

**ELECTRICITY**



**COYNE ELECTRICAL SCHOOL**



**H. C. Lewis, President  
Coyne Electrical School**

**I** AM glad to place this book in your hands for it gives you **THE STORY OF COYNE** and tells you of the opportunities in **THE GREAT ELECTRICAL INDUSTRY**.

I DO NOT employ salesmen to call on you. I prefer to **GIVE YOU THE FACTS MYSELF**. I wrote this book myself and the story it tells comes direct from **ME to YOU**.

As you go through my book I want you to **READ IT CAREFULLY PAGE BY PAGE**, for in preparing this book I tried to give you the message just as I would if I could come into your home and deliver it personally.

My school was first organized and received its first students **AWAY BACK IN 1899, OVER 40 YEARS AGO**. It has been in continuous operation ever since.

During all these years thousands of men and young men have come to Coyne, some of them from distant foreign countries. They came to my school to get the training they needed for their start to a better and happier life.

Some of these fellows lacked confidence in themselves before they came to my school. They were not sure of themselves and because they weren't, they, to use **THEIR OWN WORDS**, "took a chance." Well, many of these fellows are successful today either in a good job or a business of their own. The training they received at **COYNE** helped inspire the confidence they lacked.

Others came to my school **BECAUSE THEY HAD DEFINITELY MADE UP THEIR MIND THEY WANTED TO MAKE ELECTRICITY THEIR LIFE'S WORK** and they knew they needed a training to fit them for the field they had selected. The training they received helped them on their way to the

goal they had selected. Every month brings me many letters from fellows who have graduated and are today making good.

Many of these fellows give me and my school credit for their success. While it's true the training they received gave them the foundation they needed for success, nevertheless, I feel they, themselves are in a great measure responsible for the success they have made.

They were fellows who acted when they had the opportunity. I offered them a chance to get a training. They accepted my offer and because they did, they got the training I offered them. Had they not acted when they had the opportunity, then probably neither my school nor I nor anyone else could have given them much help.

Now, **the same opportunity—the same training and the same help** I offered them I want to offer you.

You will find the entire **COYNE** organization **WILLING AND ANXIOUS** to offer you every help in their power, **BOTH AS A STUDENT AND A GRADUATE**.

We here at **COYNE** feel that **THE SUCCESS OF OUR GRADUATES IS OUR SUCCESS**.

When you come to my school we will do all in our power to guide you and help you to success.

So, now I **WANT YOU TO READ MY BOOK. THEN I WANT TO OFFER YOU A WELCOME TO MY SCHOOL**.

  
President.

# COYNE is Located in Chicago - THE ELECTRICAL CENTER OF THE WORLD



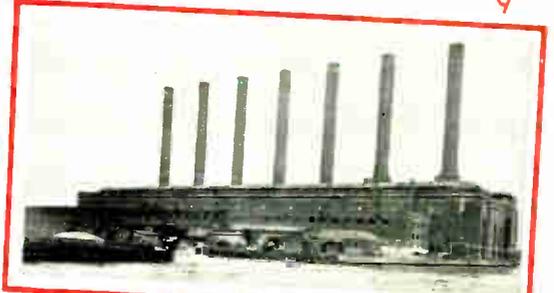
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1. Many prominent manufacturers of Electric Appliances are located in Chicago.
2. Many electric Substations of this type are found throughout Chicago and vicinity.
3. A striking night view looking over the tops of buildings in the famous Chicago "Loop".
4. Chicago has many such large and modern power stations.
5. Steel mills of this type use huge electrical equipment.
- 6, 8, 10 and 13. These views show typical power plants that contribute to Chicago's reputation as the Electrical Center of the World.
7. Chicago has long been known as the Railway Center of the U. S. This view shows a modern Diesel Electric train.
9. Great manufacturing plants of this type provide electrical supplies for users all over the world.
- 11 and 12. A large part of the world's telephone equipment is made in Chicago.
14. Chicago also abounds in huge sky-scrapers, possessing their own electric power systems.



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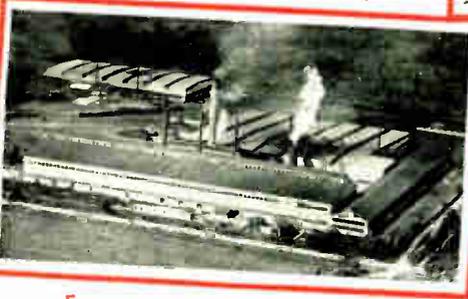
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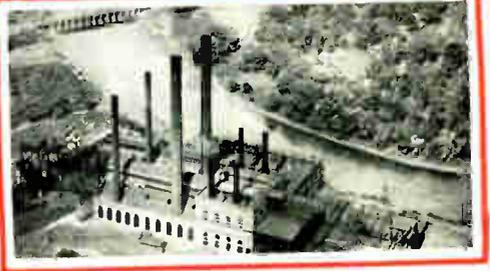


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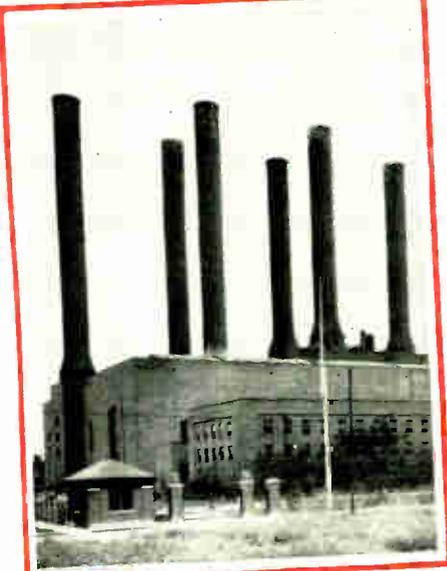


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## *A Few of Chicago's Mammoth Firms, Power Houses, Sub Stations*



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Chicago has rightfully earned her name as the Electrical Center of the World.

Illinois ranks first among all states in the number of persons employed in electrical manufacturing.

Since 1869, the Chicago Region has been the telephone manufacturing center of the world. One manufacturer alone occupies 102 buildings, covering 200 acres of ground and produces 80% of the world's telephones.

Chicago has an annual per capita consumption of Electricity of over 1000 Kilowatt hours, with a general average for the U. S. of only 600.

The largest electrical generator ever made, developing 200,000 Kilowatts, or over 265,000 H. P. is operating in the State Line generating plant at Chicago.

Electrical transportation companies in the Chicago region, operate over 1900 miles of single track line and transport over 10% of passengers carried on electric railways in the U. S.

These are only a few of the important reasons indicating why it is logical to study electricity here at COYNE in Chicago where student inspection trips make some of these remarkable electrical sights available to you.

Make up your mind to train for Electricity at COYNE in Chicago where you have the happy combination of a successful PRACTICAL Electrical School located in the World's Electrical Center.



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# Coyne Has Grown with



## Home of the Coyne Shops

**A**S A student of Coyne, you will want to know something of the building in which you are to get your training.

The picture above shows you our home. THIS BUILDING WAS BUILT EXPRESSLY FOR COYNE and was laid out to FIT OUR REQUIREMENTS.

Take particular note of the large space devoted to windows and when you consider it is open on all four sides, with no buildings next to it, you can readily see how light it is. There is always plenty of fresh air which all goes to make ideal working conditions for our students.

Then in addition to this OUR BUILDING IS FIREPROOF, of cement and steel construction throughout.

We occupy every inch of this building and, except for a small section which is used for our

offices, the entire building is used for training our students.

In this MODERN BUILDING, YOU WILL FIND AN ORGANIZATION OF MEN WHO HAVE SPENT THEIR LIFE IN HELPING MEN AND YOUNG MEN BETTER THEIR CONDITION IN LIFE.

Everything has been done to make your stay with us pleasant as well as profitable. I am sure in the years ahead you will remember the days you spent with us as enjoyable days WITH PLEASANT MEMORIES of THE FINE FELLOWS YOU WERE ASSOCIATED WITH — STUDENTS who are ambitious, sincere fellows from practically every section of the country, AS WELL as the fine bunch of fellows who make up THE COYNE FAMILY.

# COYNE HAS BEEN TRAINING MEN AND METHOD FOR

# the Electrical Industry!



## What You Will Want to Know About Coyne

**B**EFORE you go through my book and see my shops, I want to devote this space to tell you something of COYNE—things I believe you will want to know.

COYNE was ORGANIZED IN 1899, and has been in operation ever since. This means that FOR OVER 40 YEARS MEN AND YOUNG MEN HAVE BEEN TRAINED AT COYNE by the "LEARN BY DOING" method.

So far as I can learn, COYNE was the first school to adopt this method of training and at that time many considered it an experiment because in those days it was considered necessary for a fellow to serve an apprenticeship before he could enter any trade.

However, it did not take long to prove that the founders of COYNE were right, for this method of training enabled a fellow to get a training that might have taken him many times as long to get, serving as an apprentice.

### "Learn By Doing" Method Saves Time

**M**ANY fellows attempt to get a practical training in Electricity by MERELY STUDYING out of books or lessons—others try to "pick it up" on a job. They have failed to get in books and lessons the practical training they wanted. On a job they may have failed because they were put on some particular job and kept right on this job. In other words, they learned the work connected with the particular job they were doing, but when they learned it they kept right on DOING THE SAME WORK OVER.

Naturally AN EMPLOYER COULD NOT BE EXPECTED to keep putting a fellow on a different job as fast as he learned one job. IT IS NOT HIS BUSINESS TO TRAIN MEN.

But here AT COYNE it is OUR BUSINESS TO TRAIN MEN AND YOUNG MEN IN ELECTRICITY. They are trained here by doing practical work under the guidance of experienced instructors, who know how to explain the important principles and methods—and we have provided many types of electrical equipment and devices for you to work on, connect up, test, operate and repair.

The large outlay of practical electrical training equipment, along with our many years of experience and our system of training, is what has made COYNE so successful in our "LEARN BY DOING" method.

It is these things—plus the fact that when

you learn one shop job you do not continue on this work, but advance step by step to more advanced work, that should prove to you the value of Coyne Training.

So I am sure you will agree with me that the place to get a training in electricity is a place that has but one objective in mind—that objective is to give a student A PRACTICAL ELECTRICAL TRAINING. I am sure also that when you have gone through my book you will be convinced that COYNE is the place where you will want to get your training.

### Why You Can Get Coyne Electrical Training in 12 Weeks

**M**ANY times I am asked the question, "How can I get a training in 12 weeks when it takes several years at college?"

Well, here is a point I want to make clear. COYNE is not an engineering course and does not attempt in any way to give a student an education that he would get in college.

If you were to go to college to study Electrical Engineering, you would "major," as they call it, in the Subject of ELECTRICITY. Most all of your study on the subject would be book study and in addition to your major subject of Electricity, you would be required to take up languages, history, higher mathematics, chemistry, physics, and perhaps social subjects, such as economics, arts, etc.

Well, here at COYNE you are trained in the one Subject, ELECTRICITY and YOU ARE TRAINED ON ACTUAL ELECTRICAL EQUIPMENT AND APPARATUS. As you will see, when you read further into my book, you do a certain job, when you have learned this job and can prove that you understand this job, then you advance to the next job.

This procedure is followed all through the course so that it is a progressive system of training. Each job you advance to is a little more advanced than the job you just completed, so that before you hardly realize it, you are doing work that a short time before might have been so complicated, you would have been completely stumped. But you have advanced step by step, each job leading to the next, so that which may have seemed hard to you before, should come to you naturally, because THE JOB BEFORE HAS PAVED THE WAY for you to GRASP THE NEXT ONE.

### We Specialize in Electricity

**Y**EARS ago COYNE taught many other subjects besides Electricity, but 20 years ago, these were discarded and since then WE HAVE SPECIALIZED ONLY IN ELECTRICITY and its allied branches.

Many times I have been requested to take on other subjects but I HAVE NEVER considered doing so and I NEVER WILL.

I believe if a fellow is to make a success in life HE SHOULD SPECIALIZE IN ONE SUBJECT. The Jack of all trades is rarely a success in anything.

I believe IF THIS APPLIES TO AN INDIVIDUAL that it SHOULD ALSO APPLY TO MY SCHOOL.

I know if we taught other subjects I and my organization would have to be dividing their time and interests in these subjects.

I believe ELECTRICITY offers a fellow a greater opportunity than any other field. I believe it will always be so. Many other subjects may offer opportunities for a while then something comes along that takes their place and these things pass out. I can recall many things that were considered permanent things that have had to give way to some new things.

ELECTRICITY IS A TREMENDOUS FIELD TODAY. It has grown by leaps and bounds, yet who would be so foolish as to say it has reached its heights. In spite of all growth and development in this gigantic field, I believe you must agree with me when I say the next 25 years will bring developments not even thought of today, and perhaps far greater than the past 25 years.

WE WOULD NOT WANT TO TEACH ANY SUBJECT UNLESS I, MYSELF, BELIEVE THAT THIS SUBJECT OFFERED OPPORTUNITIES AND A REAL FUTURE TO THOSE WE TRAINED.

Because I feel ELECTRICITY does offer all of this, I will devote the rest of my life to this one subject, firmly believing that I have prepared those who graduate from my school for their start in a field THAT OFFERS THEM AN OPPORTUNITY NOT ONLY TODAY, BUT FOR THEIR ENTIRE LIFE.

NOW, READ THE NEXT TWO PAGES—THEY TELL YOU OF SOME OF THE OPPORTUNITIES IN ELECTRICITY.

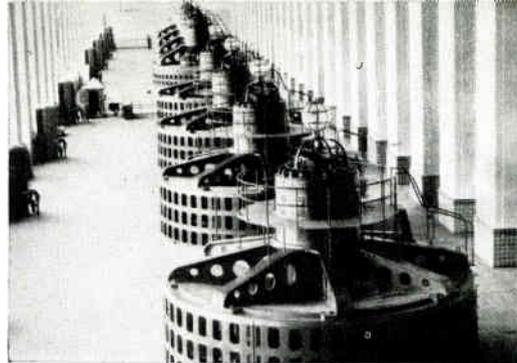
# YOUNG MEN BY THE 'LEARN BY DOING' OVER 40 YEARS



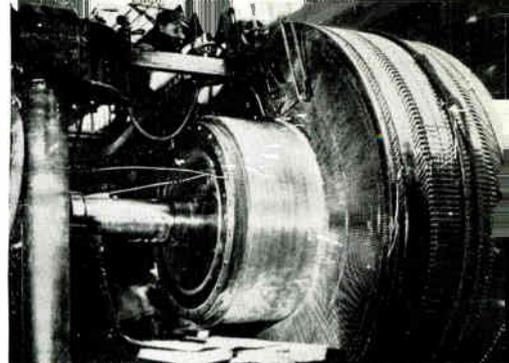
Hydro plants offer opportunities to trained men.



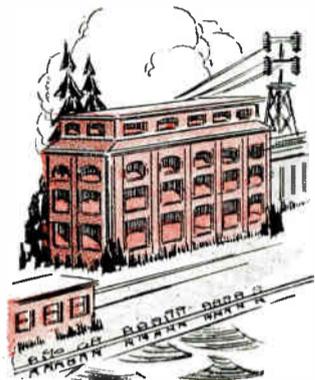
Switchboard operating provides many jobs.



Generators in Hydro-Electric stations require trained operators.

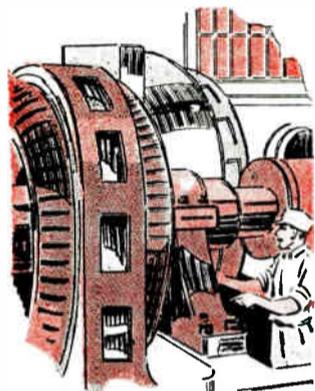


Thousands employed in Electric machinery repair work.



# ELECTRICITY the

## COYNE "Learn by Doing" Training Helps Prepare



**Y**OU and I are living in a remarkable age — AN ELECTRICAL AGE. Since this strange force known as Electricity was first discovered, thousands of uses for it have been developed. Modern inventive genius has developed thousands of machines and devices which add to the comforts and conveniences of living. This marvelous and fascinating form of energy has changed our habits and the way we live. Perhaps no other single force plays as important a part in our every day lives as Electricity does today; and its real development has apparently just begun. New applications of electricity are being developed constantly. Today, industry and, in fact, our very civilization, depend upon electricity for their existence.

Electricity lights our homes, offices, stores, hotels, theaters, factories, schools, streets, trains, shops, parks, highways, etc. Many millions of new electric lamps are manufactured and sold each year. Electric light bulbs are made in sizes ranging from that of a grain of wheat to huge lamps consuming 50,000 watts of power.

### Electricity Is Used Everywhere

**M**ILLIONS of electric motors are in use. These range in size from 1/1000 H. P. and even less, to several thousand H. P. These motors operate our gigantic industrial plants, factories and mills. Electric motors operate our street cars, subways, elevated trains and even railroad trains. Electric motors operate many devices right in our own homes, such as our refrigerators, washing machines, oil burners, fans, air condi-

tioners and many other machines.

Electric motors operate the elevators in our modern skyscrapers. They are used in oil fields and refineries, on pipe lines, on grain elevators and scores of other places too numerous to mention.

Electricity provides ignition and lights for our automobiles, it operates our radios, talking pictures, public address systems, electric signs, many household appliances, X-ray machines and other electro-medical devices in hospitals and clinics. This widespread use of electricity naturally has created many job opportunities for those trained to work with this equipment.

### Electricity Is the Heart of Modern Industry

**I**N addition to the millions of electric lights and motors which are in use, electrical energy has become the driving force of modern industry. Huge electric furnaces are used in treating and annealing steel. Electro chemical processes contribute to the treatment of fine metals and other valuable materials. This application of electricity is also used in electro plating baser metals. Electricity is necessary in the operation of arc welders, butt welders and spot welders. Welding is rapidly replacing riveting, bolting and casting in construction of metal machines, steel structures and devices of many kinds.

Electric refrigeration and air conditioning have improved working conditions and helped to speed up production in industry. Their application has facilitated the handling of materials in various types of plants and improved and speeded up meth-

ods of production. Electric cranes and conveyors reduce manual labor and speed up the handling of materials and machines.

New types of Mercury Vapor and Sodium Vapor lamps are improving factory lighting for 24 hours per day operation. Photo-electric cells, vacuum tube amplifiers and automatic electric controls are making great economies possible and improving methods in industrial plant operation.

Electricity must **STAY IN ACTION OR INDUSTRY WOULD STAND STILL**. Since industry depends on electricity as a motive power to operate its machines and devices, you can readily understand why thousands of trained electrical men are required to install, operate and maintain this necessary electrical equipment.

### The Electrical Industry Is a Growing Field

**I**N selecting a vocation for your life work there are two very important factors that should be taken into consideration. First, it is important to select a trade that is alive and growing—one with prospects of many years of development and growth ahead of it. Only such a trade can hold out any promise of steady and profitable employment in years to come. Many of the older trades are now on the decline because these crafts have been replaced by newer and better methods.

Secondly, it is essential that the industry selected be in its period of development and growth. Many a man today is out of work because the trade or industry in which he started his career has become out-of-date and

Photos by Aemo and Ewing Galloway

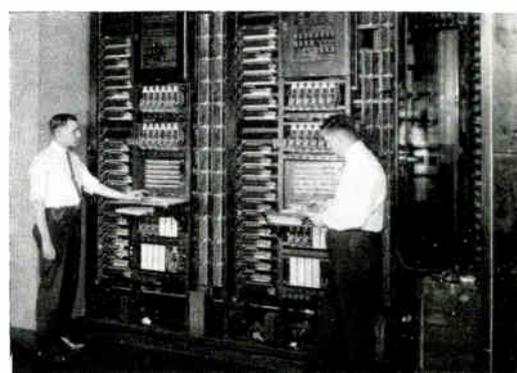
Modern electric signal and supervisory controls afford a profitable field.



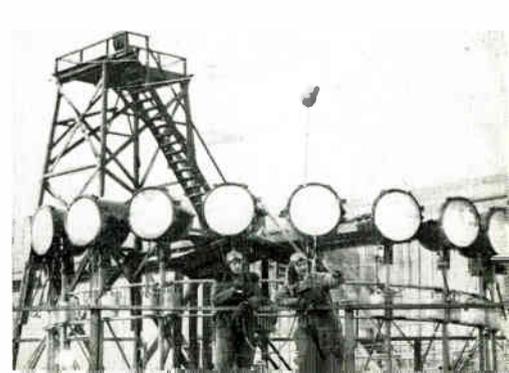
Steam Electric power plants use trained men.

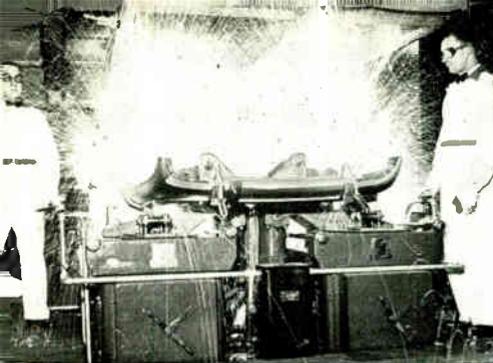


Telephone exchange testing and maintenance require skilled services.



Trained electricians are required for Airport Lighting.

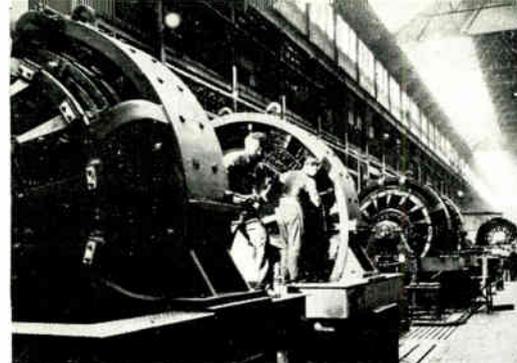




Electric welding in modern industrial plants.



Electric signs afford profitable work to trained maintenance men.



Electrical machinery manufacture and testing offers a big field.



Opportunities exist in central power system control room work.

# OPPORTUNITY field

## Men And Young Men For Their Start In This Field

has been replaced by better and more modern production methods.

The electrical industry is one of the fastest growing industries today. It has a record of steady and constant growth in the past, and should continue to grow for many years to come. Thousands of new electrical consumers are being created, thousands of farms are being electrified, and new factories and new plants are being built every year.

The extent of the development still in store for the electrical industry is impossible to predict. Industrial and scientific experiments now in progress, indicate that many more new opportunities are now in the making. Some of the present day applications of electricity were not even thought of only a few years ago. What new uses coming generations will find for Electricity only the future will reveal.

### Many New Electrical Developments

**M**ILLIONS of dollars are spent each year for new equipment and for the maintenance of old equipment.

Thousands of new homes are being built. These are more completely equipped for the use of electricity than ever before. Factories, stores and offices are adding to their electrical equipment and the number of electrical devices used.

In transportation, electricity has played an important role for many years. Today with the rapid progress in the field of fast, lightweight trains, it is becoming even more important.

Diesel-electric trains are replacing many steam trains.

The Refrigeration and Air Conditioning Industries are expanding rapidly. Many factories, homes and offices are being equipped for year 'round air conditioning.

Millions of automobiles require the services of trained ignition and battery men. Modern automatic telephones, elaborate alarm signal and control systems, and communication facilities all require trained men.

### Many Opportunities in Electricity

**B**BETTER salaries are paid in the Electrical Industry than in many other fields which are already overcrowded, or in which unskilled labor can be used. This is an Electrical Age. Electrical machines call for trained workmen. So it is natural that the men who hold the jobs of installing, operating and maintaining important electrical apparatus, on which our nation's industries depend, are paid better than average wages.

Good salaries are being paid to thousands of trained electrical men. Knowing these facts, can you afford to delay your training for your start in Electricity?

Times are getting better. The wheels of industry are turning faster and faster. There are signs of the approach of a new era of prosperity—perhaps the **GREATEST PERIOD OF PROSPERITY WE HAVE EVER KNOWN**. The Electrical Industry has proven to be one of the leaders in this march to better times. It stands to reason that improved business conditions and greater prosperity should

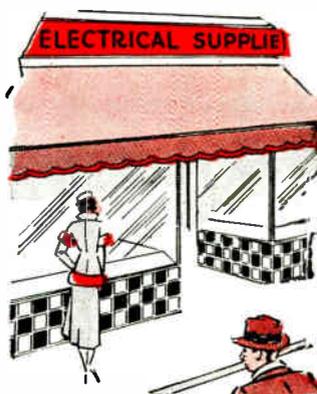
mean **MORE WORK—MORE JOBS—MORE OPPORTUNITIES!** But, for whom? Past experience teaches us that the fellows who are qualified by training should profit most by this new prosperity.

### Share in Electricity's Prosperity

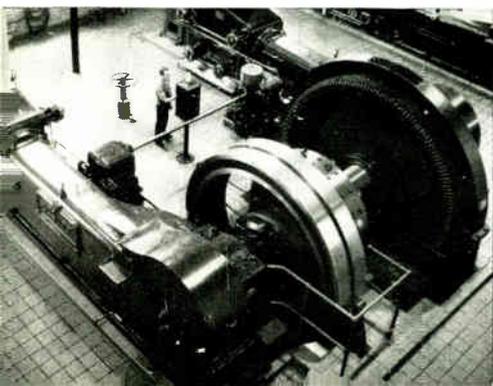
**M**ANY men will not realize the extent of the opportunities ahead and will not prepare for them. The fellow who is content to stay in the rut of a poorly paid, unskilled laborer or low paid clerical job will not be asked to fill an electrical job requiring special training. The Electrical Industry can use the services of ambitious, wide-awake, red-blooded fellows who have had the benefit of a practical training.

Even during the depression years the Electrical Industry suffered less than many other major industries. Some of its branches actually grew and expanded during these depression years. It has been one of the first to show a record of improvement. In fact, as this catalog is being printed, **WE ARE NOW GENERATING AND USING MORE ELECTRICITY THAN WE DID AT THE PEAK OF PRODUCTION IN 1929**. This is an industry that offers a real future to those who have been trained to take advantage of existing opportunities.

Determine to get your share of this new prosperity. Get your practical training now. Then once you have this training you will be ready to make your start in the great growing field of electricity and have an opportunity to build up a real future.



Privately owned power plants offer another profitable field.



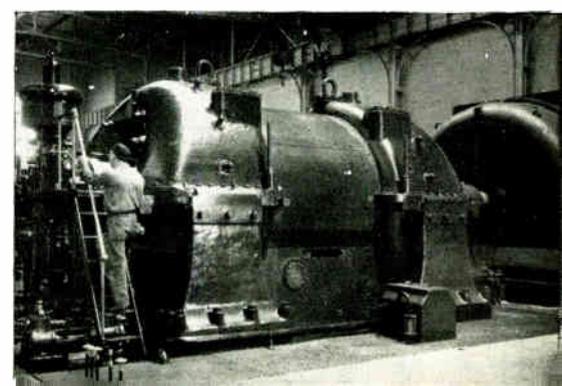
Railway electrification requires many trained men.



Great hydro developments employ the services of many trained men.



Steam turbine driven electric generators must be serviced by trained operators.



# *Wow!* See Some Actual Scenes in the Big Coyne Shops



Every Shop picture in this catalog is an actual reproduction of Coyne Training Quarters and Equipment.

**I**n the following pages of this catalog I will tell you about the big Coyne Shops and explain the "Learn-by-Doing" method that has proved so successful in training fellows for their start in the big opportunity field of Electricity.

I want to ask you to go through this book with me very carefully and thoroughly. Read the pages before each department so that you will understand what each picture means. I am going to tell you about each department first, then I'm going to show you some pictures from that department. Every picture is a bona-fide reproduction of a photograph taken right here in my school while the students were working and doing the same work that you as a student of Coyne will do when you get here. So once again let me say, don't skip through this book; take it page by page as it's written. Then you will get the true story of Coyne.

I'm going to show you through every department and while, of course, I can't picture all the equipment you will work on when you come to take your course, I am going to show you a lot of it in each department. To describe everything at Coyne would take a book much larger than this one. I am sure, however, when you have been through this book with me you will agree on one thing. Coyne offers you the opportunity to get the electrical training you want, the way you want it, by practical "Learn by doing" methods.

## You Advance Step by Step

**W**HEN you start at Coyne you start in just as though you knew nothing about electricity. If you have had experience then you are not required to do the jobs you know if you

can pass the examinations. But when you come to Coyne we assume you have had no previous electrical experience so we start you off in the Wiring department. Your shop work begins with job number one; when that is done satisfactorily and the instructor has passed your work then you move on to job number two, etc.; when you have completed every job in the department and have proven you can do them satisfactorily you are passed to the next department where you have many more interesting jobs. Of course, in each department you enter, the work becomes more advanced. But you will progress step by step and get into the more advanced branches as you go along with your training. It has been so gradual and so interesting that you should find your work a pleasure. Almost before you realize it, you will have finished the practical training for your start in the field.

## Now Let's Go Through the Shops

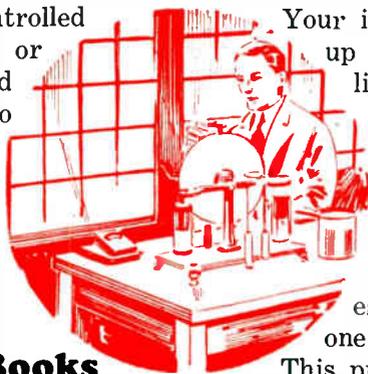
**I**'VE told you these things because I want you to be familiar with them before we start our trip through the shops. Now as we go through the following pages, I want you to pay particular attention to how my students are getting their training. As you go through these different departments I'm sure you can't help but agree with me when I say: The way to get a practical electrical training is the way it's taught at Coyne. Now the first pictures I will show you will be of the Wiring department, so before you look at the pictures of this department read the next page carefully so that you will better understand just what I'm going to tell you.

**A**S you go through the pages of this catalog you will find many testimonials from Coyne graduates. I want you to know that these expressions of goodwill are excerpts from actual letters sent by former Coyne students who have successfully applied their training in the field. These letters are in my files and the name and address in every instance will gladly be furnished to you upon request.

# Electrical Wiring Department

## Here's Where You Start Your Electrical Training

**N**OW in this light, airy and well equipped department you are first taught important Electrical principles. These are explained and demonstrated to you in a simple practical manner. You get just enough fundamental theory to enable you to understand the practical work you do on the shop equipment. Your instructor shows you how Electricity can be measured, used and controlled just as easily as water, steam or other elements. The nature and uses of Electricity are made clear to you by the practical methods and equipment we use here at Coyne. Then you prove and apply your knowledge on real Electric signals and lighting equipment.



### We Don't Use Text Books to Train You

**A**T Coyne we don't ask you to study dry text books to learn Electricity. Instead the important practical facts are explained to you in **INTERESTING** talks by the instructors, using **SIMPLE LANGUAGE** and plenty of **BLACKBOARD ILLUSTRATIONS** to make them clear. Then these points are **DEMONSTRATED** and proven to you on **ACTUAL EQUIPMENT**.

Just imagine how much **EASIER, QUICKER** and **MORE INTERESTING** it is to learn Electricity in this manner. You will be surprised at how easily you remember things learned in this manner. Then by working them out yourself on **ACTUAL EQUIPMENT** you get them fixed in your mind. You are also shown how to make brief practical notes and diagrams from the lectures and shop jobs, to keep in your own note book for future reference on the job.

### Take Your Time Here at Coyne

**Y**OU don't have to move along with any class. You can go as fast with your work as you are able, or as slow as you wish. You are not held back by others or rushed to keep up with others. **YOU DO NOT HAVE TO RECITE BEFORE ANY CLASS.** Here at Coyne you get **INDIVIDUAL INSTRUCTION** on your shop problems, and **SINCERE, PERSONAL ASSISTANCE** from your instructors whenever you need it.

You advance step-by-step from one interesting job to another, starting with simple jobs and advancing to the bigger ones almost before you realize it.

We use visual instruction and even motion pictures, along with your actual work on equipment to enable you to learn easier and faster. We make every effort to duplicate the actual work you may do later on some job in the field. Some Coyne students have told us that when they left **COYNE** and went to work it was like stepping from one job to another, because the work they had in school was so much like that out on their job.

### Practical Shop Work Helps You to Learn More Easily

**A**FTER each interesting explanation of important electrical principals by your instructor, you go to the shop equipment and work out practical jobs to prove each point. Your instructor shows you how to wire up interesting signal, telephone and lighting systems, and is always ready to help you when you need assistance. You work with batteries, magnets, relays, bells, meters, annunciators, switches, lights, signs, motors, phones, tubes, etc. Each job is so interesting it is hard to wait to finish one before starting the next.

This practical training is what you need to develop real skill and confidence. Employers in the Electrical Industry want men who not only know the principles of Electricity, but also how to **APPLY THEM TO ACTUAL EQUIPMENT**. They don't want men who have to be told how to do each job. They require men who know what needs to be done, and who have the practical training and ability to go ahead and do it. That is why the man with practical training has a better chance to advance in Electrical work than the one who has merely learned from books or "picked up" a little knowledge on the job.

### Alarm and Signal Work

**I**N this first department you wire up, test and operate a number of practical door bells, office call, signal, burglar and fire alarm, and telephone systems. This branch of electrical work is an important one, and keeps many thousands of trained men employed in factories, offices, stores, on railroads and ships, and with telephone and telegraph companies. Many of our graduates specialize in this branch, either working for firms, or in business for themselves.

Your training in this important work, on wiring, testing and circuit tracing also lays your foundation for your work on electrical power equipment in later departments and out in the field. Many of the simple rules and methods you learn in this department should help you solve many "trouble shooting" or repair jobs in the field after graduation.

### Light and Power Wiring

**Y**OU advance gradually and easily from the simple splicing and soldering jobs and signal wiring, to more advanced jobs of wiring for light and power. You wire and test a number of lighting control switches and circuits, and then install wiring systems in conduit and B. X., (or armored cable) in skeleton rooms

which we erected for this purpose. You install lights and convenience outlets, and learn modern wiring methods and National Code rules. Your instructor inspects your wiring jobs and helps you correct any mistakes. Then you "**TURN ON THE JUICE**" and see the equipment operate on the wiring you installed.

Wiring of farm buildings, city homes, factories, stores and offices, offers good opportunities for trained wiremen, either in business for themselves or working for contractors.

### Illumination and Electric Signs

**H**ERE is another important branch of electrical work. We teach you the nature of light and the principles of modern illumination, the sizes and types of lamps and fixtures to use for home, office, factory, show window and flood lighting. Also how to wire and test sign flashers and electric signs.

With the demand for modern and efficient lighting in new and old homes, stores, factories, ball parks, airports and movie studios, this field offers real opportunities and fascinating work to trained men who know how to layout, install or service electric lighting equipment.

### Electric Ranges and Appliances

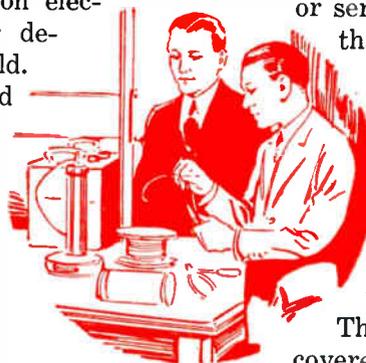
**E**LECTRICITY is rapidly coming into increasing use for home cooking. Over a million electric ranges are in use already, and it is estimated that there will be several million more in use within the next few years. Installation and servicing these units offers real opportunities for trained men.

Many millions of other electrical appliances, such as toasters, irons, fans, vacuum cleaners and washers, need servicing. There are real opportunities for trained men to start a shop or business of their own in electrical wiring or servicing, with very small capital. So that is why Coyne training covers these important branches of electrical work.

Some of our graduates who are in business in smaller towns or communities are called upon to handle several types of electrical work. So right here I want to emphasize a very important point.

There are many branches of work covered in our course, which graduates can profitably specialize in. Yet in many cases, in order to get the more profitable jobs they should be able to handle several branches. That is why we insist on giving every Coyne student a practical training in these several important branches of Electricity.

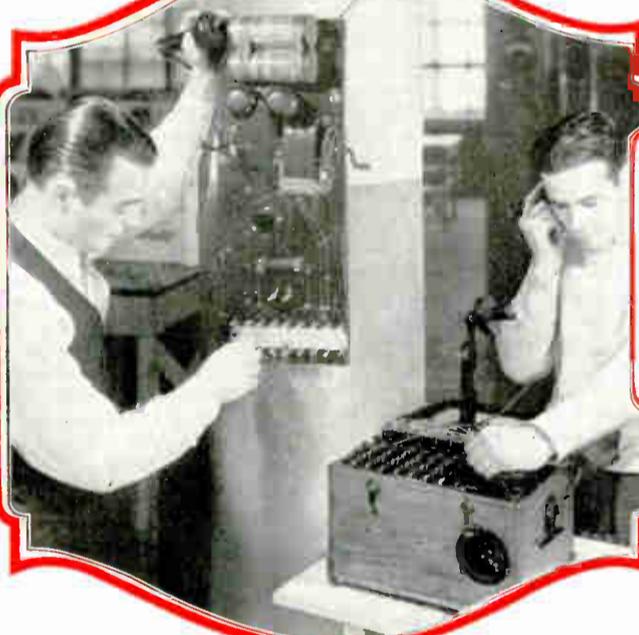
Now turn this page and see the next five pages of shop views in this department.



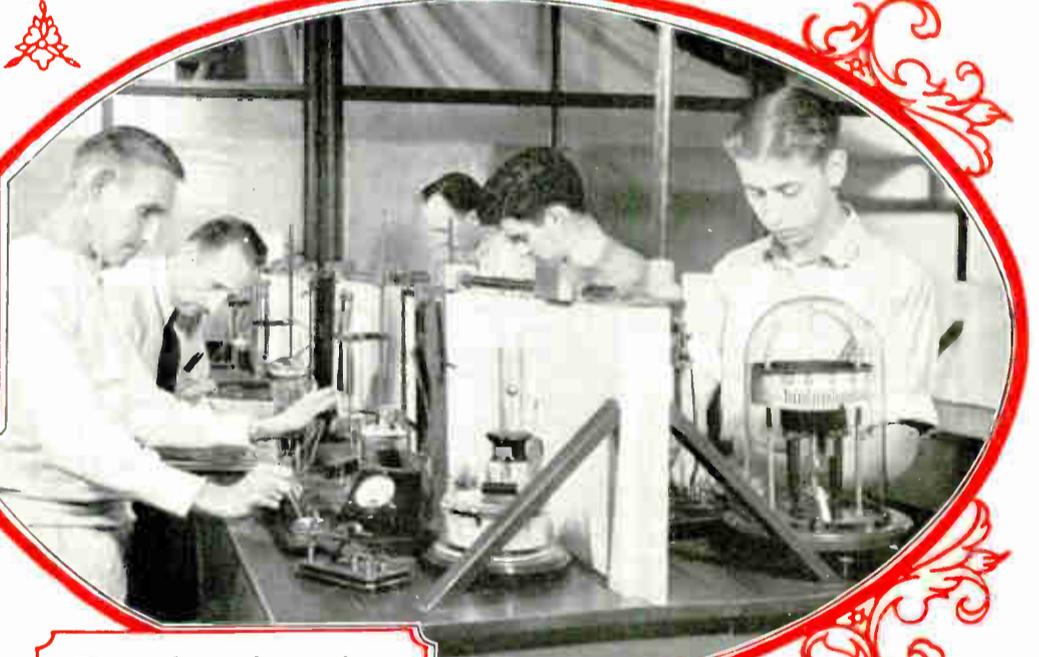
# Here You Start Your Practical Shop Work!



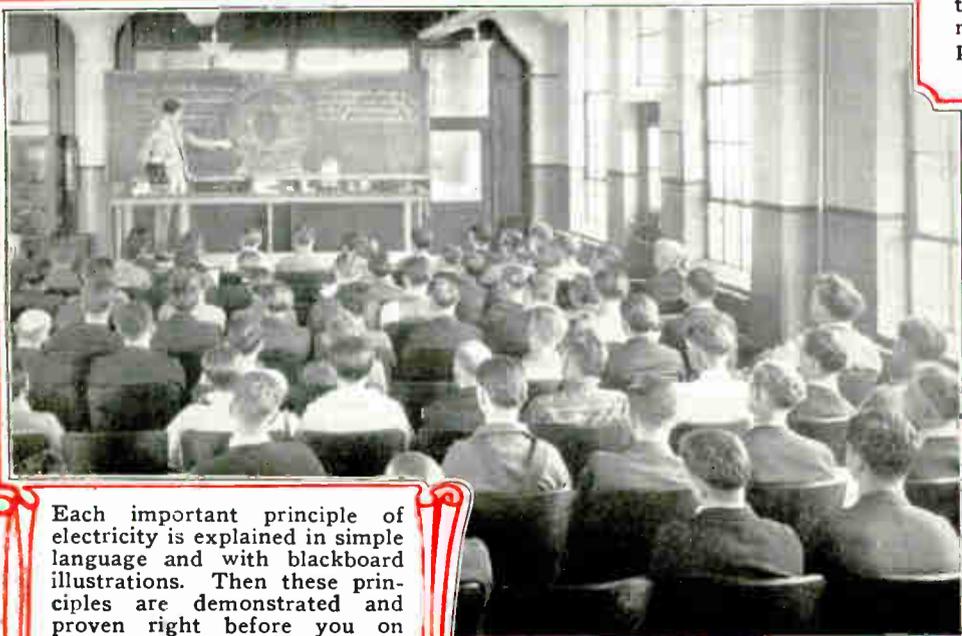
Here is a general view of part of our signal equipment. You see students wiring up and testing burglar alarm, door bell and signal systems. This is where they commence to put electricity to work, and apply many of the things taught in this department.



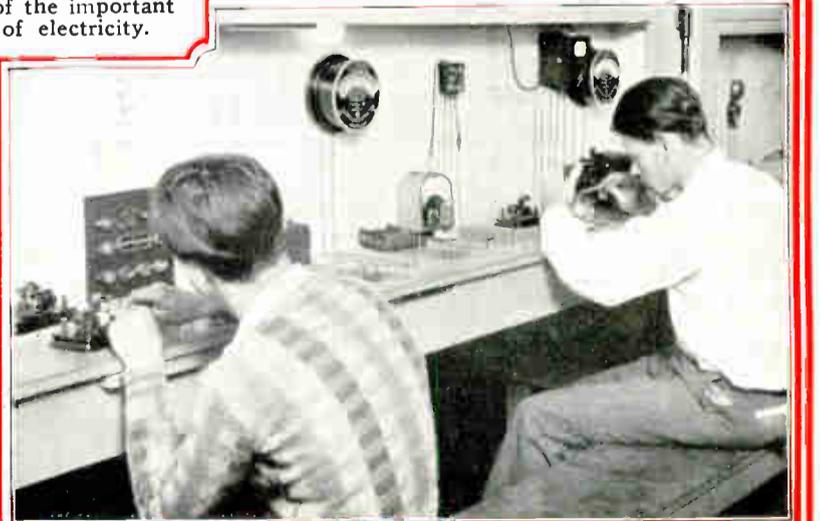
These men on the left are wiring and testing telephones. The instructor explains the operation of each part and then the students wire up the phones and test out their work by talking over them.



The students shown above are performing interesting tests with laboratory instruments to demonstrate and prove some of the important principles of electricity.



Each important principle of electricity is explained in simple language and with blackboard illustrations. Then these principles are demonstrated and proven right before you on actual equipment.



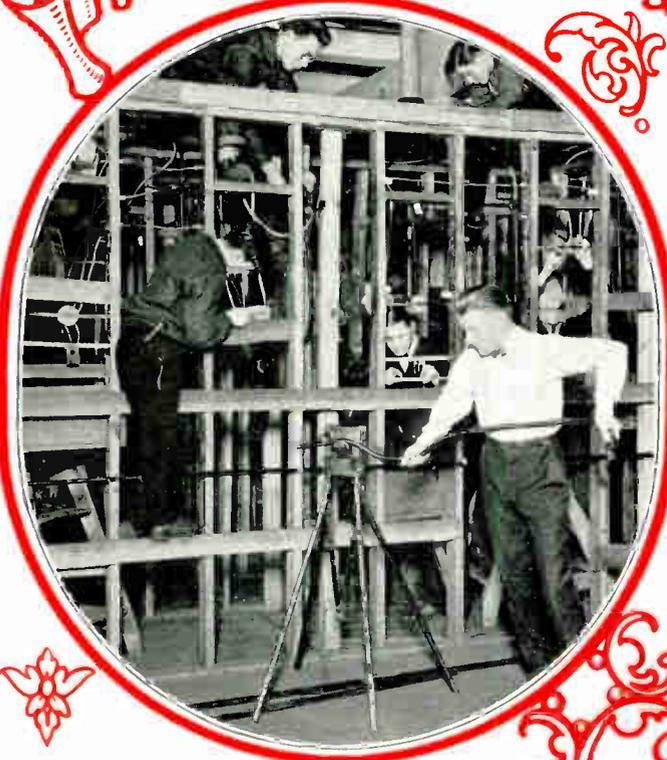
Wiring and testing special equipment for proving Ohm's law and effects of electricity with meters and instruments. These students you see are experimenting with coils, relays and meters.

# These First 5 Pages Show You Views of Our **ELECTRICAL WIRING DEPARTMENT**

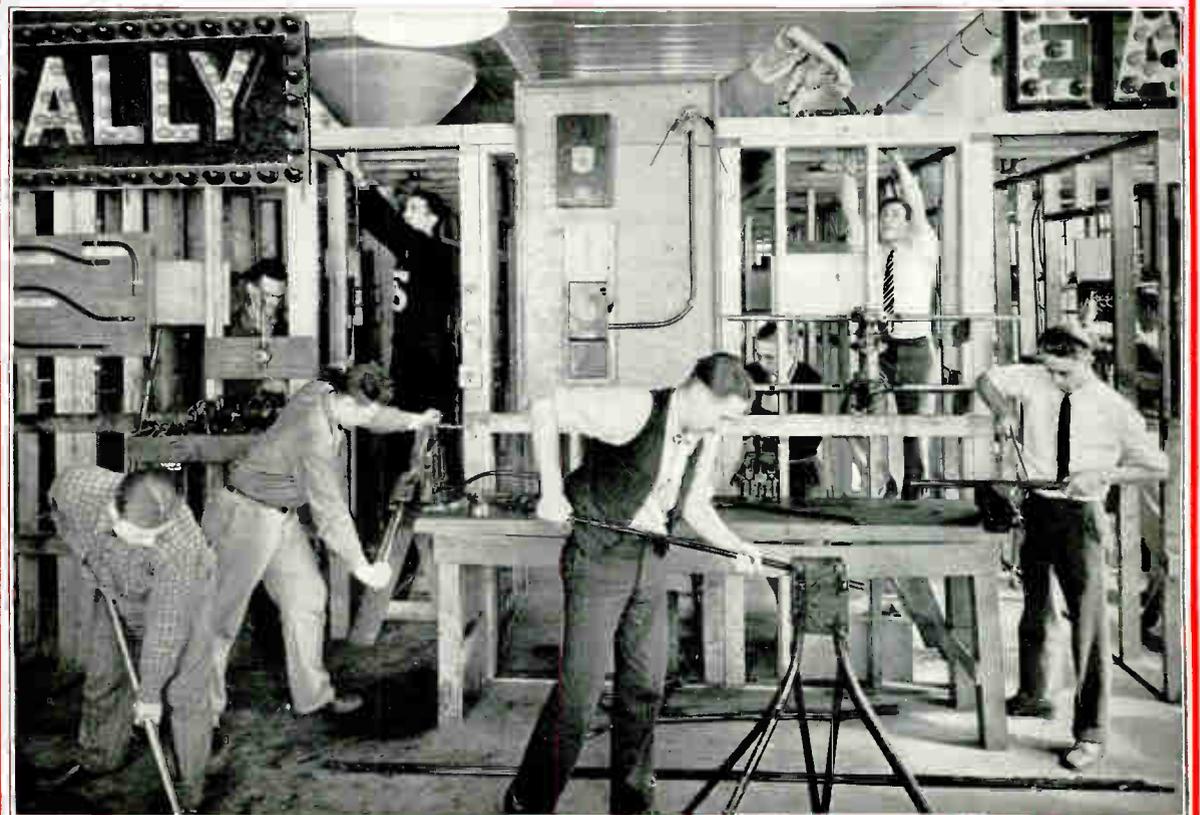
This work offers real opportunities to trained men not only with electrical concerns but also a chance to go into business for themselves.



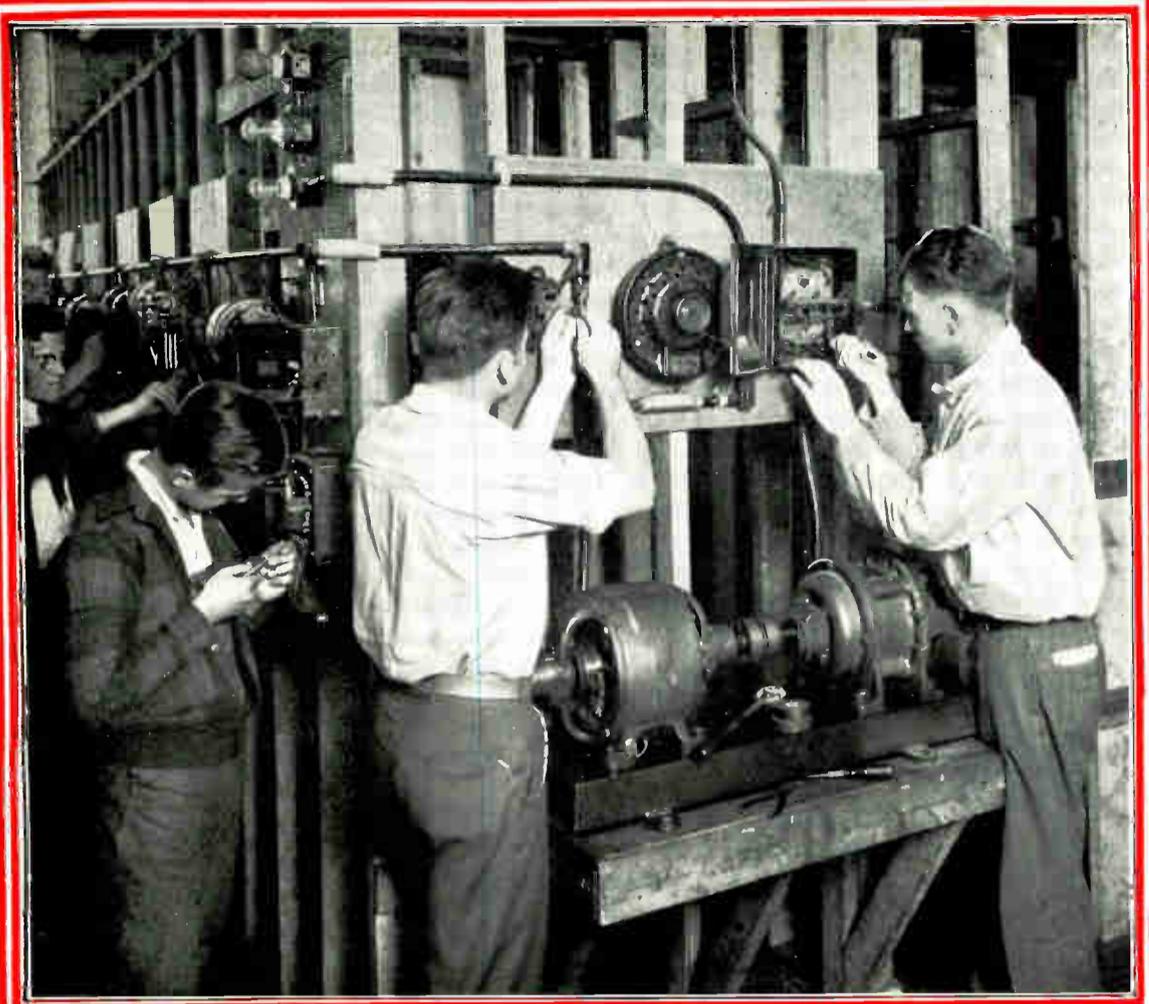
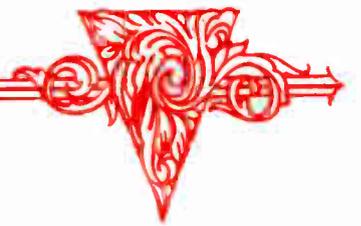
General view of a section of the electrical wiring department. Notice the large and well lighted shop. The men are wiring and testing light control circuits in their first small conduit layout, and getting real practical experience in the handling of tools and different kinds of switches.



These students are putting in wiring in conduit and BX in the actual room frames, and learning to wire lights and switches the same as they will do out on the job.



And this is how you learn to handle conduit. Most of the new and modern wiring for light and power is run in these pipes called conduit. And a practical man working in this line, must know how to bend, cut and thread this conduit. These students are getting actual work with threading dies, bending "hickeys," and in cutting pipe.



Here are some of the motors the students wire and test in this department. This actual work teaches them how motors and starters must be wired according to the code, and how to test to locate troubles in the wiring, which might cause motors to fail to operate. And it gives them still more practice in the use of tools.



Here is an electric range, with automatic temperature control equipment. These students are learning how it is constructed, and wired, and where to look for any troubles that might develop in such equipment. In many localities where hydro-power makes electricity lower in cost, these electric ranges are being sold and installed by the thousands, creating jobs for trained men to wire and repair them.

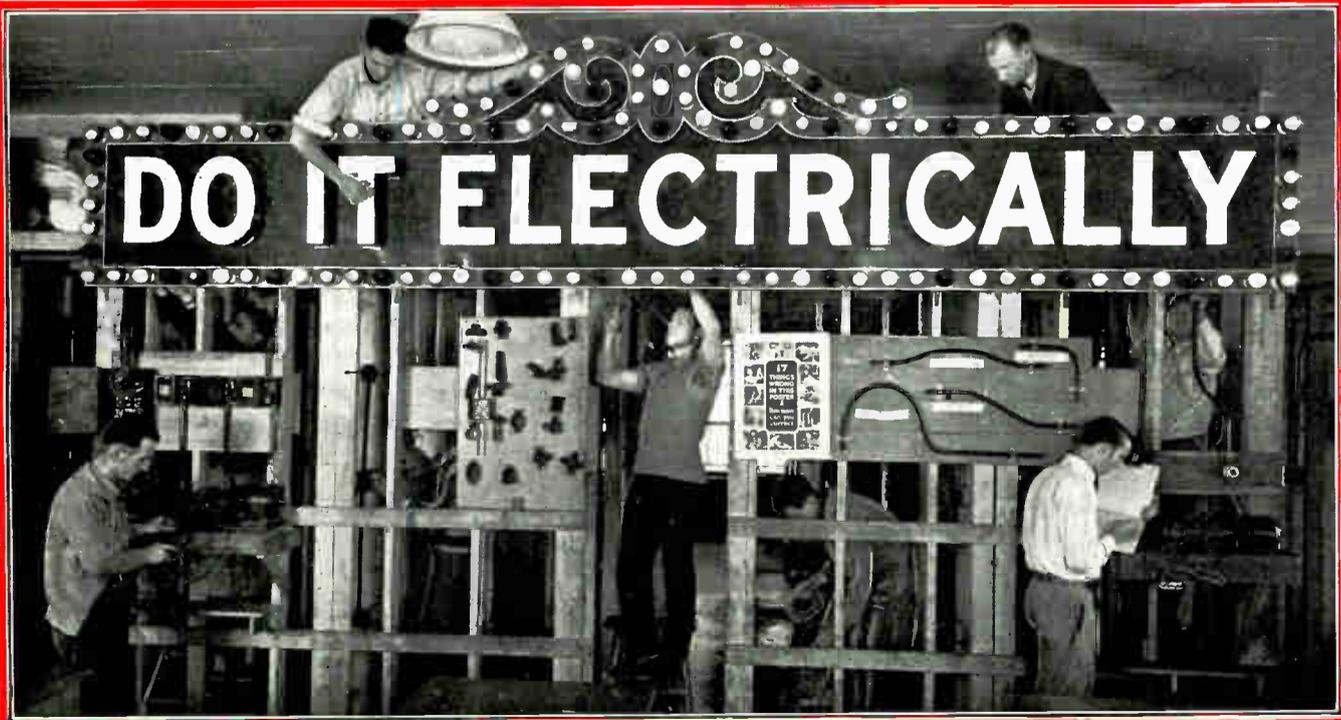


**Gets Help When Needed.**

**“BEFORE** attending Coyne I worked on a farm . . . unskilled labor of course for small wages. Since graduating I make more money and make it easier . . . from experience with the school I have found that when you need help . . . you need but ask for it . . . this alone is worth the cost of the course.”  
—L. N. WEAVER, Missouri.



**DO IT ELECTRICALLY**



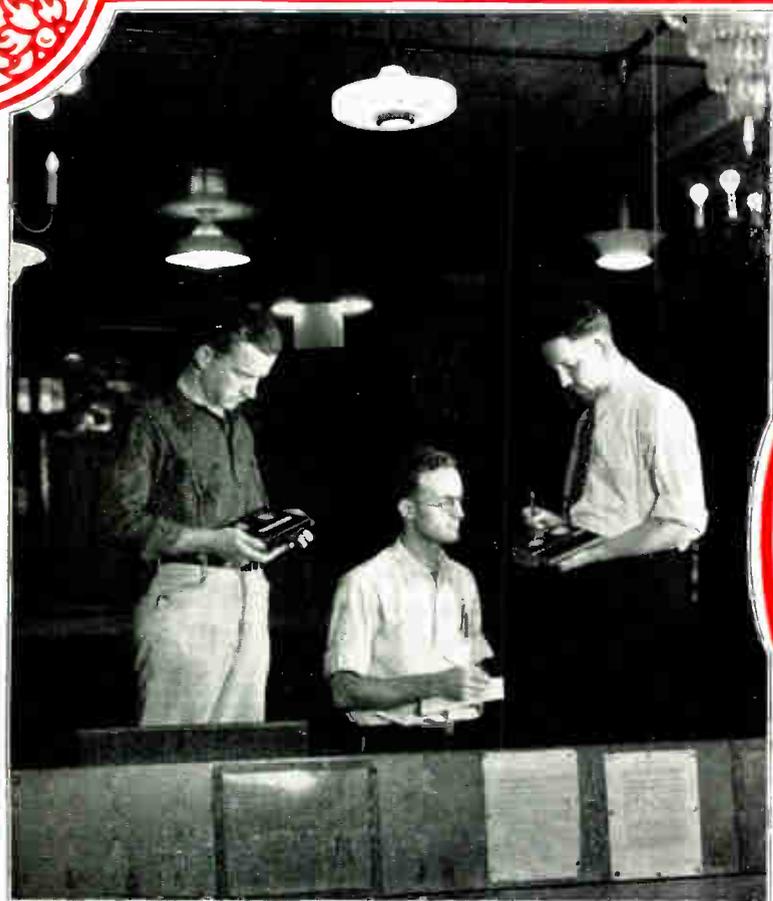
Students doing splicing and soldering. After the instructor shows you how to strip the wires and make the common splices, you make them yourself and solder them. Then he inspects them.

At the left is a big electric sign which you will be trained to test and operate. These men are wiring up the motor driven flasher control, and testing the circuits and wiring on the sign.

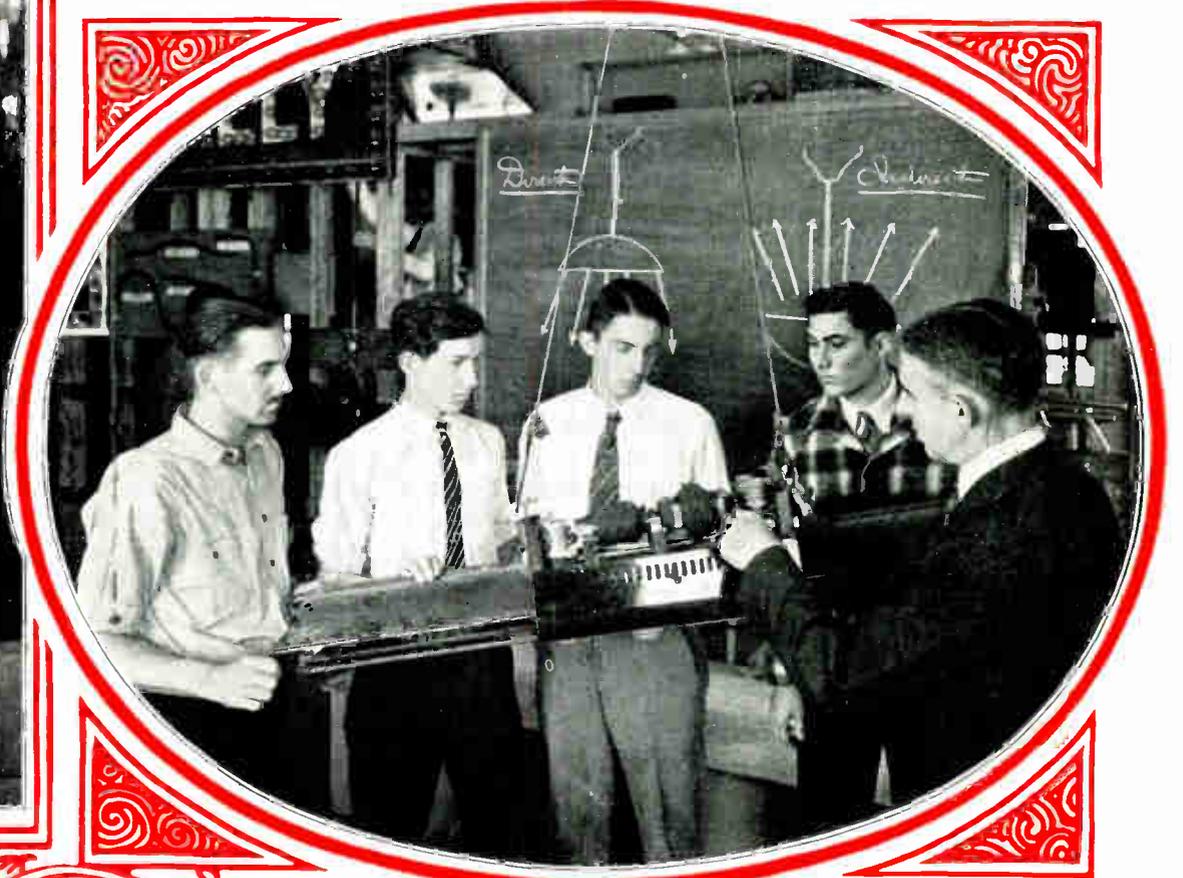
**“WITHOUT** the help of the Coyne Employment Service I would never have received the job I have today. The Coyne Graduate Manager called me in and personally introduced me to the Engineer of the Jam Handy Company of Detroit. I went to work the very next day. Coyne certainly helps her graduates locate work.” — MR. GEORGE BLEASE, Michigan.



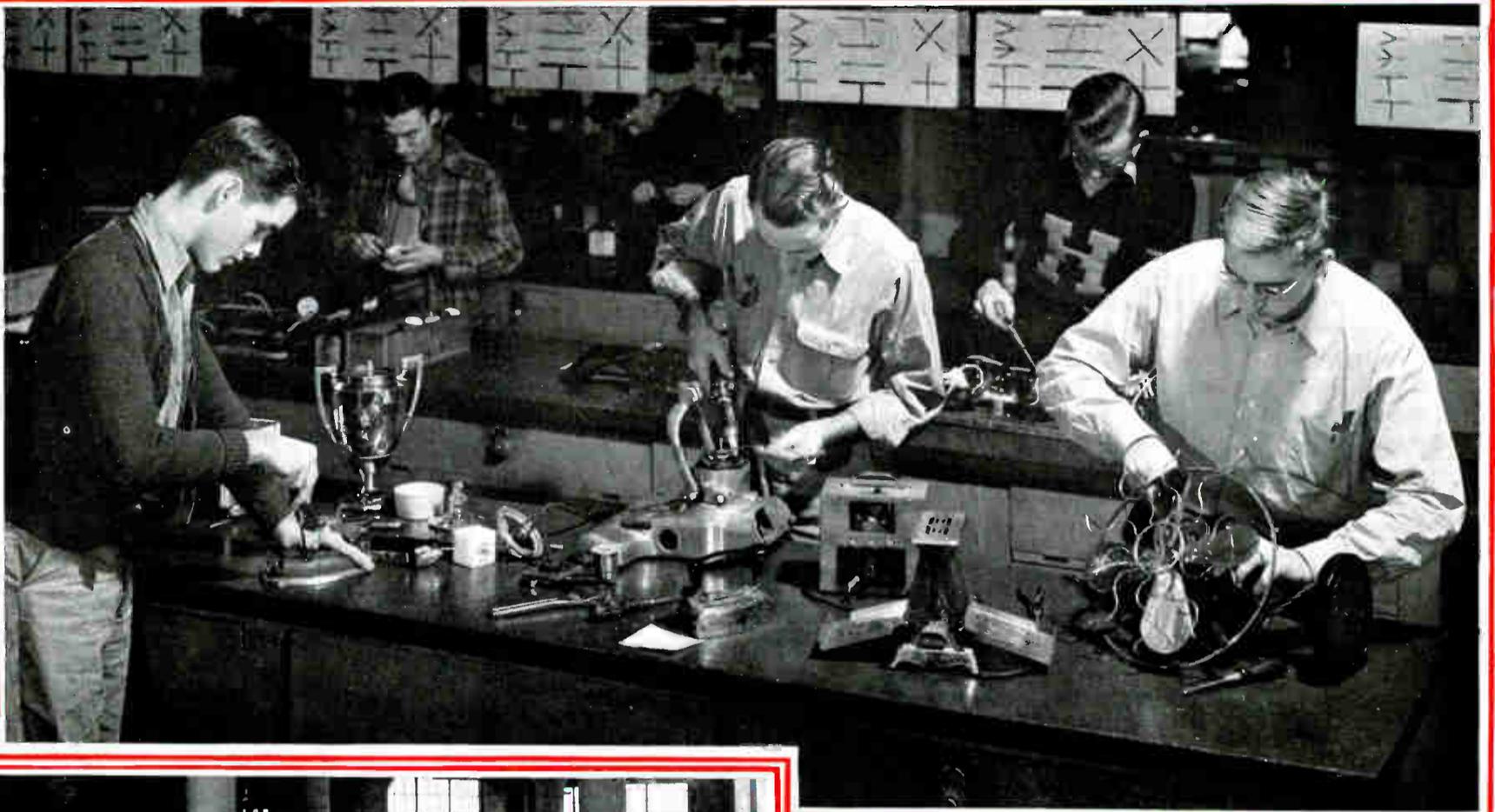
Here you see part of the illumination section, and some of the different kinds of light fixtures you work with. The instructor is showing students how to test the amount of light from each fixture with a "foot-candle meter." You are taught which type of fixture is best for home, office, or factory use.



These students are making practical tests on various lighting fixtures with foot-candle meters and light meters. Their instructor is giving them a personal explanation of one of the modern type photocell foot-candle meters.



Special instruction on the mercury vapor lamp, and the operation and care of these interesting units. Thousands of these lights are in use now, and thousands more installed yearly in the big industrial plants. And the maintenance electrician who can install and repair them is worth more to his employer.



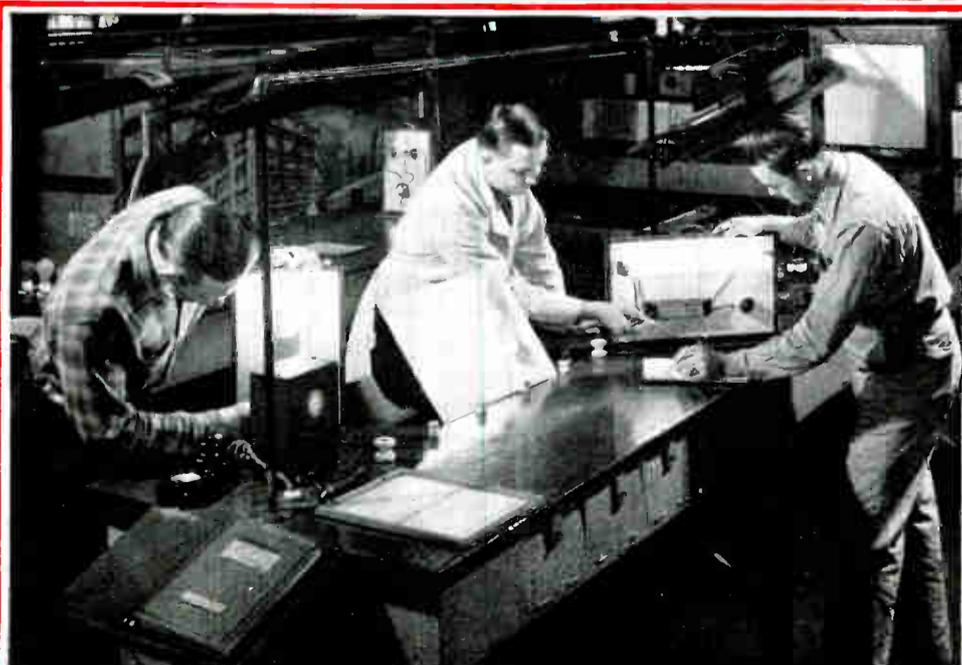
These students are getting practical training and experience, on repairing electrical appliances. Many of our graduates start a business or service shop of their own in this branch of electrical work.



Here you see students testing neon signs, fluorescent and mercury vapor lights, and lighting control units. Such practical instruction gives you a good understanding of how to use and apply modern lighting equipment.



Student and instructor working together on the testing and demonstration of special color display lighting equipment.



Instructor explaining principles and operation of new type fluorescent lighting units to students, as they perform shop tests on these modern units.

# NOW You Get Training on **Armatures**— *The Heart of Motors and Generators*

## **Why We Want Coyne Students to Have Practical Armature Training**

**H**ERE you get practical training in winding, testing and repairing armatures and stators, both small ones and those of large power motors and generators of many horse-power.

The armature can be called the heart of Direct Current motors and generators. And all power motors and generators, whether D. C. or Alternating Current, have either armatures or stators which require attention from time to time.

## **Opportunities for Trained Men in Armature Work**

**T**HINK of the many millions of motors of all sizes in our great factories and industrial plants all over the world today. The man who can quickly find and repair the troubles in these motors, and keep the wheels turning, is a valuable man in many organizations.

Power plants with their generators and motors, street railways and electrified railways with their big motors, hotels, and office buildings with elevator motors and other branches of industry, are creating additional opportunities for skilled armature winders at interesting work.

## **Personal Training**

**Y**OUR instructor first explains an armature to you in simple shop language. He shows you an armature core and shaft, and explains how the core is made.

He explains the purpose of the slots and coils, and shows you how a completed armature creates powerful magnetic fields when current is applied, and how this magnetism makes a motor armature turn. Also how the coils generate voltage in a dynamo.

So you see, you are being taught a lot about the operation of motors and generators. And right here you begin to see the need and use of many of these important laws and rules of electricity that you were taught

in the Wiring Department. All of our departments dovetail together and there is just a gradual step by step advancement, until you are right on power equipment almost before you know it.

And you will be surprised how simple even the advanced work becomes, with the methods we use, and with the personal help and explanations of your instructors.

## **Actual Work on Wire Windings**

**A**FTER the instructor has explained the armature, he shows you how to make your first wire-wound coils. Then how to put them in. Then he lets you go ahead and put in the rest and complete the windings with your own hands, but always with his ready help and advice any time you need it. **All of your windings are done with real copper wire on actual armatures.**

## **Operate the Armatures You Wind**

**W**HEN you have the coils all in, the instructor shows you how to test each one to prove that there are no faults in them. And then you connect up the coil ends to the commutator (the commutator is the group of copper bars on which the brushes run.) You also are taught how to make a sketch or winding diagram, to make your connections from, so you will be able to do winding from the plans used out on the job.

Then after you solder the connections and the commutator is trimmed, you test the whole winding out finally on a special machine for this purpose and with meters, to be sure there are no "grounds," "shorts" or "open circuits" in it. Then you put it in a motor frame and actually run it. You will get a "thrill" out of it, when you see the armature you wound with your own hands spin merrily in the motor, you feel that you can now wind any armature of this kind.

Once more you will say, how much better this kind of training is than the theory you would get by studying from printed lessons or text books.

## **Winding of Large Armatures and Stators**

**W**HEN you have finished your windings on small armatures and stators, you are ready to start on the larger windings.

Your instructor shows you how to make large coils and how to carefully tape and insulate them and place them in the well insulated slots of the large cores.

This work makes you more confident and better able to "tackle" and wind or repair larger armatures and stators should you have occasion to do so on a job.

When you finish these coils, you test them. And then connect them and solder them to the commutator.

Some of the windings are baked in an electric bake oven.

The instructor shows you how to cover them with a special varnish or insulating compound, and tells you at what temperature and how many hours armatures of different sizes should be baked.

This treatment keeps the moisture, oil, and dirt out of the finished windings, while they are in service. It greatly increases the life of a winding.

You also get training on many types of material and tools to use on different windings, and the best shop methods for winding and testing.

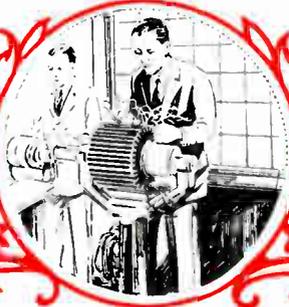
## **Testing and "Trouble-Shooting"**

**Y**OU will get practical training in various methods of testing and "trouble-shooting," to locate troubles quickly out on the job.

And regardless of what line you later take up, your armature training may often be of great value to you. And it will be a great help in your understanding of motors in the next department or on any future maintenance job.

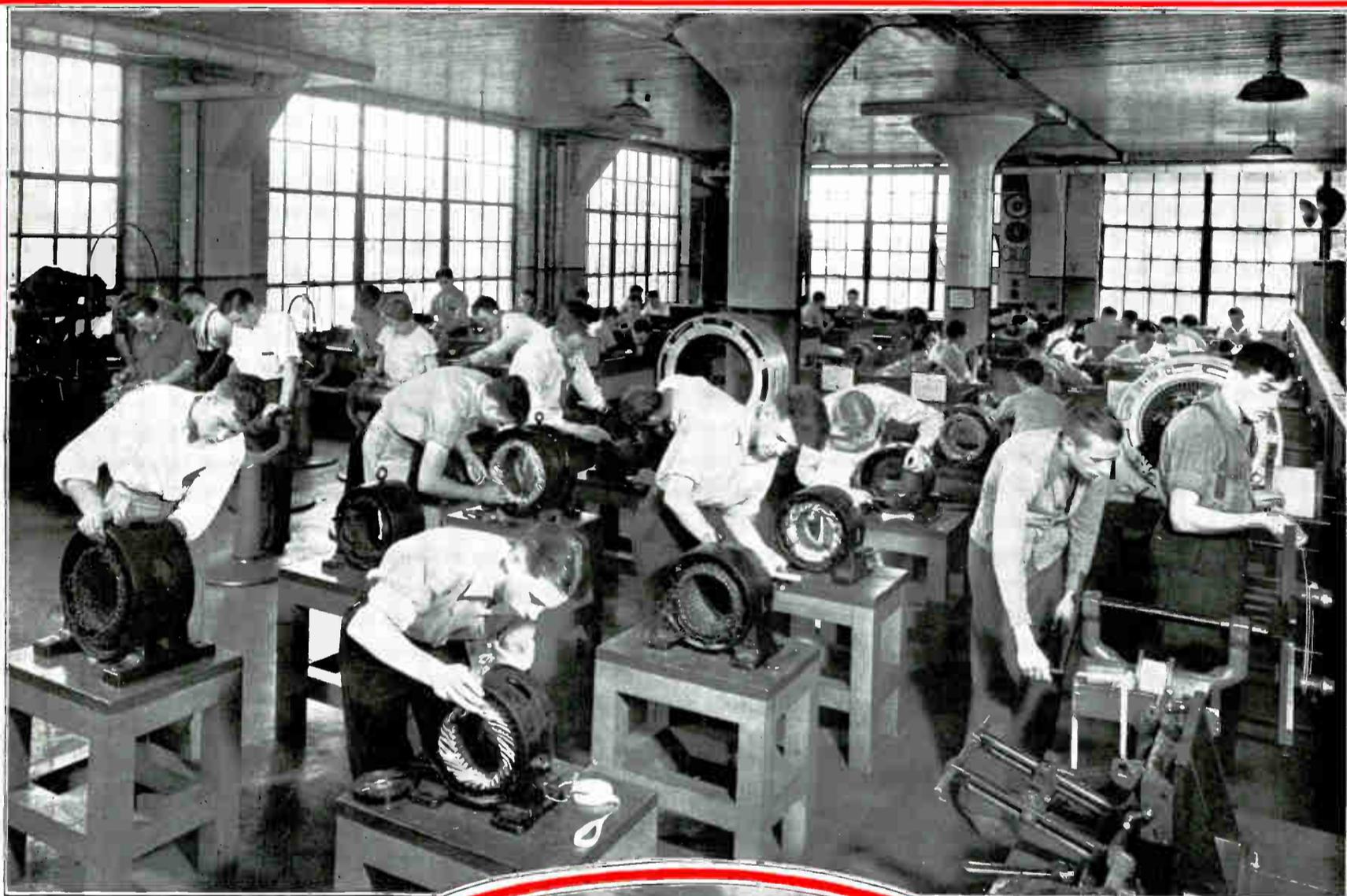
You will always remember the kind of practical work you do on these armatures and the thrill and confidence that comes of seeing your own windings work in the motor.

**SO NOW LET'S SEE THE ARMATURE SECTION ON THE NEXT THREE PAGES.**



# This and the Following Two Pages Shows You *The* **ARMATURE EQUIPMENT**

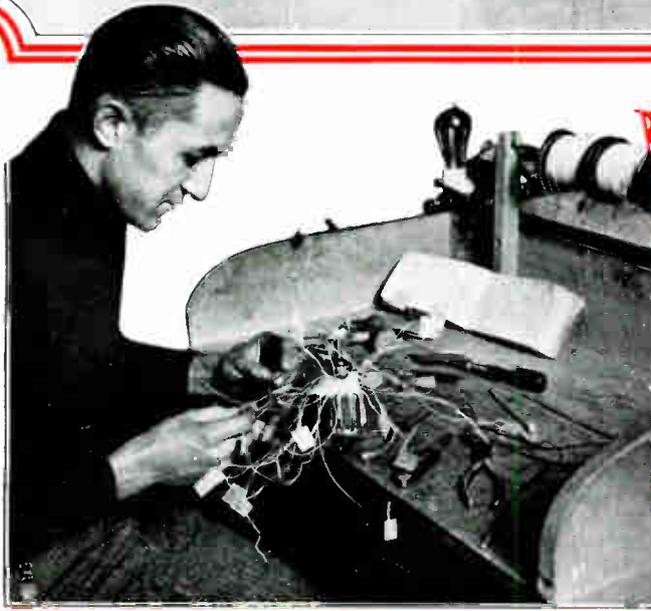
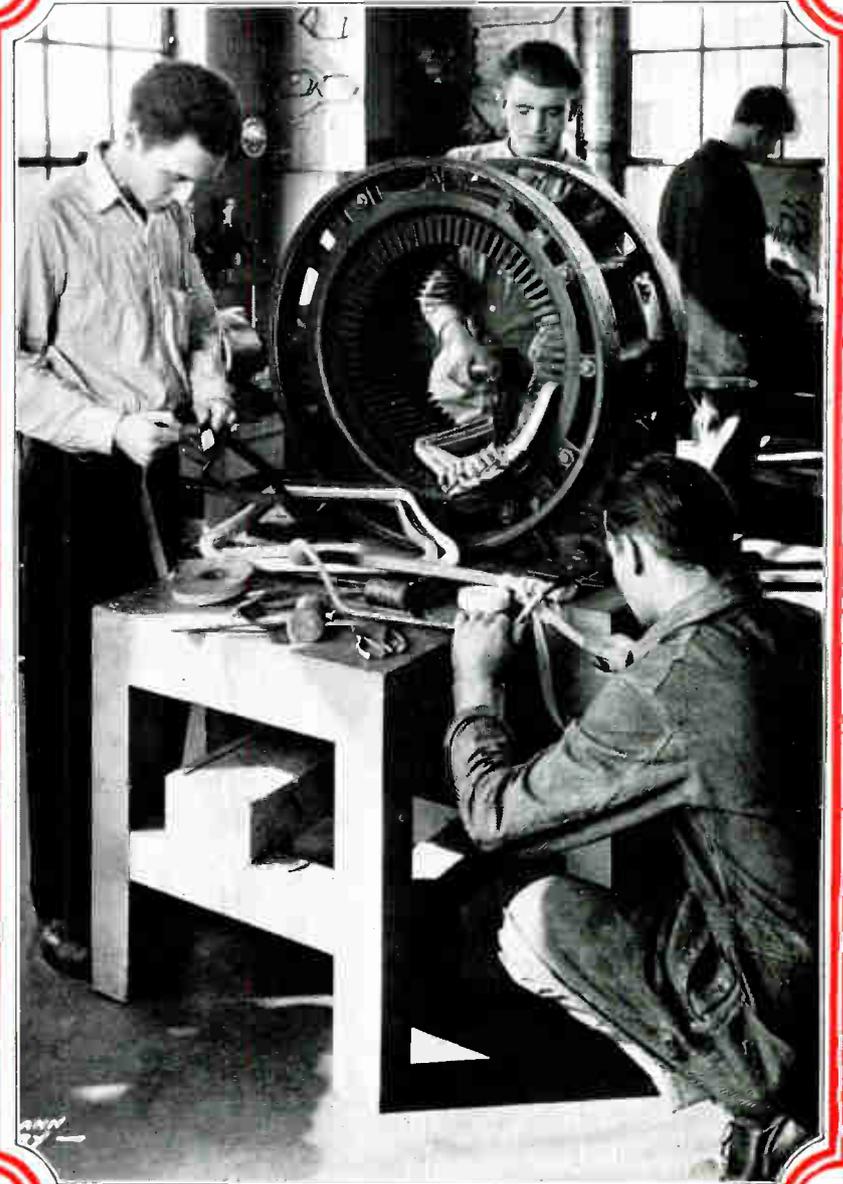
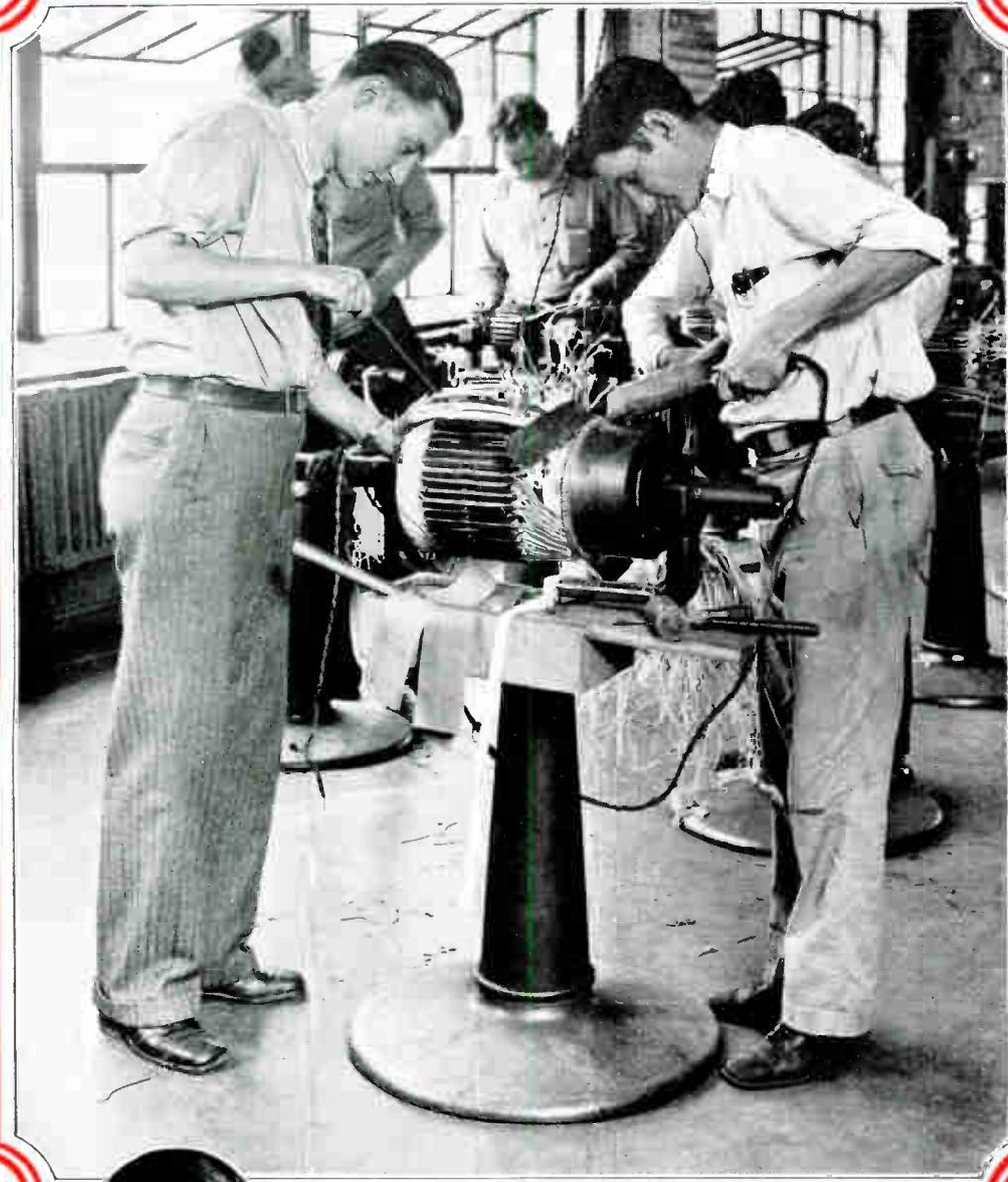
You can actually wind both Armatures and Stators and get training in the operation of motors so when trouble develops on the job, it can be corrected. Your Armature training here at COYNE should make you more valuable to an employer.



Here you see a general view of part of the Armature equipment. And you will notice the large, airy, and well lighted shop these men are working in. Actual winding and testing of D.C. and A.C. motors of various sizes helps to give you the practical training you need in this work.



These students have finished their first small windings and here you can see them winding and testing large armatures and stators. In the background you see men truing up a commutator in a lathe and others working on a 100 H. P. A. C. stator. And in the foreground, instructor shows a student how to test his finished winding, before connecting up the leads.



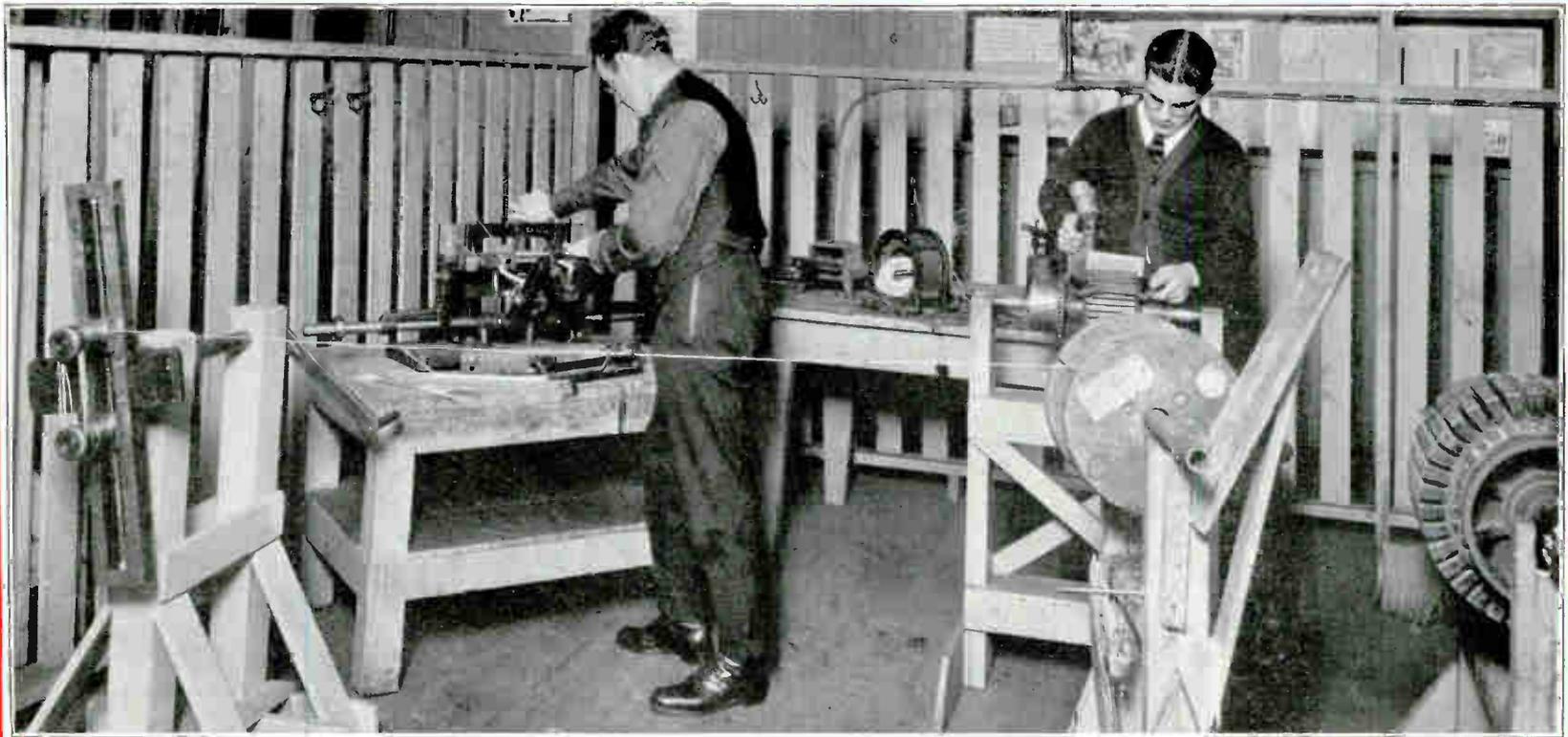
Above you see our students removing part of an armature winding, to repair some bad coils. This kind of real experience teaches them the proper use of soldering irons and tools, and the right methods to save time and do first class work.

And these men are taping and putting in new coils in a 100 horsepower A C. stator. This is the kind of actual work that helps them to handle a job in the field. And when you have done actual work like this you should have the ability and confidence to tackle repair jobs.

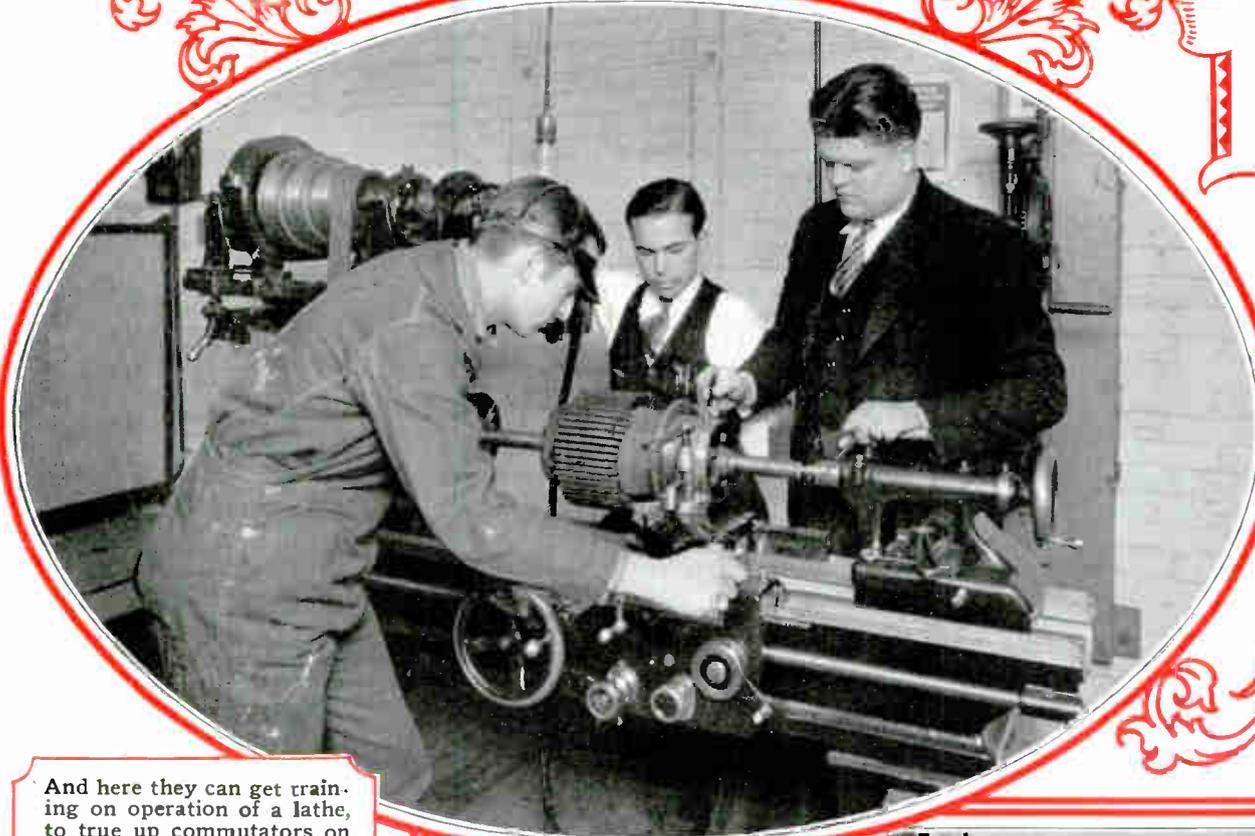
This man is testing a finished winding of a small D. C. armature, before connecting the leads to the commutator. These actual wire windings you do first on these small armatures get you acquainted with the use of tools and handling of coils, so you are ready for the large windings which come next in this department.



These students are testing finished winding of armatures and stators. This is the way they find their mistakes and are taught to make their windings correct. Testing armatures and stators and locating faults in the windings, is very valuable to any maintenance man.



These men are operating coil winding and forming machines, and making up coils for large armatures. This helps to make them acquainted with the same type of equipment they may use later in their work in the field.



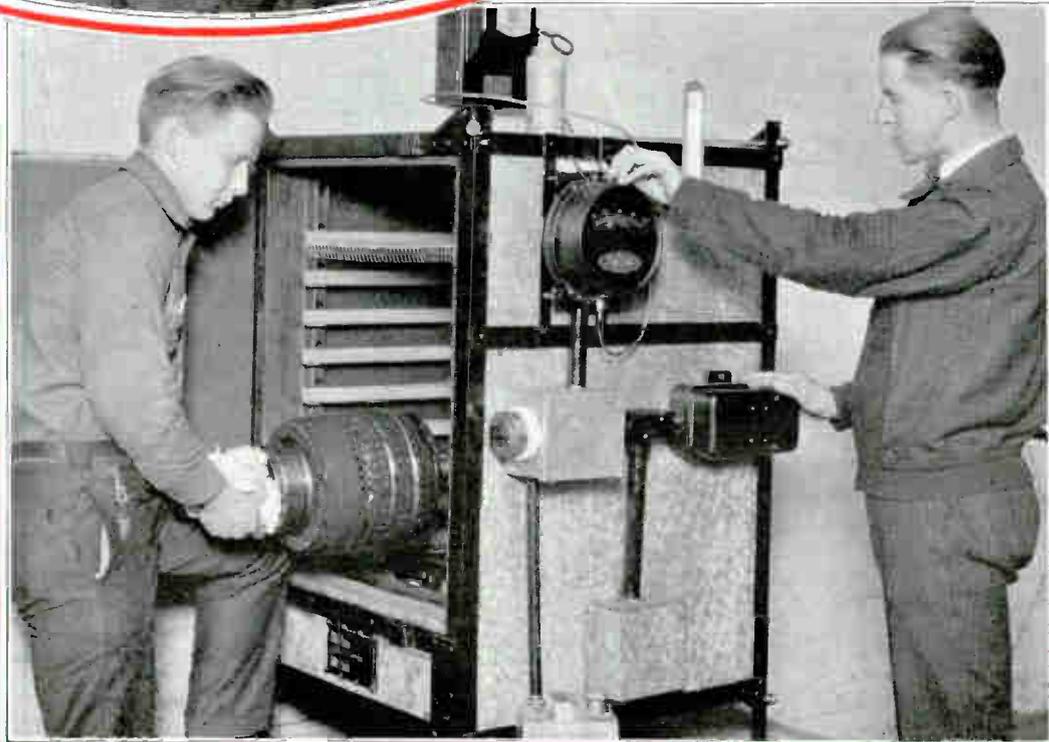
And here they can get training on operation of a lathe, to true up commutators on armatures. The instructor shows them how to grind and set the cutting tool, and how to make a nice smooth cut on the copper.



This Student is testing an armature on the growler, a machine for quickly locating trouble and faults in windings. This kind of instruction helps our graduates to get right at the cause of armature troubles without waste of time.

**Substation Maintenance Operator**

"I have a job with the Power Company. Substation maintenance is my work and I like it real well. . . . I got my job with this company the following week after I put in my application. . . . I feel now that the greatest thing I ever did was when I enrolled at Coyne."  
—JAMES DIBLE, Ohio.



These students are operating the electric bake oven, and just removing an armature that has been wound, covered with insulating compound and baked, to protect the insulation. This treatment keeps out the moisture, oil and dirt that would otherwise ruin the winding.

**Thanks Coyne for Help**

"I was hired by the Electric Light & Power Co. as a frequency changer floorman. . . . I like the work fine and am proud of my Coyne knowledge of electricity. Thanking you for your help in my interest, I am,"—RAY BRAMLEY, Missouri.

# Now Read about Power Work in the Direct Current Department

**H**ERE you get into the most fascinating work of your whole course so far.

We have used the term D. C. in several places and wherever we have, it means Direct Current.

You are now ready to APPLY many of the things you have been taught in all the previous departments to the actual operation, care and repair of real D. C. or Direct Current power equipment.

For example, the simple laws and demonstrations of magnetism you have in the first department should make it easier for you to understand the operation of the larger motors and generators. And the work you have had on armatures should help you to understand still more thoroughly the equipment in which they are used.

You will also have good use for your knowledge of circuit tracing, in wiring and testing the controllers in this department.

So again you see how we help you to understand even the advanced equipment, by our step by step practical system of training.

## Great Opportunities In This Field

**D.** C. motors and generators are used very much in mines, steel mills, for electric railways, elevators, and in some districts close to generating plants whole areas will be operated by D. C., including factories and industrial plants. Some big factories that operate their own power plants, use D. C. equipment, and so do some small towns. Even the business district of Chicago, known as the "Loop," is operated largely by D. C. So this is a very broad field, and offers splendid opportunities to trained men, as power plant operators and motor maintenance men.

Realizing the great importance of this field, we have installed a large amount of equipment to make your work in this department really practical. You work on motors and generators of many types, from the smallest to those of many horsepower, and controllers of many common types, from the simple hand operated ones to the automatic controls and starters.

Even a large power plant switch board is provided for your final operating experience.

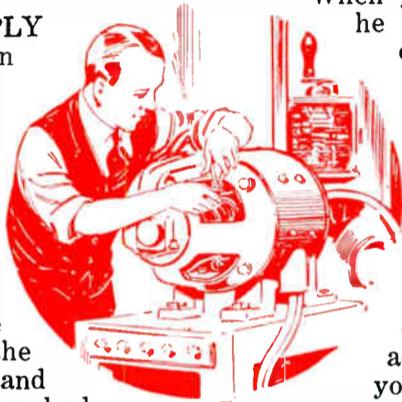
## Direct Current Motor Training

**W**HEN you start your work in this department, your instructor first explains the operation of D. C. Motors, using actual parts of a machine and interesting blackboard sketches, some of which are in various colors to make it easier for you to understand every point.

He goes over with you briefly the work you had in the Wiring and Armature

Divisions that applies to these machines, and sees that you understand the important principles. Naturally, after understanding their operation you should be able to wire them up or find and fix their troubles much more quickly when you get out in the field.

When you understand motor operation he tells you of the different types of motors and their characteristics and where each is used.



## Plenty of Personal Help

**T**HEN you go right to the equipment in the department and he shows you how to connect up, test and run the actual power motors. In this way you prove out the things he has told you and by doing the work on the equipment yourself you should easily remember what you are taught.

Then your instructor explains D. C. motor starters and speed controllers. Again he takes a simple controller first, shows you all the parts and explains about each. Then he draws it all out on the blackboard so you can get a still better picture of it in your memory, and also in order for you to copy a sketch of it to keep in your own notebook, so you can easily refresh your memory whenever you have need for the information.

You are taught how to select the right motor for different uses. And also how to test the horsepower of motors with special testing equipment used for that purpose. Then how to determine their efficiency, using both the horsepower test, and meters.

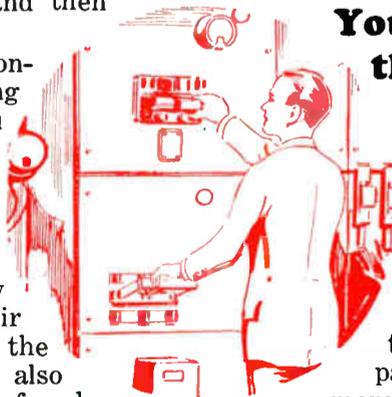
This is all very interesting work, and valuable training to the man in the electrical field.

Your work on Controllers covers wiring, testing and repairing as well as care of coils, contactors, overload devices, etc.

## Instructors Work With You

**T**HEN you also get practical training on trouble shooting and repairs, and how to test to quickly locate the common troubles in both starters and motors, and then how to fix them.

Your instructor will occasionally make something go wrong with a machine and then tell you to find the trouble and fix it. It is sometimes necessary for you to take some equipment completely apart. If you get stuck he is always near and ready to help you out, and show you the right way. This repair work makes you familiar with the proper use of tools. You are also taught how to connect motors for dynamic braking operation, by which they can be stopped quickly and smoothly by their own magnetic braking effect. This is another very valuable thing to know, as you may make it save lots of time on certain motor jobs for your employer.



## Now You Start On Generators

**N**EXT your instructor explains the operation and care of different kinds of D. C. generators and their use. Then you wire up and test and operate different kinds of generators and motor-generator sets. You work out your problems on this equipment until you understand generator operation, care and repair.

## Power Switchboards

**N**OW you get training on D. C. switchboards and their circuits and operation.

You are taught the kind of materials used for the panels, how they are mounted, and how the meters and switches are attached, also switchboard circuits and arrangements of bus bars and control wiring.

Your instructor explains the use and care of all the instruments, circuit breakers and switches, and then how to operate the board. This is explained first with blackboard diagrams which you can copy and keep, and then you are instructed right on the main power board in this department.

Here the instructor demonstrates each operation and shows you how to read the meters, how to adjust the generator voltage, connect generators in parallel and then equalize their load with the controls on the board.

Then you do the same operation yourself, and **what a thrill you get** when you realize that you are controlling many horsepower or kilowatts of energy from real generators in the department the same as you may do later, in some power plant.

You are instructed in common power plant operating rules, and this is very important information to have.

## Meters and Instruments

**N**EXT you learn about meters, voltmeters, ammeters, watt-hour meters, and recording instruments.

The instructor explains them with actual meters and parts before you, and simple sketches to make clear their operation and connections. You are taught how to read them, and how to test and adjust them and the different uses for each.

You are also trained how to use what is known as a "megger," a device used to test the insulation of machines.

## You Are Now Ready for the Next Department

**S**O you see, you will receive training on actual equipment, and plenty of patient help and capable, friendly advice from your instructors at every step. I am sure after you leave this department you will realize the value of the training you got in this work. The work in this department has also laid a great deal more of the foundation for your work

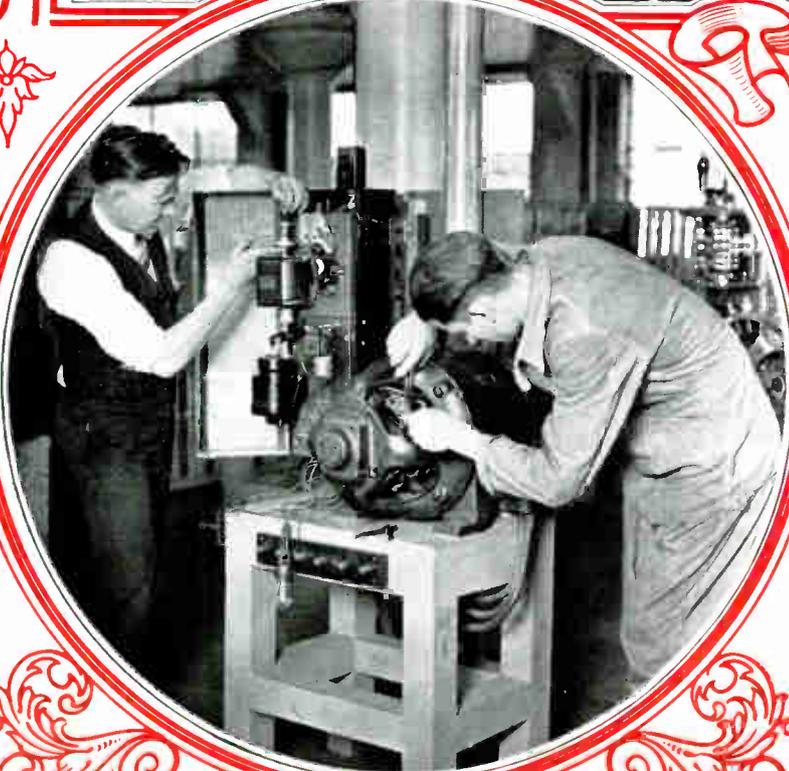
in one of the greatest branches of the entire electrical field, A. C. Power, which is covered just as efficiently in the A. C. Department, which is next. But **before you read about this, I want you to see the views of my D. C. Department on the next three pages.**

# On This and the Next Two Pages You See Our Students at Work in the Direct Current Department

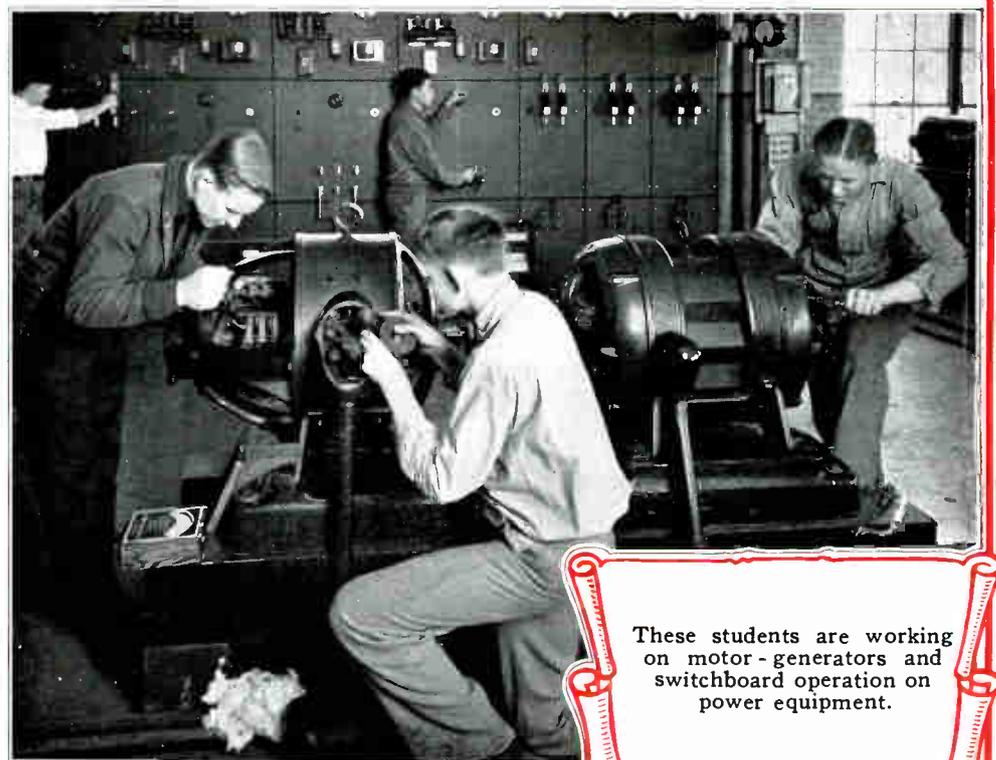
The work you do on Direct Current Equipment helps prepare students for opportunities in "trouble shooting," repairing and maintaining power equipment in Power Houses, Manufacturing Plants, Industrial Concerns and on Railroads. Just imagine yourself as one of these students.



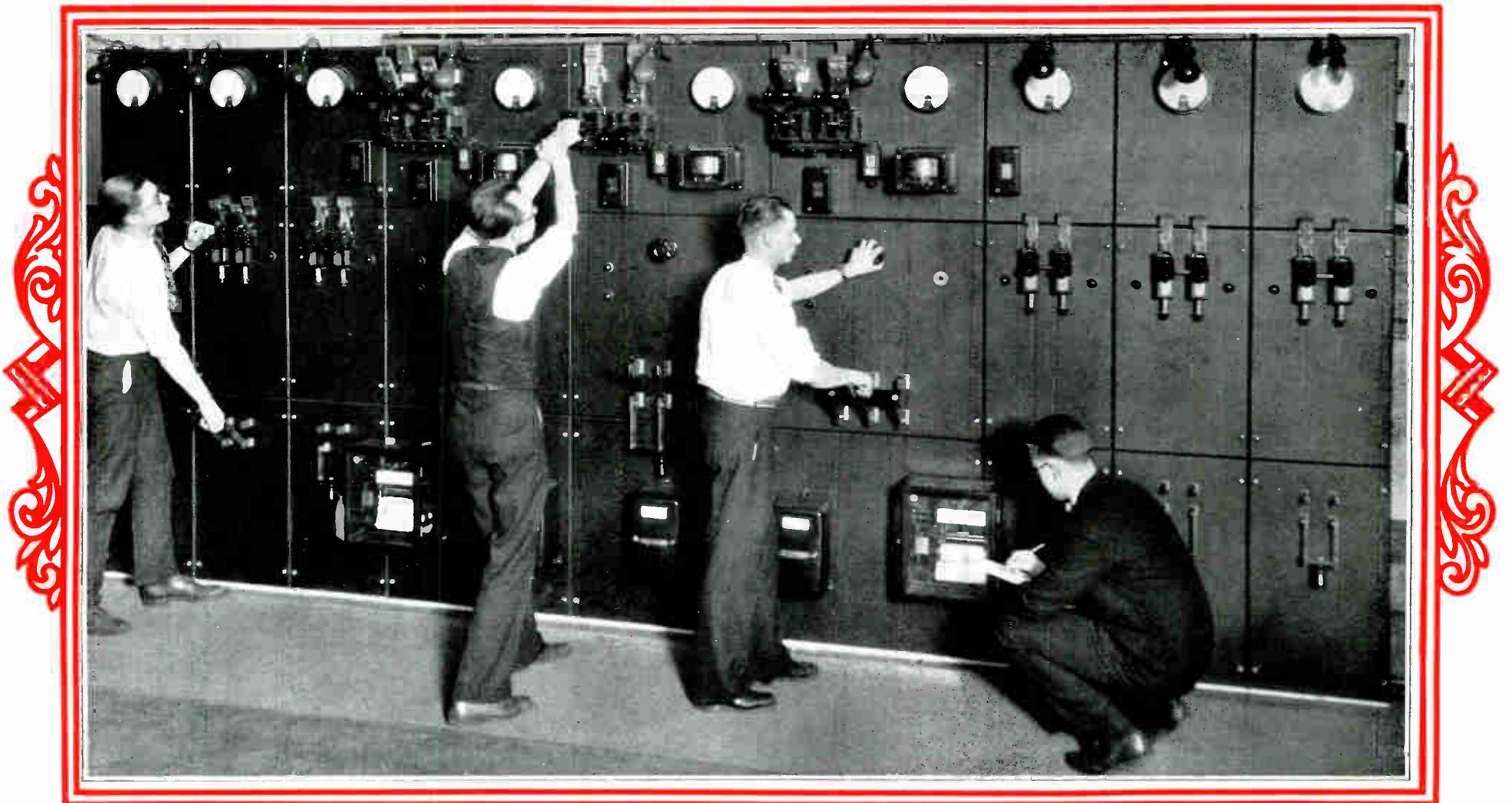
Here is a general view of the D. C. Department. Just see how interested these men are in wiring up, operating and testing D. C. motors and controllers of all common types. These machines are supplied with power from the generators right in this department.



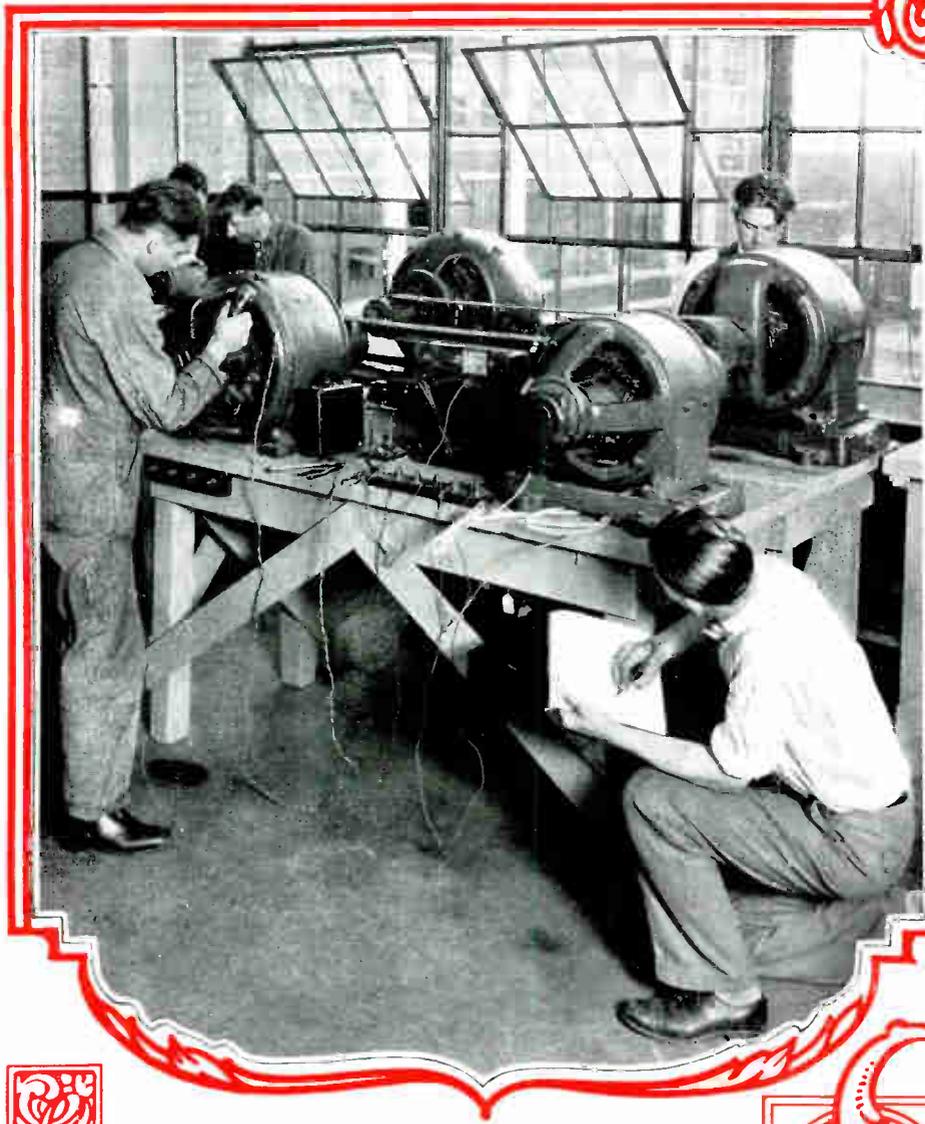
These students are being trained in the operation of an automatic controller and compound motor, and to make the same tests and repairs they may be called upon to do in the field.



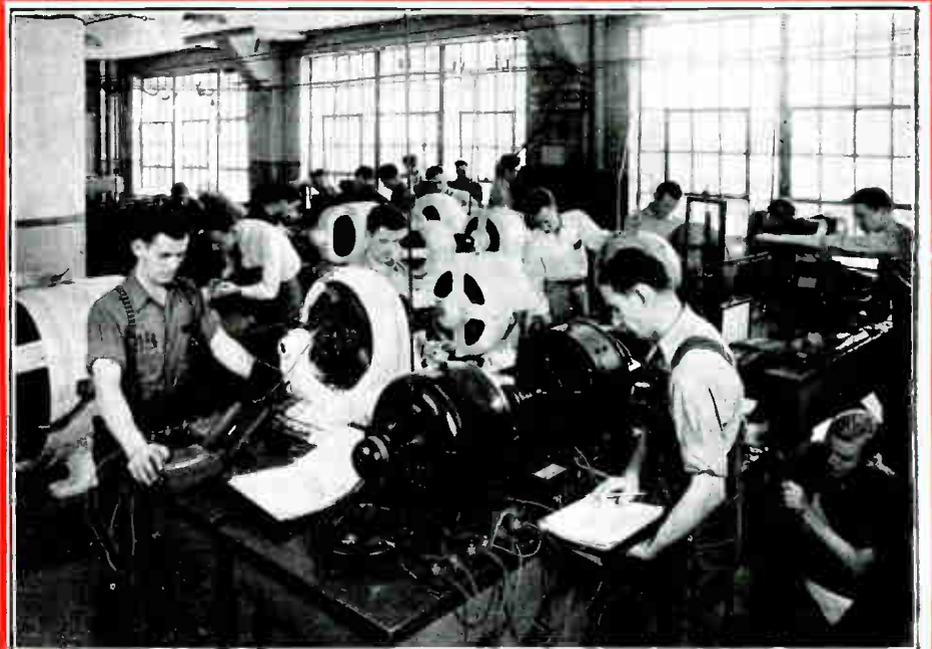
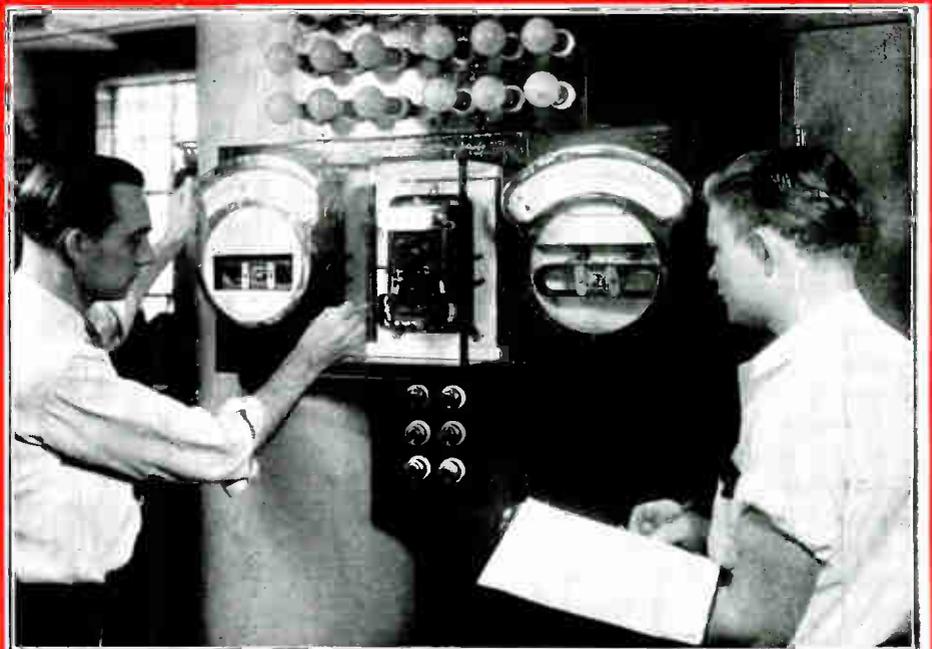
These students are working on motor-generators and switchboard operation on power equipment.



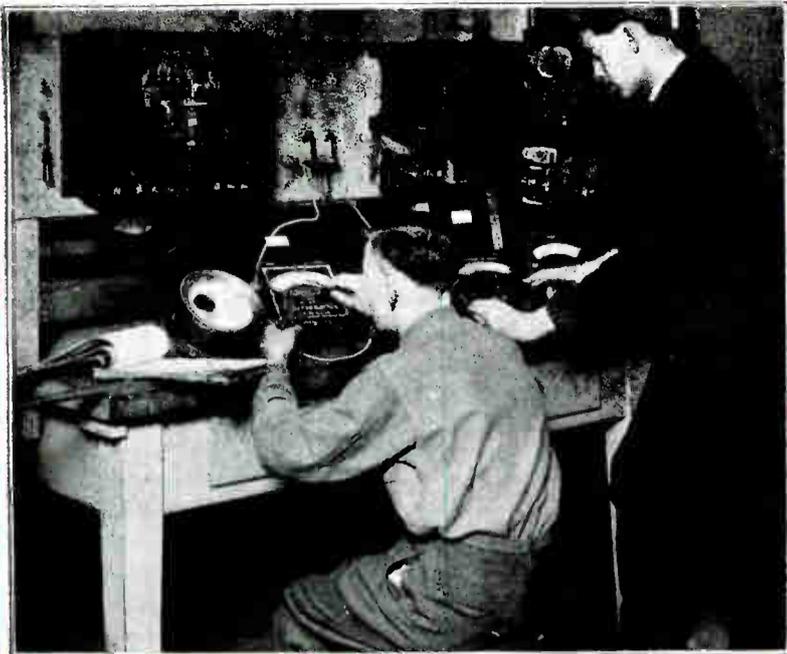
Here are students getting real operating experience on a large power D. C. Switchboard. They are taught to connect and operate generators in parallel, and to take care of circuit breakers, switches and instruments. This kind of training is valuable in power plant or substation operating work.



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



Upper view shows student receiving personal instruction on D. C. meters. Lower view, these men are making generator voltage tests and horsepower and efficiency tests on D. C. motor generators.



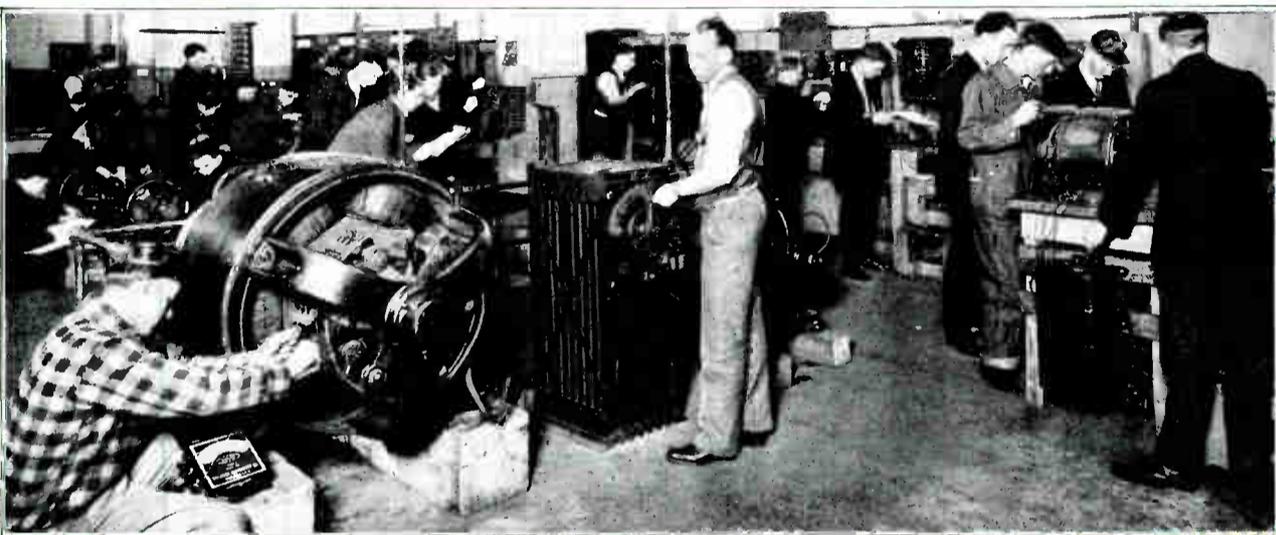
This is how our students test automatic remote control equipment, and are taught how to quickly locate troubles, so they can save time and money for their employer on the job.



Real practical training. These students are completely overhauling and repairing a D. C. motor, and repairing the field coils, and the commutator and armature.

### Training Pays for Itself

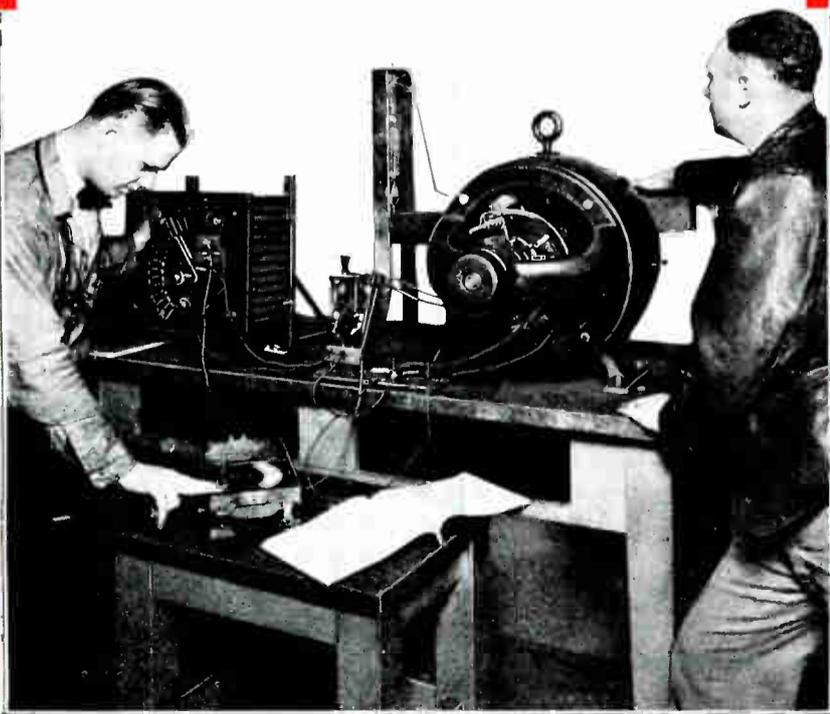
"Before going to Coyne I had just been discharged from the Navy and had no prospects of a job . . . after getting out in the field my training paid for itself, for without it . . . I would never have landed a job to say nothing of the promotions that followed. The school was all I had hoped for." — R. A. HODSON, North Carolina.



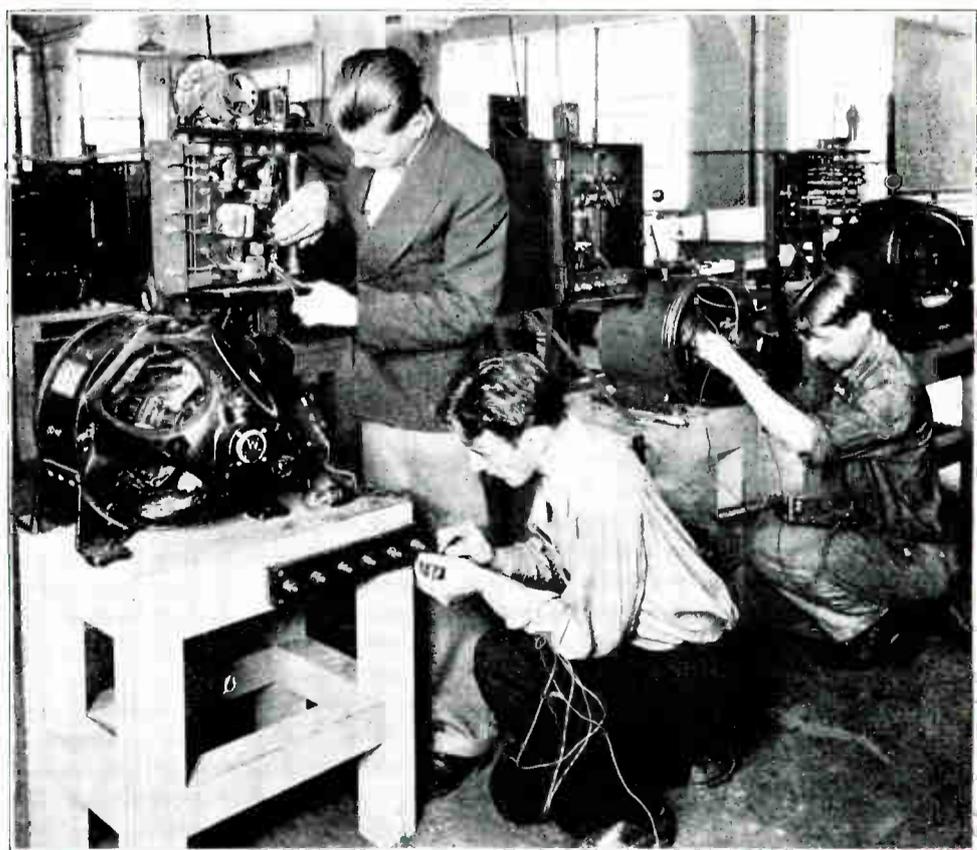
Here you see several students testing and operating D. C. machines. The large machine at the left, is used to make practical demonstration of a dynamic brake test on large motors.

### Thanks Coyne for Help

"I wish to thank you and the Coyne Staff for all you have done for me. I have obtained a good position with the Tractor Co. as an electrician. I got the job the first time I called after you sent them the recommendation. I can truthfully say this much for Coyne, they never let you down as the saying goes. I'll always speak a good word for Coyne whenever I have the opportunity." — M. V. JOCHUMS, Illinois.



And this is a horsepower test. You test the horsepower and efficiency of motors, and select the proper motor for various jobs they are used on.



These students are wiring up and operating automatic controllers, and testing their operation right with the motors.

# *You Will Now be Trained in the Most Interesting* **Branch of Electricity—A·C·POWER EQUIPMENT**

**H**ERE you enter the large Alternating Current Department and commence your work in one of the most fascinating and profitable branches of the entire electrical field.

Whenever we use the term A. C. you will understand that we mean **Alternating Current**.

Alternating Current equipment is used in practically all of the large power plants of the country and in the majority of the thousands of great electrically equipped factories and industries.

There are so many different uses for A. C. that we cannot mention them all here and it is one of the most interesting branches of electricity.

Many electricians in the field today who have not had the benefit of Training, may not be familiar with A. C. Current, and as a result may be handicapped by this lack of knowledge.

You should find this training highly interesting and valuable to you later on. You will have actual A. C. Power apparatus to work on. You should understand and remember more easily what you are taught because you have done the work with your own hands, right on the equipment.

## **Plenty of A. C. Power Equipment**

**B**ECAUSE of the great importance of A. C. today in many branches of electrical work you will need an understanding of it to become successful in these branches of electricity.

Here you get training on many commercial sized A. C. Power machines from those of less than one horsepower up to a hundred horsepower. Motors, controllers, generators, transformers, power plant switchboard, outdoor type substations, transmission lines, lightning arresters, oil switches, air breakers, welders, etc., all help to make this department fascinating, enjoyable and extremely valuable.

You should be thrilled with every minute of the time in this department until you are ready to leave it, with a practical training in A. C. that can prove so valuable to you.

## **You Wire and Test Motors**

**Y**OUR instructor first gives you a practical explanation and demonstration of the nature of Alternating Current and how it differs from Direct Current.

He uses simple blackboard diagrams and parts of equipment along with his plain shop talk to make these principles clear to you.

No course would be practical without the explanations of these principles of Alternating Current that we make so clear in this department.

We even use motion pictures along with the practical talks to help you grasp certain facts about A. C. and the construction and operation of A. C. Power Equipment.

Then after these simple explanations you go to the actual equipment and with the help of your instructor you make a definite test and prove each fact by working it out on the live equipment.

You start by wiring and testing small motors and then gradually progress to the larger and more advanced machines. Because in this department, just as all thru our course, your work has been arranged so each job is just a step ahead of the last. You reach and master the bigger jobs almost before you know it. You have been trained all along the way for each step ahead.

After you understand the simple motors, you go to the larger apparatus.

## **Real Practical Work On Trouble Shooting**

**W**HEN you have a motor connected up to run, you test its speed and its pulling power.

You change the connections and reverse the motor. Remove a wire here or there to see how it acts when a connection comes loose. You observe how it acts when in good condition and with connections O. K. and also how it acts and sounds when various things are wrong.

In this way you are taught to quickly locate troubles by the symptoms. And you also use test lamps and meters to make tests for the troubles that can be detected easily only by a trained man. And after you have done this on a number of motors, you can find and fix any of their common troubles quickly. It is this kind of training that helps Coyne trained men to advance faster.

## **Personal Help and Instruction**

**Y**OUR instructor is always near to help you with anything you get stuck or puzzled on. He points out ways to do each job best and how to save time and locate troubles quickly, and just where to look first for most common troubles. He continually gives you patient advice from his years of field experience.

When you finish any job he asks you questions about it to check up and help you be sure you know the important points. And many of these questions you answer for him may be the same you will be asked when applying for work later, so you can see how every part of our course is planned to help you handle a job successfully.

While working on motors you have very important jobs on which you make horsepower, efficiency and power tests. These are very important for you to know.

Then you work on what are known as synchronous motors and learn how to use them and perhaps save your employer money by improving the conditions and equipment in his plant.

## **Power Plant Experience**

**T**HEN after you understand the motors and controllers, your instructor explains various types of A. C. generators to you—how they operate, how to take care of them, wire them, test and repair them. Then you actually connect up and operate them. Then you get real power plant switchboard operating practice on the large power switchboard, at which you are

given the responsibility of operating the generators and controlling the power for the entire department.

The equipment you will operate generates enough power to supply a small town.

You are trained in the actual methods of switchboard operation used in many power plants.

You also work on an outdoor type substation with its transformers, choke coils, lightning arresters, high tension fuses and switches, and even a 3 phase transmission line on high tension suspension insulators running to this substation. You will, I am sure, find this work highly interesting for you are now doing advanced electrical work.

## **Arc and Spot Welding**

**B**ECAUSE of the thousands of these machines now being used in modern industrial plants and the great increase in their use, you can get in this department, training in the principles and operation of welding apparatus.

You can get instruction in arc welding with actual welding generator and transformer equipment and spot welding on specially built machines of this type.

Another one of your very important jobs in this A. C. Department is that of overhaul, test and repair of several types of A. C. motors, starters, etc. Here you go to special work benches where you can conveniently take apart and reassemble these machines with the proper tools. The instructor will show you how to make certain tests and notes of connections and troubles on them.

## **Valuable Training In Modern Maintenance**

**A**LONG this same line you are given careful training on maintenance of many types of A. C. machines used in big factories. Not only on how to find and fix the troubles but how to do this in the quickest and best way and how to make regular and systematic inspection and tests of equipment, 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 later work. Then you practice these methods right on the department equipment. You are taught how to plan a list of stock parts to carry for quick emergency repairs and modern methods of maintenance as used in large industrial plants and power plants.

You can readily see how such training here at Coyne fits a fellow for his start in this great field in which so many opportunities have been created for trained men.

That's why we have carefully planned to see that you get a practical training on many types of power apparatus. Then when you finish here, you will have valuable knowledge to apply on a job in wiring, operating or maintaining and repairing of A. C. machines. The training you get here should lay the foundation for your start to success in the electrical field. **SO NOW LET'S SEE THIS INTERESTING DEPARTMENT IN THE PICTURES ON THE NEXT FIVE PAGES.**

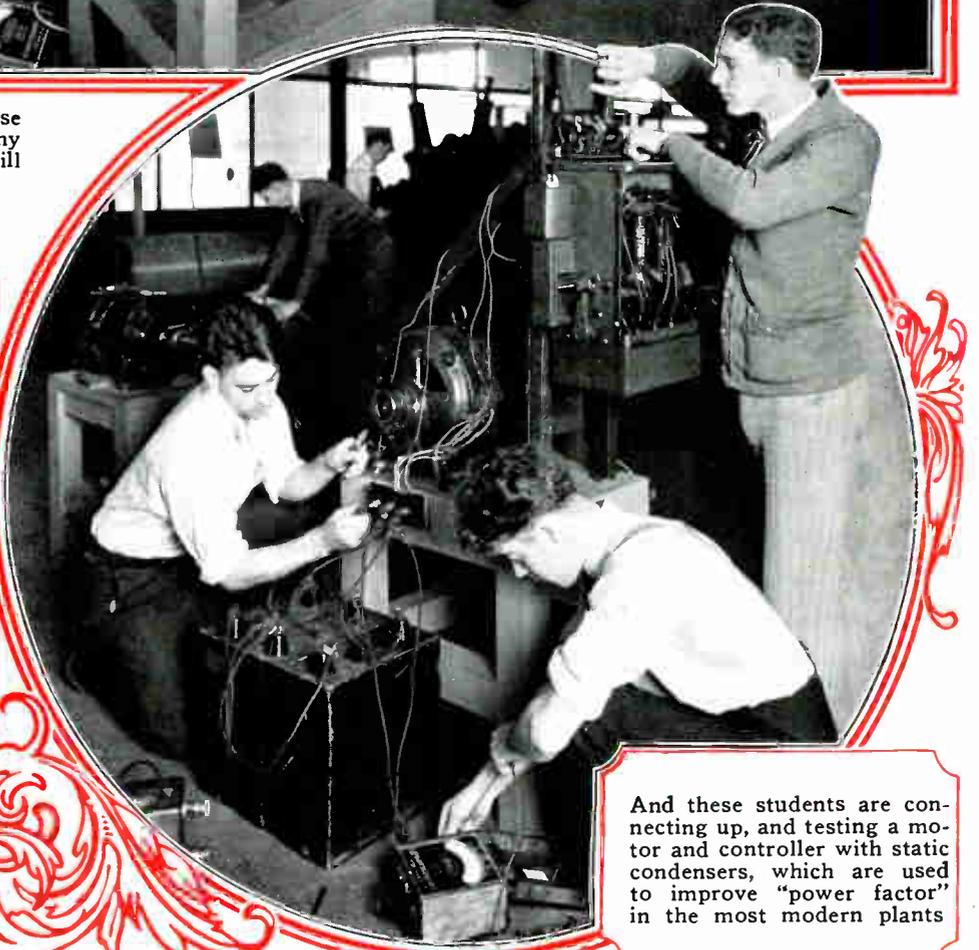
# These 5 Pages Show You Views of Our A.C. Motor and Power Department



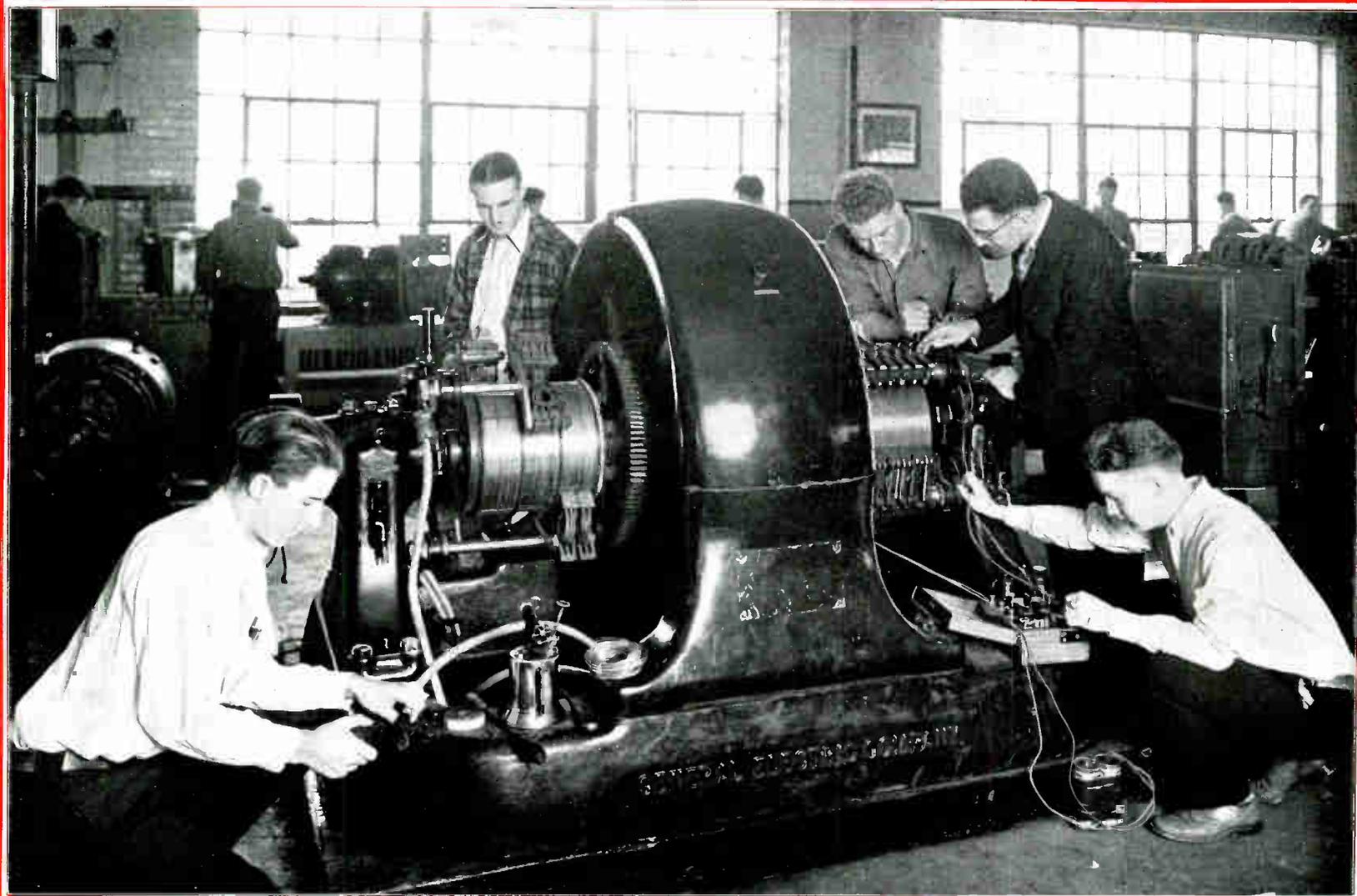
Here is a general view of one section of our alternating current department. And these students you see on these interesting jobs, are getting practical training on many types of A. C. motors, controllers, and power equipment. In the far background you will see men working on top of substation apparatus.



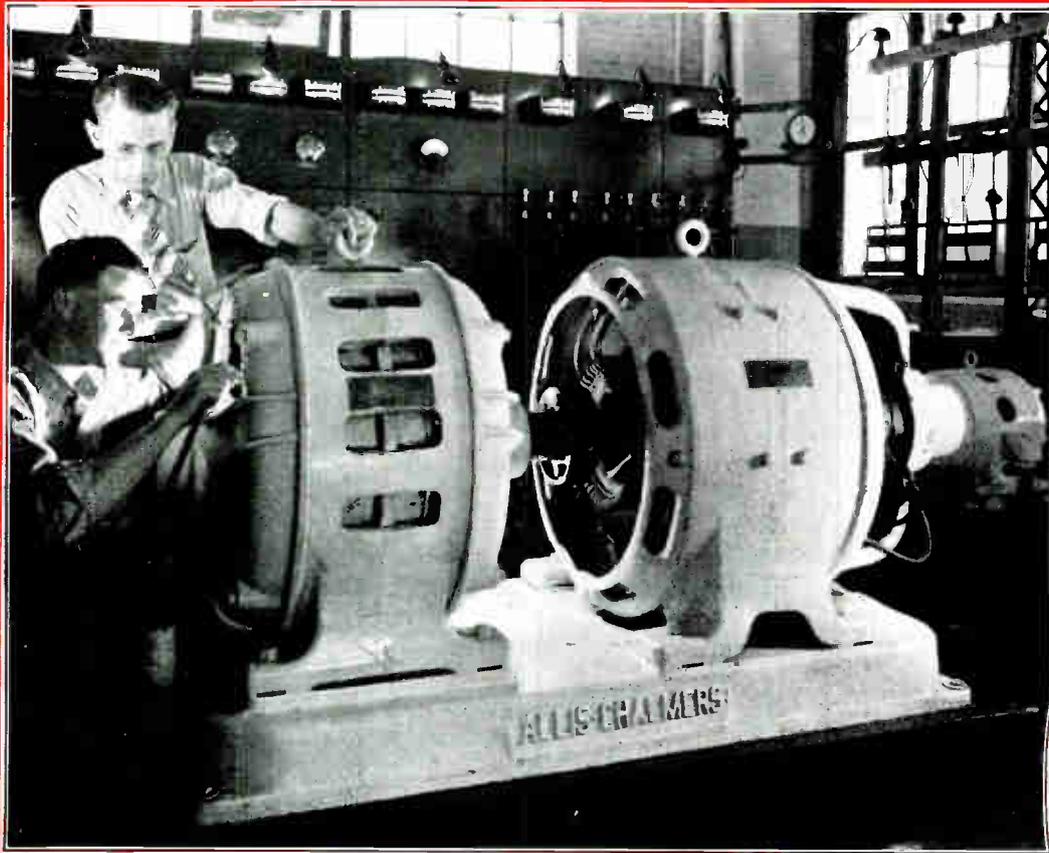
These students are testing the horsepower, efficiency, and power factor of induction motors, all very valuable things for the practical maintenance man to know.



And these students are connecting up, and testing a motor and controller with static condensers, which are used to improve "power factor" in the most modern plants



Here you see some students working on a synchronous converter, and making some very interesting connections and tests, under the supervision of the instructor on the right. These machines are used to change Alternating Current to Direct Current. It's the actual work on such equipment as this that helps to give Coyne graduates ability and confidence, in their work.



Instructor explaining operation and testing of a large motor generator in our A. C. Department. This type of personal instruction on real A. C. Power Equipment makes it easier for students to learn this interesting work.



The picture on the right shows an instructor explaining the operation of some photo electric cell control equipment with which these students are working. Actual experience on such interesting equipment is valuable on many jobs.

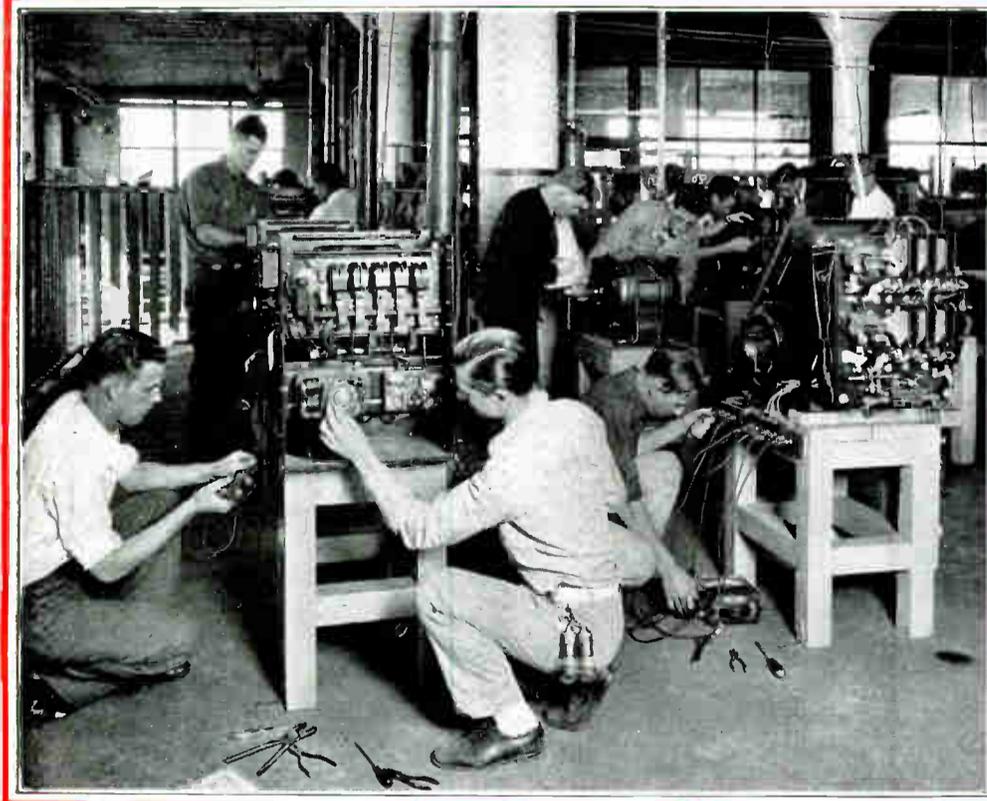




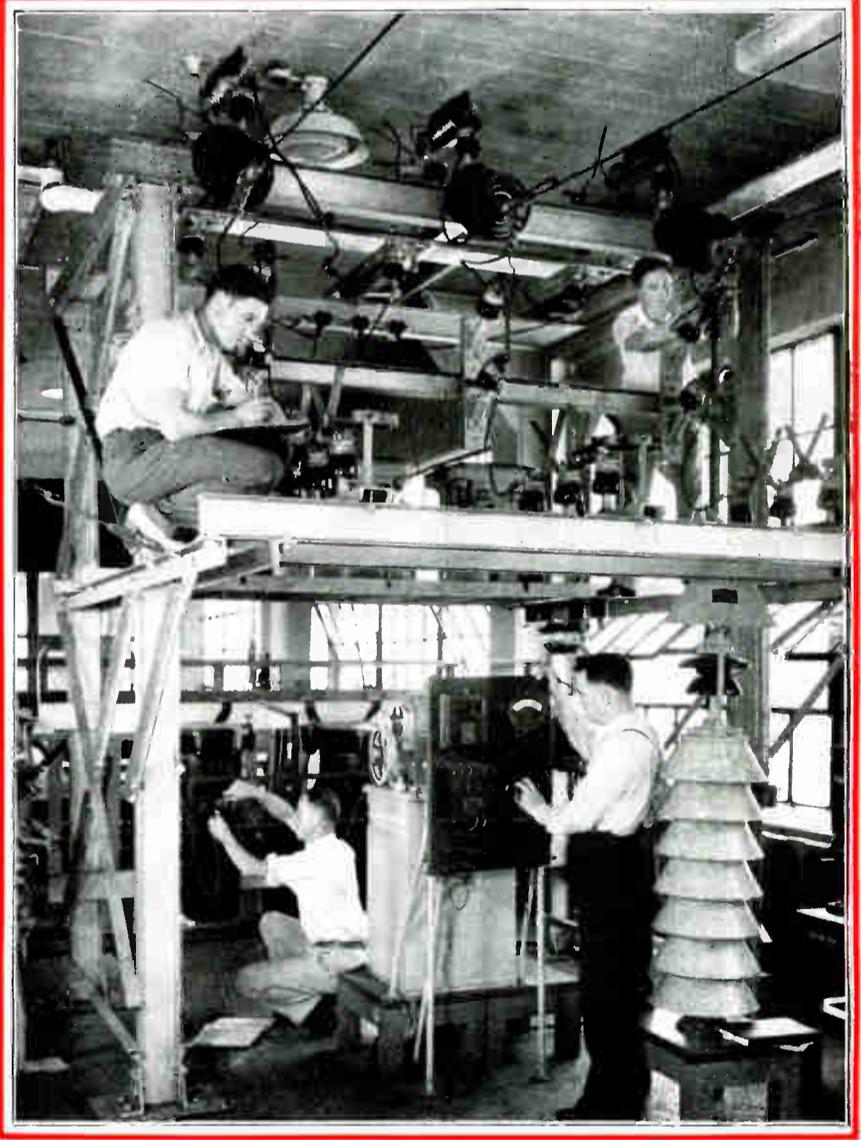
Here an instructor is explaining important principles of an induction motor, on a machine specially cut away, so the student can observe these points both while the motor is idle and when it is running. This is an example of how some of our specially prepared equipment will save your time, and quickly make its operation clear to you.



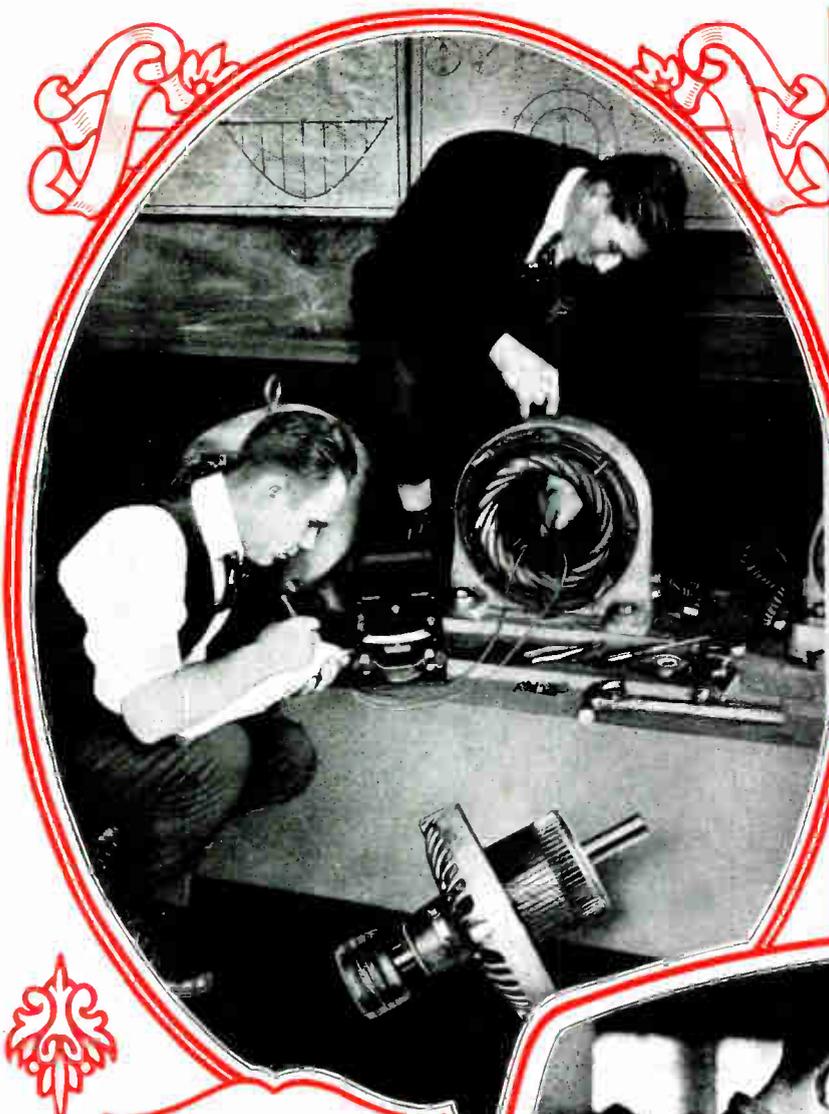
Another view of a section of our A. C. department showing students working on a wide variety of A. C. motors and control equipment. You learn how to inspect, connect up, test and repair many types of A. C. machines. This practical training in modern maintenance work helps to make Coyne Graduates more valuable to their employers.



And here we have different types of modern automatic, remote control equipment for A. C. motors. These men are getting acquainted with these controls and their care and operation, by wiring them up and testing them out with the motors.



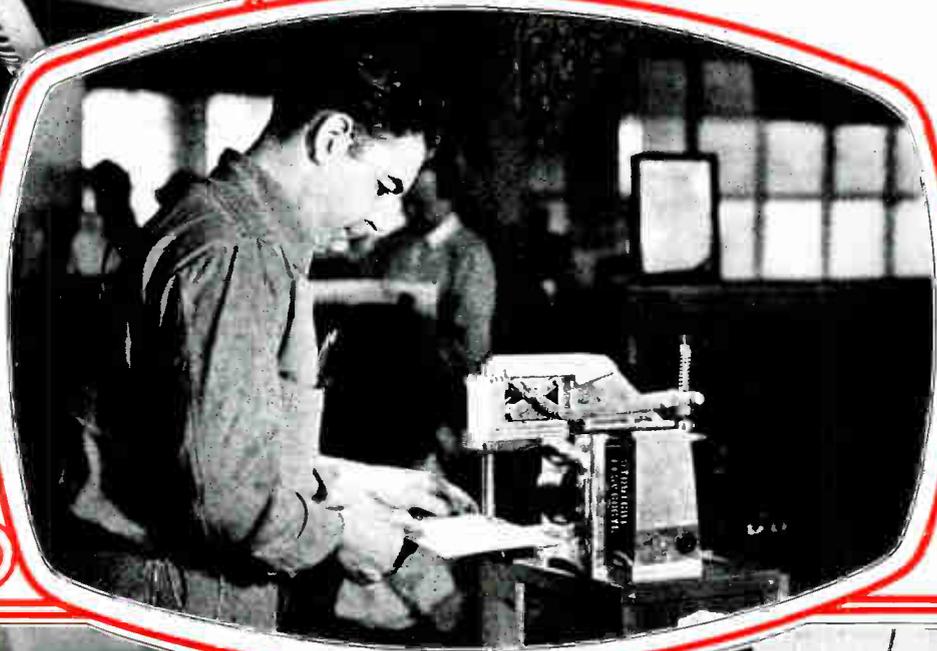
This is an outdoor type substation structure, and these students are connecting the transformers, checking the lighting arresters and voltage regulator, and becoming acquainted with this type of equipment.



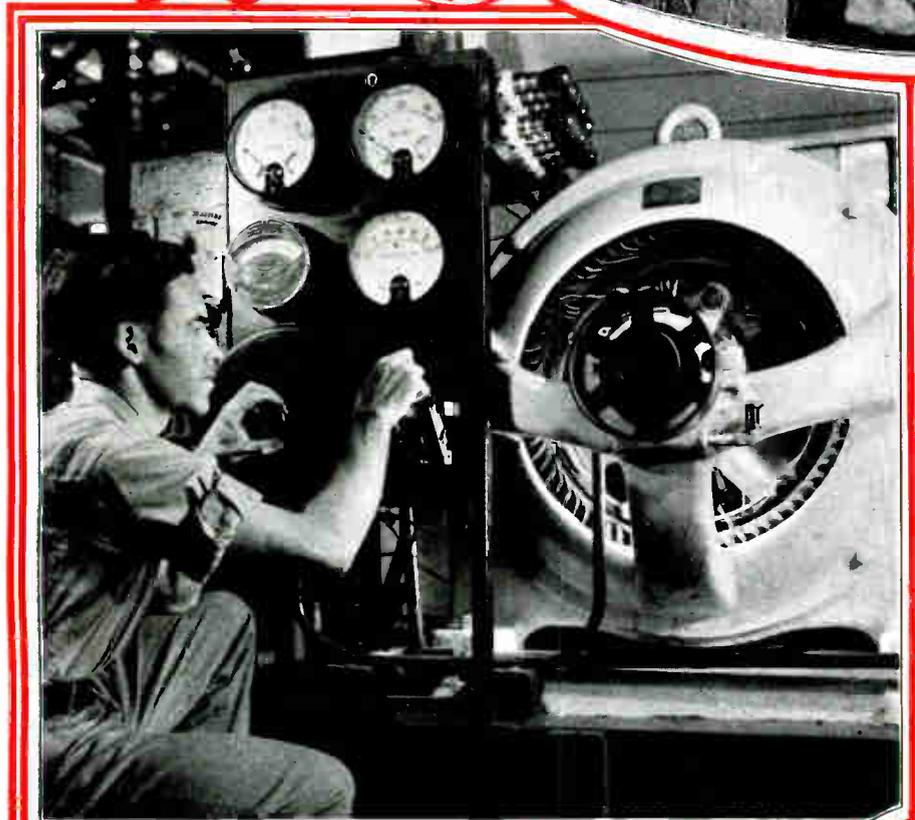
Real practical work overhauling and repairing an A. C. induction motor. When you understand the working parts of such equipment you have confidence in your knowledge of this work.



And these students 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 and equalize their load.



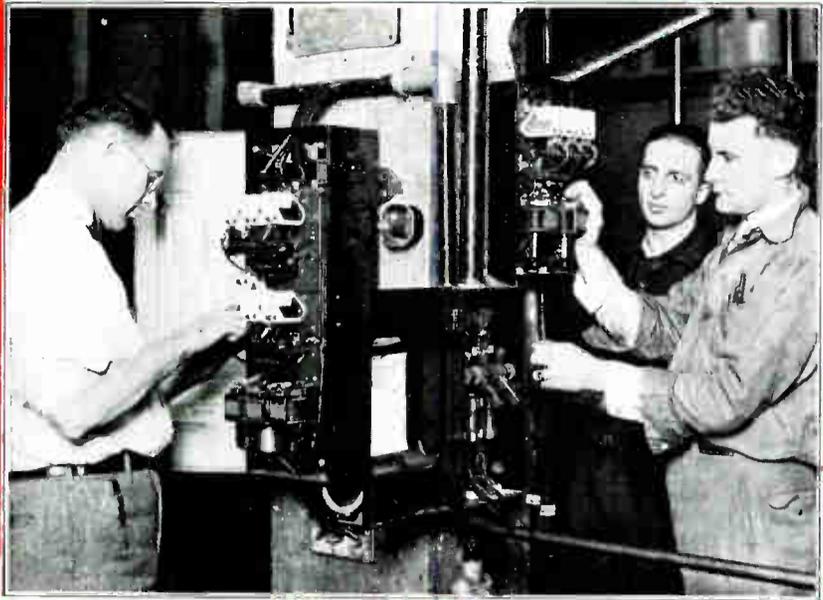
This is an electric spot welder. And this student is learning how to operate and take care of such equipment. There are thousands of welding machines in use in industrial plants today, and the well trained man is one who knows how to keep them going.



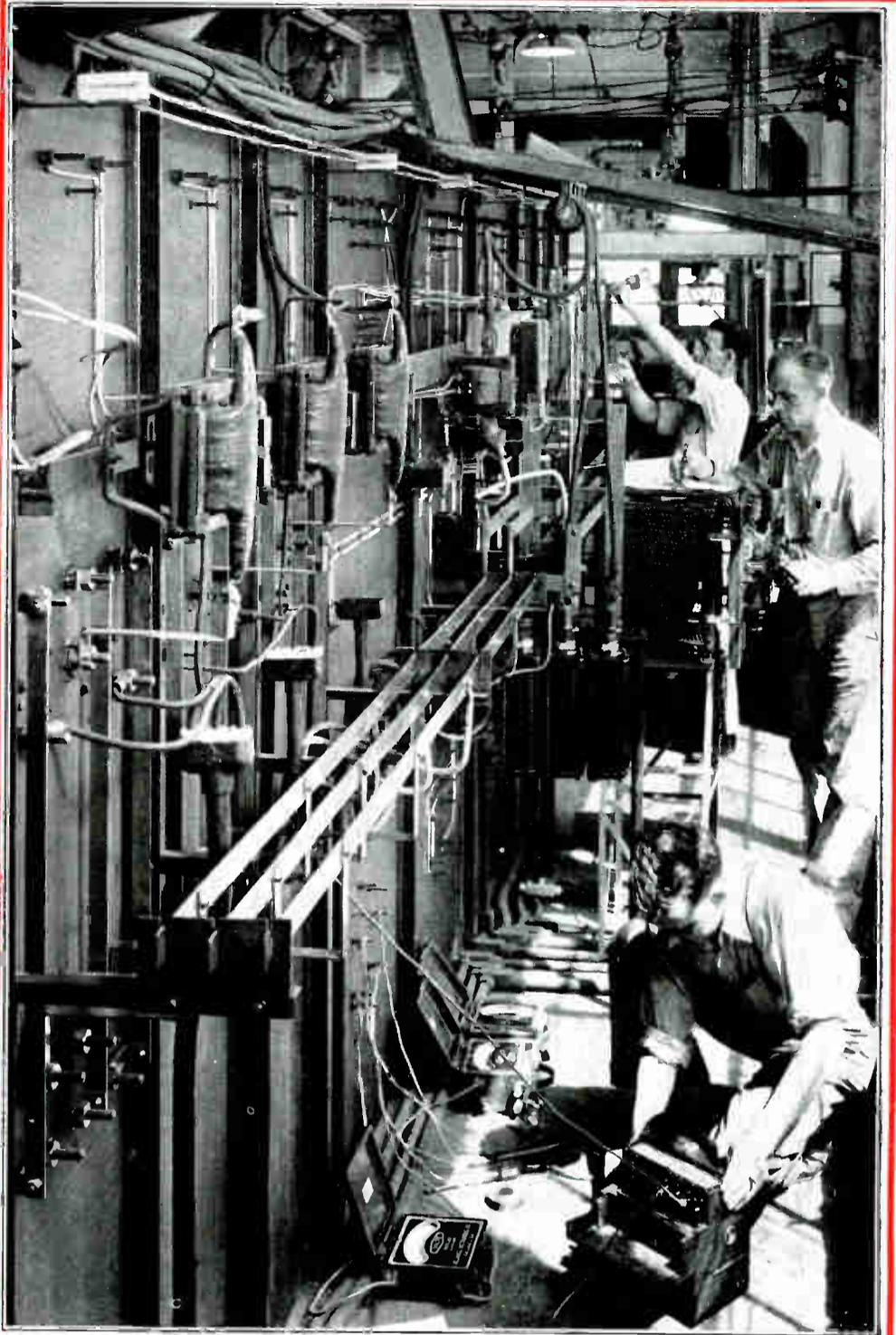
A student preparing to test a large synchronous motor which is used for correcting power factor and saving money on power bills. Every trained electrical maintenance man should be familiar with this type of work.



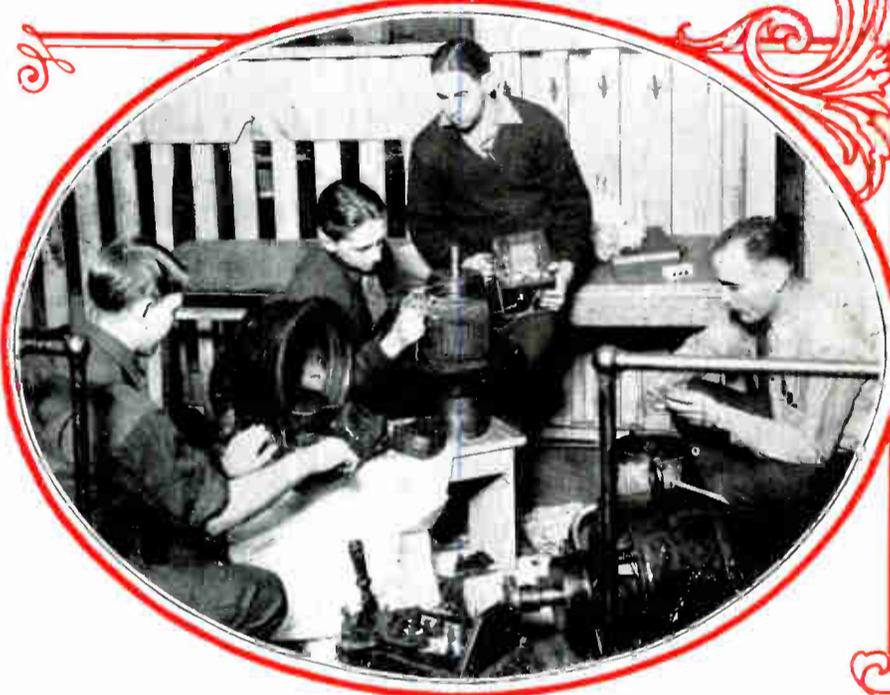
These students are connecting up a bank of power transformers for 3 phase operation, in the outdoor type substation in this department.



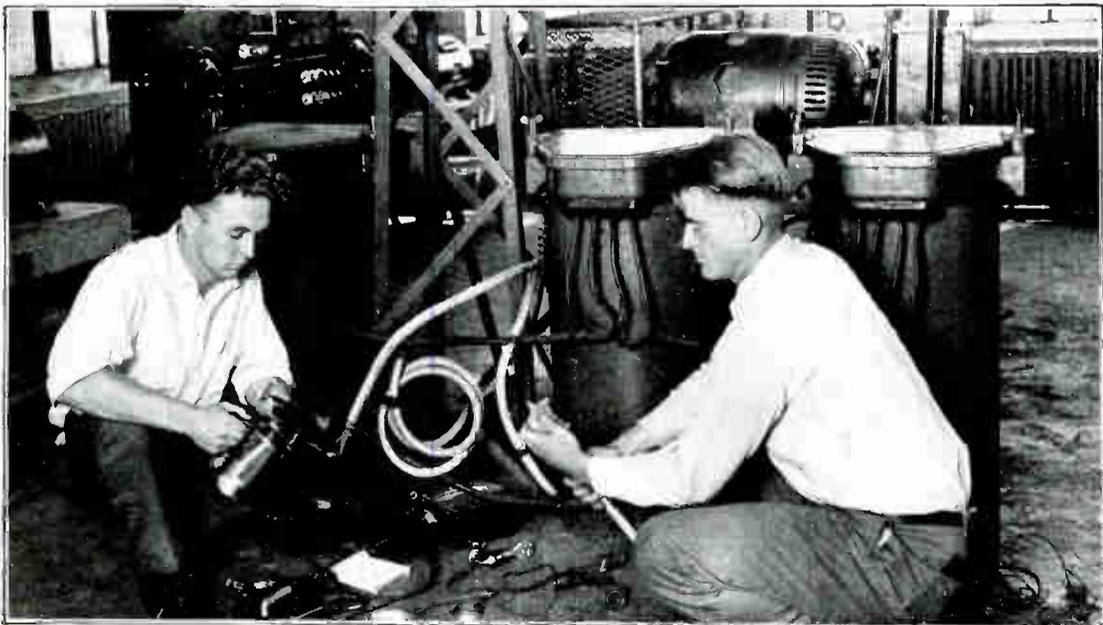
These students are operating a carbon pile A. C. motor starter, and an automatic "across the line" starter. A good knowledge of these devices is very important, as they are widely used in many industrial plants today.



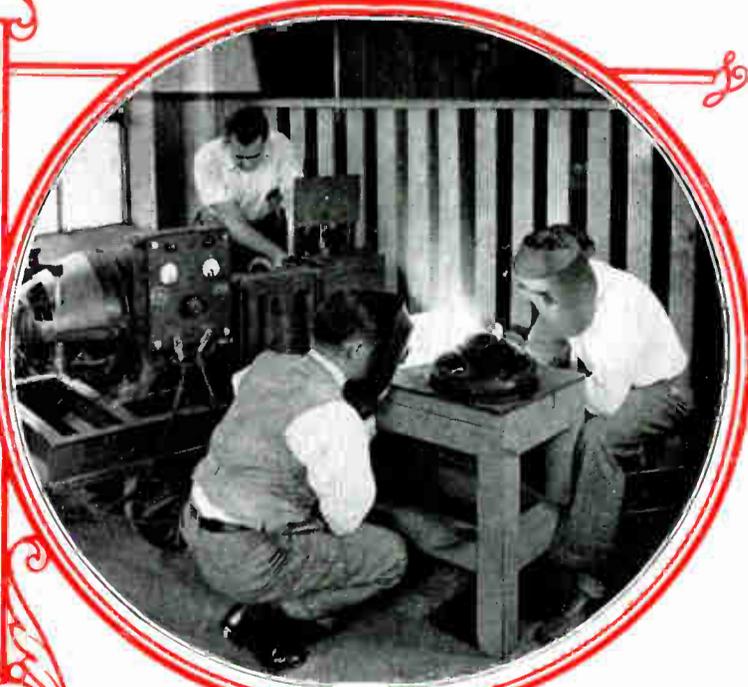
Here you see several of our students testing power circuits and equipment on the main A. C. switchboard and studying features of switchboard construction and wiring. So you see how our training helps to prepare our graduates to better advance in their work.



Here is another complete overhaul and repair job on a motor generator. These men are testing the armature with a magneto, and repairing the field coils and brushes.



These students are getting real practice with tools and instruments in connecting up cables on large power transformers.



These men are learning arc welding and how to operate and maintain welding machines. There are thousands of these machines in use in industrial plants all over the country, and the increased use of welding operations creates opportunities for men who know how to handle and maintain this equipment.

# You Now Enter this Big Department - **ELECTRIC REFRIGERATION** *and* **AIR CONDITIONING**

**N**OW I want to tell you about the **COMPARATIVELY NEW BRANCHES OF ELECTRICITY**—Electric Refrigeration and Air Conditioning.

But before I do so, I want to bring out what I believe is a **VERY IMPORTANT POINT**.

I feel that while these branches are developing into great industries and greater developments are ahead, nevertheless, I feel they are after all **ALLIED BRANCHES OF ELECTRICITY**.

In other words, **MUCH OF THE IMPORTANT EQUIPMENT USED IN THESE BRANCHES IS ELECTRICAL**, and the electrical principles that apply to this equipment **ARE COVERED IN OUR GENERAL ELECTRICAL COURSE**. For instance, a knowledge of motors, controls, and wiring is necessary in **BOTH ELECTRIC REFRIGERATION AND AIR CONDITIONING**, yet **YOU HAVE ACQUIRED** this knowledge in our wiring and A. C. and D. C. Motor Departments. The same applies to many other things that are necessary to know in these branches.

Therefore, I feel that by the time you have reached this department, much of the training you have **ALREADY RECEIVED IN ELECTRICITY CAN READILY BE APPLIED TO THESE TWO BRANCHES**. So now, in addition to the knowledge you have gained of electricity in our other departments, we give you instruction on refrigeration principles and actual shop work on the overhaul, service, operation and testing of refrigeration and air conditioning units.

Because I **FEEL THESE BRANCHES OFFER MANY OPPORTUNITIES** to the fellow who has had training in them, I **CONSIDER THEM AN IMPORTANT PART OF OUR COURSE**.

In just a few years, the production of Electric Refrigerators has increased many times. Today millions of homes are using electric refrigeration in place of the old "ice box" method. Millions of homes are yet to be equipped with electric refrigerators.

All of these units have their electric motors, controls, switches, compressors, evaporators, etc. This equipment must be serviced and repaired from time to time by experienced trained men.

## **Air Conditioning Is a Big New Field**

**A**IR Conditioning is another great new industry which is closely allied with the field of Refrigeration. The trained man should be able to make profitable use of this combined electrical and refrigeration training in this field.

For hundreds of years people have heated their homes for increased comfort and health during winter months, but it is only recently that practical year-round Air Conditioning equipment has been developed to cool the air in homes for summer comfort, and to control the

humidity, circulation and purity of the air as well.

Today, many homes, offices, stores, restaurants, theatres and even factories are completely air conditioned, to provide automatically controlled temperatures, humidity, circulation and to purify the air we breathe.

Now, thanks to Air Conditioning, in addition to heating the air with furnaces, we can also cool it during hot summer months by means of refrigerating machines, which absorb the heat with special refrigerant gases and pump the heat outside with electric motor driven compressors.

Also, in addition to heating the air in the winter and cooling it in the summer, complete air conditioning units, and systems can dehumidify, or remove the excess moisture from damp summer air, or humidify (add moisture) the dry air in heated buildings in the winter. They also circulate the air and filter out most of the dust and disease germs, for greater comfort and health in homes, offices, factories, and public buildings.

Many industrial plants now use air conditioning equipment to control the temperature, humidity and cleanliness of the air, for improving working conditions and production efficiency in the manufacture of various materials which are sensitive to temperature, moisture, etc. Bakeries, paint shops, textile mills, tobacco factories, candy and chewing gum factories and printing shops are typical industrial establishments where air conditioning is used to advantage.

Many trains are now air conditioned and busses are beginning to use air conditioning. It may only be a short time until thousands of automobiles will also have this modern comfort and convenience. Thousands of new homes are being equipped with room cooling and air conditioning systems.

Electric motors, controls, fans, thermostats and wiring play an important part in these systems. Here is where the **training our students get in other branches of Electricity can be applied to this field**. That is why I tell you of the value of training in **other branches of electricity and how one branch dove-tails into another**.

## **Many Types of Refrigeration Units**

**W**E have provided many types of Refrigerating units for your practical shop training in order to give you real experience. You get training in the operation, care and repair of these interesting refrigeration and Air Conditioning units, under the personal supervision of an experienced instructor who shows you step by step how to do the work on well-known machines of different types.

## **Practical Work on Many Types of Refrigerators**

**H**ERE at Coyne students get their practical training on different types of household refrigerators and commercial units for stores,

meat markets, restaurants, theatres, etc. This work on well-known units helps to prepare students for this new branch of electricity.

In our Refrigeration and Air Conditioning Department, we have installed many types of compressors and refrigerator units for overhaul, test and service experience. We add more of these units from time to time to keep our training up-to-date, and to give our students first-hand experience on the kind of equipment that will be found in the field.

You will be told about Refrigerant liquids that boil at temperatures near zero, about reciprocating and rotary compressors, flooded and dry type evaporators, expansion valves, float valves, thermostatic switches, various types of motors, etc. You will be taught modern methods of installation, servicing and testing refrigeration and Air Conditioning equipment.

In addition to this practical Shop Training, you will get practical pointers on salesmanship to aid you in sales work or in the operation of your own refrigeration business. **Coyne** students who possess sales ability frequently make successful equipment salesmen because they are better able to explain their machines to customers and also to service equipment in need of repair.

## **Actual Air Conditioning Equipment**

**S**O as to provide Coyne students with an opportunity to work under actual working conditions similar to those they will experience in the field, we have even built a two-room bungalow with heavily insulated walls for the purpose of conducting practical Air Conditioning tests and demonstrations. This test laboratory is equipped with instruments for measuring the air flow, air temperature, air moisture content, etc., as well as automatic control devices to regulate these conditions. Cool, crisp, invigorating temperatures can be maintained inside this test laboratory even when the air on the outside of the shops is hot and damp.

You will be shown how to calculate the proper size of Air Conditioning units and equipment to use for various sized rooms or buildings, and how to test, operate or service equipment of this kind.

Now is the time to train for these profit making fields. It is easy to understand that the fellow with foresight who gets in on the ground floor is bound to benefit in the future. Here is your chance to enter an uncrowded field of profit making possibilities. Now is the time and **Coyne** is the School where you can get the type of training that will prepare you for a start in these live, new fields.

Now, look at the pictures of our Refrigeration and Air Conditioning Department on the following pages and you should be convinced that here at Coyne you will be able to get the practical type of training you want and should have in order to enter these interesting and profitable branches of Electricity.



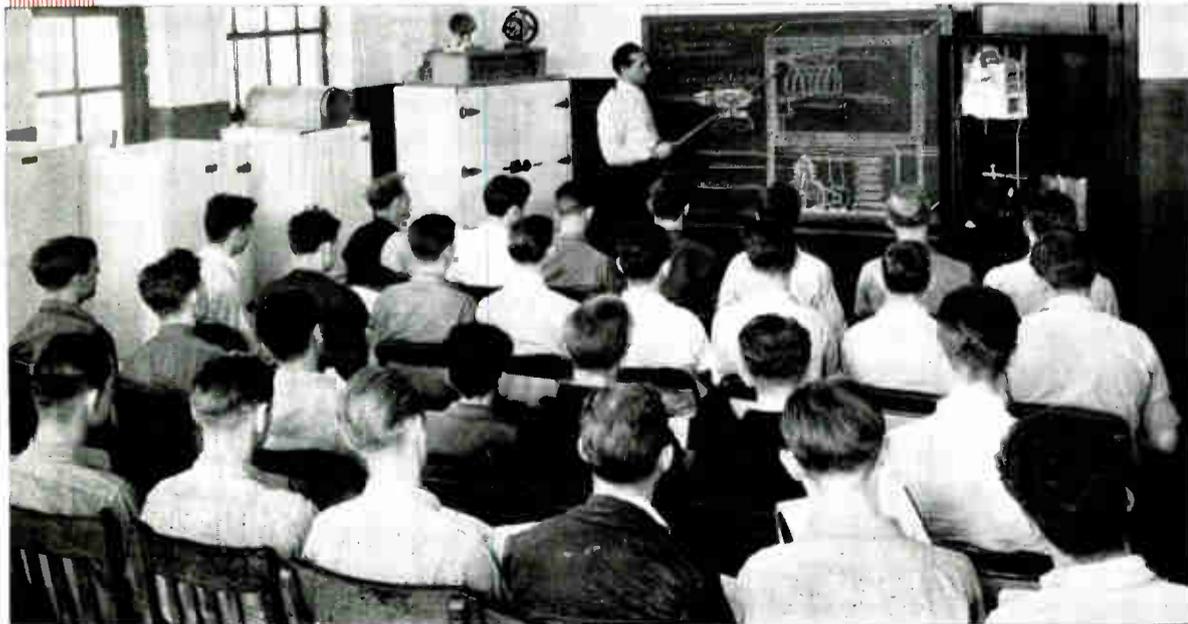
A view of the air conditioning Laboratory in which students make atmospheric and pressure tests. The air in this room is cooled, washed and filtered.



Coyne students assembling and checking a modern commercial refrigeration compressor for an ice cream machine.



To the right is a view of part of the Refrigeration Department. Instructors give personal assistance to students on these shop jobs. Note the ideal daylight working conditions for each student.



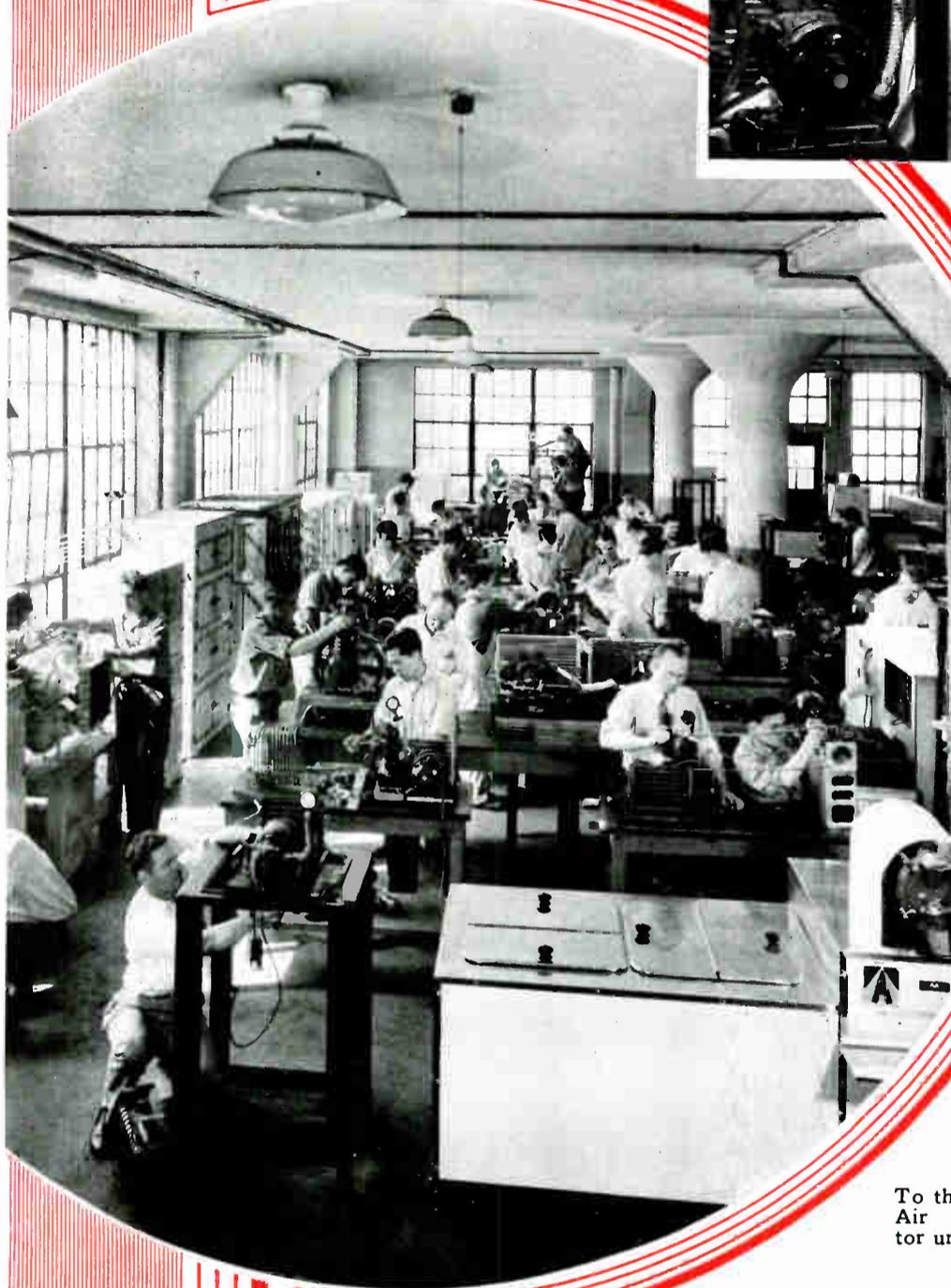
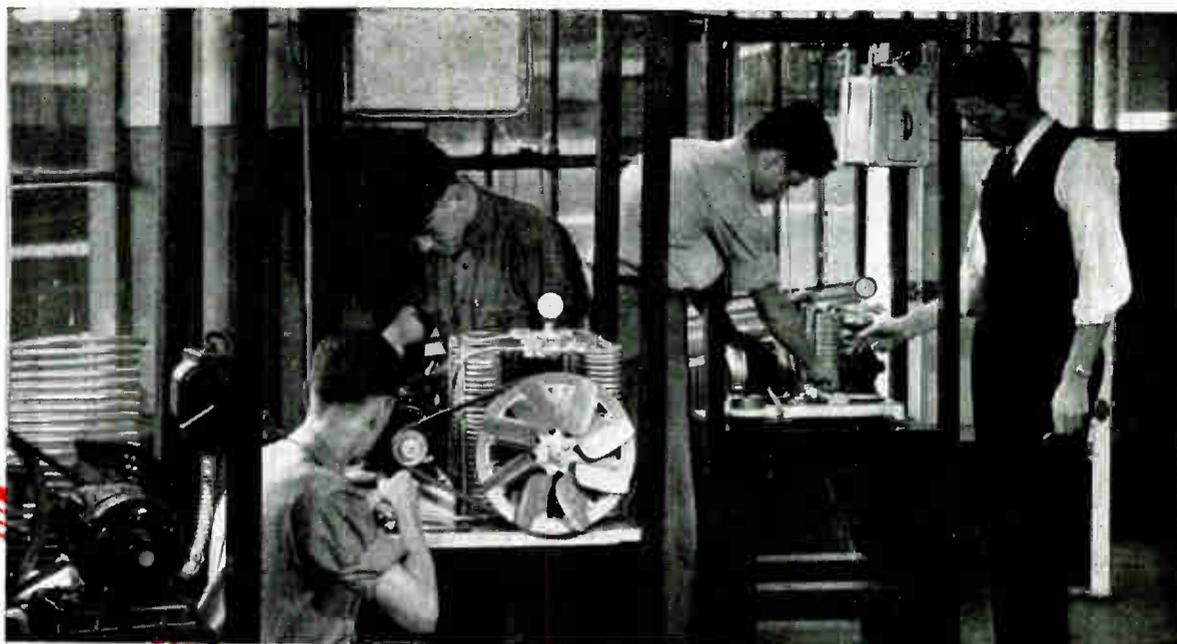
### Refrigeration Serviceman

"... You will be pleased to know that I have been connected with the — Light & Power Company since March 22, 1939, as all around service man. The major part of my work is refrigeration, Electric Stoves, Wiring and motor work. . . . Summing it all up I am called upon to repair everything. . . . Thanking you for your past efforts in my behalf."

—Walter M. Blackard,  
Tenn.

A group of students in the Refrigeration and air conditioning department listening to an interesting explanation by the instructor, of the action of a complete refrigerator unit.

Students making tests on Refrigerating units. Note the special equipment making it easy for the student to inspect and handle every part of the machine.



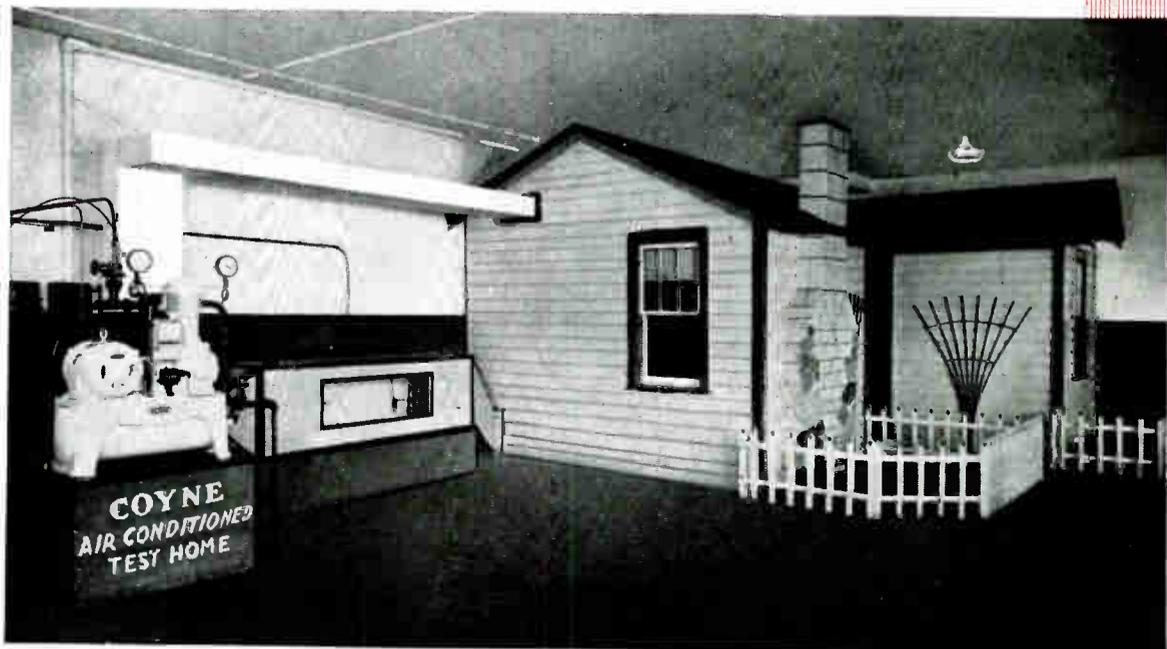
These men are making practical tests and adjustments on modern room cooling units in our Refrigeration and Air Conditioning Department. Practical shop work of this nature on late type air conditioning units helps you to qualify for this interesting branch of electrical work.

To the left is another interesting view of the Refrigeration and Air Conditioning Department. Many types of refrigerator units can be seen. The orderly arrangement of work benches provides plenty of shop space.

### Coyne Training Pays.

"AFTER I was ready for work in the field . . . Coyne came to my aid. . . I am now in charge of refrigeration and electrical equipment of this plant and territory . . . Coyne training has repaid me many times."—PAUL SENSEL, Illinois.

In this Bungalow, containing a well equipped Test Laboratory, Coyne students study temperature control, moisture content, etc. At the left of the bungalow you see the air conditioning unit.



*Now That  
You Have Had a  
Practical Training  
in Electricity....*

# Let Me Show You How to Apply It To AUTOMOTIVE, AVIATION and DIESEL Electricity

**IMPORTANT**—The training you get in this department is in addition to the regular 12 weeks' training. It is given you at no extra tuition cost. However, if you wish to receive this training **YOU SHOULD PLAN ON SPENDING TWO MORE WEEKS** in the shops in addition to the 12 weeks' time required for the regular electrical training.

**N**OW that you have covered all departments up to and including Electric Refrigeration and Air Conditioning, you need only to know how to apply that electrical knowledge to the work in this department. Each phase of Electrical work you have covered in our general course should help you to better understand these branches of electricity.

The Automotive field offers a fine opportunity to our graduates to start a business of their own. Many of them have started up an ignition and battery repair shop on very small capital and are today enjoying a profitable business.

## Practical Work on Many Types Of Equipment

**Y**OU work on a number of complete engines, farm light plant engine, etc. You wire, time and operate and get actual electrical trouble shooting work on real running engines. We also teach you about valves and timing and those things so closely linked to ignition for the proper operation of an engine.

You overhaul, test and repair generators, starting motors, cut-outs, coils, condensers and magnetos of different types and get plenty of practice with the proper tools and instruments used in repairing and testing these parts. You recharge magnets, and test spark plugs, magnetos, and various ignition devices. Then, there are special ignition test benches, late type motor analyzers and other modern ignition test equipment in which you are trained to locate defects in various systems out on the job. In all of these jobs of wiring, timing, trouble shooting and repairing you have the instructor's ever-willing help to make each step clear.

## Magnetos and Trouble Shooting

**T**HERE are numerous construction companies, oil companies and even ranches that use entire fleets of tractors and pay well for men to keep the electrical system of these machines in tune. That is why we give you plenty of practical work on ignition trouble shooting to prepare you to handle this type of work. There are many localities where this work is very profitable and your work on various types of engines and magnetos in this department helps you to find and fix common electrical troubles on tractors.

Some of our students come from large ranches where they use a number of tractors, trucks, cars, and their own farm lighting plant, just to get this knowledge and practical training to use on these farms and save money and time by keeping this equipment in good running order.

## You Now Get Training On Storage Batteries

**I**N the battery department you receive practical instruction in storage batteries. The instructor, thoroughly explains lead plate cells, their parts, how they are constructed and how they operate, also how to test and charge them.

Then you can assemble storage battery elements. You melt the lead in a modern electric melting pot, then pour and mold it into posts, straps and parts for the cells.

Then you get instruction and work on lead burning with an oxygen and gas flame. This part of battery work is very critical and must be done right. Therefore you are given plenty of personal instruction and actual work on it.

When you have been trained in lead burning on terminals and connections you can assemble the plates and separators into complete cells, seal them in the case, and burn on the connectors. Then you put batteries on charge, and get practical work operating charging lines and machines of the bulb types and also motor generators, rapid charger machines.

You are taught how to test batteries with hydrometers, meters and up-to-date high rate discharge equipment. In fact you are instructed in the practical phases you need to help you to take charge of battery work for some shop or run one of your own—even to some practical pointers on how to start, build and run a business.

## Diesel Electric Power

**W**HENEVER a new feature comes out or an old one develops to such an extent that we feel it will be of value to our students to have a knowledge of it, we add it to our training.

Now while the Diesel engine is not a new invention it has only recently sprung into prominence and up to this time I feel its uses are somewhat limited. However, because it is being used in some industries I feel our students should have instruction where the functions of the Diesel pertain to electricity.

Therefore we have added instruction in this field. Now we do not teach the mechanical work, such as overhaul, repair of mechanical parts, etc. We believe this work belongs to the man who wants to confine his efforts to automobile work, for I can only feel after all that the mechanical work, such as overhauling and repairing cannot differ greatly in principle from that of the gasoline engine.

Just as I feel the Electrical work on an automobile offers much better opportunities than the mechanical work, I feel our training in Diesel engines should be confined to the functions that pertain to electricity.

Therefore, it is often an advantage to the trained electrical man working in a garage or power plant, or on railroads or ships, to have

some knowledge of the fundamentals and operation of Diesel engines.

Some garages prefer to hire ignition men who have some knowledge of Diesel engine principles and common troubles. Diesel engines are very similar in many respects to gasoline, automobile and truck engines.

So, in our Automotive Electrical Department, we have installed several automotive, marine and stationary Diesel engines, so that you can become familiar with their operation and Troubles. In this department you may become acquainted with Diesel fuel pumps, injectors, governors, electric starters and generators, and you can learn how to start, operate and adjust these Diesel engines.

You will be shown how fuel oil can be ignited by the heat of engine compression instead of by spark plugs.

We do not offer any courses in Diesel Engineering or Diesel engine mechanical work. We do, however, give you training only in the practical Diesel engine operation, which we believe may be of value to you in your electrical work.

Diesel-Electric trains also have their electric generators, motors, controls, refrigerators, air conditioning, fans, radios, electric cooking ranges, lights, and other electrical equipment.

So, you can see how valuable your general training in Electricity can be to you in these various new branches of work.

## You Apply Your Training To Aviation Electricity

**T**O make our course more complete and to make your training more valuable to you, we have included Electrical training in this great new field—Aviation electricity.

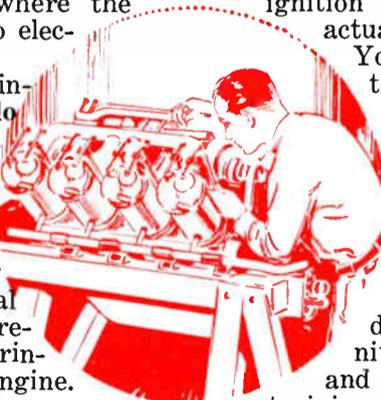
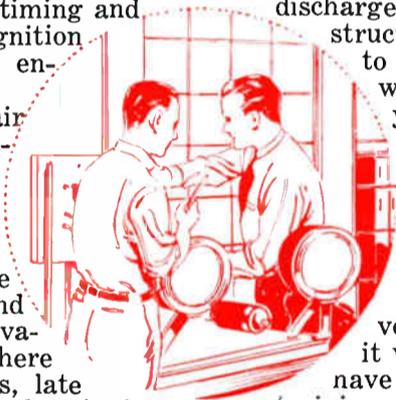
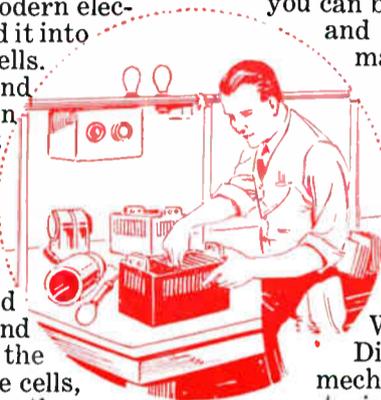
This big field is one that is going ahead by leaps and bounds and the next few years should see great growth and development. Hundreds of planes are now being used for carrying passengers, mail, express and freight.

The instructor will give you an explanation and demonstration of the OPERATION, PRINCIPLES and PARTS of these engines and their ignition systems. Then you will go to the different types of engines and put the electrical and ignition knowledge you have gained into actual practice and operation.

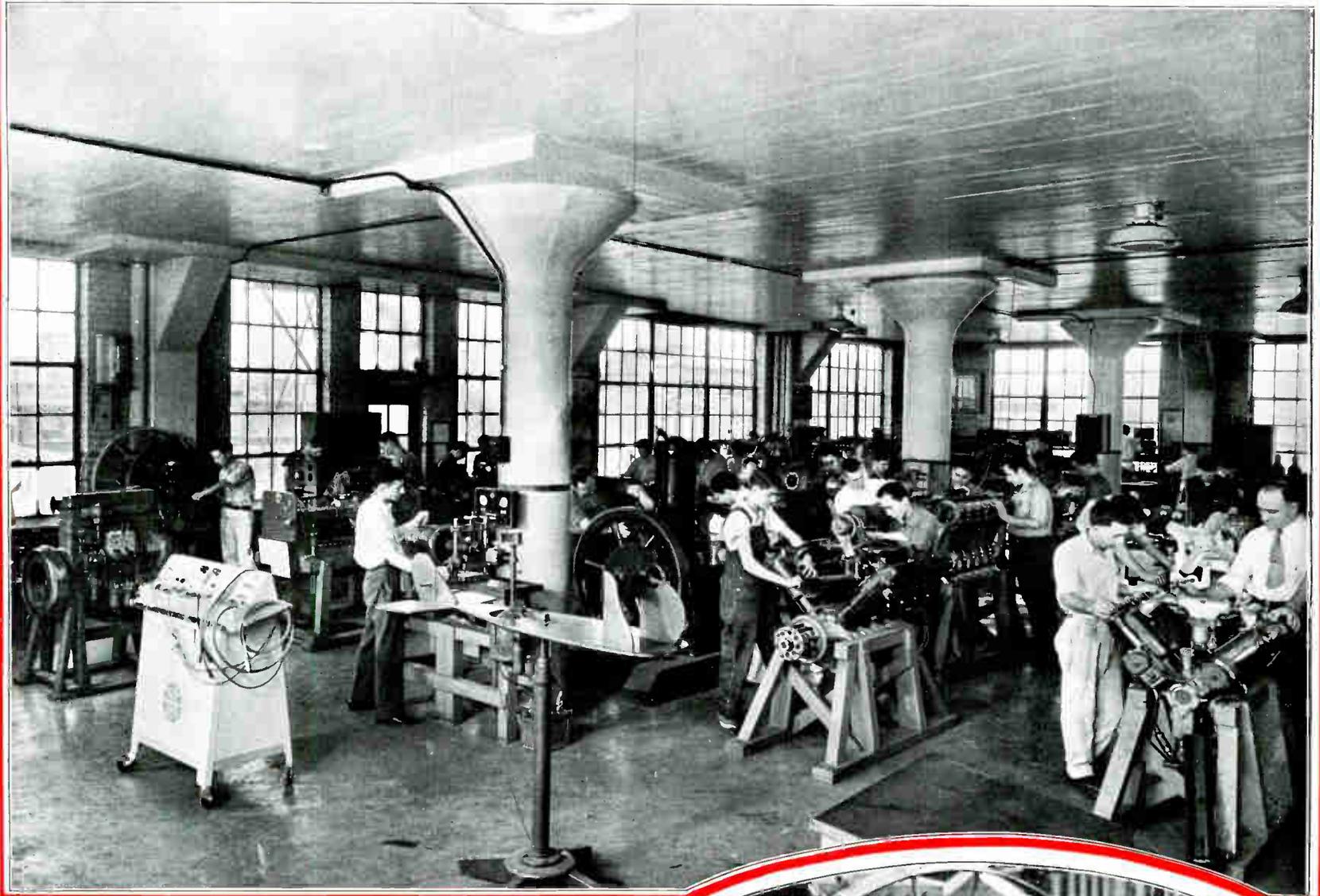
You will receive training in wiring, timing and adjusting them as well as trouble shooting, by systematic testing methods to locate faults in the wiring or electrical parts, right on the engines.

You will get training on the different kinds of magnetos and will be taught how to adjust and overhaul them. Your training in this department will cover electrical ignition work on airplanes, in this big and growing field. And by getting this training now, you still have the opportunity to get in on the ground floor.

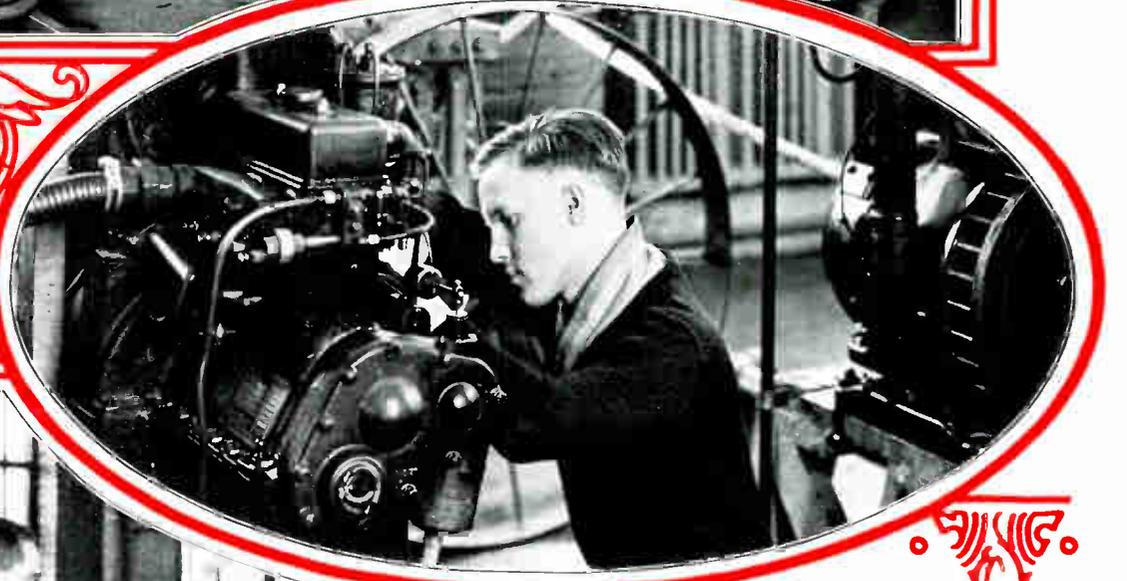
**ON THE NEXT FOUR PAGES YOU WILL SEE SOME SPLENDID SHOP VIEWS OF THE UNUSUAL AND INTERESTING FACILITIES AVAILABLE IN OUR AUTO, AVIATION, DIESEL AND TRACTOR ELECTRICITY AND BATTERY DEPARTMENT.**



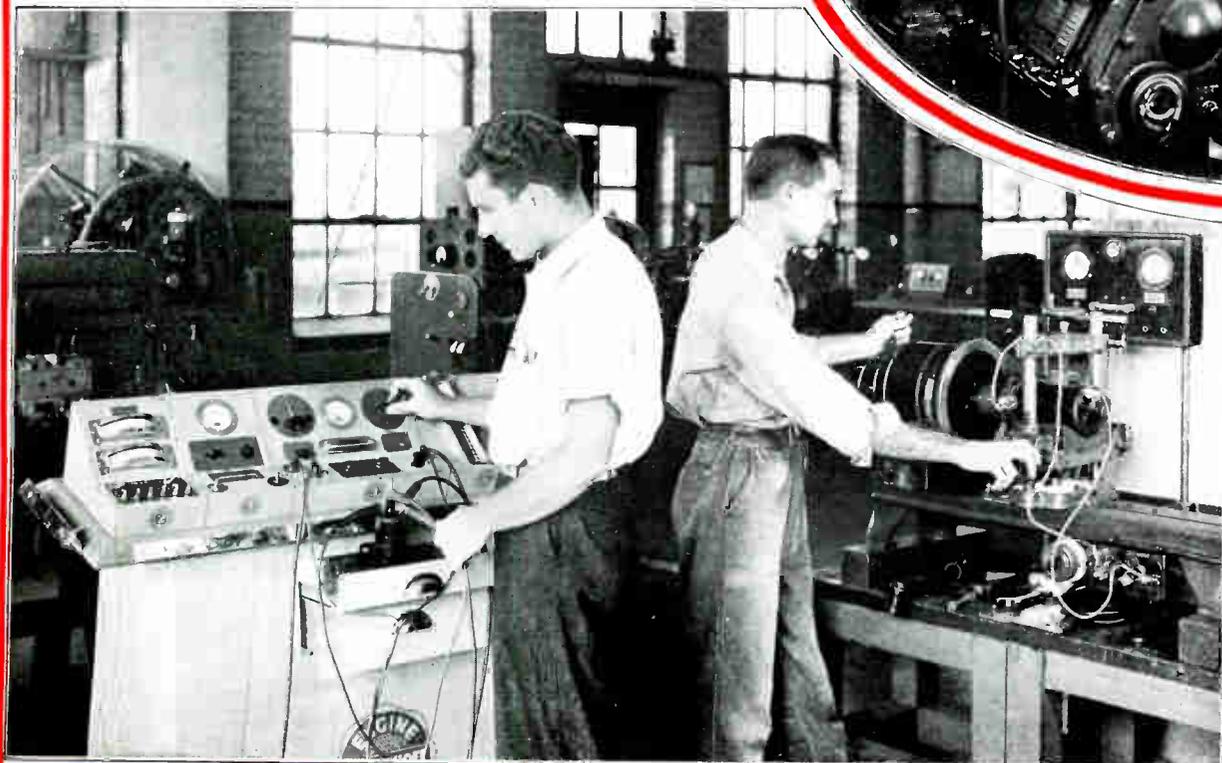
# These Four Pages Show You Pictures of This Department



Here is a part of our Auto Department. Note how well lighted and ventilated these working quarters are, and the roomy, convenient working conditions that are typical of all our shop departments. In this department you can get real work with many kinds of electrical equipment and on automobile and airplane engines and farm lighting plants. You get actual wiring, timing and trouble shooting on all these different types of engines, on real running tests.



Instruction on the operation and care of farm lighting equipment is another valuable feature of the practical work in this department.



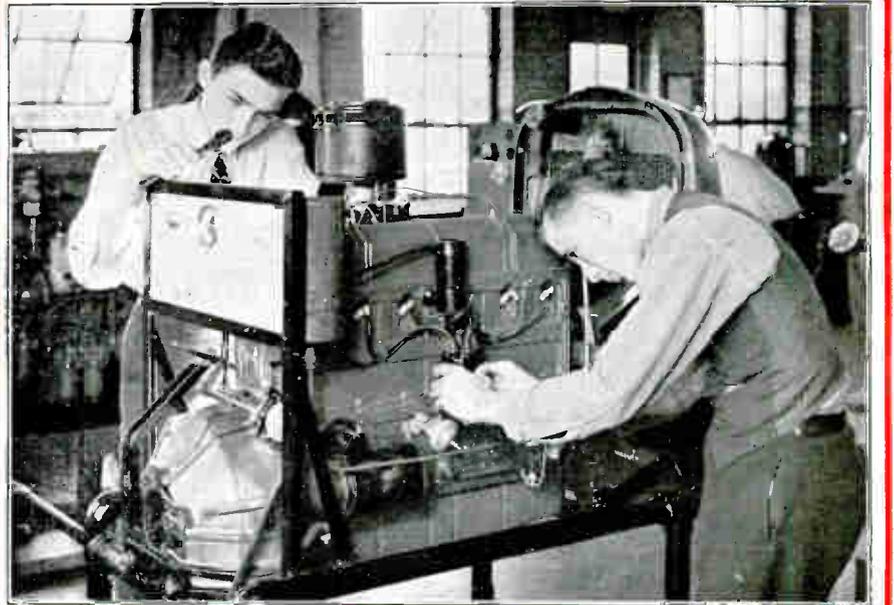
These students are using modern garage type test units for giving final tests to generators, starters and coils they have overhauled and repaired. This equipment shows you the actual results and voltage of the generators at different speeds, the same as on the car, so you know whether your work is done right. Your work on such equipment helps our students qualify for jobs where services of trained practical men are required.



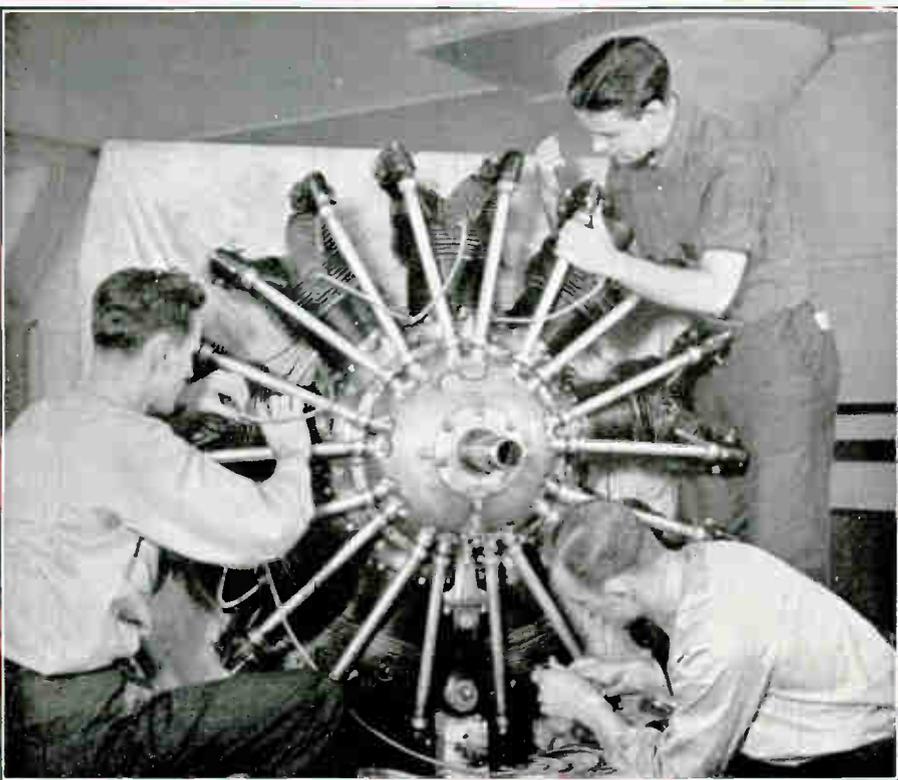
This section of our auto department shows some of the benches where you will overhaul, repair and test many types of generators, starters, ignition coils, magnetos, condensers, etc. You are trained to quickly find and fix their common troubles, and how to use the tools and test meters and devices to simplify this work.



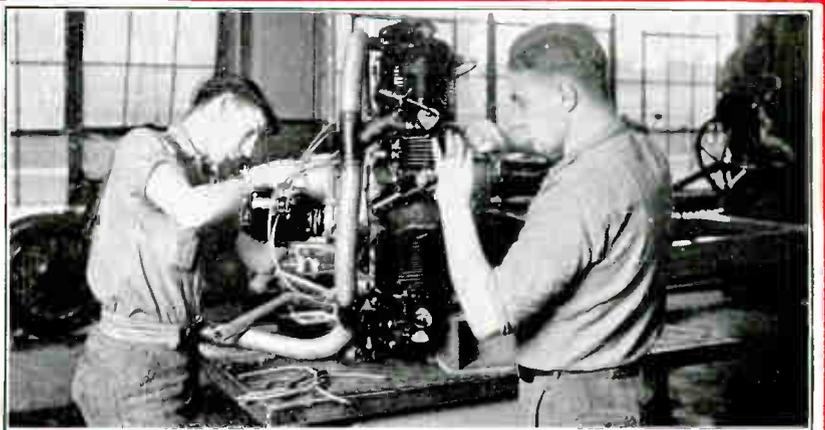
Students, adjusting and checking ignition on late model Plymouth engine. This sort of practical training helps to prepare Coyne Students to understand coils, distributors, wiring or timing on many types of engines.



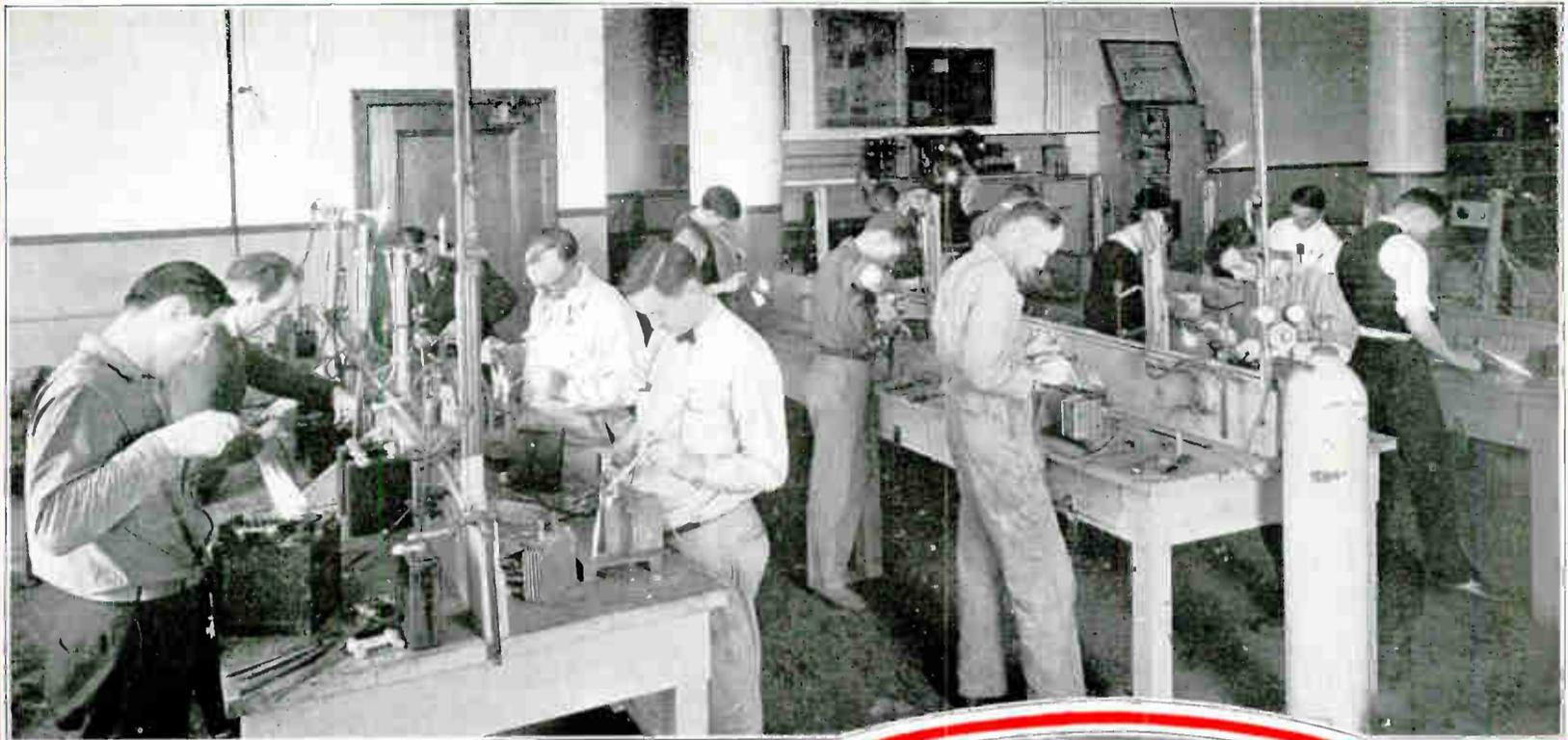
Students doing practical work on ignition and starting equipment of a Chevrolet engine. Actual work on "live" late type engines gives Coyne students an up-to-date training.



These students are wiring and testing the ignition equipment and magnetos on a Pratt Whitney Wasp Aircraft engine.



Students in our Aircraft Ignition section assembling and wiring ignition equipment and adjusting magnetos on a radial aircraft engine.



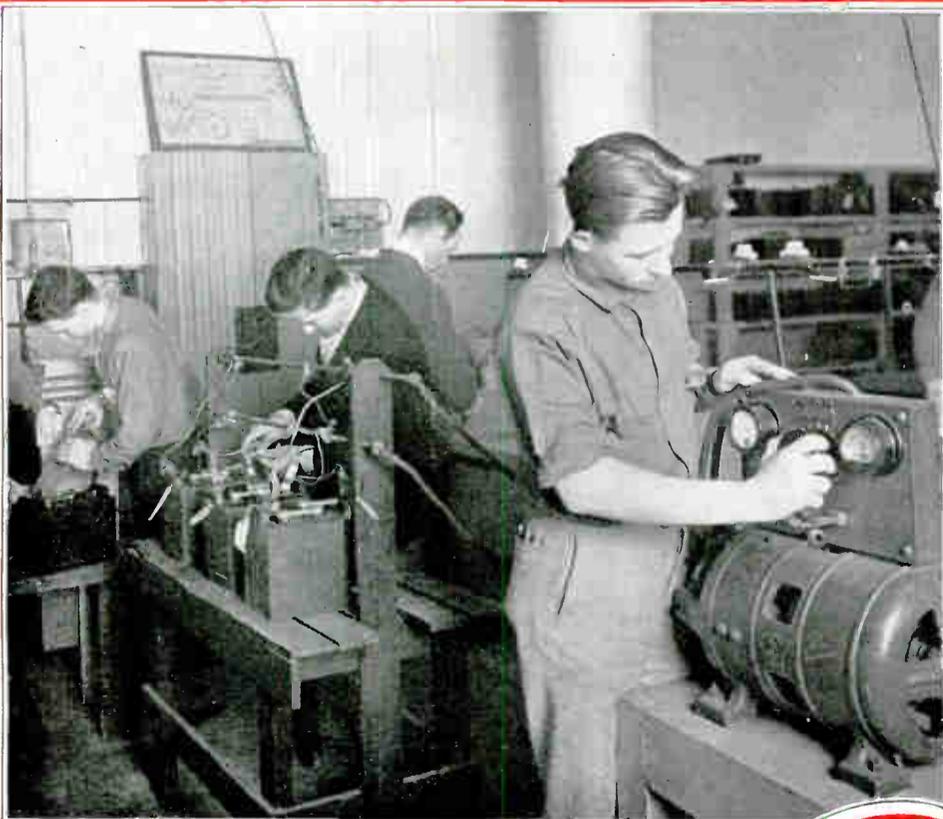
Here you see a section of the battery department, and students learning to assemble plates, do lead burning, and assemble complete cells and batteries.

### Advanced Education Not Needed

"I spent three happy months there at Coyne . . . the instructors were the finest body of men I have ever met . . . the things that a fellow can learn there in three months is wonderful . . . Education or previous experience were not a handicap to me as I could follow the work there easily even though I had only been to school through the eighth grade and I knew less than nothing about Electricity."  
—W. T. BOYD, Kellogg, Idaho.



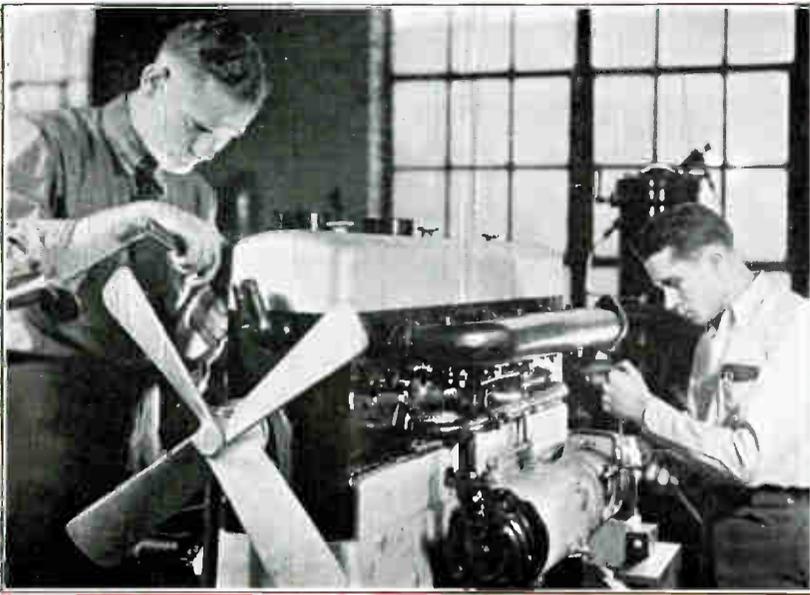
And these students are melting lead in an electric melting pot, and moulding lead posts and straps for the batteries they are building. This work gives them excellent practice with tools, and modern equipment.



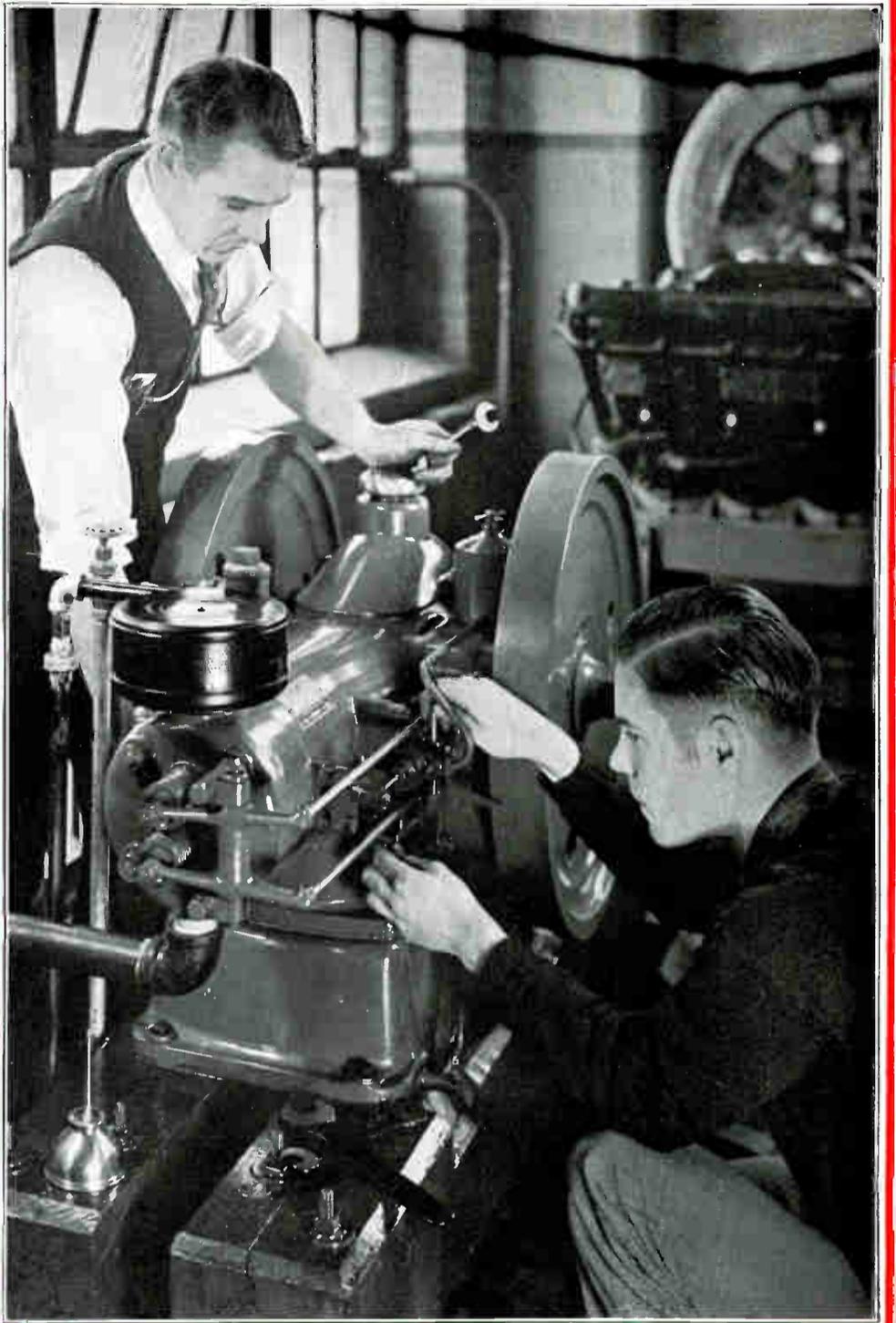
Operating a motor generator rapid charging machine, and testing batteries with a high rate discharge outfit. Many of our graduates do this kind of work in a business of their own.



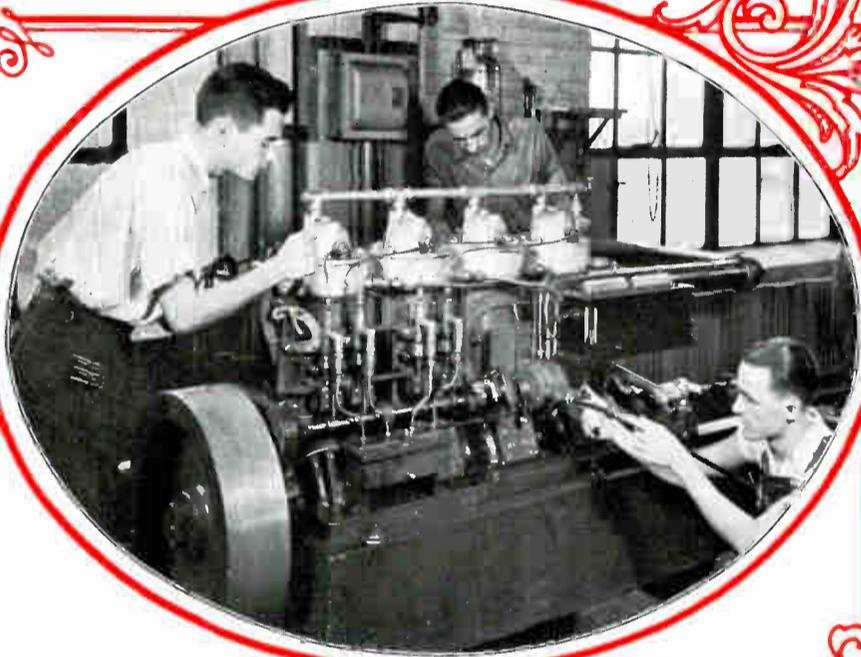
Here they are operating the charging line and equipment of the Tungar type. Both the half wave and later type full wave chargers are used here. And you see these students testing the acid, and the voltage to determine the exact condition of the batteries being charged.



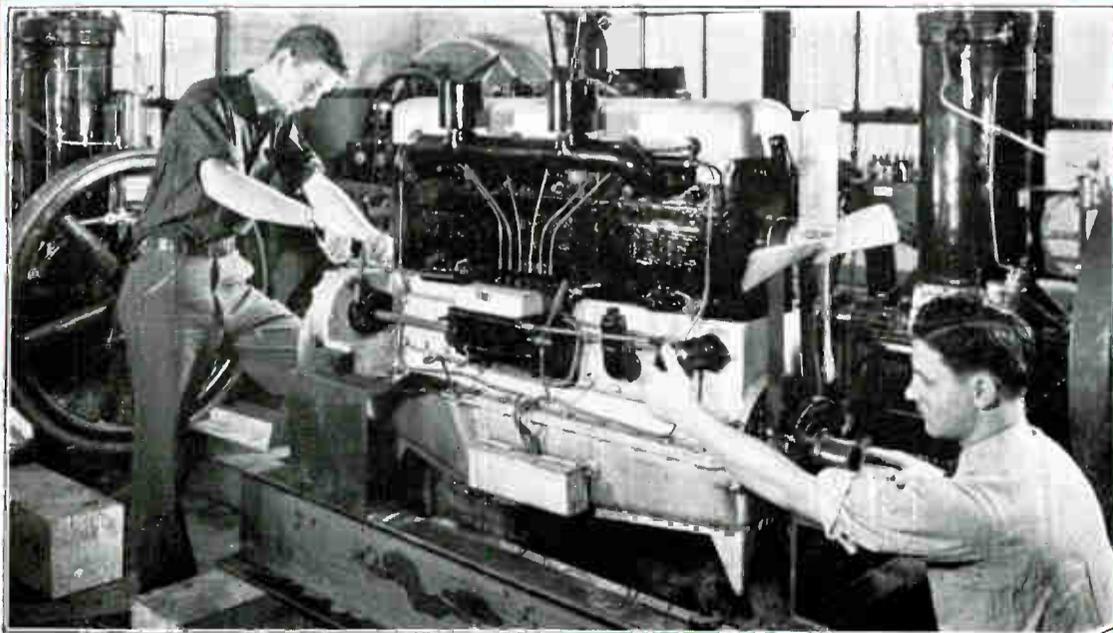
Electric starters and electric "hot plugs" form an important part of Coyne instruction in Diesel Engines. This view shows two students working on a Deutz Engine.



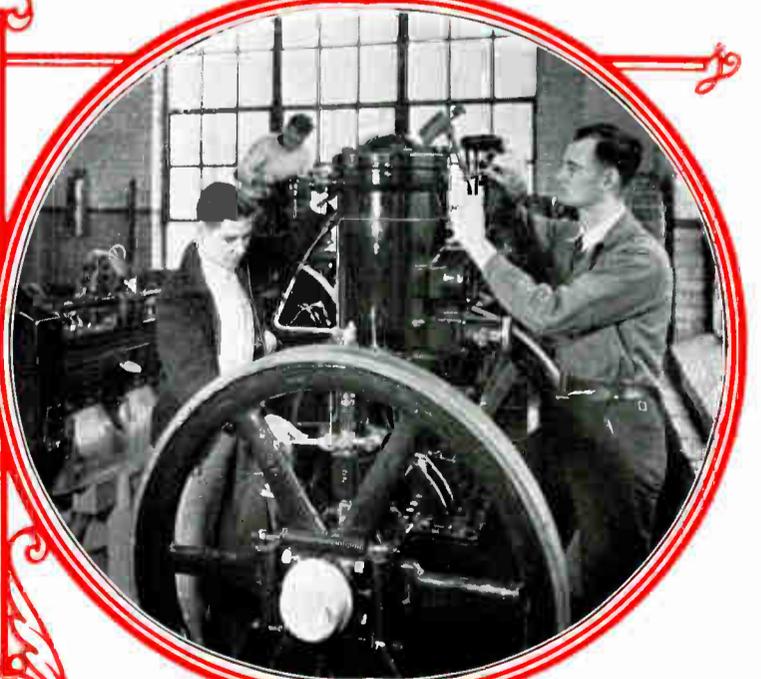
This student is being instructed on a Diesel Engine by actual work on modern equipment.



Coyne students operating and testing a marine type Diesel Engine. This job provides practical experience with air starting equipment and electric hot plugs.



This is an 85 H. P. automotive type Diesel Engine. You get training on Diesel engines where it pertains to electricity.



Here you see students at work on a popular type of stationary Diesel Engine.

# Now That You Have Been Through Our Shops I Want You to Read *This* and *Following* Pages

**A**T the beginning of this book I introduced myself and my school. Then, I told you of the opportunities in the Electrical Industry.

Then through the pages of this book I took you through my Shops—department by department. I showed you actual pictures of my shops and students at work, getting a practical shop training in Electricity.

Now, that you have the story of Coyne—I want you to carefully read this page, and the pages that follow.

They tell important facts you will want to know while you are a student in my school, and also what I offer to do for you when your training period is ended and you leave school as one of my graduates.

## Many Opportunities Ahead in Electricity

**T**o the fellow who prepares today, Electricity offers many opportunities. To merely dream of opportunity and do nothing about it, will bring no returns. But the fellow who prepares himself to take his place in this gigantic field by acquiring a training which will be the foundation for his start, has an opportunity in the Electrical Industry to build up the future every ambitious fellow wants.

Opportunities exist in the great Electrical field. You cannot doubt this. It is a field that is growing, and expanding constantly. It is interesting, fascinating, and full of opportunities for the fellow who is really ambitious to get ahead. Through Coyne Practical Training you get your start for the opportunities in this field.

## Electricity Is a Field of Many Branches

**N**OW, there is one thing I want to bring out right here and I feel it is an important point for you to consider.

The Electrical Industry is made up of many branches. Each of these branches holds opportunities for trained men.

## Coyne Is Not a One-Man Institution

**N**ATURALLY, a school such as Coyne is not a one-man institution. As head of the school, I could not possibly hope to handle all of the students' problems personally. Therefore, I have surrounded myself with an organization consisting of a group of men whom I can trust to handle most of the problems that come up, just as I would handle them myself if I were able to do so personally. In selecting the group of men who make up the Coyne Staff, this was uppermost in my mind.

I am mighty proud of the Coyne family. These men who comprise my staff are all real fellows. Most of them have been with me for many years. They are practical men, and each is thoroughly familiar with the work of his department.

You will find all of them friendly, sincere, patient and understanding, and always ready and anxious to help you with your problems.

By depending upon these men, each familiar with the matters that come under his charge, the student is sure of getting individual and personal attention in connection with his problems.

Any special problems are then brought to my attention through my staff and I can give them much better attention than if I was to attempt to handle each student matter myself.

You won't be in school for a day until you too will agree with me when I say—the Coyne family consists of the finest group of real men you ever met. You should remember them for many years and value very highly your association with them.



H. C. LEWIS, President

President

However—and here is the point I want to bring out—each of these branches is closely associated with the others. By this I mean, while you may decide to specialize in one branch, I believe it would be a mistake to train in this one branch alone, for as you go along with your training you will find that all of these electrical branches in which you are trained at Coyne are related to each other in some way.

For instance, you might want to specialize in Electric Refrigeration or Air Conditioning. Well, that's quite all right, but you should also have a knowledge of wiring, D. C. and A. C. motor and control work, as these branches are

closely related to the work in Refrigeration and Air Conditioning.

For example, in order to illustrate my point, let's consider the case of a Doctor, who wants to be a Heart Specialist. Wouldn't he first want to be familiar with the entire human system? Of course, he would because he learns that every part of the body is closely related to the action of the heart and might have some bearing on its function.

Well, we follow a similar principle here at Coyne. We feel that a student who wants to successfully specialize in any one branch of Electricity, first should have a general training in other important related branches.

That is why Coyne does not train students in just one branch of Electricity, but insists as part of our requirements that each student get the full benefit of our training in many electrical branches that are all closely related to each other.

## Coyne Training Helps to Inspire Confidence

**W**E believe that an important part of any training is to build along with that training, confidence in oneself.

Many men fail in life because they lack confidence in themselves. Perhaps they possess the ability to accomplish results but they don't succeed because they lack the confidence to make decisions.

Here at Coyne I consider it a part of our training to help a fellow develop self-reliance and think and reason things out for himself in a practical way.

## Now Carefully Read the Following Pages

**N**OW I want you to read the statement below and each of the following Pages. They carry an important message and tell you of many things you will want to know about my school and the help we will give you as a graduate.

# Coyne Training is *Learn By Doing* Shop Training To Help Make You a Practical Man!

**C**OYNE is not an Engineering School, nor do we attempt to make engineers out of our students.

Here at Coyne, you get a training on actual Electrical equipment, which is designed to give you a practical knowledge and understanding of Electricity.

The students who come to my school are the fellows who want a training that will help them to go out and do actual Electrical work. The necessary theory is given the student in a practical way, through blackboard

talks, demonstrations and by actual practice in our shops.

That is why our graduates are ready to make their start in electricity when they have finished our training.

That too, is why the students who come to Coyne do not have to have advanced education or previous electrical experience.

I have tried to point out to you facts which will help to guide you and save you a lot of time. So I say, Coyne is the place to get your training, because the Coyne Shops are equipped to give you a practical type of training.

I am sure you must be convinced of this after reading about the Coyne Shops in the previous pages of this catalog.

Now, I want you to read the balance of this catalog. As you do so, study each page carefully. I give you the facts you want to know. I have explained the many phases of the training and service available to you as a student of Coyne. I have explained also the nature of the services available to Coyne graduates.

Coyne practical training should open wider the door to opportunity.

# You Will Have a Chance to Inspect LEADING ELECTRICAL PLANTS

\*SOME OF THE PLACES OUR STUDENTS HAVE VISITED



This is an automatic substation of the street railway systems, and the students are shown examining the 2000 K. W. converter, and switchboard. Trips to such plants as these are intensely interesting.



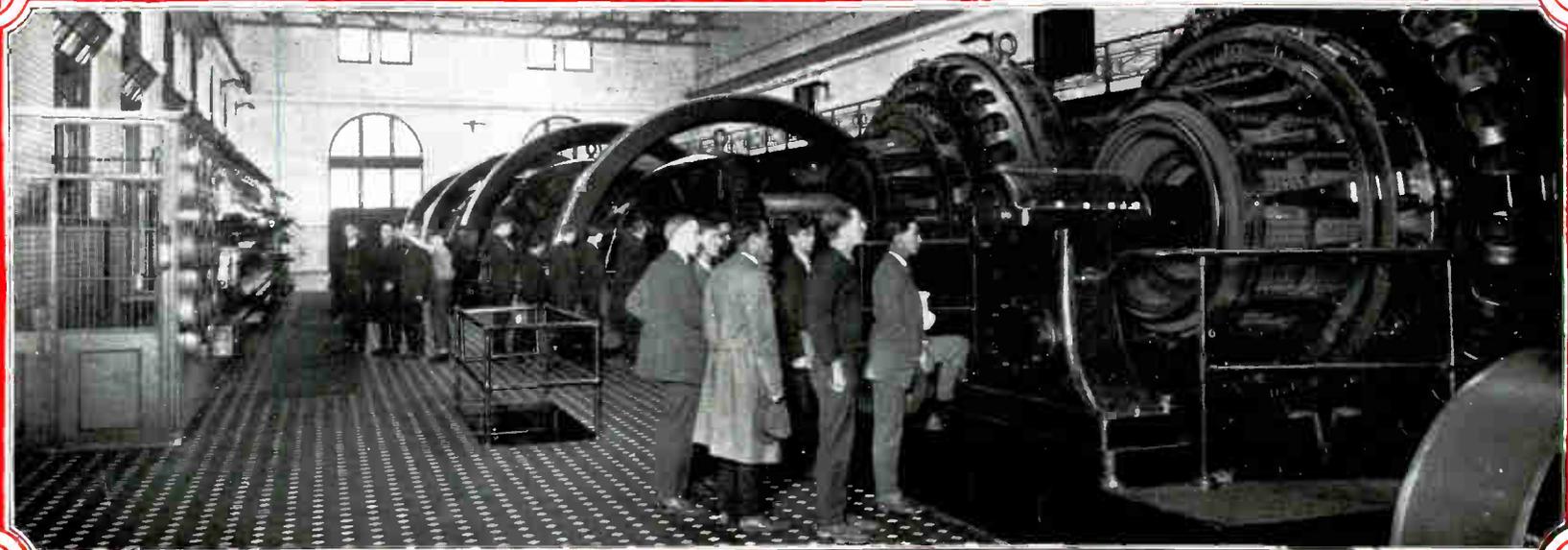
This photo shows a group of students in front of a modern transport plane at the large Municipal Airport where they inspected aircraft electrical equipment and airport lighting system.



The oval picture above is of an outdoor substation and these students are examining the oil switches, lighting arresters and transformers, with instructors along to explain everything.



The picture to the right shows a group of generators and mammoth switchboard in one of the largest private power plants in the world, at Sears, Roebuck & Company.



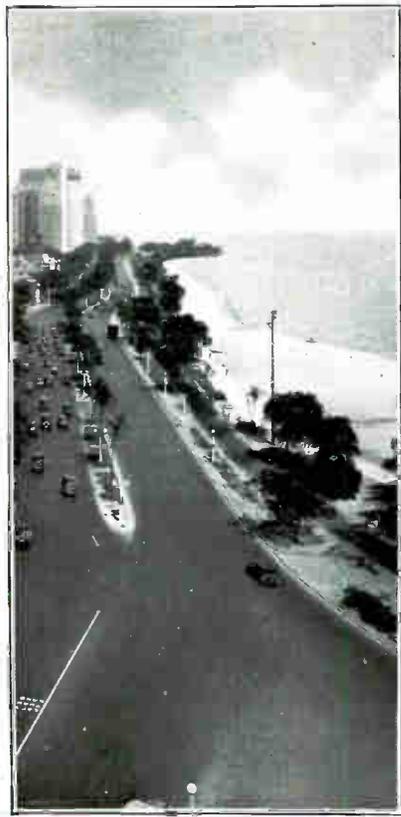
\*—While these pictures show some of the places our students have visited they do not necessarily mean that every student visits these particular places. It is our custom to have our students visit several places during their training period, but the ones we visit may be different ones than those above. Some places only allow so many visits during a year. However, any trips you make should prove interesting and valuable. There is no expense to these trips except the small street car or elevated fare.

# Beautiful CHICAGO

Get Your Practical  
Shop Training in the  
WORLD'S WONDER CITY

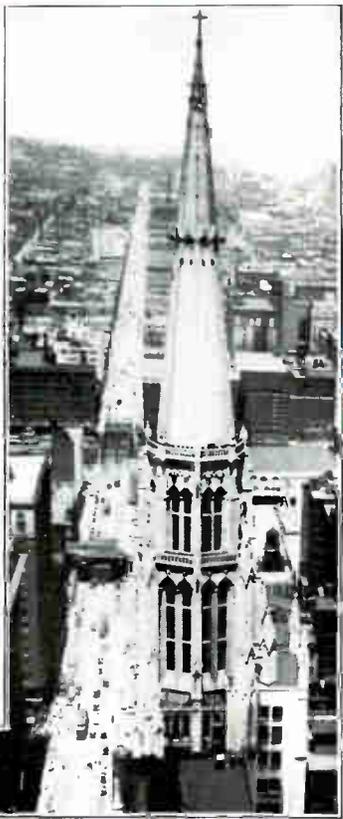


Above: Ice skating is a popular winter sport in Chicago.

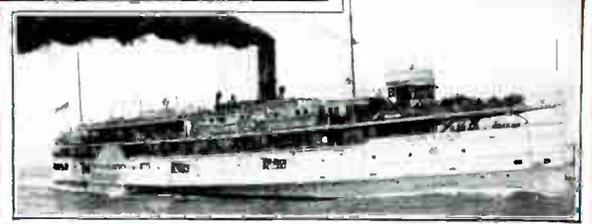


Chicago has nearly 30 miles of bathing beaches fronting beautiful Lake Michigan.

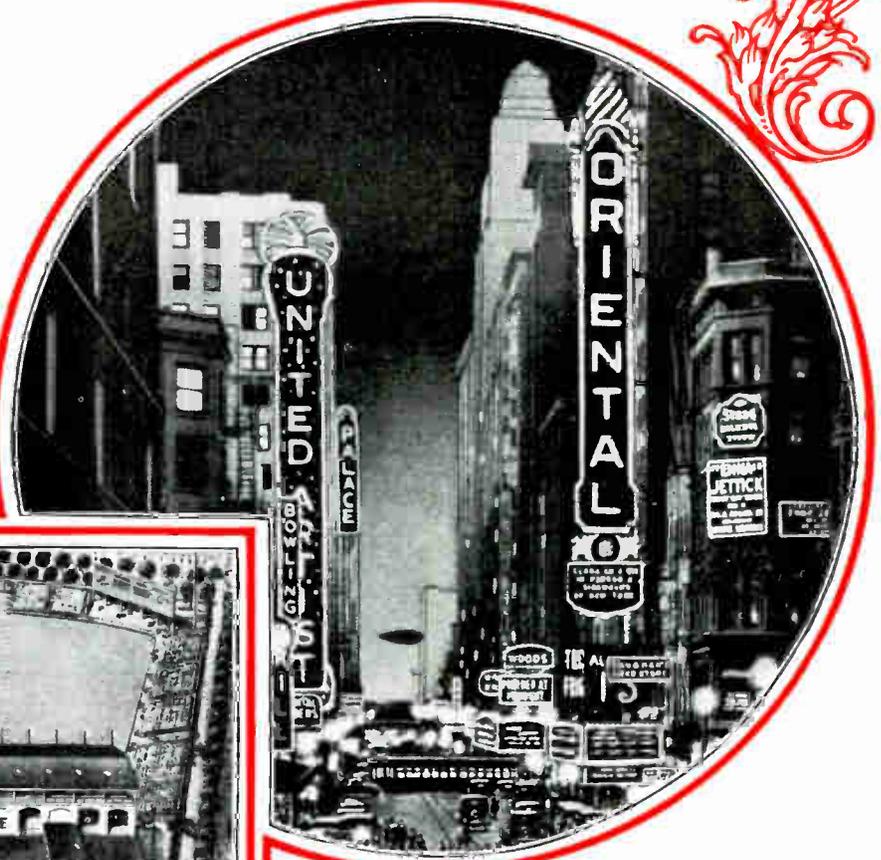
Chicago has many beautiful churches of all denominations.



Above: The million dollar Buckingham Fountain.



Right: Holiday excursion on beautiful Lake Michigan.

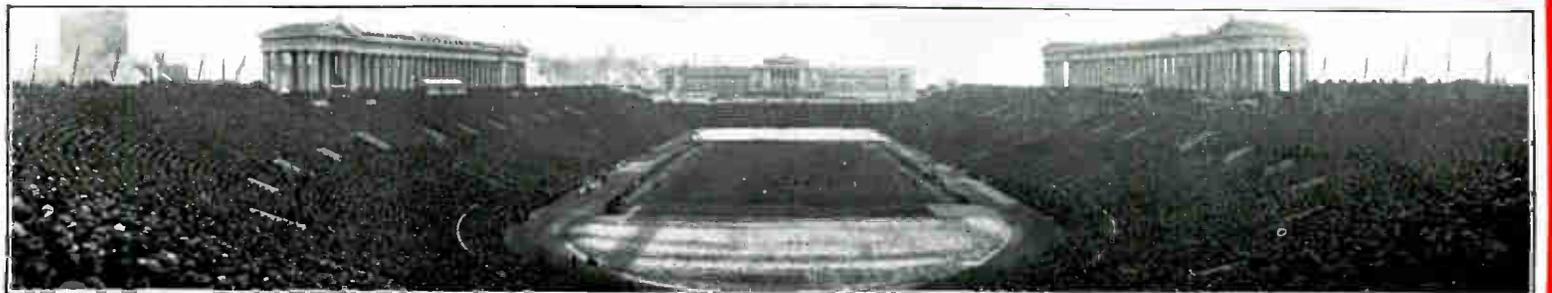


Looking down Randolph St.—Chicago's Theatrical Rialto.

Wrigley Field,  
Home of  
Chicago "Cubs"



A typical  
football  
crowd at  
Soldiers'  
Field  
Stadium



# Many Opportunities in Electricity For a Trained Man To Go Into Business and Be His Own Boss

THE field of Electricity affords scores of interesting jobs in the many electrical branches. In addition, Coyne Training helps to prepare students to go into business for themselves and be independent as their own boss.

## Excellent Opportunity—Small Investment

MANY Coyne Graduates found it possible as a result of the helpful service rendered by the school to open up a shop of their own with only a small working capital. Today, these fellows have established a permanent business in their home-town and are making a success as Contractors, Appliance Dealers and Owners of garages, service stations or repair shops.

As a Coyne graduate, you may find many opportunities for a business of your own. I have known of some of my graduates who have actually gone into business with very little money. They were able to do this by matching the

value of their electrical training against the working capital provided by some friend or acquaintance. Others found it possible to take over a small "going" business already established, but run down because of poor management.

BELOW I show you the pictures of three of my graduates who have a business of their own. I have many more graduates who are in business for themselves making good money and who are independent.

I don't know of any other field that offers a fellow as good an opportunity for a business of his own WITH THE OUTLAY OF SO LITTLE MONEY. Some of our students have gone into a business of servicing electric apparatus for small concerns with practically no capital.

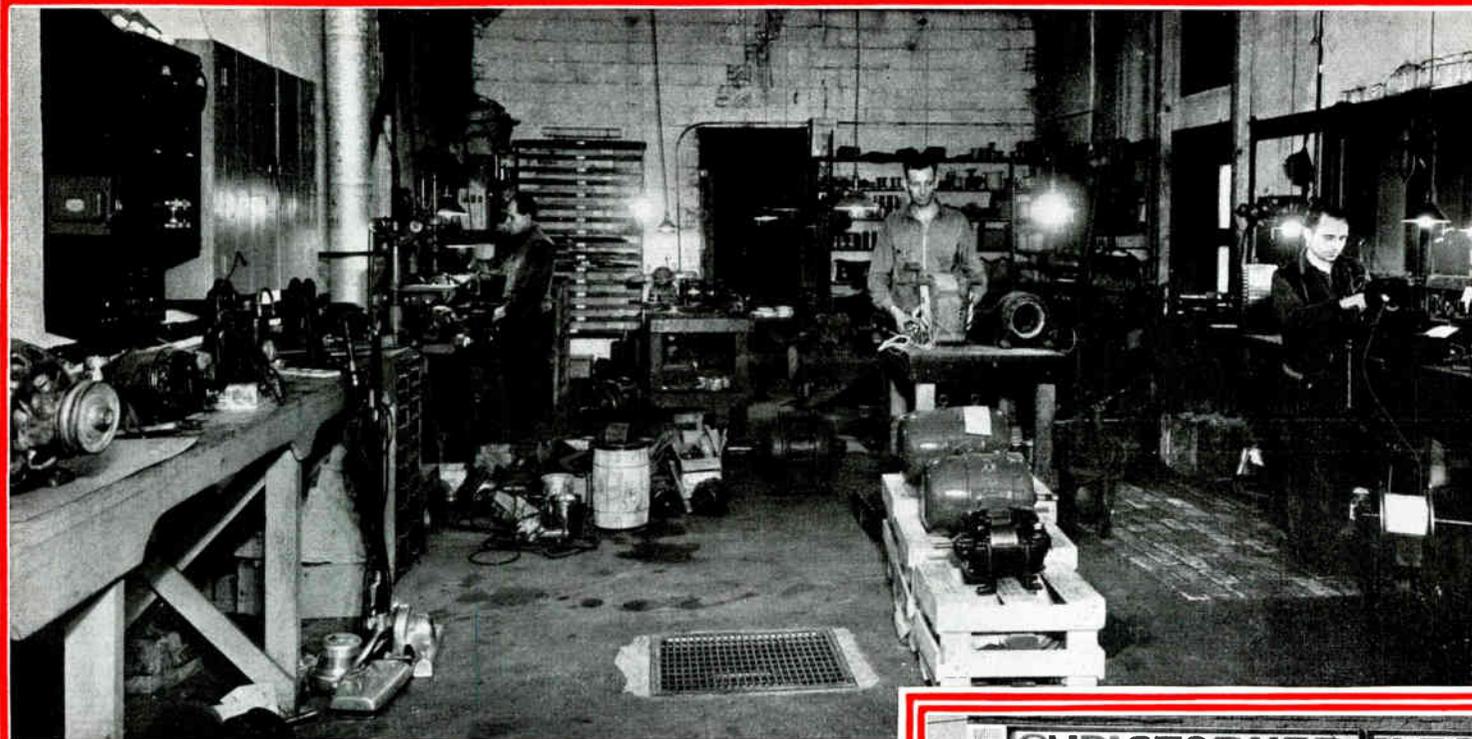
There are many small concerns as well as homes that have electric appliances and electrical equipment and these fellows have contracted to take care of this on a yearly or monthly basis.

This AS WELL AS THE TYPE OF BUSINESS PICTURED BELOW are only A FEW OF THE MANY OPPORTUNITIES FOR ONE'S OWN BUSINESS.

## Helpful Business Service

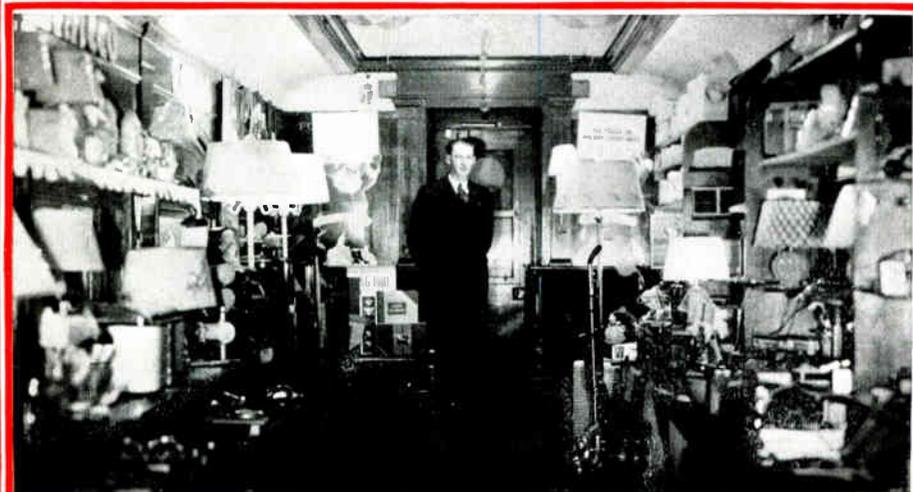
AN outstanding feature of Coyne Training is the Business Service offered to every graduate without extra charge.

As part of this service, we show any Coyne Graduate how to start a small business of his own with a limited amount of money and help him with the purchase of materials and to get the best trade discount on purchases. We also provide the benefit of our assistance in connection with sales problems, and technical advice is available from my Consulting Staff and then our business course as outlined on page 39 is designed to help the graduate who wants to go into business for himself.



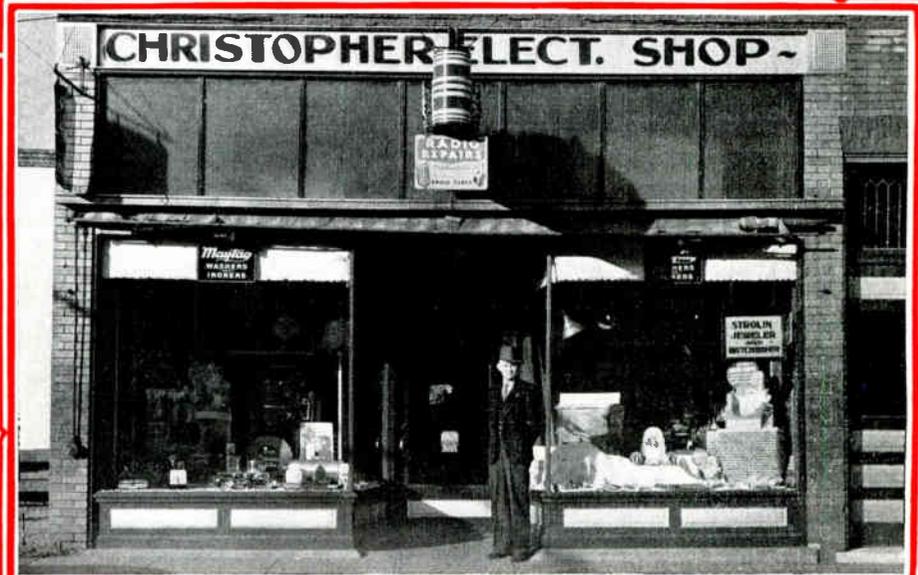
The picture at the left is a view of the interior of Coyne Graduate Harry G. Thornton's Electrical Repair Shop. Before he came to COYNE, Harry was a farm boy, working on his father's farm. There he did some mechanical work on farm equipment, but he knew very little about Electricity. Recently, he said:

"About 1 1/4 years ago I started a motor rewinding shop of my own. I have done very well and now have 3 men working for me. There is real opportunity in the Electrical Field for a man who goes after it. COYNE gave me my start and the future certainly looks good for me."—HARRY G. THORNTON, Indiana.



The picture above is a view of the interior of Coyne Graduate Leonard Ecker's Electric Shop, which you would not readily recognize as the interior of a railroad coach. Leonard purchased the coach, had it demounted from its wheels, stripped out the seats, redecorated and set up his business. In a recent letter he said:

"So far I've done very well. COYNE Training put me on the right road and the future certainly looks great for my electrical shop."—LEONARD ECKER, Illinois.



Above is a view of the front of Coyne Graduate R. W. Christopher's Electric Shop where he sells and services a complete line of small appliances as well as washing machines, refrigerators, electric ranges, radios, etc. He was working for a small wage in a factory before he came to COYNE. In a recent letter he said:

"I must say that Coyne Training has been the foundation in helping me get established, and developing this business of mine."—R. W. CHRISTOPHER, Indiana.

# Additional Training in Business Principles and How to Apply Yourself in the Business World



**N**OW, I have always believed that if a fellow is to get ahead in any field he must first get a training in that field.

This is true whether he goes in business for himself or whether he takes a position with some concern in his field.

While we all know this is true, and a fellow could not hope to go very far in any field unless he first set about to get the knowledge and training necessary for his start in his chosen field, yet **there are certain fundamental rules in business that to a great extent play an important part in the degree of success a fellow attains.**

For example, let me illustrate what I mean. Two employees starting in together, may start on the same kind of work on an equal basis. One of these fellows may advance a lot faster than the other although they may both have an equal knowledge and training in their field. One fellow may have advanced because he knew more about demonstrating his ability to his employer. He may have developed an ability to get along better with people he works with and the people he may come in contact with in his work. He may also, in addition to his training, have acquired a knowledge of business fundamentals that may have been necessary for advancement to a certain job.

Now, because we know this is true **WE HAVE MADE IT POSSIBLE FOR EVERY STUDENT TO GET IN OUR BUSINESS TRAINING COURSE,** a general knowledge of what we believe will be very **VALUABLE TO HIM** when he is **READY TO APPLY HIS ELECTRICAL TRAINING** in the field.

This training is **not a compulsory part of our course** and is entirely up to the student as to whether he takes it. It **does not** in any way **conflict with your electrical training** because it is given on **Saturday Mornings** when the electrical course is not in session, and of course, **there is no extra tuition cost for this training.**

Now, I would like to give you a **brief outline of what is covered in this business training course.**

It covers such subjects as helpful instruction on employer's needs and re-

quirements, how to make effective employment applications in person or by letter. Right and wrong methods of making job applications, ways and means of earning promotion and advancement on the job, how to sell your services, the right mental attitude toward your employer and the people you work with, as well as those you come in contact with in your work.

Then, in addition to this, we teach you the rules and principles of how to start and successfully operate a business of your own.

## **Practical Business Information and Help**

**I**T covers such important subjects as Elements of Success in Business, personality development and selling your service. How to select a business location, what tools and materials to stock. How to Finance a Business, Partnership Agreement, etc. Also, How to Advertise your Business, How to Keep Business Records, Legal Angles of Business, etc.

From these interesting lectures and demonstrations you can get the benefit of many years of valuable experience of the executives who give them, and who help you later with your business problems.

This course has helped many of our graduates to successfully start and operate their own business, with a very small starting capital. Many have started a shop or business right in their own home on a part-time basis, and built it up to a profitable full-time business with our advice and assistance.

## **Electrical Business Opportunities**

**T**HE Electrical Field offers splendid opportunities for trained men to start a business, in many different branches. For example: there is electrical contracting and house wiring, including the sale and installation of modern lighting fixtures. Burglar alarm, signal and office call installation is also

a profitable branch in many localities. Then there is service shop operation, in the servicing and repairing of household electrical appliances, such as fans, toasters, electric irons, washers, vacuum cleaners and many other home electrical devices.

Some of our graduates operate armature winding and motor repair shops. Others specialize in Electric Refrigeration or Radio service, or a combination of both. Still others operate automotive ignition and battery service shops. Then too, some go into electrical maintenance contracting, and service and take care of the electrical equipment of a number of small stores, shops, and factories on a weekly or monthly fee basis.

Farm electrification is providing many opportunities for Coyne trained men who live in rural communities, to wire farm buildings and service electric motors and appliances.

In connection with the operation of service shops, there are many opportunities for extra profits from the sale of electrical appliances, repair parts, etc.

## **Business Course Helps You Apply Your Coyne Shop Training to Best Advantage**

**T**HE Coyne Business Course helps to show you how to cash in on your practical training in many of these branches. This type of instruction helps you to better understand your employer's business problems, and should aid you in advancing to more responsible jobs.

And remember, that although this Business Course is optional and you are not required to take it, **IT CAN BE HAD WITHOUT A PENNY OF EXTRA TUITION COST.** We offer this special training to our students merely because **WE WANT TO HELP THEM BECOME MORE SUCCESSFUL IN THEIR CHOSEN LINE OF ELECTRICAL WORK.**

This is just one more example of how we do everything possible at Coyne to help you realize your ambitions to become a success in Electricity after you graduate.

TO  
HELP YOU  
MAKE A SUCCESS  
IN  
BUSINESS

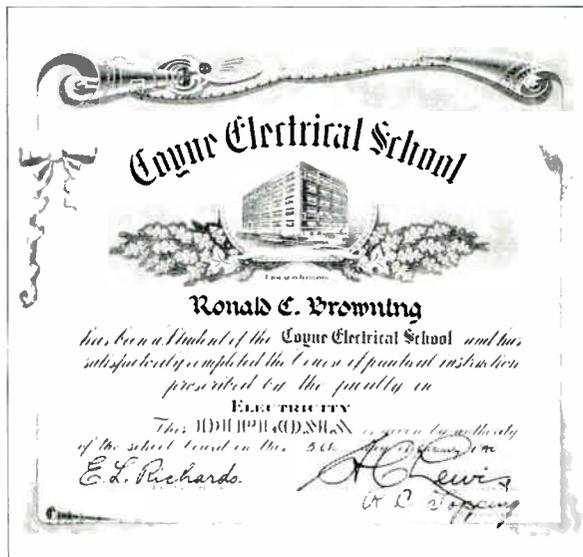
TO  
HELP YOU  
MAKE A SUCCESS  
IN  
YOUR JOB

# After You Graduate and Leave My School THIS IS WHAT I OFFER TO DO FOR YOU

IT IS generally recognized that a school is a place of learning. As such its purpose is to give its students a training. Once the student has received the benefit of this training many schools feel they have done all that is expected of them.

However, because I FEEL DIFFERENTLY ABOUT MY STUDENTS, I have adopted a different policy at Coyne. I know that we do everything in our power while a student is in our Shops to give him the best practical training. That's what a fellow expects to get when he comes to Coyne and when we have given him this training, perhaps I should feel that I have fulfilled MY obligation to him.

But, as a matter of fact, I am not satisfied to stop at this point. I FEEL THAT IT



IS MY DUTY TO MY GRADUATES TO HELP THEM FURTHER IF IT IS IN MY POWER TO DO SO.

Because I feel this way, I have organized a special department whose duty it is to help my graduates in various ways. Before outlining the nature of the service available to every Coyne Graduate, I want to point out that THERE IS ABSOLUTELY NO EXTRA CHARGE FOR ANY OF THE SERVICES I TELL YOU ABOUT BELOW.

Now, that I have told you how I feel about my graduates after they leave school and my willingness to help them so that they might get the greatest benefit from their training, I want to tell you briefly about Coyne Graduate Service.

## What Our Life Membership Means To Coyne Graduates

EVERY graduate of Coyne is entitled to a life membership in the school.

These features are outlined on this page and so long as a graduate remains in good standing, he is entitled to all the services I outline here.

### Review Privileges

THIS is a very valuable feature and one that is really appreciated by many of our graduates long after they have completed their course of training.

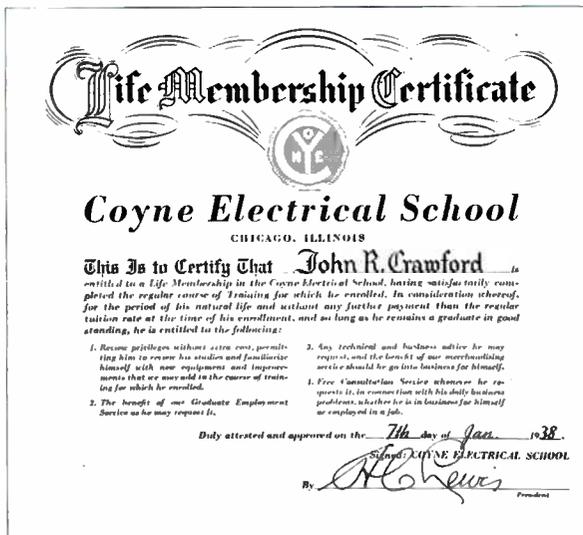
This service permits any graduate in good standing to come back to school and review any training in the course. From time to time new developments are occurring in the constantly growing field of electricity. When we consider them a help to our students we add this training to our course. With your review privileges you are entitled to come back and get this training at no extra tuition cost.

Sometimes a graduate may decide to specialize in some particular branch of Electricity when he leaves school. Then, perhaps later on he may be given a better opportunity in some other branch requiring him to brush up on his knowledge of the new work. That's where his free review privileges can prove of real value to him.

### Consultation Service

THIS service entitles a graduate to technical advice whenever he requests it in connection with his daily work, whether he is in business for himself or employed in a job.

A graduate can get this service at any time by merely writing for it. Members of my tech-



nical staff give their personal attention to all requests for information and a reply is forwarded promptly. Graduates can ask for information or advice as often as they need it.

### Merchandising Service

THIS service is available to any graduate who goes into business for himself. We are glad to advise you in connection with your printing, advertising and sales problems.

We will, upon request help you by referring you to sources for supplies and wherever possible we will help you in your purchases by getting you the best prices on your materials.

This is a valuable feature of our service for quite a few of our graduates go into business, and many times the help we give them is valuable, not only in promoting their business, but in preventing mistakes that might be costly.

### Employment Service

THIS service entitles every graduate to employment help whenever he requests it. Before explaining the nature of this service, I WANT TO MAKE CLEAR THAT COYNE DOES NOT GUARANTEE OR EVEN PROMISE ANY GRADUATE A JOB. Neither, do I feel that any fellow would ask me to obligate myself to make a statement that no man could make and be honest, for anyone knows that there are too many factors involved for anyone to guarantee another a position.

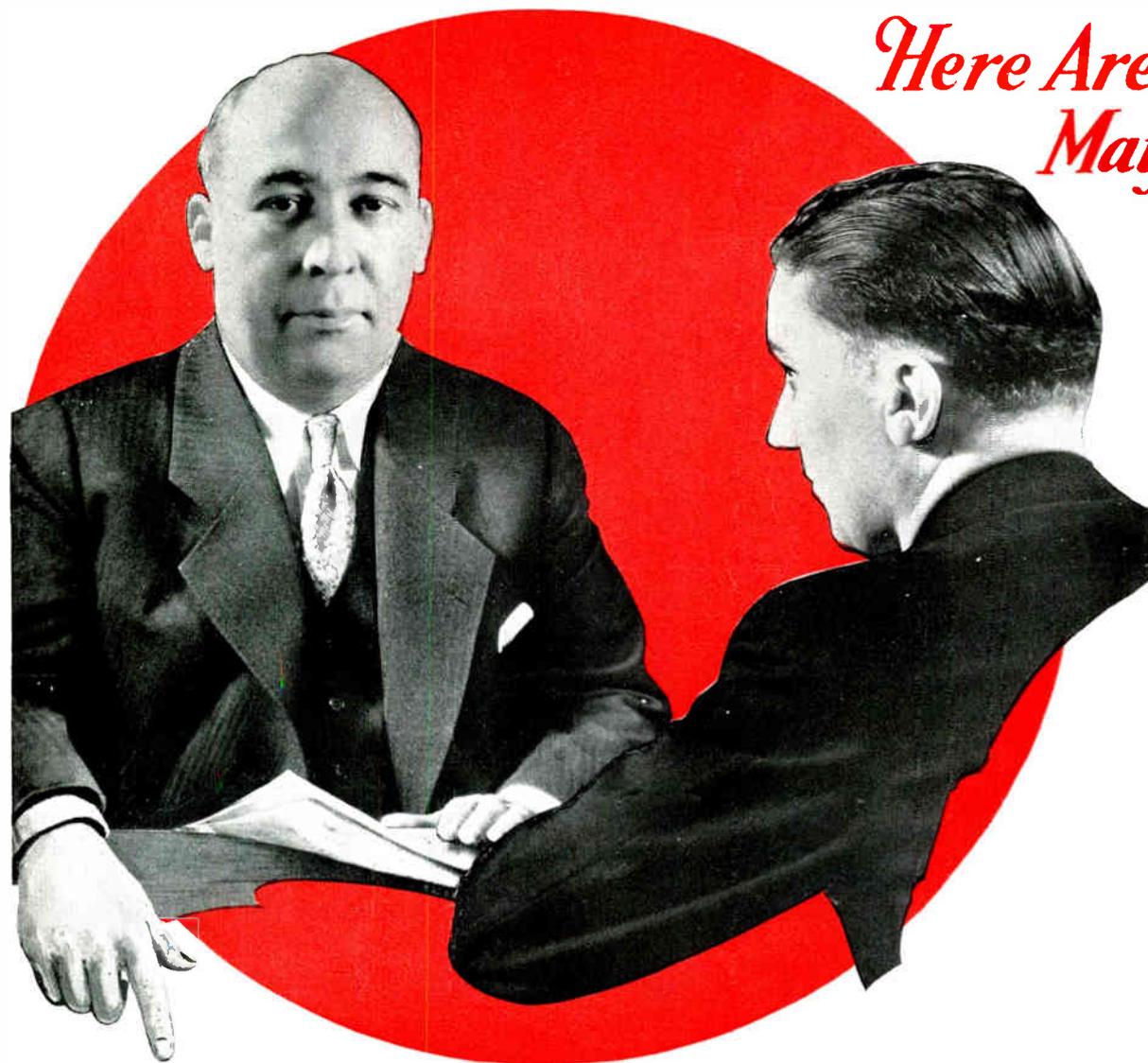
OF MY OWN FREE WILL, I HAVE PROVIDED THIS EMPLOYMENT SERVICE TO HELP ANY OF MY GRADUATES WHO REQUEST THIS ASSISTANCE. I'M SURE THAT EVERY RIGHT THINKING FELLOW WILL RESPECT MY FRANKNESS AND WON'T ABUSE THIS UNUSUAL PRIVILEGE BY ASKING ME TO GUARANTEE HIM A JOB.

Now, as part of the Employment Service rendered by my Graduate Department, we contact many employers through special mailings; bulletins are mailed periodically to graduates reporting new construction projects in various parts of the country; members of my staff make personal calls on employers; reports reach us from various trade sources and the information is passed on to graduates according to their location. IN SHORT, EVERY REASONABLE EFFORT IS MADE BY THE MEMBERS OF MY STAFF TO PROVIDE COYNE GRADUATES WITH REALLY HELPFUL EMPLOYMENT SERVICE.

This same service will be open to YOU after you have become one of my graduates. I cannot guarantee you or any graduate a job, but I do promise that you will get the graduate services I have outlined on this page.

# Important Questions Asked and Answered

*Here Are My Answers To What  
May Be Your Questions*



I HAVE tried here to answer every question you would probably want to ask, but I want you to feel free to ask any other questions you may think of. Also, if my explanations are not perfectly clear to you, don't hesitate to write me. I want you to thoroughly understand everything about my 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.

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

My school is in session all year. Since the training is individual, a student can start any school day of the year.

## 2. What do you mean when you say "no books"? Does it mean you do not teach theory?

This is a question that is asked very often. When you went to public school or if you ever enrolled for a correspondence course—practically all of your work was out of text-books. Here at Coyne we don't teach you with text-books. We don't condemn books if they are properly used to further one's knowledge of theory or for reference purposes or to keep posted on events or happenings. Our instruction, however, is on actual Electrical equipment and not by text-books. We give a student the theory he needs by practical talks, blackboard sketches and equipment demonstrations. And of course you have your own notes to refer to. Coyne is practical, both in practice and theory and you are not required to study from text-books here in my school. As I have said we do not condemn books, we even advise our students to read good books on the subject they are interested in.

## 3. Is your building modern and fire-proof?

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

## 4. Is your building centrally located?

Only a few minutes from the loop and still right in the heart of the Electrical industry. Chicago is the world's Electrical center.

## 5. What is the cost of the course?

Prices and terms are given on the enrollment blank enclosed. Additional blanks sent promptly on request.

## 6. Does your tuition price cover full training?

Yes. You never pay us more than one tuition price, which covers all departments included in the Electrical course and in addition, you receive a Life Membership including the features outlined on page 40.

## 7. What are your educational requirements?

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

## 8. Do I need previous experience?

No! Previous experience in Electricity is not necessary. While some of our students have previously done electrical work, most of them have had little or no experience before coming to Coyne.

## 9. What is the age limit for enrolling in your school?

We have students as young as 16 years of age and up to 40 years of age. While we have had students over 40 years of age who have made good, I would prefer if you are over 40 that you write me and explain your circumstances. Then I will be glad to advise you.

## 10. Do I have to recite in front of a class?

Absolutely not. Our instruction, as I have said, is individual. By this, I mean each student can progress independently of the others, so far as his shop work is concerned. If you have any problems to take up with the instructors, you take them up personally with them.

## 11. Do I have to do any school work in the evenings?

This is up to you. Most students spend an hour or two each evening on their notes they have taken from the day's work in the shops.

## 12. Does every student complete the regular course in 12 weeks?

Occasionally a student may need more than the required 12 weeks in which to finish his training. Sometimes a student may be a little slower in grasping the work. However, the majority of our students are able to complete the regular course of training in the prescribed 12 weeks' time. Naturally, it is impossible for us to tell a student in advance whether he might require additional time. I want to make clear once again that there is no extra tuition charge if you should require more than 12 weeks. Of course, if you decide to take the optional work described elsewhere in this catalog, then you must plan on spending the necessary extra time.

## 13. Do you grant a diploma?

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

## 14. Where will I live while going to school?

Our Boarding places are within walking distance of the school and in most of them, there are no other roomers, except Coyne students. Also the Y. M. C. A. is within walking distance, and some students live there.

## 15. What should my expenses amount to?

*For a limited time it is only necessary to bring \$5.00 for a set of shop prints. The other items will be furnished you at no extra charge. M.B.L.*

## 16. Do you have facilities for disabled students?

Yes! Some students who are physically disabled are sent to Coyne by various agencies. The loss of an eye, arm or leg may not prevent you from taking my course and benefit from it. We have excellent facilities for handling disabled students. If you have any disability, be sure and write us about it before you come to school, then I'll be glad to advise you and tell you if it will prevent your benefiting from my training.

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

This, of course, is optional with the student. We do not force 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, Mr. Lewis, personally handle the students' affairs?

No, it would be impossible for me to do this. Every Coyne student knows that Coyne is not a one-man institution. I am proud of the wonderful organization of fine fellows with which I have surrounded myself. There is a man at the head of each department who takes care of the problems which come under his department. Each of my assistants submits reports to me and in this way I can pass on many things each day; which gives me time to think about ways and means to render the greatest personal assistance to my students. Through my departmental heads I keep in touch with the progress of the student body and you will always find the man at the head of any department ready and willing to give you help or advice.

# Our Student

# WELFARE DEPARTMENT

## Will Make You Feel at Home

**T**HE 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.

My 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.

### Your Entertainment at COYNE

**W**HEN I tell you about the numerous entertainment features at Coyne I do not want you to get the impression that this is made too big a part of the work here. We always keep foremost in mind the big fact that the main thing we are all here for, my staff as well as my students, is sincere work. But, just as all work and no play makes Jack a dull boy, I realize the importance of clean wholesome entertainment features, as well as athletic activities.

Very frequently we hold, during a noon recess hour, some form of wholesome entertainment, such as instrumental music, singing, tap dancing, tumbling, magicians' acts or athletic exhibitions. There is never any charge to our students for this entertainment.

### Athletics

**Q**UITE often, during the noon hour, we hold an amateur boxing tournament. All contestants are volunteers from the student body. Maybe a lad from Oklahoma takes on a fellow student from Canada, and so on, boys being represented from all parts of the United States and many foreign countries. The bouts usually go one and two rounds and, while always lively and full of humor and interest, are put on in a fine spirit of sportsmanship—never any rough stuff.

### Outdoor Sports

**T**HEN, 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 Sight-seeing Busses, Stockyards, Field Museum and hundreds of other buildings and places of interest afford a fellow hours of good clean recreation without sacrificing any of his school work.

### We Help You Locate a Room Near the School

**W**HEN you arrive at Coyne and complete your enrollment you will meet my Welfare Director who will refer you to your room. Student rooms are located within a short distance from the school in houses that as a rule 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.

Room and board can be had for as low as \$6.00 a week. Special low rates are also made for light house-keeping rooms, in the case of married students who wish to bring their wives with them.

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.

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.

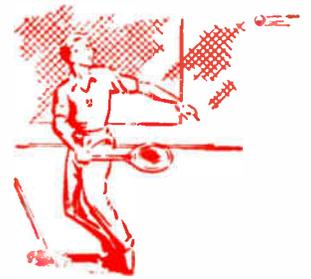
### The Y. M. C. A. Right Near COYNE

**T**HE Y. M. C. A. is just a few blocks from the school and our students may join while here at a special price. This also gives them the privilege of rooming there if they so desire. 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.

### Church Services

**N**O MATTER what your religion may be or what your denomination, you will find a church of your choice in Chicago and they welcome their members from other towns and cities.

On Sundays, groups of students often attend one of the neighborhood churches. Special classes and discussions are occasionally held for Coyne students and these are strictly non-sectarian. Attendance is purely voluntary—no student has to go unless he wishes to. It's a matter of personal choice.



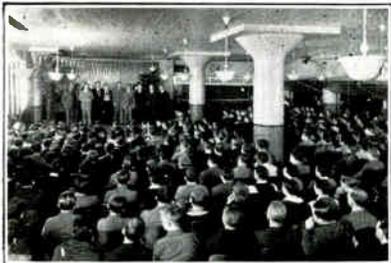
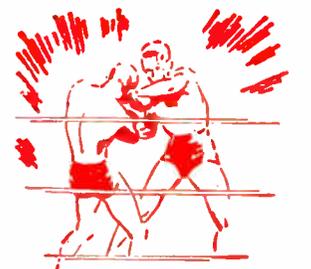
### A Letter from a Mother

"Gene reached home safely. Vibrant with plans for the future and rich in memories of his time at COYNE.

I am deeply appreciative of what it has meant and will mean to him, this privilege of mingling with men of great moral worth in his first venture away from home, and I thank you for the kindly interest you have extended to him. All your letters were a comfort to me, but this last one has given me a joy that nothing can dim or take away.

Across the miles, I clasp your hand and wish you all the best in life. May health and happiness be yours as you continue the noble work of inspiring young men and bringing cheer to anxious Mothers."

Sincerely,  
LENA CONBOY.



A typical student crowd being entertained by a group of celebrities.



A Minstrel Show staged, produced and acted by Coyne Students.



Coyne Students engage in many forms of athletic activities. Here you have a championship basketball team.



Above: Occasional social activities help to liven up after-school hours. Below is the Y. M. C. A. located near School.

# WHAT WILL YOU BE DOING IN THE YEARS AHEAD?

## *A Personal Message To Ambitious Fellows Who Want To Get Ahead*

**A**MAZING as it may seem, I frequently hear a fellow say—"There isn't the opportunity for a fellow today that there was 25 years ago."

Certainly anyone who makes such a statement hasn't taken the trouble to give the matter much thought.

Just stop a moment and think of the many industries today that were unheard of 25 years ago. Practically every one of these industries offers opportunities today to men and young men who have the foresight to prepare themselves to fit into these industries. Many of these opportunities did not exist years ago.

In addition to the many opportunities existing at this time, I firmly believe this country is yet to see the period of its greatest growth. According to a recent statement by a leading industrialist, "THE UNITED STATES PRESENTS GREATER OPPORTUNITY FOR YOUTH TODAY THAN IT EVER DID BEFORE." I also, feel that the years ahead will bring even greater opportunities than were ever dreamed of before.

**WE ARE LIVING TODAY IN AN ELECTRICAL AGE.** The past twenty-five years have brought about great changes in our mode of living. There have been great developments requiring the introduction of huge, complicated machinery to make automobiles, airplanes, radios, electric refrigerators, air conditioning apparatus, and other equipment. These costly machines are found in every phase of industry and electricity supplies the motive power for these machines. You will find them in

factories of every description, on land, on the sea, and in the air; you will find them on the farm and even in the home. All of these machines must be manufactured, installed, operated, serviced and repaired. Who is to do this work? Naturally, it must be done by men who understand the operation of this machinery—**MEN WHO HAVE BEEN SPECIALLY TRAINED.**

I am giving you these facts because I want to bring out one big important point before I answer some other questions that I know must be in your mind. And that point is—**TO SUCCEED YOU SHOULD BE TRAINED!**

The next step is to choose a field where there are many opportunities today and where there will be many more opportunities in the years ahead. I have just told you about the great new developments that have been responsible for the vast increase in the use of machinery of every description. How do all of these machines operate? What supplies the motive power that makes them go 'round? You know the answer already. **IT IS ELECTRICITY THAT MAKES THE WORLD OF INDUSTRY HUM.** Without **ELECTRICITY**, the world would be plunged into darkness and industry would cease. **ELECTRICITY** is an absolute necessity almost every moment of our lives. Can you think of a world without **ELECTRICITY**? Then, what better field could a fellow choose in which to build up a successful future? Can there be any doubt in your mind that **ELECTRICITY** offers real opportunities to ambitious men and young men?

Perhaps the greatest mistake a fellow can make is to feel there are no opportunities for him because he sees around him fellows who have made a failure in life—these fellows are in many cases bitter and attempt to excuse their failure by saying, "There aren't any jobs open"—"Things are different today than they used to be," etc., etc.

Many of these fellows may lack the energy, initiative, will power and courage to make an effort.

They may feel the world owes them a living or that some day they will strike it lucky and then everything will be fine.

I am sure these fellows I speak of will make no effort to help themselves because they haven't learned that success doesn't just happen and that in most cases the success one makes of life depends to a great extent upon what they put into the effort to reach it.

We all know that you can't make the most expensive car move without first supplying the starting power. **TRAINING IS A FELLOW'S STARTING POWER.** Without training one can't hope to fill a job that needs the skilled services of a trained man. So, once you have the necessary training, you are better able to fit into many jobs that were not open to you before.

During the past twenty-five years, I have seen for myself the many changes that have taken place in the industrial life of our great country. I can recall the start of each new development and I have watched each grow to enormous size. I have passed through several depressions and periods of discouragement and have witnessed the tremendous forward spurt after each depression. I can look back over a quarter century ago and recall how even in those days many people were saying there were no more opportunities and the country had seen its greatest growth. I know, just as others know who went through this period, that **EACH PERIOD OF BAD TIMES IS GENERALLY A FORE-RUNNER OF A NEW AND GREATER PERIOD OF PROSPERITY.**

I sincerely believe a similar condition is ahead in this country today and that we are bound to have a new period of prosperity. Who has a better chance to benefit more from these coming good times than the young men who have prepared themselves through training to step into the newly-created jobs that will result from new developments?

Science is right now developing new ideas in the great research laboratories of the Nation. Think of air conditioning in thousands of homes, automobiles, and places of business, airplanes spanning the oceans in daily travel, streamlined Diesel trains swiftly moving across the country, 300,000 miles of highways brightly lighted at night, great new developments bringing cheaper power to every home and farm, startling new methods of communication to all corners of the globe, and numerous other developments affecting the daily mode of living of every person.

Don't you feel as I do that these changes must bring even greater opportunities than we have experienced in the past? **WHERE WILL WE GET THE MANPOWER NEEDED IN THE FUTURE TO MANUFACTURE, INSTALL, OPERATE, SERVICE AND REPAIR THE NEW AND COMPLICATED ELECTRICAL MACHINERY, APPLIANCES AND OTHER EQUIPMENT? Isn't it true that THIS MANPOWER MUST BE PROVIDED BY THE AMBITIOUS YOUNG MEN WHO ARE NOW BEING TRAINED TO HANDLE THIS SKILLED WORK?**

**WHAT WILL HAPPEN WHEN TODAY'S SKILLED WORKERS RETIRE? WHO WILL TAKE THEIR PLACES? WON'T IT BE THE YOUNGER MEN WHO HAVE PREPARED THEMSELVES BY TRAINING TO FILL THESE VACANCIES? A leading industrial publication quotes one of our well known executives as saying, "THE OPPORTUNITY FOR THE AVERAGE WORKMAN TO RISE TO THE MANAGEMENT POSITIONS IN INDUSTRY WAS NEVER BETTER THAN IT IS TODAY. THESE OPPORTUNITIES WILL CONTINUE TO GROW IN THE NEXT DECADE."**

Every day, far-reaching changes are taking place in industry. Daily, the ranks of trained men are being reduced by older men who are retiring from active effort. **THESE JOBS THAT ARE BEING VACATED MUST BE FILLED BY YOUNGER MEN.** It is the younger generation who will supply our trained men of the future, our shop foremen, superintendents and other important jobs in the many branches of the great Field of **ELECTRICITY.**

I agree with those industrial leaders I have quoted in this message that **THE FUTURE SHOULD PROVIDE GREATER OPPORTUNITIES TO YOUNG MEN WHO PREPARE FOR THEM THAN WAS OFFERED BEFORE.** But I also feel that **THESE FUTURE OPPORTUNITIES WILL BE FOR THE FELLOWS WHO HAVE THE FORESIGHT AND AMBITION TO GET READY FOR THEM.** When you wrote for my book, you proved to me you realized this.

Now, if you will back up your decision to enter this great, growing field of **ELECTRICITY** with prompt action, you will have made your start to a brighter and more prosperous future.

*A. C. Lewis*  
President.

# WE WANT YOUR FRIENDSHIP

## Both as a Student and a Graduate

I HAVE already told you how every member of my staff will do his best to help you with your personal and shop problems while you are getting your training.

I have also explained how my Graduate Department will be ready to serve you after you end your training period and leave school.

I want your friendship and good will both while you are a student, then later on when you are one of my graduates. I have always felt that my duty did not end once a student's training period was over. I want every Coyne graduate to feel that he is always a member of my school.

That is why I give each of my graduates a Life Membership entitling him to valuable privileges. Through this Life Membership, I have tried to make clear to my graduates that we here at Coyne are always ready to give them the same help and consideration when they are in the field, as if they were still attending school.

On Page 40, I told you of the various services we render you as a graduate of my school.

During your stay with us and after you have graduated, you may find many little courtesies and helps rendered you that we do not even mention or promise you, because my entire organization is constantly

striving to increase our service to our students and graduates. That is the policy all through the Coyne Family.

In short, I want every fellow who comes to my school to be satisfied. I feel that satisfied graduates will tell their friends and others about my school and they, in turn, may come to Coyne for their training.

That is my policy as head of Coyne Electrical School. When you come here you will find that Coyne keeps its promise to give a student every possible assistance both while he is in school and then later on when he graduates and is applying his training in the field, as I tell you on Page 40.

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## What To Do When You Arrive in Chicago

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WHEN you arrive in Chicago, just walk right out of the depot and you will see several Yellow Cabs. Get into one of them and tell the driver to take you to The Coyne School, 500 South Paulina Street, Chicago.

Our office is open and ready to receive you on the days and hours mentioned below.

**Monday, Wednesday and Friday** from 7:30 in the morning, until 9:00 o'clock at night.

**Tuesday and Thursday** from 7:30 in the morning, until 6:00 o'clock in evening.

**Saturday** from 7:30 in the morning, until 4:00 o'clock in the afternoon.

**Sunday** from 9:00 in the morning, until 4:00 o'clock in the afternoon.

Should you arrive in Chicago at any other time than mentioned above—then take a Yellow Cab and tell the driver to take you to the Fort Dearborn Hotel, spend the night there and take a Yellow Cab to the school the next morning.

**Don't worry about your accommodations!** We'll arrange for your room when you get to the school.

### Terms of Tuition

THE enrollment blank shows you the complete tuition charge. The only other charges are covered in question 15 on page 41. Outside of this there are no compulsory charges for school supplies. Any reference material and other supplies you might want to buy would be up to you. The one tuition charge covers all work in all departments of your

course, and even includes full review privileges and a Life Membership. Shop tools will be loaned to you in each department without charge.

### What Your Living Expenses Will Amount To

IF YOU are like most of the fellows here, you haven't got much money to spare and will want to get by just as reasonably as possible. You can get room and board accommodations as low as \$6.00 a week. The only other necessary expense would be for laundry and this should not run over fifty to seventy-five cents a week.

### School Information

EXAMINATIONS—Students are graded largely on shop work, with some credit on notes. Examinations are not designed to "catch" the student, but to test his knowledge. He will be required to pass an examination before leaving each department.

Reports—Reports of students' progress and conduct will be made to parents or guardian twice a month, if requested.

Shop Hours—The shops are in session every day in the year, except Saturdays, Sundays and Holidays. The hours are 8:30 to 4:30, with an hour at noon for lunch. Since our instruction is individual, a student can enter any school day.

Office Hours—While there is no school on SATURDAY OR SUNDAY, WE KEEP OUR OFFICE OPEN ON BOTH OF THESE DAYS and MY REGISTRAR and WELFARE MAN will be here. Many students prefer to come on either Saturday or Sunday so they can get all settled and ready to start in Monday Morning. If you want to come on either of these days, THE OFFICE WILL BE OPEN TO RECEIVE YOU between 9:00 A.M. and 4:00 P.M. on both days. There is a complete schedule at the left showing all other school and office hours.

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

Care of Students—Students are lodged in clean, comfortable rooms only, which are frequently inspected by the Welfare Director.

Illness—I consider the health of my students to be a very important factor in their stay with us. We have our own physician and trained nurse, and the slightest illness is reported to us by our approved rooming houses and is given immediate attention by our physician or nurse.

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



**I Have Given You The Facts**  
*Now* - I Am Going to  
**Put It Up to You!**

**I**N the pages of this book I have told you how you can get an electrical training and make your start for a more successful future.

You want to make more money.

You want the good things in life.

**Electricity, the opportunity field**, offers these advantages to those who will prepare by training for them.

I am sure there can be no doubt in your mind but that the practical "LEARN-BY-DOING" Methods used at Coyne offer you a better and quicker way to get this training.

You are ambitious, of that I am sure.

But, one can be ambitious and still be a failure if they do not take advantage of opportunities when they come their way.

It is the man of **Action**, the man who makes a **Decision** and goes through with it, who generally makes a **Success in life**.

Great men and successful men, have been men of action, men who acted when the opportunity came.

**Electricity is a field of Opportunity**, Coyne is the key that can help to open the door to that opportunity.

The message contained in this book COMES DIRECT FROM ME, because I wanted you to have the facts as they really are.

I have shown you how men and young men are trained in Electricity here at my school.

I have told you of the services I am ready to give you BOTH AS A STUDENT AND AS A GRADUATE after your training is over.

I DO NOT EMPLOY SALESMEN. I want YOU to make YOUR OWN DECISION.

The training, the personal help, and the services given to so many other fellows who came to my school ARE NOW OFFERED ALSO TO YOU.

My entire staff is here to help you and I know you'll find them the finest bunch of fellows you ever met, working one and all in your interests while you are in school and then after you graduate.

AS PRESIDENT OF COYNE, I AND MY ENTIRE STAFF OFFER YOU A HEARTY WELCOME!

*A.C. Lewis.*  
PRESIDENT





**H·C·LEWIS,  
PRESIDENT  
500  
S·PAULINA ST.  
CHICAGO, ILL.**

*For*

629HS-6-27-0

Mr. Arthur Kissel,  
Fults,  
Illinois

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