best investment I ever made was by attending your school. I'll let you know from time to time how I am getting

along.

A grateful graduate, Alex Castillo California

[28] World Radio History

TV CIRCUITS and **CONSTRUCTION** Here You Get Further Vital Training Leading to Great Opportunities for a Successful Future in the AMAZING FIELD OF TELEVISION—RADIO

U P to this time, your training has been applied to the sound reproduction phase of the Television-Radio Field. This, in itself, is an important branch of the field as the service and repair of the wide variety of sound reproducing equipment on the market, which includes A.M. and F.M. Radio Receivers, A.M. and F.M. Phonograph Combinations, Automatic Record Players, HiFi Amplifiers, Auto Radios, etc., call for trained and skilled service men.

Today's sound reproducing equipment are precision-built instruments that call for expert maintenance, service and repair, and the man who is going to be prepared to do the best job in this field needs practical-technical training in the broad applications of this type of equipment.

Sound and Video Go Together

THE training you have received so far has a direct application to Television also. Television is broadcast along with sound, by means of F.M. Radio Receiving equipment, and many of the servicing procedures that you learned and applied to Sound Equipment in the preceding departments have an application to this sound equipment and to Television itself.

equipment and to Television itself. However, in this TV CIRCUITS AND CON-STRUCTION DEPARTMENT, you begin to work directly with Television equipment and Test Instruments designed specifically for use in the Testing, Service and Repair of Television Receiving Sets. This, in turn, leads directly to the various applications of TV Servicing and Repair Techniques in the departments to come, all of which leads to the final objective and that is to be qualified for the opportunities in the field of Television-Radio and the opportunities to come in this fast growing field.

Big Opportunities Ahead For Trained Television Men

THIS fabulous field of Television offers thousands and thousands of opportunities right now for men and young men who will put forth the effort necessary to train themselves to qualify for these opportunities.

Because of the rapid growth of the industry, manufacturers, distributors, dealers and service organizations have all been short of the men needed and have been doing everything possible in an effort to find enough trained Television men to carry on operations.

Television Is a Major Industry

A FTER only a few years of development, the Television Industry has assumed a position as one of our major industries. Manufacturers are producing Television sets so fast that it is almost impossible to estimate the number of sets in use.

New Television Stations are being built and Television Networks are being expanded from coast to coast bringing Television to practically every family in the U.S.

Your Opportunity To Get In On The Ground Floor Of Color TV Development

THIS industry will offer even greater opportunities for a successful future on a much larger and more amazing scale than it has offered before because now this industry is further stimulated by the new sensational TV development—COLOR TELEVISION, which is expected to be even greater than black and white TV.

This opens the door to an expansion in the TELEVISION industry such as we have not yet seen, in spite of its sensational development so far. It means that the opportunities ahead of us in this great field are almost unlimited. It's seldom indeed, that a major industry offers the wonderful opportunities that the field of TELE-VISION-RADIO offers today.

(please continue on next page)



This is a general view of TV Circuits and Construction. Here you see students getting instructions on the principles of Television construction. Notice the students working right on the Television Equipment. This type of training on the latest

type Television Equipment gives the student confidence in his ability to step out into the Television-Radio field after he graduates and make good in a job that offers a real future or in a business of his own.

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TV CIRCUITS and CONSTRUCTION (continued)



This photo shows you one of our specially constructed Television Service benches. Coyne Students working with Modern Television Test equipment gain valuable practical experience which gives them the confidence and ability to do this same work out in the Television Field after they graduate. Notice the convenient arrangement of the work benches with the required test instruments within easy reach and placed at eye level for ease in reading the meters.



In the job pictured above, students are adjusting the ion trap in a Receiver. In this shop job, students perform the same operations that a serviceman does when installing a new TV set or assembling one after repairs.

(continued from page 29)

Practical-Technical Television-Radio Training Needed

THAT'S why you need real Practical-Technical TRAINING IN TELEVISION-RADIO to cash in on these opportunities that are open to trained men. To have just a smattering of training is not enough. You need to know the FUNDAMENTALS OF SOUND AND PIC-TURE REPRODUCTION as well as the AD-VANCED APPLICATIONS OF SERVICING AND REPAIR PROCEDURES.

(continued on page 31)

TRAINING HELPS IN SERVICE

"Thanks to the knowledge I received at Coyne, I am now in the Signal Corps Engineering Lab. Development Detachment. I am on a team that takes radios of different types to Camps with Signal Corps Depots. We set up the equipment and give instruction on the operation and maintenance of each set. I graduated from a course in Multi Channel Micro Wave and found here again the knowledge I received at Coyne was very helpful."

Yours truly, PFC. Donald D. Benson

PRAISES COYNE TRAINING HIGHLY

"... I have been very successful. I have my own radio-television repair, and engineering laboratory, one of the finest in the state of Iowa.

"In conclusion I will say for the benefit and enlightenment of future students: 'Coyne is the best if not the greatest Radio-Television school in the United States'."

Sincerely yours, Glenn W. Radcliffe, Iowa

[**30**] World Radio History

TV CIRCUITS and CONSTRUCTION (continued)

(continued from page 30)

×.

You Work on Real Television Sets

Y OUR shop jobs include Television Antenna calculations, installation and adjustment. Tuning the television receiver, observing the composite video signal with an oscilloscope and identification of the various impulses. Checking deflection circuit waveforms, linearity of deflection voltages, checking the video i-f amplifier and checking television receiver power supplies.

Shop experiments covered deal with the video or picture signal, and the various circuits through which it passes from the receiving antenna to the cathode ray tube. This knowledge of theory and fundamentals is very essential to the proper diagnosis and correction of troubles arising in the video section of the television receiver.

You Apply Your Theory on Actual Television Equipment

T HE practical work in this Department also includes: alignment of the f.m. ratio detector in the television receiver; Alignment of f.m. discriminator and amplitude limiter; Localizing and correcting trouble in audio i-f amplifier of the television receiver, and Alignment of audio section. The student also gets instruction in setting up the Oscilloscope for operation; checking frequencies, varying voltages and *(continued in last column)*



Here you see students checking the wiring and tracing the circuits of Television Receivers. This actual practice and practical experience qualifies them to quickly locate the troubles in Television Receivers they may find in service work out in the field.







In the photo above you see an instructor giving a student instruction and guidance in the correct procedures and important safety measures involved in the installation of a picture tube in a Television Receiver.

alignment and checking of tuned circuits, using an Oscilloscope.

Your training in television circuits includes the adaption of a-m and f-m receiver servicing to the f-m sound section of the television receiver, study of the construction and application of the cathode ray tube. This type of training is an invaluable aid in Television Servicing and Repair which you get in the next department.

Now You're Ready for Television Service and Repair

A FTER you have completed the training in T.V. Circuits and Construction you will have laid the foundation for your interesting and profitable training in Television Service and Repair. This is the most important training of your entire Radio-Television course. This training is pictured and described on pages 32, 33, and 34.

You're Now Ready for the Vitally Important Training in TELEVISION SERVICE and REPAIR

I N the TELEVISION SERVICE AND REPAIR DEPART-MENT the operating principles of Television Circuits that were covered in the TV Circuits and Construction Department are reviewed and discussed with special attention to typical troubles that develop in a TV receiver, whether it be in the circuit itself or in one of the component parts, the symptoms they produce and what to do about it.

It is not possible here to list all the subjects covered in lectures, class discussions, demonstrations and shop jobs, but in a general way the training in this department has to do with matters relating to the location of troubles that develop in a TV receiver, or Trouble Shooting, and the means and ways of correcting these troubles and break downs.

You Study Trouble Shooting Methods With Instruments

THE Television Receiver is a complex, precision instrument, so the study of Trouble Shooting methods on TV receivers includes, among other things, a great deal of emphasis on the study of the operating principles and applications of Typical Test Instruments used in TV Service and Repair work, such as the high resistance voltohmeter, the vacuum tube voltmeter, the kilovoltmeter, audio-generators, sine-square wave generators, RF generators, marker generators, sweep generators, cross-hatch generators, conventional oscilloscope, wide-band oscilloscopes, the voltage calibrator, field strength meters, grid dip-meters, probes for the oscilloscopes, the volt-ohm-milliammeter, and for the vacuum tube voltmeter and other testing instruments.

(please continue on page 34)



This student is getting special help from an instructor in measuring the strength of picture signals and checking for troubles that normally develop and making proper corrections to get the best reception.



This is a general view of Television Service and Repair. One of the important advantages of Coyne practical-technical training is the actual practice students get in using up-to-date television service instruments to locate faults and troubles in Television Receivers.

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Under the guidance of an instructor these students are getting practice in trouble shooting on a standard TV Receiver so that they become familiar with the methods and procedures employed under actual field conditions.



These students are getting practice in Trouble Shooting the High Voltage Power Supply with the use of a High Voltage Test Probe, to become familiar with the common troubles that develop in these units.

HAS OWN TV-RADIO SHOP



I certainly feel that Coyne has helped me make a place for myself in this busy world.

Yours very truly, William E. Beers, Ohio

GETS JOB RIGHT AWAY



GETS JOB RIGHT AWAY Will write a few lines to say hello and let you know how I'm getting along. I got a job the next day after getting home. I like my job very much and have a chance to put some part of my training to work most every day. I know now that without the training I had at Coyne I would never have been able to get this job and get along as good as I have. I want to thank you for all the help

I want to thank you for all the help you have given me after I graduated. Yours truly,

James Elnier, N. Y.

WELL SATISFIED WITH JOB

I wish to inform you that I am presently em-ployed as a civil service worker at Kelly Air Force Base, Texas. I do main-tenance work on electronic test conjunced and test equipment and am well satisfied.

Yours truly, Floyd C. Mueller, Texas

HAS TV-RADIO AND APPLIANCE BUSINESS

BUSINESS I am writing you to renew our friend-ship and to thank you for making me what I am today. You see, I am now the proprietor of my own place of business, Weatherman Radio & Television Sales & Service. And, I feel that you are the one who is responsible for my welbeing today. I should like to stress that, though TV service is gaining importance, radio service now is and. we believe, will continue to be important. My training in Electrical Ap-pliances has proved very successful also... Respectfully yours. William A. Weatherman, Ind.

In this photo you see an instructor explaining procedures in checking linearity using a Bar Generator. The students in the background are aligning and testing Receivers using various types of up-to-date testing equipment. This practical training gives the students the experience they will need out in the field. [33] World Radio History

TELEVISION SERVICE and **REPAIR**

Coyne Practical-Technical Training in TELEVISION-RADIO Prepares You For Many Opportunities in This Expanding Field

(continued from page 32)

Instruction In Operating A Television-Radio Service Business

A LSO covered in this department is instruction on setting up a Service Shop, including ideas on equipping the shop, essential test instruments, other instruments desired, required tools, factors determining best location of shop, layout of work bench, scheduling calls, tube changing, schedule of service charges, the study of the problems connected with the study of the Television Receiver installation in the home, location of receiver, position of antenna, customer relations and other factors in the successful operation of a Television-Radio Business of your own.

You Do Trouble Shooting With Modern Television Test Instruments

THE shop jobs include accepted methods of Trouble Shooting and proper use of Test Instruments for this purpose, such as the Oscilloscope, Voltage Calibrators, Vacuum Tube Voltmeters, Square Wave Generators, Signal Generators, Sweep Generators and others.

After locating troubles by accepted trouble shooting procedures, students then get practice in correcting these troubles on various popular models of Television receivers made by several of the leading Television manufacturers in the country and sets that are commonly found in use throughout the United States.

Students Get Practice in Service and Repair

TYPICAL troubles are inserted in different sections of the Television receiver and students find and repair the trouble and in this way become familiar with various makes of TV receivers, their circuits and means of adjusting them for best performance. This gives students the knowledge, experience and practice they need to become familiar with different models, and to analyze, test and repair them under actual field conditions.

conditions. This is the practical application of the Coyne Practical-Technical Method of training as explained on page 2, DESIGNED TO QUALIFY STUDENTS QUICKLY AND THOROUGHLY FOR GOOD JOBS AND ADVANCEMENT IN THE FIELD OF TELEVISION-RADIO OR OPERATE A SUCCESSFUL BUSINESS OF THEIR OWN.

UHF Opens Up New Television Opportunities

F OR some time Television has been one of our really fast growing industries. Only a few short years ago, there was only a handful of broadcasting stations with an audience of a little over one million people, mostly in the north eastern part of the country. Now there are nationwide Television networks from coast to coast and from the Canadian border to Mexico bringing Television within reach of millions of people.

A very important factor in the FCC allocation of Television stations is the fact that the SMALLER COMMUNITIES HAVE BEEN PROTECTED BY CHANNEL AS-SIGNMENTS in the UHF (ULTRA HIGH FREQUENCY) WAVE BAND. This means that many more sections of the United States will have better Television reception than ever before.

In these FCC assignments, well over half of the cities covered in the plan have a population of twenty-five thousand or less and nearly 500 communities of less than ten thousand population are allocated one or more channels. This means that Television will soon be available to almost every community in the United States.



This is a close up view showing how a student gets practice in aligning a Television Receiver. Actual practical experience like this is needed for the better jobs in the Television-Radio field.



The photo above shows a section of our Television Service and Repair. This Coyne instructor is demonstrating the procedure of equipping a television receiving set to receive UHF (Ultra High Frequency) television.

These developments in the field open the door to an expansion of the Television industry such as we have never seen before, in spite of its sensational development so far.

The advent of COLOR TELEVISION will further increase this already great field and offer additional opportunities in Television for years to come.

So, you can see why there are such great opportunities for trained Television-Radio men today and why opportunities will continue to grow in the years ahead.

Now You're Ready For TV Servicing and Color Circuits

A FTER you have completed the training in Television Service and Repair you will have laid the foundation for your interesting and profitable training in T.V. Servicing and Color Circuits. This is a most important training of your entire Radio-Television course as it gives you training in Advance Servicing Techniques in Black and White Television and training in Color Television circuits and the use of Color Television test instruments. This training is pictured and described on pages 35, 36, and 37.



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 Receivers under the supervision of experienced instructors.

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TV SERVICING and **COLOR CIRCUITS** THE PICTURES ON THIS AND THE FOLLOWING PAGES SHOW STUDENTS GETTING PRACTICAL TRAINING IN THE

TV SERVICING AND COLOR CIRCUITS DEPARTMENT

I N the TV SERVICING AND COLOR CIR-CUITS DEPARTMENT, the student contin-ues the study of TV Servicing Principles learned in the preceding department as applied to Black and White TV.

The practical work in this department also is a continuation of the Servicing Procedures started in the preceding department for the purpose of developing skills and efficiency in the Service and Repair of the various types of pop-ular Television Receiving Sets.

Of course, the study of Radio and Television and Service Procedures throughout ALL OF THE DEPARTMENTS in the Radio-Tele-vision Division of the school HAVE A DIRECT RELATIONSHIP TO COLOR TV and it is all vital and essential to an understanding of Color Television.

This means that the vitally important training the student has gotten in the preceding departments gives him the foundation for the more advanced Service work on Black and White TV, and also the foundation for the study of Color TV Circuits and special test instruments used in Color TV Servicing Procedures.

The major portion of the Installation, Serv-ice and Repair of Television Receivers at the present time in most parts of the country is on Black and White TV. In fact, this will, no doubt, be true for some time to come as Color TV is in a rapid development stage and will undergo many changes in the next few years.

many changes in the next few years. However, Color TV is now such an impor-tant factor in the TV Field and will become in-creasingly important as time goes on that we feel that it is absolutely essential for any one entering the Television Field today to include in his training a study of Color TV Circuits and Principles of Operation.

(continued on page 37)

That is why our TV Servicing and Color Circuits Department is organized to include the study of Color Circuits and is in a position to expand on these training facilities and put more

emphasis on this phase of Television as it comes into more general use, and in that way better prepare our students for success in the Radio-TV field.



The photo above shows a general view of an area in the TV Servicing section of the TV Servicing and Color Circuit Department. Here you see students getting further practice and guidance in Servicing procedures on popular makes of black and white TV Sets.



Here is a general view of the Color Circuit Section of the TV Servicing and Color Circuits Department showing students making various tests and adjustments on many Receivers with Testing Equipment designed for use on Color Sets. The training in all TV

Departments has a relationship to Color TV, but this specially designed Color Lab enables Coyne Students to study the special procedures as applied to Color TV and prepares them to follow its development as it comes into more and more general use.

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TV SERVICING and COLOR CIRCUITS



The picture above shows Coyne students getting practice in a very important trouble shooting procedure, the stage by stage gain check with use of an RF Signal generator and a VT meter. The many different types of Test Instruments which are available to Coyne students makes the training intensely practical and valuable to them when they get out into the Service field.



Here you see a Coyne student getting a special demonstration on the use of stubs for impedance matching and filters to eliminate interference and obtain the best possible picture. Instructors in the Coyne Shops are always available and willing to give students a helping hand when they need it or have questions to ask.



These students are performing a Color IF Alignment job on a Color TV Receiver using a sweep generator, marker generator and scope. One student is making adjustments while his partner is observing the scope pattern.



These students ore getting special help from their instructor in the use of a Color-Bar Generator and a Vacuum Tube Voltmeter in working out a Color Oscillator Alignment job. Other instruments are within arm's reach for other jobs that students do as a part of their shop training.



This group of students is getting a special demonstration by an Instructor in proper tuning adjustments on a Color TV Receiver to get correct color reproduction. Here in the shops of Coyne you'll always find instructors ready and willing to give you personal help, when you need it.

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TV SERVICING and COLOR CIRCUITS (continued)

(continued from page 35)

You Work On Popular TV Sets

T is, of course, not possible to show pictures of all the equipment in this department, or any other department in our shops. However, the photos we have reproduced on this page and the two preceding pages are typical shop scenes designed to show students getting practical instruction on popular Color TV Receiving Sets, as well as popular Black and White Television Receivers.

The practical shop training in this department includes among other shop jobs, Trouble Shooting Tuner Defects, Antenna Checks, Video and Sound IF Troubles, Video and Sound Amplifier Trouble Shooting, Sync Troubles, Vertical and Horizontal Sweep Troubles, Color Conveyance, Adjustments, Color Purity Checks, Installation, Wave Form Analysis and other specific jobs, as well as generally accepted Trouble Shooting Color TV Procedures.

You Work With Modern Test Instruments

O NE 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 and Television Receivers.

In this department the student continues to work with various types of testing instruments commonly used in a service shop in Testing and Trouble Shooting Black and White Receivers. In addition, the student learns to use instruments especially designed for Color TV, such as White Dot Generators, Color-Bar Generators, Sweep and Marker Generators, Oscilloscopes, Special Test Probes and others.



The picture above shows students making adjustments on a Color TV set to properly converge the primary colors, using a white-dot generator to produce a dot pattern on the Color TV picture tube.



These students are performing a trouble shooting job to detect Vertical Sweep Troubles using an Oscilloscope and a DC-AC Meter. Practical training of this kind gives the student confidence in his ability to do a good job and make good when he starts out in the field.

Excellent Opportunities for Men with a Well-Rounded Television and Radio Training

HEN you have satisfactorily completed the training in TELEVISION and RADIO 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 THE SECTION DESCRIBING OUR TELEVISION-RA-DIO TRAINING AND STUDYING THE PICTURES YOU WILL REALIZE THE MANY ADVANTAGES OF COYNE TRAINING AND REALIZE THAT THE FAMOUS COYNE PRACTICAL-TECHNICAL SHOP TRAINING COURSES IN TELEVISION-RA-DIO GIVES YOU THE KIND OF TRAINING YOU NEED FOR A BRIGHT AND SUCCESSFUL FU-TURE IN THIS GREAT FIELD. A few of the many opportunities in Television-Radio are listed on page 39.



City-Town-Country

A World of Opportunities ECTRICITY-ELECTRONICS

YOU and I are living in an Electrical Age. Thousands of uses for this great force have been developed . . . thousands of machines and devices to improve and speed up manufacturing processes. Yet, scientists tell us that we have only scratched the surface. New applications are being developed constantly. Today, industry and our very civilization, depends upon Electricity.

Electricity Everywhere

Y ES, Electricity is used everywhere . . . in big cities, in towns and on farms. Yet many fellows think Electrical jobs exist only in Electrical concerns. This is far from true. Thousands of men are employed in concerns that do not specialize in Electrical products. And, of course, Electrical concerns such as Power companies, telephone, and telegraph companies, and electrical manufacturers account for thousands of jobs for trained Electrical men.

On this page 1 want to bring out some of the many fields of opportunity open to trained Electrical-Electronics men.

Power Plants

A LARGE power company operating several plants may have hundreds of trained men to build power plants, transmission lines, substations, etc., in small towns and villages, as well as in large cities, and hundreds of other trained men to operate and maintain them. The opportunities here are tremendous, to be sure. There is no denying that. Yet . . . they are only a part of the total number of Electrical-Electronics jobs open to trained men.

Manufacturing Plants

O^{NE} example of these other opportunities is in the factories that get their electrical power in wholesale quantities from a power company. These factories are electrified. Electrical energy is used for their hundreds of electric motors, lights, and other electrical equipment.

Other factories have their own complete power plants.

Trained Electrical-Electronics men are needed to keep this equipment in repair and running every minute of the day.

Steel Mills

STEEL mills employ thousands of electricians as motor inspectors, repairmen and maintenance men on motors, lighting, electric ovens, furnaces, cranes, hoists, signals, communication systems and controls.

Railroads

EVERY large railroad needs many trained electrical workers for installation, repair and maintenance of safety devices, signal systems, automatic train controls, communication circuits, lighting, heating, etc.

Textile Industry

TEXTILE Companies employ thousands of trained Electrical-Electronics men to service and maintain their lighting systems, motors, controls, and to operate and maintain their power plants.

Industrial Electronics

E LECTRICITY and Electronics are vital factors in modern developments in science. Industrial Electronic devices are performing almost unbelievable feats in manufacturing processes and other applications.

Rural Electrification

TO the fellow who doesn't want to work in the city there are countless opportunities in small towns and communities. During recent years hundreds of thousands of farms were electrified. Rural Electrification has made it possible for industrial plants to move to the small town or rural districts providing splendid opportunities for trained electrical men in rural districts, as supervisors, power plant operators, or Superintendents of Rural Power Systems.

Own and Operate Your Own Shop

YOUR training also includes INSTRUCTION ON STARTING AND OPERATING YOUR OWN BUSINESS, business hints, location of store, required instruments and tools, stock requirements, advertising, etc.

This is one of the various Special Services offered you as a student of Coyne, in addition to your practical Shop training.

Many Coyne graduates are established in their own contracting or sales and service business.

Many Opportunities

MANY other industries such as Paper Mills, Mines, Chemical Plants, Airports, Hotels, Stores, Office Buildings, Warehouses, Steamships offer opportunities for trained Electrical-Electronics men.

However, how much a fellow profits from these many opportunities depends 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 a practical and technical training in ELECTRICITY-ELECTRONICS, there should be, in this great field, the interesting and profitable future he has pictured and planned for himself.

HE field of TELEVISION-RADIO today offers men and young men an opportunity of a life time for a GOOD JOB OR INDEPENDENCE IN A BUSI-NESS OF THEIR OWN, because the RADIO-TV field today is one of our fastest growing industries in America.

TELEVISION-RADIO is in the billion dollar class already and the development of COLOR TELE-VISION will further stimulate this already great field and offers additional opportunities in TV for years to come.

Television and Radio networks are being expanded from coast to coast making Television available in practically every city, town and community in America.

The production of Television Receivers is so great and is increasing so fast that it is almost impossible to estimate the number that will be owned and in use in another year.



for trained men in and TELEVISION-RADI

TELEVISION MANUFACTURING The Television 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. Hurdreds of Coyne Graduates are em-ployed in this great field.



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branches

FACTORY REPAIRING **ON TELEVISION RECEIVERS** Repairing of production line rejected Television Re-ceivers requires skill and training and pays good money to men who can qualify for this work. Many trained men are employed in this interesting work in large Television manufacturing concerns.

MODERN TELEVISION AND RADIO SERVICING

HE millions of Television and Radio Sets, which include a wide variety of A.M. and F.M. Receivers, Radio-Phonograph Combinations, Auto-Radios, etc., that will be manufactured will create thousands of good jobs in manufacturing plants. These sets will have to be in-spected, checked, aligned and tested. When they are sold, they'll have to be installed, adjusted and serviced.

This means that the opportunities ahead of us in the great field of TELEVISION-RADIO, in sales, instal-lation and servicing of Receiving Sets are almost unlation and servicing of neceiving Sets are almost un-limited. It's seldom, indeed, that a major industry has offered the wonderful opportunities that the field of TELEVISION-RADIO offers today to get in on the ground floor of a great new industry and grow and advance as the industry grows—A chance to step out into the field at a time when a real future is practically assured to those who will prepare and qualify for these great opportunities.

TELEVISION SERVICE—A PROFITABLE FIELD A modern Service Bench showing some of the equipment required to locate defects in modern Receivers. This is one of the most popular and profitable of the field.

A STORE AND SERVICE SHOP OF YOUR OWN

MANY Coyne Graduates have stepped right out of the Shops of Coyne into a Sales and Service Shop of their own and are today established in a prosperous business that offers future security and independence.

It's easy to see why so many of our graduates do so well when they decide to go into business for themselves, because as they have often said, "It's just like going from one shop to another." Coyne Training is especially designed to be an excellent stepping stone to independence or a business of your own.



A BUSINESS OF YOUR OWN Selling and servicing A.M., F.M. and Television sets, Phonograph Combinations and Record Changers can be a highly profitable business. Many Coyne gradu-ates have opened their own shops, and built a great future in their own business.

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TELEVISION SERVICING Television installation and servicing offers unusual opportunities and good pay to men who can qualify. The above photo shows a technician aligning, phas-ing, setting up controls and making factory adjust-ments on a Television Receiver.

Is It Possible To Learn On The Job?

A STATEMENT BY J. P. HANAN, DIRECTOR OF COYNE TRAINING



Mr. Hanan has been with Coyne over 25 years and has guided the progress of thousands of stu-dents through the Coyne Shops. His associate membership in the Institute of Radio Engineers and the Physics Club of Chicago and his many contacts with industry through these years, makes him particularly well qualified to answer this question.

W E have been asked many times if it is possible for a fellow to go into a plant or shop and "pick up" a knowledge of Electricity, Electron-ics, Television or Radio while working on the job. My answer to this question is—No! Of course, it may be quite possible to get a smattering knowledge. Some fellows have tried it, and after a year or so, consider themselves to be trained.

But you can't get the real Practical-Technical knowledge of Electrical, Television, Electronic, or Radio apparatus and equipment that you need. You must understand how and why the equipment operates and how to service and maintain it and you can't get all this on the job.

SHOP MEN IN INDUSTRY NOT TRAINED TO TEACH

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

Suppose you're assigned as a helper to an "old timer" with years of experience who presumably "knows the ropes." He can't take the time to explain the fine points of each job. He's paid for what he does, and it's easier for him to turn over the simple work to you and go ahead with the parts that require skill.

Moreover, such a man is not trained in teaching others. He doesn't have the patience to go over and over each step until you master it. But most important . . . 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.

COYNE TRAINING MODERN AND UP-TO-DATE

HERE at Coyne you have an opportunity to work on a wide range of Electrical, Electronic, Television and Radio apparatus and equipment. The shops at Coyne make up the backbone around which all the other services revolve. The objective is to set up shop jobs and laboratory projects that are representative of the job that will be encountered in the field. The student starts on certain basic fundamental jobs and then advances into simulated field type jobs. He is taught to become self reliant so that any normal variation of trouble in the field will not be confusing. The student must finish each job satisfactorily before credit is allowed by an instructor. Instructors lend a hand whenever it is needed.

DISCUSSIONS AND EQUIPMENT DEMONSTRATIONS BY INSTRUCTOR

ISCUSSION of information is given in detail prior to each shop period so that the student understands the operating principle of each piece of equipment. Demonstrations by an instructor are used extensively so that the student knows what to expect on the job.

SPECIALLY PREPARED TEXT MATERIAL

THE required text material consists of specially prepared manuals. These manuals are in two parts, one for related information and one for shop jobs and laboratory procedures that are to be worked out in the shops. Students keep these manuals and they prove very valuable to students after they graduate and are out working in the field.

WHY LIMIT YOUR FUTURE?

OMPARE this systematic step by step method of training to trying to learn in the factory or shop where you will be tied down to a single branch of the field. You will be in grave danger of landing in a "oneoperation" job with little or no chance for advancement. And should you

hear of a better opportunity in some other branch of the field, you won't have the necessary Know-how to take advantage of it. 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 real Practical-Technical training and experience

with life sized apparatus and 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 OPPORTUNI-TIES IN THE INTERESTING AND FASCINATING FIELD OF OPPORTUNITY.

the best of care and attention while going to school. This is one of our most important considerations. Every effort is made by our Welfare Department to provide a friendly understanding atmosphere and give students the best of care and attention at all times. Page 46

in this catalog explains some of the activities of our Welfare department and shows to what lengths we go to help adjust students not only toward getting the most out of their school work but also to adjust them to outside activities and recreation and look out for their

PARENTS OF STUDENTS PRAISE COYNE HIGHLY

It's only natural for parents to be intensely interested in their sons It's only natural for parents to be intensely interested in their sons and want to be sure that when their boys go away to school they will not only get the training and knowledge that will give them a good start toward a successful future, but that they will receive the best of care and attention while away from home. We're greatly pleased to know that many parents who send their sons to Coyne appreciate our efforts and we're proud of the many letters we get from these parents, a few of which are reproduced below. These expressions of there is a from parents will help assure you that your son will receive thanks from parents will help assure you that your son will receive

THESE PARENTS SAY: "COYNE PROVIDES A HOME AWAY FROM HOME"

A HOME AWAY FROM HOME" It is with regret that we inform you that we will not be in a position to attend the graduation ceremonies of your current class of which our son, Royce Booth, is a member. It would certainly be a very happy occasion for us because we are very proud of the progress that he has made during his stay at your school. We extend to you and the entire staff of your school our most sincere appreciation for the help that you have given him. We are aware of the wonderful assistance that you have given him not only with his studies, but also in helping him to become adjusted to activities outside of school, and assisting him in finding part-time work, without which all of this would probably never have been possible. We are sure that your most helpful service of providing these boys "a home away from home" has contributed continued on the boots

Work, without which all of this would provably herer hard cert possible. We are sure that your most helpful service of providing these boys "a home away from home" has contributed greatly to your excellent school. It is amazing the success that you seem to have in keeping a boy's mind on his work in a City such as Chicago. We realize that this is particularly true when a boy comes from a very small town such as is the case with our son. We thank you again for the many favors extended to him, and the guidance that you have given. We heartily recommend your school to any young man or boy desiring to enter this field of work.

With kindest regards, we are Very truly yours, Mr. and Mrs. Roy Booth, North Carolina

RECOMMENDS COYNE HIGHLY

Our son, Bill D. Mauldin, graduated from your fine school . . . and is now with the Middle South Utilities Corporation as a dispatcher. the names of two high school boys that will finish their senior year here in May.

Many thanks to you and your fine school for all the kindness and help shown to our son, Bill D. Mauldin, while he was a student there.

Most sincerely yours, Mrs. H. L. Mauldin, Sr., Arkansas

A PLEASURE FOR SON TO GO TO COYNE

It has been a pleasure for my son Scott Lewis to go to your school. He writes us such interesting things about the school and always says you go out of the way to see that every one is all right.

Sincerely yours, Mrs. K. F. Lewis, N. Carolina

comfort while not in school.

COYNE TRAINING HELPS SON GET GOOD JOB

Our son, Robert, is now working for General Electric in Auburn, N. Y. He has a very fine position and is more interested every week in his work. We feel that he owes his good fortune to Coyne School for getting on so well with such a well known firm, and we are very thankful for the wonderful training he received there.

Yours very truly. Mrs. Bert T. Jellison. Maine

SENDS THREE BOYS TO COYNE

Thanks to Coyne School for all the great success our

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

[40] World Radio History

You.. as a COYNEGRADUATE

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will benefit throughout Life from these many important services

WHAT IT MEANS TO YOU TO BE A COYNE GRADUATE

T can mean a great deal to you to be a graduate of Covne. This old established institution with a record of over half a century of training men and young men for better jobs has thousands of successful graduates throughout the United States and in many Foreign Countries. Hundreds of employers have hired Coyne Graduates, who have made good with these firms. Hundreds of calls for graduates come to us each year from reliable firms and many Graduates are placed directly in good jobs by our Graduate Service Department. This, in itself, is worth a great deal to any graduate of Coyne, but, in addition to this we give you many other important lifetime services.

After 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 gradu-ation, 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, improve-ments 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.



Let These Graduates Tell You Electricity-Electronics

THESE GRADUATES ARE SUCCESSFUL IN ELECTRICITY-ELECTRONICS

DID NOT NEED LEADS TO GET

DID NOT NEED LEADS TO GET JOB AS ELECTRONICS TECHNICIAN "Thank you for the job lends which you sent me. However, I didn't find it necessary to use them. be-cause I have been employed by the Engineering Staff, Naval Ordnance Department of Eastman Kodak Company, as a technician in design and development of Electronic components. I was able to pass an oral examination by the head of the Engineering Depart-ment, with a perfect score." Yours truly, Wm. A. Dixon, New York TEAINING GOT HIM JOB

Wm. A. Dixon, New York **TRAINING GOT HIM JOB** "I am now working for Electric Co. in Asheville, N. C. My training at Coyne helped me to get this job and has been of great help to me since the day I started working. I knew I learned quite a lot at Coyne, but I didn't realize how much until faced with problems on the job. I sure appreciate the training at Coyne." Yours truly, Oscar F. Cross, No. Carolina

SATISFIED WITH HIS WORK

"I sincerely appreciate the job leads that you sent me. I am now employed by the.......Telephone & Telegraph Co. I have always enjoyed communications more than any part of electrical work. I enjoy this type of work and the people with whom I associate. They all seem very satisfied with their work and show it." Sincerely yours. John Wm. Byrd, Jr., No. Carolina

John Wm. Byrd, Jr., No. Carolina **GOT MANY GOOD OFFERS** "I get so many good offers for jobs that it is hard to stay at one place. I now work for the Coal Co., Jetf, Ky. ..., Coal The job I have has a lot of responsibility, also good pay, I maintain 3 Jeffrey Coal Loaders, 1 Jeffrey Cut-ting Machine, 2 Goodman Cutting Machines. 3 Coal Drills (Pneumatic) 5 Jeffrey Pan Lines, 1 Jeffrey Belt Line, 1 10 HP fan and motor (for ventilation). 1 Goodman Hoist. So you can see I have plenty of responsibility. Best wishes & good luck to Coyne and all the stu-dents, It's a great school. Sincerely yours.

Sincerely yours. J. L. Webb, Ky

J. L. Webb, Ky. **TRAINING THOROUGH AND VALUABLE** "I am working as a maintenance electrician which of course would not be possible were it not for the training I received at Coyne. It has for sometime been quite apparent to me how thorough and valuable the training is that you give in your course. I think the most of us have to be out in the field a while to fully realize that fact, and to really appreciate the thorough-ness and completeness of your course." Yours truly, P. E. Thor, Illinois **TRAINING A**

P. E. Thor, Illinois TRAINING A STEPPING STONE TO SUCCESS "I took your Electrical and Refrigeration course.... I left Coyne and started to work in the Refrigeration field. Now I am the authorized Frigidaire Serviceman for three counties here and the service manager for the Frigidaire Commercial dealer here. I know the training I received at Coyne was my big stepping stone and the basic reason for my success." Yours truly. Hoyle B. Holt. Oklahoma ELECTION

READY FOR PROMOTION

READY FOR PROMOTION "I wish to express my appreciation for the training I received at Coyne. Since graduating, I have obtained a job on the mailroad. I feel that the training I received at Coyne helped me to get the job, also I feel that if a promotion comes up. I will be able to handle it. I recommend highly 'Coyne Electrical School' to any boy or man interested in electricity." B. L. Burke, Florida

Now CHIEF ELECTRICIAN "I will soon receive my five year pin from the Co. in Defiance, Ohio. as their chief electrician. I was employed by this company. ... I am also assistant foreman of the maintenance crew. I have always mar-yeled at the training that Coyne gave me, without it I would still be just another man. Thanks to Coyne." Sincerely yours.

Sincerely yours, L. H. F. Behm. Ohio

L. H. F. Behm. Ohio **PRAISES COYNE TRAINING** "I wanted to write you sometime back and let you know that I have been getting along just fine since I got back, but I just didn't get around to writing. I have done quite a bit of refrigeration and electrical work since I got back. I now have a job with doing refrigeration and air conditioning. I think I profiled greatly by coming to your school." Yours truly. James E. Arrington, Virginia

TWO FIELDS THAT OFF Interesting Work.... and a

THE letters you read on this page are from fel-lows who were once in the same position you may be in today. They were untrained and wondering, just as you may be wondering, "What must I do to hold down a good job or have a business of my own in the great fields of ELECTRIC-ITY-ELECTRONICS or TELEVISION-RADIO!"

They realized that to the fellow who is prepared by training today, these great fields offer them the choice of many interesting types of work and many different jobs.

ELECTRICITY-ELECTRONICS has always been an expanding and progressive field. This is in interesting field of work, offering opportunities to thousands of new employees each year. It's a field that can be entered with confidence that a man can progress step-by-step to the future he has planned for himself.

TELEVISION-RADIO is an outstanding field of opportunity. TELEVISION offers some of the greatest chances for a real future that a fellow could have in his lifetime. TELEVISION is within reach of nearly every city, town and Community in the United States. This field offers a chance to get in on the ground floor of a great new industry and grow and prosper as this industry expands.

The jobs these graduates tell about represent only some of the many opportunities in the great fields of ELECTRICITY-ELECTRONICS AND TELEVISION-RADIO. I'm sure you'll agree with me when I say that opportunity for the trained man will continue to grow and grow and offer you the kind of future you have planned for yourself in the years ahead.



BELOW ARE PICTURES AND EX THE POPULAR MECHANICS MAG

All of the Men Who Were and are Pictured Here are

Analyze, locate, repair and adjust are the steps followed in television servicing. The tools of this trade are instruments such as oscilloscope, signal generator, vacuum tuhe ohmmeter, tube tester and sweep generator. Here, technicians are check-ing the alignment of a set using some of this eminment.

"Today, the interest of the entire world "Today, the interest of the entire world is focused upon this great industry. It is the basis of entertainment in our homes; it is vital in advertising, public relations and the split-second communication of news and current events. In community service: Police and fire, traffic control, dial and long-distance telephone, and a host of other similar applications, it has become essential become essential.

Then, on a larger scale, you might say the very peace of the world hinges on electronics. Radar was one of the decid-ing factors in the outcome of World War II. The first atomic explosion was

War II. The first atomic explosion was seen on an oscilloscope screen. In man's conquest of space, electronics is un-doubtedly the most important factor. The potential for the further develop-ment and application of electronics is tremendous! This is one of the fastest growing, most dynamic of all industries and should be considered by every young and should be considered by every young man when planning his career. The op-portunities for interesting, good paying jobs with real advancement possibilities in sales and service, in manufacturing, and in research are as unlimited as the future of electronics itself!"

"Electronics is a growing, thriving industry with a great future. Men with technical ability are in demand. We are employing twice the number of technicians today as in 1950. Most of these have come from trade schools. The graduate of a good trade school has the training necessary to get a rewarding job in electronics. Thereafter, advancement will come according to his ambition and energy. I must emphasize the need for technical educa-tion. It's fundamental to success. For instance, without my trade school education, I'm sure I wouldn't have my present job." Roy S. Laird, Vice President, Ohmite Mfg. Co.



How Trained Men Can Succeed In and lelevision-ha MANY OPPORTUNITIES THESE GRADUATES ARE MAKING GOOD **Happy Prosperous Future**

Many Opportunities For a **Business of Your Own**

N addition to the scores of interesting jobs that the Electrical-Electronics and Televi-sion-Radio fields offer, COYNE TRAINING ALSO PREPARES STUDENTS TO GO INTO BUSINESS FOR THEMSELVES AND BE INDEPENDENT AS THEIR OWN BOSS.

I don't know of any other fields that offer a fellow greater opportunities for establishing a business of his own.

Many Coyne Graduates have opened up a business of their own with only a small working capital and made a success as Contractors, Appliance Dealers and Owners of Service and Repair Shops.

AN OUTSTANDING FEATURE OF COYNE TRAINING IS THE BUSINESS TRAINING AND HELP OFFERED TO STUDENTS AND GRADUATES AS DISCUSSED ON PAGES 38 AND 41 AND ELSEWHERE IN THIS BOOK.

OW, I have given you just a few examples of the various industries for which the training you get here at COYNE prepares you.

But we do not stop when we have given you the training you need for work in these great fields. We back you up with Employment Service for life and then we don't stop even after you have become located in a job, but through our Consultation Service, Review Privileges and other features of our Graduate Department which I tell you about on page 41, we want to help you build yourself up in that job, increase your success and make it as great as we can.

CERPTS FROM AN ARTICLE THAT APPEARED IN AZINE FEATURE SECTION "SKILLS FOR AMERICA"

Interviewed and Featured in this Article Graduates of the Coyne Electrical School.

"The television repairman has to know almost as much as the designer to service sets properly. This takes study! Our requirements for new men are 2-4 years of trade school training. Our experienced techni-cians spend one to two weeks each year taking trade courses to keep abreast of electronic improvements. Trade schools have certainly earned my respect! I'm a graduate of one, so are my son and son-in-law. Fact is, the success of our business is due to our trade school background." J. N. Eisman, Owner (right); J. N. Eismin, Jr., J.N.E. Television, East Chicago, Ind.



"As distributors of electronic supplies, we deal with service rechnicians, engineers, ham operators, hi-fi enthusiasts, exper-menters, and hobbyists. To service these customers to their satisfaction, our parts salesmen, countermen and store man-agers must have a broad understanding of radio, television and electronics. Our company recommends that all sales per-sennel have technical training. I am manager of three Olson stores in the Chicago-Milwaukee area. The trade school edu-cation I received has been one of the greatest aids in my work. Without it. I wouldn't be in my position of responsi-bility!" Charles F. Kellner, Chicago Manager, Olson kadio Warehouse.



"No man can be truly competent in technical fields without thor-ough training—the kind you get through trade courses. My son and I both graduated from an electronic trade school. The thorough in-struction I received made it possible for me to start my own business. The technical education my son received gave him an immediate all-vantage when he joined the Marine Reserve. Our firm rebuilds and repairs electric motors, generators and appliances. There is a lot of business in this field—but only for the skilled and trained." Alfred H. Laseke, Owner (right); Alfred H. Laseke, Jr.. Laseke Electric Co., Palatine, Ill.

IN TELEVISION-RADIO ELECTRONICS

PICKS COYNE FOR RADIO-TELEVISION

PICKS COYNE FOR RADIO-TELEVISION "When I graduated from High School, I decided to learn how to service Radio and Television, I decided "Knowing very little about Radio and Television, I had to enroll in a school that would teach me the necessary theory and get enough practical training necessary theory and get enough practical training television. "Atter corefully considering all possible schools. I molded at Covne and I sun now coing very well at Radio and Television work. I would certainly recom-tenend Coyne to any High School graduates interessed in learning Radio and Television." Sincerely. Arnold M. Herman, Illinois

HAS RADIO-TELEVISION SHOP

"After I graduated from Coyne, I opened my own business in this town. I now have a service beach that is in keeping with the times. I carry in stock— General Electric. Stromberg Carlson, Motorola and Capehart tadio and television. I de all of my sales Capenaric canon and service. "Best of good wishes to Coyne." Sincerely yours, C. L. Hobson, New York

THANKS FOR WONDERFUL TRAINING

"HANKS FOR WONDERFUL TRAINING "I have been meaning to write this letter for a long time but just couldn't find time. "To start with I want to thank the Coyne Staff for the wonderful training they gave me. "I am a test set construction and maintenance man in the Electric Company Electronics Plants in Penasylvania. Being a Coyne graduate got me this job. At the plant we make radio tabes, resistors, condensers and most anything. I myself work in the Bell Telephone Laboratories there where we do all the experimental work. All of this was made possible by Coyne. copre. Coyne. "Wishing you luck . . . and many many more years of surcess." I remain.

I remain. Edward J. Kinney. Penna.

TRAINING RESPONSIBLE FOR JOB

"At the present I am employed at the Disi-sion of the Mfg. Co. in Cincinnati. I am work-ing on Television sets. ".... I have been working here about 10 months. Coyne training is responsible for my job and I'd certainly recommend it to anyone." Sincerely yours, J. D. Sutton. Ohjo

RECOMMENDS COYNE TELEVISION TRAINING

RECOMMENDS COYNE TELEVISION IRGINING "Since graduating from Coyne I have been working as a Television technician for the R. C. A. Service Co. For the first time in my life I'm doing something that I really enjoy and it has certainly made a different person of me. Because of the wonders that Coyne did for me. I am sending you the name of a friend who wants training in Television." Thanks John B. Thompson, Ohio

HAS GOOD JOB IN WELEVISION

HAS GOOD JOB IN WELEVISION "I would like to write you and tell yon how thankful I am that I had the chance to go to your school and the reason why I did.... "I had always been interested in Radio so I decided to train at Cwyne because boys who had been to your school gave me the best reports on your training. I am yery happy to say that from the training I received is even raises I wish to thank you again for the train-ing I received." Sincerely yours.

Sincerely yours, Edgar W. Garner, Jr., Illinois

PROUD OF COYNE DIPLOMA

PROUD OF COYNE DIPLOMA "I cannot express the value of my Coyne education, for as a result of it. I am now employed at Service, eventsive Phileo dealer, which is the largest and also the finest radio and refrigeration store in my home town. I am web pleased with my job and have Coyne to thank for it. "There is a great future in the Radio and Televi-sion field and I would advise anyone, even the least bit interested, to take this course. In my opinon there is no other school that can train as well as Coyne. "Believe me, I am proud of my Coyne graduation diploma."

Sincerely, Eugene E. Naumann, Texas

Here Are <u>IO</u> <u>BIG</u> <u>REASONS</u> Why You Should Get Your Training at COYNE

HEN 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.

It is preparation to make the best use of your ability. Its purpose is to take you out of the monotonous type of job that can't offer you any kind of future security. It should be your best insurance against unemployment. And, in the years ahead, your training should enable you to get all those things you want for yourself and your loved ones... a car... a nice home of your own ... an education for your children ... and the other things that go to make up a full and happy life.

For these reasons you can't afford to gamble with your future, you owe yourself the best training you can get FOR IT IS SOMETHING THAT YOU ARE GOING TO HAVE ALL YOUR LIFE.

We could, no doubt, give you training for less money if we took out certain features in our training. We could very easily take out two or three features. We could cut down on our equipment and most important of all, we could cut down on the service and the help we give you both as a student and as a graduate. These services are not, strictly speaking, a part of the training, but we are convinced that they are important. FOR ALL THESE THINGS GO TOGETHER TO MAKE YOUR TRAINING VALUABLE ALL THROUGH YOUR LIFE.

We have always felt that the actual training given to our students (which must be the best) is after all only a part of our obligation to them. We feel that it is just as important to give them every possible help and assistance not just while they are in school, but also AFTER THEY GRADUATE . . . and not just for the first few months after they leave school, but for the rest of their lives—whenever they want it.

Iwant 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 course in THE GREAT TRAINING SHOPS OF COYNE is an investment that can pay you dividends all your life and cannot be duplicated anywhere else.

Now I want to give you 10 important reasons why you should select COYNE for your training:

OLDEST, LARGEST AND BEST EQUIPPED SCHOOL OF ITS KIND IN AMERICA.

COYNE was established way back in 1899 and has a background of over half a century of 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.

2 COYNE HAS A NATIONAL REPUTATION.

COYNE is a nationally known institution with a record of many years of fair and square business methods. COYNE is the best known school of its kind in America, which means that Graduates of COYNE will be welcome in hundreds of firms throughout the United States because for

OVER HALF A CENTURY OF TRAINING EXPERIENCE

Our school of practical training was established in 1899 and has been in continuous operation ever since. Thousands of men and young men have come to Coyne for their training from every state in the Union and many foreign countries. During this more than half a century Coyne has progressed continually. We have kept pace with the tremendous growth of Electricity, Electronics, Television and Radio, constantly adding new equipment and including the latest development in our training. COYNE IS A TRIED AND PROVEN SCHOOL. OVER HALF A CENTURY

velopment in our training. COYNE IS A TRIED AND PROVEN SCHOOL. OVER HALF A CENTURY OF EXPERIENCE IN TRAINING MEN FOR BETTER JOBS AND SUC-CESSFUL FUTURES PROVES THIS BETTER THAN ANYTHING WE CAN TELL YOU. DON'T LET ANY. THING STOP YOU FROM COMING TO COYNE TO GET THE PRACTI-CAL TRAINING YOU KNOW YOU NEED FOR A REAL SUCCESSFUL FUTURE, FULL OF OPPORTUNI-TIES IN AN INTERESTING AND FASCINATING FIELD.

over half a century we have been training men to become successful graduates.

COYNE TRAINING IS PRACTICAL-TECHNICAL TRAINING.

At COYNE you learn by getting technical training and theory and applying this by doing actual shop work on real Electrical, Electronics, Television and Radio Equipment—the same type that you will expect to work on out in the field after you finish training.

COYNE WASTES NO TIME ON NON-ESSENTIALS.

COYNE does not believe in wasting your time on a lot of things you don't really need and never have occasion to use. Every bit of training we give you here will help you directly to make a success. That is why COYNE is known throughout the land as THE ONE INSTITUTION THAT CAN GIVE YOU SO MUCH REAL TRAINING IN SO SHORT A TIME.

5 YOU ARE TRAINED IN ONE OF THE GREATEST ELECTRICAL-ELECTRONICS AND TELEVISION-RADIO CENTERS.

COYNE IS LOCATED IN CHICAGO, one of THE GREATEST ELECTRICAL-ELECTRON-ICS and TELEVISION-RADIO CENTERS IN THE WORLD and students have the opportunity to get their training in this great Industrial Center. Whenever it's possible to do so, inspection trips are arranged for an entire class of students to go through leading industrial plants in the Chicago area.



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 thoroughly 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 problem. You are given every service WHILE A STUDENT, such as personal attention in the selection of your living quarters and the benefit of our advice and experience with other school problems.

COYNE OFFERS LIFETIME EMPLOY-MENT SERVICE TO GRADUATES.

After you graduate, you are given employment service 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. You just register with our Graduate Service Department, telling them where you want to locate, etc., and they will immediately give you assistance in locating a job for you. I don't know of another school that has a Graduate Employment Service as efficient as COYNE'S, and we don't charge a cent for this service. These services are fully outlined on page 41.

CONSULTATION SERVICE AND OTHER GRADUATE SERVICE.

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



Yes, COYNE training will last the rest of your life. Every COYNE Graduate gets a Life Membership which entitles him to return and review any part of the course for which he enrolled, or take up new phases that have been added as outlined in our Life Membership Certificate.

10 A TREMENDOUS OUTLAY OF EQUIPMENT.

You are trained on one of the largest outlays of Electrical, Electronics, Television and Radio 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.

.

I 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 WE WILL DEPEND UPON YOU AFTER YOU GRADUATE TO RECOM-MEND OUR SCHOOL TO YOUR FRIENDS.

COYNE HAS NO BRANCHES

Coyne has no branches nor are we associated or connected with any other school. I feel all OUR EFFORTS should be confined to one school, and we couldn't spare the time to split our interests in several places. You have only one training to give yourself; look for the best money and experience can give you. Don't take a chance with your future. Prepare for your future by getting Coyne Practical-Technical Training. Here are the ANSWERS TO YOUR QUESTIONS



MR. S. C. NARLAND

1. When is the best time to enroll?

Our school is in session all year. In addition to the individual, practical shop training here at Coyne, there are very important instructor's lectures and equipment demonstrations, includ-ing sound motion pictures, which must natu-rally be given in logical sequence. So every student can start at the beginning of a period and get this training in logical sequence, WE HAVE A DEFINITE SCHEDULE OF START-ING DATES. New students are started on ING DATES. New students are started on scheduled Starting Dates as shown on our Starting Date Schedule.

2. What do you mean when you say "Practical Method" of Training?

"Practical Method" of Training? This is a question I'd like to fully explain. For example, when you went to school or if you have ever taken a correspondence course your work was mostly from books, lessons and dia-grams. This is called theory. When you work on actual equipment, that is called practical work. To be a well trained man it is necessary to have both theory and practical training. Here at Coyne you get your technical train-ing and theory through lectures by your instruc-tor, supplemented by blackboard illustrations, diagrams, films, strip films, and equipment demonstrations. This is getting theory in a practical way. Then you apply this technical knowledge by working out these problems on actual Electrical, Electronics, and Television and Radio Equipment in our training shops. This then, is our "Practical Method" of train-ing. ing.

3. 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 build-ing for our own use.

4. Is your building centrally located?

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

5. What does your course cost?

Prices and terms are given on our Advance Enrollment Blank.

6. What are your educational requirements?

All we require is that a fellow have a common school education. While many of our students have a high school education, many others have not. If you have had grade school educa-tion, you should be able to master Coyne Training.

by MR. S. C. NARLAND

VICE-PRESIDENT and GENERAL MANAGER

Note: Mr. Narland's many years of experience in the Educational field, of which over 30 years have been spent here at Coyne, has given him an exceptional under-standing 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 question you may have in mind before coming to school.

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.

7. Do I need previous experience?

No! Previous experience is not necessary and many of our students have had little or no previous experience. On the other hand other students had been working in Electricity-Electronics, Radio-Television, but they found their knowledge of the field was not broad enough — they had a knowledge of certain branches only — they lacked all around train-ing. They have come to Coyne to get the all around training they needed to prepare for a better job and advancement in the field.

8. What are your age limits?

We have students as young as 17 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 and over. These fellows have learned they should have gotten a train-ing when they were younger, but when they realized they needed a training they didn't let a few extra years stop them. They CAME TO COYNE AND BECAME TRAINED MEN AND MADE GOOD, even though they had wasted time before. It's not how young or how old you are, but what you should know and can do that counts.

9. Do you grant a diploma?

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

10. 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 Electricity-Electronics and changes are constantly occurring in the Tele-vision-Radio field that we believe would be of more advantage to a student to understand. In this case, we occasionally change a par-ticular section of the training or improve our course to make Coyne training as up-to-the-minute as possible. However, this is never done unless our Staff feels sure it is going to bene-fit the student more.

11. 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.

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.

12. 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

little farther from the school. In any case we will always do our best to get you located as near the school as possible. Also, the Y.M.C.A. is within walking distance, and some students live there.

13. What should my expenses be?

It is possible for our students to get comfort-able 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.

14. Do you have facilities for students with physical disabilities?

Yes! See page 48 for further information re-garding our facilities for students with phys-ical disabilities.

15. Is Coyne approved to train veterans?

Yes-Coyne has trained World War II Veterans under Public Law No. 346 and disabled Vet-erans under Public Law No. 16 since 1944. It is also APPROVED TO TRAIN VETERANS UNDER THE CURRENT VETERANS' BENEFIT BILL NO. 550 and Public Law No. 894, as well as war orphans under Public Law No. 634. IF YOU MAY BE ELIGIBLE FOR TRAINING UNDER ANY OF THESE LAWS, MAKE APPLICATION WITH YOUR NEAREST VETERANS ADMINISTRATION OFFICE FOR THE TRAINING BENEFITS TO WHICH YOU ARE ENTITLED.

16. Does Coyne operate branch schools?

No-Coyne does not operate any branch schools nor are we associated with any other school. All of our training is given here in the Coyne training shops in Chicago.

17. Do your students go to church?

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 attend.

18. 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 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.



Everything has been arranged at COYNE for Your COMFORT and WELFARE



MR. FRECH, our Welfare Director having a friendly talk with a student. Students in school are urged to bring their problems to Mr. Frech, the same as they would to their parents or personal friends if they were at home.



A First Aid Room is located in the school building with a Trained Nurse in attendance, which offers First Aid Service to Students at scheduled hours.



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.

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 trifling 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. Theatres 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.



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



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.



Coyne is located less than a block from the famous Chicago Medical Center, which is one of the largest in the world. This is one of the large hospitals in this center.

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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

- I. The Merchandise Mart, world's largest business building.
- 2. View of the famous corner of State and Madison Streets—world's busiest corner.
- 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 Conrad Hilton Hotel, the world's largest, shown at the left.
- 7. The mile-long Navy Pier.
- 8. Bird's-eye view of a section of Midway Airport.
- 9. (Below) Night view of the South Chicago steel mills.
- 10. The Chicago Stock yards, location of the large meat packing industries.
 - [47] World Radio History

- 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 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.



Pertinent Facts About COYNE

COYNE is the oldest school of its kind in America. Founded in 1899, for over half a century we have been training men by the Coyne Practical Method of training.

COYNE is chartered under the laws of the state of Illinois as an Educational Institution Operated Not For Profit and is licensed and registered by the Illinois Department of Registration and Education.

COYNE is a member of the Chicago Chamber of Commerce and the Electric Association.

COYNE is an approved training agency for Veterans. Thousands of veterans have trained here under the various Veterans Benefit Bills.

COYNE was called upon to train specialists for the U.S. Army and trained several thousands during World War Two.

COYNE IS APPROVED as a school for immigrant students under section 101 (a) (15) (f) of the Immigration and Nationality Act, which was granted on March 17, 1953 pursuant to the provisions of Title 8, Code of Federal Regulations, Part 214 f.5.

COYNE is located in the heart of the Electrical-Electronics and Television-Radio industries.

Information You Will Want to Know About COYNE

COYNE maintains a nation-wide employment service to give our graduates every possible assistance in getting employment after graduation.

COYNE maintains a welfare department for the purpose of helping students with personal and school problems, personal help in the selection of living quarters and other services.

COYNE occupies its own modern, fire-proof building which has over 50,000 Sq. Ft. of floor space and is literally packed with equipment and facilities for training students.

COYNE maintains the services of a Registered Nurse who is on duty every school day to provide expert health care for students.

SPECIAL SCHOOL INFORMATION

Reports-Reports of students' prog-ress 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. training.

training. Money—We supply students with de-posit privileges at the office. Money de-posited 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 Ex-press or Post Office money order.

School Hours-The school is in session every day of the year except Sat-urdays, Sundays and Legal Holidays. The school week is Monday to Friday inclusive from 8:00 A.M. until 2:00 P.M. which allows ample time for part time work and study after school hours.

COYNE HAS TRAINED MANY MEN WITH PHYSICAL DISABILITIES

For many years COYNE has been train-ing men and young men with physical disabilities, many of whom got their training arsonners, many of whom got their training at no cost to them for tuition and subsist-ence. IF YOU HAVE A PHYSICAL DIS-ABILITY of any kind WRITE US AT ONCE, giving details and we may be able to give you valuable suggestions and help in getting YOUP training hear in the share 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.

OFFICIAL 4 STATE SATELLITE TRACKING STATION - ENGINEERED and BUILT BY THE COYNE STAFF AS A PUBLIC SERVICE"



COYNE'S Director of Training, J. P. Hanan, operating the sensitive equipment necessary to detecting and tracking the satellite's flight.



Official observers for "OPERATION MOONWATCH" at work.

On the rooftop of the famous Edgewater Beach Hotel in Chicago, the staff of COYNE ELECTRICAL SCHOOL in cooperation with The Ground Observer Corps, erected this vital station. Coyne instructors designed special equipment and essential electronic circuits needed in observing and recording of satellite movements, and Coyne's executive department donated all the funds toward its immediate construction. Coyne Electrical School also handles the constant maintenance of all equipment.

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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 Electricity, Electronics, Television and Radio 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 Practical Training 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

COYNE ELECTRICAL SCHOOL

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 Electrical, Electronics, Television, Radio and Refrigeration 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 Electronics! Decide to send your Advance Enrollment Application today!



1501 WEST CONGRESS PARKWAY CHICAGO 12, ILLINOIS

CHARTERED AS AN EDUCATIONAL INSTITUTION NOT FOR PROFIT Electricity * Television * Radio * Refrigeration * Electronics

TRAINING MEN AND YOUNG MEN SINCE 1899

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Practical Jechnical Training in ...

ELECTRICITY TELEVISION RADIO REFRIGERATION ELECTRONICS

World Radio History

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ELECTRICITY TELEVISION RADIO REFRIGERATION ELECTRONICS



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