

**COYNE**

*Gateway To Opportunity*

**CHICAGO**

*World's Greatest Electrical Center*

Founded 1899

# Coyne *Founded* 1899

7794



## The Great New Home of Coyne

### Dedicated to Our Thousands of Successful Graduates

**A**S a student of Coyne you will want to know something of the building in which you are to get your training, so I will give you a brief outline of our new home which we have just completed.

This handsome, five-story building was built and is owned by Coyne.

It was built with one idea in mind, to give our students the most efficient, practical Electrical training possible and at the same time keeping in mind the comforts, health and the happiness of our students, during their training.

This building is absolutely fireproof; of the very latest construction and every inch of the entire building is occupied by The Coyne Electrical School. The building is open on all sides and is entirely flooded with sunlight and fresh air and even in addition to this, we have installed automatic ventilating machinery, so that every part of the building will have fresh air at all times.

Nothing has been left undone to make your stay with us the most pleasant as well as the most profitable three months you have ever spent.

This big modern building has been the result of 30 years of successfully training men to better their condition in life.

The Coyne Electrical School is America's pioneer institution for practical training.

It is to the success of the thousands of graduates who have left the doors of Coyne to become successful men, many of whom occupy important positions in the electrical industry, that this building and the success of Coyne is due.

The Coyne Electrical School has grown consistently every year from a small start 30 years ago, to the enviable position it occupies today in the educational field.

This should and must be an important thing for you to consider when you select the institution where you are to get your training.

Your future success and what you accomplish in the years ahead of you depends a great deal upon the quality of training you get.

Remember one thing—COYNE was founded 30 years ago—COYNE has stood the test in all these years and has grown every year of the 30 years.

The building you see on this page, built and owned by The Coyne Electrical School, is absolute proof of the responsibility, stability and integrity of this institution.

**COYNE HAS GROWN UP WITH THE ELECTRICAL INDUSTRY**



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

**F**OR many years I have had a very close knowledge of the great work being done by Mr. H. C. Lewis and the Coyne Electrical School in fitting men and young men for the many opportunities offered them in the Electrical industry.

Just as every institution is but the reflection of the man at its head, so can one understand why the Coyne Electrical School has gained a world-wide reputation, why it enjoys the confidence and respect of the Electrical Industry and why this school has been able to take thousands after thousands of the untrained, dependent youth of our country and in the shortest possible time transform them into skilled, self-supporting and independent workers in the fascinating and thrilling Electrical Field.

It is not difficult for you to picture the necessity for a man in Mr. Lewis' position, at the head of a great school of this kind, being dynamic, inspiring, human and kindly, untiring and methodical, and it would be impossible to associate the great success the Coyne School has achieved with anything but whole-hearted, honest and sincere principles of the man whose guiding hand is back of it.

I have been impressed by the care and ability which Mr. Lewis exercises in selecting and training his instructors, not only in the rudiments of the science they have to teach, but in his broad policies and ideals of service to each

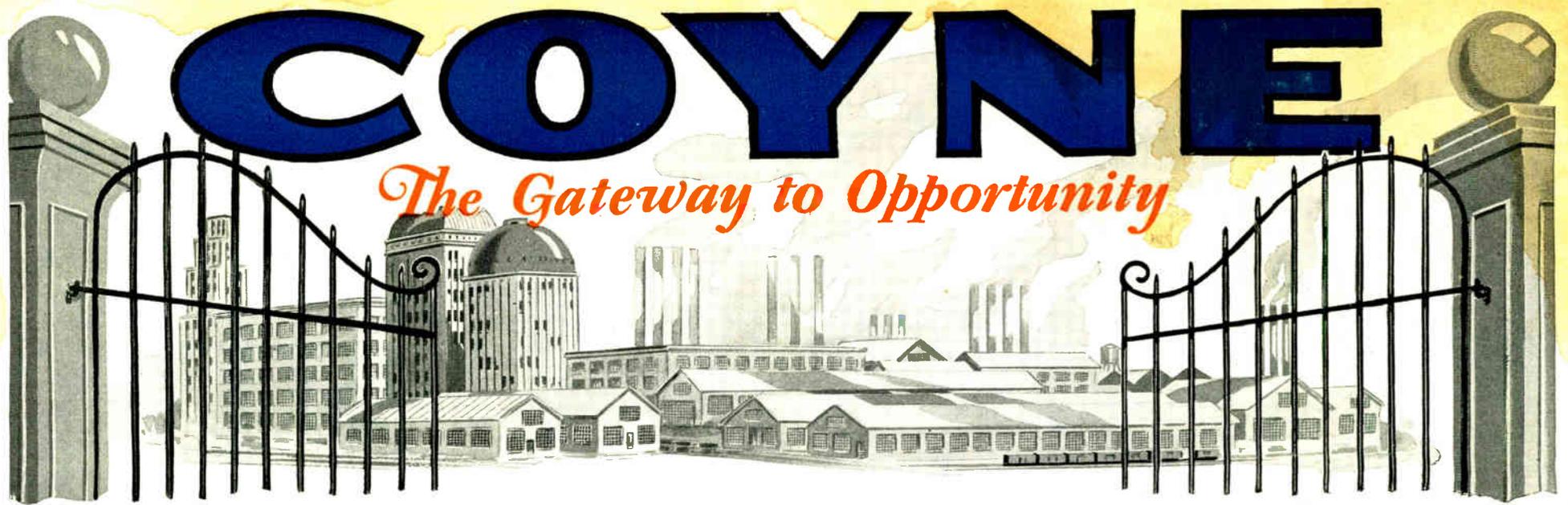
and every Coyne student. Time after time I have heard stories of his broad humanity from the men he has helped. They show a sincere sympathy and understanding of the problems of young men. Mr. Lewis is a living testimonial to the fact that the square deal pays big dividends. You can rely on his fairness at all times.

The stories that come to me from Coyne graduates reflect definitely that the Coyne executives, the Coyne faculty members and the Coyne student body are all like one big, happy family, working together, shoulder to shoulder, in the common and commendable cause of making skilled and successful electrical men—yes, real Big-Pay Electrical EXPERTS—out of men who, for the most part, never before had experienced the thrill nor reaped the rewards which come from genuine achievement. The morale of this unique institution is remarkable. The spirit of Service and Good Will is everywhere apparent.

You can safely entrust your electrical training to H. C. Lewis, with no misgivings as to the quality and quantity of service he can render to you, both as a student and as a graduate.

*Ernst Jacobson*

ERNST JACOBSON, President,  
UNITED PUBLIC SERVICE COMPANY, Chicago, Ill.



# What You Will Want to Know About Coyne

**T**HE fact that you have shown an interest in my school clearly proves to me that you are a fellow who is not satisfied to just "get by." When a fellow shows a desire to better his condition in life it shows that fellow has the right stuff in him. If he didn't he would be satisfied to go along and take the easiest way around.

Now because you are clearly not of this kind and because you are interested in your future, I am interested in you. So let's you and I be perfectly frank with each other. I'm going to tell you right here my ideas on the matter of training. Then after you have gone thru and read my book, and if everything isn't perfectly clear, then write me a frank letter and ask me any question that's in your mind.

Now this wish of yours to get a training is a mighty important thing to you. For the quality of that training plus the help and encouragement given you after you graduate are going to have a whole lot to do with the success you make after you get that training.

I have always felt that it's mighty important to give a man the best training I can possibly give him regardless of the expense, and to give him that training at the lowest possible cost to him.

## But, That is Only the Start

**A**FTER a fellow has gotten that training there is still much more for me to do before my job is complete. I feel that I must give him every possible help in getting satisfactorily placed in the right kind of a job. Then he should be helped so that he can hold the success he has gained. This I do thru my graduate department. As soon as a fellow graduates from my school my employment department is ready to help him into that electrical job. Then he gets free consultation service. Free bulletin service which keeps him posted on the latest developments in his field, such as new projects, new jobs being opened and what is new in the electrical field. Every graduate's name is listed and we are in touch with them at all times. This gives us the advantage of always being able to help our fellows at all times. And remember this service is not only for a few months but continues for life. These are important things to you as a graduate.

## Coyne Has Stood Every Test for 30 Years

**T**HIRTY years is a long time. No business could hope to continue this long if it was not serving, and producing results. Coyne has not only continued in business 30 years, but every year has shown an increase in enrollments over the year previous. Only one thing has made this possible. The success of our graduates. The boosting and recommendation of my graduates sends hundreds of students to my school every year. Therefore, you can make no mistake in selecting Coyne as the school to get your training. Nothing is cheaper and more profitable than the investment you make in the most precious thing in your life—your future.

## You Don't Need Advanced Education or Electrical Experience at Coyne

**M**Y method of instruction is so simple and thorough that you don't need a high school education to complete my course. Many of my most successful graduates never even completed the eighth grade in school. Nor, do you need previous electrical experience. By far the most of my students never had a bit of experience before coming to Coyne.

Now that's just what the great shops of Coyne are here for, to give you experience.

You'll get it, on actual electrical machinery in full operation. The very same kind of machinery you'll get paid for working on after you graduate.

## Why We Can Train You in 12 Weeks

**I**AM often asked this question. I could answer it this way. The fact that we have been doing it for 30 years and my graduates have made good in the field should prove it. But I'm going even further and explain just why it is possible. First let me say we don't require that you study it out of books. Nor do we give you a lot of useless theory that you nor anyone else will ever use. There is no lost motion. You work strictly as an individual. We don't repeat what you learn, when you learn one thing you go ahead to the next thing starting in with the most simple jobs and gradually working into the advanced work, step by step. And during your stay here you are trained on one subject, electricity, and you are trained thoroughly in every branch of this subject.

## Why I Teach Nothing But Electricity

**M**ANY years ago, when Coyne was first founded, we taught many different classes of trades, brick-laying, plumbing, plastering and so on. But all these have long since been discarded, for two big main reasons:

1. Just as you, a Coyne graduate, are successful because you are a trained specialist, so is my school most efficient and successful teaching ONE THING. I believe in practising what I preach.
2. The demand for trained men in the Electrical Industry is so tremendous that I more than have my hands full turning out enough skilled graduates for this one profession alone.

I, too, could offer half a dozen different courses to attract as many students as possible. It would be very easy for me to do this and probably make a lot of money, but that is not my policy; I am content to make a success in training my students so they are better trained than any one else could train them, even if I don't make as much money as I could if I taught several different courses.

## My Student Service Department Will See That You Are Made Comfortable When You Arrive

**M**Y service director will attend to your room, board and baggage and will see that you are made comfortable at all times during your stay with us. You will find everyone at Coyne courteous and anxious to make your stay here pleasant and something you can look back over in the years to come as the most enjoyable and profitable days you ever spent anywhere. You won't be here 30 minutes before you will realize that you are among as fine a bunch of fellows as you ever met.

## If You Need Part Time Work We Will Help You Get It

**M**ANY of my students could never have taken my course if it had not been for the part time jobs we got them. If you need this kind of work I will give you every help through my employment department in getting it. I have never guaranteed positions but I will see that every help is given you and if you have enough to keep yourself going for a week or two, I am sure we can get you a job to help you out with your expenses if you have to have it.

Nothing is left undone to place a fellow in a job while attending school if he needs it and the same applies after a fellow graduates. We have a well organized employment department and a man at the head of it who knows employment problems. This man and his associates are at your service at any time while you are a student and for life after graduating.

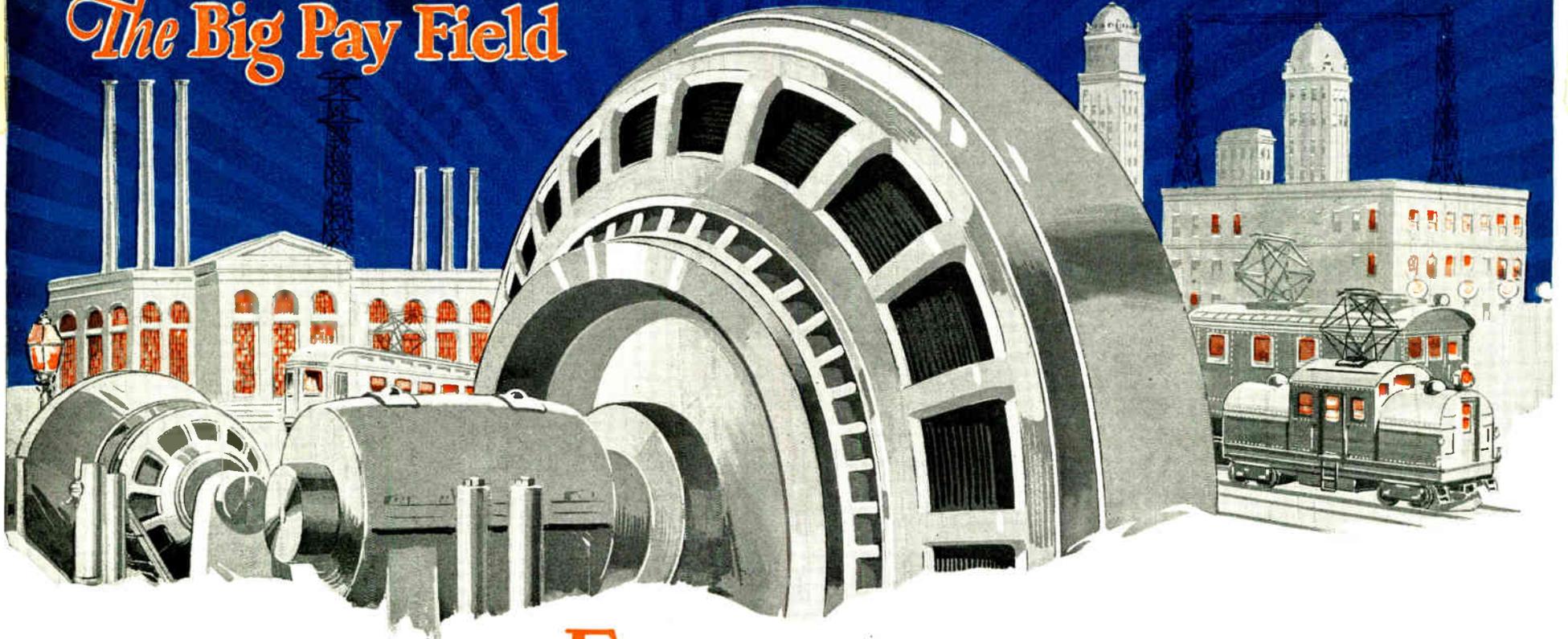
As you read through this book you will be convinced of four very important things: First, my absolute sincerity and honesty in offering to help you quickly realize your best ambitions. Second, I am striving to have you receive all the big-pay benefits of my training—which means constant new opportunities for advancement. Third, I am trying to tell you, in the plainest language I can write, to take full advantage of present day possibilities in the greatest field ever discovered where you, as a new beginner— anxious for rapid success—can get in without experience, advanced education, special influence or long years of preparation. Fourth, I am doing everything in my power to get you to use me in shaping your quick entrance to the Giant Electrical Industry where lifetime opportunities await you on every hand—making you happy, contented and sure of a standing that is bound to follow your trained big-money-earning career.

## Now I Want You to Know the Great Opportunities in the Electrical Field

**T**URN over now to the next page and read of the great opportunities in the Electrical Field. This giant industry offers you unlimited opportunities and on the next page I am going to tell you about a few of them.

# ELECTRICITY

## The Big Pay Field



**N**O fellow who has ambition and the desire to get ahead can help but be thrilled with the very thought of electricity.

It holds a fascination and appeal that hardly anyone can resist even though they know but little about the subject. To those experienced who know the workings and the mysteries of this great subject it holds a fascination of which nothing else can compare.

To those who are trained and who know all branches of electricity it holds rich rewards. Salaries of \$60.00, \$70.00, \$100.00 and \$200.00 a week and even much higher are paid to thousands of men no smarter than you.

### You Need Never Worry About Not Having a Steady Job

**E**LECTRICITY offers certain employment and the added advantage of many different branches from which to select and the thoroughly trained man is capable of stepping into a different branch and handling it as capably as any other.

Constant new developments, new projects and new uses for this great force are creating more and more openings for trained men every day.

Thomas Edison recently said, "The greatest handicap to electrical progress today is the lack of trained men."

### Your Training Must be Thorough

**T**HEREFORE, I say to you, my friend, who are looking around you now for an escape from small pay, hard work and no future—you can make no mistake in selecting Electricity as your life's work. But I want to make it very clear when I say this. You must be equipped

**ELECTRICITY** Offers You as a Trained Expert, Untold Opportunities to Earn \$60<sup>00</sup> \$70<sup>00</sup> and on up to \$200<sup>00</sup> a Week or You Can Go into Your Own Business and Earn up to \$15,000<sup>00</sup> a Year

#### Branches You Can Enter

Contractor-Dealer .....	\$3,000 to \$20,000 a year
Power Plant & Substation Operation .....	50.00 to 70.00 a week
Maintenance Engineering .....	250.00 to 600.00 a month
Armature Winding and Repairing .....	45.00 to 75.00 a week
Motor Inspection .....	200.00 to 400.00 a month
Illumination Expert .....	50.00 to 80.00 a week
Radio Engineer .....	250.00 to 500.00 a month
Motor and Appliance Repair .....	3,000 to 15,000 a year
Signal Engineering .....	50.00 to 100.00 a week
Auto, Truck and Tractor Ignition Expert .....	45.00 to 75.00 a week
Aviation Ignition .....	60.00 to 125.00 a week
Battery Manufacturing and Repairing .....	3,500 to 12,000 a year
Farm Lighting Plant Expert .....	50.00 to 80.00 a week
Service Station Operation (Own Business) .....	3,500 to 15,000 a year

to advance. A half way training or a knowledge of one or two branches of electricity does not qualify you for advancement in this field. You must be trained, thoroughly trained, so that you know Electricity in all its phases. If you are so equipped you are headed for success and a happy contented life with no fears of the future.

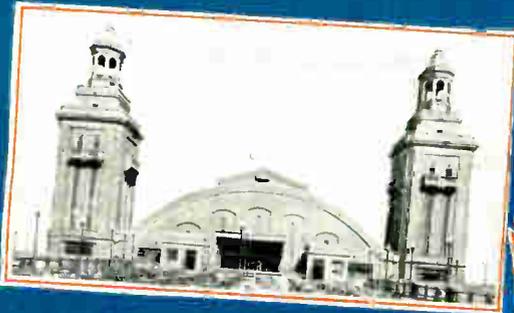
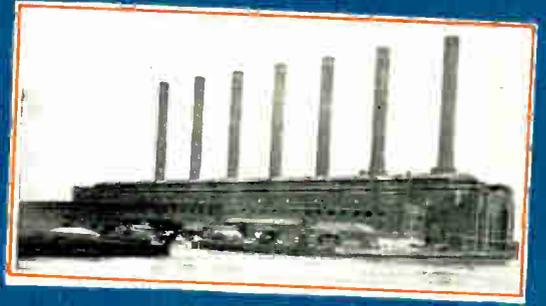
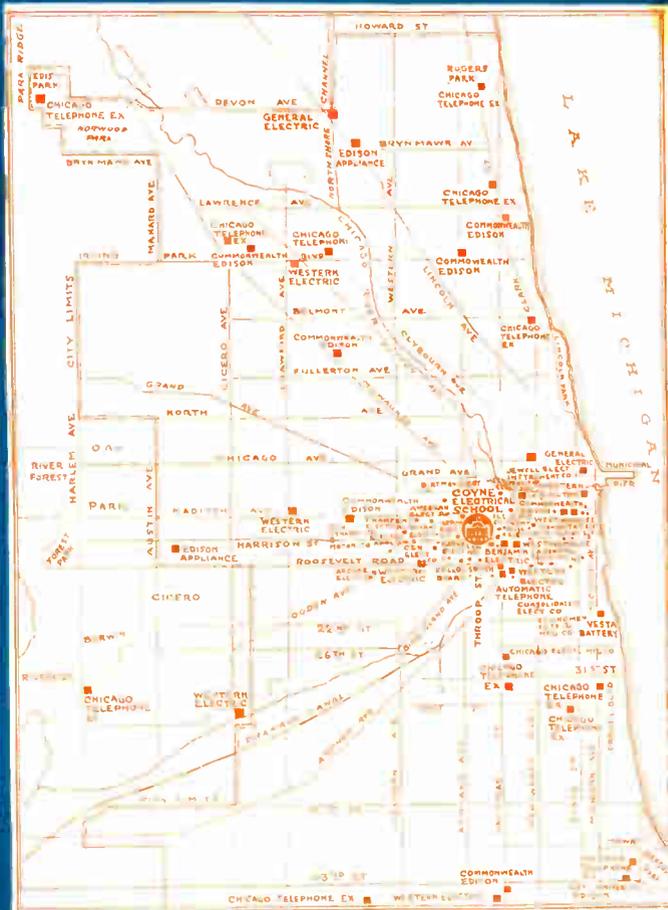
### With Coyne Training Electricity Offers You Untold Opportunities

**C**OYNE offers you this opportunity. Coyne opens the door to a big career in the world's most fascinating and profitable field known to mankind. Through Coyne and the Electrical Industry you can make every wish you have ever had for the future come true. You, my friend, have made a wise decision in choosing electricity as your life's work. Now that you have made that decision make no mistake on your selection of the place to get the training so that all lost motion may be eliminated in reaching your goal.

No applications accepted from negroes

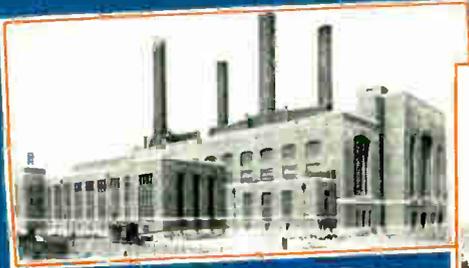
*A. C. Lewis.*

# Coyne is Located in Chicago—Because Chicago is the Electrical Center of the World



**Map Shows Ideal Location of Coyne Among Dozens of Electrical Firms**

The map above shows the location of the Coyne Electrical School at 500 South Paulina St.—right in the heart of the electrical industry—conveniently located to the big plants. Space on this map permits us to show only a few of the hundreds of electrical firms that go to make Chicago the Electrical Center of the World and the ideal place to study electricity.



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



## Why Coyne is Endorsed by Electrical Industry

**C**OYNE has received magnificent support, co-operation and assistance from electrical industry. When you arrive at my school I shall be glad to show you the large number of letters I have from electrical concerns located in Chicago and elsewhere.

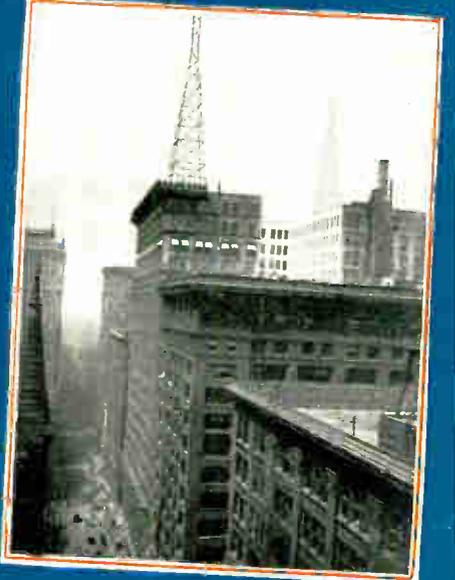
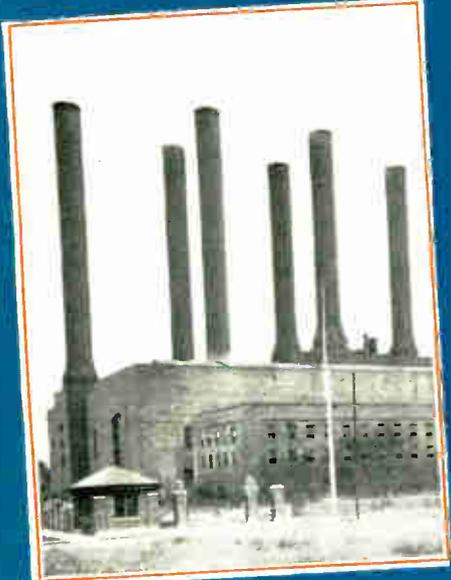
Some are from firms asking information preliminary to granting employees leaves of absence to attend my school, other letters tell about the success of Coyne graduates in their employ, and still others represent calls for trained men to go on their pay roll.

Many firms endorse my school to such an extent that they help pay the tuition of some of their employees whom they desire to receive my training.

Coyne has grown up with electrical industry, starting way back in the nineties, in the early days of electricity, and it is only natural for us to enjoy the confidence of oldest and biggest firms in the industry.

Coyne methods of training sprang from electrical industry itself. Just as electrical concerns gladly employ Coyne men, so have they helped me in dozens of ways to make my training the best. Engineers have visited my shops, gladly offered their ideas and suggestions, and, in turn, have thrown open the doors of their great plants for the famous inspection trips my students make regularly.

Nowhere in the world, I do not believe, could all these things exist except in Chicago, the Electrical Center of the World.



# Come With Me Into The Great Shops of Coyne



**I** WANT you to imagine you are right at my side and that I'm talking to you just as though we were both right here at Coyne. In talking to you through the following pages I'm going to talk just as if I met you right here in my school, for I know it isn't going to be very long before you are here in person.

I'm now going to take you through my shops step by step:

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 picture 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 show you all of the equipment and machinery 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 show you 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 greatest opportunity you have ever had offered you. I know long before you have been through this book you will admit, that Coyne offers you something that cannot possibly be obtained by any other method of training.

## **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 put you right into the elementary room doing the most simple work. There are so many jobs in each department. You start in, for instance, on job number one; when that is done satisfactorily and the instructor has passed your work then you move onto job number two, etc.; when you have completed every job in this department then if you have proven you can do them satisfactory and understand how each one is done, you are passed to the next department where you have so many more jobs. Of course, each department you enter the work is more advanced. But, you've been advancing step by step and without realizing it you are getting into advanced branches of electricity. It has all been so gradual that instead of being hard it has **been so easy it was a pleasure.** You find yourself so interested, so fascinated with the progress you make and the simple way in which you do it that time passes so fast you wonder where it goes.

## **Now Let's Go Through the Shops**

**I**'VE told you these things because I wanted you to be familiar with them before we started our trip through the shops. Now as we go through 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: **There is only one way to learn electricity and that's as it's taught at Coyne.** Now the first department I will take you through will be the elementary department, so before you look at the pictures on this department read the next page carefully so you will understand just what I'm going to show you.

**So Now You and I  
Will Go Through  
The Shops Together**

# Elementary Department

## Here's Where You Start Your Big Money Career

**T**HE first thing that impresses you as we enter this department is the light, airy room. It's just flooded with daylight and fresh air, which is the ideal working condition.

Now in this department we give you, in a simple, clear, practical way an understanding of the electrical laws and principles. You will learn from the very first day that Electricity, even though an unseen force of nature, can be measured and handled with meters and other devices just as surely as water, steam or other forces. Electricity always acts according to definite laws which are very simple and can easily be shown to you on the actual equipment we use here, so that after everything is explained and demonstrated to you, you yourself can work them out very easily. You learn the real meaning of voltage and amperage and all about the different actions of the different kinds of electricity.

After you have been told and shown what these different things mean, then you actually operate and demonstrate to yourself just what each one is. You will find you are spellbound, for it's all so interesting and fascinating.

The thrill of the thing just grips you, holds you tight; you follow every move, hang onto every word, but even though you may not even realize it, one by one, great important facts about electricity, things you **must** know to be a thoroughly trained man, are sinking into your head, **there to stay!** You'll never forget them.

### You Work it Out in a Practical Way

**T**HE whole thing has been so easy and so interesting that before you know it you have gained a knowledge of the fundamentals of electricity. And you will go to your room at night knowing more about electricity than you ever thought you would in a month.

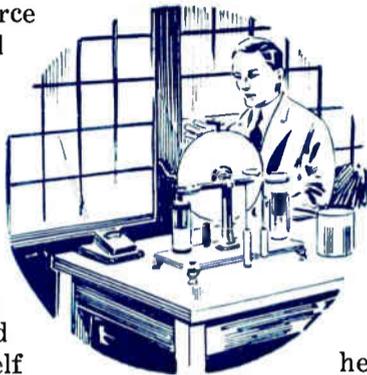
You have worked out all your problems in a practical way. You experiment with actual equipment. The plan is so simple and understandable that you will be amazed at the speed with which you grasp it. Of course, there is a good reason for all this.

It is the system of training I have worked out.

First, your instructor states a definite electrical fact, law or principle.

Second, he proceeds to discuss it with you, goes into all angles of it, and every time he makes a point he "registers" it in your brain by illustrating it on a blackboard and on the equipment itself.

Third, you jot down in your note-book these points as he goes along, and to make 100 per cent sure that you understand everything, practical demonstrations on apparatus are made and you then work out the problems yourself.



### Now You Know What it Means to "Learn by Doing"

**A**LREADY you begin to realize the tremendous advantages the trained man has over the plodder who tries hard at some job or by trying to learn only by books or lessons, but doesn't understand what he is doing.

The man who is in demand in the Electrical Profession is the fellow who can go ahead and work and figure things out for himself. If the boss has got to stand over you and tell you everything to do, he might as well do it himself in the first place. So many fellows, well meaning enough, but misguided, have plugged along for years as a helper, at low wages, trying to learn the great profession of Electricity in a piece-meal, halfway manner. Gradually they learn how to do a few things in electrical work, but that's as far as they can go. Others attempt to learn by just books or lessons, but after trying hard they realize they must learn by actual practice.

### You Now Begin to Feel the Power of Coyne Training

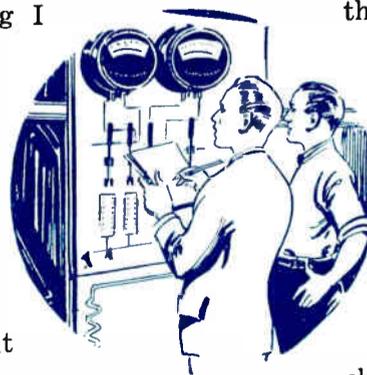
**T**HAT'S where these simple but vitally important electrical laws and principles you learn in the Elementary Department prove their value and put you in the trained class. Because when anything goes wrong, the trained man knows at once what the most probable causes of trouble are, he understands how to trace his circuits through quickly and accurately, and in almost no time he has his fingers on the whole difficulty.

No electrical man can get along and advance without these laws and principles. This is why the Coyne trained man proves himself able to go ahead and install and connect up a piece of electrical machinery without taking up anybody's time supervising him, and in the same way, if the machinery shuts down for some reason, he knows just how to go about locating the trouble.

Your common sense will tell you that the trained man with this ability to "go ahead" is worth far more in salary than the other fellow who is untrained, who has to be told everything, and watched every minute.

### There Are No Classes At Coyne

**W**HAT I mean by this is that you don't move along with a class. Each student has just so much work to be done and for that reason he can go as fast or as slow as **he himself is able to go.** No student is held back by others nor is he pushed ahead to keep up with others, and **no student is ever called upon** to recite before



a class. Here at Coyne you get individual instruction and you take up your problems with you instructors personally. I even use visual instruction, pictures, blackboard illustrations and even motion pictures with your actual work on machinery to make it easier and faster to learn.

We make every effort to duplicate the actual work that you will have to do when you go out to take a job. Many students have told me when they left my school and went to work it was just like stepping from one job into another, and that the work they got here in school was just like they were doing.

### I Don't Use Books to Train You

**I** KNOW from experience there is only one way to thoroughly learn a thing, and that way is to actually do it. I could send you lessons by mail or even motion pictures of machinery, then I could tell you how to do it, but could you after you had studied these lessons and pictures be able to go into a power house, for instance, and operate the machinery you would be called upon to operate? I don't believe you could, for all you would know would be a lot of theory, without any experience. Here at Coyne we give you experience with whatever theory is necessary and we do it in a practical way. First we tell you how a thing should be done, then we show you how it should be done and then we put you on the job and let you actually do it yourself under an expert instructor's supervision.

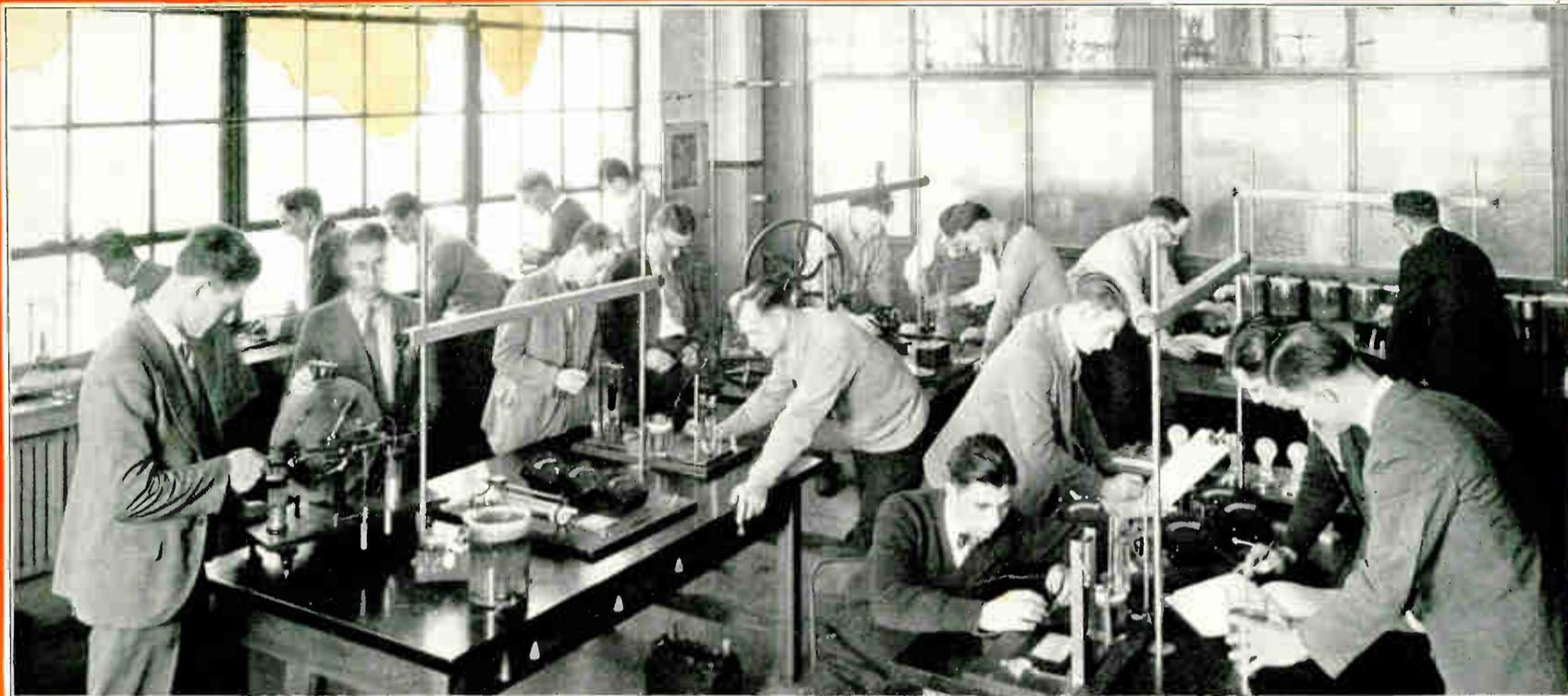
Then after you have passed through these three stages you have learned everything there is to be known about each individual job.

I have told you here just how you will get your training in the first department, and in doing so I have talked about a few other things, but the other things I have told you apply to every department, as well as the elementary department. For instance, the method of "learning by doing" and not with books applies to all the departments in the school.

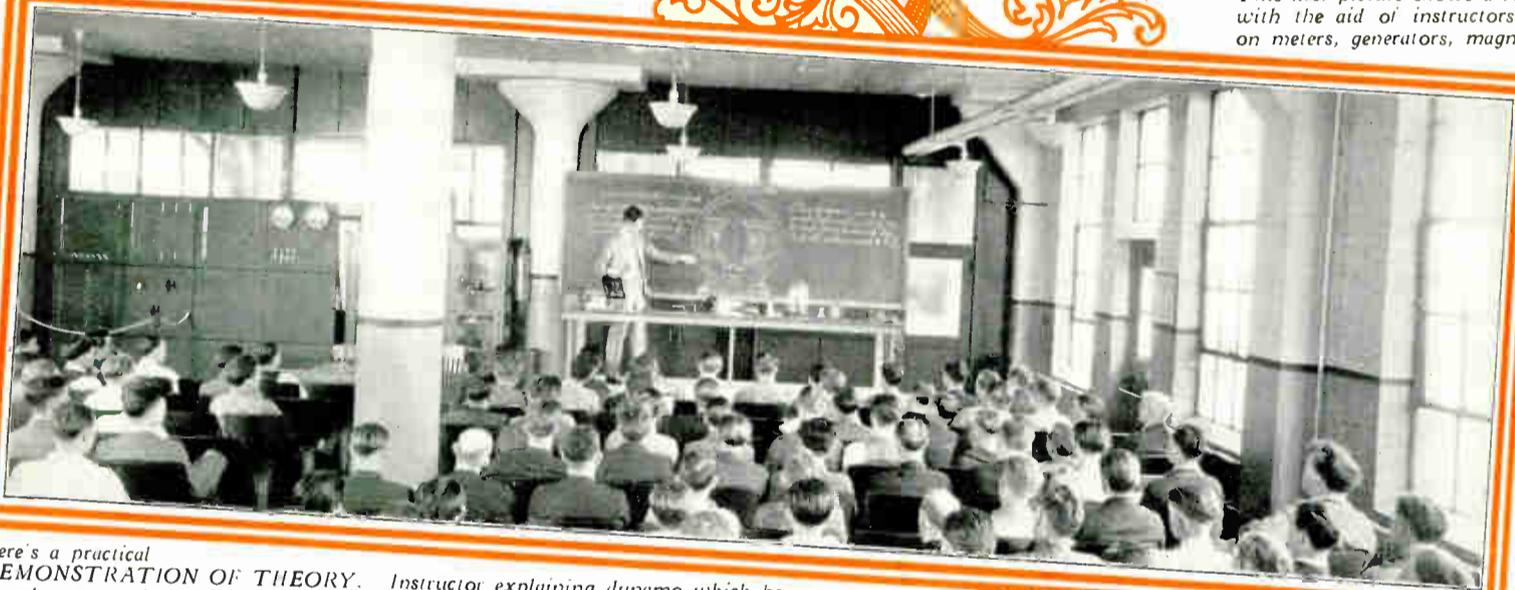
### You Now Have the Groundwork

**W**HEN you have finished your work in this first department you have built the groundwork for the next one, so in your next department you begin to apply it on other types of practical electrical work. But, before you go to the next department, which we call the Circuit Department, look at the pictures on the next page. These pictures will show you just how you will proceed to get the knowledge in your first department—the Elementary Department. After you have looked them over carefully then go to the next page and read of our trip through the Circuit Department.

# Now I Want You to See the Elementary Department



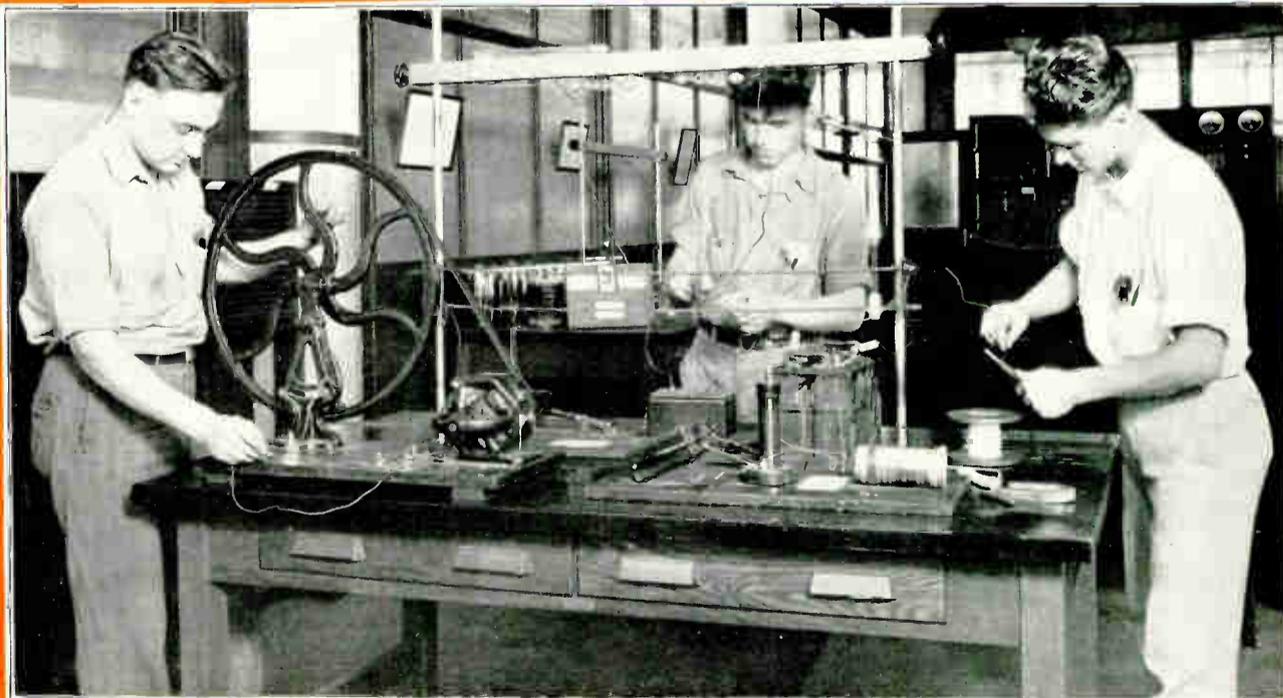
This first picture shows a few of my students, actually proving with the aid of instructors the **ELECTRICAL PRINCIPLES** on meters, generators, magnets, batteries and spark coils, all of which is necessary for the foundation of your more advanced work later on in the course.



Here's a practical **DEMONSTRATION OF THEORY**. Instructor explaining dynamo which he has drawn on blackboard, with parts of machine before him. Each part is explained, drawn out and made very simple, with the actual parts of the machine, far better than trying to **LEARN** by just books or printed lessons.



This picture shows the instructor explaining how the current flows through different resistance coils. Then he shows how this is proved out by the meters which you see on the top of the board.



The students shown in this picture are winding electro magnets, testing different kinds of insulation and actually connecting and running a small generator. They make these practical tests themselves and **UNDERSTAND WHY THEY DO IT**.

# Now Let Me Tell You About The CIRCUIT DEPARTMENT



**T**HE next step in my course is The Circuit Department. New students are usually surprised at the quickness with which they pass their examinations and advance to this next step in their fascinating instruction.

Here the new student begins to apply the laws of Electricity that he has already been so thoroughly trained in—in the Elementary Department. You should just see a new bunch of fellows come into this department—when they come for the first day.

Individual instruction shows them actually how to make Electricity perform common every day uses, like connecting up dry cell batteries to door bells, annunciators, buzzers and alarms, also automatic burglar alarms, fire alarm systems, call systems, and electric door locks, etc.

## No Time Wasted

**A**S a Coyne student, you are trained to do only the things in this department that would be useful to you out on the job—because all equipment is standard and modern and the kind that you will find in daily use wherever you go.

Every fellow at Coyne goes through the same experience, the excitement of arranging and rearranging wires leading to instruments and other electrical equipment—and getting results out of things that have been a mystery before. But it's all so simple. Anybody can do it under expert instructors—and every instructor is an expert in his department at Coyne.

## You Advance Rapidly Step by Step

**Y**OU are continually learning something new—and you are urged to take your time. No other student can hold you back by being slow—nor can any other fellow push you ahead faster than you care to go. Remember—you are trained at Coyne as an individual student. You can take all the time you want—it costs you nothing extra, re-

gardless of how much time you take at Coyne.

## You Learn by Actually Doing

**W**HEN my Circuit Department instructors train you to connect up a telephone—it is a real telephone, modern in every respect—a live telephone—one that you can really talk over when you have finished the work. If you follow this branch of the course after graduation—the tools and the instruments handed you on the job to be done will be no puzzle to you. You will be familiar with all the apparatus used.

## Working From Your Own Notes — Not Books

**Y**OU work out each new step from your pencil note book—and you take these notes from your instructor's blackboard after everything has been carefully explained. These notes are yours, together with all the rough sketches you make—they are your personal property for any future reference you may need.

The instructor now assigns you to your place at a bench where all the equipment necessary has been made ready for you—then from your notes you begin to make the connections which have been made thoroughly clear to you—the instructor always being close at hand to help you when you want him.

He shows you how to wire up the simplest kind of door bell first, and then you advance step by step to the bigger systems for modern burglar alarm and signal systems.

And on every job you see the proof of your work and advancement, by the actual operation of the bells, lamps and relays when you get your wires all on and turn on the current.

Here is where you really begin to make electricity work, and you get a real thrill out of these interesting jobs.

## My Circuit Training is Building on Your Foundation

**Y**OUR note book always carries a clear picture and simple explanation of what you have learned and you will have use for it many times after graduation. I am trying to show you that the work of the Circuit Department at Coyne is of the greatest importance to every new student because your training here is the foundation for your success in all the departments which follow, and will be a great help to you in wiring your power jobs and big machines in the later departments. Some simple rule you learn in Circuit work will aid you on almost any electrical duties which fall to your hand after graduation and getting out on a Big Pay Job.

In other words, while you are learning that branch of the profession called signal and alarm wiring, you are also learning general circuit tracing and testing, which is one of the most valuable things for any maintenance electrician to know.

## No Expense Spared

**T**HAT'S why I have gone to so much trouble and expense in making the work so interesting; that's why I use all the most modern devices and equipment to see that you learn only the things that will be the most useful to you; I insist that your training must be thorough and complete in this department because I mean to see that you get full advantage of the big opportunities Coyne offers you.

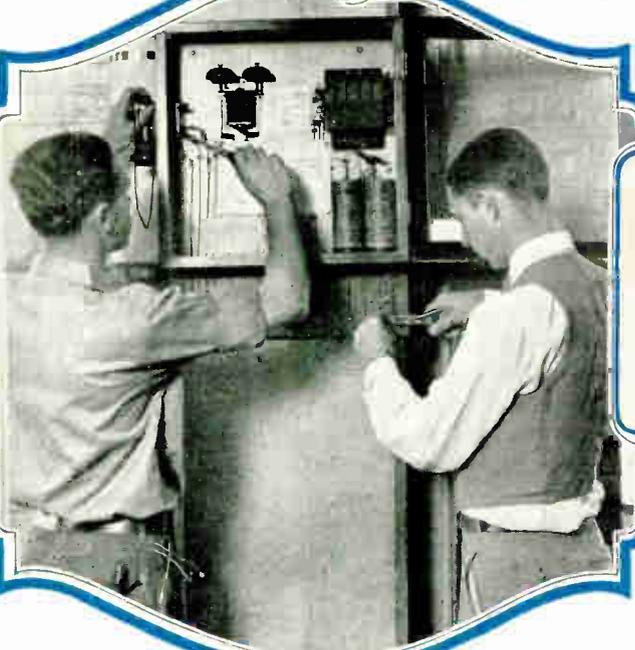
Now I have told you about my Circuit Department—so turn the page and you will see actual photographs of Coyne students busily engaged in working out their fascinating training on live electrical equipment.



# -Then I'll Show You My Circuit Department



Here is a general view of part of my circuit department. You see the fellows wiring up and testing interesting burglar alarm, door bell and signal systems. On this work is where they commence to put the current to work, and apply many of the things learned in Elementary Department.



These men on the left are wiring a telephone. They learn the use and operation of every part, and then actually talk over it to other phones in the department when they get it wired. Proving out their work in this way gives them confidence.



The fellows above are getting real experience on circuit tracing and testing on advanced alarm and signal systems. And they keep a copy of the diagram for each job, and their notes of the things they test and prove out in wiring it.



And here you see them overhauling a telephone, and testing various phone parts, such as magnetos, bells, receivers and transmitters. This practical work makes it easy to understand telephones and fits them for the real jobs later on.



Wiring and testing special equipment for proving Ohms law and effects of electricity with meters and instruments. These students you see are experimenting with spark coils, neon tubes, transformers and carbon arcs.

# Construction Work is a Big Pay Field I'll Now Tell You About This Department!

**H**ERE you get into bigger work, and start to do wiring for light and power systems.

This is a very important branch of electrical work and offers splendid opportunities to our graduates, in wiring houses and factories, for lights and motors.

The trained man can make very good money working for contractors, or to the fellow who wants to go in business for himself, it offers wonderful opportunities to **START A NICE BUSINESS** with very little money necessary to get started.

In any community where there is electric power there are houses, farms, factories or other places to be wired up for lights and power. Many of our graduates have gone right into business when they left my school and have worked up a wonderful business right in their own communities.

Now in this department you start off with the simplest work first and make your first splices.

The instructor shows you how to properly strip wires and how to make the common and best splices. He shows you how to make them correctly and to avoid the common mistakes.

Then after he has shown you how, you make a number of splices yourself and have the instructor inspect them.

When you can make them all O. K. he shows you how to solder them.

## The Instructor Works With You

**R**EMEMBER the instructor is always near to help you and show you the best methods, from long years of experience. In this way efficient teaching and kindly advice save you the years of stumbling along and "picking it up" a little at a time by the old apprenticeship method.

You next go to a bench where you wire up several different systems of switches and lights.

You learn the purpose of conduit (the pipe used to run wires thru) and the use of various fittings, and what the different kinds of switches are for.

When you have connected all your wires and taped your splices the instructor inspects the job and shows you how to test it out with the current, to prove that all joints and connections are O. K. and that the lights work as they should.



## Coyne Training Thorough and Practical

**A**ND now, you advance to the house wiring section, where we have built up a complete system of skeleton houses, for you to actually wire up the same as you would out on the job.

Here you pull wires in longer runs of conduit and learn BX (or armored cable) and knob and tube work, and all the common types of wiring. You install a complete system of lights and switches and convenience outlets.

You learn the most up-to-date methods and materials. And you do the work according to the national code or the rules by which practically all wiring must be done nowadays to pass the inspector and to make a safe and dependable job.

And while you are doing this you have at all times the help and advice from your instructors, so you can handle the really big jobs right, when you get out in the field.

Now when you have this job all wired, you learn how to test it, to prove that there are no short circuits, open circuits or "grounds" at any of the splices or connections.

## Now You Can Turn On The "Juice"

**A**ND now you are ready to connect the lamps and switches and then turn on the "juice," and what a thrill, when you see your own first wiring job in operation, and the lights all respond to your touch on the switches. Then is when you will say you're glad you chose the Coyne method of practical training.

We give you special practice in bending, threading and cutting conduit, and the use of the proper tools, and fittings for this kind of work.

And then you go to a special motor wiring job and get your first power wiring. Here you wire up motors, and starters, with conduit systems, and when you get the wires all in and tested you turn on the current, and watch the motors run.

Imagine hearing the smooth hum of the motors, running on "juice" that comes thru the wires you installed yourself.

## Illumination---A Fascinating and Good Paying Field

**W**ITH the tremendous increase and improvement in lighting systems everywhere today, and the demand for the most complete and efficient lighting in all new buildings, and the remodeling of thousands of old inefficient systems, this branch is calling for thousands of well trained men at good pay and the finest kind of work.

I teach you the simple facts about the nature of light and principles of illumination, the types of lamps and fixtures to use for various jobs and how to determine the size and number of them, and the amount of light required for various classes of work. Also how to lay out lighting systems.

And you wire up and operate sign flashers, and learn flood lighting, and advertising illumination. All types of lights used for movie-studios, and airplane landing field lighting. All of these are very active fields and employ thousands of electrical experts.

## Big Demand For Trained Men In Refrigeration

**T**HOUSANDS of electric refrigerators are being sold and installed every month. Think of it. And the manufacturers, dealers and contractors are calling for trained men to install and service them all over the country. Coyne graduates by the dozens are cashing in on this interesting, pleasant and good paying work. I teach you the operation and care of refrigerators on actual equipment.

Many of my graduates are making good money or running a very profitable business of their own, just specializing in illumination, wiring, or refrigeration.

But others in smaller towns must handle several branches to make a good business, or hold the best jobs.

So right here I want to make a point, and make it strong. While there are many branches of work covered in my complete course, that graduates can profitably specialize in, if they are thoroughly trained in all branches. Yet in many other cases, in order to get in on the biggest jobs they must be able to handle or take charge of several branches. That is why I insist on giving every one of my students a thorough course, and complete practical training in every department.

Now that I've told you about my Construction Department I want you to see it on the next three pages.



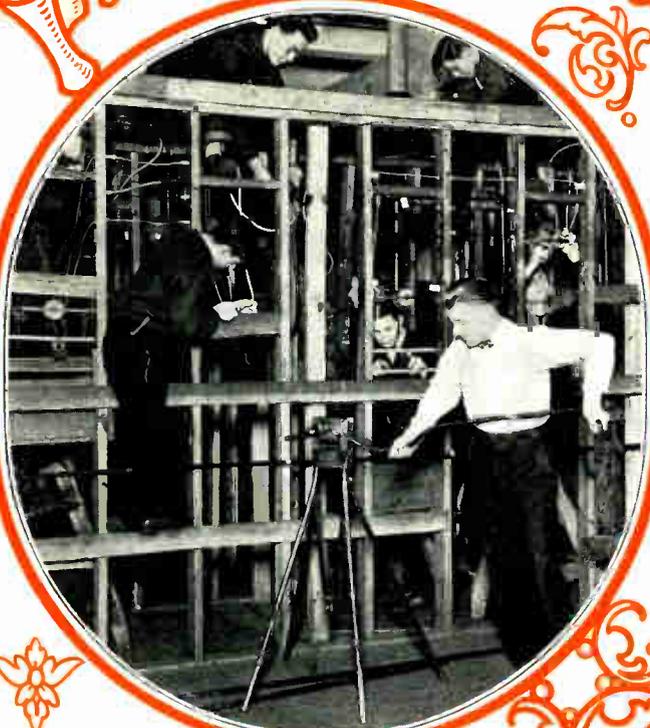
# On This Page and the Next Two I'll Show You *My* **CONSTRUCTION DEPARTMENT**

This work offers you big pay and the chance to go into business for yourself

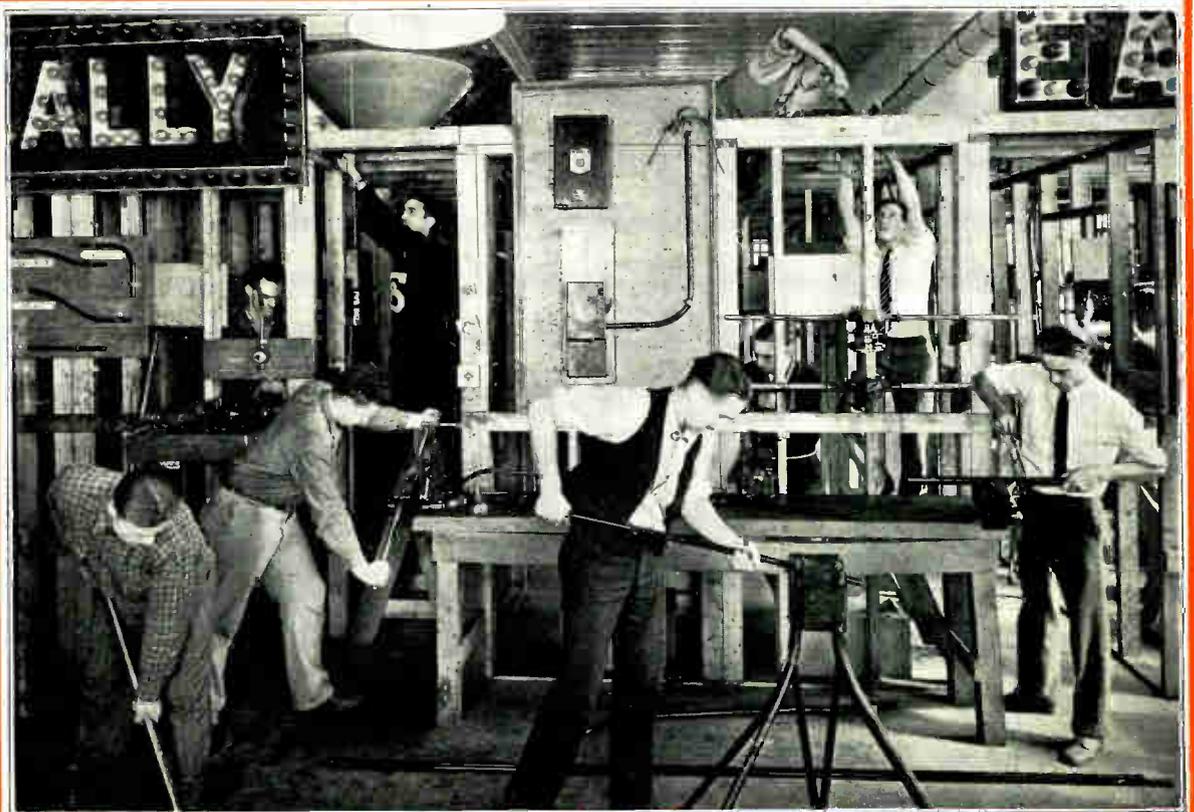
with very little money invested and opportunity to make up to \$15,000 a year.



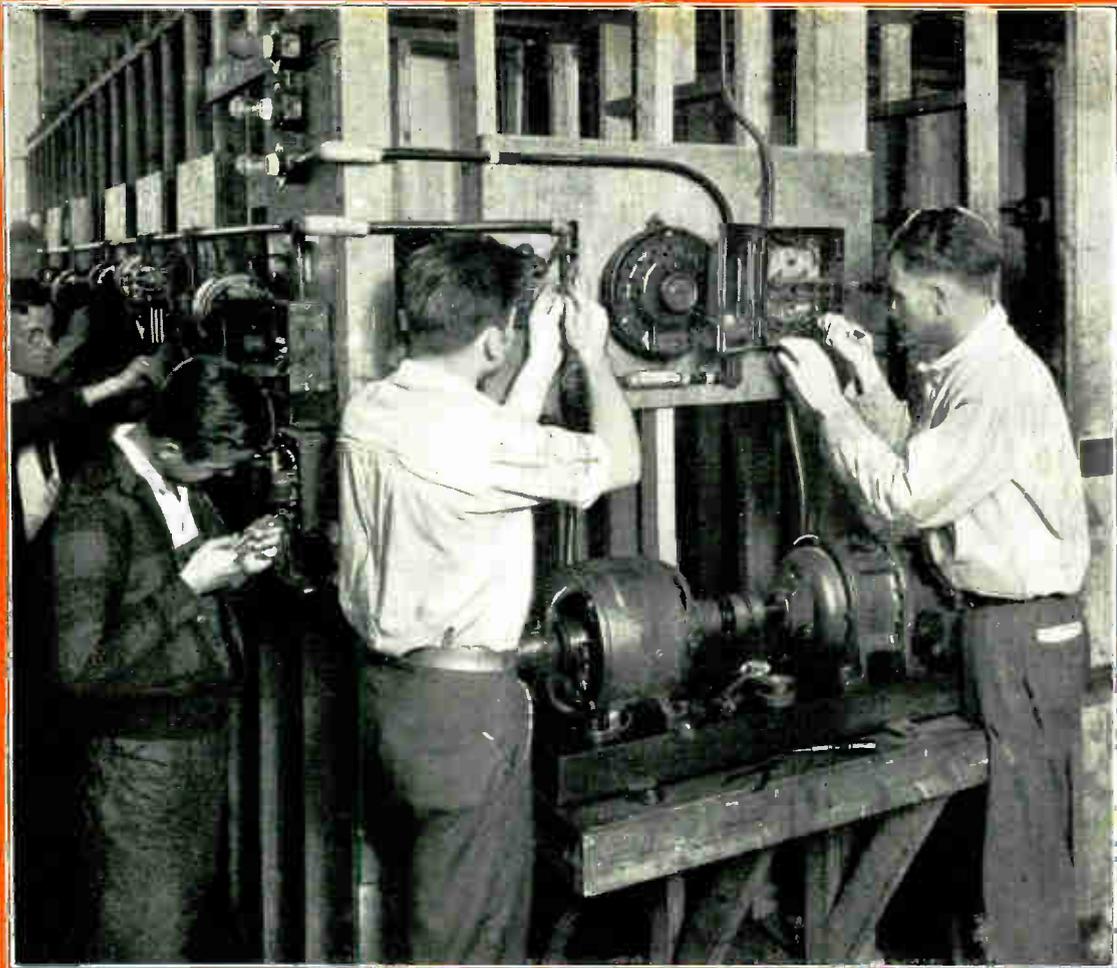
Here you see a general view of a section of my construction or wiring department. Notice the large and well lighted shop. The men in this picture are wiring and testing light control circuits in their first small conduit layout, and getting real work with the tools and different kinds of switches.



These fellows are putting in wiring in conduit, BX, and knob and tube, in the actual house frames, and learning to wire lights and switches the same as they will out on the job.



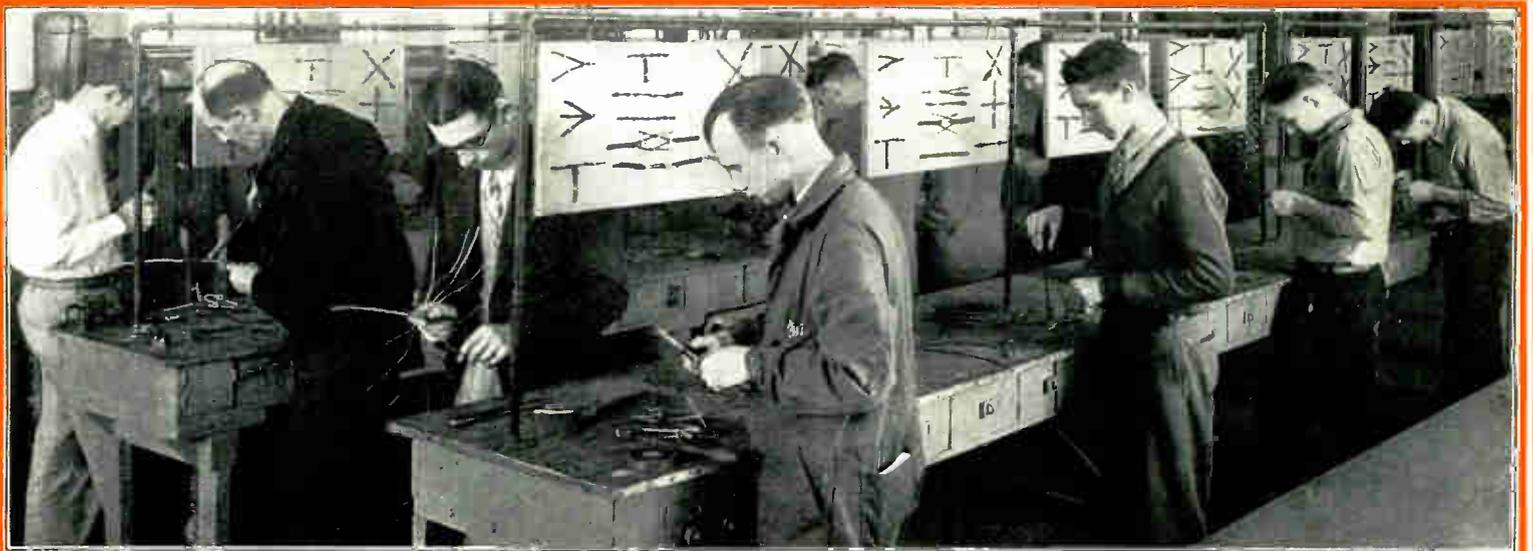
And this is how you learn to handle conduit. Most of the new and modern wiring for light and power is run in these pipes called conduit. And a practical man working in this line, must know how to bend, cut and thread this conduit. These men are getting actual work with the threading dies, bending "hickeys",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



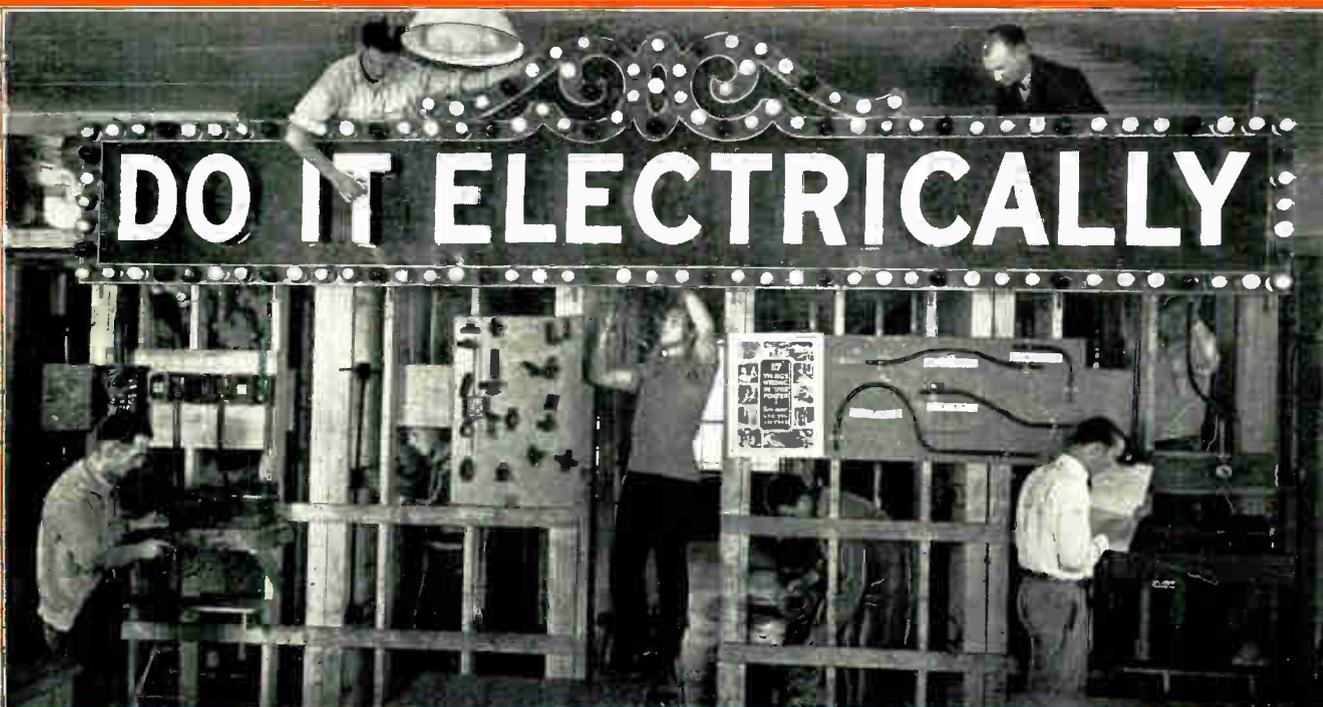
Here are some of the motors the fellows wire and test in this department. This actual work teaches them how motors and starters must be wired according to the code, and how to test to locate troubles in the wiring, which might cause motors to fail to operate. And it gives them still more practice in the use of tools. Don't you agree that to "Learn by Doing" is certainly best?



My shops are kept up-to-date. Here is an electric range, with automatic temperature control equipment. These fellows 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 good jobs for trained men to wire and repair them.



# DO IT ELECTRICALLY



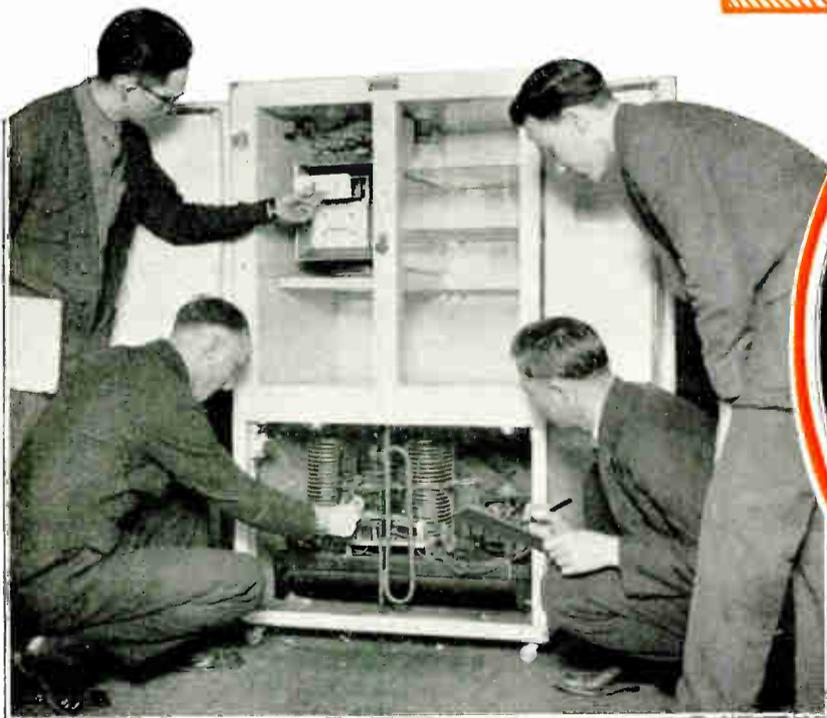
This is your first job in this department. After the instructor shows you how to strip the wires and make the common splices, you make them yourself and solder them. Then he inspects them.

At the left is one of the big modern electric signs which you will learn to wire and operate. These men are wiring up the motor driven flasher control, and testing the circuits and wiring on the sign.

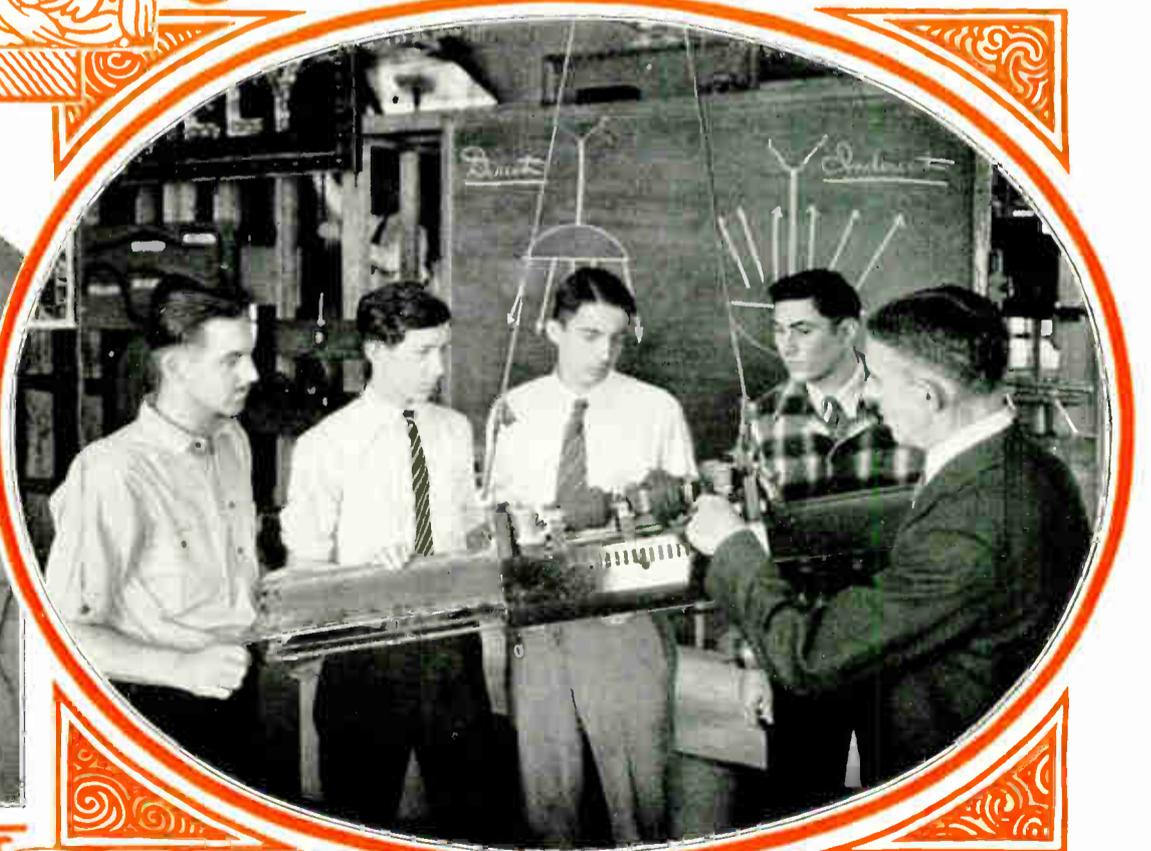




Here you see part of the illumination section, and some of the different kinds of light fixtures you work with. The instructor in the right foreground is showing students how to test the amount of light from each fixture with a "foot candle meter." You learn which type of fixture is best for home, office,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



These fellows are getting an explanation of the operation and care of this electric refrigerator. There are many good jobs for trained men in selling, installing and servicing these machines, and it is a very interesting and good paying branch of work.



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 can qualify for the better jobs.

# Right Here I'll Tell You About Armatures— *The Heart of Motors and Generators*

## Why I Want My Students to Have Complete Armature Training

**I**N this department you get thorough and practical training in winding, testing and repairing armatures and stators, both small ones and those of large power motors and generators of many horsepower.

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 to be wound.

## Steady Jobs and Big Pay in Armature Work

**T**HINK of the hundreds of thousands 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, can be sure of a good paying and steady job in almost any section of the country.

Power plants with their generators and motors, street railways and electrified steam railways with their big motors, hotels, and office buildings with elevator motors, and now many electrified ships, are all creating a great demand for skilled armature winders at interesting steady jobs and big pay.

## Easy to Understand—Personal Instruction

**I**N this department, your 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 magnetism around its surface 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, in this department you are learning a lot about the operation of motors and generators. And right here you begin to see the need and use of many of those important laws

and rules of electricity that you learned in the Elementary Department. All of our departments work together to make your whole course easy and complete, and just a gradual step by step advancement, until you are right on power machinery almost before you know it.

And you will be surprised how simple and easy even the advanced work is, 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 the ready help and advice any time you need it. All of your windings are done with real copper wire on actual armatures.

## You Make Your Own Windings Run

**W**HEN you have the coils all in he shows you how to test each coil 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). Then you learn how to make a sketch or winding diagram, to make your connections from, so you will be able to do windings 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 what?** Why, you put it in a motor frame and actually run it. **What a "thrill"** you get out of it. When you see the armature you wound with your own hands spin merrily in the motor, you just feel that you can wind any armature then.

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

## Now You Wind Large Armatures and Stators

**W**HEN you have finished your windings on small armatures and stators, you are ready to go to the large 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 any of the large armatures and stators when you get out on the 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 a modern 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 special instructions on all types of material and tools to use on different windings, and the best shop methods for winding and testing.

## Training Is Thorough

**I**SEE that you get thorough training on 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 will always 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 in this department and the thrill and confidence that comes of seeing your own windings work in the machines.

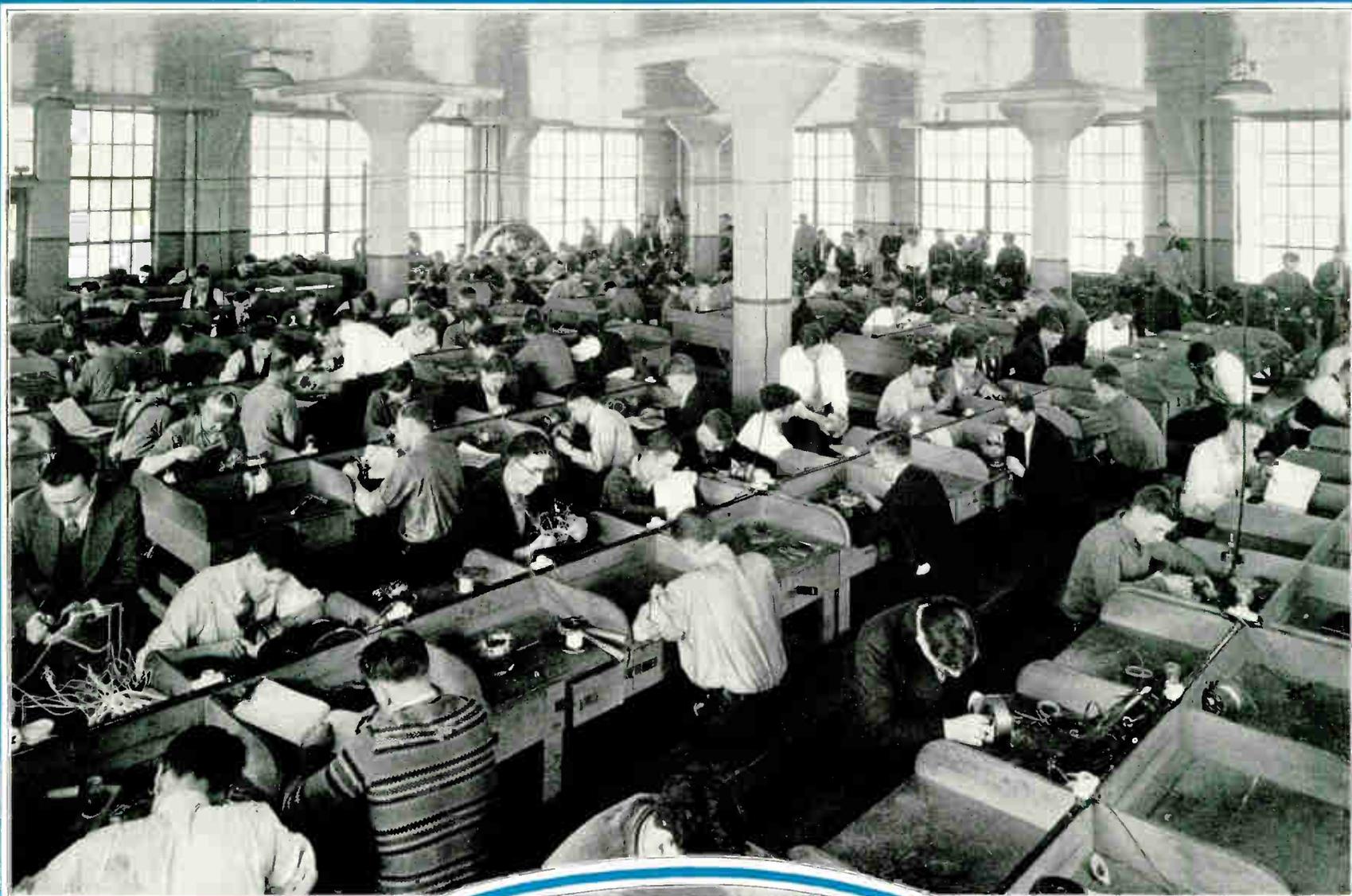
So now let's see the armature department on the next three pages.



# This and the Following Two Pages Shows You *My* **ARMATURE DEPARTMENT**

You will actually build both Armatures and Stators and learn what makes motors run, so when trouble develops on any job, you

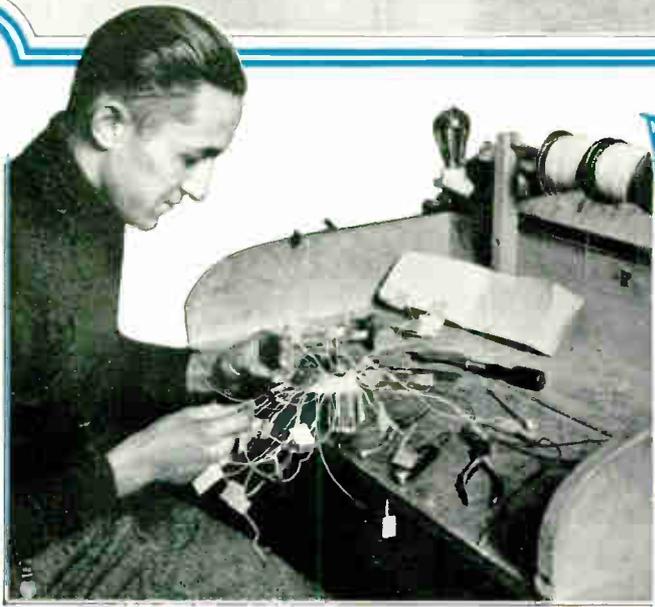
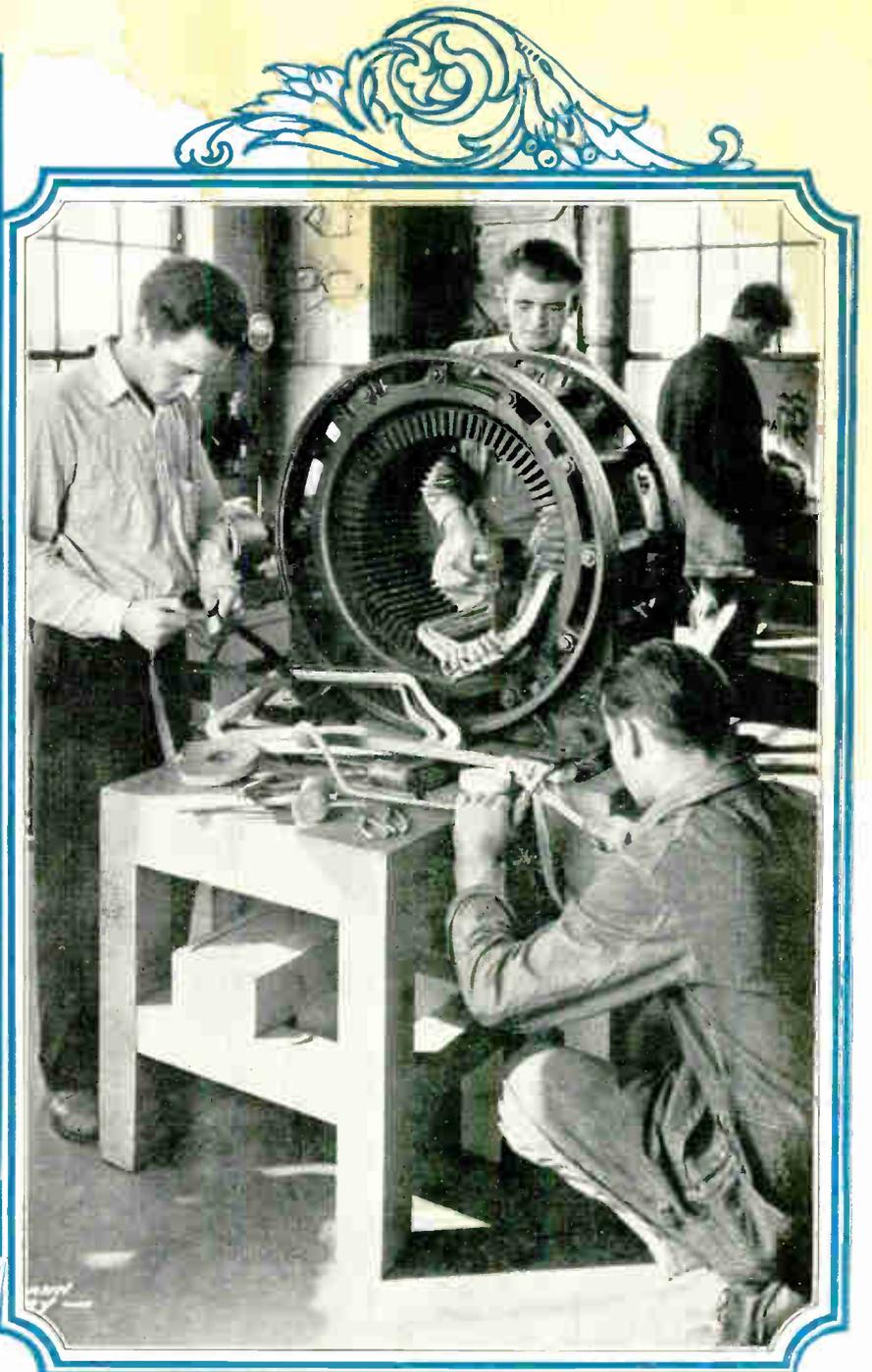
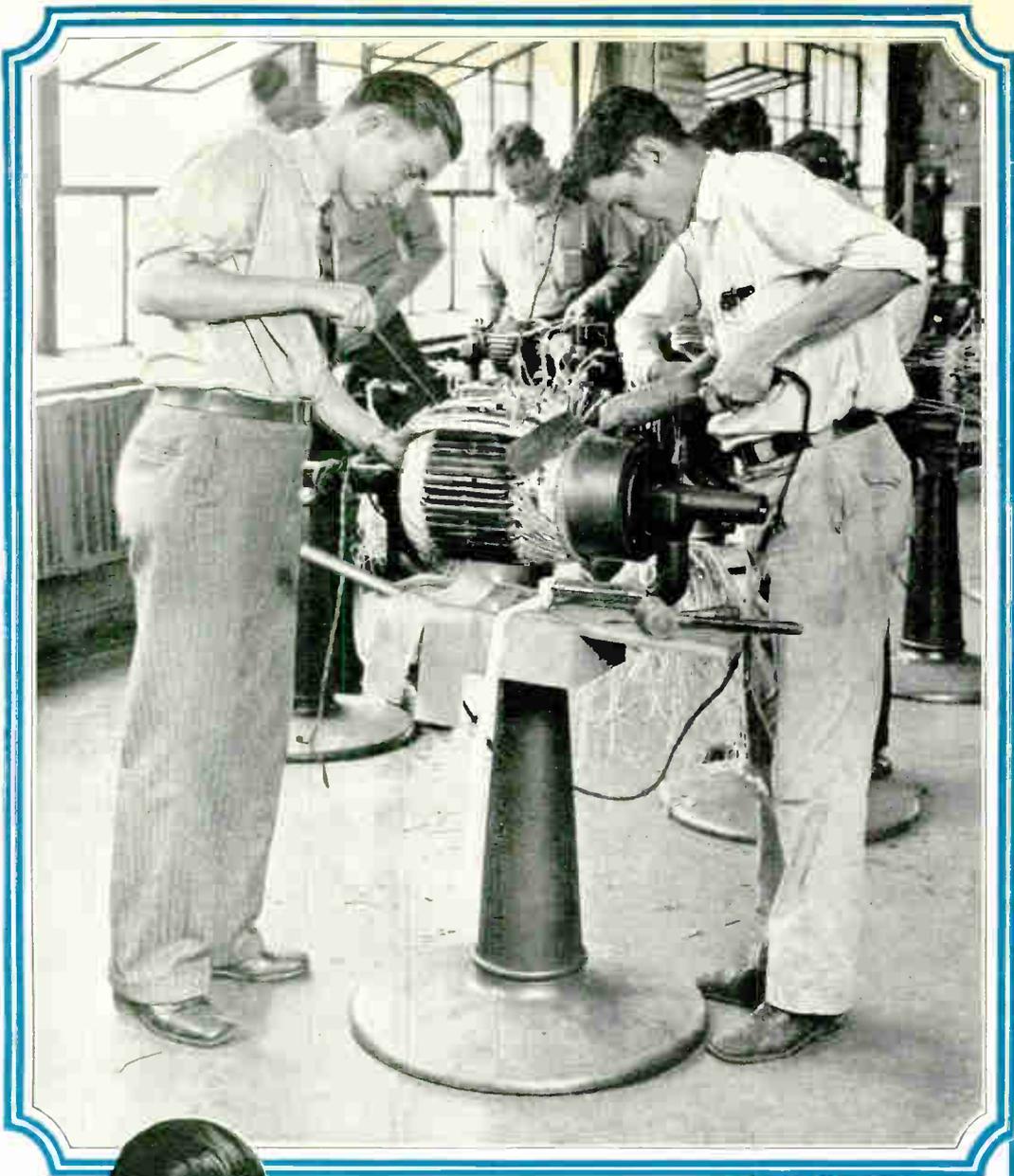
can correct it quickly. That's why COYNE men have the confidence of electrical employers and command big salaries everywhere.



Here you see a general view of part of my Armature Department. And you will notice the large, airy, and well lighted shop these men are working in. They are winding small armatures and stators with wire coils. This is their first job in this department. Their next jobs will be on large armatures. And you can see instructors in the foreground, helping first one man and then another.



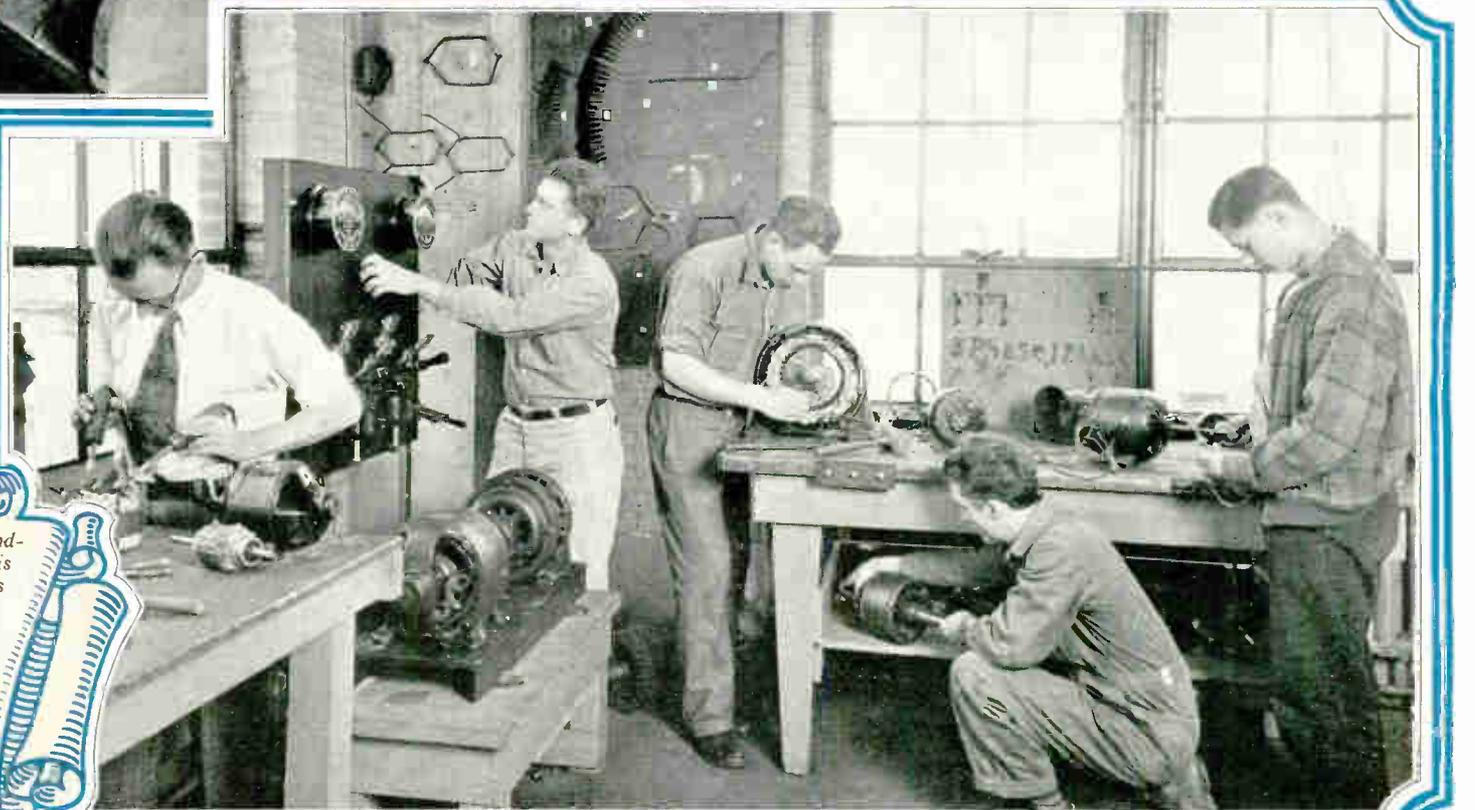
These fellows have finished their first small winding and here you can see them winding and testing large armatures and stators. In the background you will see men trueing up a commutator in a lathe and others winding a 200 h. p. A. C. stator. And in the foreground one of the instructors showing a student how to test his finished winding, before connecting up the leads.



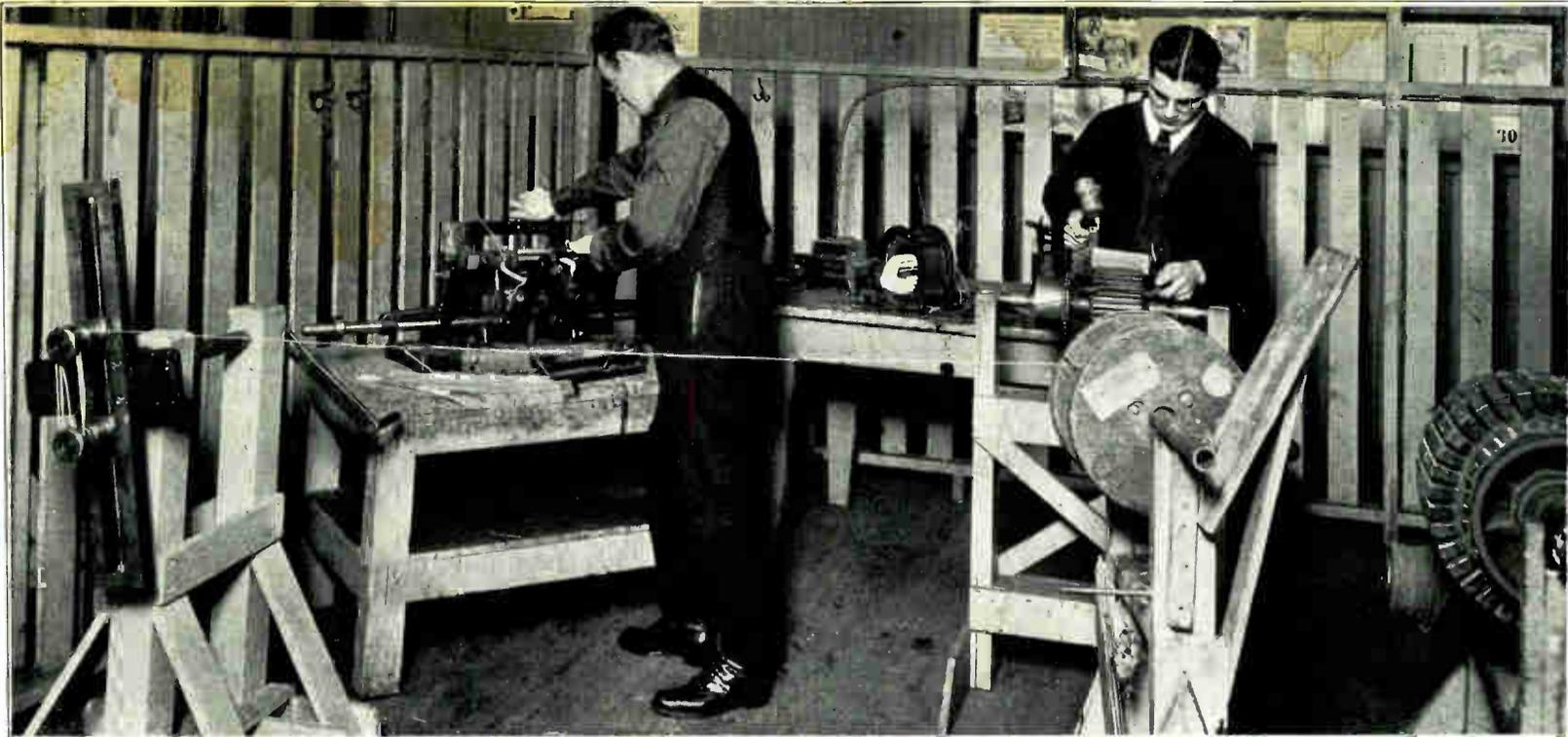
Above you see my students removing part of an armature winding, to repair some bad coils. This kind of real experience teaches them the proper use of soldering irons and tools, and the right methods to save time and do first class work. Isn't this a lot easier and better than book teaching?

And these men are taping and putting in new coils in a 200 horsepower A. C. stator. This is the kind of actual work that makes them able to handle the big jobs in the field. You don't forget this kind of experience, and when you have done actual work like this you will have the ability and confidence to tackle repair jobs anywhere.

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 machines get you acquainted with the use of tools and handling of coils, so you are ready for the large windings you do next in this department.



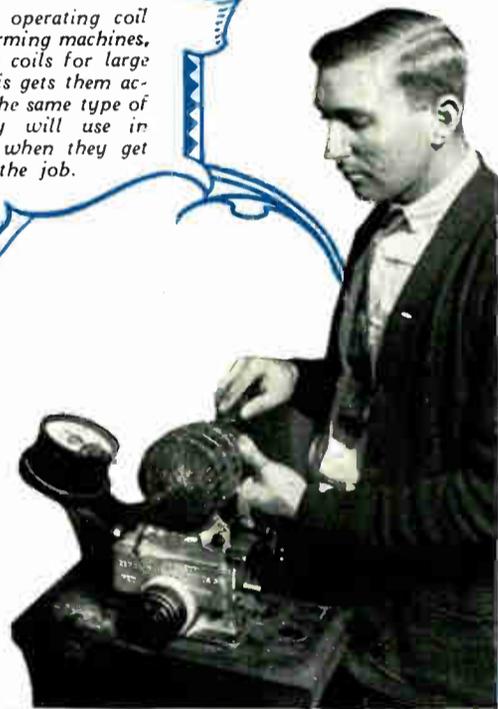
These fellows are testing finished windings of armatures and stators. This is the way they find their mistakes and learn to make their windings correct, so they can become perfect in their work. Testing armatures and stators and locating faults in the windings, is very valuable to any maintenance man whether he follows armature winding or not.



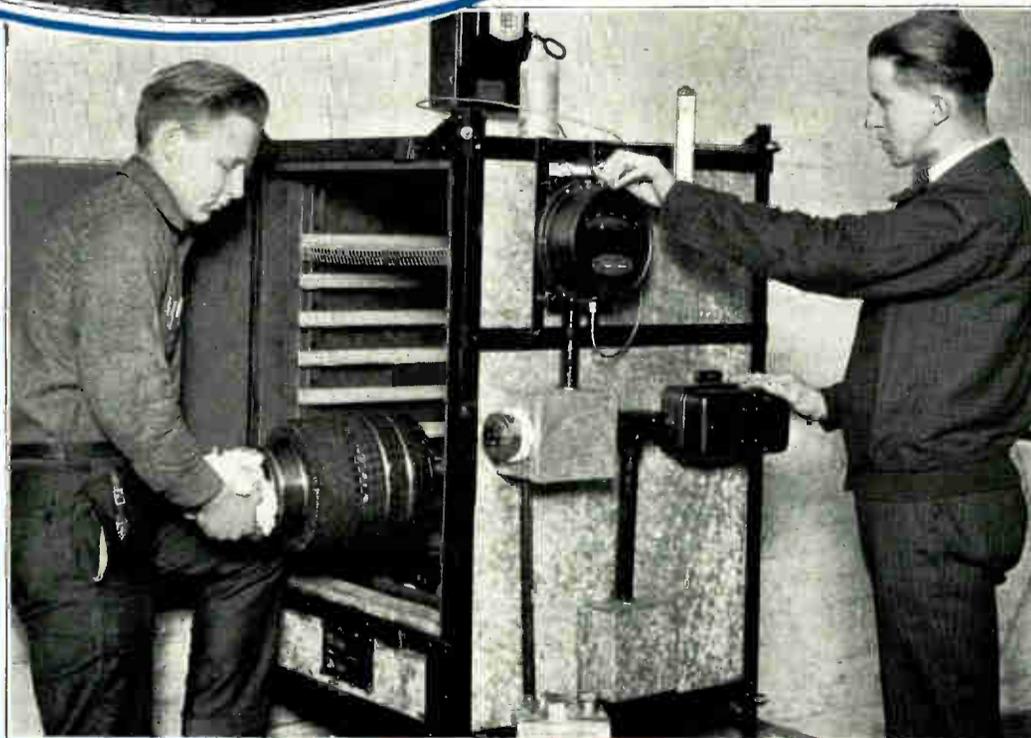
These men are operating coil winding and forming machines, and making up coils for large armatures. This gets them acquainted with the same type of equipment they will use in winding shops when they get out on the job.



And here they are getting special instruction 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 man is testing an armature on the growler, a machine for quickly locating trouble and faults in windings. This kind of instruction enables my graduates to get right at the cause of armature troubles without waste of time.



These fellows are operating the electric bake oven, and just removing an armature that has been wound, covered with insulating compound and baked, as all armatures must be. This treatment keeps out the moisture, oil and dirt that would otherwise ruin the winding.



# Now I'll Tell You about Power Work in the Direct Current Department

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

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

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

For example, the simple laws and demonstrations of magnetism you had in the Elementary department will make it very easy for you to understand the operation of the largest motors and generators. And the work you have had on armatures will help you to understand these machines in which they are used, still more thoroughly.

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 easy and simple we make 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 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. Many big factories that operate their own power plants, use D. C. equipment, and so do many small towns.

So you see this is a very broad field, and offers splendid opportunities to thousands of trained men, in steady work and good paying jobs as power plant operators and motor maintenance men.

## Complete Equipment Needed For Practical Training

**R**EALIZING the great importance of this field, I have accumulated thousands of dollars' worth of splendid machines of all sizes and types to make your work complete and practical in this department. You work on motors and generators of many types, and from the smallest to those of many horsepower. Controllers of all common types, from the simple hand operated ones to the most modern automatics.

Even a complete power plant switchboard is provided for your final operating experience.

## Motor Training Easy and Practical

**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 black-board sketches, some of which are in various colors to make it easy for you to understand every point.

He goes over with you briefly the work you had in the Elementary and Armature Departments that applies to these machines, and sees

that you get every principle of them thoroughly. Because a proper understanding of their operation will make you able to wire them up or find and fix their troubles much quicker when you get out in the field.

When you understand motor operation, he tells you the different types of motors and how they operate and where each is used.

## Plenty of Personal Help

**T**HEN you go right to the machines in the department and he shows you how to connect up and test and run the actual power motors. And in this way you prove out everything he has told you and by doing the work on the

machines yourself you always remember what you learn.

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 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 note book, so you can easily refresh your memory wherever you have need for it.

## Thorough and Complete

**Y**OU 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 qualifies you to hold the better jobs when you get in the field.

Your work on Controllers covers simple hand operated starters, as well as the more advanced types which are used in many big plants. This gives you thorough instruction on all the parts of each.

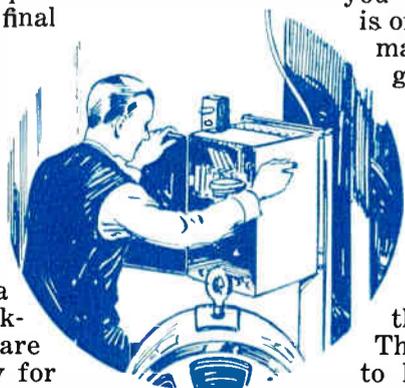
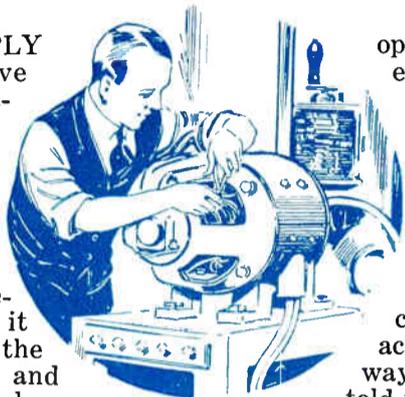
## Instructors Work With You

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

Your instructor will often cause something to go wrong with a machine and then tell you to find the trouble and fix it. It is often necessary for you to take the machine completely apart. If you get stuck he is always near and ready to help you out, and show you the right way. This overhaul work gets you familiar with the proper use of tools.

You also learn 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 can make it save lots of time on certain motor jobs for your employer.

With such Training as this, is it any wonder Coyne men are in demand?



## 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 these actual machines until you thoroughly understand generator operation, care and repair.

## Power Switchboards

**N**OW you get special instruction on D. C. switchboards and how they are constructed, wired, and operated.

You learn the kind of materials used for the panels, how they are erected, and how the meters and switches are attached. Then how to put on the bus bars (or heavy copper bar conductors) and control wires.

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 complete black-board diagrams which you can copy and keep, and then 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 will later, in some power plant.

You are instructed in common power plant operating rules, so you can go about it like an old timer when you get out on the job.

## Meters and Instruments

**N**EXT you learn about meters, voltmeters, ammeters, watt-hour meters, demand 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 learn how to read them, and how to test and adjust them and the different uses for each.

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

## Thoroughly Trained

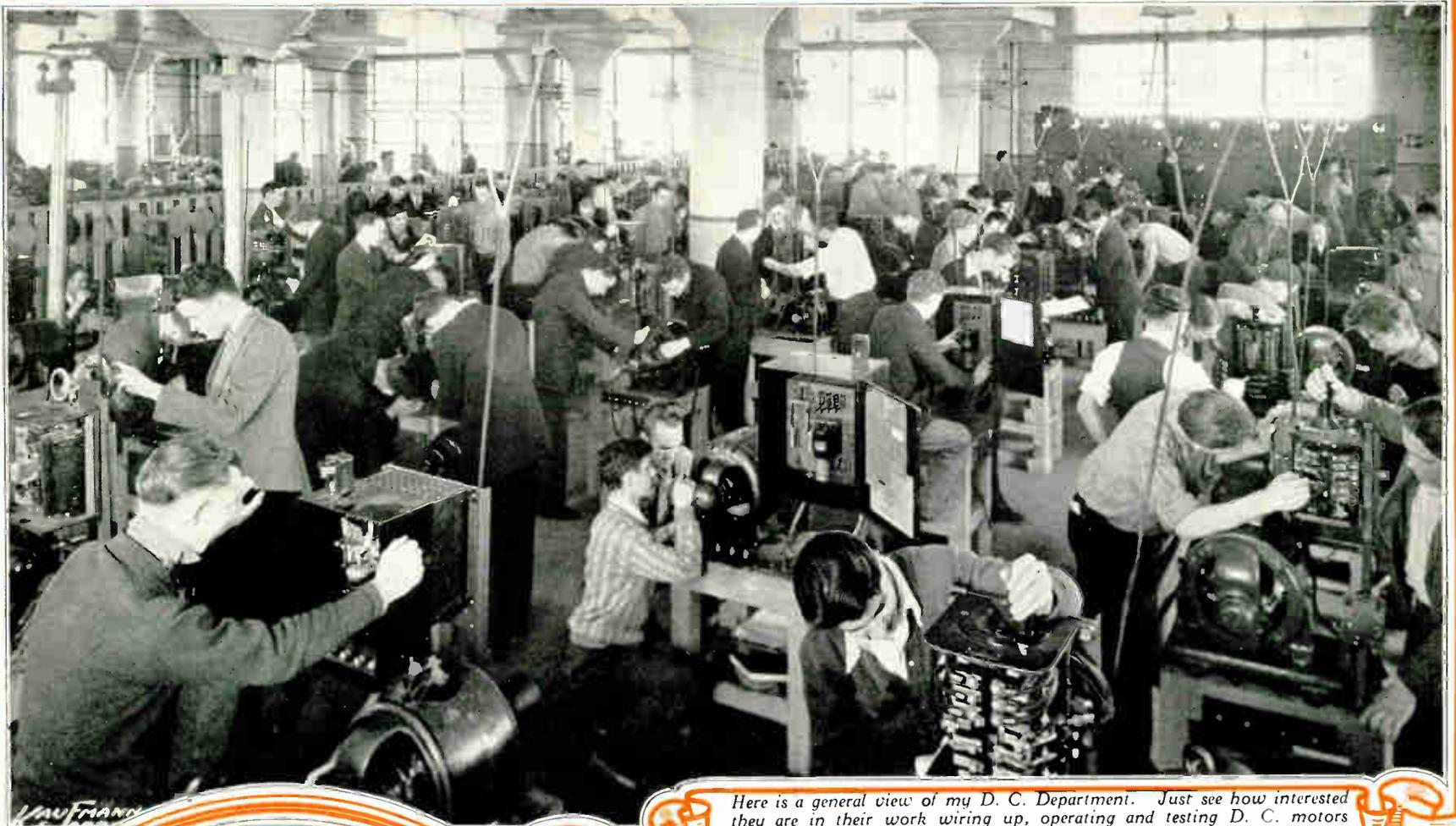
**S**O you see, everything needed to make sure of your success in this great field of Direct Current is thoroughly covered, with the most interesting and practical work on actual machines and equipment, and plenty of patient help and capable, friendly advice from your instructors at every step.

When you leave this interesting department you will feel sure of your ability to go out and master D. C. work, and qualify for the big jobs in this great field. The work in this department has also laid a great deal more of the foundation for your work in the greatest branch of the entire electrical field, Alternating Current, which is covered just as thoroughly in my A. C. Department, which is next. But before you read about this, I want you to see my D. C. Department on the next three pages.

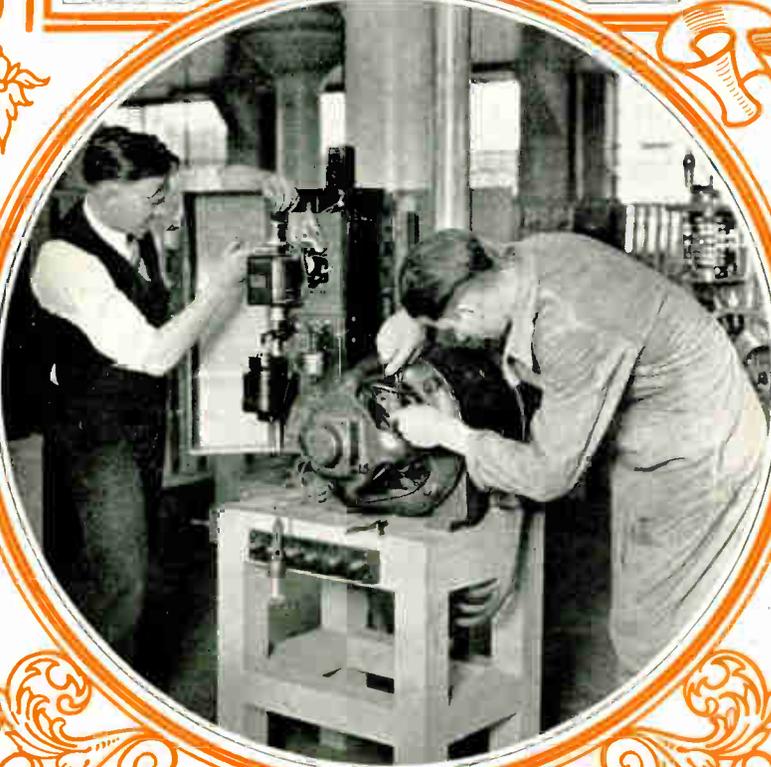
# On This and the Next Two Pages You See My Students at Work in the Direct Current Department

The work you do on this kind of Direct Current Machinery fits you quickly for the Big Pay Jobs in "trouble shooting", repairing and maintaining power

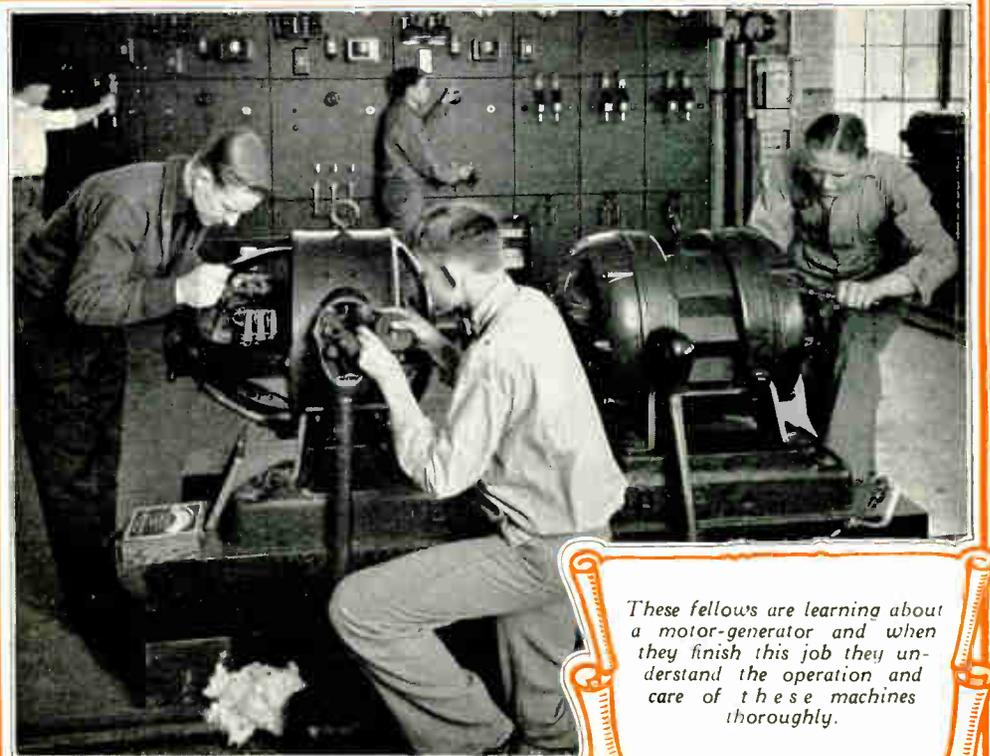
equipment in Power Houses, Manufacturing Plants, Industrial Concerns and on Railroads. Just imagine yourself as one of these students.



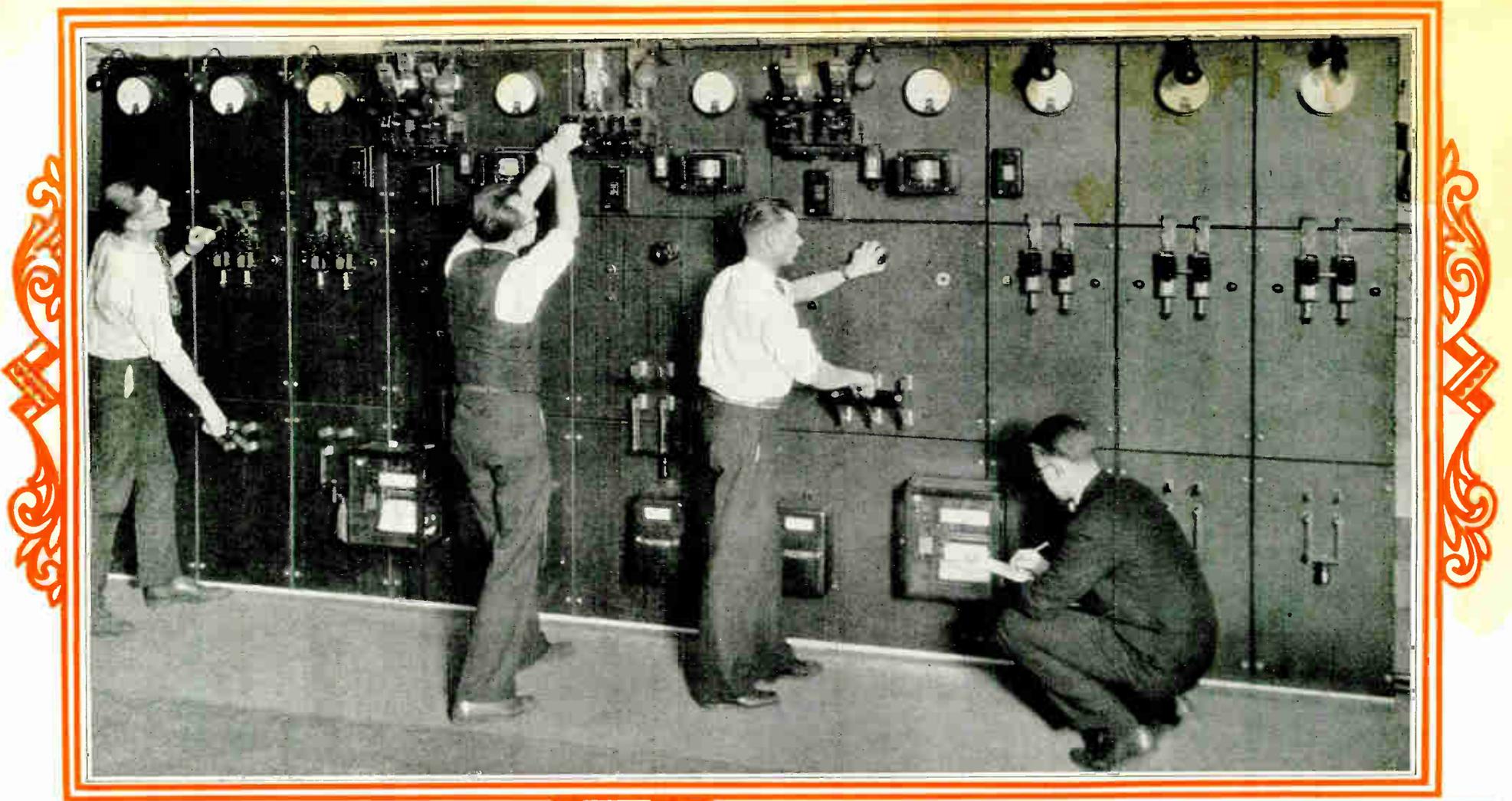
Here is a general view of my D. C. Department. Just see how interested they are in their work wiring up, operating and testing D. C. motors and controllers of all common types. Notice the wires coming down from overhead, to supply current for running tests on every machine, no dead machinery or toy models, all actual running machinery.



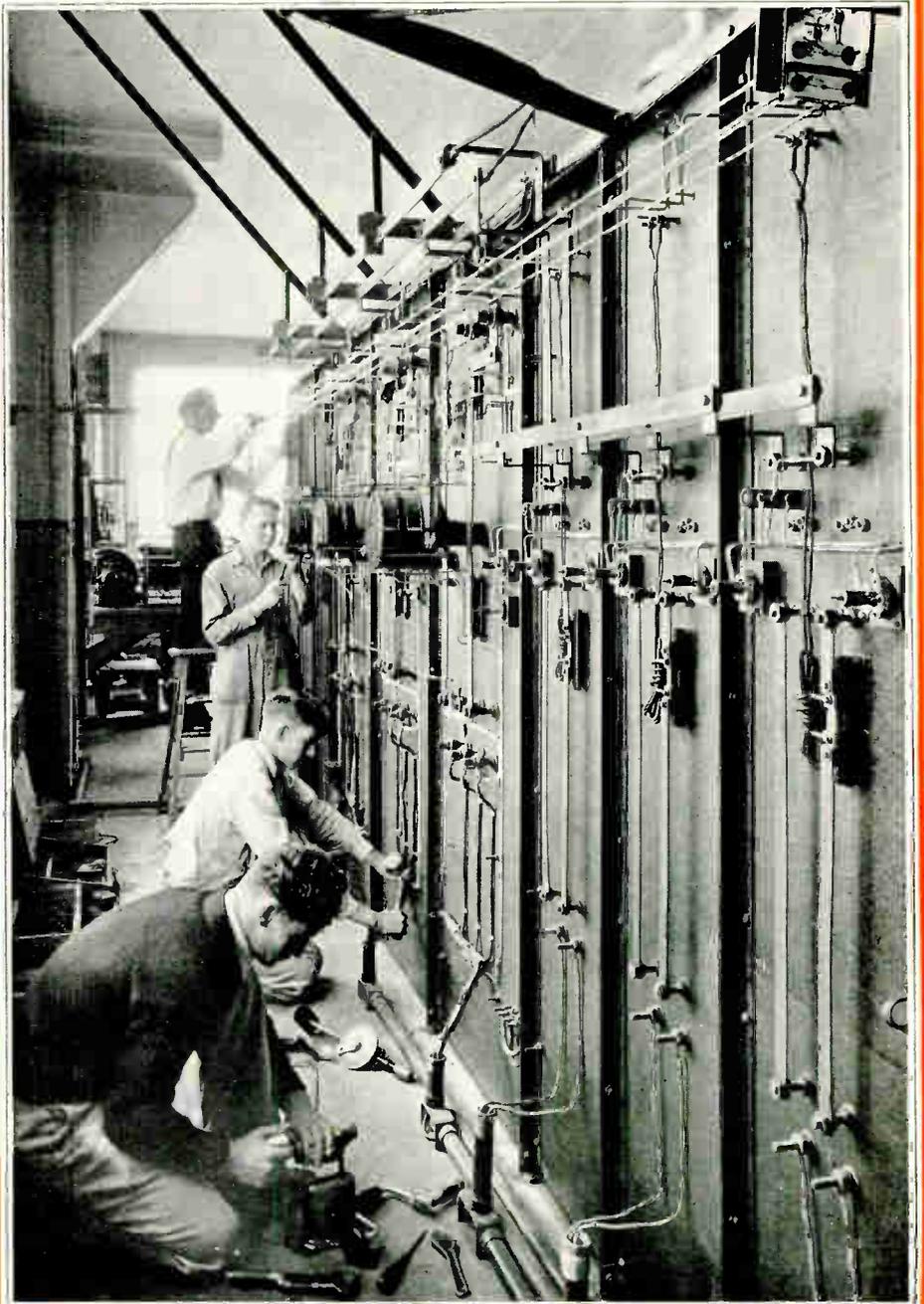
These fellows are learning the operation of an automatic controller and compound motor, and learning to make the same tests and repairs they will have to do out on the job.



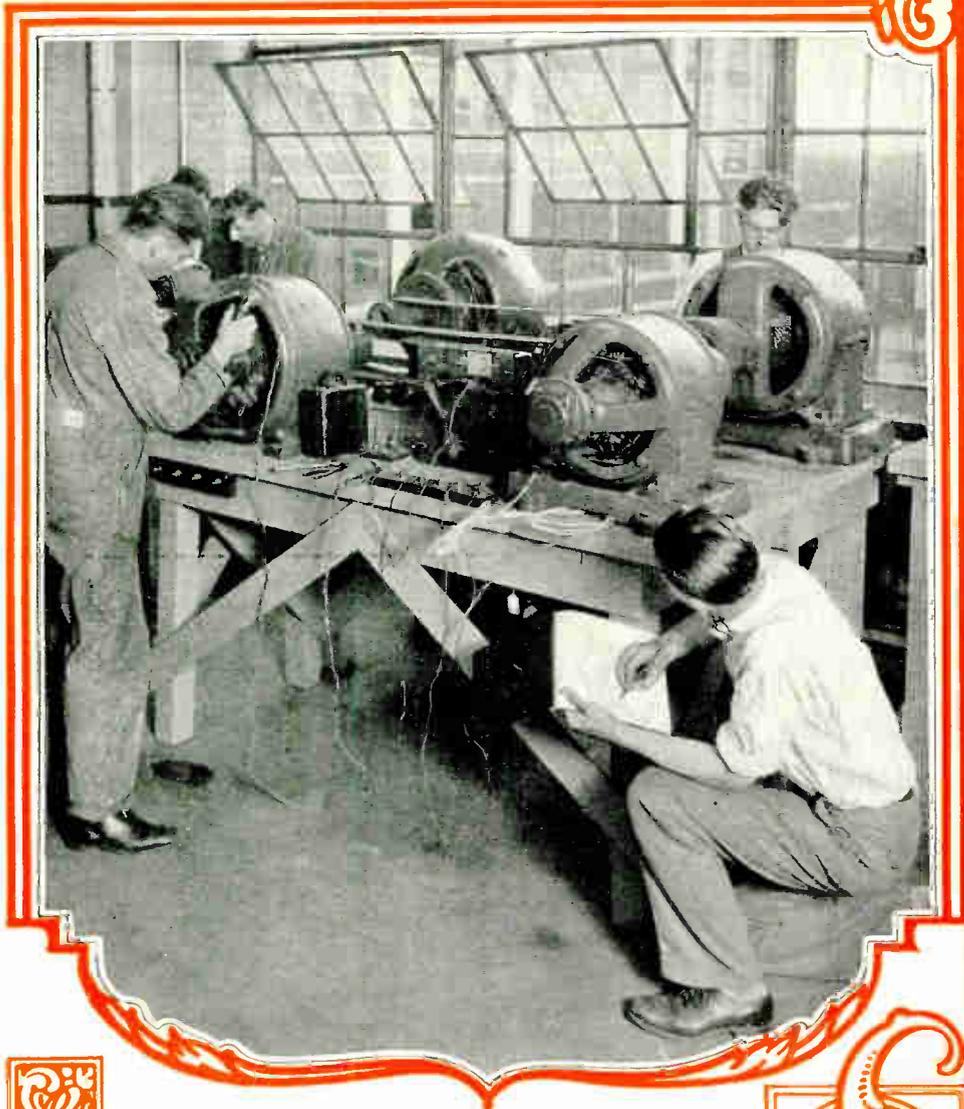
These fellows are learning about a motor-generator and when they finish this job they understand the operation and care of these machines thoroughly.



Here are my students getting real operating experience on a large modern D. C. Switchboard. They learn to connect and operate generators in parallel, and to take care of circuit breakers, switches and instruments. This kind of training qualifies them for the power plant and sub-station operating jobs.



And here is the back of a large switchboard, showing fellows wiring up the panels and instruments for machines in the department. In this way they learn how to build and wire switchboards, as well as operating them.



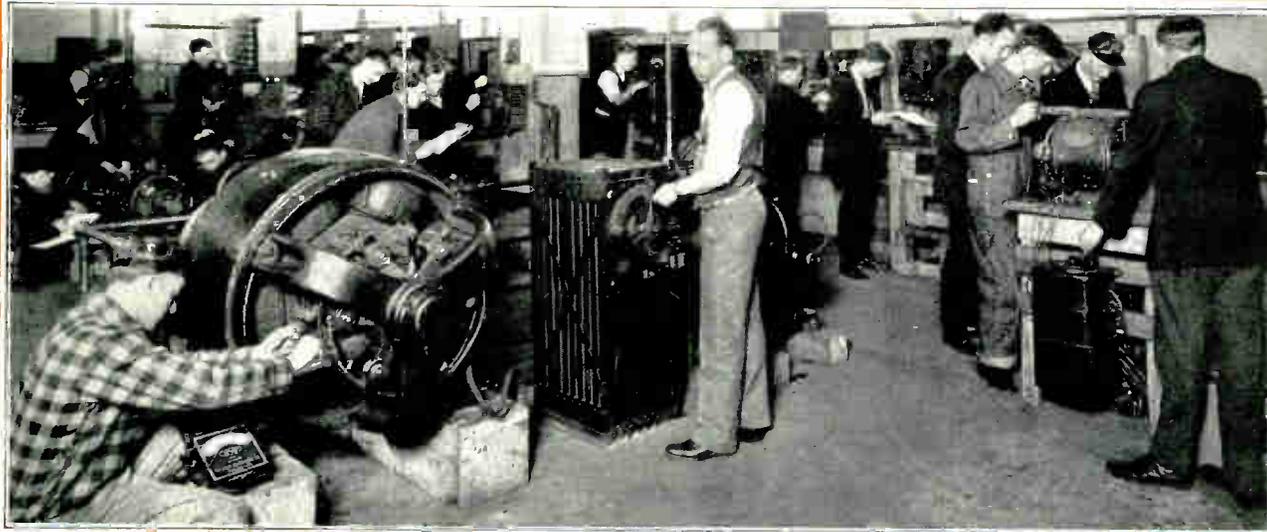
These fellows are operating and testing motor generator sets, building up voltage, and measuring output of these machines.



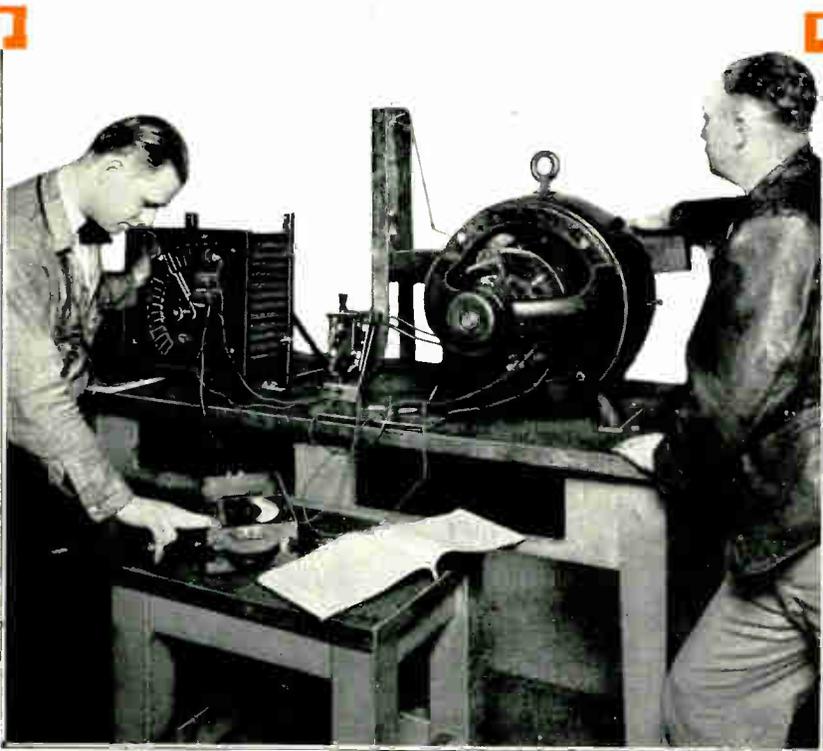
*This is how my students get the testing of automatic remote control equipment, and learn how to quickly locate troubles, so they can save time and money for their employer when they get out on the job.*



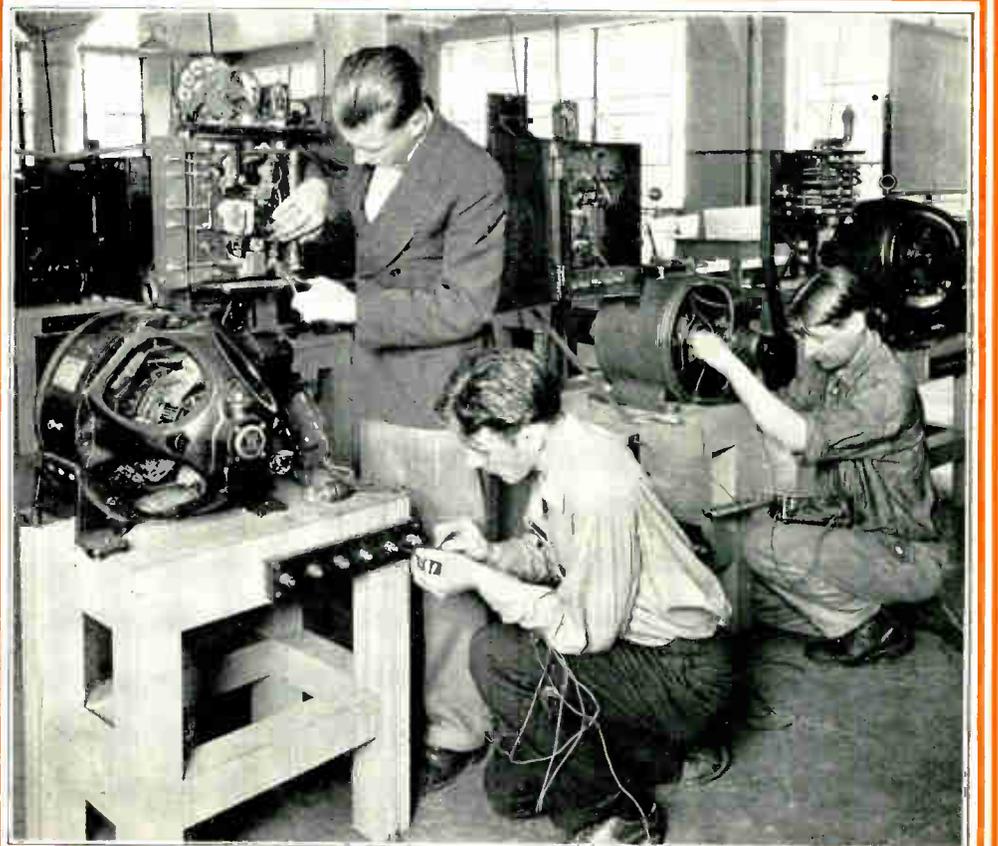
*Real practical training. These fellows are completely overhauling and repairing a D. C. motor, and repairing the field coils, and the commutator and armature.*



*Here you see several of my students testing and operating generators. The large machine at the left, is used to make practical demonstrations of a three wire generator, and also dynamic brake tests.*



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



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

# How Could Any Training Be Complete Without Inspection Trips Through the World's Greatest and Most Modern Electrical Plants?

WHILE of course the inspection trips my students make are not a part of the Coyne course, still I feel they are very valuable as an addition to my training.

Many of my students have remarked after visiting some of these great plants that it was an inspiration to them and gave them greater desire than ever to become a part of this great industry.

I don't believe any place in the world offers you the opportunity to visit such places, and after you have seen some of these plants you can well understand how Chicago has gained the name of **The Electrical Center of the World**.

These inspection trips are made frequently and the students are always accompanied by the instructors and the engineers in charge of these plants.

I have reproduced on the next pages views of a few of the regular trips made by my students. I could not begin to show you all of the places my students visit, so I have only attempted to show you a few to give you an idea of the wonderful advantage in **getting your training at COYNE**.

One of the pictures on the next page shows a section of the **largest private or individual power plant** in the world, in which is generated electricity for Power, Light, etc. This is the plant of Sears, Roebuck & Company, which generates enough electricity to supply a **good sized city**.

Another of the many very interesting trips is the one shown in the picture at the upper right hand corner; this is one of the automatic substations of the street railways system. This station is the very latest type and a **wonderful sight** for anyone interested in Electricity.

Notice how interested they all are in this modern equipment.

## Generates Over Two Billion K. W. Hours

MANY other interesting trips are taken, including the different gigantic plants of the Commonwealth Edison Company, the **largest Electrical power company in the world**, which has the enormous station output of over two billion Kilowatt-hours. When you stop to think that they can generate enough in one minute to last the average home over fifty years, you can get some idea of the enormous current generated. This company alone uses over three million tons of coal a year to generate its Power.

## Inspection Trips Double Value of Course

CHICAGO, besides being the electrical center of the world, is also the radio broad-

casting center of the country. There are more high-class broadcasting stations in Chicago than in any other city. Our students have an opportunity to **inspect various stations** and see just how they are constructed and operated.

Students are also shown how fixtures are made and which of all types are best, in visits to some of the largest fixture companies in the country.

Our students are **continually expressing themselves** about the additional value of studying electricity in such a **community**. Many have told us that they considered the inspection trips priceless to them because it gives them a greater vision of the electrical industry which they could **never have had** if their training had been taken at **any other place but COYNE**.

The immensity of the electrical development in Chicago staggers the imagination and it is hard to believe it all until you see it with your own eyes.

## You See the Greatest in Electricity

STUDENTS also visit the plant of the Franklin and Exide Battery companies and see the building of plates and complete batteries on a mammoth scale.

There are very few electrical devices known that are not made by at least one firm in Chicago.

The students are always interested in the trips through the various plants which manufacture motors. Here you see motors being made from less than a horse power, to the gigantic ones **running into hundreds of Horse Power**.

Then there are the plants such as the Edison Appliance Co., Russell Electric Co., Benjamin Electric Co., The Telephone Companies and dozens of others manufacturing electrical products for the home, such as fans, toasters, stoves, vacuum cleaners, farm lighting plants, heaters, etc. These places are especially interesting to those students who hope to **have a business of their own some day**, as there are millions of dollars worth of these goods sold every year.

Another great trip is the one to the North Shore Railroad Plants. These are specially chartered electric trains that back up on a siding within one block of the school and take the boys on inspection of substations along the North Shore toward Waukegan and Milwaukee.

## Aviation and Electric Farm Inspection Trips

AND then there is the trip to the great municipal air port, where dozens of different types of airplanes are landing and leav-

ing throughout each day and night, with mail and passengers, from all parts of the country.

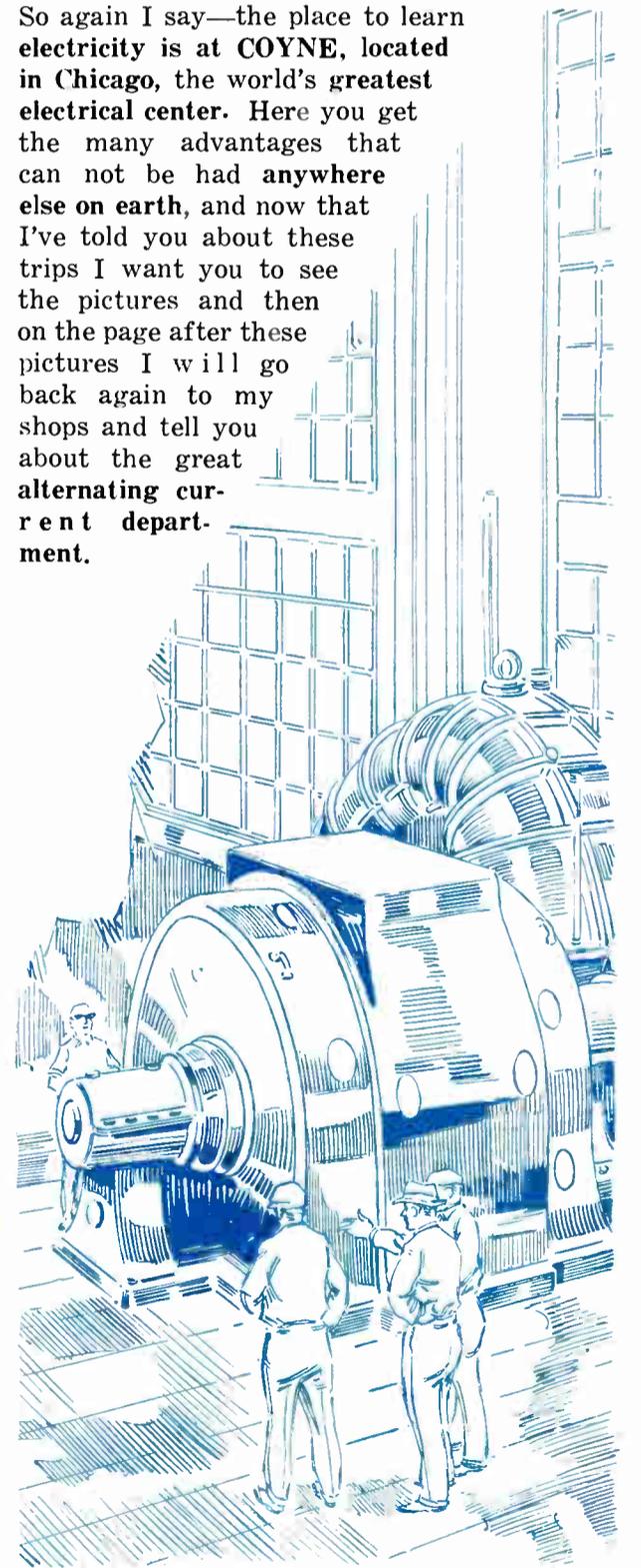
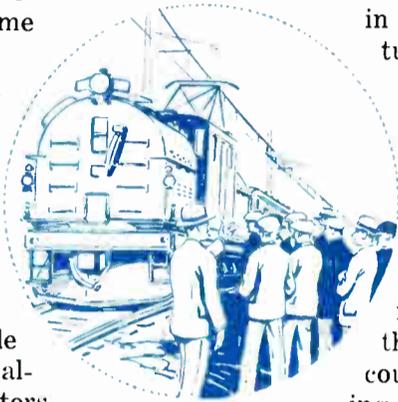
And here you can see many planes undergoing test and overhaul, as many of them are kept in repair in the shops at this air port. And you see the plane on its way again.

The big Ford all metal, 3 motored planes make wonderful sight-seeing trips over Chicago both day and night, that anyone can take.

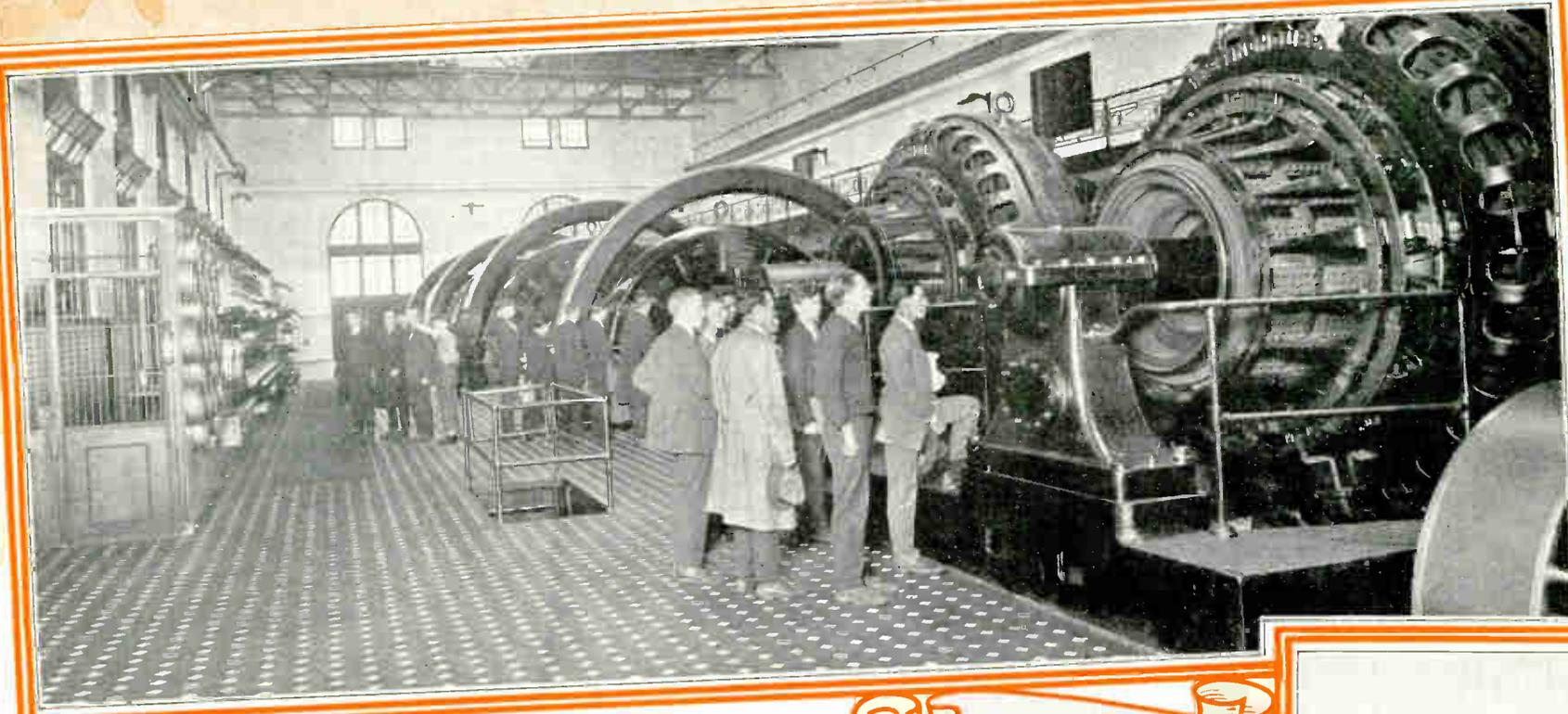
And another very interesting trip is to the Electric farm, where electricity is made to do everything possible with the latest equipment.

You can get a lot of good ideas on the latest practice and electrical devices for farm use here.

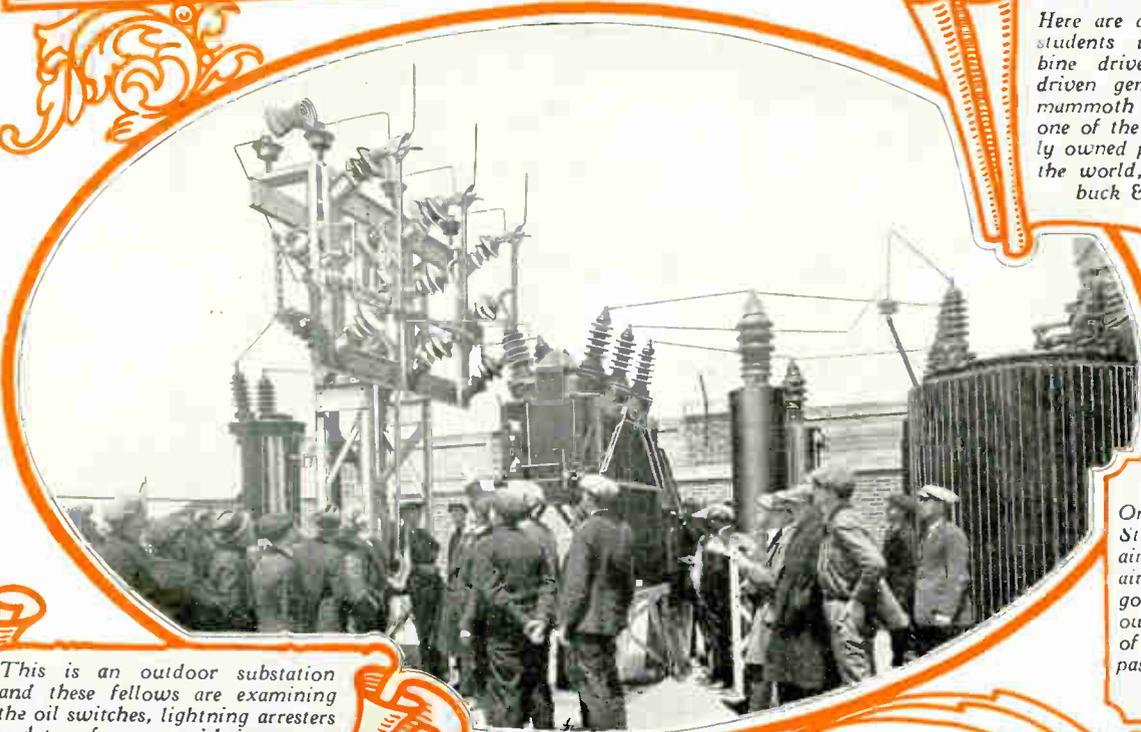
So again I say—the place to learn electricity is at **COYNE**, located in Chicago, the world's greatest electrical center. Here you get the many advantages that can not be had **anywhere else on earth**, and now that I've told you about these trips I want you to see the pictures and then on the page after these pictures I will go back again to my shops and tell you about the great **alternating current department**.



# Inspecting the World



Here are a group of my students inspecting turbine driven and engine driven generators, and a mammoth switchboard in one of the largest privately owned power plants in the world, at Sears Roebuck & Company.



This is an outdoor substation and these fellows are examining the oil switches, lightning arresters and transformers, with instructors along to explain every part.



One of the mammoth Ford-Stout, 3 motored, all metal airplanes, at the municipal air-port, where my students go on trips to inspect various planes. Great numbers of them are being built for passenger and express service.



Here is the plant of a large wire manufacturer, showing how copper wires are made and insulated.

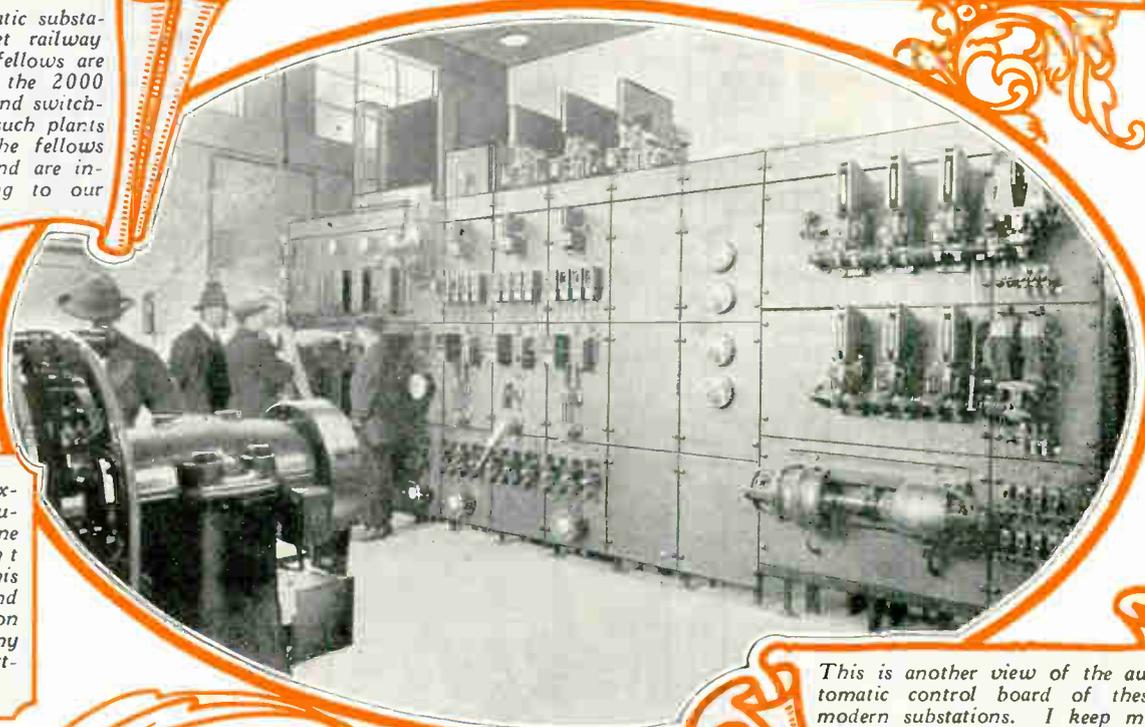


This shows a large group of the fellows on trip, and the special electric train through automatic substations and the

# d's Electrical Center



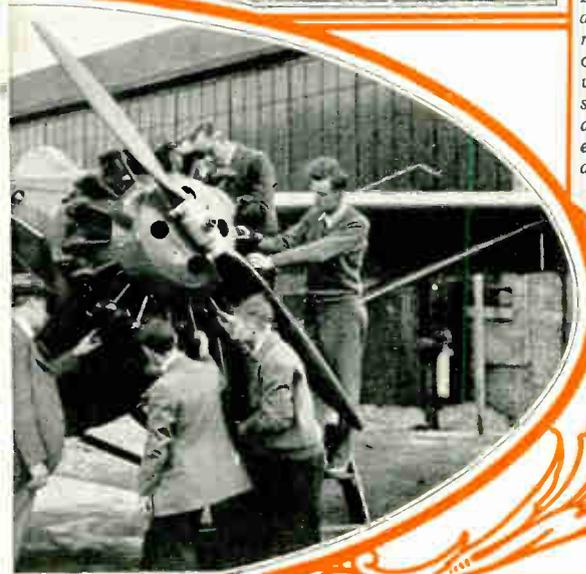
This is an automatic substation of the street railway systems, and the fellows are shown examining the 2000 K. W. converter, and switchboard. Trips to such plants as these inspire the fellows to work harder and are intensely interesting to our students.



This is another view of the automatic control board of these modern substations. I keep my students thoroughly acquainted with this latest type equipment.



Below at left, they are examining, at the great municipal aviation field, one of the famous Wright whirlwind motors. This shows them the use and application of the ignition experience they get in my airplane ignition department.



Here is a group of the fellows at the power plant of one of the large packing companies, where several different types of generators and great refrigerating machines are inspected.

on our regular North Shore inspection takes them to inspect several late type at Lakes Naval Aviation Station.

# Let Me Tell You Now About the Most Interesting Branch of Electricity-**ALTERNATING CURRENT**

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

Wherever you find me using the term A. C. you will understand that I mean Alternating Current.

Alternating Current machinery 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 I cannot mention them all here, and it is one of the most rapidly developing branches of electricity.

A great many of the electricians in the field today who have not had proper training, do not know A. C. the way it should be known, and are not advancing into the real jobs this branch is creating by the thousands.

That is why it pays to get your training at Coyne, where you can be sure of getting the most complete and practical knowledge of A. C. and where 30 years of teaching experience have enabled us to make this great subject clear and easy to master,—where you will have plenty of actual A. C. power machines to prove every step of it out, so you are sure you know it. You will always remember it, because you have done it with your own hands, right on the machines.

## Complete Power Equipment

**B**ECAUSE of the great importance of A. C. today in any branch of electrical work, and because you will need a good understanding of it to make your best success in any branch, I have gone to enormous expense to make this department the most complete thing of its kind in the country.

Here you will work on a great number of real commercial sized A. C. power machines, from those of less than one horsepower to those of over a hundred horsepower. Motors, controllers, generators, transformers, power plant switchboards, complete outdoor type substations, transmission lines, lightning arresters, oil switches, air breakers, welders, etc., all help to make this department one of the most fascinating and enjoyable, and extremely valuable of your entire course.

You will be thrilled with every minute of the time in this department until you are ready to leave it, with a most complete and practical knowledge of A. C. that will give you full confidence to step out and "tackle" any of the most difficult jobs in this line. Even those on which many ordinary electricians give up in despair will be simple to you.

## A. C. Made Simple

**I**N this department your instructor first gives you a thorough 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 machines along with his plain shop talk, to make these principles clear to you.

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

We even use elaborate 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 and final proof of every fact, worked out on the running machines.

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

After you thoroughly understand the simple motors, you go to the larger machines.

## 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 it. 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 learn to quickly locate troubles by the symptoms. And you also use test lamps and meters to make tests for the troubles that cannot be detected by anyone but an expert. And after you have done this on a number of machines, you can find and fix any of their common troubles quickly. It is this kind of training that puts Coyne Trained men in demand.

Along with each motor, is a starter or controller of the proper type, to be wired up with the motor.

## 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 own, and our long 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 all the important points. And many of these questions you answer for him are the same as you will be asked when applying for work later. So you can see how every part of our course is planned to make certain your future success.

While working on motors you have a very important job on which you make all kinds of different tests. These are very important things for the electrician to know if he wishes to qualify for the best jobs.

Then you work on what are known as synchronous motors, and learn how to use them and probably save your employer hundreds or thousands of dollars by improving the conditions and equipment in his plant. Is it any wonder Coyne Trained men get good steady jobs and good pay?

## Power Plant Experience

**T**HEN after you have mastered all 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 modern main switchboard, at which you are given the responsibility of operating the generators and controlling the power for the entire department.

The machines you will operate generate enough power to supply a small town.

You learn the modern methods of remote control operation used in the very largest power plants.

You get practice on a complete 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. Don't forget you will go on inspection trips to some of the largest and most modern power plants and substations while in this department (as you saw on pages 24 and 25).

## 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, I have prepared special equipment for your thorough training in this very profitable branch also.

You will learn arc welding with modern welding generator equipment, and spot and butt welding on specially built machines of this type.

Another one of your very important jobs in this A. C. department is that of complete 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 re-assemble 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 very thorough instruction on maintenance of all types of A. C. machines in industrial plants. 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, to locate and correct faults before they become serious and cause an actual shut-down and loss of time and money in your employer's plant. Then you practice these methods right on the department machines. You learn how to plan a list of stock parts to carry for quick emergency repairs, and the best of modern methods of maintenance as used in the largest industrial plants and power plants in the country.

I am sure you can readily see how such training here at Coyne will fit you for the best jobs in this great field. A field which is creating thousands of new jobs for trained men every year.

That's why I have spent many thousands of dollars and years of careful planning to see that you have the most complete, practical and up-to-the-minute training, and all types of machines to actually prove out and get your experience on while in this department. Then when you finish here you will be confident and able to go right out and tackle any kind of job in wiring, operating, or maintaining and repairing of A. C. machines. So you will be qualified to hold one of the thousands of steady, good paying jobs that are calling for trained practical men in the fascinating field all over the world. So now let's see this wonderful department in pictures on the next five pages.

# These 5 Pages Show You My Great Alternating Current Department



In this department I have spared no expense in making this the greatest outlay of instructive, fascinating power machinery ever provided in any institution for educational purposes; including

all common standard types and the very latest machines developed.

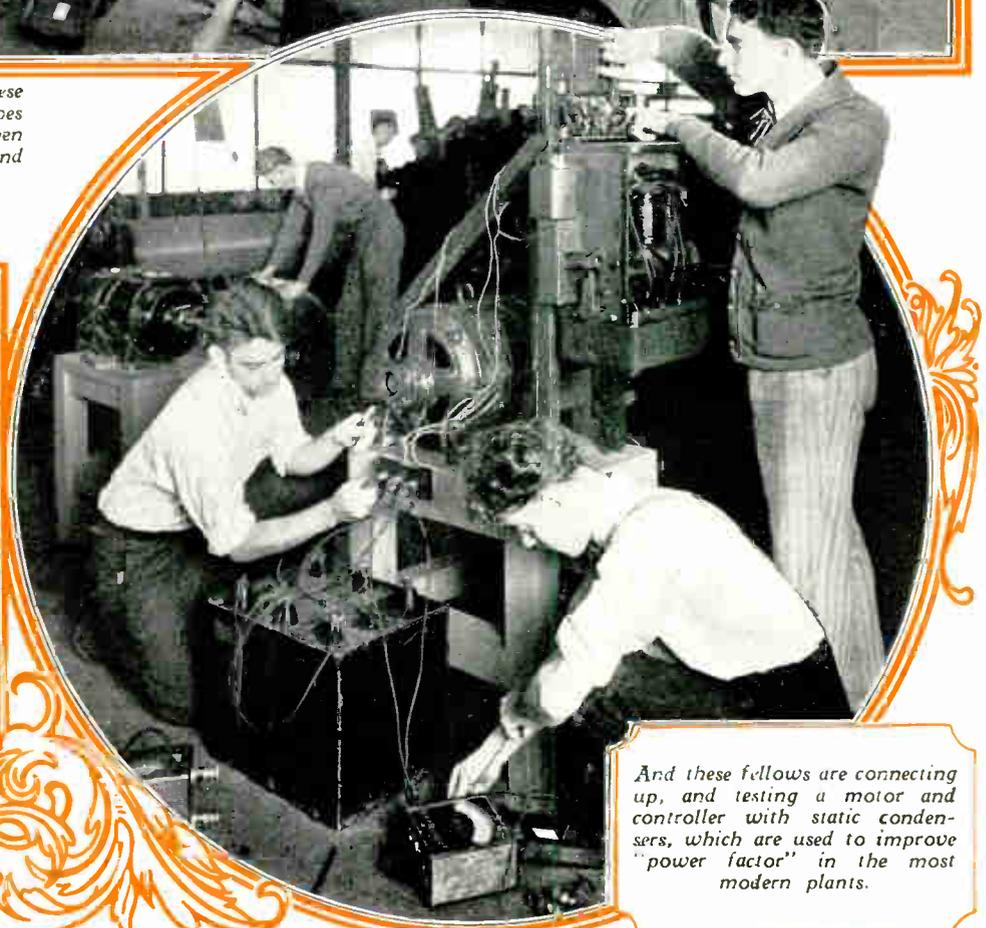
Is it any wonder COYNE Graduates are in great demand and able to qualify for salaries leading to \$60 and up to \$200 a week?



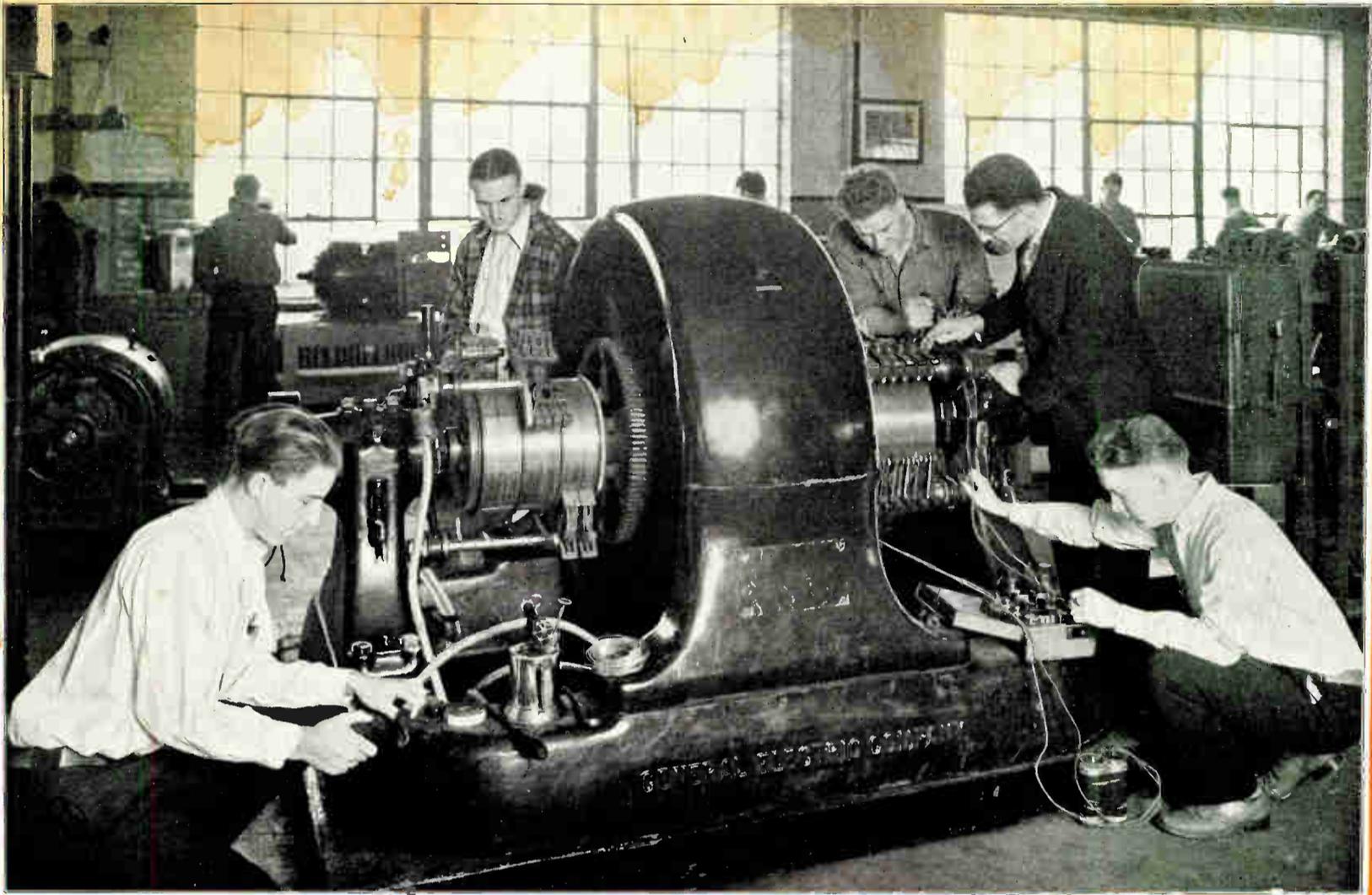
Here is a general view of one section of my alternating current department. And all these fellows you see on these interesting jobs, are getting the best kind of experience on all types of A. C. motors, controllers, and power equipment. In the far background you will see men working on the top of a complete substation. This only shows a part of this department, and the following pictures show you some of the other equipment in this department.



These men are testing the horsepower, efficiency, and power factor of an induction motor. All very valuable things for the practical maintenance man to know.



And these fellows 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 of my boys working on a synchronous converter, and making some very interesting connections and tests, under the supervision of the instructor on the right. This machine is used to change Alternating Current to Direct Current. It's the actual work on such machines as this that give my graduates the ability and the confidence to tackle any kind of a job in the field.



These fellows are connecting up, testing and repairing various types of A. C. Motors and controls. When they get the machine running and understand its operation, use, and care, the instructor checks their work, so they know it is right, and when they leave school to take a job on the outside, it's just like changing jobs.

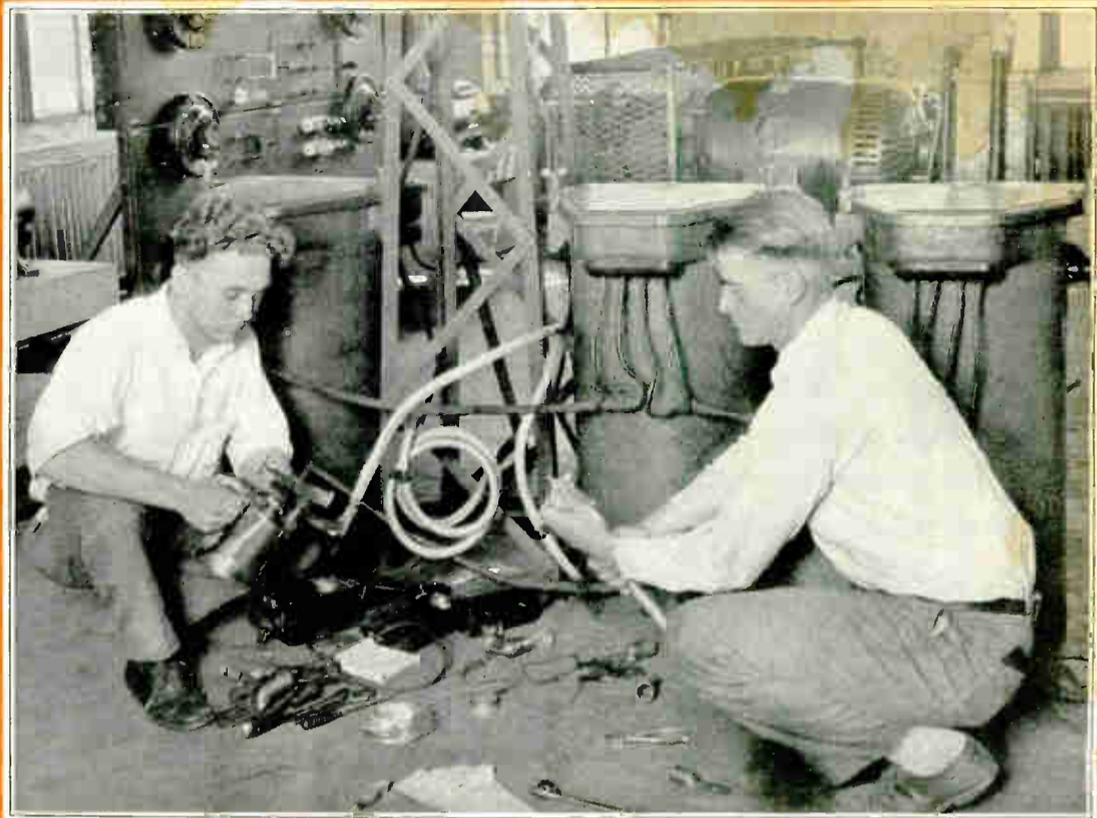


At the right you see how my students learn to operate switchboards and how to take meter readings on a board that operates several machines in the department. Here at Coyne things are natural and years of study on our part has proven just what a student needs to make a success.

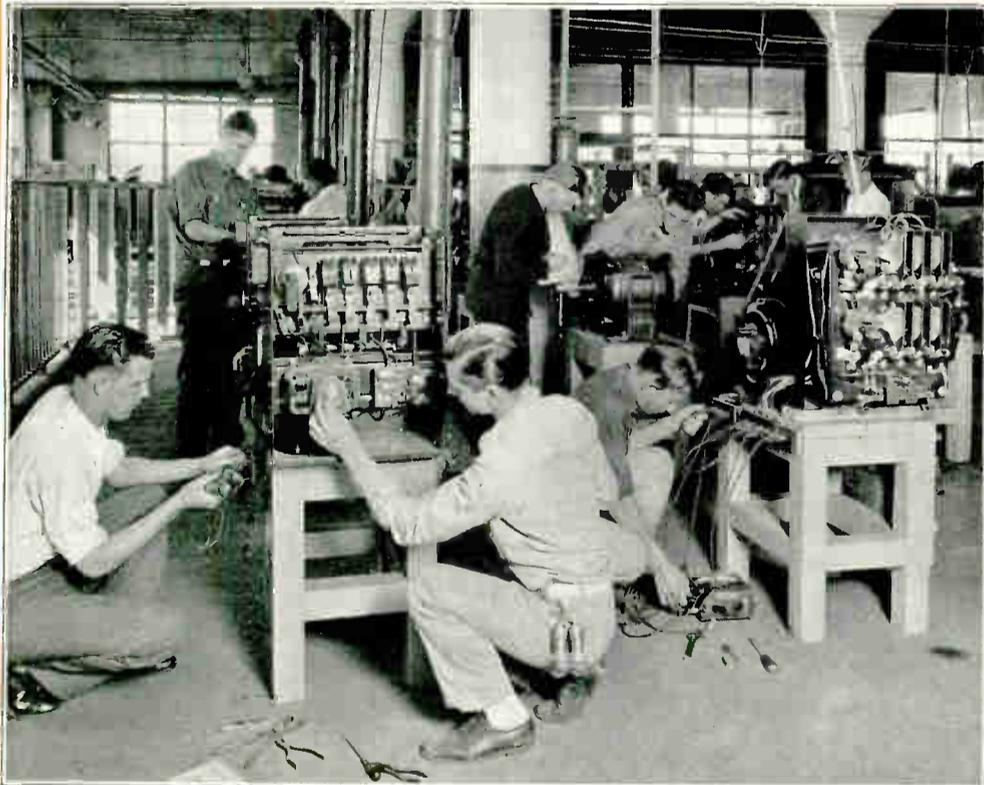




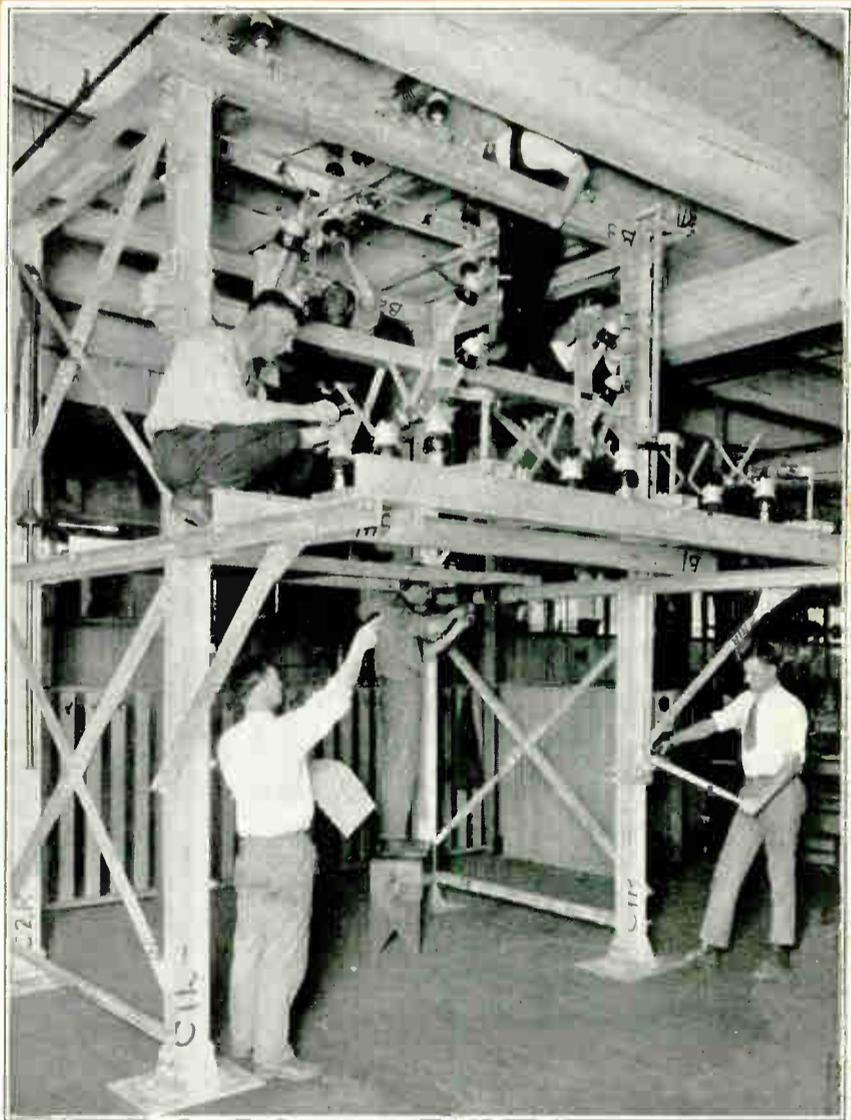
Here an instructor is explaining important principles of an induction motor, on a machine specially cut away, so you can observe these points both while it is idle and when it is running. This is an example of how some of our specially prepared equipment will save your time, and quickly and easily make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



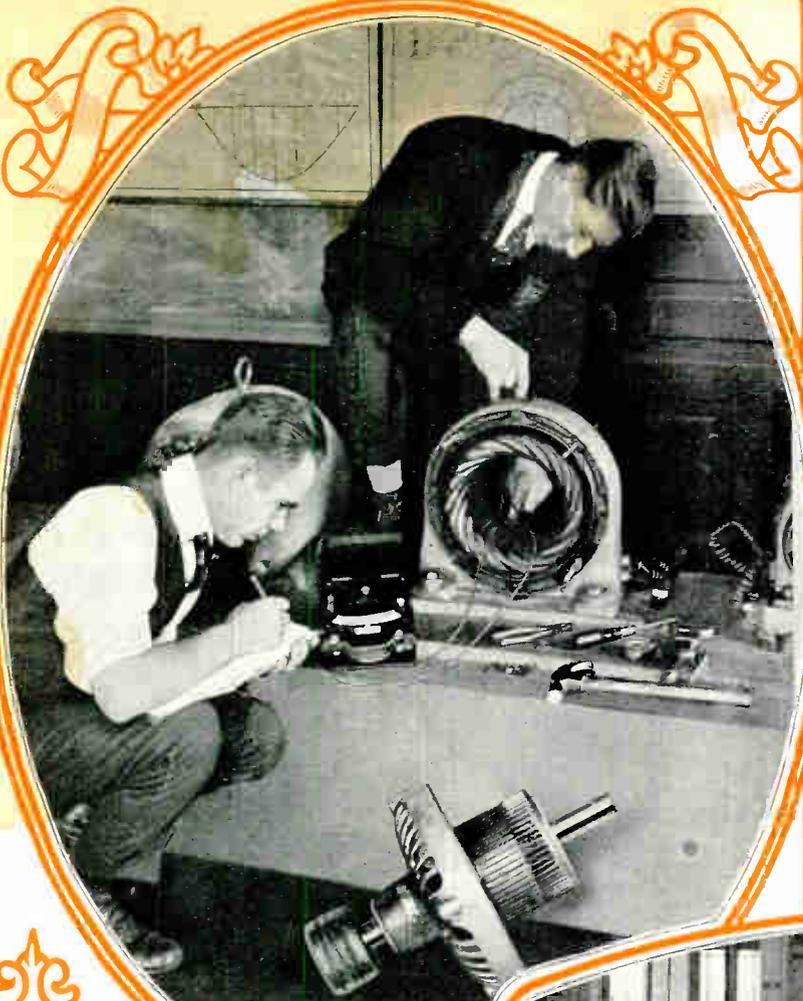
These fellows are connecting up a bank of three power transformers, and soldering the lugs on the cables with a blow torch, and learning how to use the tools on the job.



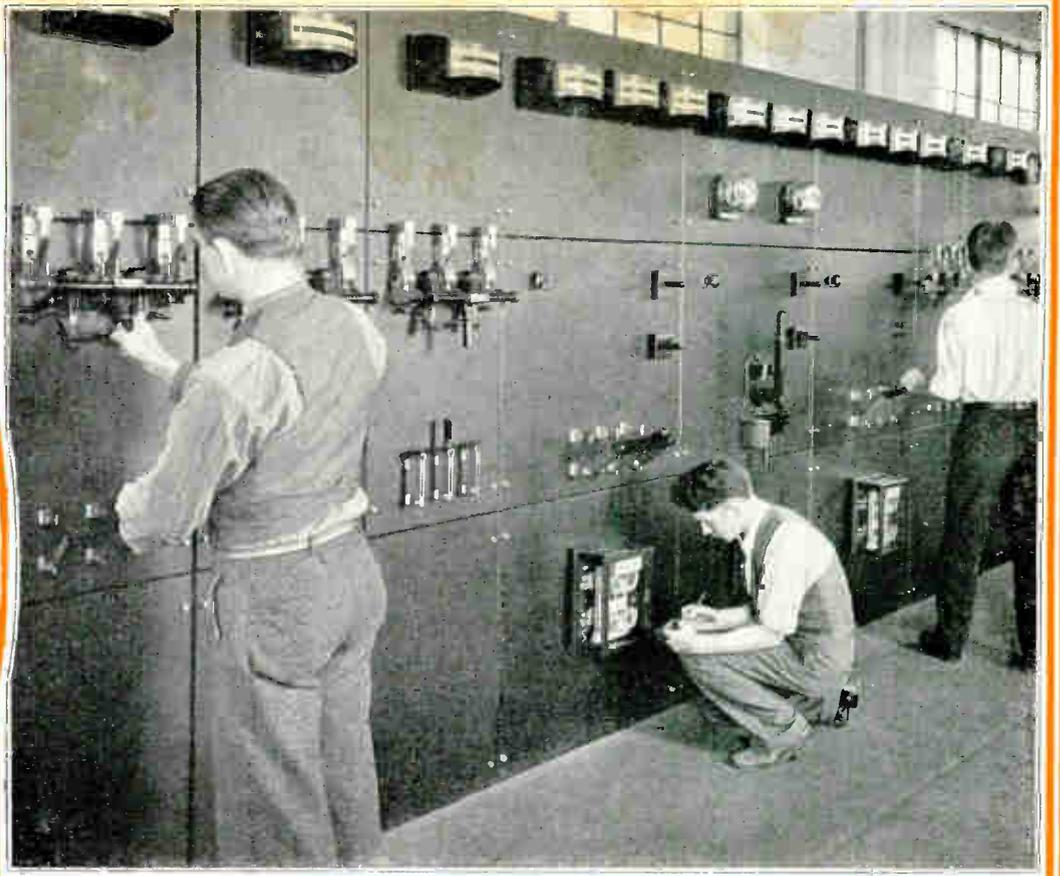
And here we have different types of modern automatic, remote control equipment for A. C. motors. These men are getting thoroughly acquainted with every part of them and their care and operation, by wiring them up and testing them out with the motors.



This is an outdoor type substation structure, and these fellows are operating the high tension switches and observing the fuses, choke coils and lightning arresters, and getting thoroughly acquainted with this kind of equipment and its construction and operation.



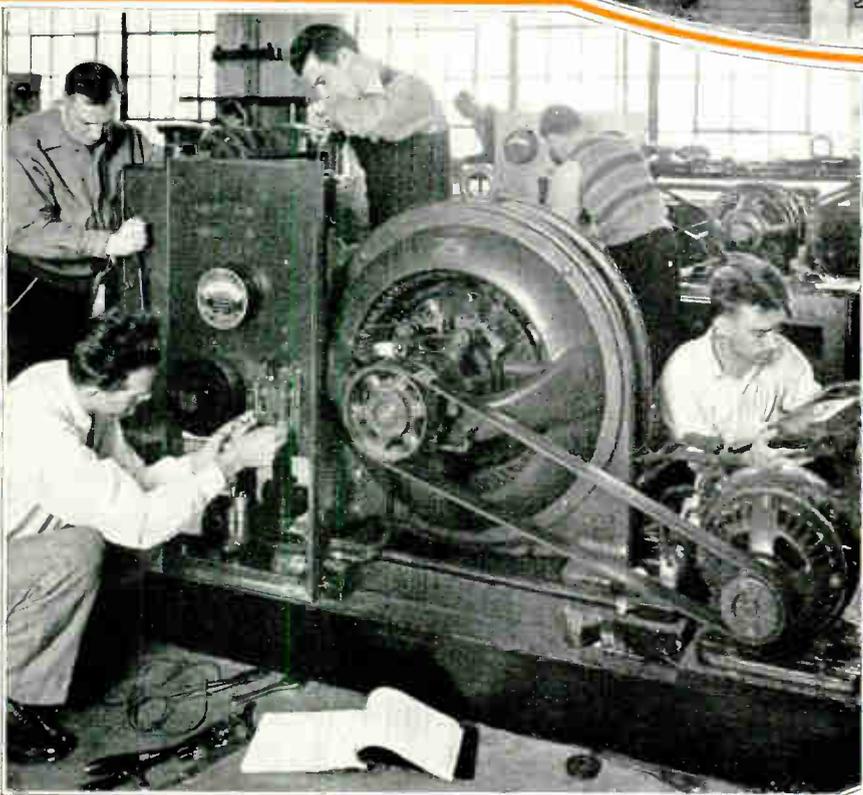
Real practical work overhauling and repairing on A. C. induction motor. This is the kind of work that makes you sure of yourself when you get out on the job, for when you thoroughly understand all the working parts of a machine you have confidence in yourself.



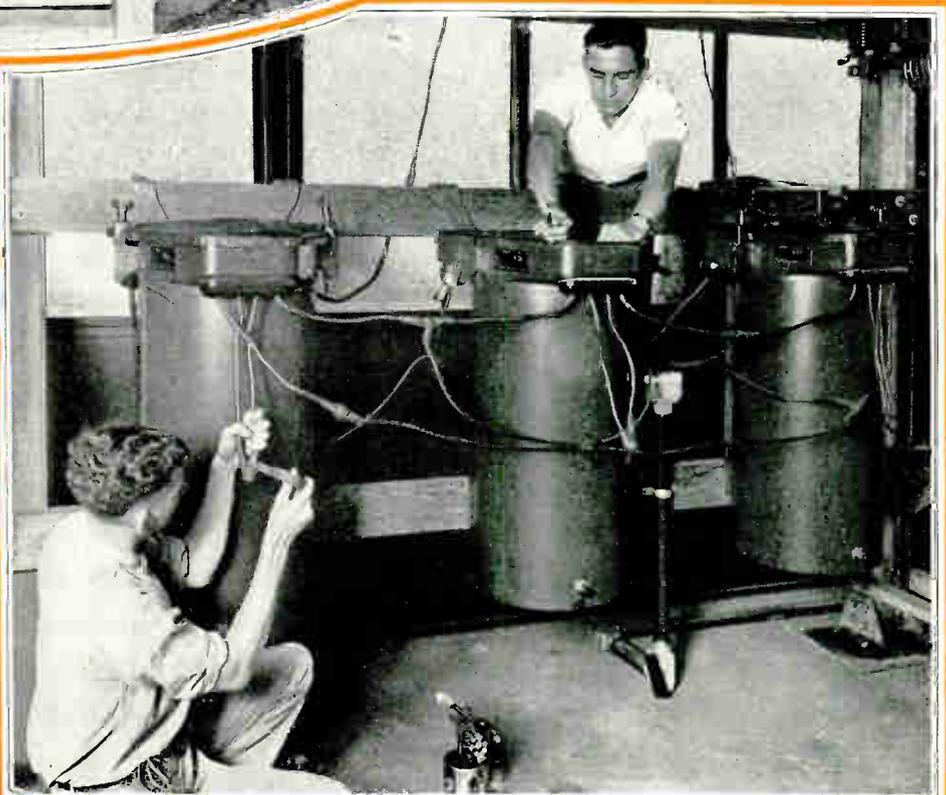
And these men are getting actual operating practice on a large A. C. switchboard. Here they learn the operation and care of meters, circuit breakers and switches, and how to synchronize and operate alternators in parallel and equalize their load. And in this way quality for the fine positions in A. C. Power plant operating.



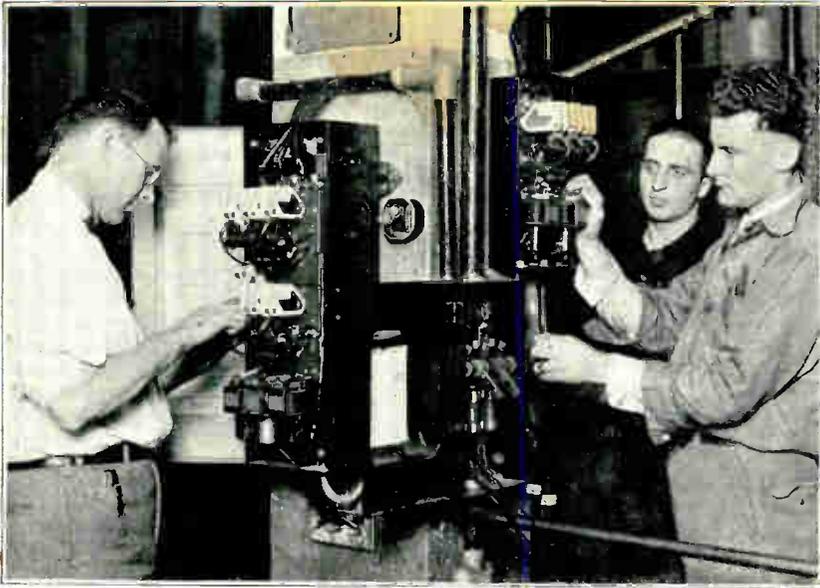
This is an electric spot welder. And these fellows are learning how to operate and take care of such equipment. There are thousands of these machines in use in industrial plants today, and the well trained man must know how to keep them going.



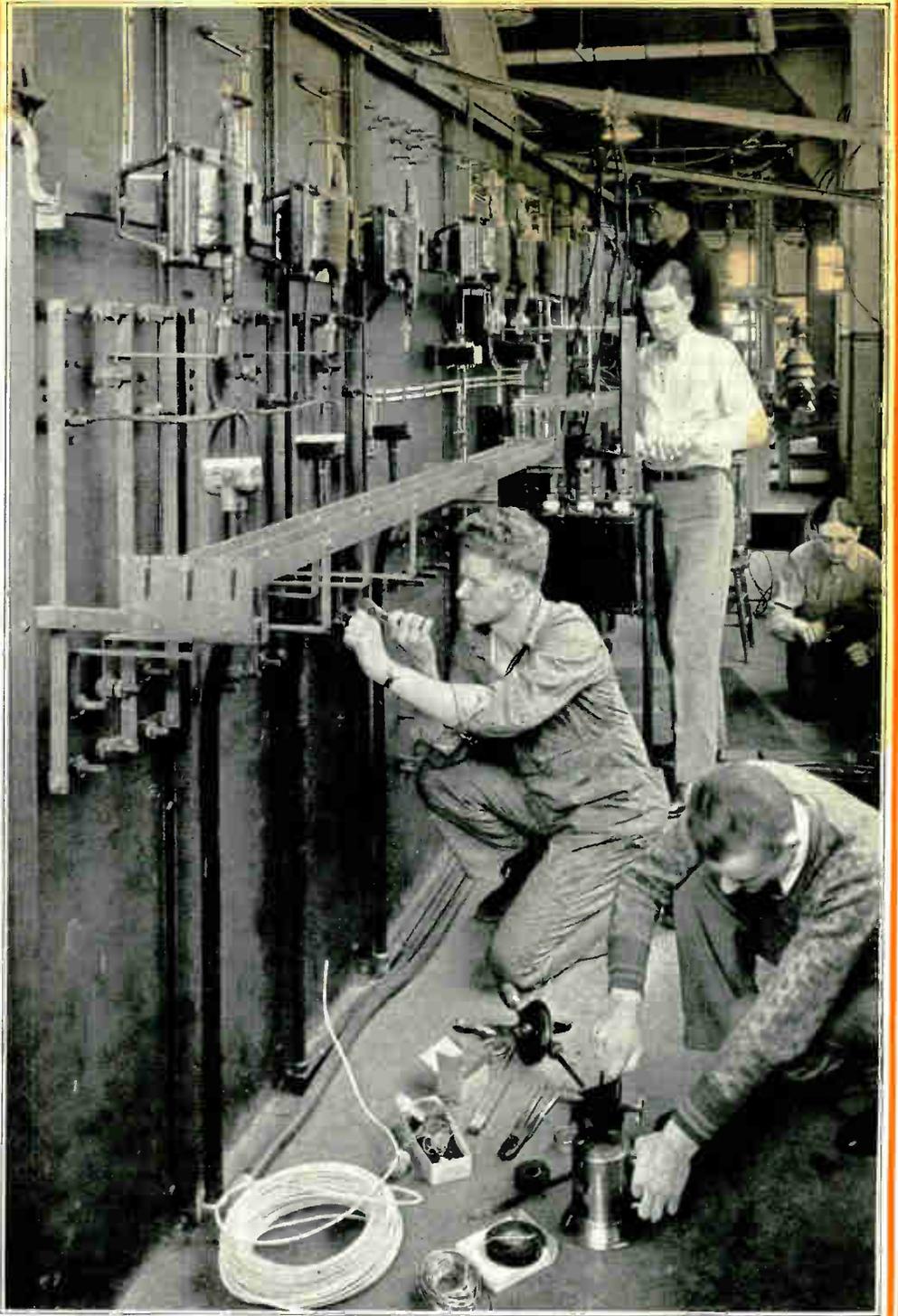
Here you see several of my students connecting, testing, and operating a large synchronous motor, and its exciter generator. This machine is also used for correcting power factor, and every up-to-date, well trained man should know this work well, to qualify for the best jobs.



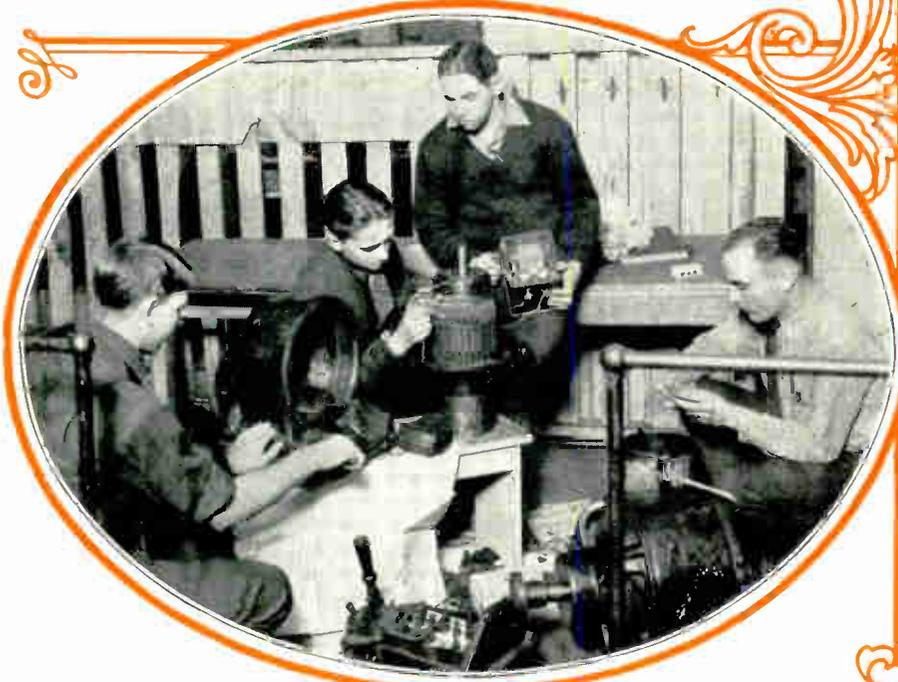
These fellows are connecting up a bank of power transformers for 3 phase operation, in the outdoor type substation in this department.



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



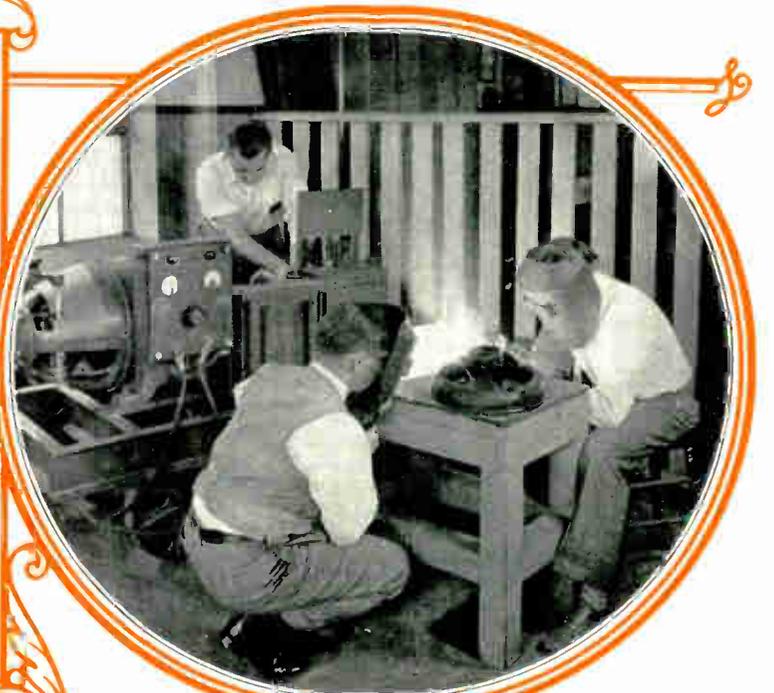
Real switchboard construction. Here you see several of my students putting additional circuits on the main A. C. switchboard. They are installing bus bars, cables and conduit, and instrument transformers. So you see how my complete training qualifies you for anything that comes up on the job.



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.



And these fellows are doing general trouble shooting and repair on A. C. motors, and building a complete test transformer for high voltage testing of insulation.



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 many new jobs at big pay open up every month for skilled men in this line.

*Now that  
You Have Learned  
Electricity-*

# Let Me Show You How to Apply it to **AUTOMOBILES, TRACTORS, FARM LIGHTING PLANTS and BATTERIES**

**N**OW that you have covered all departments up to and including alternating current, you need only to apply that electrical knowledge to the work in this department. Every phase of Electrical work has been covered in my general course, so here you just apply this, as I have said, to the automotive work. Then you are qualified to handle electrical work on cars, tractors, etc., in an expert way.

The automotive field offers splendid opportunities to men with practical electrical knowledge who can apply it to the care and repair of ignition, starting and lighting equipment.

The modern automobile has a complete small power plant of its own, with its electric generator, starter, lights, ignition, horn and numerous other electrical conveniences often added.

The many millions of automobiles, and trucks in daily use in this country need thousands of electrical experts to keep up their electrical equipment. A great many automobile troubles are little electrical faults that can quickly be corrected by a trained electrical man. Every electrical trouble and problem which applies to automobiles has been covered in principle in your general training.

And remember new cars are being turned out by the thousands every day, continually increasing this demand for ignition experts.

This field also 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 in a very profitable business.

Many of our students find this a very valuable branch to know even though they intend to do other electrical work, for it's always a big satisfaction for a fellow to know he can do his own electrical work on his own car.

## **Coyne Specializes in Electricity**

**C**OYNE is therefore especially well qualified and equipped to teach you Automotive electricity. When you enter this department you already have a thorough understanding of general electricity, and circuits, generators, motors, trouble shooting, etc.—then you just **easily apply your knowledge to automotive equipment**, with the real practical instruction and equipment I have prepared in this department.

This includes complete cut away engines, which have sections of the cylinders and casings removed so you can see every valve, piston, and part in operation. And even the spark plugs wired and equipped with small flashing lights, which give a wonderful demonstration of the firing order and timing arrangement on such engines.

## **Complete Equipment and Practical Work**

**Y**OU work on a number of complete engines such as the Ford, Chevrolet, Nash Special 6, Packard 8 in line, Packard twin 6, late type Harley Motorcycle, etc., for you to wire, time

and operate, and get actual electrical trouble shooting work on real running engines. I also teach you about valves and carburetors and those things so closely linked to ignition in getting proper operation of an engine.

You completely overhaul, test, and repair, generators, starting motors, cutouts, 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.

Then there are special ignition test benches with complete electrical equipment and wiring as arranged on different cars, for general trouble shooting experience, so you can locate defects in any kind of system out on the job.

You will find your work very easy in this department because of the knowledge you already have of electricity.

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 and answer all your questions.

You recharge magnets, and test spark plugs in a glass chamber under compression.

While in this department, you learn how a number of handy test and repair devices are made, which you can later make and use in your own business if you wish.

## **Good Money In Tractor Ignition Work**

**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 systems of these machines in tune.

So I also have actual equipment here for you to get electrical tractor timing and trouble shooting experience on.

There are many localities where this work is very profitable and your work on various types of engines and magnetos in this department enables you to find and fix electrical troubles on tractors in "short order."

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 always having this equipment running good.

## **Farm Lighting Plants**

**H**ERE is another branch of very profitable work to know.

There are thousands of farms installing these private light and power plants every year.

Many of our graduates are making good money selling, installing, and repairing them.

You learn how to adjust, operate and repair these machines very easily because they are so much like the engines and generators you have already worked on.

## **You Build and Repair Storage Batteries**

**W**ITH the millions of cars and trucks, and millions of radio sets in use in this country today, there is an enormous demand for men who really know battery work and can give first class service on repairing and charging batteries.

Hundreds of our graduates are running their own shops in business for themselves in this line.

In my battery department you learn storage batteries from A to Z.

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 start to build your first complete battery cells.

You melt the lead in a modern electric melting pot, then pour and mold it into posts, straps, and parts for the cells.

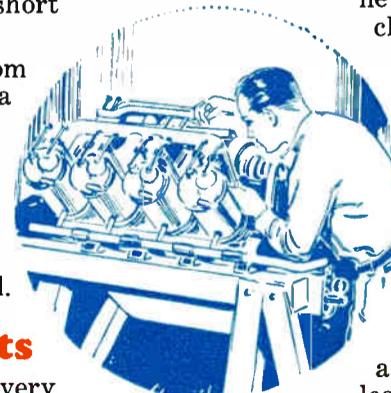
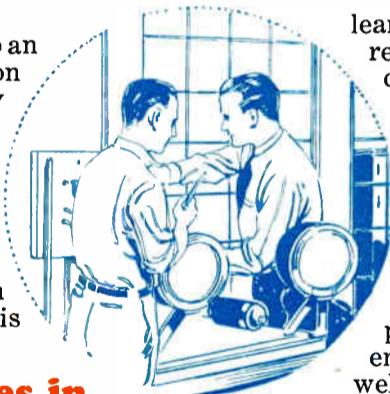
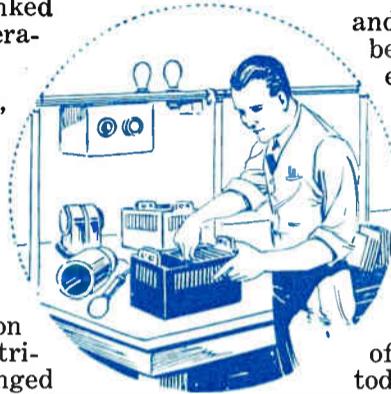
Then you get special instruction and work on lead burning with an oxygen and gas flame. This part of battery work is very critical and must be done right. Therefore you are given plenty of personal instruction and actual work on it.

When you have mastered the trick of lead burning on terminals and connections, you assemble the plates and separators into complete cells, seal them in the case, burn on the connectors and mix the acid and water for the electrolyte.

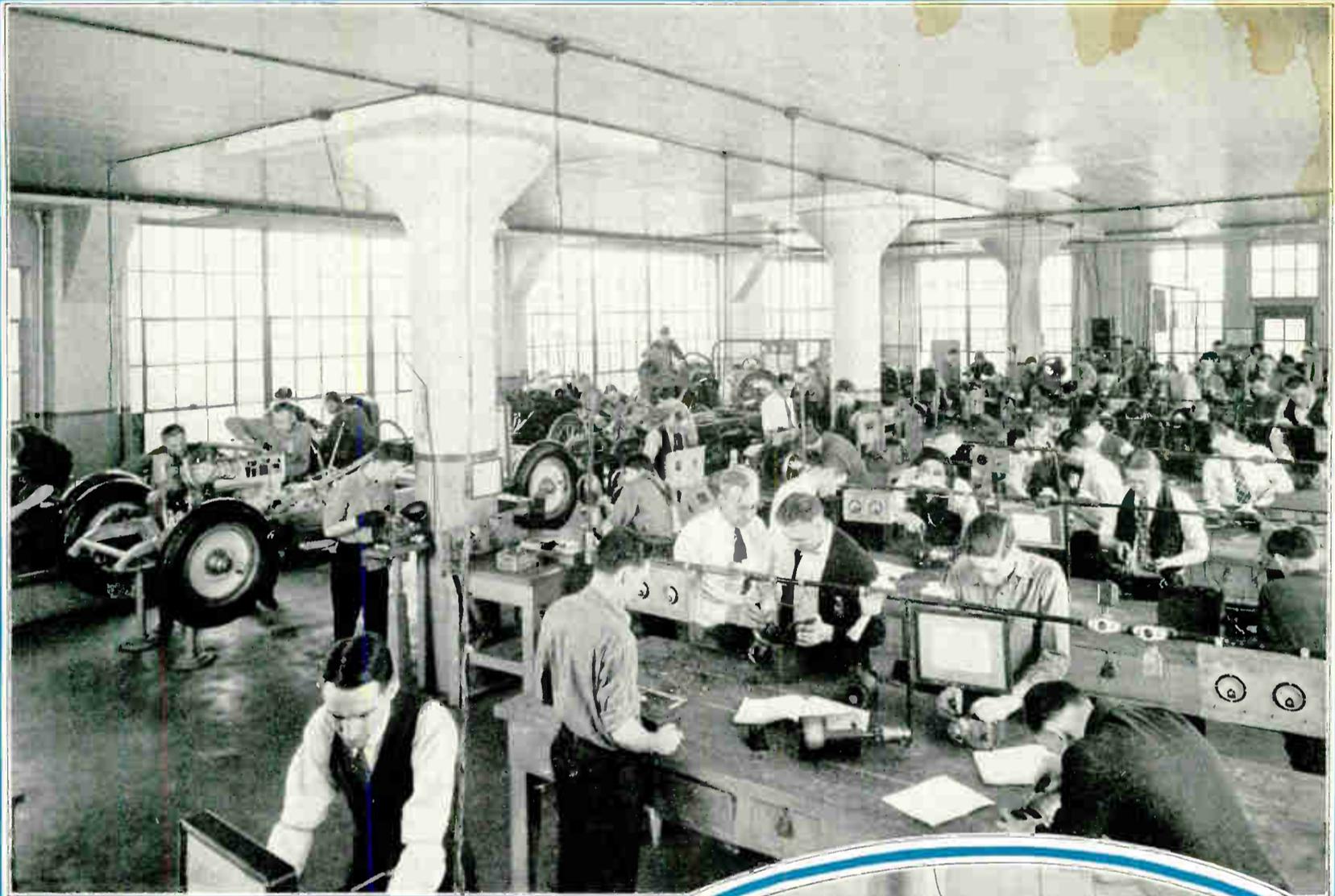
Then you put your battery on charge, and get practical work operating charging lines and machines of the bulb types and the new type motor generator, rapid charger machines.

You learn how to test batteries with hydrometers, meters, and up-to-date high rate discharge equipment.

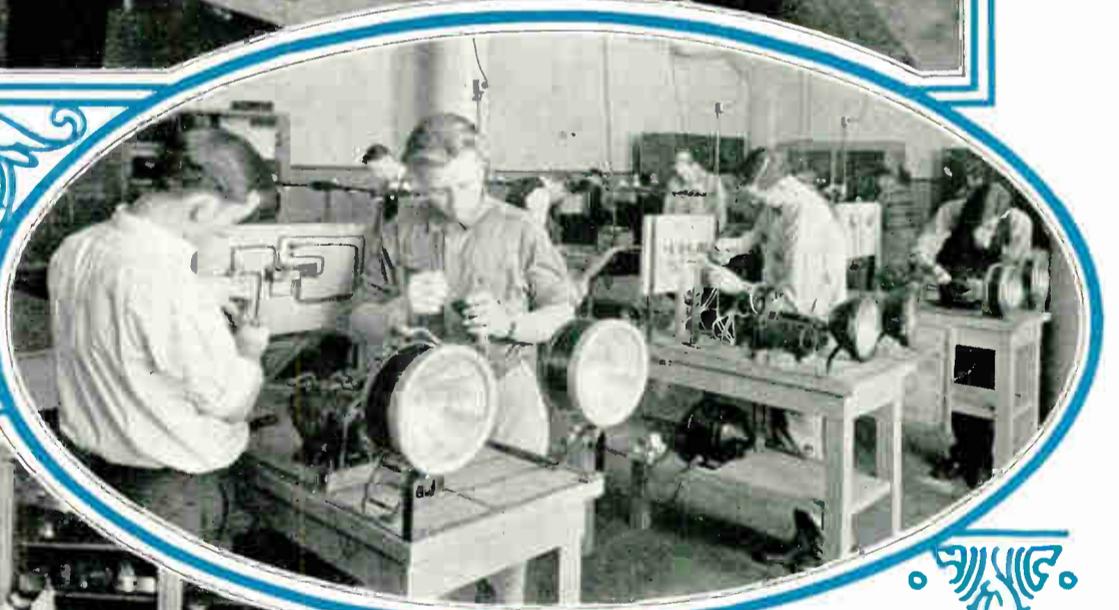
In fact, everything you need to enable you to take charge of battery work for some shop, or run one of your own—even to some practical pointers on how to start, build up and run a business. So you see, I leave nothing undone to give you everything you need to make sure your future success. Now I want you to see this department on the next four pages.



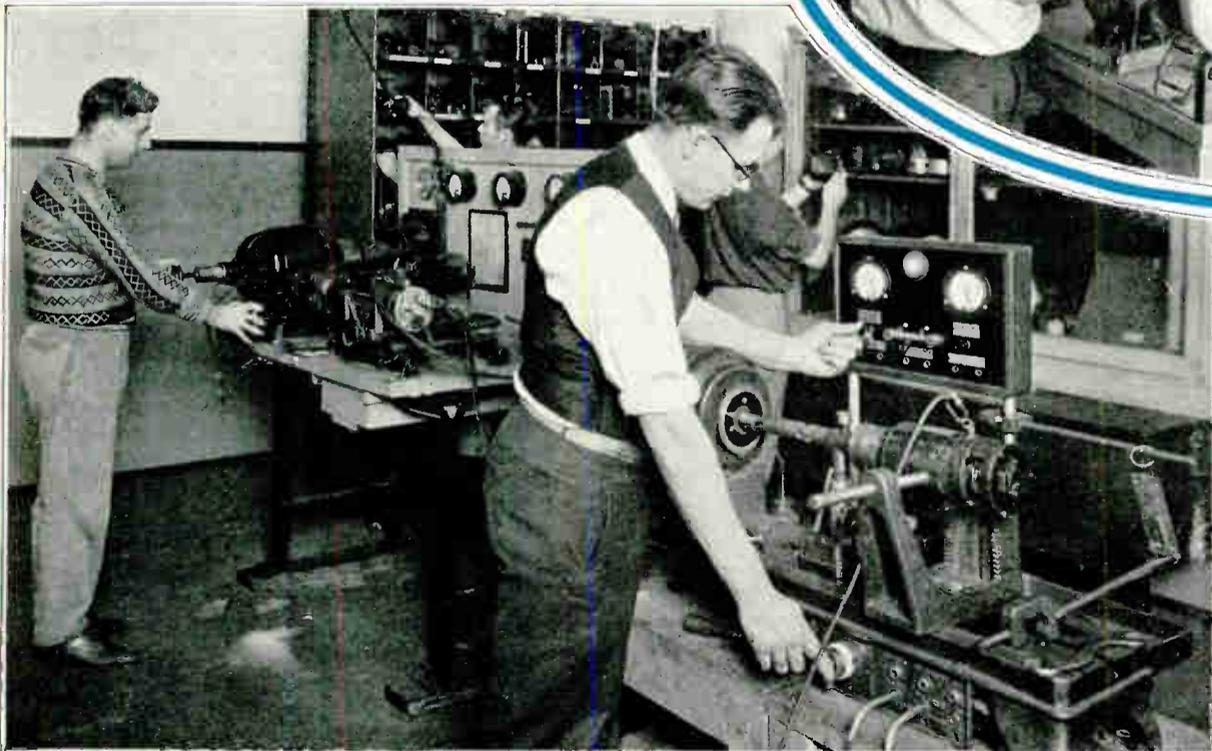
# These Four Pages Will Show You What I Have Just Told You on the Opposite Page



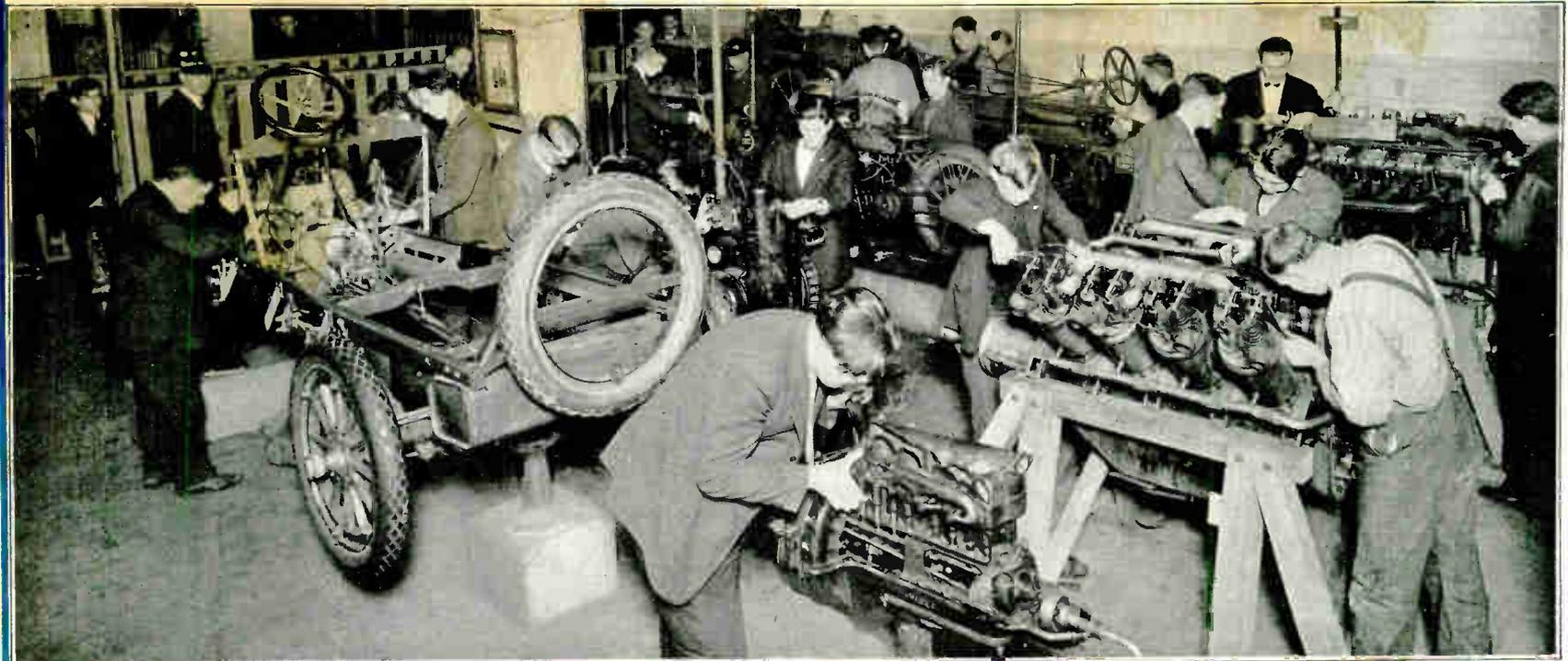
Here is a part of my Auto Department. Note how well lighted and ventilated, and the roomy, convenient working conditions that are typical of all my shop departments. In this department you will get plenty of real work with the tools, overhauling and repairing many kinds of electrical equipment and parts of automobiles, tractors, airplane engines, motorcycle and farm lighting plants. You get actual wiring, timing and trouble shooting on all these different types of engines, on real running tests.



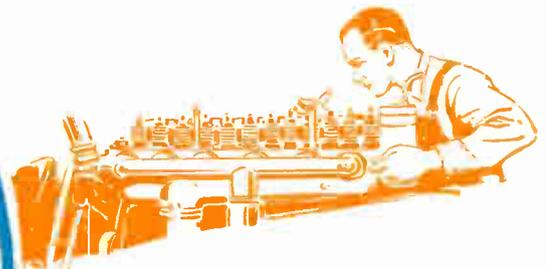
Here you see them wiring and testing complete electrical systems of different types of cars, with all the parts and wiring laid out on a bench for convenient and practical work on trouble shooting, and checking of firing orders and timing. This work enables them to quickly locate by systematic tests, the troubles such as "open circuits", "grounds", shorts, etc., that cause many car troubles.



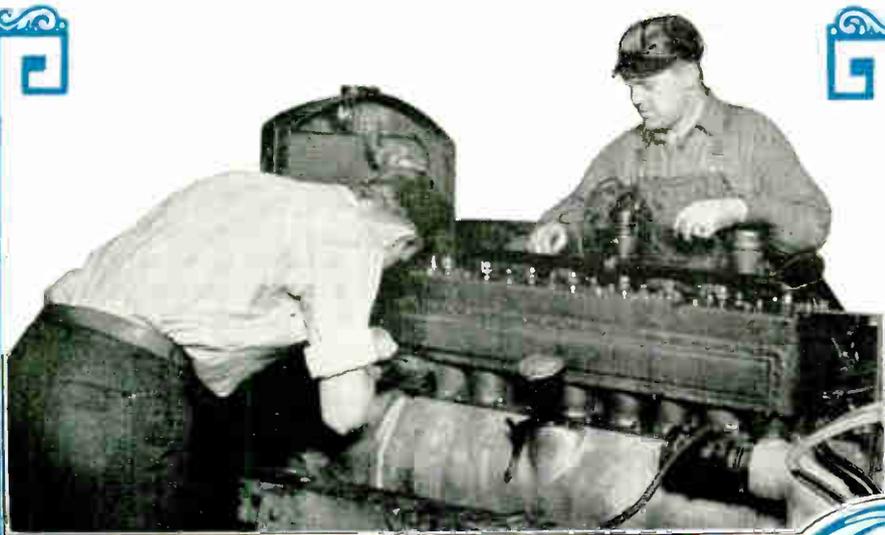
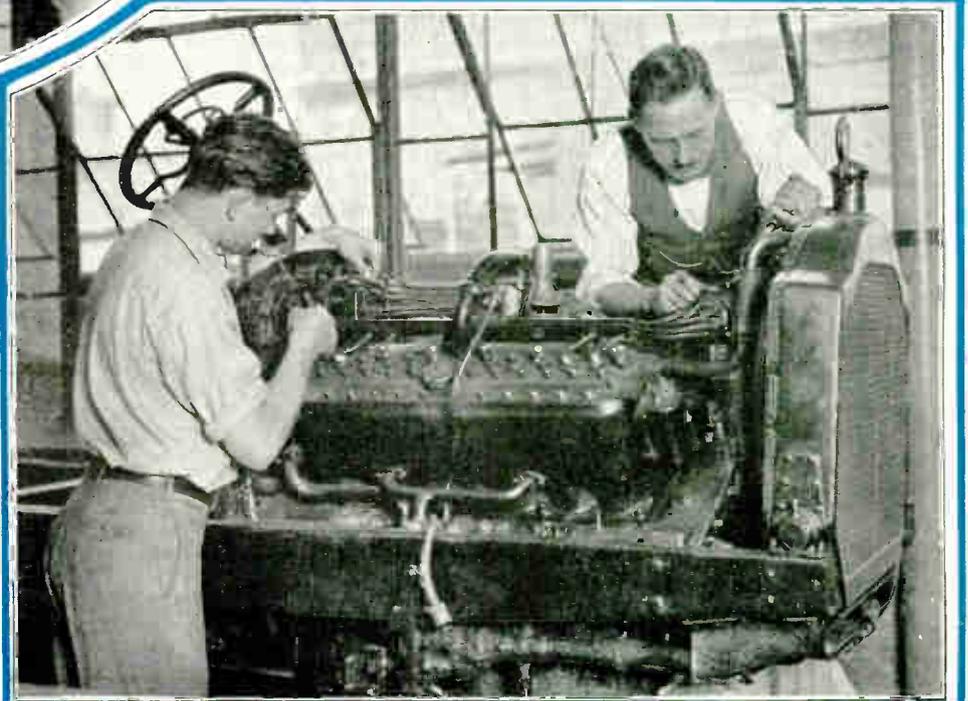
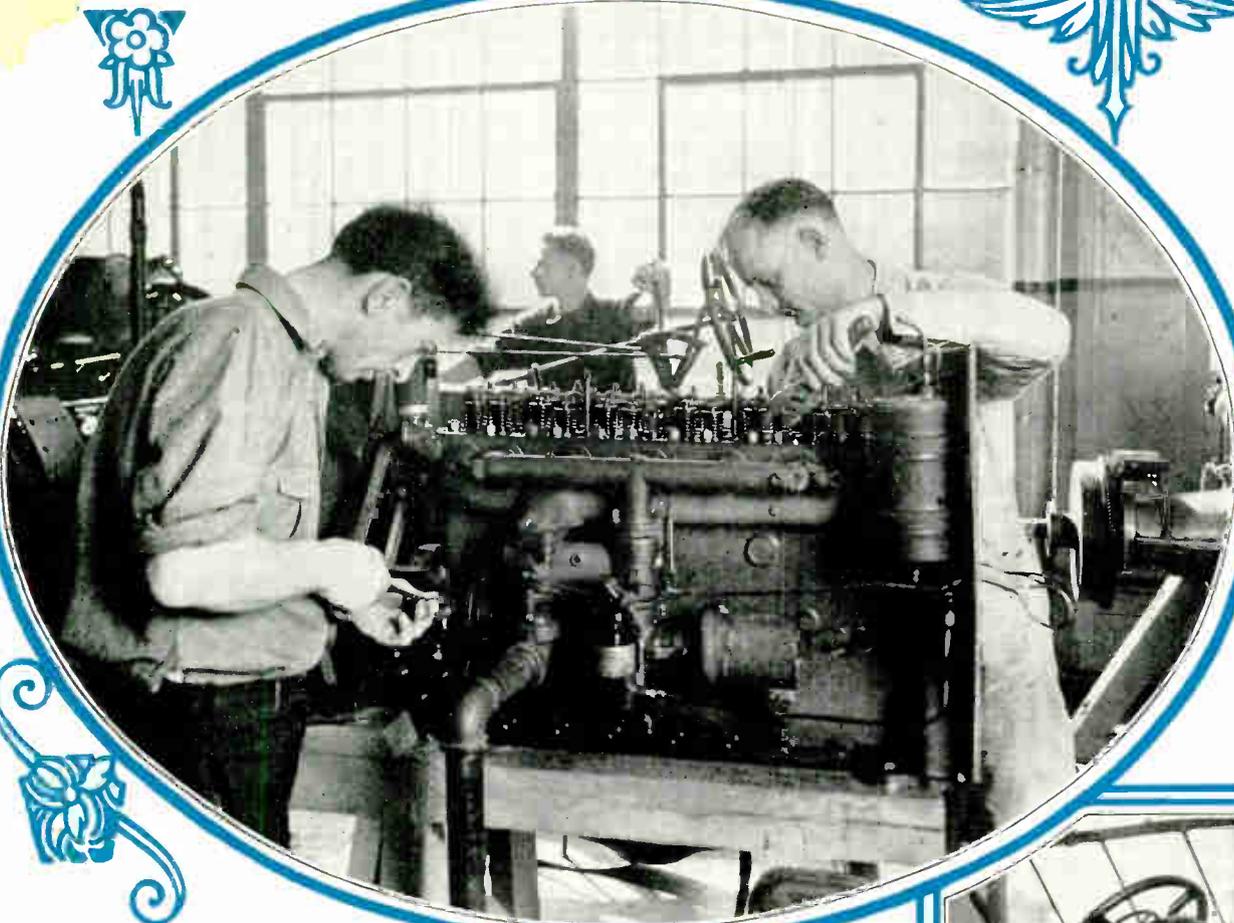
These fellows are using modern garage type test benches for giving final running tests to generators and starters they have overhauled and repaired. These machines show you the actual results and voltage of the generators at different speeds, the same as on the car, so you know whether your work is done right or not. Your work on such equipment as this will help you qualify for the real jobs in this line, and a line in which there is a great demand for trained practical men.



Here is a part of my "live engine" section, and these men are getting actual experience timing the ignition, and trouble shooting on automobile, tractor, motorcycle, and farm lighting plant engines. In the foreground you will see a special cut away engine, on which you can quickly see the action of the valves, pistons, and all parts of the engine.



These fellows are working on a late model "Nash Special 6" engine. Adjusting the generator and charging rate, and setting distributor points and timing. This kind of work makes them handy with the tools, makes them sure of their ability to do these things any time later out on the job. Because you will remember what you do with your own hands.

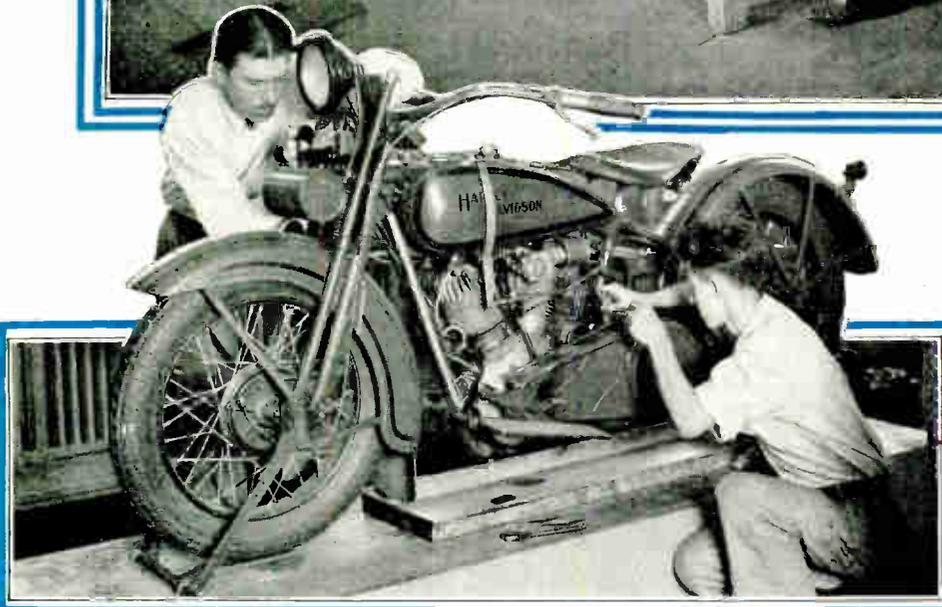


And here you see a Packard "8 cylinder in line" engine. These men are checking the firing order and connecting ignition wires to the spark plugs properly. Work on such engines as this makes you able to handle the good jobs in ignition work.

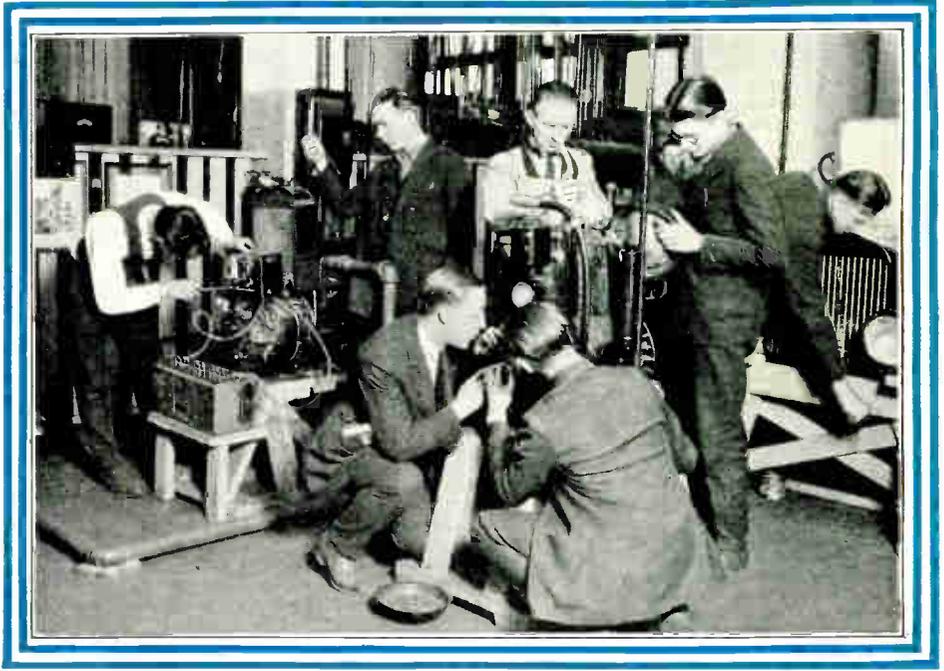
And this is a Packard twin six engine for wiring, timing and trouble shooting. And when the wires are all in place and timing set O. K., these men will "step on the starter" and run the engine at different speeds, and then "tune it" to run smooth both as to ignition, and carburetor adjustment.



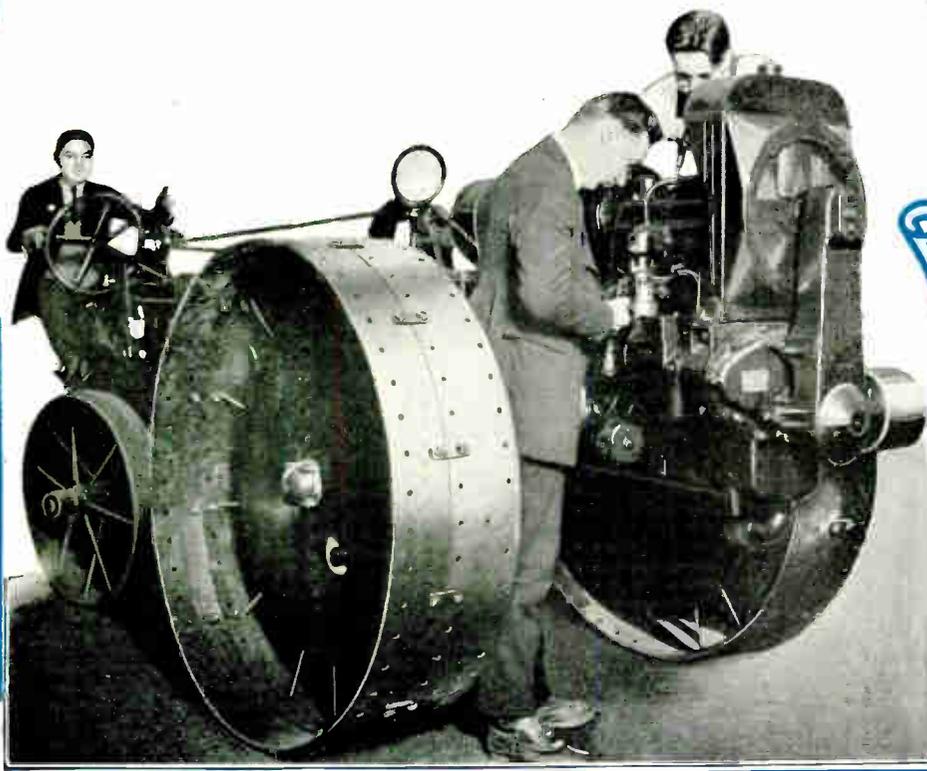
This section of my auto department shows some of the benches where you will overhaul, repair and test many types of generators, starters, ignition coils, magnetos, condensers, etc. You learn to quickly find and fix all their common troubles, and how to use the tools and test meters and devices to simplify this work. These are the things that will make you able to get the good pay jobs, or run a successful repair shop of your own.



And here is a late model Harley Davidson motorcycle, to give you actual work on care and adjustment of electrical equipment for these machines. When you have adjusted the wiring and timing, you climb on and tune it up with a running test.



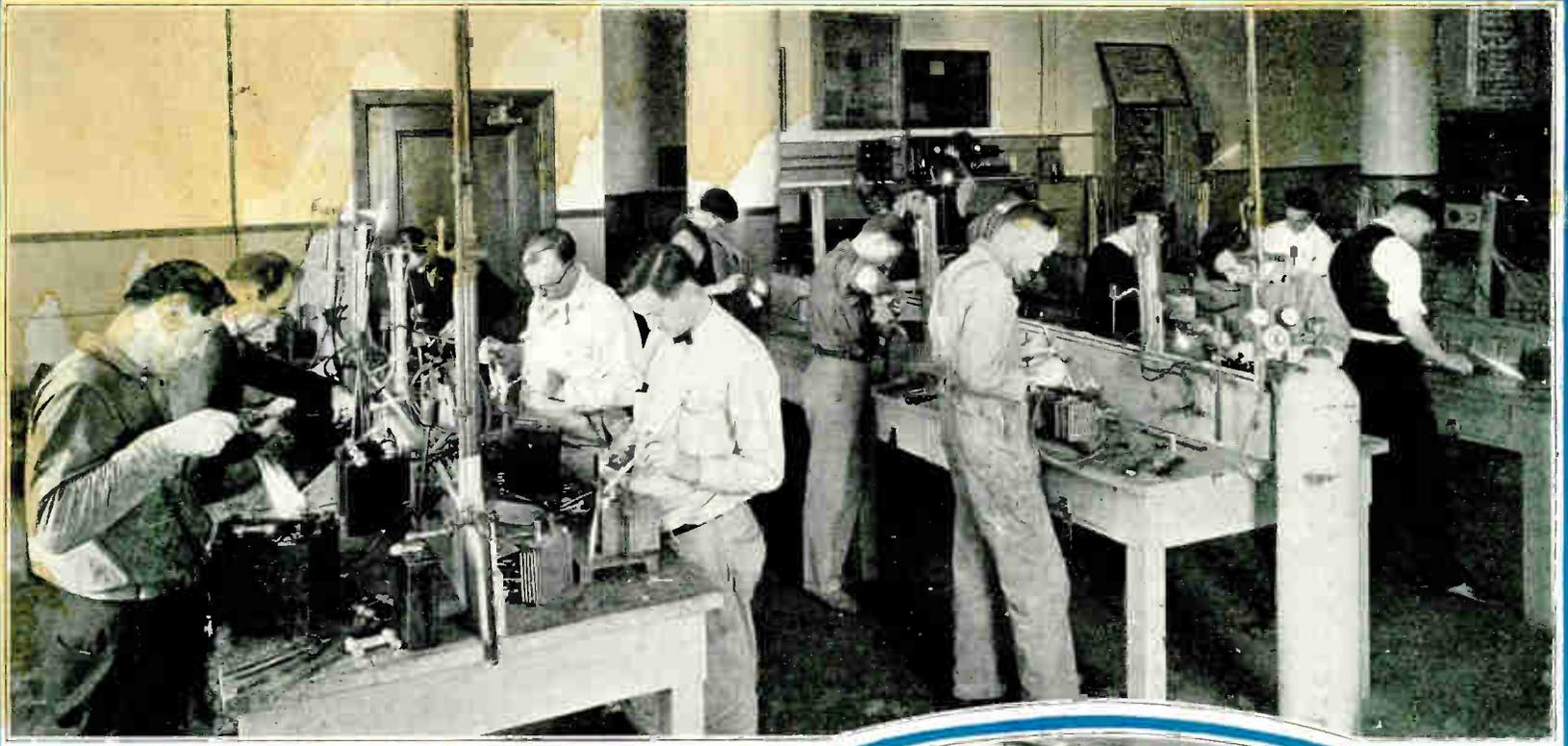
These fellows are working on farm lighting plants. Here you will learn the care and operation of both the hand started storage battery type, and the automatic machines which start and stop themselves as lights are turned on or off. Many of our graduates are making good money selling, installing and servicing such plants.



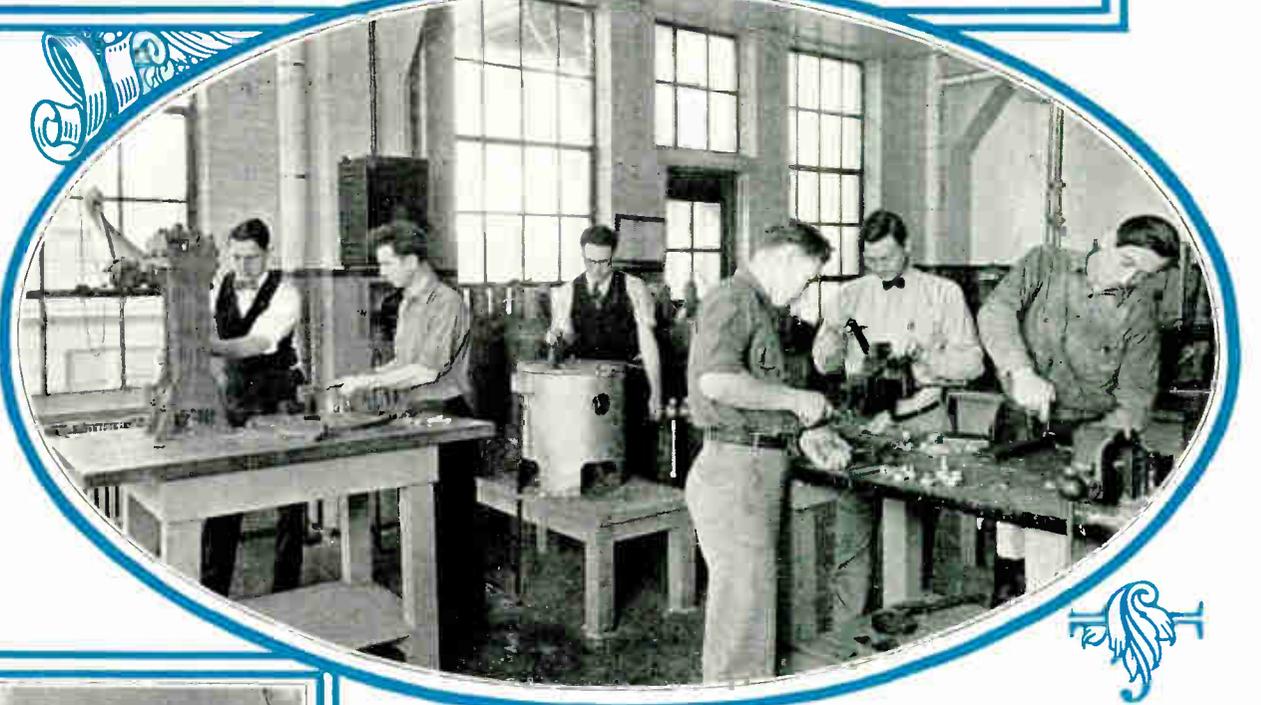
And you get actual experience on wiring and timing of this tractor, and on the care and repair of the different kinds of electrical equipment used on tractors of different makes.



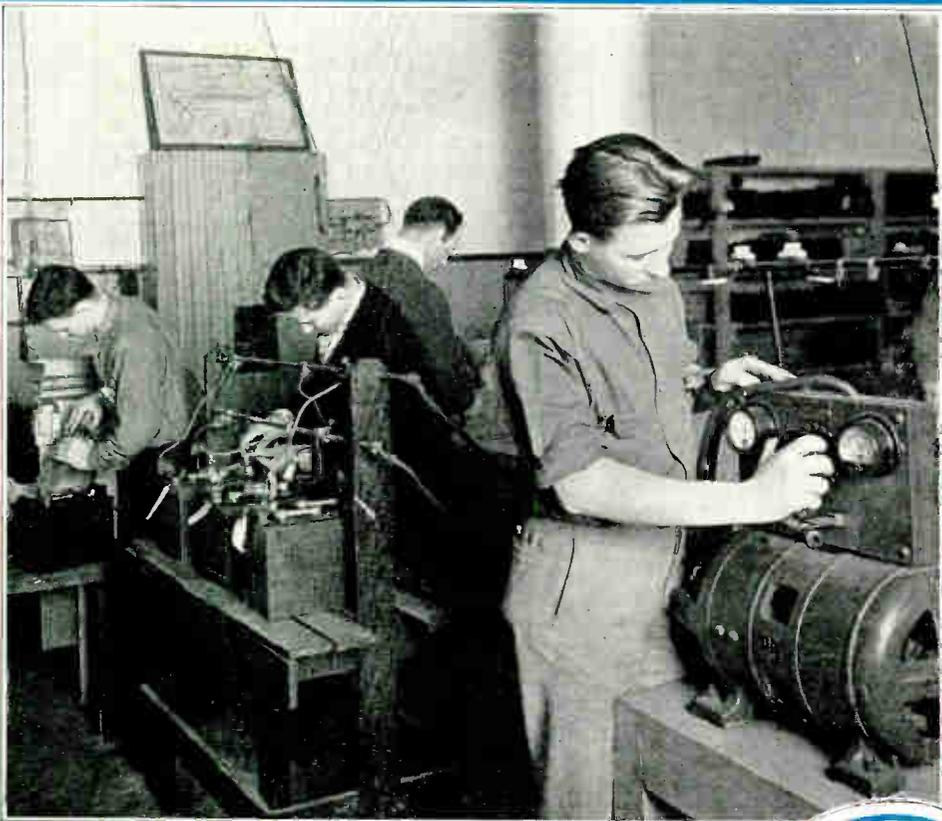
These men are testing motor driven auto horns, and recharging field magnets of magnetos. You will also note the glass spark plug test chamber at the left of this bench.



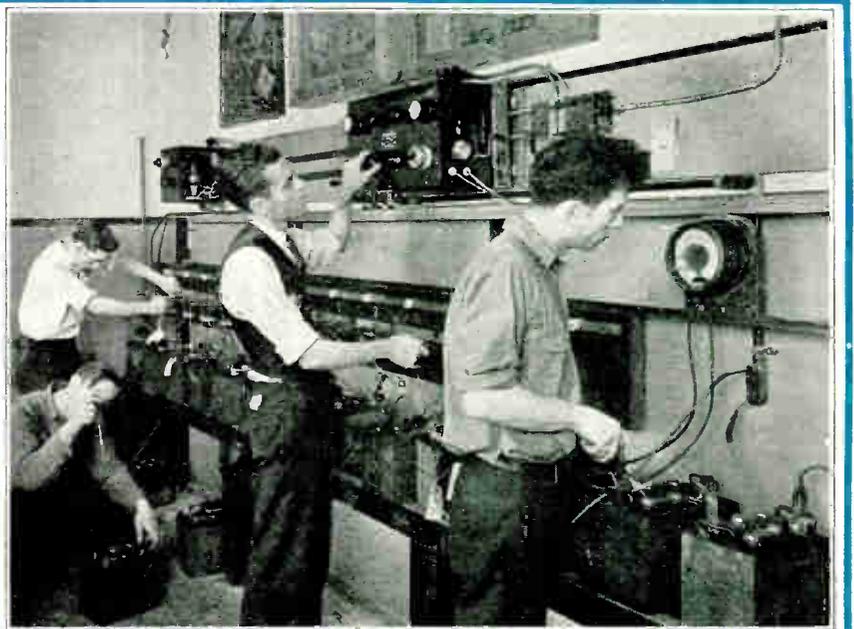
Here you see a section of my battery department, and students learning to assemble plates, do lead burning, and assemble complete cells, and batteries. The special training these men get on lead burning is a big help to them in getting good jobs in this line.



And these fellows are melting lead in a modern 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. These are all very valuable jobs to qualify my students for the best jobs, or a business of their own.



And 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 men testing the acid, and the voltage to determine the exact condition of the batteries being charged.

# My RADIO DEPARTMENT *Qualifies You* for This Fascinating Branch

**T**HIS is one of the newest branches of electricity and is a very valuable addition to your training.

Radio is another great field of the most fascinating kind of work, in which many Coyne men are making good.

Radio, while one of the most recent branches added to the electrical field, has had a rapid growth and has become one of the greatest in size.

It is just a few years ago that radio sets were mostly crystal detectors or single tube sets. And it was then, in the very beginning of the broadcasting development, that Coyne started to teach it, and keep our men up-to-date with its latest development.

And now that it has grown to where there are many millions of receiving sets in this country alone, these sets are bringing news, education, and entertainment to many homes. And radio is being used more and more for commercial and public communication, even to the successful daily conversations across the ocean in regular radio telephone service.

You will easily understand radio after your general training in electricity, as radio is largely A. C. electricity with a few variations from power uses and frequencies.

## Extra Money in Spare Time

**I**N this department you will get thorough instruction in radio principles, the names and uses of all the parts and equipment, how to

build and repair receiving sets, and with special practical work on "trouble shooting" and servicing sets, a branch many of our graduates are making good money specializing in. Others are making extra money in this as a side line from their regular work.

Your work covers tubes of all types, including the late model power tubes and A. C. tubes. Also latest and most efficient tuning devices, condensers, loud speakers, etc.

And the principles and methods of construction of sets, from single tube to the twelve tube super heterodyne sets. Also principles and operation of transmitting equipment.

You learn how to erect proper antenna, how to make grounds, use of loops, etc.

You can also tear down, rebuild and test several types of multiple tube receivers, with parts furnished to you, in this department.

Your instructor shows you how to arrange and mount the parts, drill and prepare the panel, and the best way to run and connect the wiring to get best results.

The instructor shows you how to test each coil, condenser and transformer, and all parts of the circuit, so you can quickly locate any defective parts or faults in the wiring when you get on any "trouble shooting" jobs in the field later.

When your set is all O. K. you connect it to the department aerial and ground, or the loop aerial, and tune in some station.

Then the instructor will place various

faults in the set to show you the symptoms and sounds caused by different troubles.

This is the kind of real practical training that makes you able to hold one of the better jobs in radio service and repair work later.

Your instruction also covers B battery eliminators, testing of radio batteries, etc.

And Chicago has many of the finest broadcasting stations in the country, and you can visit some of these while here if you desire.

And if you wish, you can purchase radio parts at a discount, and build one or more sets of your own with the help of your instructor.

## Your Own Business

**P**ROSPEROUS and well regulated Radio stores furnish a constant demand for high salaried men on the floor who can readily answer customers' more or less technical questions. Your Coyne training will give you a practical knowledge of all the latest improved "hook ups" and equipment. That information can be valuable to you in making money for your employer or, if you go into the Radio business for yourself, you can be the best Radio Expert in the neighborhood—and charge for your services accordingly.

And now with the coming of television, we are following every step of its development, and keeping our students up-to-date on this new, fascinating branch. And we will continue to add more, practical work in this, just as fast as this branch develops and comes into more practical use.



Here is where you tear down, rebuild and test actual receiving sets. This gives you splendid experience in radio circuit wiring, soldering, and also in arrangement and assembly of parts. And you get special instruction in testing and "trouble shooting" right on these sets you build.

These men are building and wiring a complete panel for a power amplifier and general control for a group of large loud speakers used to address a large audience. They are installing all the switches, meters, resistors, and circuits.



Here is another group at one of the assembly benches, repairing and overhauling receiving sets, and building and testing a small phone transmitter equipment. Such work as this qualifies them for the good jobs in radio.

Here I Want  
to Tell You of the Great  
New Field

# Aviation Electricity



**T**O make my course complete I have included Electrical training in this great new field—aviation. Make no mistake about this—aviation is here.

This new field is one that is going ahead by leaps and bounds, and the next few years will see a growth and development such as we have probably never seen in any other industry. There will be thousands of planes used for carrying passengers, mail, express and freight, and who knows but that within the next few years they will be as numerous as automobiles are now?

This development is going to call for skilled experts. Not those with a smattering knowledge of the subject, but those who thoroughly understand everything about the engines of these planes. There will be two distinct branches of this work, electrical and mechanical.

Each will demand their trained experts who can quickly prove themselves thoroughly equipped and trustworthy, and they will, undoubtedly, have to pass the most rigid examination to be able to do this work. It is too important to trust the lives of those who travel in the air to some half trained "tinkerer".

## Electricity a Mighty Important Factor In Aviation

**T**HIS new field will call for specialists, and who can doubt but that electricity or the electrical work on airplanes will become the most important branch of this specialization?

Every aviator must have the utmost confidence in his electrical equipment, such as his magnetos, his lights and electrical instruments. Even today, with aviation in its very infancy, there is a growing demand for electrical experts, and aviation now has barely started.

The fellow who is interested in electricity and can see ahead, will make no mistake in considering this branch—aviation electricity.

## You Need More Than Just The Aviation Electricity

**T**HAT is why Coyne is the place to get your training for this work. We don't train you by simply putting you on this equip-

ment and trying to teach you this alone.

No, indeed, it's just as important and probably more so that you be thoroughly trained in every branch of electricity, to qualify for electrical work on airplanes, for all this work is based on general electrical principles. You must know the action of electricity, tracing of circuits, armature work and many other things. Then you need only apply this knowledge to the equipment in aviation electricity to become thoroughly familiar with this particular equipment. Then you have received a complete training and are qualified for this great field, aviation electricity.

## You Apply Your Training To Aviation Electricity

**A**S I said, your general electrical training has now given you the knowledge you need for any branch, so now you apply that knowledge to the equipment in this department.

You will be trained on ignition equipment (which means the system of exploding the gas in the cylinders, which produces the power). This training you will get on the very latest radial (or whirlwind motors), as well as on the "V" types of various makes.

The instructor will give you a complete explanation and demonstration of the entire operation, principles and parts of these engines, and then complete ignition systems. Then you will go to the different types of engines and put the things you have learned into actual practice and operation.

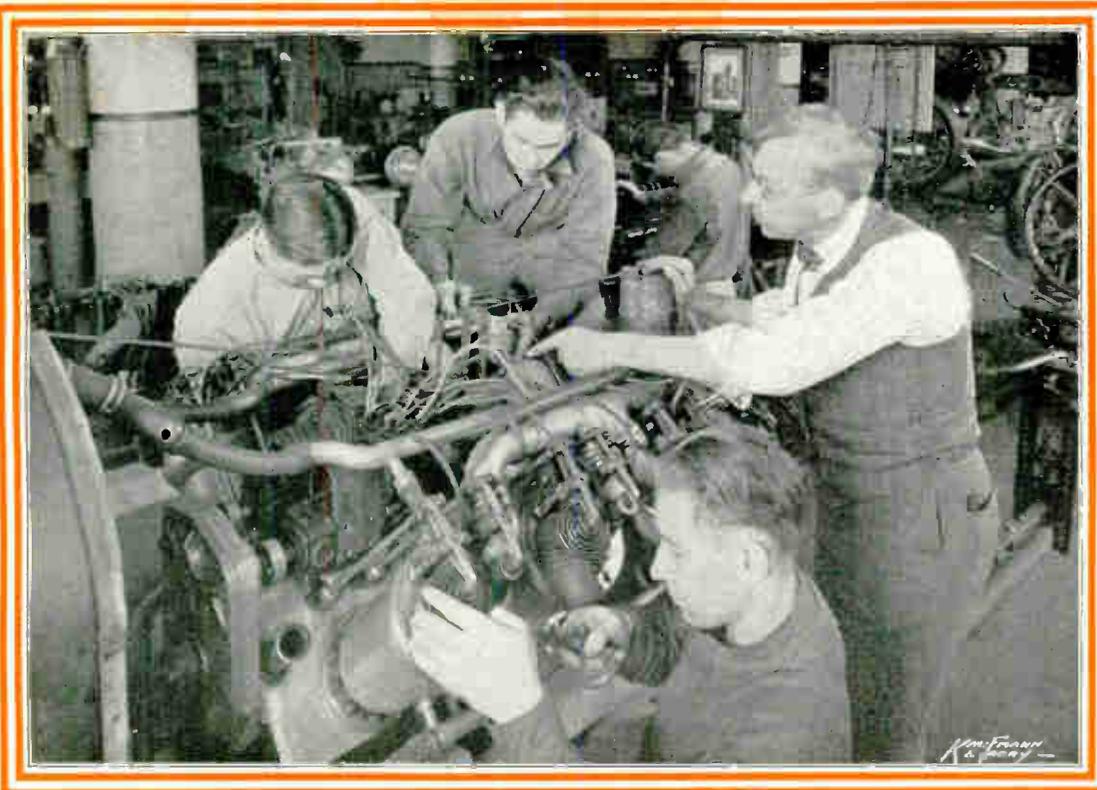
You will get actual experience in wiring, timing and adjusting them, as well as trouble shooting, by systematic testing methods to locate trouble quickly, or faults of any kind in the wiring or electrical parts, right on the engines.

You will get instruction and experience on the different kinds of magnetos, and will learn how to assemble and overhaul them. Your training in this department will cover in a thorough way all electrical work on airplanes, and will fit you for this big, new field. And by getting it now, you are getting in on the ground floor.

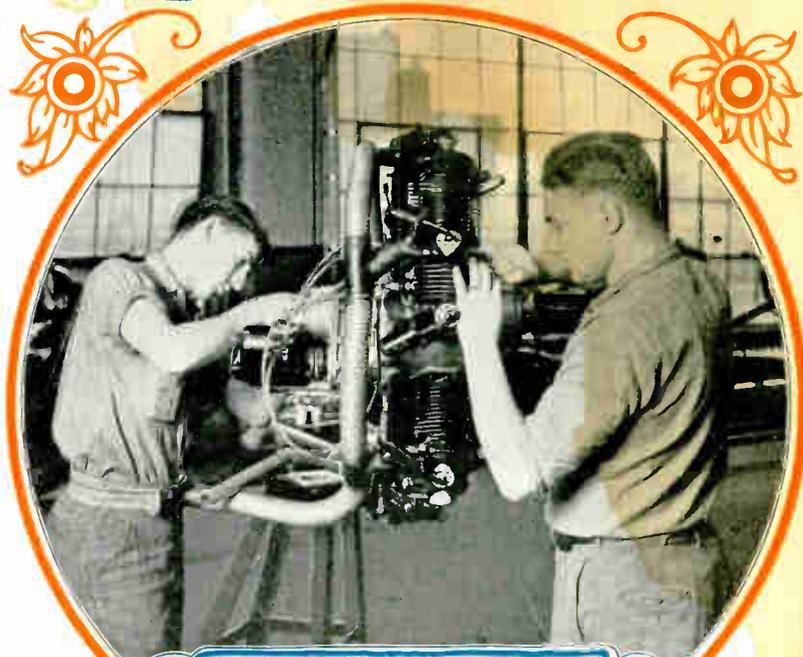
Now I want you to see a few pictures of this department on the next page.



# And Here Is My Aviation Department



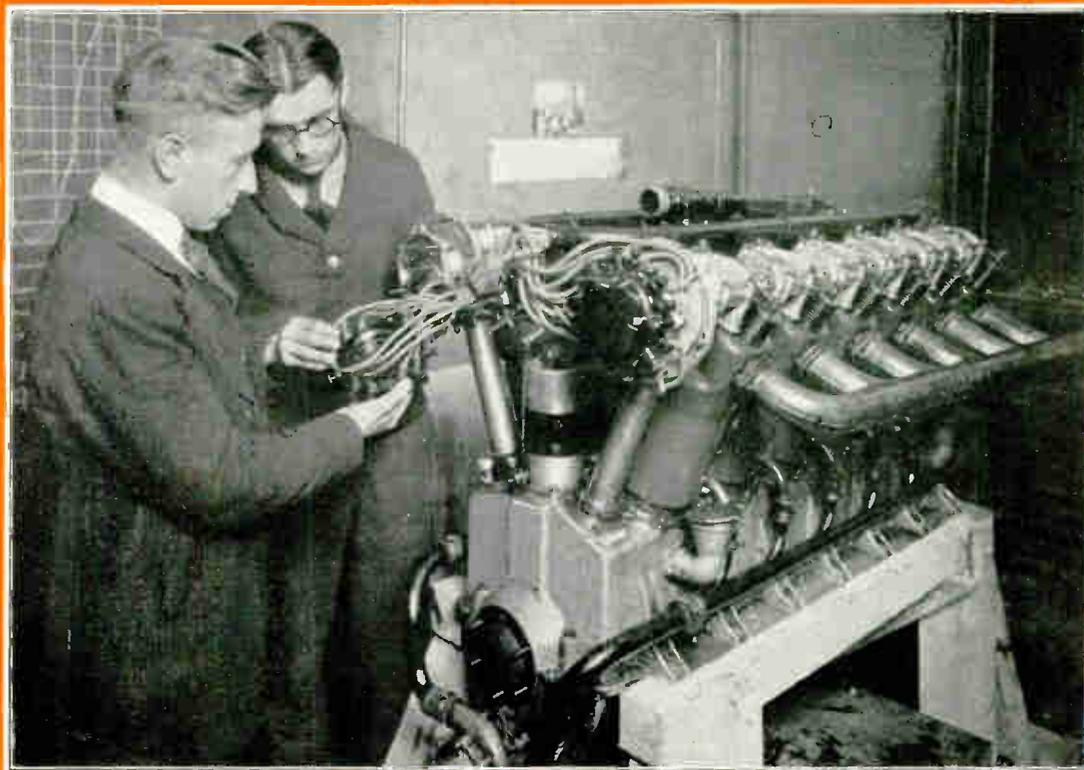
Here you get personal instruction in aircraft ignition wiring on actual engines, and learn how to apply your electrical knowledge to aircraft work. The instructor is showing these men how to wire the ignition of this Curtis 8 cylinder motor, and how to locate faults and troubles in such wiring.



These fellows are wiring and testing the ignition of a modern radial aircraft engine, using the famous Scintilla magnetos. The proper operation of every airplane motor depends on its magnetos and ignition.



Here is where you learn the use of the twin magnetos and spark plugs for double ignition on airplane engines. And these men are also learning carburetor and valve adjustment, which of course, are necessary for the proper "tuning" of the motor. There is a great and growing demand for expert ground men to work at the hangars and landing fields, and keep these motors in "tune".



And on this job the instructor is explaining the operation of the valves and timing of a late model Velie, radial aircraft engine. This personal coaching and help of experts makes your work easy and interesting. Then working it out on the actual equipment helps you to remember what you learn.

And here is one of the famous Liberty 12 cylinder, 360 horse power engines, on which you get special work in trouble shooting and repair of the ignition wiring and equipment. These men are learning how to locate "distributor troubles" and grounds or short circuits in the wires to the spark plugs. Such practical work as this will help you qualify for the good jobs in this fascinating field.

# Some of My Graduates Want To Do Electrical Drafting

*That's Why I Give This Post Graduate Course ~ If You Want It*

**T**HIS department does not have to be taken as a part of the general course, as you get quite well acquainted with plan reading and wiring of jobs from diagrams, in the other departments.

But many of my students like this branch of work and wish to take special training in plan and blue print reading, use of instruments, drawing plans, and estimating, and then specialize in this work for contractors, or engineering departments of manufacturing firms.

Electrical drafting is a big field and employs a great number of men in clean, enjoyable work, preparing the drawings and plans for new electrical machines and power plants, and wiring plans for homes, office buildings, hotels, and factories.

And a working knowledge of this subject is often a great help to the practical man, to work into splendid jobs in charge of electrical construction work.

## Easy Personal Instruction

**I** WANT my graduates to have every possible opportunity to make a success, so I am giving this training after you complete the

other departments, **WITHOUT ANY EXTRA COST**, and recommend it to those who have a liking for this kind of work.

In this department the instructor gives you personal instruction on reading plans, from the most simple, to complete power plant layouts, and wiring plans for huge office and apartment buildings.

When you can read plans and check the material necessary for their wiring, he shows you how to estimate the cost of the materials and labor at standard rates and how to figure the overhead costs and profit allowances for the job.

Then he shows you how to use the drawing tools, and do first the simple plans, and then the more advanced. You also get lettering practice, and learn to make drawings to scale, so each fraction of an inch on the plan means so many inches or feet on the job.

And if you wish you can take special work on mechanical drawing to help you represent and work out your own ideas on paper, if you are of an inventive turn of mind.

And this may be of great help to you some time later in developing some electrical device

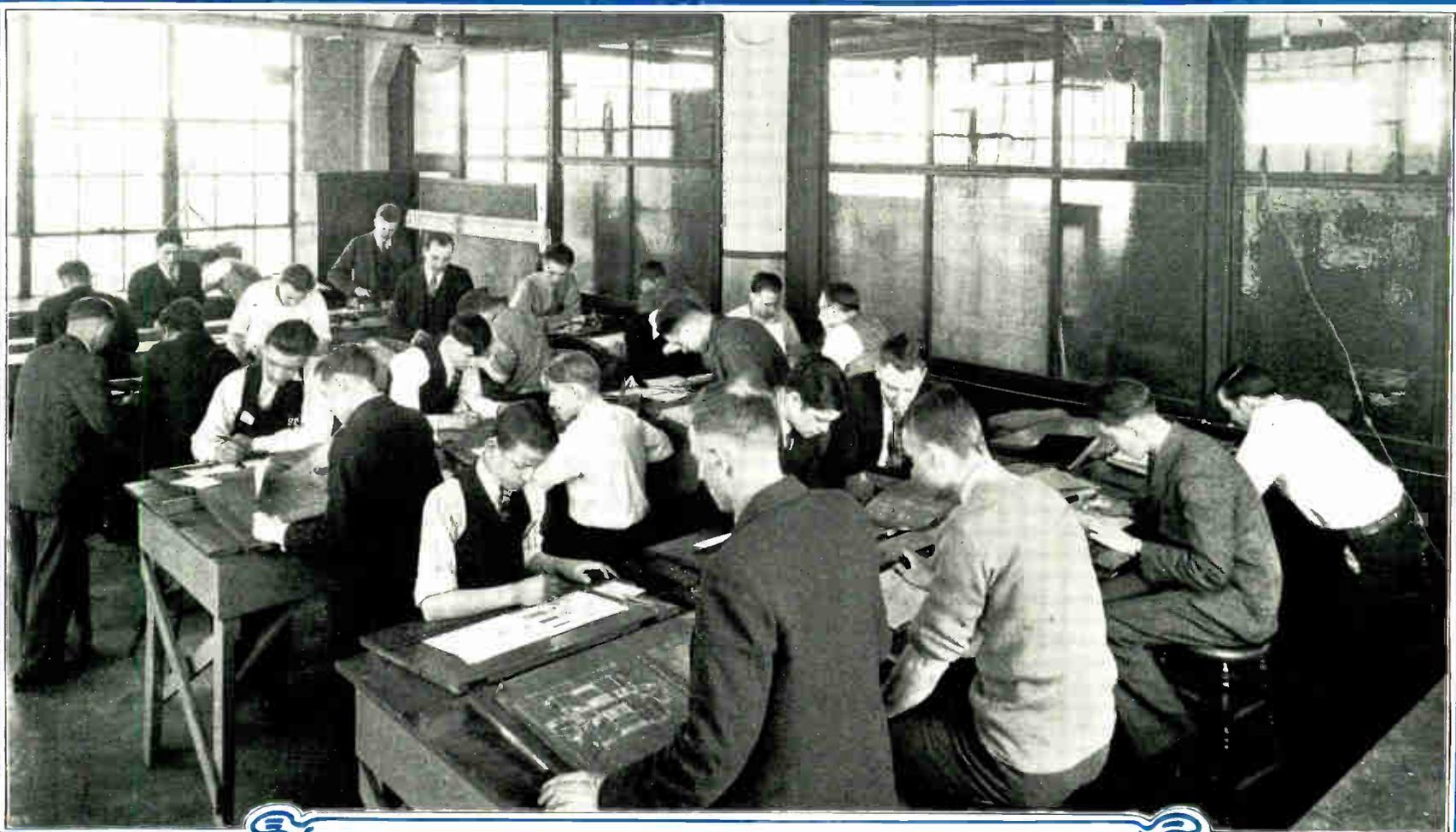
or improvement, as a number of our graduates have done.

And the work you get in this department will also be very valuable to you if you go into your own business as a wiring contractor.

## You Don't Need Advanced Education

**M**Y entire course is so prepared that you do not need any mathematics beyond that of common grammar school, and many of my very successful graduates had even less than that. What simple mathematics you need are covered right in the course in practical problems. But if you wish to brush up or get any special help on either simple arithmetic or mathematics the instructor in this department is always ready to give you personal help on this.

If you wish to take this drafting work, you will enjoy it, because you have had the actual experience in the shop departments on the very machines you will draw here, and it will be a very valuable addition to your shop training in the other departments.



Here is a view of part of my drafting department. These fellows are learning to use drawing instruments and to make and read plans of electrical machines and systems. This work is not a required part of the course, but can be taken as post graduate work by those who desire.

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

**Y**OU have seen actual pictures of Coyne—both inside and out.

You could hardly help noticing our wonderful new fireproof building on page one. Also you must have been impressed with the light, airy effects in our class-rooms. All warm and cozy in winter—well ventilated and cool in summer. We train students at Coyne every day except Sundays and Holidays—the year around. Can you doubt the evidence of massive electrical machinery by the actual photographs you have seen—and mind you they are reproductions of actual photographs, every one of them. What a fascinating sight it is to see so many fellows—no different than you—so happily engaged in working individually under personal instruction. And remember that all these men were actually engaged in tearing down, rebuilding, repairing and operating real plant sized electrical equipment—getting a training that is the quickest way to a big pay start in the Electrical field. Couldn't you just see yourself one of these lads?

## **I Am Talking to You as Man to Man**

**I**NTEND to show you that it is easier for you to get into Electricity and be ready for big pay—than you think. I am trying to tell you every single detail about Coyne training that I believe you want to know. Can you imagine the size of a building, necessary to house all the massive machinery and equipment you have seen pictured in the foregoing pages? There is no greater display in any other educational institution—but that is only one of the many things which make Coyne the greatest on earth. No wonder Coyne men are so well trained and new fellows can be trained so quickly,—just as you will be!

## **I Personally Conducted You**

**B**ECAUSE I wanted to be sure that you got everything in the proper order and without any misunderstanding on your part. The

## **You Can be Thoroughly Trained in a Very Short Time**

**R**EAD the following pages very carefully. You will soon understand how I intend to give you this thorough training. For instance, you will see:

Proof that I Do Actually Get Big-Pay Jobs For My Graduates—Plenty of Them.

How I give you Personal Service while at Coyne. What wonderful opportunities you will have for recreation, athletics and entertainment.

Vital questions asked and answered. Most all of these will interest you.

The Branches in Electricity Open to You and the Big-Pay Jobs waiting.

How I stand Behind you and Back You up for Life After Your Graduation.

Your Diploma, Terms of my course and what it will cost to live in Chicago while attending Coyne.

Your decision to enroll at Coyne and why you should make it now.

history of Coyne is so interesting that I am seeing to it myself that you understand it correctly from the important things I have already shown you.

## **No Entrance Examinations No Experience Necessary**

**T**HE Coyne Electrical course gives every student the very thing he lacks. I accept you at Coyne because I believe you want to improve your living conditions by making Big-

Pay in Electricity. I take it for granted that you know little, if anything, about Electricity. When you enroll at Coyne I feel that you are here for just one purpose—to learn Electricity as quickly as you can. How much you know about it when you arrive is not nearly so important as that you must be thoroughly trained when you leave.

## **Have Complete Confidence in Your Training at Coyne**

**C**OYNE Graduates have confidence because they are sure of themselves. They are trained practical planners. They can handle any practical electrical job quickly in first-class shape. They know how—they are experts in dozens of different branches in Electricity. But the thing I take the greatest pride in is that Coyne men are trained to reason a thing out and think for themselves. They know that what they have learned at Coyne is true, and repeated work in school has shown them how to apply it under any condition, anywhere.

## **The Field of Big-pay Positions for New Men Like You is Unlimited**

**I**ESTIMATE that 60,000 new Expert Electricians could be used during the next twelve months if they could be found. Now I am not talking about "pick and shovel men," "helpers" or the rank and file of ordinary laborers. Neither am I speaking of every-day "screw-driver electricians" who do the "hackwork" on time clocks under close supervision. I mean Trained Electrical Experts at Big-Pay who know how and can supervise many untrained workers.

Of course, I'm doing my level best to train as many fellows as I can, but I see right now I cannot hope to equip new men fast enough to hardly make a dent in the Electrical Industry's vast and rapidly increasing requirements. I am forced to count on you and other fellows like you to help me supply even a small part of the enormous demand for new Electrical Experts.

# **Practical Training Is the Best**

## *Make No Mistake About This Coyne Has Proved It for 30 Years*

**I**T stands to reason that you can learn Electricity better and quicker by actual practice on actual machinery than you could ever hope to learn just from books or lessons. Many fellows make the mistake of first thinking they can "absorb" Electricity by reading about it while they hold down a small pay job doing one routine thing with a wrench or screw-driver in an Electrical shop. A little experience teaches them that's not the way to quick success in this Big-Pay field. Stop and think a minute. If this were possible Coyne would not have become the great institution it is today.

I have given you only facts. Any thinking man knows that actually doing a thing when that thing is thoroughly understood and done under the personal supervision of an expert—is not to be compared with reading about it. I have tried to be fair to you. I have tried to point out to you facts

which will help to guide you and save you much grief and regret in later years. So I say, get your training at Coyne, the most practical school in the world, where I have seen to it that we are the most completely equipped to give you what you need. I am sure you can't help but be convinced after reading some of the success stories of my graduates and seeing the endorsements given Coyne by prominent people and concerns in Chicago, that Coyne is equipped to give you what you need.

## **Now Read the Following Pages**

**I**N the pages following this one I have given you further facts about Coyne. Things you will want to know before you come to Coyne. Read them carefully—it will only take you a few minutes more.

# We Give Our Graduates Real Employment Help

## Can't Say Too Much for Coyne

Dear Mr. Lewis:

I just wanted to let you know that I am still employed at the \* Supply Company. This is the job you got me when I graduated and I want to thank you for your prompt service in placing me when I finished your school.

I can't say too much for your method of training and your employment department which has helped me so wonderfully.

With best wishes for the continued success of old Coyne, I am as ever your booster,

Ralph Flood, Ohio.

## Appreciates Our Help

Dear Mr. Lewis:

I knew you would be interested in hearing about how I was getting along so I thought I'd drop you these few lines. I still am employed at the \* Oil Burner Company, this is the same job that you got me when I graduated and I sure do appreciate it.

With best wishes for the continued success of the school, I am

Your old friend,  
LeRoy C. Ridlen, Mass.

## Got Both Part Time and Graduate Position

Mr. E. A. Darling, Manager,  
Employment Dept.,  
Coyne Electrical School,  
500 South Paulina Street,  
Chicago, Illinois.

Dear Sir:

In answer to your letter concerning the Employment Department. The Department located me with part time employment which enabled me to finish school. Within a week after graduating the Department directed me to a position which I am now holding with the \* Refrigerator Company of Chicago.

Russell Gorbett, Illinois.

## Our Help Does Not Stop With One Job

Dear Mr. Lewis:

I'm writing this letter to let you know what you and your school have done for me.

I am nineteen years old and feel very proud of the fact that I was able to work at part time work which your employment department secured for me to pay part of my living expenses while going through school.

After I graduated I secured an electrical job through your employment department's educational plan which I worked at quite successfully until I left this position. But your employment department again came to my assistance and gave me another job at the \* Electric where I hope I will continue to work for a long time.

The work is electrical repairing of all kinds of electrical equipment and I need not tell you that I'm much pleased with it.

I remain as ever, a successful graduate,

Frank Saari, Michigan.

## Hundreds of Letters Like This Are in My Files

Mr. E. A. Darling,  
Employment Department,  
Coyne Electrical School.

Dear Sir:

I have recently obtained a position through your service and am very satisfied with it. I wish you success.

Yours truly,  
Alfred O. Behm, Illinois.

\*Names and addresses gladly furnished on request.

**Y**OU as one of my prospective students naturally are interested in getting a job after you graduate. So right here I'm going to tell you just what you can expect as a graduate of my school.

I have told you in other parts of this book that the most valuable thing to me is the good will I have built with my great army of graduates. Accountants who appraise the worth of a business place this good will of Coyne at over a million dollars. What has been responsible for this satisfaction among my graduates? Just one thing. **Service and help.** Probably the most important branch of this service and help is our employment service.

## I Maintain a High Grade Employment Service

**T**HAT is why I maintain an employment department, not merely in name, but an actual honest-to-goodness employment department and run as a separate department in charge of competent, honest men. This department is maintained for students and graduates only. It has contact with the Electrical concerns all over the country and has only one object. To see that every student who needs it gets part time work while attending school and every graduate of Coyne gets real helpful employment service after they graduate.

When you graduate my employment man is going to take you in hand and is going to **do everything in his power** to see that you are satisfactorily placed. First, because it owes you that service as part of our obligation to you; secondly, because we want your good will and we know the only way we can hold you as a friend after you leave old Coyne is to make you happy.

When you graduate from Coyne you will be given every assistance in finding the kind of job you want.

Coyne has made an international reputation on their accomplishment in placing their graduates in jobs, and we don't intend to ever lose this wonderful reputation we have built.

And remember one thing—this wonderful reputation and a record I don't believe is equaled by another educational institution, has been made without ever giving anyone a guarantee of a job.

The records of my employment department are open to anyone who wants to see them. They speak for themselves and are absolute proof of what Coyne does for her graduates.

## I Want You as My Lifetime Friend

**I**F you are satisfied you'll boost my school. You will in the years to come be responsible for sending me many students. That's a mighty strong reason, not the only one, of course, but just the same an important one, why I want you as a friend when you leave the doors of Coyne to go out and cash in on the training I will give you. I do not feel that I or anyone else at the head of any school has any right to guarantee a fellow a job just to get him to enroll. I feel you will not be deceived by any such promises made by some schools.

I guarantee to give you the best training possible. After that I guarantee to do everything that's possible to help you in every way. **For, after all, your success is my success.**

## Coyne Spares No Expense to Help Graduates

Dear Mr. Lewis:

In my opinion your employment department is one of the most active in your school. I had no trouble after graduation, your Mr. Darling got me a good paying job at once.

I think you certainly do wonders for Coyne men after graduation for I know of several instances where your employment department has gone to much trouble and expense to get a graduate quickly placed in satisfactory positions.

Good luck to you and Coyne.

Your old friend,

P. C. Humphrye, Illinois.

## Got a Job a Week Before He Graduated

Dear Mr. Lewis:

Mr. Lewis, I appreciate the help of the employment department has given me. I consider it was an unusual service to receive an electrical job a week before I graduated.

Sincerely yours,

E. D. James, Virginia.

## Even Better Than Expected

Dear Mr. Lewis:

I want you to know how pleased I have been with the job your Employment Department quickly got me after I graduated from Coyne.

I had always heard the highest praise of you and Coyne, but I did not know how promptly you could land a man in a good job until the day after I graduated. More power to you. Call on me any time. You may use this letter in any manner or form that might be useful.

Arthur Blaha, Illinois.

## Came Back to Review and Got Real Employment Help

Mr. Darling, Manager,  
Employment Department,  
Coyne Electrical School.

I was on my vacation when your letter arrived so didn't get to answer immediately. I sincerely hope that this letter will reach you in plenty of time.

I went back to Coyne last summer to review. When I was nearly through I ran out of cash. I was given aid through your department to a part time job until I could finish the subject I was reviewing at that time; after that I received a full time job with which I was well pleased through the aid of the department. Later I received a position with the \*. For whom I am still working. I also received this position through the aid of the school.

I am glad to say that the graduating department helped me out a great deal.

Very truly yours,

Carl H. Minick, Oklahoma.

## Speaks for Coyne Graduates

Dear Mr. Lewis:

I wish to let you know that I deeply appreciate the new field of work opened to me by the Coyne Course, and the remarkable results gained by the Employment Service in placing the graduated students.

Through the Employment Service I obtained a position with the \* Machine Company. I cannot thank your Course and Employment Service too much.

Sincerely,

Myron B. Weaver, Washington.

\*Names and addresses gladly furnished on request.

# Our Student Service Department Handles All Your Problems

THE Student Service and Welfare Department plays an important part in Coyne School life. The minute you arrive, you have the feeling 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 Student Service Manager 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. He treats every boy as he would his own son.

No matter what your religion may be or what your denomination, you will find that a church of your choice is right near at hand and they welcome their members from other towns and cities. I had room to illustrate only a few of these on page 44.

On Sundays an instructor escorts a large number of students to the neighborhood churches where they have special classes and discussions. This is strictly non-sectarian and attendance is absolutely voluntary. I mention this because I do not want anyone to think any of my students are forced to attend against their wishes. Our text book in these meetings is the Bible and we make a practical study of the Word of God and the Life of Christ, as applied to our own daily problems.

## Your Entertainment at Coyne

WHEN 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.

Every week, usually on Thursday, I stage,

during the noon hour, a high-class entertainment. The double size stage is raised in place and the artists start their features. Sometimes it may be high class novelty music, string quartets and quintets, a magical show, songs and skits, clog artists, athletic exhibitions, and so on, features of practically every description. These are all high-priced acts or features that I engage direct from recognized circuits and every one of them is as clean and wholesome of quality as can be found, and they cost you nothing.

## Athletics a Great Feature

ONCE weekly, during the noon hour, I hold a big amateur boxing tournament. All contestants are volunteers from the student body. The big stage is put in place, the ropes pulled taut, the gong tested, and timekeeper ready, then maybe a lad from Oklahoma takes on a fellow student from Canada, and so on it goes, 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 always put on in a fine spirit of sportsmanship—never any rough stuff.

## Outdoor Sports

THEN as you know, Chicago is one of the greatest cities in the world for outdoor sports. In the summer one of the big leagues is always playing here. Either the White Sox or Cubs have a game every day of the season.

There is swimming and hundreds of other good, clean recreations. In the fall the biggest football teams in the country play here. Then in the winter there is skating in the Parks. Theatres and great athletic contests going on continually. The Sightseeing Busses, Stockyards, Field Museum and hundreds of other buildings and places of interest afford a fellow hours of good clean recreation without sacrificing any of his school work.

## I Help You Locate a Fine Private Home Near School

WHEN you arrive at Coyne and have completed your enrollment and met my student service man, you are then ready to get your room. Our 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 many students prefer to live.

Our rooms run in some cases as low as \$2.50 a week where students are willing to room together. Other rooms run higher, but a very fine room can be gotten for from \$2.50 up to \$3.50. If a student wants more facilities he can get them by paying slightly more.

As I said, these rooms are located within short walking distance from the school. Your meals should average about \$6.00 per week.

You will find that no detail making for your happiness, well-being, comfort and health has been overlooked. 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.

In case you happen to feel indisposed at any time, arrangements have been made whereby the folks with whom you make your home will notify me at once. Should there be occasion for medical attention, my house physician is available at all times.

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

THE Y. M. C. A. is just a few short blocks from the school and our students have the privilege of joining during their stay here at a special price. This also gives them the privilege of rooming there if they so desire. There are numerous 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.

My Welfare Department sees that you are placed in living quarters suitable to your taste and convenience.

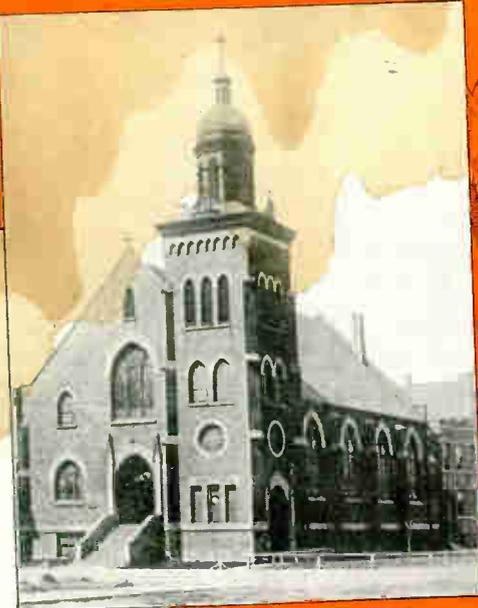
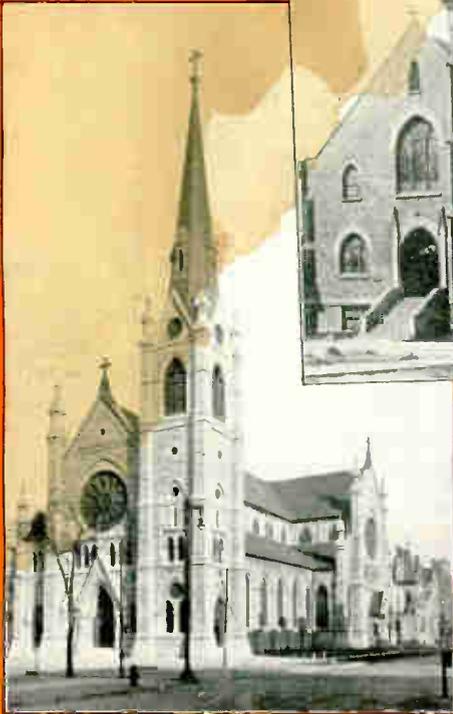


Amateur Boxing, among COYNE students, furnishes wholesome exercise and amusement for all who like it.



H. C.'s Treat, the Great 29th Anniversary "Blowout," to which all COYNE Graduates as well as Students Were Invited.

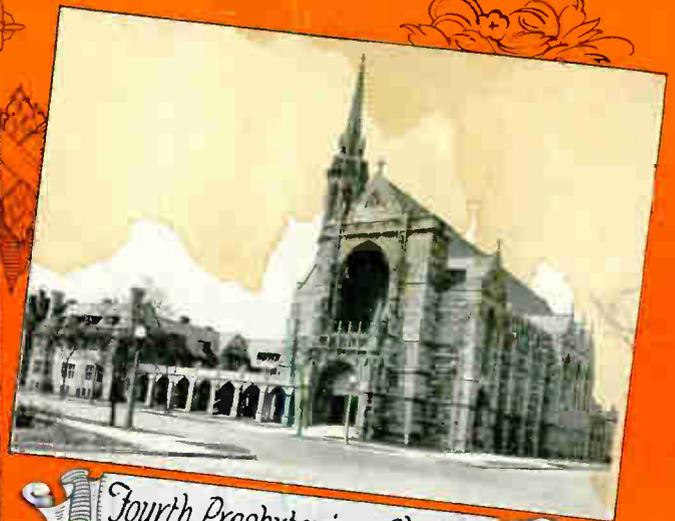
*Holy Name Cathedral*



*Bethel Lutheran Church*



*M. E. Church ~ Chicago Temple*



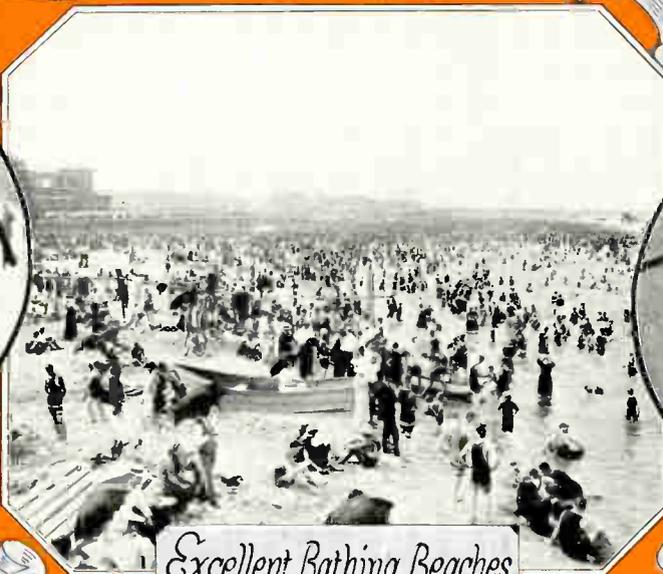
*Fourth Presbyterian Church*



*One of the many excursion boats*



*Ice skating on Park Lagoons*



*Excellent Bathing Beaches*



*Municipal Pier*

*Big League Baseball Game at Cubs Park*



*Football Game at Soldiers' Field Stadium*

# Important Questions Asked and Answered

I HAVE tried here to bring out every question you would likely want an answer to. Please feel free, however, to ask any question you may have in mind if it is not on this page.

If the answer to any question here is not perfectly clear don't hesitate to write me. I want you to thoroughly understand everything about my school.

I have tried to make everything clear not only on this page but all through my book but sometimes a fellow has a problem that's different from any other fellow's. So if you have any problem at all feel perfectly free to discuss it with me and if it's of a confidential nature I will keep it confidential.

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

This is a question that is asked me very often so I'll answer it clearly. When you went to public school or if you ever attempted to take a correspondence course—practically all of your work was out of text books or printed lessons. Here at Coyne we don't teach you with text books. We don't condemn books if they are properly used for reference purposes or to keep posted on events or happenings. Our instruction, however, is on actual electrical machinery and not by text books. We give a student the theory he needs by practical talks, blackboard sketches and equipment demonstrations, then when you learn it this way it stays with you. About one hour a day is devoted to this work. As I said, I don't condemn books—they serve their purpose, but I don't believe anyone can become a trained expert by only studying books or lessons. Coyne is practical, both in practice and theory, and you don't study books here in my school.

## 2. Is your building modern and fireproof?

Absolutely, the very latest style of steel and concrete construction, light on all sides, ventilated and every comfort and convenience for our students. We own our own building and occupy every foot of it for our school.

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

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

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

Yes. You never pay us more than one tuition price, which covers all departments and all materials and in addition receive a Life Scholarship in the Students' Association, including full review and consultation privileges.

## 5. What are your entrance requirements?

Students are expected to understand the English language sufficiently to be able to follow simple explanations and familiar instructions and illustrations used by the instructors.

## 6. Do you teach by mail?

No. Absolutely No. The students of Coyne are trained by actual work on the greatest assembly of electrical apparatus and machinery of its kind in America. This requires the student's personal attendance, as I believe, this is the only way to learn electricity.

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

Any time. The earlier, the better for yourself. This school is in operation twelve months of the year. No classes to hold you back.

## 8. Can I go to school half time and work half time?

No. Absolutely not. We know from experience that any such plan is not a good one.

## 9. Can I get work to help pay my expenses?

While we do not guarantee positions we will give you every assistance in procuring work after school to help pay your living expenses while in school.

Now please understand these jobs are only to help a student through his course and are usually jobs that require no skill. See Pages 3 and 42.

## 10. How much education must I have to enter?

An ordinary common school education is sufficient, plus ambition and the willingness to work. By our method of teaching an advanced education is not necessary. We teach by practical training. Some of my successful graduates have never even completed the common school grades.

## 11. Must I know anything about electricity to enter?

No. We teach you this work in all its branches from the very beginning. Most of our very successful students knew absolutely nothing about electricity when they started. Students who know something about the science, however, are not kept back studying details they already know.

## 12. Can anyone understand and learn your course if he is serious and works industriously?

Yes. All we require is a willingness on your part. Our course is laid out in such a way that anyone can master the course if they will apply themselves and do their part.

## 13. What is the age limit, if any, for enrolling in your school?

There is none. We have students as young as 15 and others as old as 45. Some of the best men we ever turned out were mature in years. Fathers and sons have taken the course together. Some of our students are experienced men who come to master advanced methods of doing their work.

## 14. Are there any extra expenses?

The only additional expense necessary is as follows: \$5.00 for tool deposit, which is returnable when you graduate. \$1.25 for your note book and electrical dictionary and \$5.00 for a diploma. Our reference sets, as I say in question 21, is purely optional. You can buy them or not just as you please. If you desire them they are \$5.50.

## 15. If I have to leave school—what then?

If you are forced to leave temporarily—you can come back and finish at any time. Your life scholarship gives you this privilege.

## 16. Do you have school all year around?

Yes. Twelve months in the year, and every day except Sundays and legal holidays.

## 17. Do you grant a diploma?

Yes, and this diploma is well and favorably known by thousands of employers in all parts of America.

## 18. Are your testimonial letters genuine?

Absolutely! Every letter published here and elsewhere in my circulars are genuine and the original is in my files and the address will be furnished if you want it.

## 19. When were you organized?

1899. We are the oldest established practical electrical school in the United States.

## 20. Is your building centrally located?

Only a few minutes from the loop and still right in the heart of the electrical industry. See map, page 5.

## 21. Do you use books?

We do not use books as a part of our course. We have prepared a reference set which is built around our course. These are not, however, a part of our course. If a student wants them he can purchase a set for \$5.50. They are excellent for reference purposes, both while in school and after graduation. You are

not urged to buy them and they are not necessary to complete the course.

## 22. Do you advise borrowing money to pay tuition?

Yes. If you haven't sufficient money to pay your tuition borrow it by all means. It will be the best investment you ever made. With Coyne training, you should be able to land a good job and should have no difficulty in paying back the money in a short time.

## 23. Do you guarantee me a job after graduation?

This question is fully answered on page 42. Of course we nor no other reputable school can guarantee any individual a job, before ever seeing him, and not even knowing his character or disposition. But the thousands of our graduates whom we have placed, and our experience with the shortage of trained help and conditions in the electrical industry, show that any graduate who does his part and completes his course properly should always get a satisfactory and good paying position.

## 24. What should my living expenses amount to?

A good room can be had for from \$2.50 to \$3.50 a week. Board should not cost over \$6.00 per week. We have a lunch-counter in our building where we provide breakfast and noon lunch at very nominal prices. By purchasing a meal-ticket considerable can be saved.

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

Most of our rooms are within easy walking distance of the school and in most of them there are no other roomers, except Coyne students.

## 26. 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 all denominations right in our neighborhood and our welfare man will see that you get acquainted in the church you care to attend.

## 27. Do you, Mr. Lewis, personally handle all the students' affairs?

There is one thing I want to impress upon every one and that is this—Coyne is not a one man institution. If there is one thing I am proud of it's my wonderful organization of fine fellows which I have surrounded myself with. Every one of them is a specialist in his line. There is a man at the head of every department—they do nothing but take care of things which come under their department. They submit all students' problems to me personally and in this way I can pass on many things in a day, which gives me much more time to think about ways and means to constantly help my students. Through my department heads I keep in touch with the progress of every student and you will always find the man at the head of any department ready and willing to give you any help or advice. You won't be in school an hour until you are impressed with this fact.

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

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

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

This is entirely up to the student. Many of my students with the aid of our reference sets prefer to spend an hour or so each evening going over their note book and reference sets, sort of reviewing in this way the work they have been actually doing that day. As I say, that's entirely up to the student.

# There Are Many Different Branches of Electrical Work

I AM asked many times why a fellow who wants to follow just one branch of electricity should take my entire course, so I am going to answer that question right here.

Suppose a fellow was going to be a doctor and he wanted to specialize on stomach diseases. Would he study only the stomach of the human body? No, indeed, he would have to be familiar with the entire human body, because the stomach is only a part of that body and works in harmony with the other organs of the body.

The same thing applies in electricity. While there are different branches of electricity still every branch has some connection with every other branch and one branch dovetails into the other. It would be impossible for anyone to make good in any one branch of electricity if he was not familiar with all. He would be continually handicapped by problems coming up which he was not familiar with. I will not give a man a half training. I want our graduates to make good and the only way they could hope to do it is to be thoroughly trained, and by thoroughly trained I mean you must be trained in all branches. Thirty years' experience has taught us that to advance you must know all branches of this great field. A half training is not enough. You must be thoroughly trained.

## Nothing Takes the Place of Practical Training

DON'T let anyone tell you that you can get a training by just books or lessons that equals the training given on actual electrical machinery. Hundreds of fellows come to me every year who have tried to learn by these methods along with so-called outfits that were sent them but after giving it a fair trial gave it up and came to me to get a training that would qualify them to go out and hold a big-pay job.

My method of training has been proved by authorities to be the best. Knowledge is acquired through our senses—(1) Sight, (2) Sound, (3) Taste, (4) Smell, (5) Touch. By trying to get a training in any way except by practical "Learn by Doing" method, you only use one of these senses—sight. But here at Coyne you combine this sense with touch and sound, thereby using three of your senses instead of one.

There is an old saying that a picture is worth 10,000 words. We improve on this and say actually doing a job is worth 10,000 pictures of how it should be done. Think this over, my friend, and you can't help but agree that there's only one way to get an electrical training and that is by my method of practical "Learn by Doing" instruction.

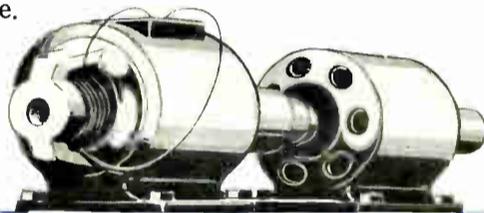
## Average Time to Complete My Course is 12 Weeks---But You Can Take Longer if Necessary

NOW, while as I say, the average time to complete my course is 12 weeks and 95% of my students complete it in this time, don't think for a minute we will be through with you. Sometimes a fellow requires longer than the

average time and if that is necessary he simply takes the time he needs. When you enroll at Coyne and pay your tuition that is all you will ever have to pay. For enrollment at COYNE means you get a life scholarship which entitles you to stay as long as necessary and come back at any time to brush up or review. Now let's see what that means. Suppose you leave Coyne and decide to take up Armature work and two years later you would get a better offer in another branch, say for instance Power House Work. You have been specializing in one branch and in order to take your new job you may want to brush up in this work. Then you come right back to Coyne and stay as long as you please at no cost to you.

## Get Your Training at Coyne Then You KNOW It's Right

I HAVE been very frank in my statements. But I have only been trying to point out to you the safe road. I want to save you any grief or regrets later on. A fellow can buy a suit of clothes and if that suit is unsatisfactory then all he has lost is the price of the suit. If a fellow should make a mistake on his training that affects a lot more than his pocketbook. When you decide to get a training you are not merely spending money for an article. You are spending money to improve your life, to make your future secure and the future of your family or the family you are some day going to have.



## There is Always Steady Work

WITH the great number of branches of electrical work, and the way in which so many industries are coming to depend more and more on electricity, I am sure you can see that it is the most dependable profession you could choose. And I know that any man who is properly and thoroughly trained in all branches is assured of steady work at high salaries in any part of this or any other civilized country. When this training is complete it also gives you a chance to work in any line you like best.

For example, there is an ever increasing number of steady electrical jobs in factories and manufacturing plants, hotels and office buildings, power plants and sub-stations, on the railroads, in signal, automatic train control or electric locomotives. In communication or telephone and telegraph work. On the sea with new electrically driven and equipped ships. In radio, aviation and auto ignition and battery and farm lighting plant work.

Even the smallest towns, villages, farms and rural sections are fast becoming electrified. Every year hundreds more of these small towns are installing power plants or becoming connected to some great transmission line system with the result that their buildings all have to be wired and supplied with lights, and power equipment, and then maintained.

Every year thousands and thousands of farms install lighting plants or get their power from a power line. The great savings and conveniences accomplished by electricity on the farms make it profitable for every farmer to know electricity. All this in addition to the tremendous growth of electricity and continual adding of new uses and branches in the big cities. But remember, to be able to choose any of these branches you like, and the location you like, and be sure of a steady job at good pay, you must be thoroughly and practically trained in all branches. Here at Coyne you can be sure of this training.

If that training is right then you will cash in on it the rest of your life. The few dollars you spend for the right kind of training pays you dividends, and enormous dividends all your life, not only in dollars and cents, but in contentment, happiness and ease of mind.

That's why I say, my friend, take no chances, even though some other training may be a little cheaper or may offer you the promise of getting it without leaving home. Coyne training is the result of 30 years' experience in training men to make a success. It is tried and tested and my thousands of successful graduates are living proofs that it is right.

Therefore, my friend, do not hesitate. Big money and a big future awaits you. Coyne can place them all within your reach with 12 weeks of practical intensive training in the common sense method of "learning by doing."

When you choose Coyne you have avoided any danger of regrets later on and this is a mighty important matter to you right now.

You have but one life to lead. One future to look forward to. Give it every chance and you will have nothing to worry about in the years to come.

## 60,000 New Electrical Experts Needed Yearly

SIXTY thousand New Electrical Experts needed yearly! Think of it! Yet this is the lowest and most conservative estimate of the number of Trained Men—new men who have heretofore been outside the Electrical Industry—needed to keep pace with the growth of this marvelous profession.

Many predict a much higher number of Trained Men needed yearly.

But if either of these estimates sounds high to you, stop and consider that an average of fully 5,000 separate and distinct new Electrical Projects are under construction, planned or completed every year.

You know what happens when a new Power Plant goes up. First, trained men are required to construct it. Second, more trained men are required to run it. These trained men must come from somewhere.

If enough Coyne graduates are available they may jump in and meet the call. If not, they must come from some other power plant. These men must be replaced and so, somewhere along the line, 60,000 or more gaps appear every year that must be filled.

Every Electrical Project, when completed, requires anywhere from roughly a dozen trained men up to, in some cases, even hundreds. But take the lowest figure of twelve trained men to each completed project and multiply that by the low estimated total of 5,000 Electrical Projects and you arrive at the figure of 60,000 new trained men needed yearly. Think of it!

## Don't Gamble with Your Future

WHATEVER you do, don't gamble with the most precious thing in your life—your future.

Coyne training is strictly QUALITY training, from start to finish. No expense is spared in vast outlays of electrical machinery of all kinds in order that you may be properly trained, the staff of executives and instructors are well paid and happy in their work.

# Coyne Stands Behind You and Aids You for Life

I HAVE always felt it was a great mistake for any school to think that when they had given a student a training their job was done. I think that is one great mistake many institutions of learning in this country make. Many such institutions feel that when a fellow graduate, their duty to him is ended and from this point on he should work out his own salvation.

Now no one will ever convince me this is right and I hope to see the day when all institutions of learning will realize that a lot can be done to help their graduates after they graduate and leave the school.

## I Owe a Duty to My Graduates

NOW let me tell you just what the graduate's association does for my graduates and what it means to them.

Your entire record in school along with all information we can get about you is listed. From this information we know what line of work you are planning to follow, where you are located, what you are most interested in and many other things. Then from these records we know how best to serve you. You will receive a letter from us at least once a month. You will receive bulletins on electrical developments. Interesting things to read and good constructive criticisms if we feel it will help you. Our research department is continually working on

ways and means to discover new things in the electrical field as well as ways to help our graduates.

Then through this department we will give you any and all kinds of consultation help. If you need help of any kind, whether it is of an electrical nature or even a legal matter or in fact any problem you may have—we will give you expert advice. This is all free to you any time during your life.

I have the confidence of my graduates and they are my friends. This good will of my great army of graduates in the field boosting and talking for Coyne is responsible for Coyne's great success.

As I told you in the first part of my book I believe that I should not only give my students the best training possible but I feel I should go further and back them for life, and give them the help and encouragement they need to keep advancing in their work.

I want every fellow to feel that he is part of this great institution when he leaves our doors as a graduate.

I want him to feel that in Coyne he has a friend whom he can always rely on and besides I want to feel that he is my lifelong friend.

I want you as a graduate to feel that no matter what kind of help you will ever need you can call on me.

My graduates know that I am sincere and

they have faith in me, and that's why I can number among my graduates thousands of friends.

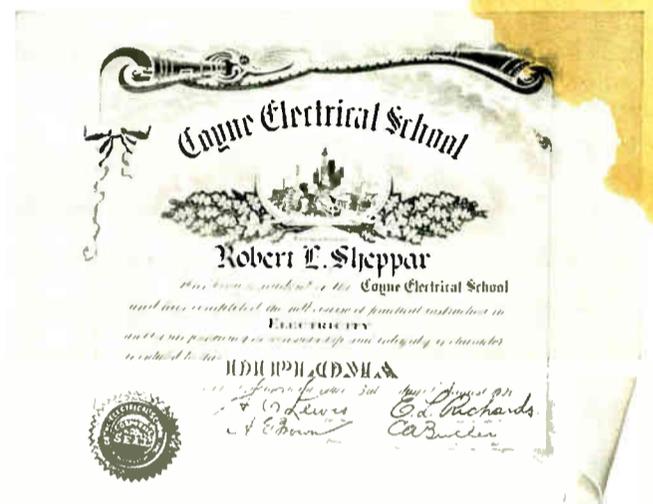
Nothing would ever influence me to do anything to cause a loss of that friendship.

My boys in the field have confidence in me, and I am mighty proud of this confidence.

Nothing is left undone to assist you.

## Exact Reproduction of the Diploma You Will Get When You Graduate

BELOW is the copy of the diploma which you are entitled to upon graduation.



# What to Do When You Arrive in Chicago

WHEN you arrive in Chicago just walk right out of the depot and you will see several yellow cabs. Just take one of these cabs and tell them to take you to The Coyne Electrical School, 500 So. Paulina St., Chicago.

Our office is open and ready to receive you on Monday, Tuesday, Wednesday, Thursday and Friday from 7:30 in the morning until 9:00 o'clock at night and on Saturday it is open from 7:30 in the morning until 4:00 o'clock in the afternoon and on Sunday it is open from 9:00 o'clock in the morning until 4:00 o'clock in the afternoon.

If you should arrive at any time which would not permit you to get here during these hours then take the yellow cab and tell him to take you to the LaSalle Hotel. Then in the morning take another cab from there to our school. Bring us the Taxi Bill you paid to get to the LaSalle and also your bill from the hotel and we will pay this money back to you when you arrive here the next morning.

Now just follow out these directions I have given you and you won't have one bit of trouble in getting here and you can't possibly get mixed up.

When you get to our office we will arrange all things for you, such as getting your room, getting your trunk from the depot and anything else to make you comfortable.

## Terms of Tuition

TUITION charges and the enrollment blank is sent to you with this book. Tuition charges cover all expenses of tools, material and equipment except the following: You will be required to make a deposit of \$5.00 for tools. This is returned to you when you graduate. You will be required to buy a note book which is \$1.25. There is a reference set which you can buy if you want it and this will be \$5.50 if you decide you care to have it. There is also a charge of \$5.00 for the diploma when you graduate.

## What Your Living Expenses Will Amount to

HERE you will find a fair estimate of your living expenses while training at Coyne. These are average figures. Of course, many of our students do part time work, which greatly reduces their expenses.

Room at \$2.50 to \$3.50 a week—\$30.00 to \$40.00 for 12 weeks.

Board at \$6.00 per week—\$72.00 for 12 weeks.

Laundry at \$1.00 per week—\$12.00 for 12 weeks.

Total \$114.00 to \$124.00 for 12 weeks.

## School Information

**Examinations**—Students are graded on work done in notebooks and on the various jobs. Examinations are not designed to "catch" the student but to determine his knowledge. He will be required to pass an examination before leaving each department.

**Care of Students**—Students are lodged in clean, respectable homes only. We make frequent inspections of students' quarters and require that they shall meet with our approval. (See Student Service Department, page 43.)

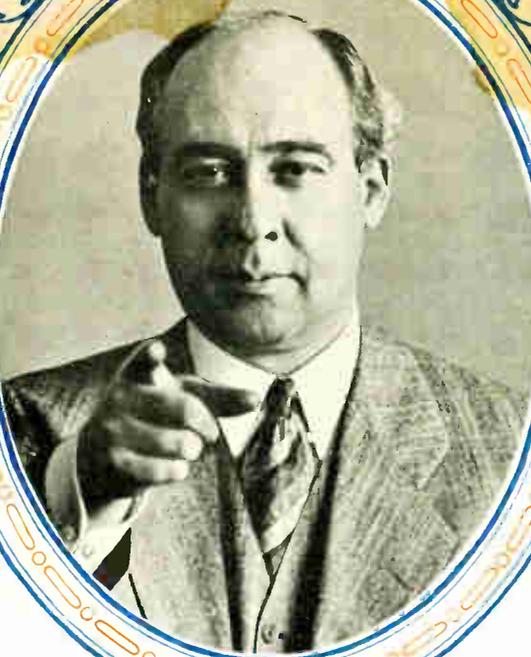
**Reports**—I will send report of students' progress and conduct to parents or guardian semi-monthly on request.

**Sickness**—Absence from class is immediately noted and inquiries made regarding cause. Students found sick are taken care of and parents or friends immediately notified if case is serious. (See Student Service Department, page 43.)

**Money**—We supply students with banking privileges at the office. Money deposited with the cashier may be drawn out at regular banking hours.

**School Sessions**—As our course is not class work and our institution is individual, a student can enter any day. The school is in session every day of the year with the exception of Sundays and Holidays. Sessions are from 8:30 to 12:00 noon and from 1:00 to 4:30 P. M.

**COYNE ELECTRICAL SCHOOL, 500 S. Paulina Street, Chicago, Illinois**



## *Now*—I Am Going to Put It *Up to You!*

### **I Have Given You The Facts — Now It's Up To You**

**I**N the pages of this book I have shown you the sure road to success.

You want to make more money.

You want the good things in life.

You want to be happy and independent.

Electricity, the "Big-Pay" field, offers you all of these and many more if you are a **Trained Expert**.

I am sure there can be no doubt in your mind but that there is only one way to obtain this training, and this is in a practical "Learn by Doing" way.

I believe you are convinced that **Coyne** offers you the best training you can get.

You are ambitious, of that I am sure.

But, you can be ambitious and still be a failure if you are **not a man of action**.

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

All great men and all successful men have been men of action, men who acted when the opportunity came.

Electricity is the field of opportunity, **COYNE** is the key that will open the door to that opportunity.

Use this key—Decide Today—There can be no half way—a man is either a success or a failure. You either step ahead or step aside.

### **Coyne Offers You Success**

**T**HE decision now rests with you; you can decide to go on as you are. This may mean nothing to look forward to but low pay, hard work and a bare existence in your old age.

Or—

You can decide to enter the **World's Greatest Industry** which offers you big pay, easy work and independence in later years.

I believe I know how you will decide, so I say—Come to **COYNE** right away or mail your enrollment **Today** and make your plans to come just as soon as possible.

*A. C. Lewis.*

President

