

AMERICA'S OLDEST  
PRACTICAL SCHOOL  
OF ELECTRICITY

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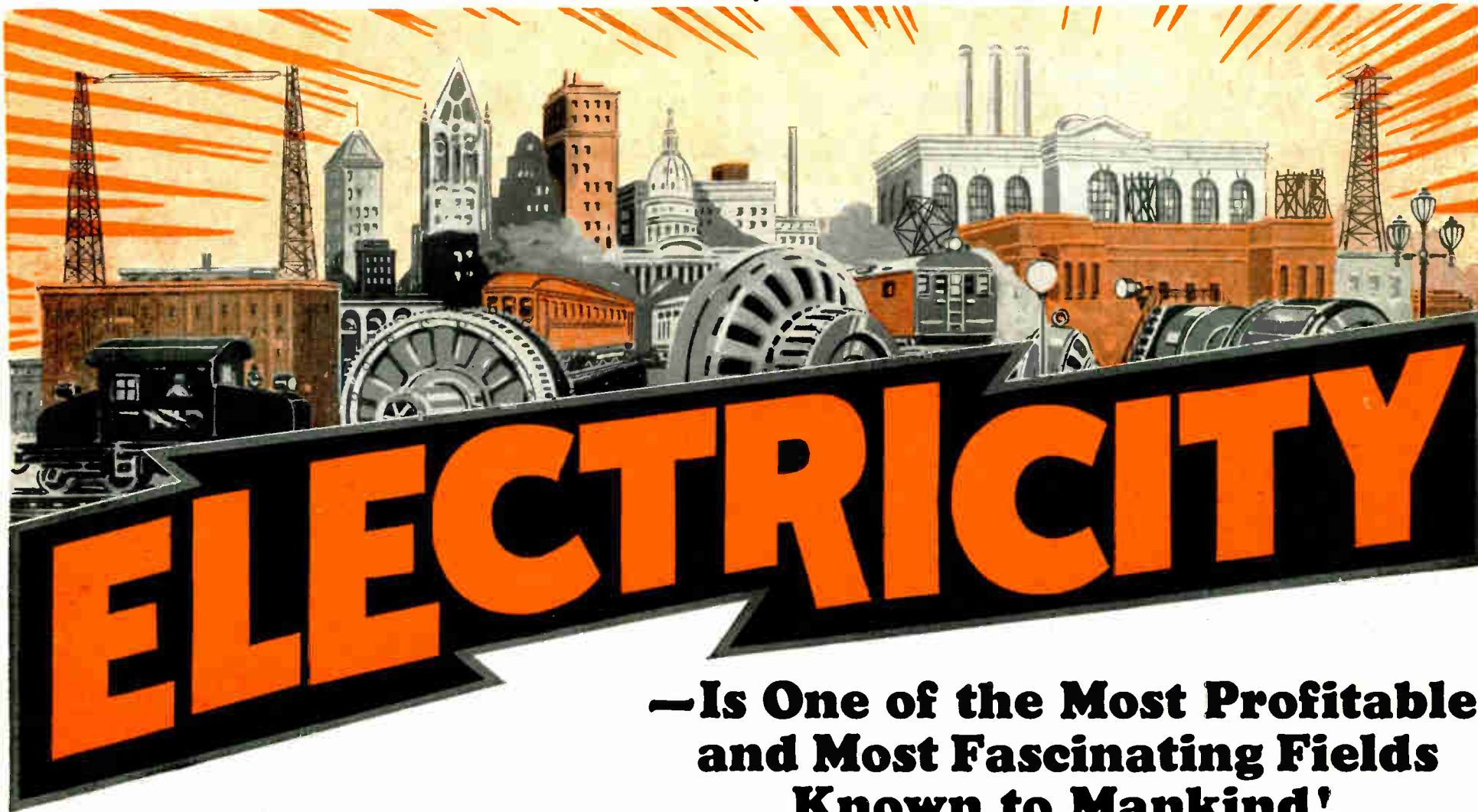
# COYNE FOUNDED 1899

COYNE HAS GROWN UP WITH  
THE ELECTRICAL INDUSTRY

WE ARE  
**SPECIALISTS**  
IN TEACHING  
**ELECTRICITY**

More than a  
quarter of a century  
of experience in solv-  
ing the needs of young  
men and electrical  
industry





**—Is One of the Most Profitable  
and Most Fascinating Fields  
Known to Mankind!**

*a vital, personal  
message to YOU  
~ from*

**PRESIDENT  
H. C. LEWIS**

**I**F you, my friend, have not as yet made much of a success in life; if you haven't earned much money, or progressed very far, you may possibly not have a great deal of confidence in yourself. If so, I can understand just how you feel. For Success brings you confidence, and I don't know of anything else that will.

So when you read the amazing story of electricity and the millions of opportunities it offers you in the pages that follow in this big book, I realize I can not expect you to have the same confidence that I have that all these things can really happen to you. I expect you to think, "Well, that all sounds fine, but I just can't believe it. It seems too good to be true."

Every successful man looks back upon this same time in his life when he, too, lacked confidence in his future, in his ability. The average untrained fellow, slaving along on a routine, blind-alley job at \$20, \$30 and \$35 a week would be scared speechless at the idea of his ever making \$60 or \$100 or \$200 a week. It would be so amazing to him, so far beyond his horizon, and the things he has been used to, that he would scarcely believe you if you shoved a signed, gold-bond contract in front of him.

**Don't Let Lack of Confidence Hold You Back**

As I stated, however, every successful man looks back upon a time in his life when he went through this same period of "stage fright." But the greatest courage in the world is going ahead and doing something in spite of fear. So these successful men acted, they had nerve, they dared to make the big GO AHEAD decision in spite of their lack of confidence.

Every word of the big amazing story of electricity in this big book is true. Every testimonial published is a genuine one, the original of which is in my private files. Every testimonial is an unsolicited one. Some are from fellows without education, some unable to speak English fluently, some from married men, some from elderly men, others from young fellows just out of school—and in almost ALL cases they had very little money.

**My Training Will Raise You Above the Mob**

For every routine, unskilled, long-hour job that is open, a hundred or more unskilled, untrained men wait with eager eyes—the moment somebody quits, a hundred swarm for the knothole of that one miserable, poorly paid job.

Exactly the opposite condition confronts the trained man—the job seeks him, and for that reason he can command a salary that to the untrained man seems impossible.

My friend, the big book whose pages are now before you, tells you how you can put yourself beyond the reach of these unskilled millions—so far beyond them in earning capacity that they can not possibly compete with you. My book tells you how you can say good-by forever to that miserable job, to those long hours of drudgery, to the human bugaboo of fear of the boss—and good-by forever to that thin pay envelope.

A New Day has dawned for you.

Read the pages that follow. All I ask is that you put your faith in me, no matter how little confidence you have in yourself. I'll do the rest!

Sincerely,

*H. C. Lewis.*







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

**A Tribute From One of America's Greatest Leaders in the Electrical Industry to the President of America's Greatest Electrical School**

By **THOMAS C. RUSSELL, President, Russell Electric Co., Chicago**  
**World's Largest Manufacturers of Electric Lamp Socket Heating Appliances**

**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 shadow 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 a whole-hearted, honest, sincere guiding hand 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 I employ 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.

I have more reasons than my acquaintance with Mr. Lewis and his school for endorsing Coyne training. As the founder and head of the Russell Electric Company, manufacturers of Hold-Heet Appliances, employing several hundred people in my plant, it has been my privilege to employ many Coyne graduates. Their services have been highly satisfactory and reflect very favorably upon the kind of training they have received. We always give a preference to Coyne men because of the training they have had.

Mr. Nolan H. McCleary, who, I understand, has volunteered to write a letter in appreciation of his Coyne training, is one of these graduates we employed a number of years ago.

*J. C. Russell*  
President



# Hundreds of COYNE-Trained Men

FOR THE SAKE OF YOUR FUTURE HAPPINESS AND PROSPERITY,

## ELECTRICITY—World's Fastest Growing Profession

**A**STONISHING achievements in Electrical Science have marked the last quarter of a century to such an extent that it staggers the imagination.

From sunrise to sunset, this great, silent "white power" affects, directly and indirectly, in whole or in part, your every move, your every act, the clothes you wear, the food you eat, the home you live in, your transportation, your comforts, your necessities. You can not walk into a store and buy a single product whose manufacture or distribution has not been affected by Electricity.

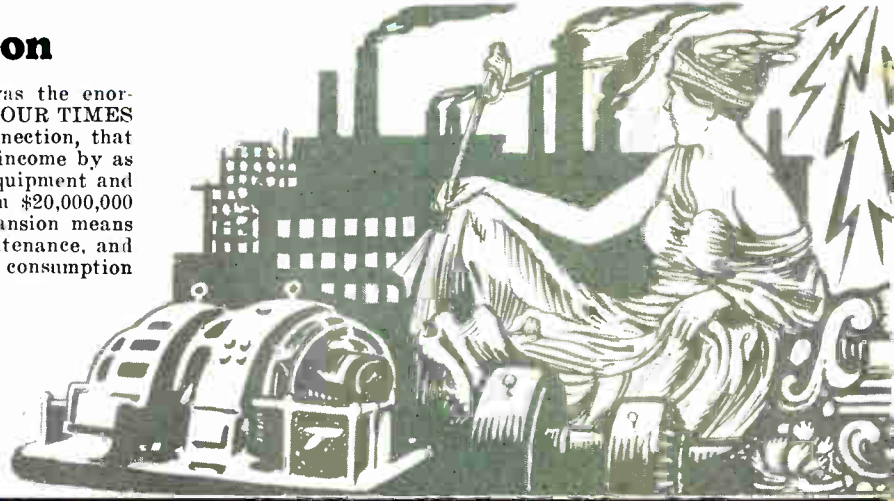
Take America's basic industry, transportation. America, as a nation, could not exist without it. Whole cities would starve inside a week. Yet transportation itself would be paralyzed overnight without Electric telegraph systems, Electric lights, Electric heating, Electric ignition, and our modern Electric block signal systems. And now the steam railroad is electrifying its locomotives for power.

Another basic industry, steel, now is one of the largest consumers of Electricity. All modern mines nowadays are electrified for ventilation, light and safety. The country's thousands and tens of thousands of huge factories are turning more and more to Electricity to power their machinery, speed up production, and cut down costs. Since 1910 their use of Electricity has increased five times! Every modern factory needs skilled, trained maintenance and operating men.

Last year the Electrical Industry's income was the enormous total of \$1,470,000,000, which is more than FOUR TIMES what it was in 1914. Bear in mind, in this connection, that every time the Electrical Industry increases its income by as little as \$5,000,000 it must invest in new plant equipment and transmission lines and distribution systems from \$20,000,000 to \$25,000,000! Think what this enormous expansion means to trained men, for construction work, for maintenance, and operating, at the terrific rate the increase in the consumption of Electricity is going on all over the country.

Since 1910 the total consumption of energy has increased six times. Railroads alone, which have just really begun to electrify, have doubled their consumption of electricity since 1910.

I could go on indefinitely with amazing statistics of this kind. Each year's activity in this profession requires hundreds of pages just to enumerate the developments that have taken place. But all this is scarcely a scratch on the surface of what is yet to come. The end is nowhere in sight; in fact, Electricity is one industry that can never reach its limits because its supply is inexhaustible and newer and greater uses to which it can be put are being discovered every day.



## 60,000 Trained Electrical Experts Needed Yearly

Take the automobile. Even now, the most important part of your automobile system is its electric power plant, no car can turn a wheel without ignition; but what will happen when the other element is exhausted, namely, gasoline? The answer is electrically powered automobiles, run, perhaps, by wireless transmission of electrical energy.

An average of more than 5,000 separate and distinct new Electrical Projects are reported to me every year, new railroads and countless other such increased uses of this magical, economical, silent, clean, healthful and safe form of power.

If only as few as twelve trained men are required for each one of these new projects, that means a yearly shortage of 60,000 trained Electrical Experts. Never in the pages of history has such a situation existed, where so many trained men are needed, at such fine salaries, and, at the same time, with so few men who are trained and qualified to accept these jobs.

## Why I Teach Nothing Else But Electricity

**M**ANY years ago, when Coyne was first founded, we taught many different classes of trades, bricklaying, plumbing, plastering, and so on. But long since, all these have 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 practicing 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. It would only be weakness on my part if I had to hunt up other trades to teach you in order to supply enough jobs. I don't have to do this because the demand for trained men in Electricity is so great I can never hope to catch up with it.

You may have observed that this fact has been recognized elsewhere. 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.

## Why I Can Make You An Electrical

**P**ROBABLY, to one unacquainted with my methods, nothing is more startling than the revolutionary idea of mastering my course in twelve happy weeks. But let us analyze this a little.

In the first place, Coyne values your time too much to burden you with a lot of red tape and endless dry theories which aren't put to everyday use and practice on more than 2 per cent of the country's electrical work, anyway. I teach you only the boiled down essential theory along with practical work that you absorb and understand many times faster.

Science proves that the eye is twenty-two times quicker to grasp things. My "Learn by Doing" methods mean that you see and follow and understand every move, every principle, every theory on actual, visible, full-size machinery and equipment. That's why you learn so quickly.

## You Don't Recite Before a Class

There is no lost motion, no getting up and reciting before a class, or poring over dry books printed in fine type. NO! You work strictly as an individual, getting personal attention; you are free and independent from every other student. Nobody to bother you, or make you feel flustered, or to hold you back or push you ahead, and a competent instructor works right along with you and helps you with your problems just as though there wasn't another student in the department.

Another reason why I can train you in so short a time is that Coyne is a place where everybody is happy and feels like working; every day is a school day except Sunday, even on Saturday there is school until noon. So you get in more hours—a full seven hours a day of interesting, thrilling work. We don't have a lot of holidays, observing only the big national holidays, like Christmas, Thanksgiving, and so on.

Every one of these school or really "shop" days gives you seven full hours of interesting, thrilling work.

You Can Earn More Money in the Electrical Field



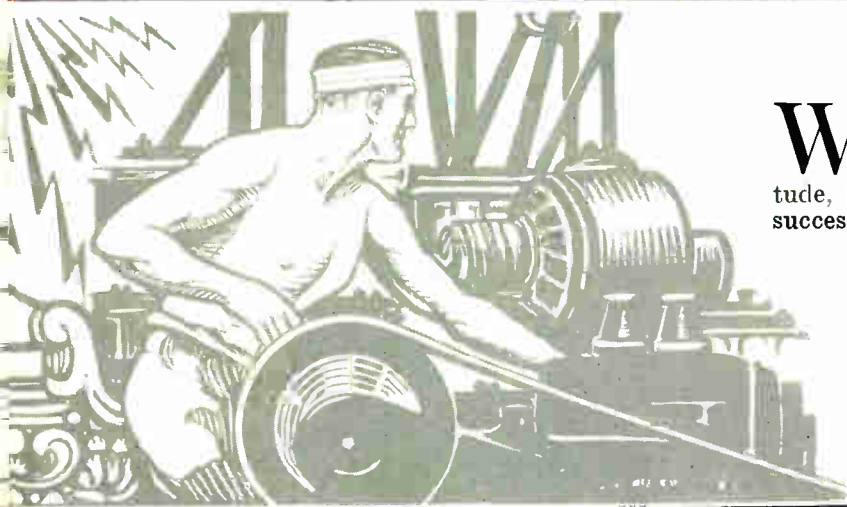
# SPEND 12 HAPPY

*Then Step Into a Big-Pay,*



# Earn \$60 to \$200 a Week!

## GET INTO THE BIG-PAYING, FAST-GROWING ELECTRICAL FIELD NOW!



### You Don't Need Advanced Education or Experience

**W**HEN you enroll in my school, there's only one thing beyond my control that determines your success, and that's your mental attitude, your willingness and capacity for wanting success.

If you possess this one thing, you may lack all the other advantages in the world, and yet you can't help being a success with my training.

I don't care how "old" or "young" you consider yourself; how much or how little money you have; I don't care what your nationality is, whether you are married or single, a father or a son, or whether you have finished the eighth grade or not—my training is so efficient, so practical, so amazingly simple and thorough that nothing on earth can hold you back from success with its power behind you.

Many of America's foremost Electrical Leaders today are men who had little or no education. This is true also in other lines. A b r a h a m Lincoln, Thomas Edison, and scores of other great men started with as little and probably less education than you

have. Thirty-one (31) of the names appearing in America's "Who's Who" are men who had no education whatsoever.

I can show you hundreds and hundreds of fellows who today are making big money and have fine, happy homes and splendid jobs or businesses of their own, who had little or no education before coming to Coyne.

Nor do you need previous experience. While I have a very large number of students who come to my school after finding they had wasted years of their life trying to "pick up" this profession, yet by far the biggest majority are fellows who never before knew anything about Electricity. These fellows had the advantage of starting their careers in my shops with a clean slate.

Now, that's just what the great shops of Coyne are here for, to give you experience. You'll get it, on huge electrical machinery in full operation, all hooked up and humming with "juice," the very same machinery you'll get paid for working on later out in the field.

## Expert in Twelve Happy Weeks

### Stay Longer Than Twelve Weeks If You Wish

Please understand that when you enroll as a Coyne student you are putting back of you, at one stroke, the entire power and resources and prestige and privileges of Coyne for life, not just twelve weeks or twelve months or five years.

You are not required to finish in twelve weeks or any other certain length of time. As I said, my instruction is individual and occasionally a little longer time is required, for every student doesn't grasp the work as quickly as some others. While twelve weeks is the average time, every student is expected to complete the work in each department in a satisfactory way even if it should take a little longer than twelve weeks. Some of my students tell me they feel so reluctant to leave the many fine friends and the interesting work in my shops that they want to stay longer. Others may want to stay a little longer in one department or another that they intend to specialize in. Then again, some students prefer, for reasons of their own, to take longer than twelve weeks for the entire course.

No matter what the reason is, every student is perfectly welcome to stay as long as he desires, and my sole object in helping my students to graduate at the earliest possible moment is so that they can get out "on the job" and into the rich rewards my training will bring them.

Do not lose sight of the fact that my course, however, can be and is completed regularly in twelve weeks; this is the average time most of my students take, but I want you to realize that you are the sole judge of the length of time you want to take, and if you feel like going a little slower than the average time, that's entirely up to you.

### No Investment Is Cheaper Than That Which You Make in Yourself

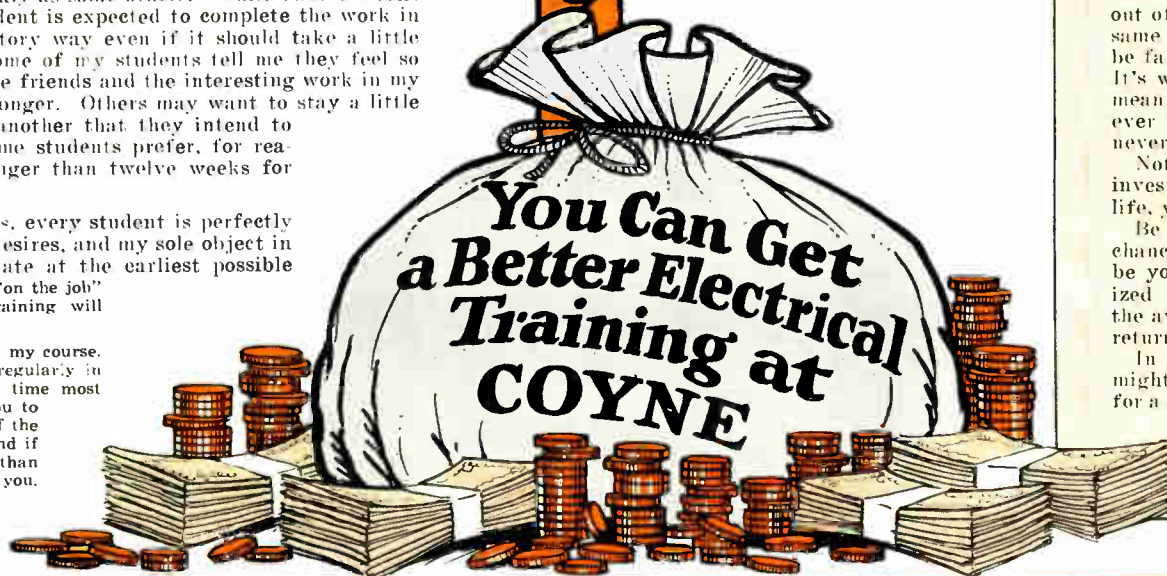
**I**'VE seen one little idea grow into millions. I've seen a man who makes \$3,000.00 a day who, to look at him, you might think was a day laborer.

What makes this difference in fellows? Why is it that out of a thousand men who all look alike and who have the same education a few will make money and the others will be failures? I'll tell you. It's training. It's specializing. It's what's on the inside of their heads. But that doesn't mean you have to be a genius. One of the biggest men I ever knew was the slowest in his class at school; in fact, never liked school, and quit. Training is what counts.

Nothing is cheaper and more profitable than the small investment you make in the most precious thing in your life, your future.

Be fair to yourself. Give that fine brain of yours a chance. Yes, even give it half a chance. It can and will be your best friend, once you fit it with trained, specialized knowledge. A small investment now, far less than the average person spends foolishly every few months, will return to you a rich harvest.

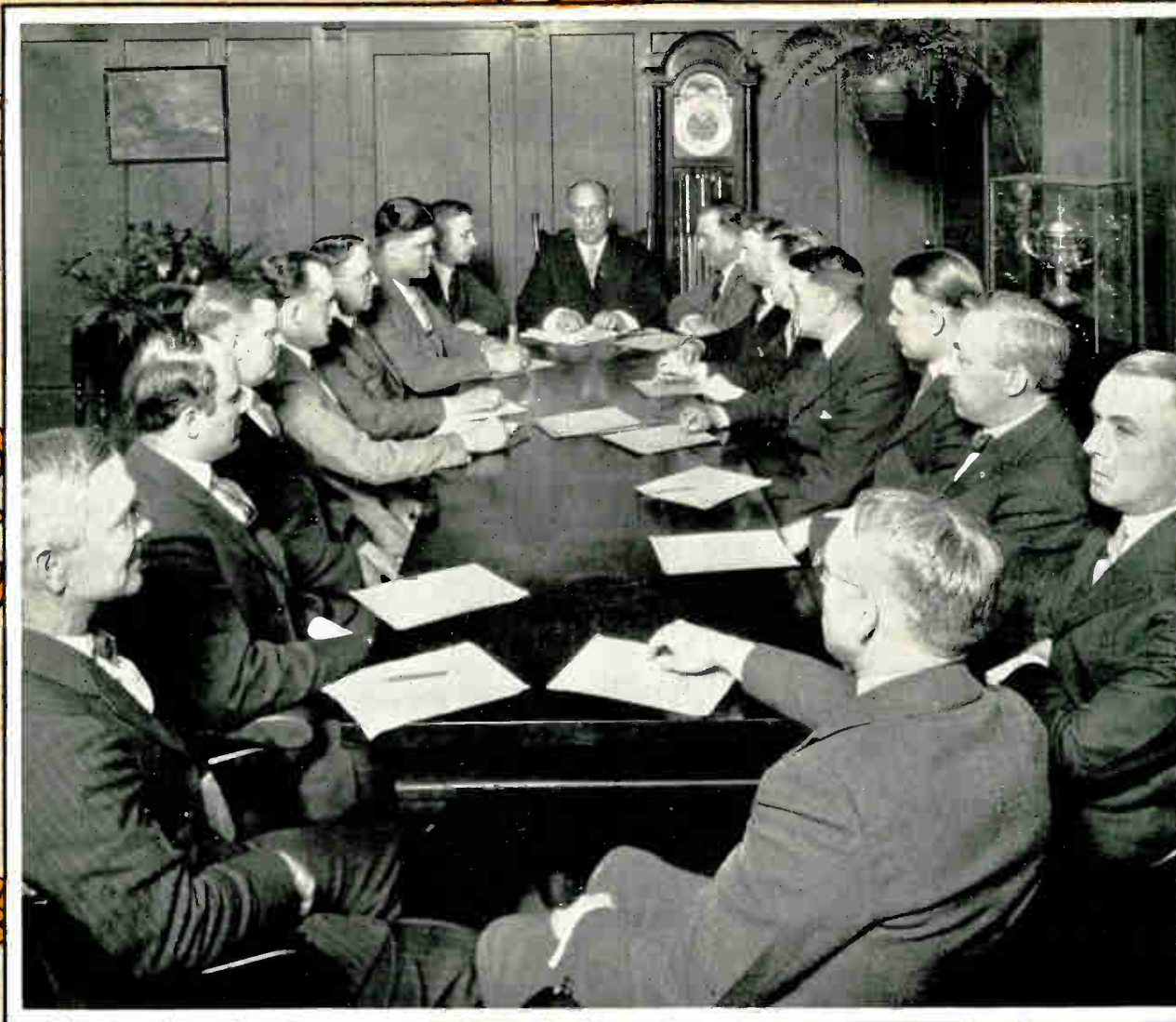
In selecting your training, remember one thing: You might get a cheaper course, but can you afford to gamble for a few dollars when your future is at stake? No, indeed, you want the best and you will always have to pay a little more to get the best, whether it be training or merchandise.



# WEEKS AT COYNE

## Thrilling Electrical Job!





## The Staff of Department Heads of Coyne

**H**ERE is one point I want to drive home at the very beginning of my talk to you in these pages: **COYNE** is not a one-man organization. By that I mean that I alone am not entitled to all the credit for the remarkable growth of **COYNE ELECTRICAL SCHOOL**, and the dominant position it has occupied from the day it was founded. Most of the credit belongs to the group of capable, conscientious, earnest men who are my department heads and department assistants.

I am very proud of my good fortune in procuring as members of my staff men who are thoroughly acquainted with the vast Electrical Field, who can in the most simple, direct and interesting manner impart their knowledge to others, and who are in entire sympathy with the high ideals and the sound policies of old **COYNE**.

No man is permitted to become a member of the **COYNE** Staff of Department Heads unless he is prominently known as a man of sterling character. I have always regarded it as a solemn duty to the thousands of **COYNE** students to place them under the guidance of department heads who understand the characteristics and problems of young men, who can gain the confidence and respect of the students, and whose actions are marked by dignity, friendliness and sincerity.

Next to character, I look for ability and experience in the man who seeks to join my staff as a department head or assistant. He must have a wide practical knowledge of electrical work. If he is to be appointed an instructor, it is of utmost importance that he have outstanding knowledge of the subjects he is to teach. He must possess a natural ability for teaching, for no man can be a real successful instructor—no matter how thoroughly he may know his subject—unless he is capable of passing his knowledge to others and is wholeheartedly devoted to his worthy calling.

Each **COYNE** executive must be a real leader—a man who will at all times be an inspiration to students and will constantly urge them on, in the most friendly spirit, to higher ambitions and larger accomplishments.

It is a huge task to build up an organization such as I have welded together, but my exacting tests in selecting executives and other members of my staff have borne fruit and have brought countless benefits to the thousands of men who come to **COYNE** each year to prepare for their life careers.

The required qualifications which I have mentioned are possessed by every man in the above picture and by every other man on the staff here at **COYNE**.

The picture shows a meeting of **COYNE** executives. These meetings are held frequently so that nothing may be left undone in the matter of improving **COYNE** training and rendering fullest service to **COYNE** students.

It is said that experience is the best teacher. We have had more experience than any other practical electrical school in the world, yet we are not content to rest on our laurels, but, rather, are constantly on the lookout for new and advanced ideas in methods of training.

Each meeting of executives seems to bring forth new thoughts, new methods of instructing and caring for students, new ways of quickly placing **COYNE**-trained men into important, big-pay electrical jobs.

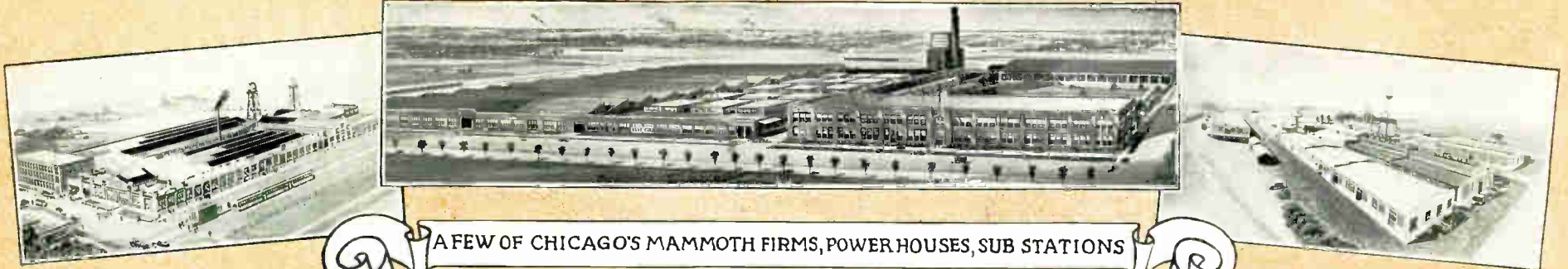
If space would permit, I would give you a complete review here of the wonderful record of each man in the picture, but that would take many, many pages, and there are things you are more anxious to know at this time. Just let me say that when you come to Coyne and make the personal acquaintance of all these men you will soon have the same deep regard and affection for them that I have.

Every one of them is a leader in his line, as you will learn when you come to **COYNE**.

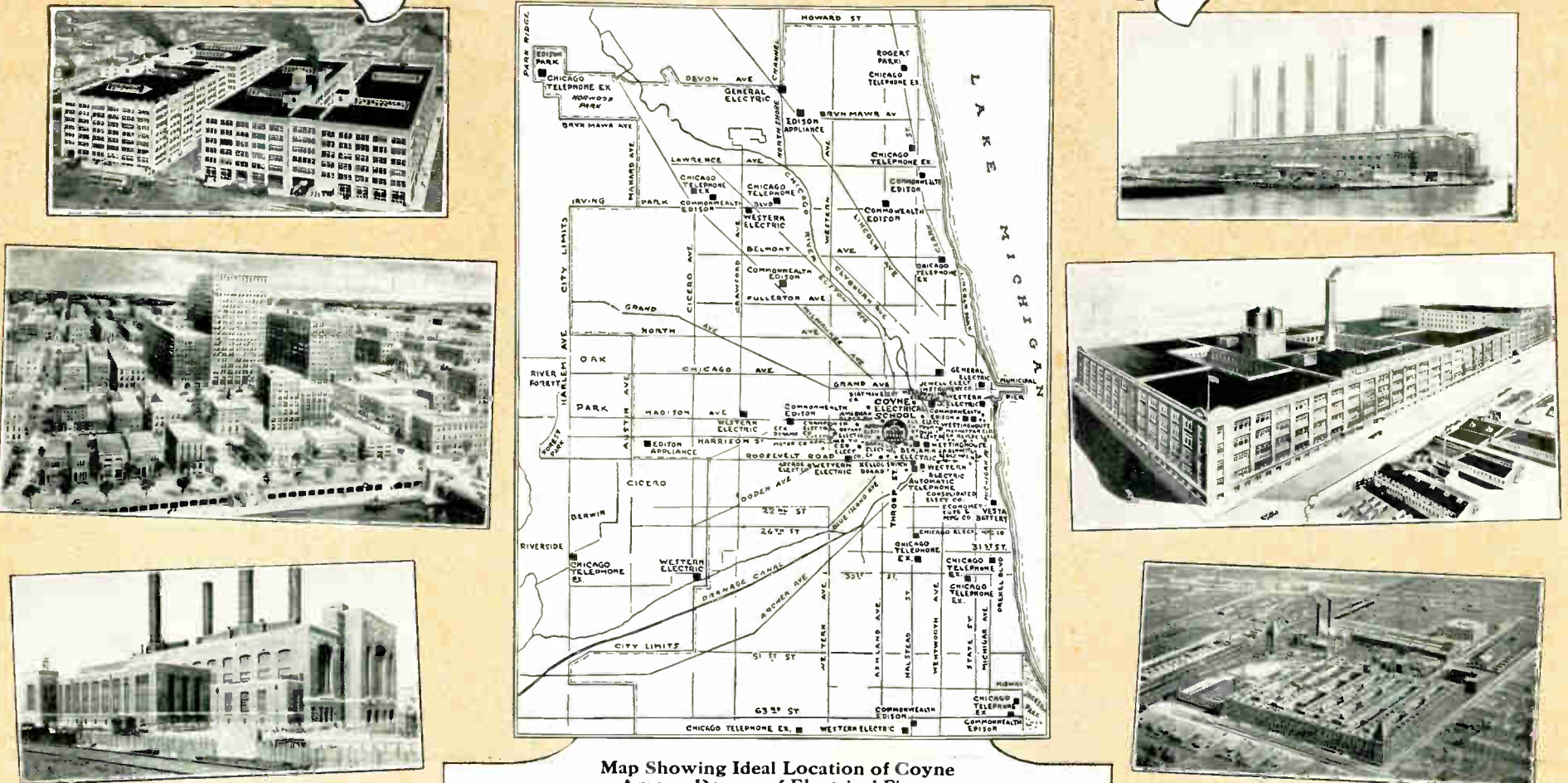
These are the men who are shaping the destinies of hundreds of **COYNE** students, and through their efforts you, too, can be quickly trained and guided on a swift, smooth road to sure success.



# Chicago - The Electrical Center of the World



A FEW OF CHICAGO'S MAMMOTH FIRMS, POWER HOUSES, SUB STATIONS



**Map Showing Ideal Location of Coyne Among Dozens of Electrical Firms**  
 The map above shows the location of the Coyne Electrical School at 1300 W. Harrison 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.

## 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.

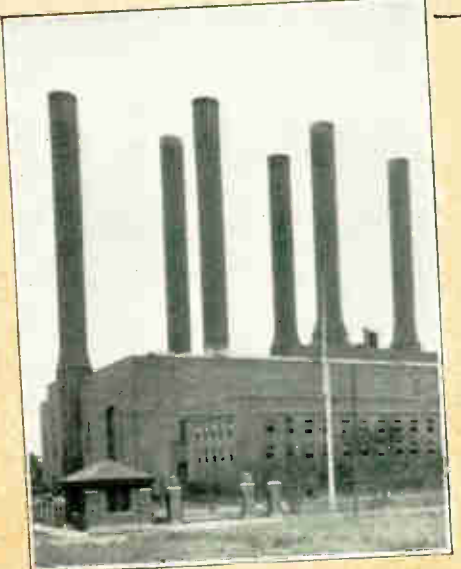
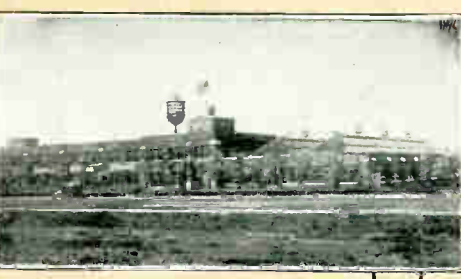
Some are from firms asking information preliminary to granting employees leaves of absence to attend my school, other letters tell about the success of Coyne graduates in their employ, and a vast number represent calls for trained men to go on their pay roll.

Many firms endorse my school to such an extent that they help pay the tuitions 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 the oldest and biggest firms in the industry.

Coyne methods of training sprang from electrical industry itself. Just as electrical concerns employ Coyne men as fast as they graduate, 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 could all these things exist except in Chicago, the Electrical Center of the World.





# COYNE

## WORLD'S GREATEST ELECTRICAL SCHOOL

### COYNE Does Not Teach By Correspondence

I HAVE no quarrel with any school that is conscientiously trying to teach Electricity by correspondence. I do know, however, and you, as a sensible man, will agree with me, that if you are to be an Electrical Expert you must know more than you can get out of a set of printed lessons. You must have practical experience, you must know how and why a thing operates as it does, not by reading about it, but by actually operating it.

Coyne was founded in 1899 on the one and only "Learn by Doing" principle and to this principle I owe, in greatest measure, the success of my school, so I'm going to stick to it.

My method of training takes out all the dull, dry, useless theory and gives you the solid meat of every-day Electrical Practice, retaining only the necessary theory that is used and applied on 98 per cent of the electrical jobs that come up every day. No! My school doesn't set out to make you a professor; I give you the things you need to know, the things that actually bring in your bread and butter.

Here in my great shops you have no tedious books or useless theory to rack your brain over. No! You actually work on giant switchboards, transmission lines, motor and generator equipment, armatures, remote control equipment, you install lighting systems in real skeleton houses, you climb over and through substation structures, you create with your own hands artificial lightning on a huge Tesla coil—all of this enormous outlay of electrical machinery is here for you, humming and teeming with life, all hooked up, and in complete operation every school day of the year.

This equipment is all FULL SIZE, just as you find it in the field, not a toy outfit to play with in the front parlor, but the real stuff! Nothing is left to your imagination, nothing is left out for you to wonder about how it looks or operates. Everything is made so clear to you that you will be amazed at the ease with which you step right in and handle it yourself.

Imagine trying to get such marvelous training as this by correspondence? Why, it would be just like trying to learn how to be a surgeon or a dentist by mail.

Here at Coyne your instructors stay right with you, answer your questions and help you on every problem that arises. I have selected these instructors not only because they know their subjects well, but because they also have the true Coyne fellowship spirit, and the happiest and most profitable hours of your life will be the hours you spend with them. They'll see that nothing is left undone to satisfy you and help you on the road to Happiness and Independence.

Take no chances with your future, the most precious thing in your life. Don't hunt for the cheapest training, but look for quality. Play safe and come to the best known, the oldest and largest practical school of Electricity in existence, bar none, located in Chicago, the Electrical Center of the World.

### I Teach Only One Subject—Electricity

I HAVE never believed a man could be a real success if he was a Jack-of-all-trades, and I think the same thing applies to a school. A man can not train men to be specialists if he is a Jack-of-all-trades himself.

By concentrating on one subject at Coyne, we have nothing else to divide our thoughts; that's why we have the most efficient training organization in the world. Many years ago Coyne attempted to teach other subjects, but it didn't take me long to find out that I couldn't teach any one of them one-third as well as I could by put-

ting all my thoughts on the one subject—Electricity.

That is why my school has grown and become more successful each year. It may be possible to partly train a man in a school that teaches several other subjects, but I also know from experience that NO SCHOOL CAN GIVE THE QUALITY TRAINING THAT I CAN GIVE BY CONCENTRATING ALL MY ATTENTIONS AND THE ATTENTION OF THE ENTIRE ORGANIZATION ON ONE THING—Electricity. That's why, so long as I am the head of this great school, no other subject will be taught.

### A Jack-of-All-Trades Can't Teach You To Be a Specialist

I believe if a fellow wants to learn to be a mechanic or anything else the place to go is a school that specializes in this work. But remember, no school can teach Electricity and teach it right if they are spending half, or more than half, of their time in trying to teach a lot of other things at the same time.

If you were sick you wouldn't go to a doctor who spent half his time running a barber shop. That was all right years ago, but this is the day of specialists and we are specialists in teaching Electricity. That's one reason why we are the World's Greatest Electrical School.

Big, successful men and big, successful firms always have a lot of imitators and we are no exception to the rule. Coyne has been the leader for 28 years in teaching Electricity, and it isn't and never will be interested in teaching anything else. Just think of that—28 years without a stop. It takes years, many years, to develop a method of training that will in any way compare with ours. You can't teach one trade for a while, then jump to another, and so on, and do it right.

I'm telling you this simply to show you how Coyne has rightfully won its name as the greatest electrical school in the world. It is because we have, through all these years, developed a training in Electricity that can not be duplicated, because we have thought Electricity and have not for one minute divided our attention among other trades.

So I say, if you want to learn Electricity, go to a school that teaches Electricity and nothing else, a school that has been a specialist and a leader in this big-pay profession for more than a quarter of a century.

### You Don't Have to Recite Before a Class

There are no classes at Coyne to hold you back or push you ahead. You don't have to get up in front of a bunch of fellows and recite. So far as you are concerned, there isn't another student in the whole department, because you are free and independent from everybody else.

You go as fast or as slow as you like, and no other students will know anything about it, one way or the other, unless you yourself tell them.

And, right beside you, helping you at every turn with your problems and answering your questions, is a friendly, sympathetic instructor wearing a big brother smile that won't come off. Can you picture a more ideal place to go for your training? Can you picture any place where you will feel more at home than in the great, happy Coyne family where the instructors are pals with the boys from morning to night, day in and day out?

**Here's Another Reason  
Electrical Industry  
Endorses Coyne—**

*Employers Get the Facts from Graduates Like Mr. McCleary*

Dear H. C.:

I want you to know that I received my early training and knowledge of electricity in the great shops of Coyne.

Wonderful as Coyne training was in those days, it doesn't begin to compare with the vast improvement in methods and outlay of equipment Coyne offers today. I didn't realize that until the other day, when I had occasion to drop in to pay the "Old Gang" a visit. I was utterly amazed to see the tremendous growth the school had gone through.

I saw equipment, such as substation structures, new types of motors and generators, D. C. and A. C. switchboards, remote control apparatus, transmission lines and towers, all new stuff that Coyne didn't have in the old days. Wonderful!

Why shouldn't I be enthusiastic about Coyne? Why shouldn't I recommend it to any man or young man who is desirous of entering this thrilling, fascinating, highly paid field of Electricity?

Today I am employed as Chicago District Representative by the Russell Electric Company, the world's largest manufacturers of lamp socket heating devices, the famous "HOLD-HEET" brand. I have been with them for over seven years and during this time I have never passed a year without a substantial increase in salary.

Is that enough endorsement for Coyne Training?

Sincerely yours,  
RUSSELL ELECTRIC COMPANY.  
By

*Nolan H. McCleary*  
Chicago District Representative.

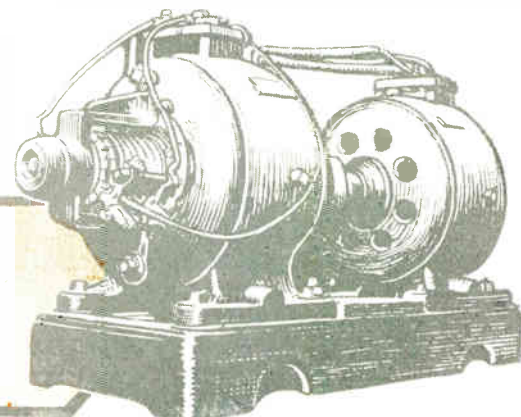
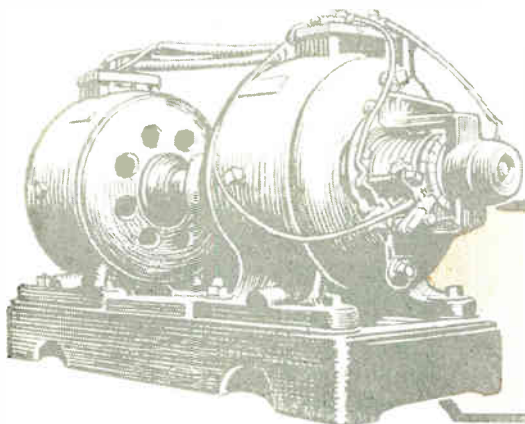
NMcC:LL

P. S.—You have my permission to publish this letter.

A COYNE DIPLOMA IS READILY  
RECOGNIZED AS AN EMBLEM OF MERIT  
IN THE ELECTRICAL FIELD

*It stands to reason: There is no substitute for  
personal, practical training, on real equipment,  
in great shops.*

**COYNE ELECTRICAL SCHOOL**  
1300-1338 West Harrison Street  
CHICAGO, ILLINOIS





# Come With Me Into the Great COYNE SHOPS

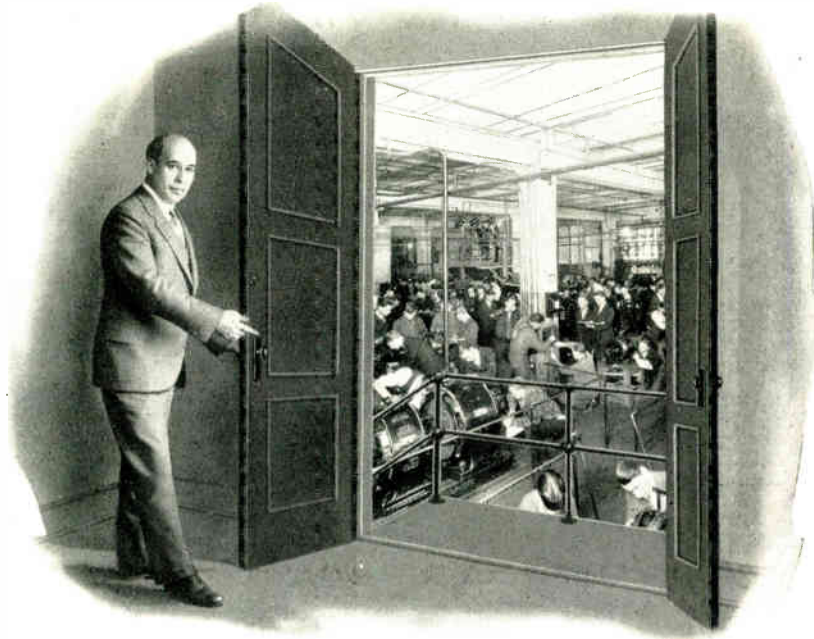
**T**HE Big Day has arrived! You are about to start in the great shops of Coyne as a Coyne student! A button is pressed, the electrically controlled door releases, and we swing through into a great City of Electricity.

You can literally smell the electricity in the air. You feel a great thrill going up your backbone. You sense a scene of tremendous action and power before you. You can feel the urge and force of great things in the air.

### You are a Coyne Student!

No toy shop, this. No ordinary school scene with laboratories, and dry professors, and text-books lying around. No miniature size motors and generators and switchboards, and so on. **NO!** Every piece of machinery is **FULL SIZE**. Much of it would require heavy duty, high-powered trucks to transport from one place to another. You notice with another great thrill that it's all in **action**, surging with life, all hooked up, and real juice pouring through every wire.

You discover that Coyne handles, right here in one department, enough power to light a small city. You notice several students before a huge panel switchboard, an instructor close by. One of the boys studies



a switch a moment, a big oil breaker type, checks it with his notebook, looks for the O. K. signal from another student, then disconnects the main circuit.

The entire machinery stops. For the first time you realize that, while you hadn't noticed it, the sound of all this machinery in operation had literally filled the room with a smooth roar of high speed operation. The contrast after pulling the main circuit switch is startling. You can hear a pin drop.

Overhead are stretched huge transmission lines. These lines are used for familiarizing the boys with tower construction, different types of insulators used for distribution systems, including line testing by Wheatstone Bridge method. For instance, a town is going through a severe storm. Somewhere a main feed line breaks. How do you suppose the exact point of the break is located—**quickly**? Well, a trained man knows just how to do it and he doesn't have to move a foot outside the power house or substation to check it. That's a story in itself, the Wheatstone Bridge method of locating line troubles. Well, the boys get that practise right here on those transmission lines you are looking at.

But let's not get too far ahead. The first department you enter as a student is the—

## BEGINNERS DEPARTMENT

**T**HIS department gives you, in a simple, clear, practical way, an understanding of electrical laws and principles. You learn why one kind of an electrical current travels near the outer surface of a round wire while another kind flows through the whole area of the wire, and your instructor proceeds to demonstrate this in a practical way by means of special tests and experiments with hollow wire and solid wire.

You learn the real meaning of voltage and amperage as terms in measuring electrical energy; you learn about the frequencies of current, what static electricity is.

Your instructor then will show you a static machine, operate it before you, and thus produce static electricity. You'll watch with great interest the brilliant flashes while he explains the different characteristics of this kind of electricity, what its principal uses are, and makes comparisons with higher amperage and lower frequency currents. Thrilling! Interesting? Yes, sir! You listen with a sense of intense fascination.

You don't realize you are learning every minute of the time. 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 realize it, one by one, great, important facts about electricity, things you **must** know to be a thoroughly trained electrical man, are sinking into your head, there to **stay!** You'll never forget them.

### You Are Already Becoming a Trained Man

The whole thing is so easy and so gripping that before you know it, you find you have a splendid, unforgettable knowledge of magnetism, the practical application of Ohm's law, resistance, series and parallel battery connections, and the definitions of the more common terms used in Electricity, such as ohms, amperes, watts, volts, and so on.

You work out your problems in a practical way. You experiment with demonstration equipment. The plan is so simple and so 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.

Third, you are required to keep a notebook and you jot down these points as he goes along, and to make 100 per cent sure that you understand everything, practical demonstrations on apparatus are made.

### How These Laws and Principles Help You in the Field

Already you begin to realize the tremendous advantages the trained man has over the plodder who tries hard, 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 miserable wages, trying to learn the great profession of Electricity in a piecemeal, haphazard manner. Gradually they learn how to handle a screw driver or a monkey wrench, but that's as far as they can go.

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

That's where these simple but **vital** important electrical laws and principles you learn in the Beginners' 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 without these laws and principles. Right there your Coyne graduate shows his "stuff"; he proves himself able to go ahead and install and connect up a piece of electrical machinery from a blueprint 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 like a hawk every minute.

Now, all these things you have learned in this department lead up to other things. You now understand the basic principles of electricity, so in your next department you begin to apply them on other types of practical electrical work. So let's make a visit to the Circuit Department.



Above: Instructor Explaining Principles and Laws of Electricity. Below: Students Making Tests on Demonstration Apparatus.





# THE CIRCUIT DEPARTMENT



Students Wiring Annunciators and Testing Out Various Kinds of Circuits—This Is Fascinating Work

## You "Learn by Doing" in the Circuit Room

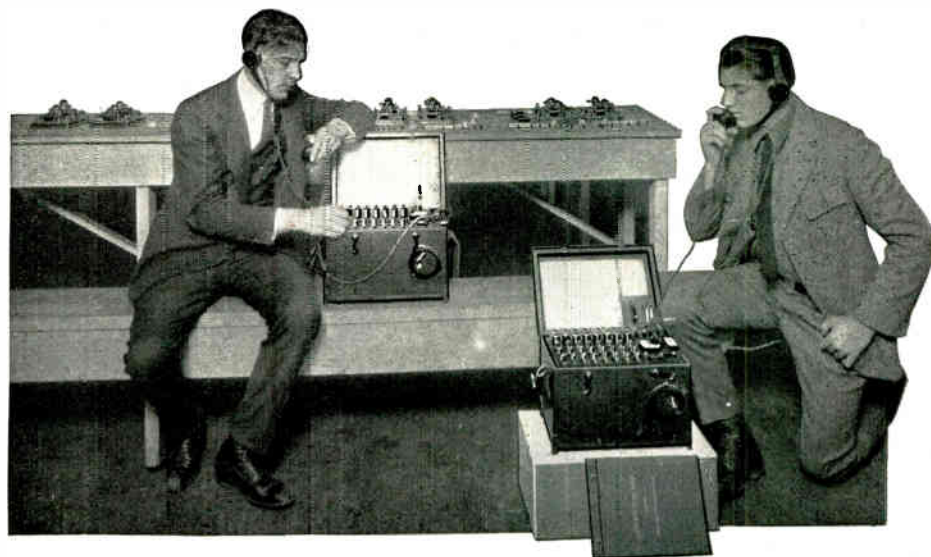
**A**FTER passing an examination, you go from the Beginners' Room to the Circuit Room. Here you learn, by actual practice, the various ways dry cells can be connected, and how to apply these connections and current to doorbells, annunciators, buzzers and alarms. You learn the control of these devices by push buttons and hidden connections; you learn how to connect up automatic burglar alarms, fire alarm systems, call systems, electric door locks, and so on.

The work in the Circuit Room includes every kind of electro-magnetic system in regular use. The range is from a simple doorbell mechanism to a complicated stick-relay for a continuous ringing burglar alarm. This practical, thorough training makes you master of this department of electrical work. Altogether you get forty-five different and complete systems. You work from sketches made by yourself, and you learn to make systematic tests for trouble on any electric system.

### You Advance Step by Step

The procedure in this room is simply one of progressive work. When you have thoroughly mastered one job, you move to the next—and so on. So, you see, you are continually learning something new. That's the advantage of Coyne methods.

Next you advance to Telegraphy, Telephony and Electric Signaling. In view of the universal use of the telegraph and telephone, and the great number of positions open in this branch of the electrical industry, this training is a valuable asset to any man.



Interesting and Instructive Work with Field Telephones

## Coyne Training Gives You Practical Experience



Wiring Burglar Alarms in Circuit Department. Note That This Is Job Number 30

**R**EMEMBER every piece of work you do at Coyne is like experience out on the job. Of course, you learn more quickly, because everything you do is planned to teach you something new.

In the Circuit Room you learn the wiring, operation, construction and principles of telegraph instruments. You make every practical connection and study its operation under all sorts of conditions. You practice with a sending key and you can, if you wish, learn the Morse and Continental codes, actually sending messages over the wire.

The work in Telephony is just as practical. You wire up and test telephonic apparatus. You actually wire and talk over single and party lines. You study Magneto Battery and Central Energy circuits, and learn how to find and correct trouble. You not only learn the more simple connections involved in single line phones, but those embracing extensions and inter-communicating.

The mysteries of the switchboard become an open book to you.

This training in circuit-tracing and testing gives you one of the very fundamentals of electrical work and one of the essential requirements for a good maintenance man or trouble shooter, as well as in installing and operating electrical equipment.

### Your Circuit Training is a Foundation on Which You Build Success

After you study and master each group of apparatus you make a sketch of it in your notebook. Your diagram is a picture of what you learned. Your notebook is a permanent reference work for you, and you will use it many times after you are in the field.

Thus, you see right from the start your training is essentially practical and every assignment you are given is aimed to be of some definite assistance to you in your electrical career. On graduating from the Circuit Room, you are equipped to do Low Voltage Wiring. Many of my graduates who are in business have found this line of work very profitable as it is a branch of electrical work very much in demand.





# CONSTRUCTION DEPARTMENT



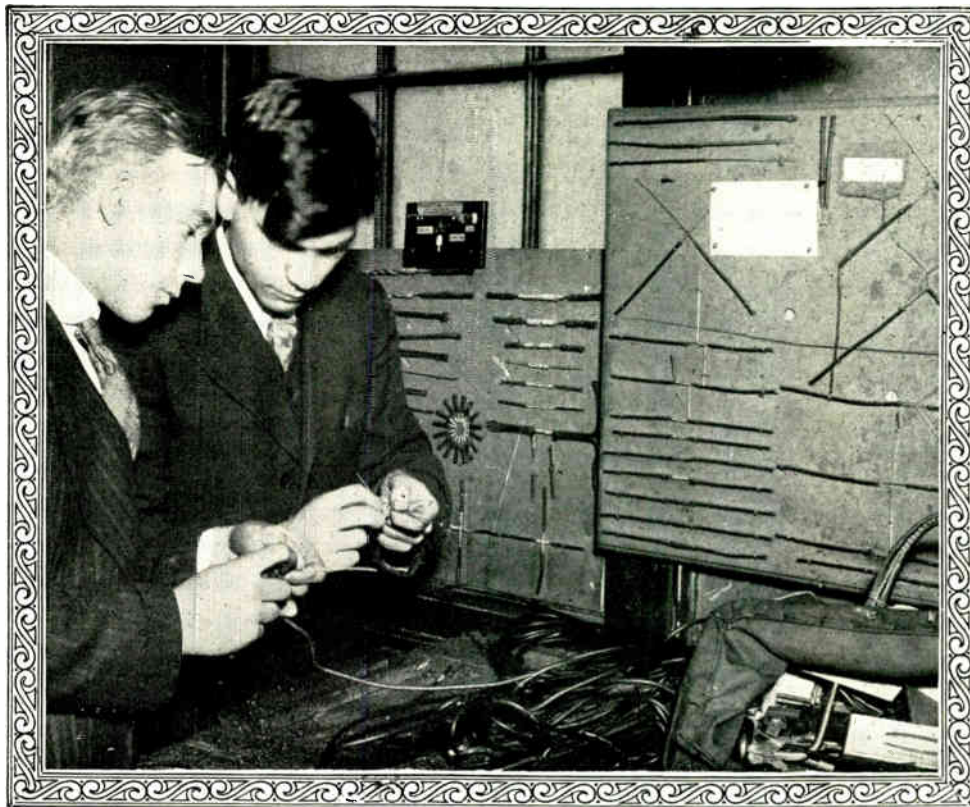
## From Circuit to Construction Dept.

**Y**OUR next step is construction work—one of the most interesting and complete branches of the Coyne course. Realizing the opportunities that lie in construction work, which includes house wiring, motor installation, electric signs and illumination, I have spared nothing to make this department thorough and complete in every respect.

The work in the Circuit Room with low voltage has laid the foundation for the more important work in this department where you deal with higher voltage. Naturally, electric wire carrying more current at higher voltage requires heavier covering or insulation than the small, low voltage wire used in the Circuit Room. First, your instructor will take a piece of wire and strip off the black covering or insulation, explaining in the meantime, why the insulation is put on and why it has to be a certain thickness. Next, he makes a simple splice with another piece of wire, showing you both the right way and the wrong way.

### Your Instructor Works with You

Now you do the same thing under the instructor's supervision. If you make mistakes, he will correct them immediately so that **you are always on the right track**. From the simple splices, you progress to the more complex ones until all of the standard splices are fully mastered. Next you learn to solder these connections and solder lugs wherever they are necessary. As in splicing, the instructor does it first, showing the right way to handle a soldering iron and how to "tin" it properly so the solder will stick. Your first efforts will be rough, uneven soldering, but remember, the instructor is watching and making helpful suggestions so that you will soon be making smooth, solid joints that will pass rigid inspection anywhere. In addition to soldering, you learn how to put both rubber and friction tape on the more important splices.

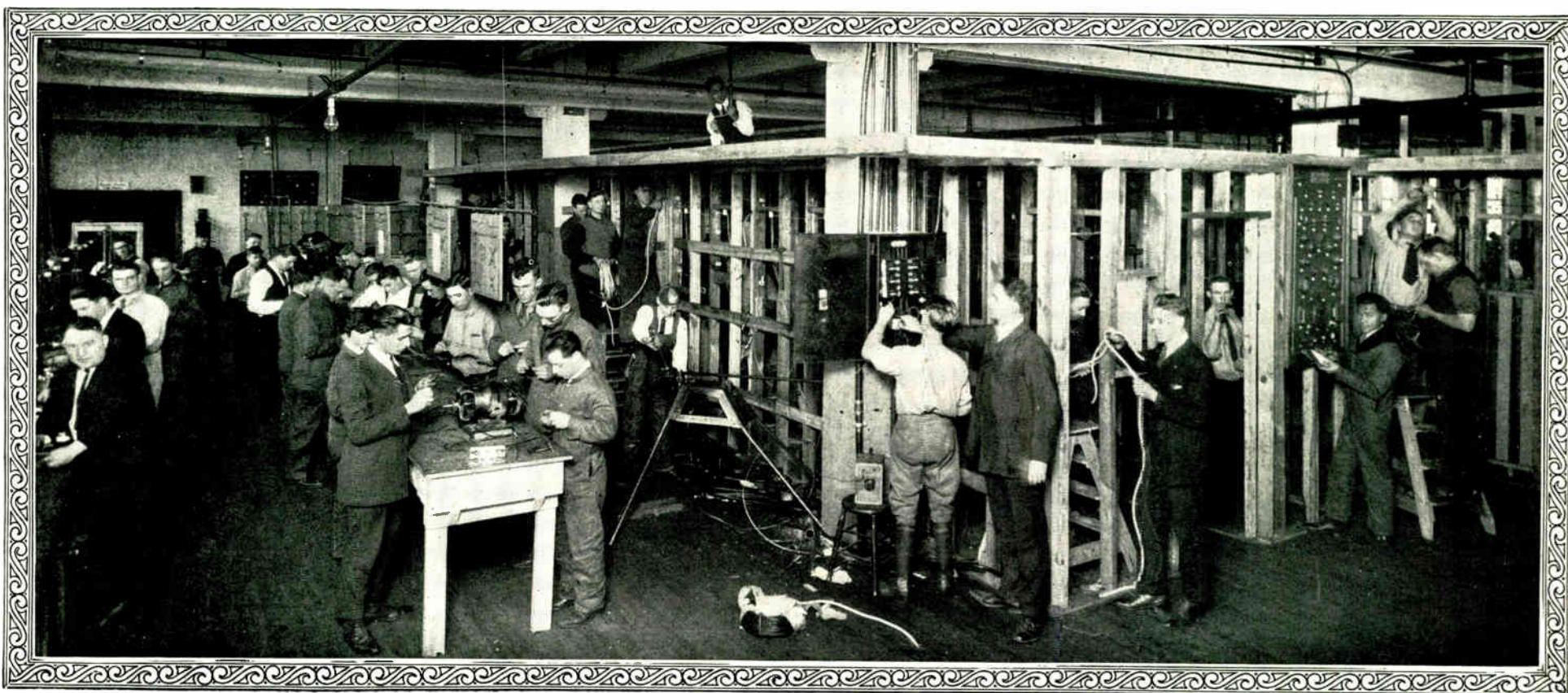


Wire Splicing—First Instructions

### Coyne Instruction is Thorough

This work, preliminary to house wiring, may seem unimportant, but it is vital to your future success. Do you realize that fires in homes and buildings can be caused by "crossed wires" and faulty connections? How long could an electrician stay in business doing this kind of work? That's why the Coyne method of instruction is **thorough to the last degree**. No student is allowed to "skim over" any part of the work. Every job must pass inspection before a new one is taken up. By this practical, thorough method you lay a solid foundation for the work to come.

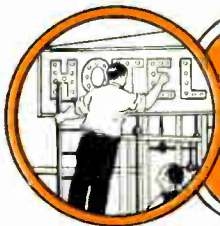
Now comes Detail Boards. To acquaint you with various types of fittings, switches and wiring of many different circuits, I have constructed special Detail Boards where this work can be accomplished in a compact space. Circuit work on Detail Boards includes the method of controlling lights wired in series and in parallel, with single pole, double pole, three-way and four-way switches for selective and master control. The student is required to make a drawing of each circuit in his note book before proceeding to lay it out and connect it up on the board. You proceed to actual house wiring as soon as you understand these things thoroughly and can do any of the jobs without the aid of the instructor.



A General View of the Construction Room Showing Skeletons of Houses for House Wiring

Coyne Specializes in ONE Thing—Electricity

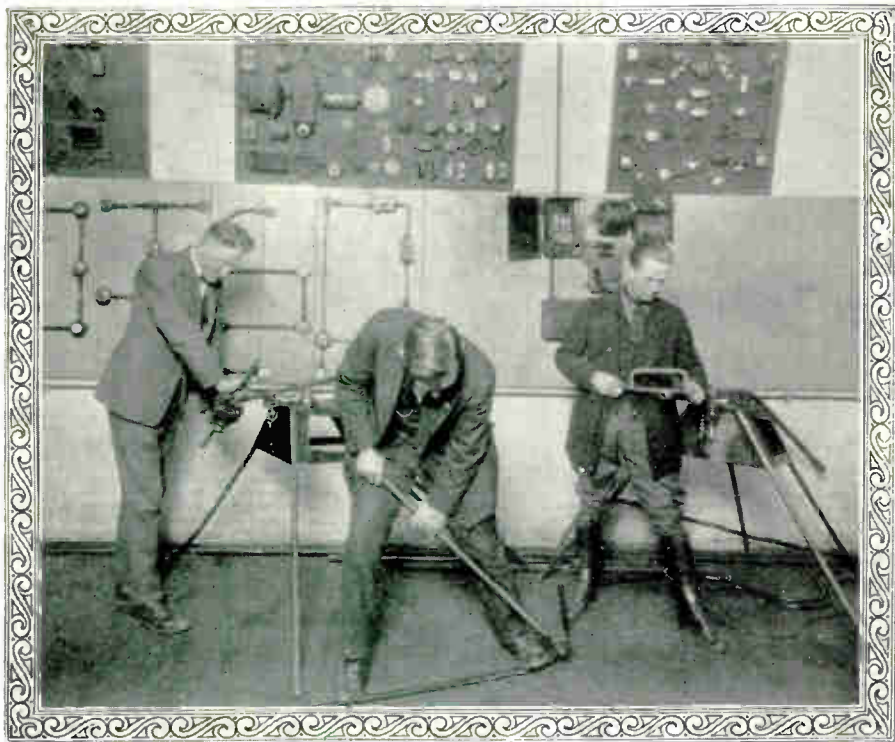




# CONSTRUCTION DEPARTMENT



## House Wiring Is Very Profitable Work for the Coyne Trained Expert



Students Bending and Threading Rigid Conduit

### To Advance, You Must be Thoroughly Trained in ALL Branches

THE only practical way to learn house wiring is to do the work with the same materials and under the same working conditions that you would find in wiring a house or a building. I use the most up-to-date materials obtainable and to produce the same working conditions, have constructed skeleton houses. These skeletons are like an ordinary house which has been completed to the point of wiring. The installation of conduit, control boxes, switches, outlets and fixtures is exactly the same as you would do it "out on the job." Thus, you see, we have perfected a practical and easy method of mastering house wiring. This system was not developed in a few months; it is an accumulation of years of experience and the equipment is constantly changing to keep pace with new conditions on the outside.

### Nothing Left Out of Coyne Course

First, the student is required to make a diagram of the wiring installation of a house, indicating the kind of conduit to be used and locating the various control boxes, switches and outlets. Then the actual installation of wiring begins. You are taught first the knob and tube method, then the B. X. and flexible, and last of all, the rigid conduit method. If any new conduit or fittings come into standard use, rest assured it will be included in the Coyne course. In connection with rigid conduit, you are given practical work on bending and threading. This is very important as the average electrician can not bend conduit correctly. I insist that my students be thoroughly trained in every angle of electricity.



House Wiring—Showing B. X. Work—Just Like You Do It Out on the Job

There Is No Substitute for Practical Shop Training





# CONSTRUCTION DEPARTMENT



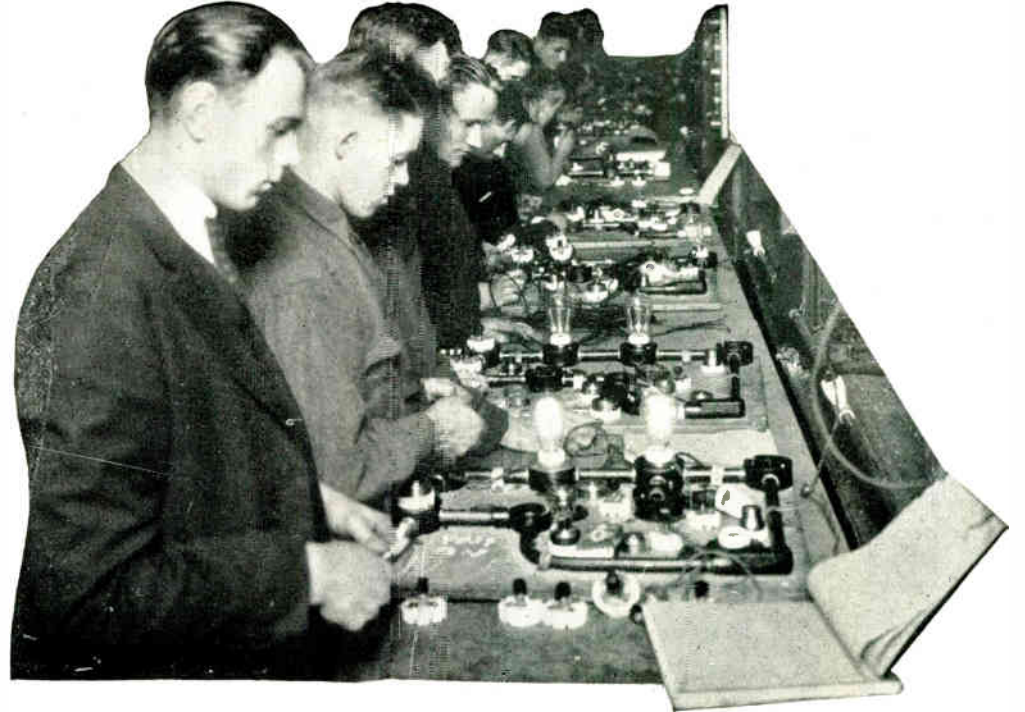
## Now You Can Turn on the "Juice"

THE work is so interesting and the progress so rapid that you can hardly wait to run the wire through the conduit to see if you have laid out your circuits correctly. If the arrangement is right, the control box and switches can be connected in their proper order. After the job is finished and connected to the "juice," the instructor shows you how to check up your work. If any "grounds" or "short circuits" occur, they must be located with test lamps and the fault cleared up. Under no circumstances is a student allowed to graduate from house wiring until he can make installations that will pass rigid inspection.

### Coyne Trains You to Make Big Money

All of this work is put in according to the Underwriters and Commonwealth Edison Code Rules. These correspond to the Chicago Code which is practically the same as a National Code. You can readily see that for fire insurance purposes, there would have to be a certain standard for installing switches and fixtures. Familiarity with Code Rules is very important and I see to it that you know them thoroughly so that your work will pass inspection no matter where you locate after leaving Coyne. A student who completes house wiring under our practical instruction need not be afraid to tackle any kind of a wiring job because he has learned how to do things the right way—the way that earns him the reputation of an "expert" and not a "tinker." **Coyne trains you to make money**—not to do sloppy work that some one else will have to do over again.

My instructors test your ability to trace circuits and shoot for trouble on an immense board where the circuits are not in skeleton form. They are enclosed like you would find them in the wall of a house or building. He will purposely throw a circuit out of adjustment so that the student can apply his knowledge to restore it to working order. There is a definite reason for this kind of work. Suppose you were called upon to "shoot" for trouble or make repairs in a house or building where nothing was visible



Wiring Up Switches and Fittings on Detail Boards

except the control box, switches and fixtures. What would you do? You would be able to trace out the circuits and find the trouble immediately because the Coyne training gave you **practical** work on concealed circuits. An expert repairman who can make repairs quickly and efficiently will save his employer lots of money and is just as valuable as the man who can put in an installation.



Another Partial View of the Construction Department Showing Bending and Threading Conduits, Soldering Connections and Switching Work on Concealed Circuits Boards

Coyne Specializes in ONE Thing—Electricity





# CONSTRUCTION DEPARTMENT



## Motor Installation Comes Next

HAVING completed the work in connection with inside installations, repairing and "trouble shooting," the student is given practical instruction in service installation and motor installation. Service installation covers the service or supply wires of all buildings for light and power. You are taught to install the service, line switch, meter loop and cut-out cabinet for a house or for apartments for two or more families. All of this work must be done in accordance with the Chicago and Underwriters Code Rules.

The work in motor installation covers the complete installation of D. C. and A. C. motors, including the meter and necessary control apparatus and switches; mounting of motor and intelligent understanding of Code rules as regards safety and protection. Students are also required to install wiring in rigid conduit for shunt motors having starting boxes and double pole, single throw knife switch, to control the line. And in addition, connect up the same motors for reversing the field and direction of rotation. We know at Coyne what you will need to make you a **success in the field** and our aim is to always duplicate actual working conditions on the outside.

### Coyne Trained Men Are in Big Demand

This kind of practical training fits a man to handle properly all motor wiring for the most particular requirements. You are taught wire calculations for every installation, and the data necessary to install anything from a single motor to fifty or more. You learn the proper use of fuses, circuit breakers, reversing switches, remote control and other necessary factors of work required to make you a practical man, capable of supervising the big jobs. The training is so thorough that it is no wonder **Coyne men are in big demand everywhere.**

Now you see how a student progresses step by step, being prepared for the things ahead of him as he goes along. In this way, he makes rapid progress without realizing it and the work comes easily. Of course, the necessary theory is explained by practical talks and blackboard work which are made interesting with practical demonstrations by the instructor. Nothing is ever dry or uninteresting in the Coyne course, that is why my students learn so quickly, they are **interested in their work.** I am sure you can see how **impossible it would be** to learn this fascinating work by reading out of dry books or lessons. That's why I say there is only one way to learn electricity and that's "**Learn by Doing.**"

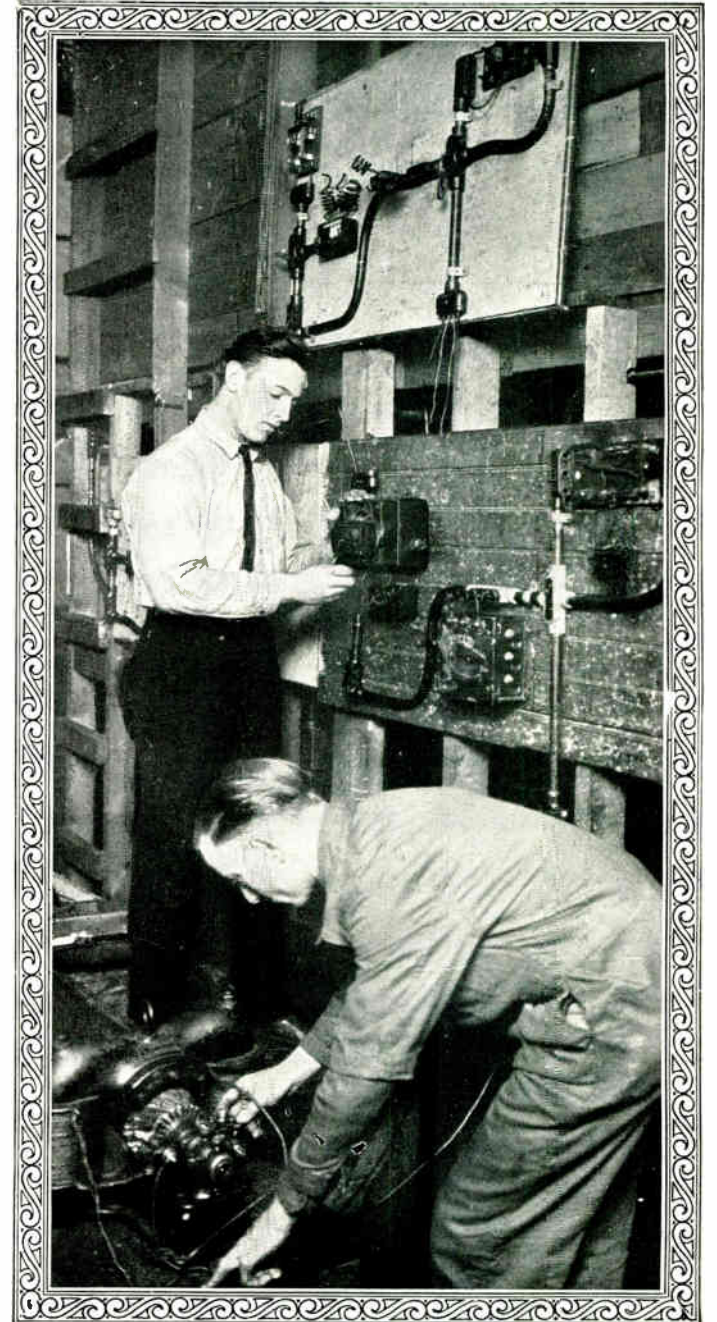


#### MORE THAN \$3,000 A YEAR

I do not know of any other school where you can get so much for your money in the way of real knowledge and practical experience, all in so short a time as you get at COYNE. The equipment at COYNE is unsurpassed by any other school and you advance very rapidly by doing the work yourself.

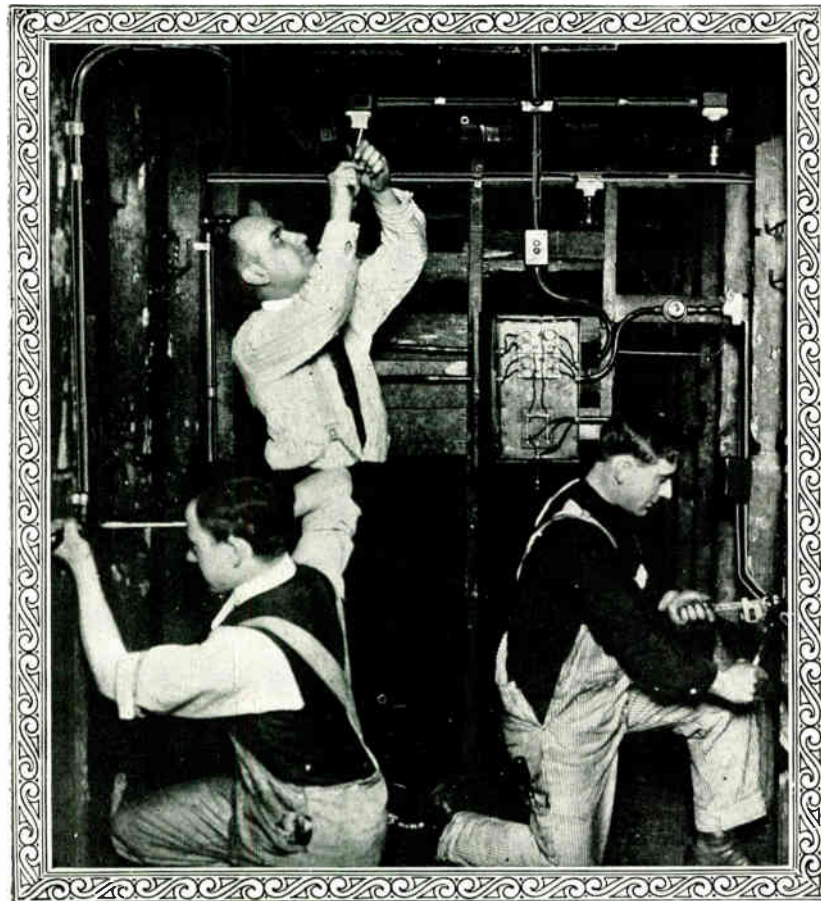
I never earned over fifteen dollars a week before I went there. After finishing the course I worked for Armour and Company and also the Western Electric Company. Then I came here to work at my present employment as Chief Engineer for the Regal Gasoline Engine Company who build a very large line of motors for marine use, including electric lighting systems. My salary last year was \$3000.00 and was advanced at the beginning of the present year.

Very truly, yours,  
L. T. DUBENDORF



Motor Wiring and Installation

The success of our graduates is living proof of the value of our training.



Completing Condulet Installation

## Big Money in Construction Work for the Coyne Trained Expert

CONSTRUCTION work offers a wonderful field for the man who wishes to go into business for himself and who is a thoroughly trained Electrical EXPERT. Hundreds of Coyne graduates are now doing electrical contracting and making lots of money. Many men have attempted to go in business for themselves after learning this one branch of the work. They are rarely successful because it is necessary to have a thorough knowledge of all branches. **That is why the Coyne man is successful, where the man with a little knowledge of the one branch is outclassed.** To be a success in any branch of Electricity you must be thoroughly trained. The average number of homes that are wired for electricity in our larger cities is only around fifty per cent. Thousands of smaller towns are not wired at all so you can readily see the opportunities for the practical man in house wiring. Nearly every manufacturing plant operates from several to hundreds of electric motors. The installation and maintenance of these motors is a profitable field in itself.

Many of our graduates who are in business do this work and make **big money** in addition to their contracting work. Some of our graduates take jobs on a contract basis to **install and maintain** motors and have more work than they can do at big pay.

There Is No Substitute for Practical Shop Training

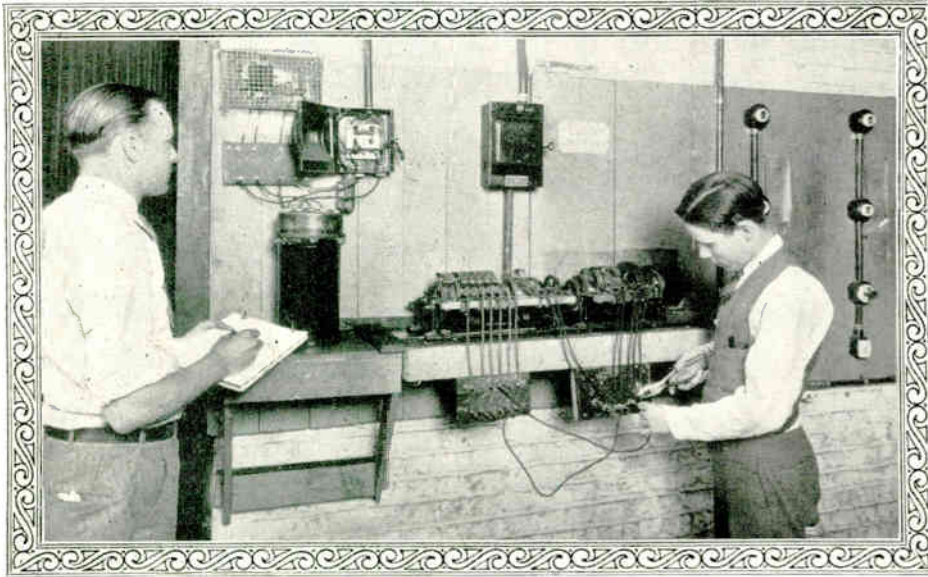




# CONSTRUCTION DEPARTMENT



## Electric Signs and Illumination



Close-up of Drum Control Sign Flasher Mechanism on Which You Get Valuable Practical Work

**T**HE electrical sign, particularly the flasher type, is an important branch of the electrical industry and our course would not be complete if we did not cover this subject.

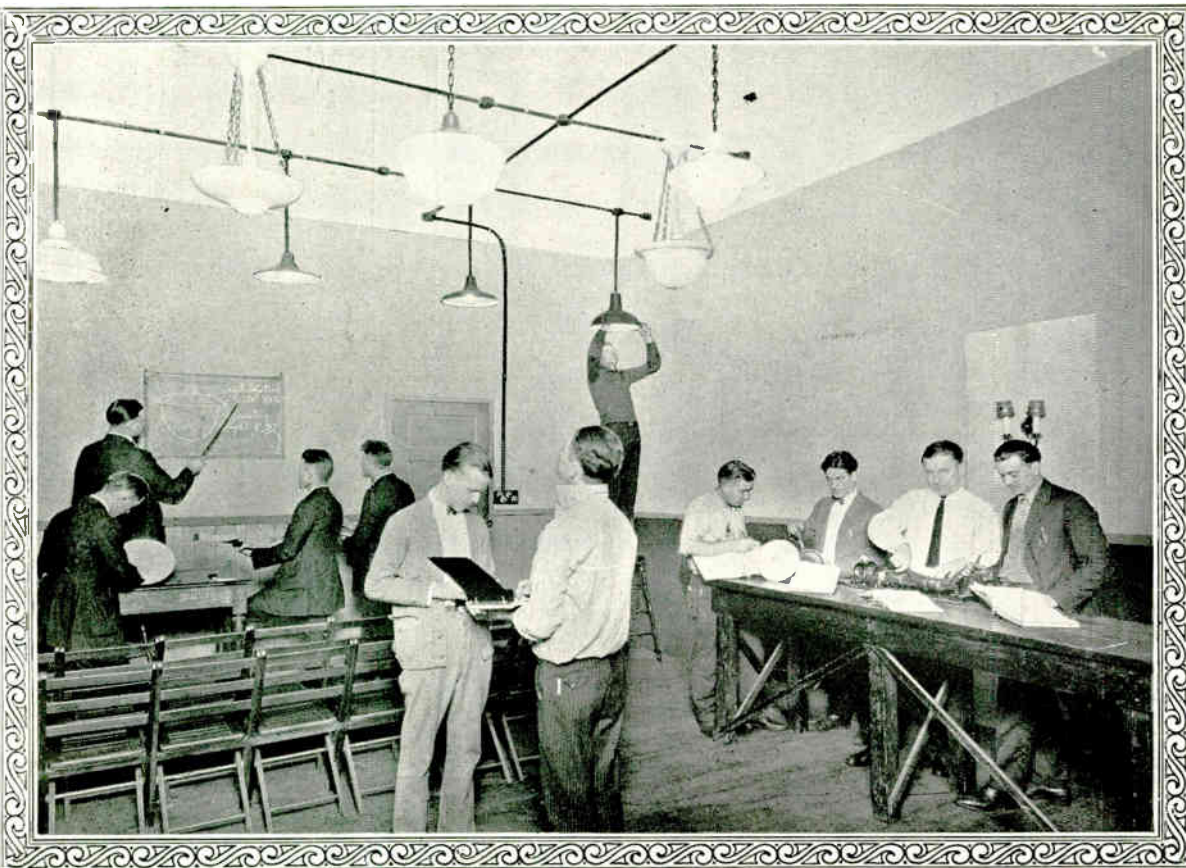
How many times have you walked down the main street of your home town and been attracted by a flasher sign? Well, now you are going to find out how it operates. And you are going still further, you are going to wire up a flasher and operate it yourself. First you work with thermostats and magnetic flasher controls until you become familiar with their operation and various uses. Then you go to a Drum type sign flasher, similar to the one pictured above, and wire it up yourself.

### Our Equipment is Modern

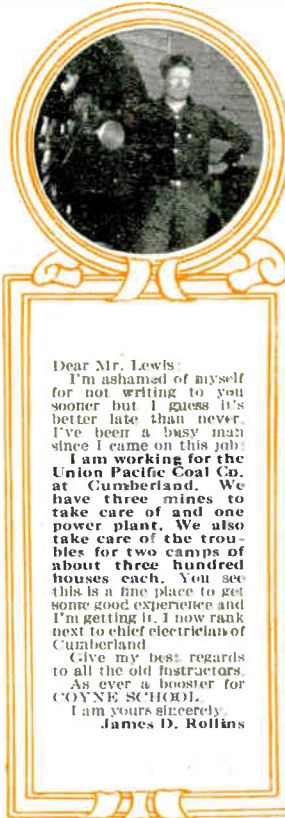
You work on practically every known type of this device in common use, from the simplest to such up-to-the-minute designs as the oil-switch type automatic flasher. It is by keeping our equipment modern at all times that COYNE has won the reputation of the "World's Greatest Electrical School."

The tremendous use of electric signs for advertising purposes opens up a big field for the Coyne trained expert. Besides the installing and operating, there is the contracting end of the business, which is very profitable in towns where a large number of signs are used. Coyne trains you to handle any of these jobs.

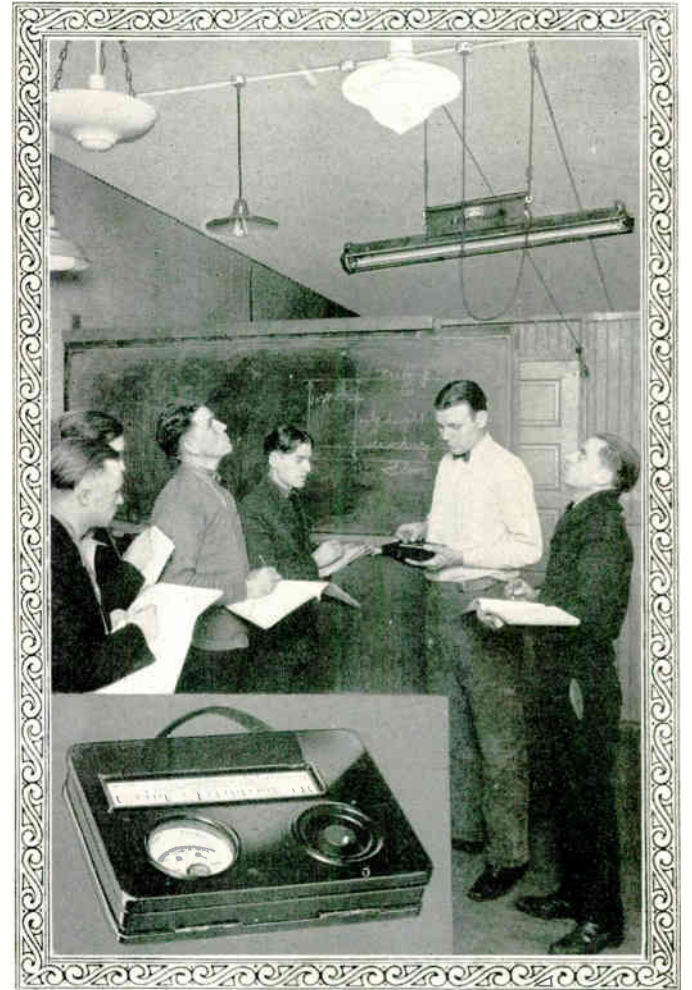
## Thorough Training in Illumination



A Portion of the Illumination Department



Dear Mr. Lewis:  
I'm ashamed of myself for not writing to you sooner but I guess it's better late than never. I've been a busy man since I came on this job. I am working for the Union Pacific Coal Co. at Cumberland. We have three mines to take care of and one power plant. We also take care of the troubles for two camps of about three hundred houses each. You see this is a fine place to get some good experience and I'm getting it. I now rank next to chief electrician of Cumberland. Give my best regards to all the old frustrators. As ever a booster for COYNE SCHOOL.  
I am yours sincerely,  
James D. Rollins



Measuring the Candle Power of a Cooper Hewitt Mercury Lamp. Instrument Used Is Shown in Inset

**D**ESPITE the wide use of artificial lighting in every industry, there are very few electricians who understand the requirements for proper illumination. This naturally comes in connection with construction and sign work because the equipment and wiring is a big factor.

### You Learn from the Very Beginning

You are first taught the principles of illumination, proper diffusion and intensities of light for all practical work. Then you take up the various types of lamps and fixtures and their uses. Then you are taught the proper kind of fixtures to use under different conditions and you are required to make various tests with the candle meter shown in the picture, to determine the proper intensity and distribution of light. And when you are in the drafting department, you will draw the complete lighting plans of a building, showing just where the lights will be placed and how the wiring will run. You also receive practical work on vapor-filled lamps, such as the Cooper-Hewitt illustrated at the left.

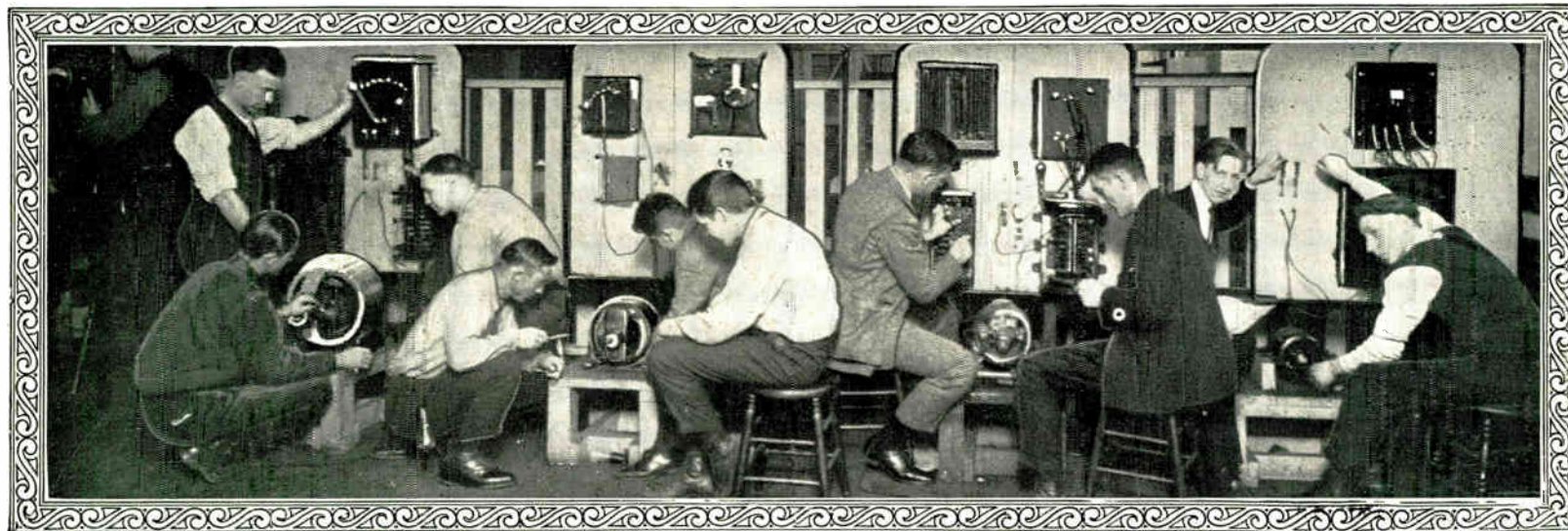
### Training that Enables You to Make Big Money in a Business of Your Own

Coyne gives the student a thorough training in laying out floor areas, enabling him to calculate the number, size and proper style of lights to secure the best possible illumination under any and all conditions. This work is very important and the expert who can sit down with the building contractor or architect and figure out the correct illumination requirements for any style of building, from a manufacturing plant to a cottage, will find his services in great demand.





# DIRECT CURRENT DEPARTMENT



Students Wiring Up and Operating Various Types of D. C. Control Apparatus and Motors

## Power Work in the Direct Current Dept.

**N**OW that you have finished the work in the construction room, you are advanced to D. C. or Direct Current work. This is where you get your first real taste of power work and the production of electrical energy. Up to this point, you have probably wondered where the "juice" came from and how it was generated. Now you are going to find out. There are two kinds of electric current, direct and alternating. The work in this room deals with the production and uses of direct current only. Here you will find assembled all types of motors and generators together with the necessary control apparatus and instruments for testing. The demand is so

great for experienced men who can operate and maintain direct current machinery that I have "left no stone unturned" to make our equipment the finest in the country.

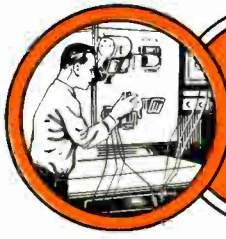
First, the instructor gives you a practical talk, showing the various types of shunt, series and compound motors and generators. He explains the different parts, their arrangement and how they act under various conditions. Then he takes you right to the apparatus and demonstrates the principles he has been talking about so that everything is made clear. You are not left "flat" with a theory. It's "I'm from Missouri" in the Coyne course and we see to it that you do the work yourself so that you understand it thoroughly.



A General View of a Small Section of the Direct Current Department Showing Part of the D. C. Apparatus

There Is No Substitute for Practical Shop Training





# DIRECT CURRENT DEPARTMENT



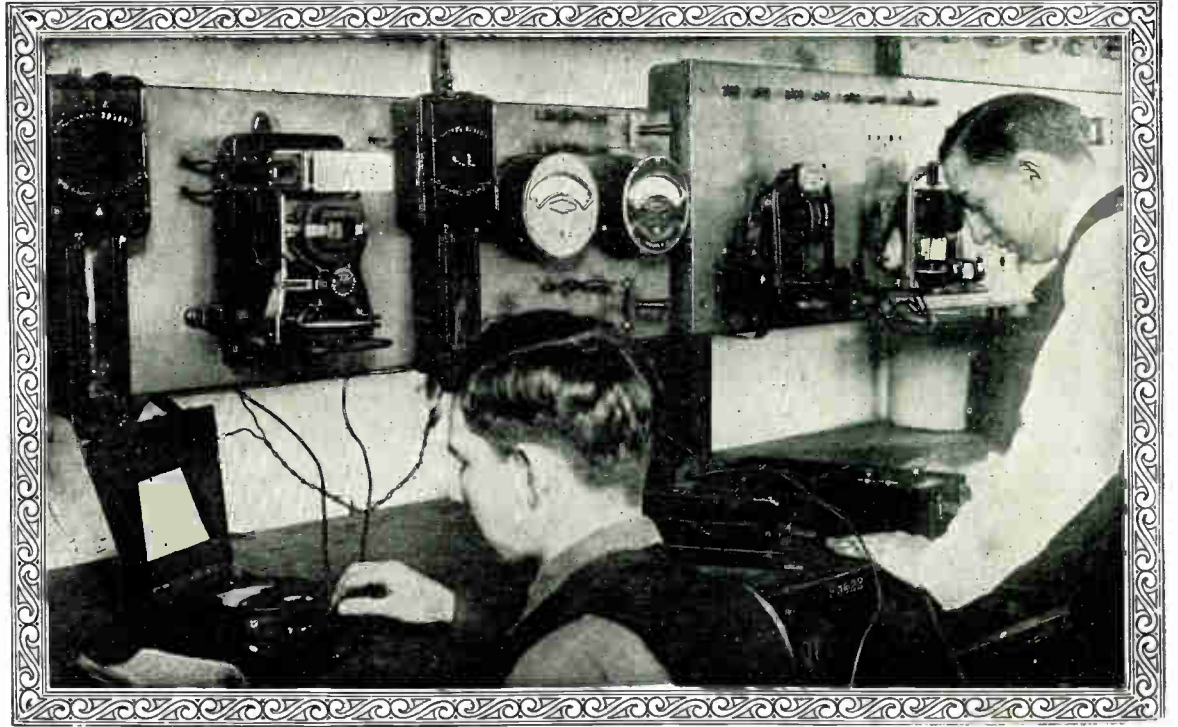
## You Learn All Types of D.C. Motors and Generators

BEFORE taking up the control apparatus, the student is required to make a number of experiments with direct current motors and generators. Each type has different characteristics and different uses but you become familiar with all of them by tracing out the circuits and making sketches in your notebook for future reference when you get "out on the job." The instructor will purposely throw a motor or generator out of adjustment and it will be up to you to put it in working order again. These experiments are not designed to "catch" the student but to test his knowledge so he will never be "stumped" by practical problems. The great success of Coyne graduates in power plants is due to the fact that they know a great deal more than the average electrician. They get the big jobs because their instruction was the same as actual working conditions.

## You Get a Thorough Knowledge of Meter Testing

Now that you have become familiar with the different types of D. C. motors and generators, you must know how much current is going in or coming out of the machine; in other words, the input and the output. Various types of meters are used to measure this energy and for test work. Of course, you study the more common types that are installed in every house or building where current is used and in addition to this, become familiar with more complicated meters that are used in power plants. First, your instructor will take a meter and explain its operating principle and the graduations of the scale, so a correct reading can be obtained. Then you will take the meter yourself and make a similar reading on another piece of apparatus. The practical work on meter-reading includes maximum demand, or discount meters, kilowatt hour, volt and ammeters.

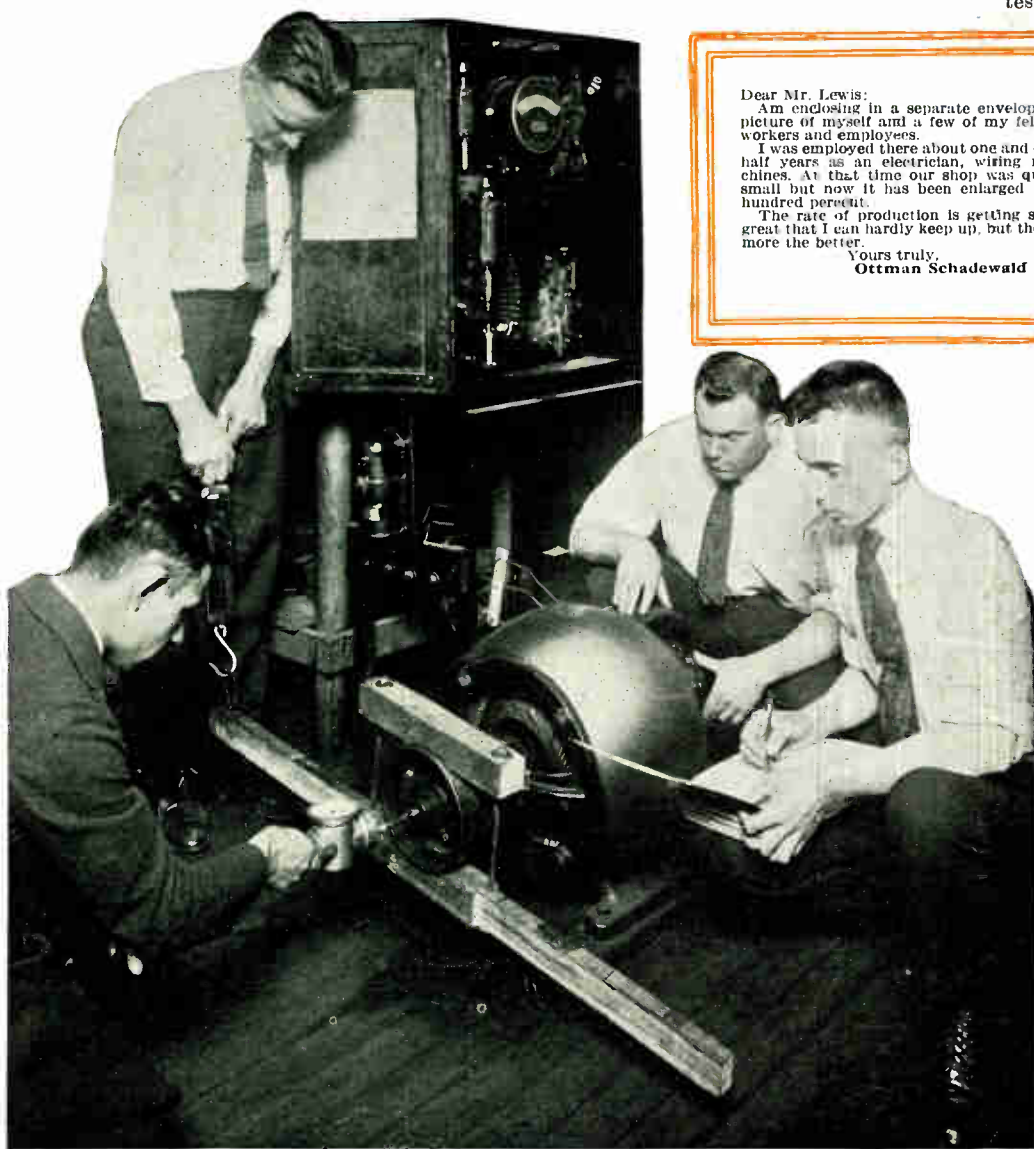
We also give you ammeter shunts, voltmeter multipliers and the Wheatstone Bridge, both slide wire and box type.



Learning by Doing—Testing Watt Meters

One of the most interesting experiments in the direct current department is the Prony brake test. This particular test is to determine the horsepower of a motor and you will use this knowledge many times in your future electrical work. You can readily see the importance of this test and can appreciate the fact that the average electrician would not have an opportunity to become familiar with this particular apparatus. Imagine yourself in charge of a power plant where it would be necessary to know the horsepower of various machines. Without this knowledge you would be helpless and that's why it's in the Coyne course. You will probably wonder when you go through the school why I have placed so much importance on these tests. It is because I am training you for a big job—a job where your thorough training will place you in a class above the average electrician. In addition to testing for horsepower with the Prony brake apparatus, you are also taught to test motors for efficiency, using voltmeters, ammeters, wattmeters, etc. Naturally, it is necessary to determine the efficiency of a machine as well as the horsepower. The illustration to the left below will give you an idea of how this interesting test is made.

Nothing is left out of the Coyne course to make you a success. Read on this page what two of my graduates have done since leaving Coyne.



An Interesting Experiment with the Prony Brake Test Apparatus

Dear Mr. Lewis:  
Am enclosing in a separate envelope a picture of myself and a few of my fellow workers and employees.

I was employed there about one and one half years as an electrician, wiring machines. At that time our shop was quite small but now it has been enlarged five hundred percent.

The rate of production is getting so great that I can hardly keep up, but the more the better.

Yours truly,  
Ottman Schadowald



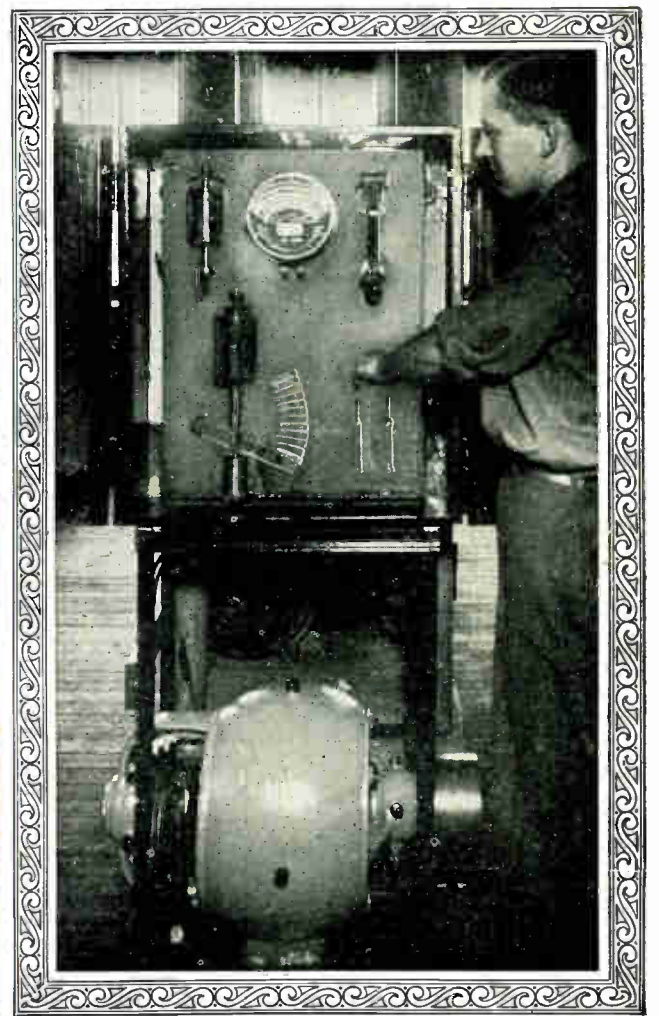
### GETS LICENSE RIGHT AWAY

Dear Mr. Lewis:  
After graduating from your school, about a year ago as a trained man here is the result, and also ready to take any job. I first took my examination here in the hall as a Power Construction Man, which I have passed and I sure say you, Mr. Lewis, have a wonderful practical school.

I here enclose my photos that have been taken on the job, and the other at my own work shop.

Closing with all wishes and luck to Coyne.

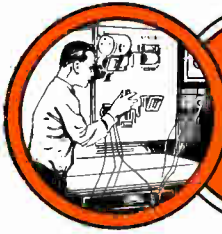
I remain  
Yours truly,  
George E. Hosaga



Student Operating Remote Control

Coyne Specializes in ONE Thing—Electricity



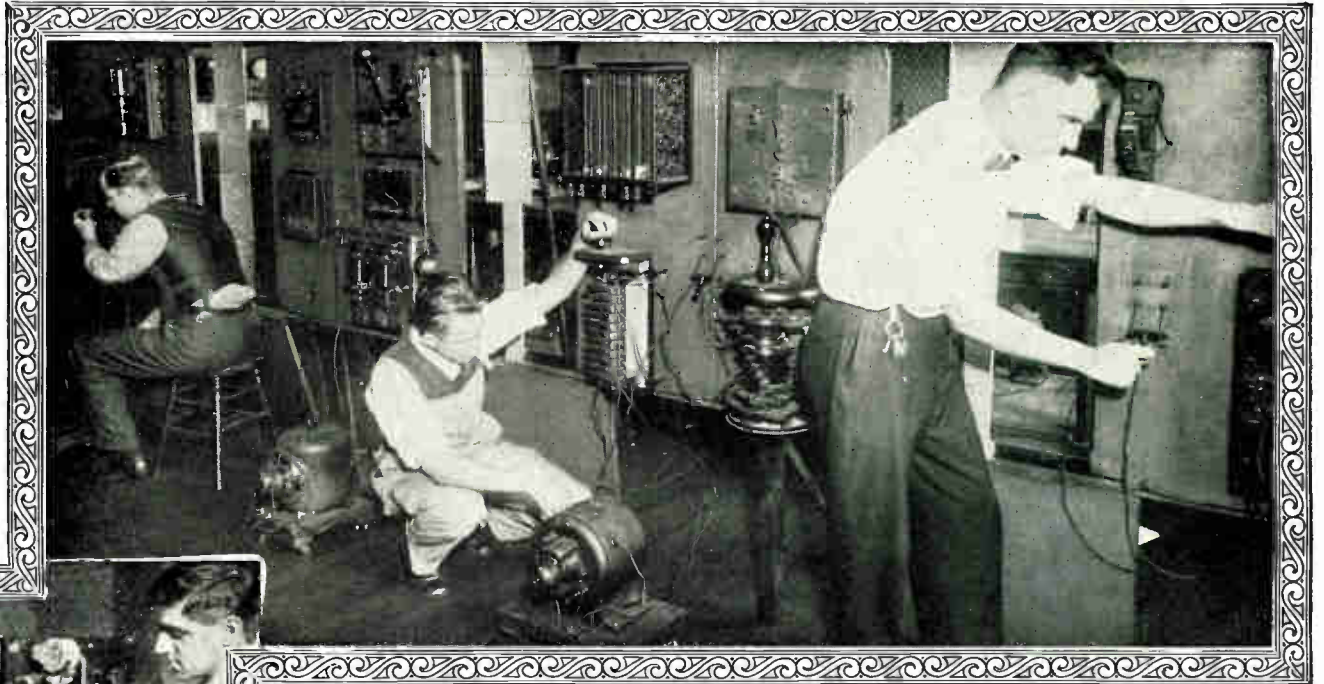


# DIRECT CURRENT DEPARTMENT



## Interesting Work With D. C. Controls

**A**FTER you have learned all about the direct current generator and motor, and can take these machines apart and put them together again, with a full understanding of testing and repairs, you get a thorough training in the very important apparatus that comes between the generator and the motor, viz.: the controls. An expert control man is one of the highest paid and scarcest of electrical workers. This particular branch offers splendid connections "right off the reel" to the Coyne trained expert. Consequently, I have installed control apparatus used in every class of business—all of the most efficient and expensive type, representing an equipment not equaled by any other institution anywhere. This knowledge is also very necessary in all maintenance work.

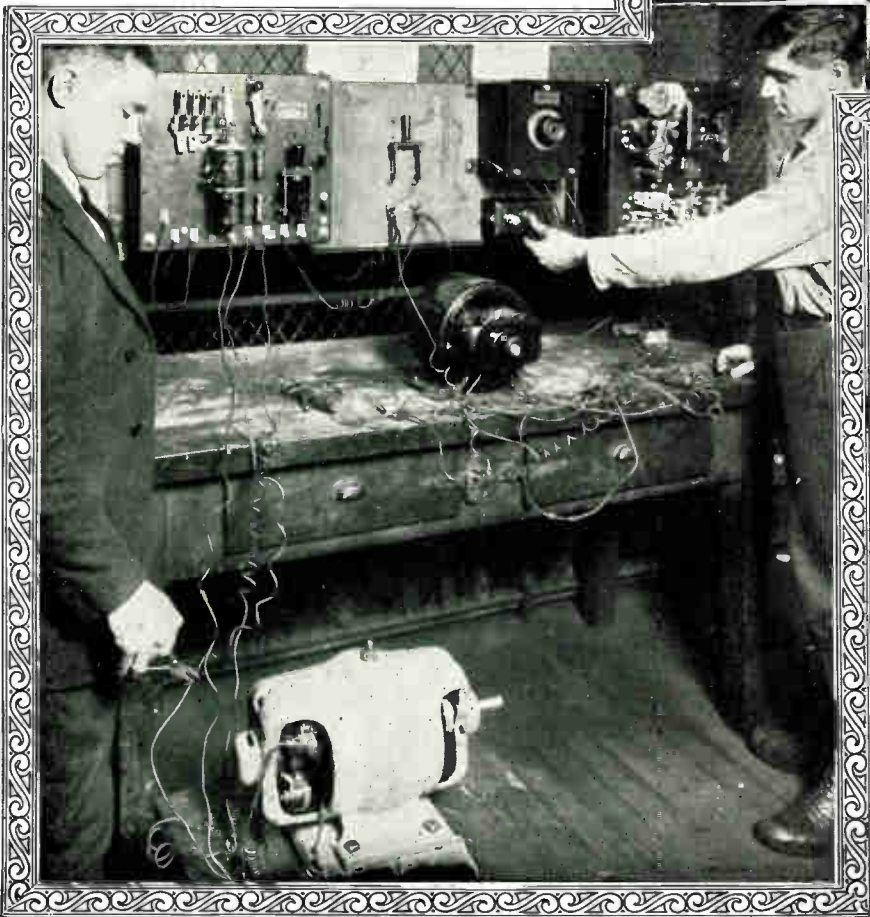


Operating All Kinds of Motor Control Apparatus

## Coyne Fits You for Responsible Positions

The control boxes are mounted on panels which make them easily accessible. Each type of control is different and is connected to a motor suitable for a particular kind of work. The student learns the correct method of connecting the motor with the control and must prove to the instructor that he can operate the machine properly and make a sketch of the wiring in his notebook before proceeding to the next type. Controllers vary with the kind of work in which they are used and to become an electrical expert you would naturally want to be familiar with every type in standard use. When you consider the number of controllers that are used in power plants, electric trains, electric elevators, machine shops, print shops, electric cranes, shovels and many other kinds of heavy machinery, you can appreciate the importance of this subject.

Coyne equipment includes train lever and reversing drum type for train work—magnetic brake and tank controller for filling tanks. In addition to this, you work on elevator controllers, both drum and plunger type, hand and automatic, as well as release type starters. There are several types of remote control such as dynamic brake and push-button type, which form a very important part of the work on this apparatus. Thus you see that by giving you practical training on every conceivable kind of control we are fitting you to accept a responsible position with a substantial salary. Can't you see the tremendous opportunities that lie in this branch of electricity for the Coyne trained expert?



All Types of Remote Control Studied at Coyne

## "Trouble Shooting," Testing and Repair Work

**A**S a finish to the work on controls, the student is given testing and "trouble shooting." Your instructor will assign you to a certain control which is out of order. It will be up to you to make tests, locate the trouble and repair the apparatus so that it is in good working order. After you have done this successfully several times, using the knowledge you have gained in previous work, you will not be afraid to tackle anything. This kind of work makes the course intensely interesting. You become fascinated with some problem and are not satisfied to give it up until you have "licked the job." Coyne men are noted for their ability to "shoot for trouble," and the reason they can do it quickly and efficiently is because all their training has been along practical lines.



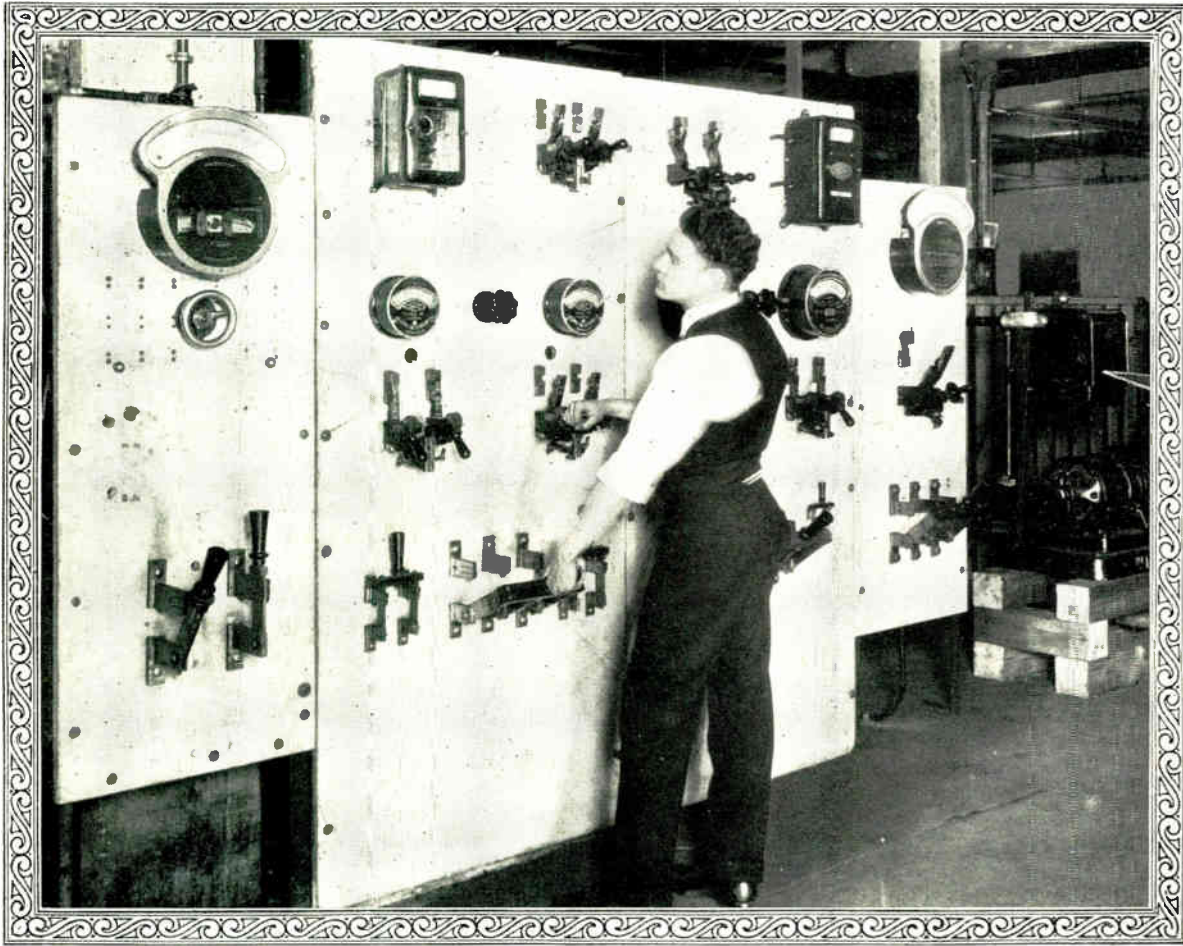
Students Testing Automatic Elevator Control Apparatus

There Is No Substitute for Practical Shop Training





# DIRECT CURRENT DEPARTMENT



Here is a Student Doing Actual Switchboard Operations. This D. C. Switchboard is All Connected Up and Controls a Whole Floor of Electrical Machinery.

## “Learn by Doing” with Modern D. C. Switchboards

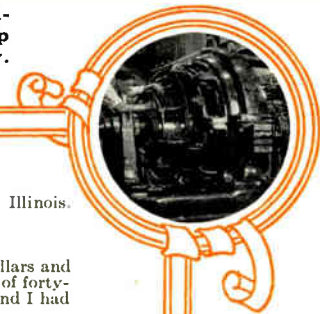
YOU are probably wondering where the switchboard comes in. The switchboard is the heart of the system receiving the current from the generator and distributing it under control to all the various circuits at the will of the operator. The work on switchboards consists of the construction and operation of all regulating devices, such as field rheostats, line switches, meters and circuit breakers. Every student gets thorough practice in the operating of this switchboard and regulation of the generator voltage.

### Amazed at Completeness of Our Shops!

Did you ever go through a power plant and notice the massive switchboards? It looked like a Chinese puzzle, didn't it? Well, when you finish the switchboard work in the Direct Current Room you will know this instrument “like a book.” You will be able to tackle almost any kind of contracting job where you would have to install, operate or maintain direct-current machinery, including the generators, motors, switchboard and necessary control apparatus. Coyne training and Coyne equipment has made this possible. No other school offers the opportunity to work with your hands and suitable tools on the same great outlay of machinery that you will find “out on the job.” Some people think I have gone crazy on the subject of equipment. But visiting electrical engineers have been amazed at the completeness of our great shops.

## Direct Current a Big Field for the Coyne Trained EXPERT

NOW that you have been told of the instruction in the Direct Current Department, you are anxious to know more about the opportunities in the field for this kind of work. A good part of the apparatus used in power plants, railway service, steel mills and smaller manufacturing plants is direct current machinery. The district nearest the Central Station in any large city is usually operated with D. C. Besides the superintendent of a power plant there are many other important good-salaried positions in power work for the Coyne trained expert.



DEAR MR. LEWIS:

I often wonder how everybody is getting along at Coyne.

Well do I remember the days I spent at Coyne.

I was nineteen years of age when I borrowed twenty-five dollars and this with the twenty dollars that I already had, making a total of forty-five dollars in all, I started to Coyne. I was a Coyne Student and I had to succeed.

It has now been over a year since I graduated and a busy year it has been. I went to work for the Standard Oil Company, Woodriver. They started using me in their Electrical Department, and I have steady employment in this department now.

I received my first copy of “Coyne Graduate” and I certainly am pleased with it. Just keep it coming.

Give my regards to Mr. Richards and all the rest of the big Coyne family.

I sure am satisfied with the training I received at Coyne, so just remember me as a satisfied graduate and a Coyne Booster.

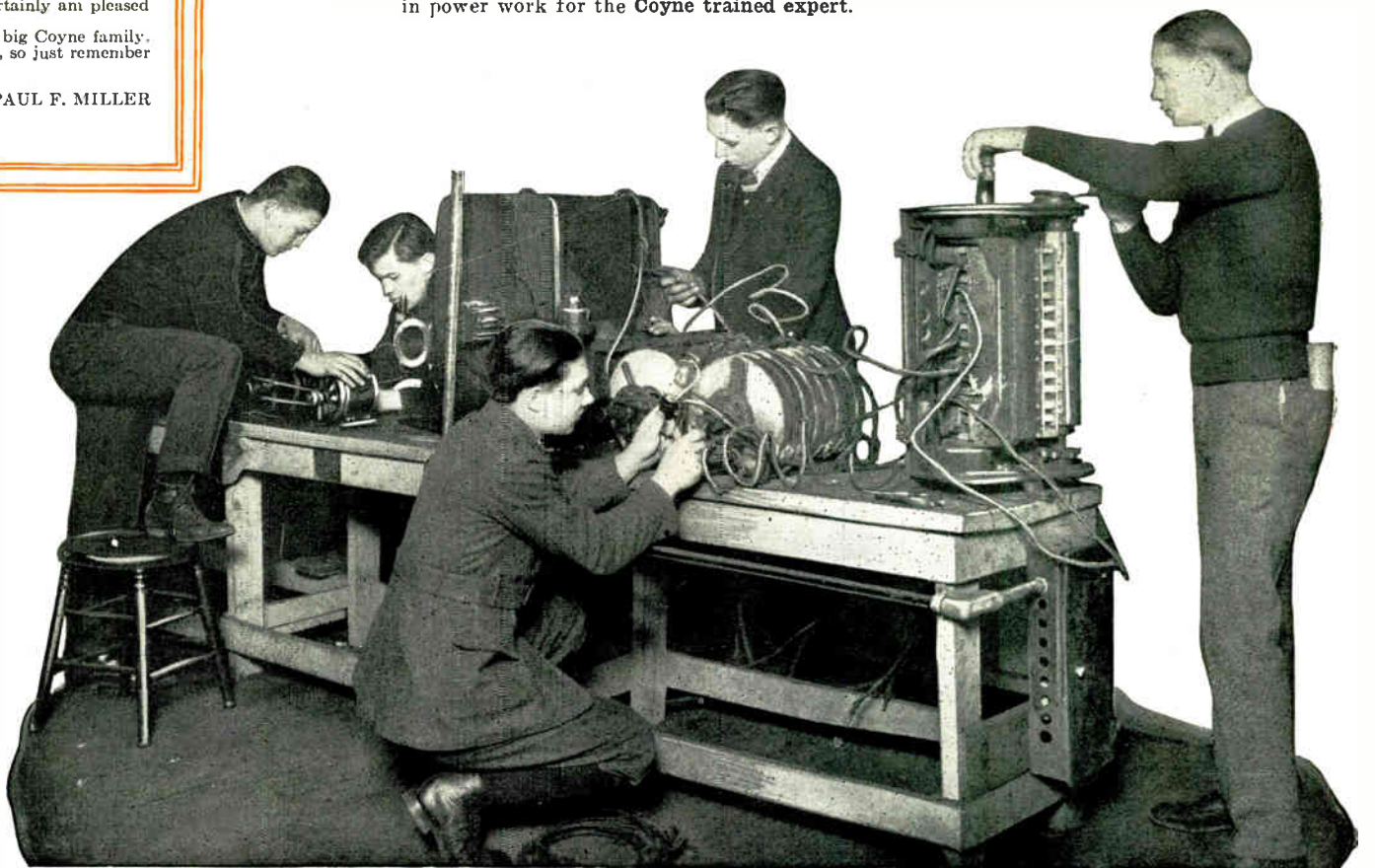
Yours truly,

(Signed) PAUL F. MILLER

Illinois.

## D. C. Work a Foundation for Alternating Current

Just think of the thousands and thousands of good jobs around railway yards and other places where practically everything is operated with direct current! In addition to the work on new installations, just stop and visualize the repair work on motors and generators now in use. So you see, the field is unlimited, but remember, the big jobs will be filled by practical men. The ordinary electrician who has picked up a little experience here and there will not qualify. The work in Direct Current has laid the foundation for the most interesting and important subject in the electrical field, namely, alternating current.



Wiring Up the Control and Resistance and Motors of a Mine Locomotive

Coyne Specializes in ONE Thing—Electricity





# ALTERNATING CURRENT DEPARTMENT



## Alternating Current — A Fascinating Subject

**N**OW you are about to enter the field of A. C., probably the most interesting and most important branch of electricity. Alternating current has made wonderful advancement in the past few years, and the years to come will show an even greater advance, so without a thorough knowledge of this fascinating work, the electrical man will not get very far. That is why we have put so much emphasis on this particular department. Many Electrical authorities visiting our school have expressed themselves as astonished at the completeness and thoroughness of our A. C. layout.

### Your Previous Work Has Paved the Way for Your Work in the A. C. Dep't

Below I have shown a picture of part of the A. C. department. You will notice the railings around the different apparatus; now this is to divide the different sections so that each particular type is in a section by itself. Altogether there are more than one hundred separate jobs in this room. The student is required to operate every piece of apparatus by demonstration and practice; of course, some theory is necessary. This is given by plain practical talks by men who have had years of practical experience and know how to explain what they know. These talks are made clear by illustrations, diagrams, etc., and are very interesting. The same rule applies in this department as in the others, when a thing is explained to you, then you are required to do it by actual practice, as I believe that to learn you must "**Learn by Doing.**"

**It is possible for us to teach this work quickly and thoroughly because of two things:**

First, the sound, practical training received by the student up to the time he reaches A. C. work. Second, our tremendous outlay of equipment that enables our instructors to train you on A. C. principles and laws by actual practice on the machinery used in alternating current work under the same conditions you will meet on the outside.

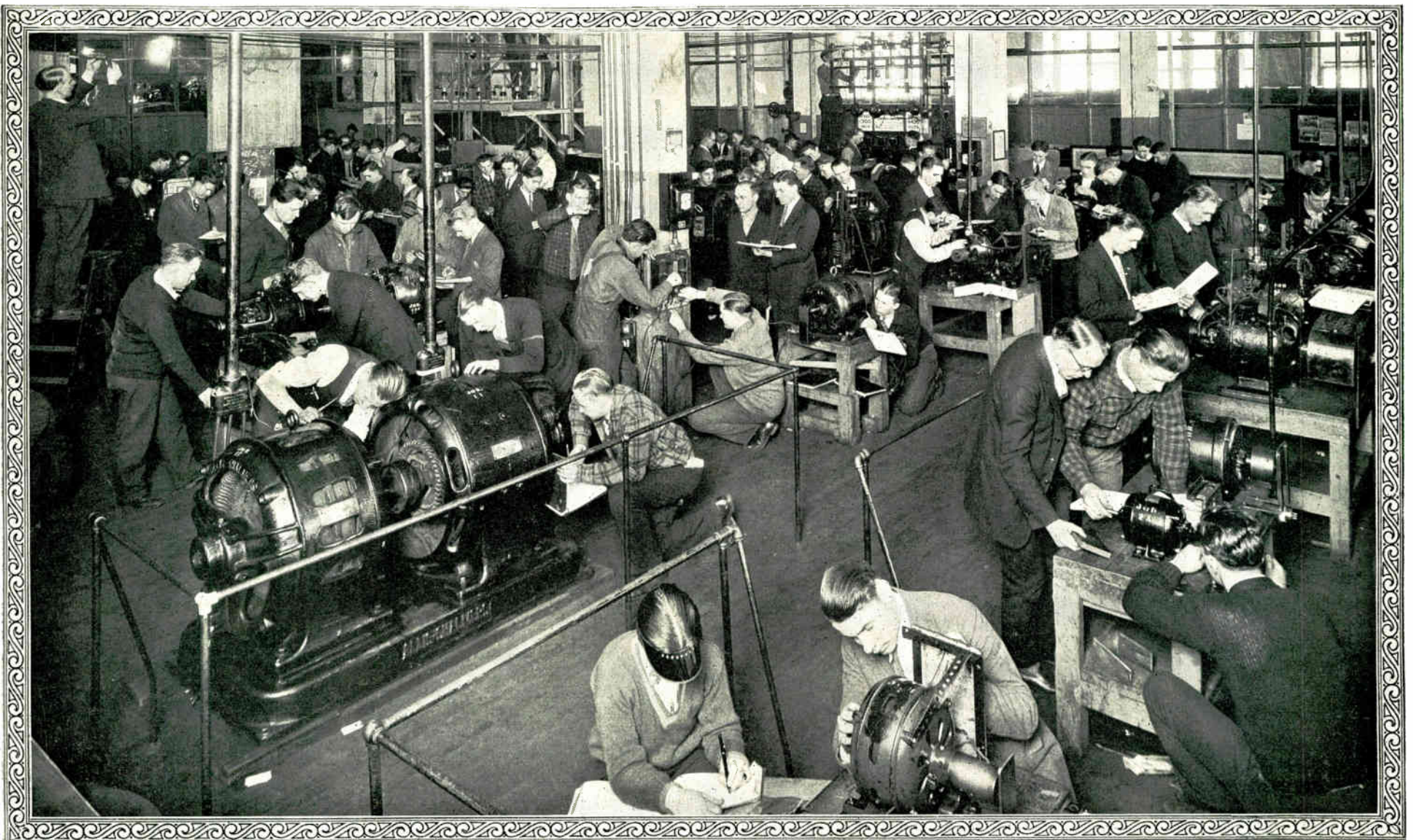
The machines, of course, in this room are different from those used in direct current work; they are wound differently; the controls are constructed on different principles, and there are many types of apparatus to learn; such as the compensator, the transformer, the rotary converter, etc.

You are taught the different things that happen where electrical energy alternates (swings back and forth), instead of flowing straight onward as in D. C.; you work on all these different jobs, advancing step by step. When you have completed one job, you go to the next one which is just a little more advanced than the one you have just finished. That's why it isn't hard to learn at Coyne; you just grow right into it without realizing that the work is becoming more advanced.

### You Must Have a Knowledge of All Branches of Electricity to Advance

When you get out into the field and accept a position, you find the training you have received here duplicates the actual work you will be doing. You take up your work with the "know how" of an old hand, and your progress is that much faster toward greater income. Time and again our graduates write us, telling how their training enabled them to go right in and work beside old timers—yes, and show these older men many tricks of the trade with which they were not familiar.

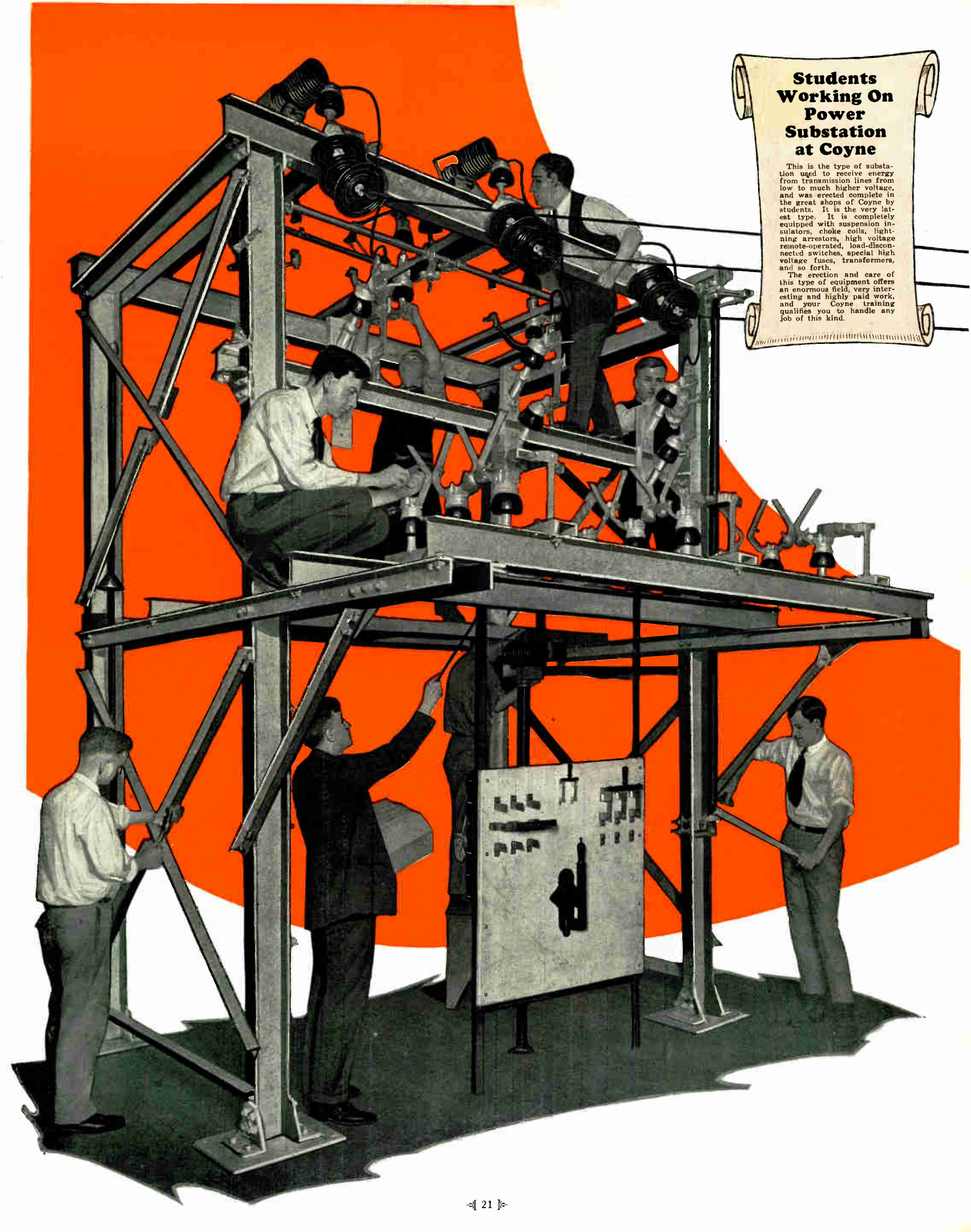
Many men have attempted to learn electricity by picking it up outside with the result that they have only learned one or two things. These men are working under a handicap because they haven't a thorough general training. I don't mean by this that I don't believe in specializing. I believe a man should specialize in some branch of electricity, but he must first have a thorough general knowledge of all branches before he attempts to specialize because every one has some connection with every other branch, and they must dovetail into each other. **That's another reason, and a big one, why Coyne students advance so rapidly.**



Partial View of A. C. Department. In the background may be seen an outdoor type substation. This does not show up plainly because of the distance, but its size is apparent from the close-up shown on opposite page (21). Between substation and foreground may be seen a portion of another system of transmission lines.

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



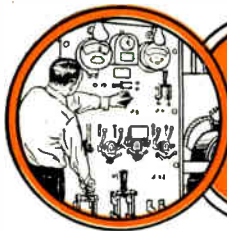


## Students Working On Power Substation at Coyne

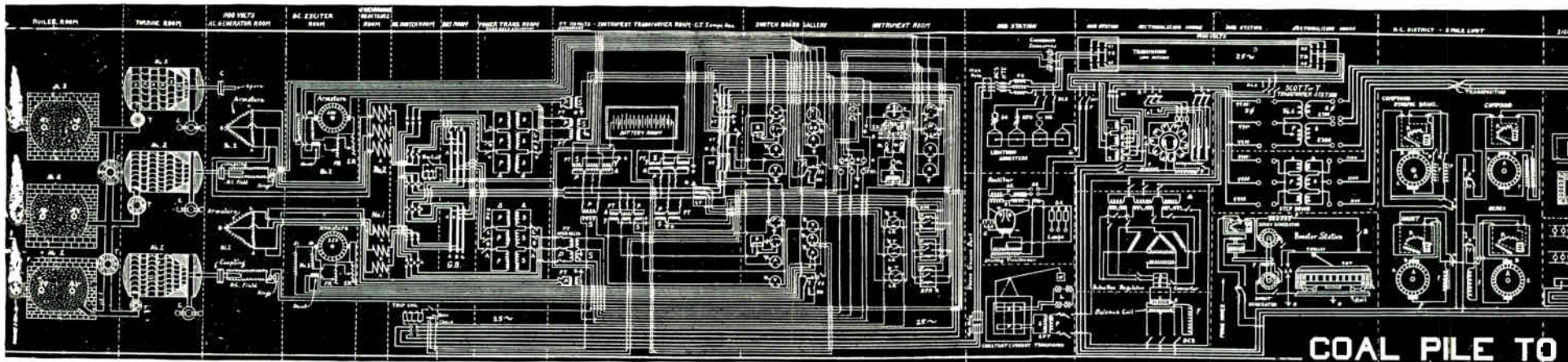
This is the type of substation used to receive energy from transmission lines from low to much higher voltage, and was erected complete in the great shops of Coyne by students. It is the very latest type. It is completely equipped with suspension insulators, choke coils, lightning arrestors, high voltage remote-operated, load-disconnected switches, special high voltage fuses, transformers, and so forth.

The erection and care of this type of equipment offers an enormous field, very interesting and highly paid work, and your Coyne training qualifies you to handle any job of this kind.





# ALTERNATING CURRENT DEPARTMENT



## We Train You From Coal Pile to Consumer

THE above complete electrical diagram shows in detail all the machine circuits and control devices of a power plant, transformers, transmission line, sub-station equipment, distribution system and consumer devices. The actual size of this print is 12 inches by 9 feet, and you will notice it is divided into little sections by dotted lines, and in the A. C. room the student works out this system one section at a time on the actual equipment, thus gaining a clear understanding of the handling of electricity from its production to utilization.

The student follows out the practical work on the machines in this room, doing each job in its proper order; first, the practice on alternators, synchronizing, etc., then transformer testing and connections, the features of transmission line construction, actual practice on rotary converters, motor generators, voltage regulators and booster generators, all of which comes in with substation work. The next job the student does is to connect and operate the motors, and other devices that use this energy as it comes from the substation, also the layout of distribution systems to carry this energy from the substation to the consuming machines.

### You DON'T Have to be a Genius to Learn at COYNE!

Leading electrical authorities agree that the Coyne method of training is superior to all others. My job method of shop practice is the most

efficient training and is the logical way to teach electricity; that is why our course is simple and yet thorough. You don't have to be a genius to learn by the Coyne Job Method!

The illustration below shows the student getting actual jobs on motor repair and testing. They must learn the rules for systematic inspection and repair tests or trouble shooting, as it is sometimes called. This work also familiarizes the student with different parts of the motor, and the instruments and tools used in this repair work. The actual parts of motors are few and simple when one thoroughly understands the purpose and principle of operation of each part.

The repairing of the windings of stators and rotors for A. C. machines is a subject by itself and is taken up in detail in our Armature Department.

#### POWER HOUSE WORK MAKES THIS GRADUATE PAY INCOME TAX

I am making more money than ever did in all my life. I never did have to pay income tax. But I sure will have to this year. My pay checks for 2 months' work come to \$402.00. I started at Coyne one year ago and now I am doing a man's work.

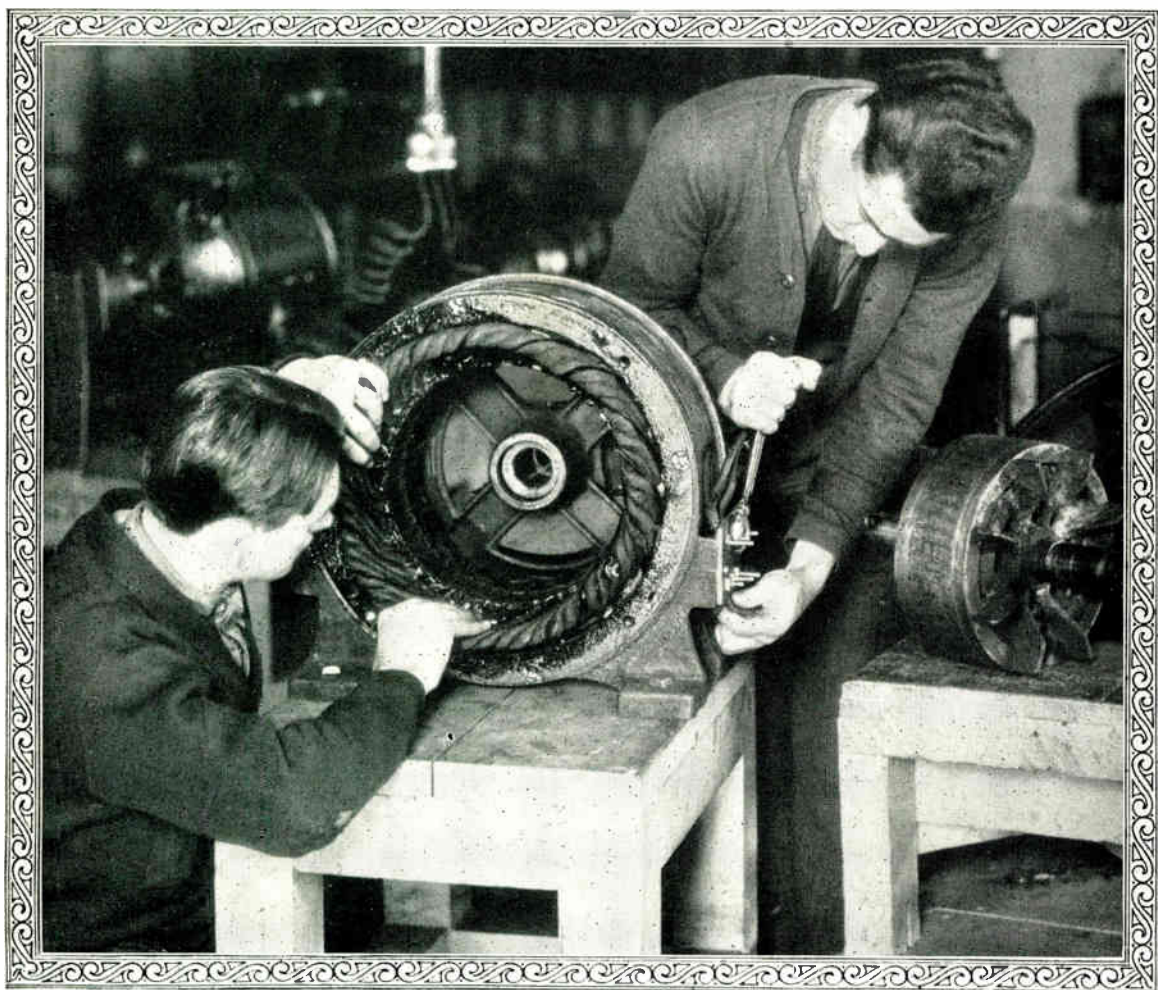
J. L. FAIRBANK,  
Michigan



Students Testing Induction Motor

### Rotary Converters and Motor Generator Sets

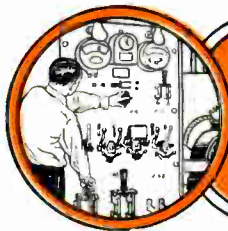
WHEN it is necessary to change direct current into alternating current, a machine known as a rotary converter is generally used. When your high voltage energy has been transmitted over the line to the substation the voltage must be "stepped down" by means of transformers to a safe operating voltage. Then a rotary converter is used to change this from A. C. to D. C. So at this point you work on the apparatus and get actual practice in starting, paralleling and operating rotary converters. The illustration at the left shows a student making a voltmeter test on a rotary converter. By the time he finishes this job he knows the subject thoroughly because the work has been done with his own hands on the actual apparatus.



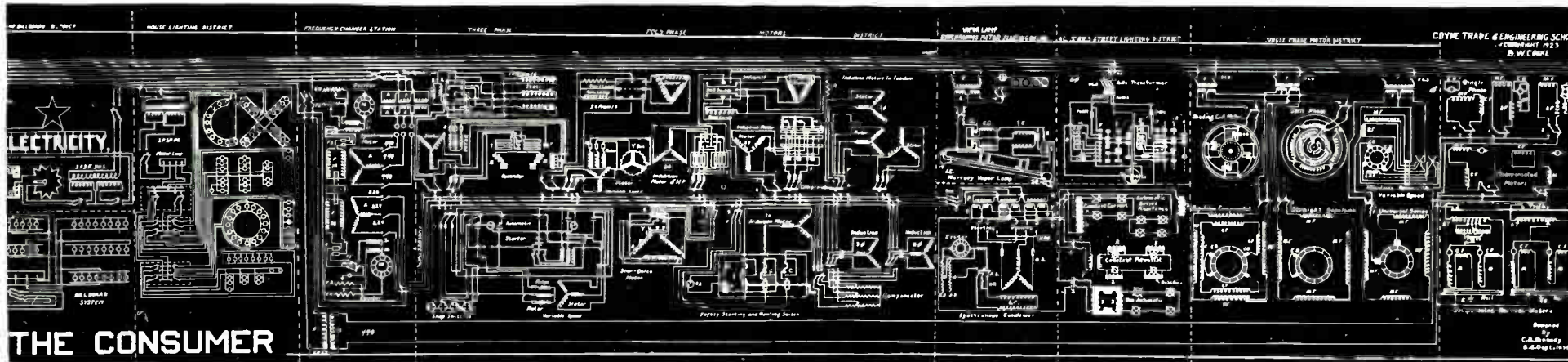
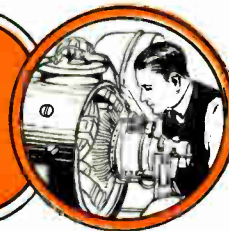
Instructor and Student on Rotary Converter

There Is No Substitute for Practical Shop Training





# ALTERNATING CURRENT DEPARTMENT



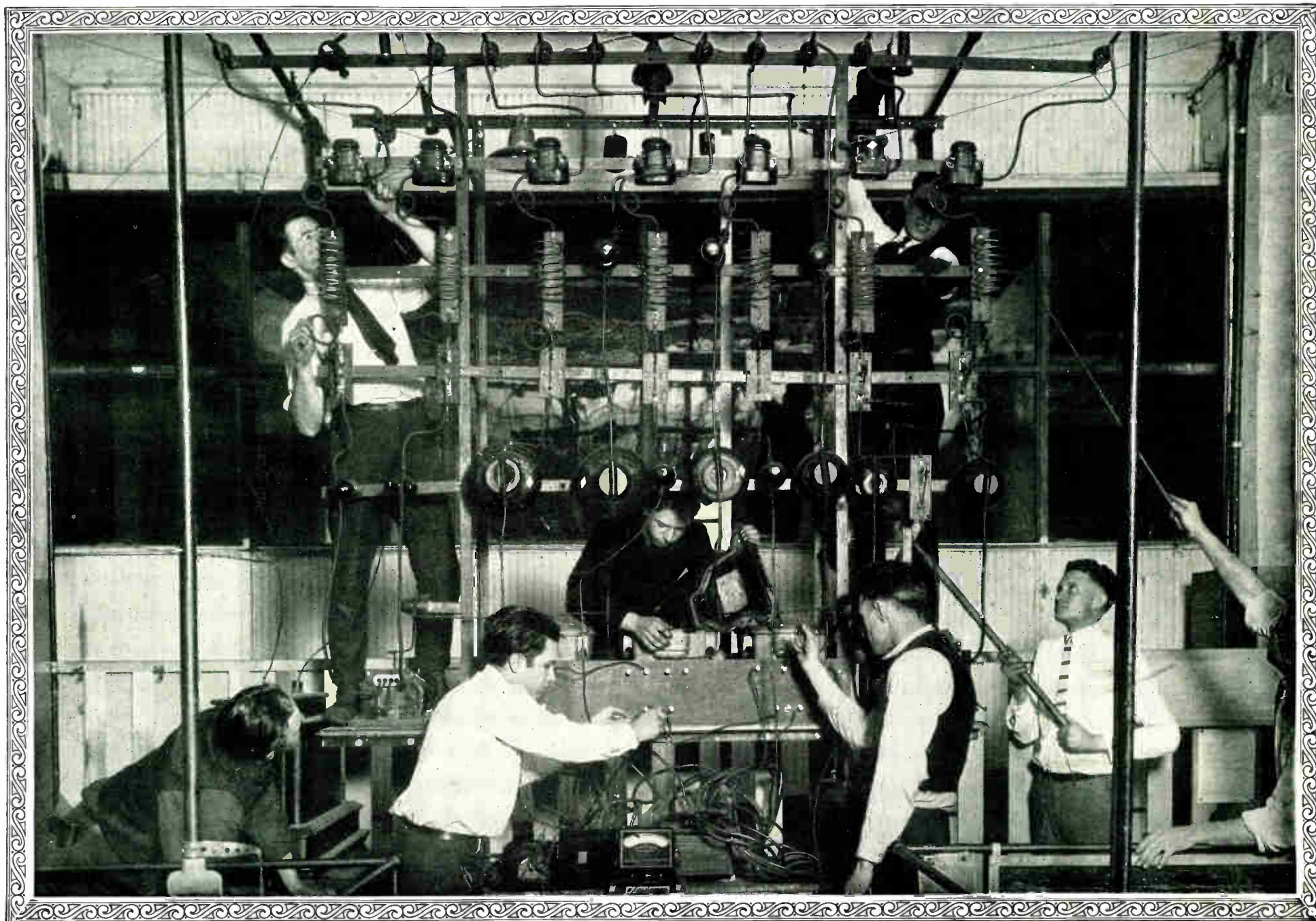
## Practical Work—Transformers and Transmission

**T**HE massive tower construction and equipment below show students making transformer connections, testing and operating transformers on single and three-phase circuits. Also testing insulators and protective devices used in transmission line construction. For making these tests they use voltages from 32 to 4,400, which are the same as you will have to deal with when you take a power plant job.

Another important test that you will use many times on the outside is that of testing high voltage insulators and lightning arresters with a high

voltage transformer which throws an eighteen-inch spark. This work is extremely important because high voltage energy is necessary for economical transmission. You will need this practical training in order to qualify for the many opportunities in modern transmission line construction.

We know of no other school that offers you the chance to get such complete practical work on such a tremendous outlay of equipment; that is why Coyne has been the leader in its field for the past twenty-eight years—the school indorsed by electrical industry.



Showing Students Testing Transformers; Protection Devices for High Voltage and Transmission Lines

Coyne Specializes in ONE Thing—Electricity





# ALTERNATING CURRENT DEPARTMENT



## Switchboard Operation and Instrument Practice

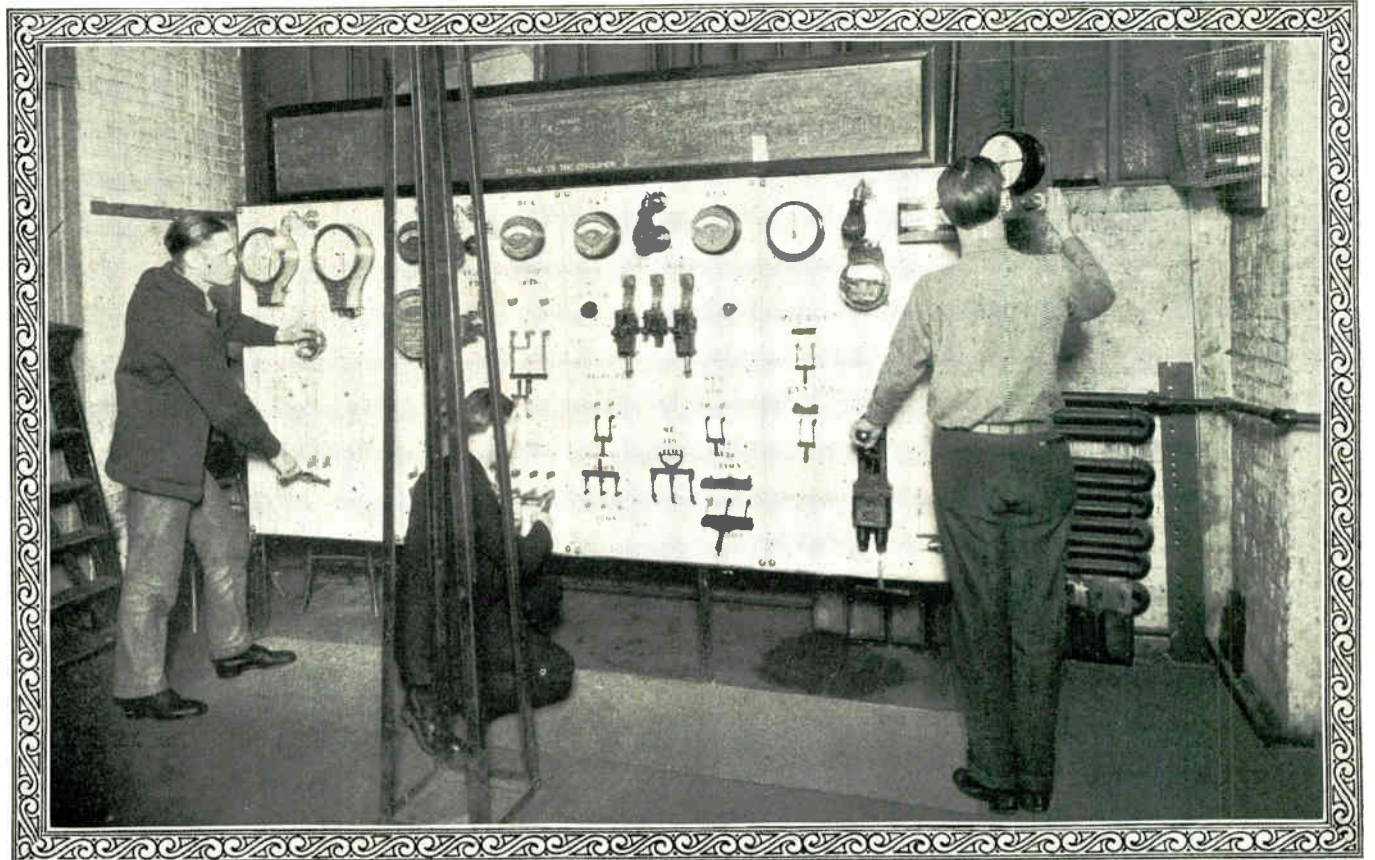
**M**EASURING, indicating and recording instruments are an important branch of alternating current work, and to be successful in this work you must have a thorough knowledge of the different types used. Testing and repairing of these instruments is really a profession in itself.

The power plant switchboard shown in this illustration contains A. C. Voltmeters, Ammeters, Frequency Meters, Watt Hour Meters and Power Factor Indicators, as well as Control Switches, Circuit Breaker, etc., that are used to operate the various machines throughout this room.

### You Learn Exactly How It is Done

Each of the indicating instruments shown is also connected to one or more of these machines. The student is required to do dozens of jobs of tracing out and connecting up the circuits from these control switches and instruments to the generators or converters that they operate.

The man who can go in the field and install such machines and see that they are properly connected and tested and put in shape for operation is the man that is in demand. Coyne training prepares you for this work because your jobs here in school are just like they will be later when you go to work.



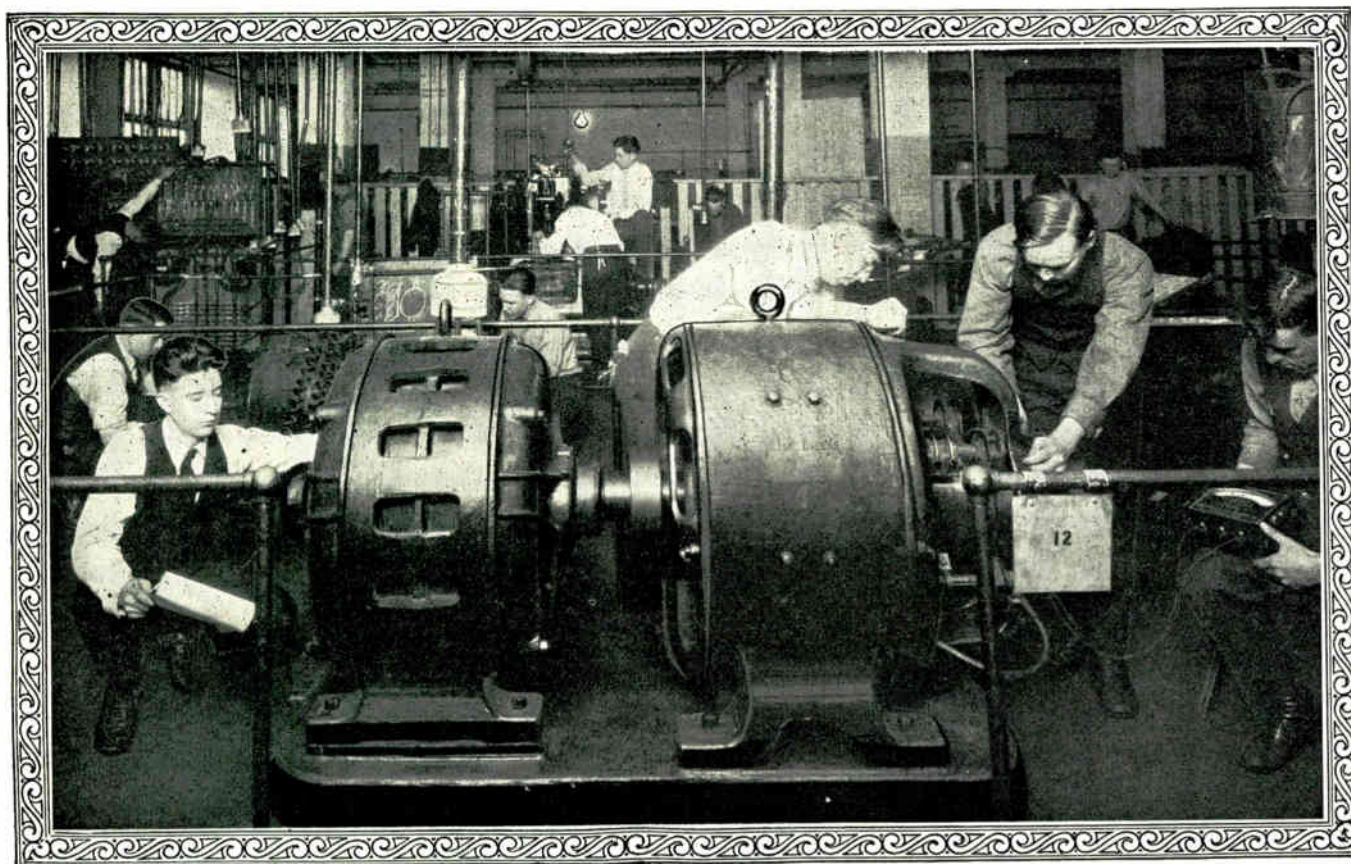
Practical Work on A. C. Switchboards. This switchboard is not "dead" but alive with "juice" and controls electrical machinery on the floor. Note the steel tower in foreground which is one terminal of high tension transmission lines, but not shown in picture.

## You Master All Types of A. C. Motors and Generators

**T**HIS illustration shows the size of some of the motors and generators used to give the student actual job practice along this line. This is job number 12, and these students are learning to make tests of this 50-horsepower, 35-K. W. motor generator set for efficiency, power factor and temperature increase under different loads, and a study of brush and commutator construction and care on the D. C. end of this machine. In this same line of work the student gets experience in connecting, operating and testing all kinds of A. C. shop and power motors, using a number of different types

of induction and repulsion motors, both for single and three-phase operation. This work also gives a knowledge of stator and rotor connections.

The man who has a thorough knowledge of motor installation, maintenance and inspection is qualified to handle a very interesting and well-paid position. This work often leads to higher executive positions, such as maintenance superintendent, when he has a thorough general knowledge of electricity such as he obtains at Coyne. We have many graduates who are now holding these positions.



52-H. P. 35-K. W. Motor Generator Set—Generates Enough Current for a Small Power Plant

### We Generate Enough Power for a Small Town

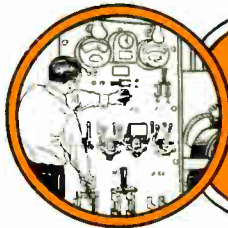
**W**ITH this elaborate supply of generators and machines, the student can get the same experience that he would in a power plant. This collection of equipment represents a tremendous investment, and I am continually adding new equipment as it comes out to keep right up to date with electrical progress. This is merely another example of my effort to make the students' training practical and intensive. We generate enough power in our A. C. room to supply a small town.

### I am Continually Adding New Equipment

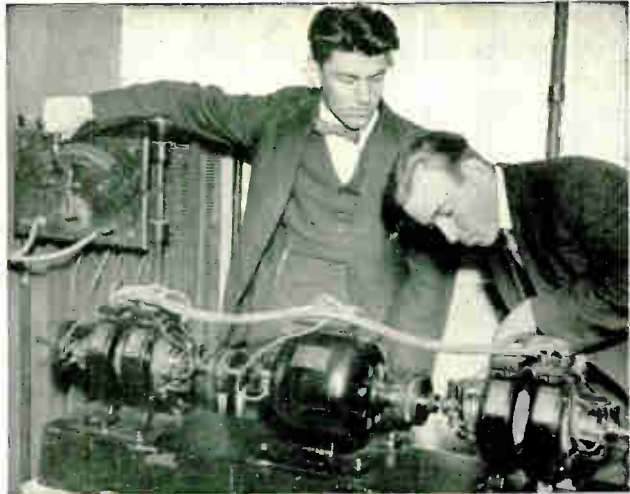
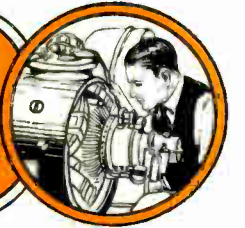
The illustrations on the top of page 25 show students at work on telephone alternators and power motor generator sets and practice on high frequency generators used for radio transmitting. The pictures are intended to give you an idea of some of the things covered, but lack of space forbids me to show but a part of the apparatus used in our school. Of course, I am adding to this equipment from time to time in order to keep abreast with the changes in the industry.

There Is No Substitute for Practical Shop Training





# ALTERNATING CURRENT DEPARTMENT



Students Testing Small Alternators

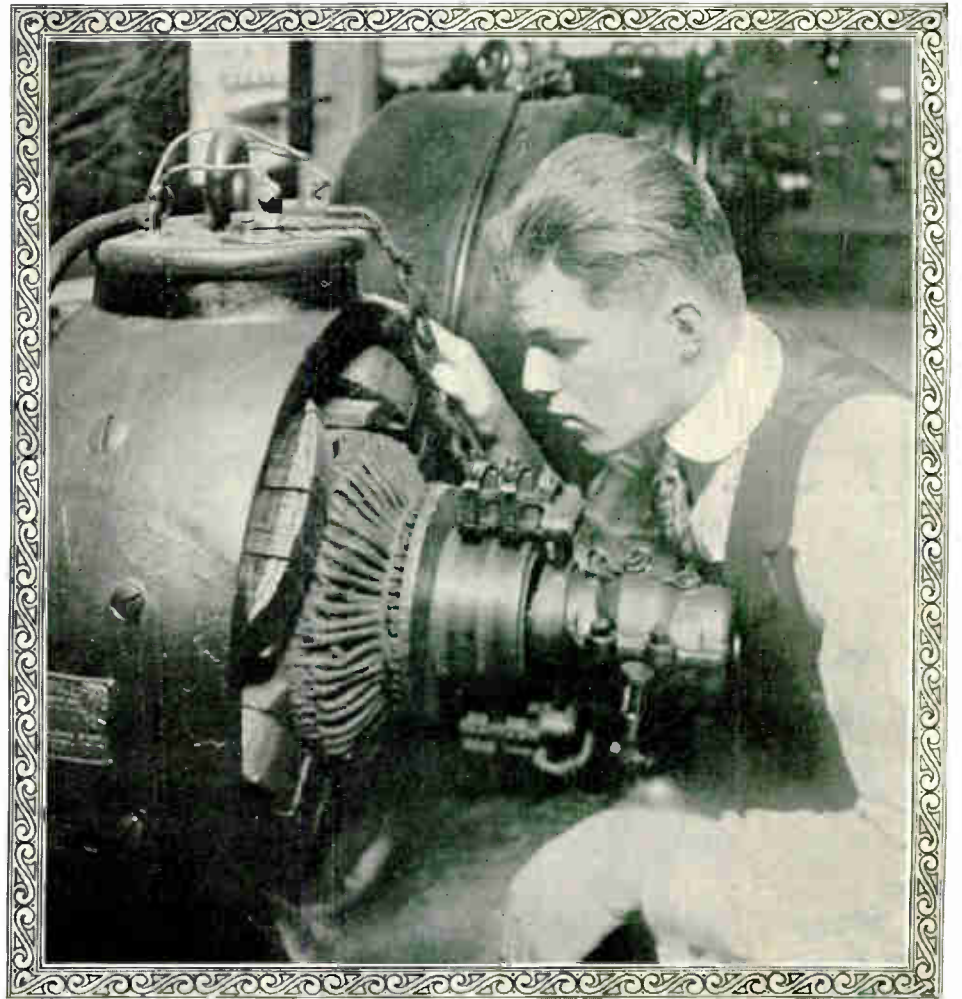
\$100.00 a Week with Great Western Railroad

"I graduated the 21st of July last year and the 1st of August I got a job at the Great Western Railroad as electrician, and a very responsible job for a man just out of school. While there I averaged over a hundred dollars a week. Now I hold a splendid position in the main power house in the Ford Motor Co., Detroit, Mich."  
Clyde F. Hart

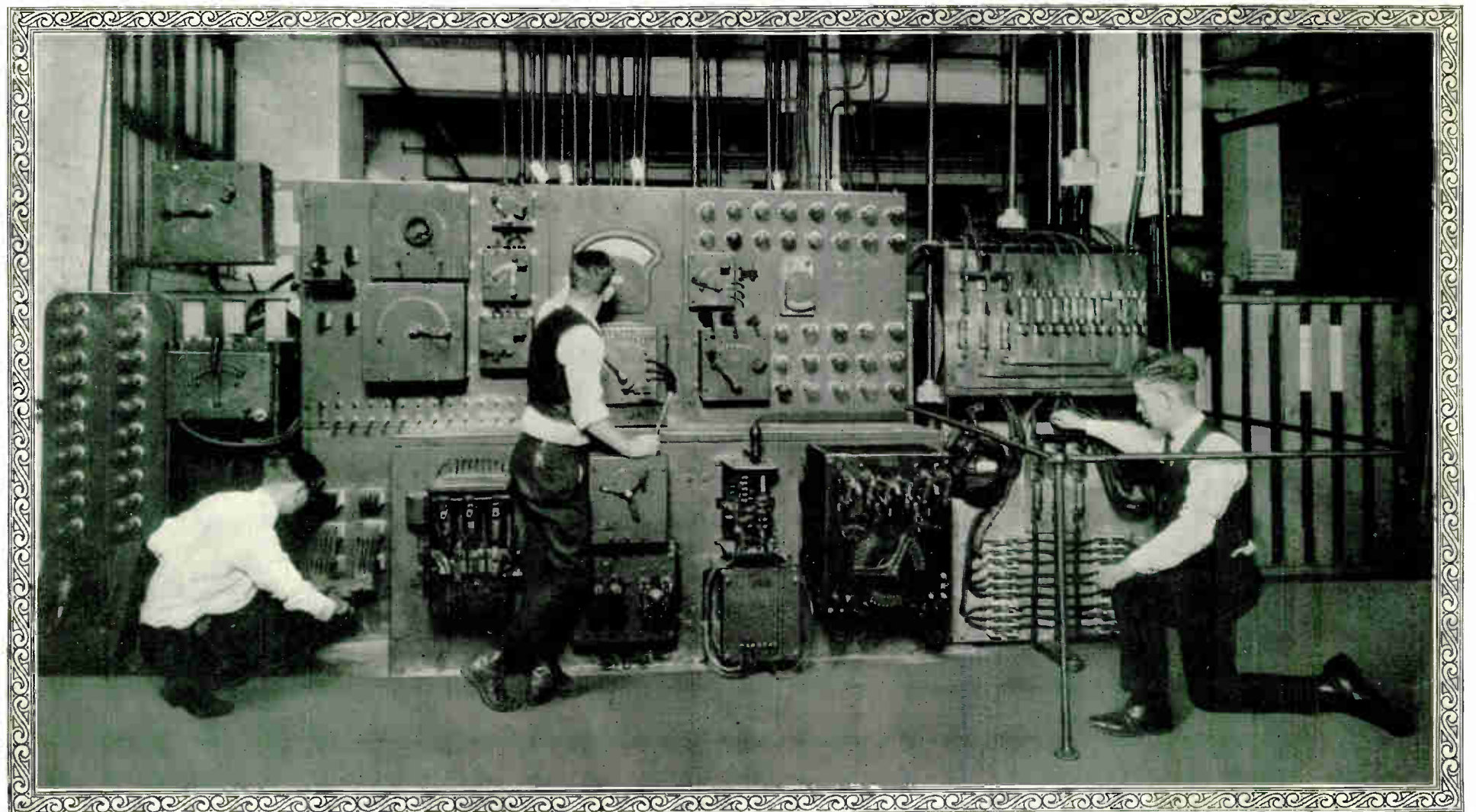
## A. C. Is a Tremendous Field for the Coyne Trained Expert

EVERY forward step you take emphasizes the great possibilities in the electrical field for A. C. experts. From the small towns with a central producing plant and the gigantic plants of the big cities, to the great hydraulic developments of the West, there are big opportunities for any one who is an electrical **EXPERT**. This energy must be transmitted long distances and the method in which we cover the important subject of electrical transmission is explained on later pages.

The large illustration below shows a number of compensators, reactance boxes and heavy switches used in connection with the A. C. machines in this room, also a light and power distribution panel with fuses, cut-out switches and meters. The students get actual job practice in connecting, testing and operating enough different types of these devices so that they will be able to master anything in this line when they get into the field.



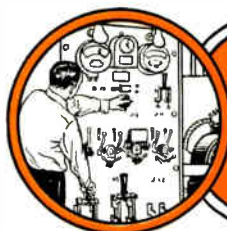
Trained Motor Men Command Good Pay—Here Is a Coyne Man Making an Inspection



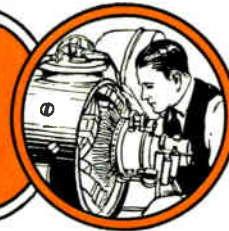
A Mammoth Control Board Where Students Receive Practical Training on A. C. Compensators, Controls of All Types and Light Power Distribution Panel

Coyne Specializes in ONE Thing—Electricity





# ALTERNATING CURRENT DEPARTMENT



## New Types of Synchronous Motors

**C**OYNE is quick to install new electrical machinery, the modern Fynn-Weichsel motor you see at the right being only one small example. It is one of electricity's very newest developments—so recent that it has just recently been placed on the market.

However, the policy of Coyne is to keep fully abreast of the times, *always*, in order that Coyne trained experts may be the finest, best-paid group of electrical workers in the world. And so we ordered this motor, special built, direct from the manufacturer.

### It May Revolutionize the Industry

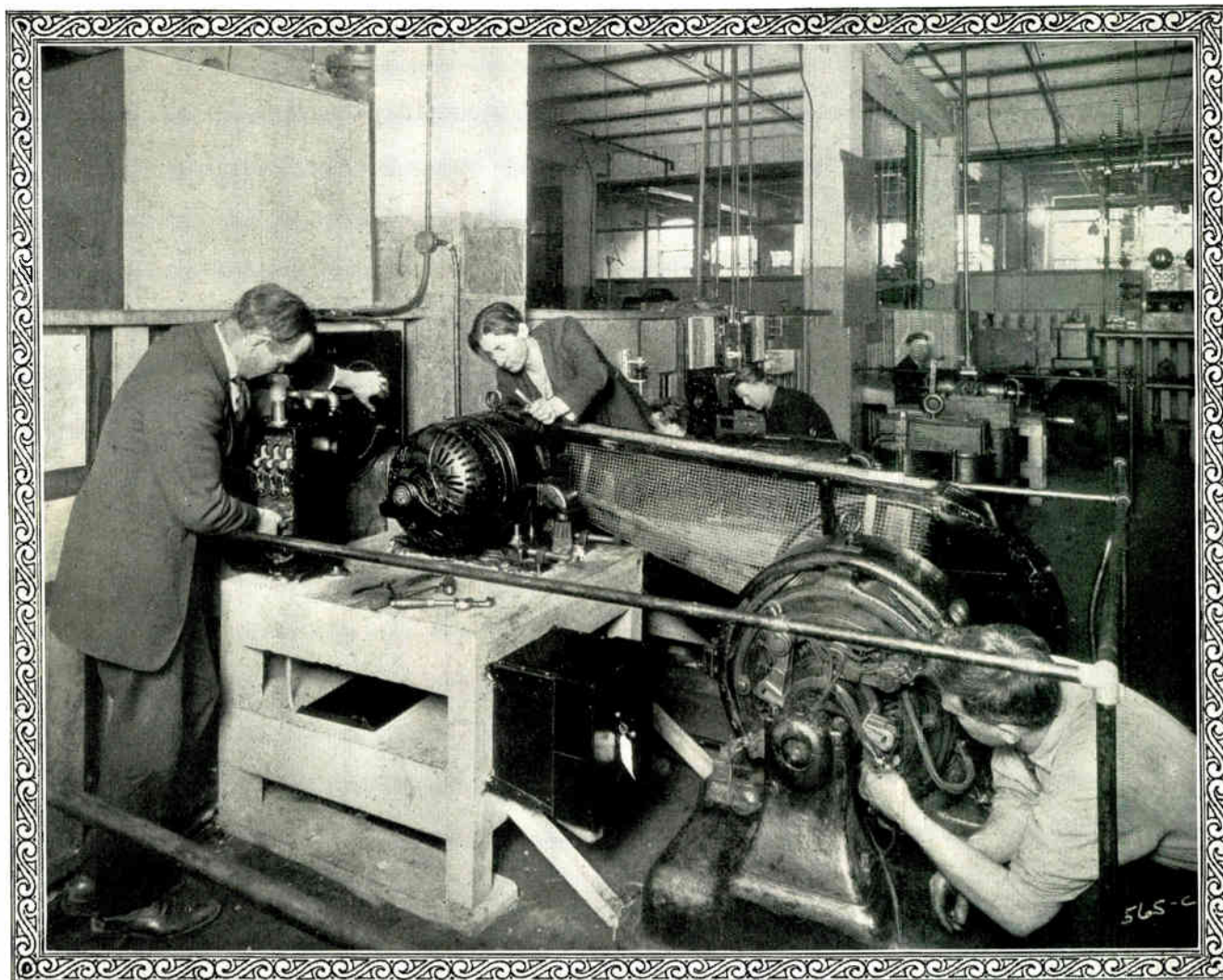
The unusual and little-known characteristics of this motor, which is known as the Fynn-Weichsel motor, may quickly cause startling changes in electrical work.

As a power unit and power factor corrector with an exceptionally good starting and running torque, it is quite probable that motors of this type will very soon replace thousands of the older type, in all sizes, wherever electric motor power is used.

### Only the Coyne Trained Expert Has This Advantage

If the older type motors are replaced by the Fynn-Weichsel, it will mean "hard luck" for most ordinary electricians—for they will not be familiar with the newer kind and will, no doubt, have considerable difficulty in learning it.

Coyne men, however, can turn these conditions to good advantage. When the ordinary man has to admit that he is "up against it" and does not know how to handle some problem in connection with a Fynn-Weichsel, the Coyne man will be able to step right up and **prove** that he is an **expert** by going right to the heart of the problem without hesitation and solving it in mighty short order.



Students Operating the Modern Fynn-Weichsel Motor

Two facts account for this advantage you will have when you graduate from Coyne. First, the Coyne "Learn by Doing" methods which give you **practical** training by actual work on modern equipment. Second, the Coyne policy of keeping our equipment fully up to date at all times.

## A Spark That Jumps 30 Inches!

At the right you see an actual photograph of the **gigantic Tesla Coil** here in the "Great Shops of Coyne." This is a high voltage, high frequency transformer and was built right here at Coyne, by Coyne students—which, in itself, is a fine example of the kind of **practical** work you will get when you come.

A voltage of about **500,000 volts** is developed by this remarkable device—and yet, its 24 to 30 inch spark is **entirely harmless** because of the extremely high frequency and low current capacity.

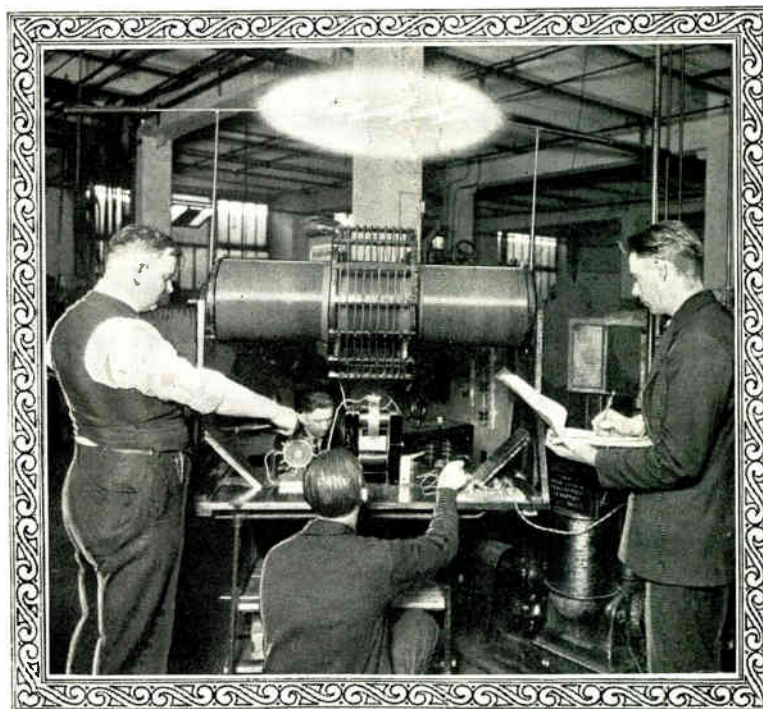
When Steinmetz startled the world about two years ago by "making lightning" in the Schenectady plant of the General Electric Company, he used the principles upon which this transformer operates. You will be greatly interested in seeing and operating this device yourself when you come to Coyne.

### Tesla Coil Gives Practical Training to Coyne Students

Insulation is subjected to rigorous tests by means of this high voltage, high frequency transformer. You learn to make these tests yourself and how to determine the efficiency of various kinds and amounts of insulation under nearly every conceivable condition.

You also learn the principles of high frequency transformers, condensers, radio, etc.

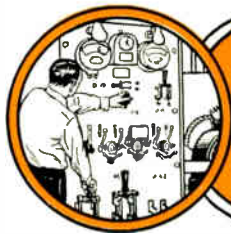
In fact, every one of the many uses to which this Tesla coil is put, here at Coyne, is **practical** and means real money to you after you graduate.



Operating the Tesla Coil

There Is No Substitute for Practical Shop Training

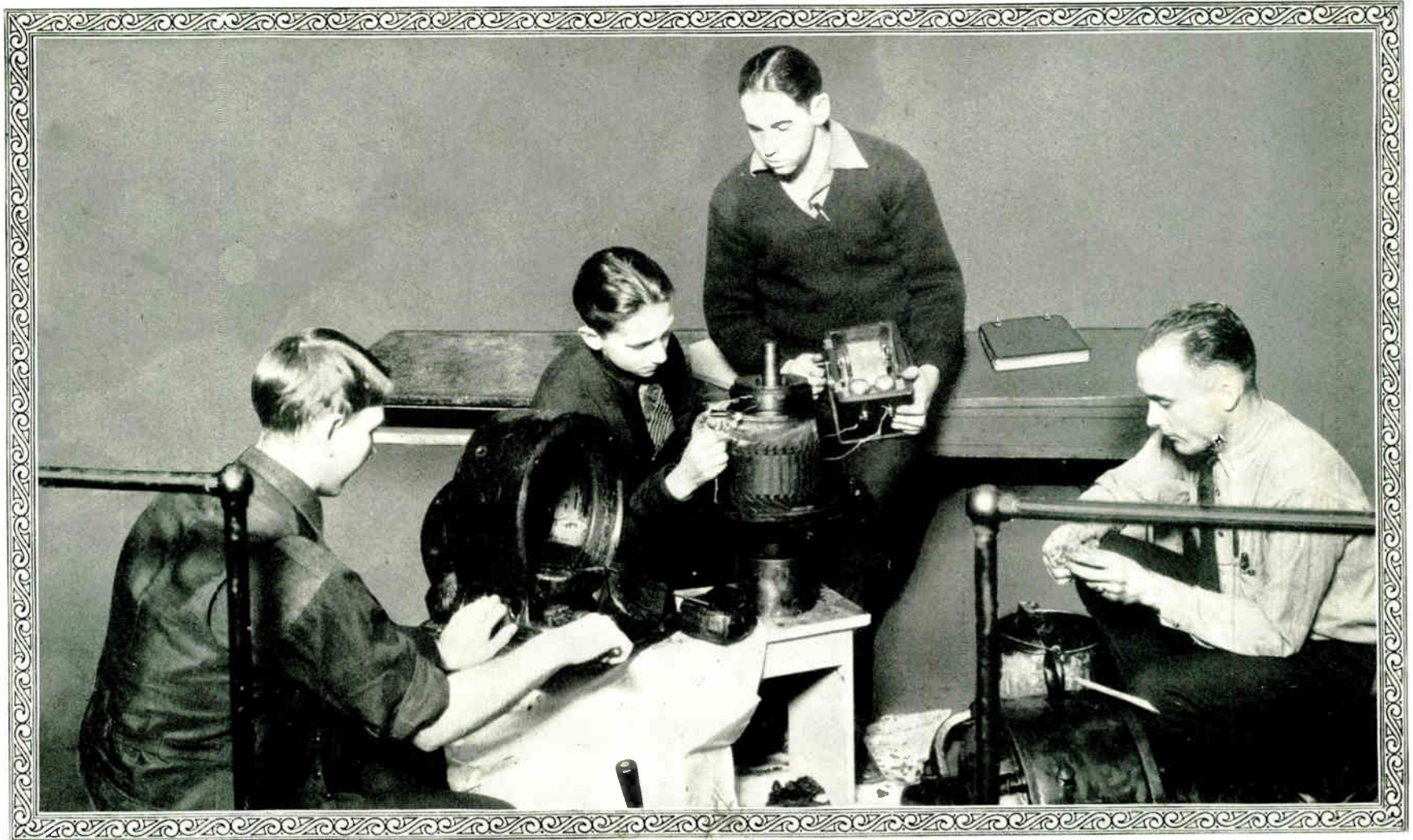




# ALTERNATING CURRENT DEPARTMENT



## You Also Tear Down and Re-Build Motors



**T**HE above picture shows students actually designing and building power transformers from fractional kilowatt in power up. First, they assemble the core of special magnetic iron; then insulate it and wind the coils for various ratios and voltages from 100 to several thousand volts. Nothing is left to the imagination at Coyne—you do the actual work.

### You Build and Repair Transformers and A. C. Motors

The picture also shows some of my students taking apart and re-assembling A. C. motors of various types—including series, universal, single phase, variable speed and centrifugal switch types—to get a clear idea of what each part does when the motor is in operation.

Such supremely practical work shows you in a positively unforgettable manner, every detail of the construction of such motors, teaches you more about their operation and maintenance than you could learn in a lifetime of just reading about motors, and enables you to locate and repair troubles in a way that will quickly win for you recognition as a genuine EXPERT.

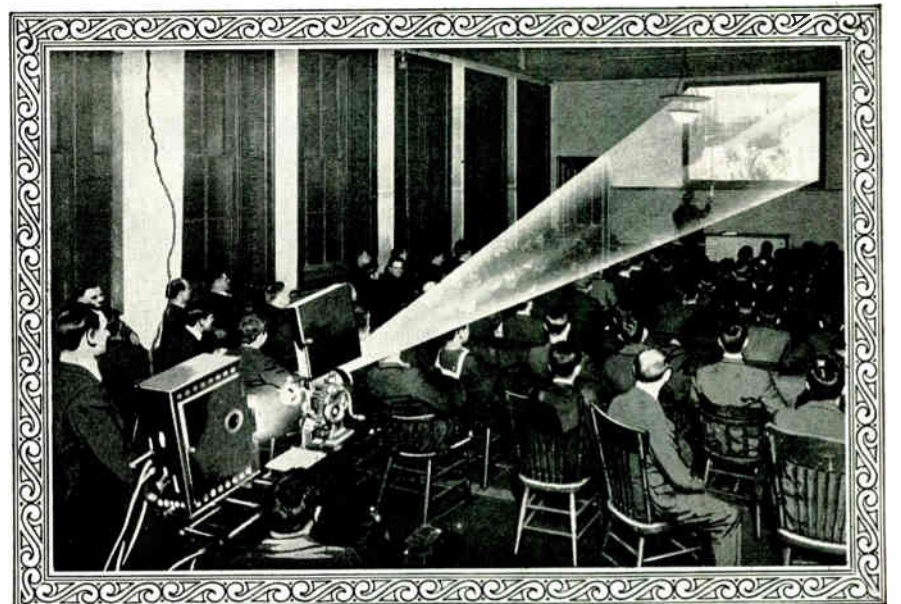
### When You Finish You KNOW Electricity as it SHOULD be Known

As my students build these transformers and reassemble the motors, the instructor explains the entire principle of construction and operation. When the job is finished he shows you how to test what you have done so that—when you finish my course—you will be able to build, from the bottom up, a transformer that really works and will be able to take the largest motor down, overhaul it and set it up again, in the shortest possible time. Such training explains why COYNE men make good everywhere!

### Even the Pictures Do “Actual Work”—at COYNE

Everything here at Coyne is so practical that even in the few places where a picture or two will give you a better understanding of electricity I insist that the pictures be practical! It's not enough for them just to stand still and let you look at them—they have to move and make every move clear to you!

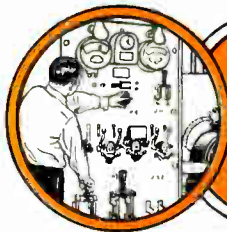
And so I have moving pictures. The illustration below shows a group of my students listening to a practical talk on the principles of A. C. The points brought out by the instructor are emphasized and made clearer by the use of a motion picture machine and specially made film. Here at Coyne I spare nothing to make my course better and to make you a \$2,500 to \$10,000 a year EXPERT just as quickly as possible.



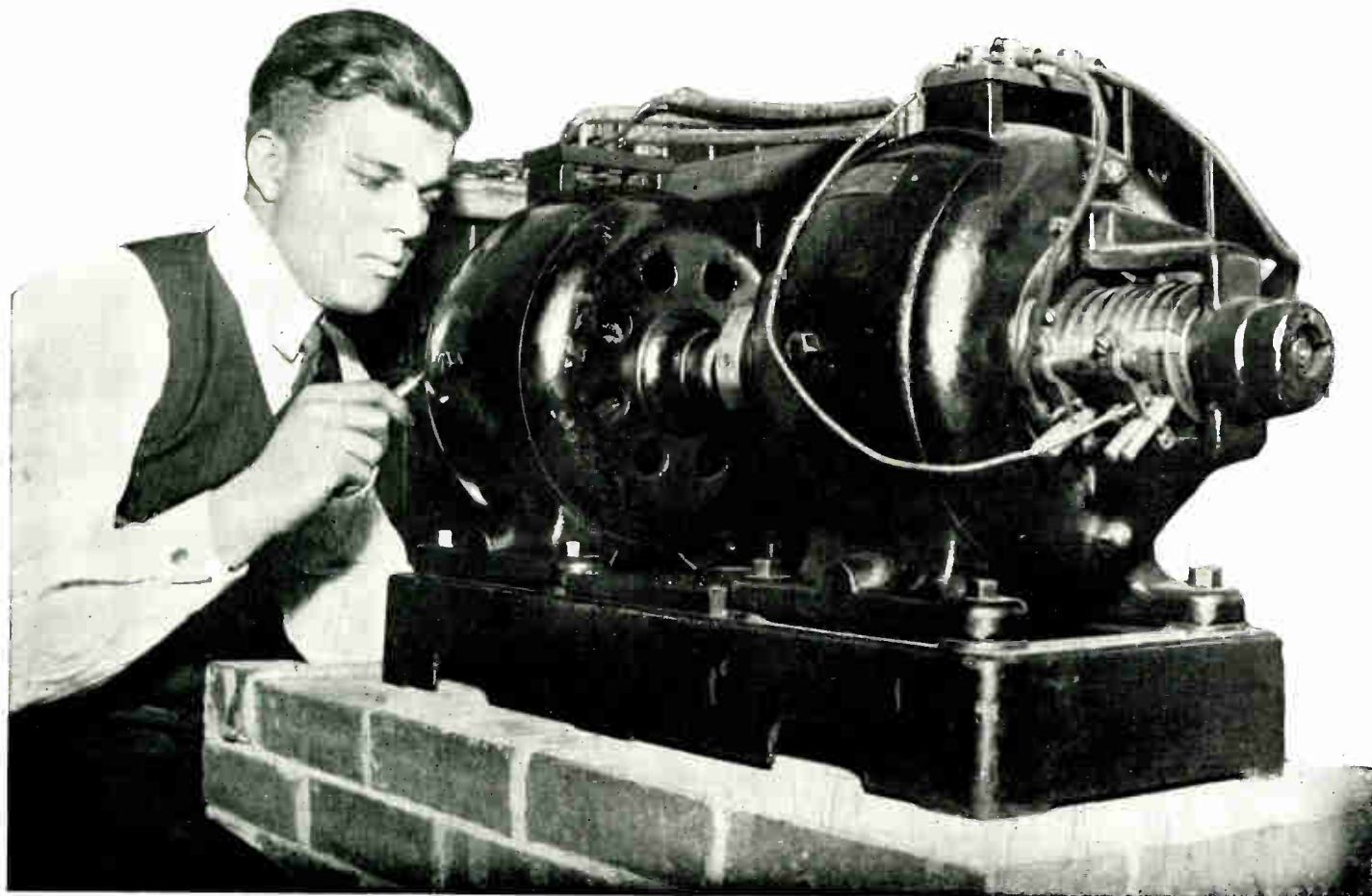
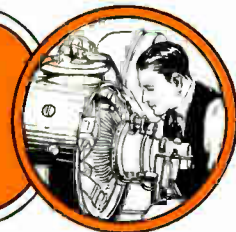
Lecture on Electricity, Illustrated with Motion Pictures

Coyne Specializes in ONE Thing—Electricity





# ALTERNATING CURRENT DEPARTMENT



Student Testing Motor Generator



### Coyne Built Foundation

Chicago, Ill.

Mr. H. C. Lewis, President.

Dear Sir:

This picture that I am enclosing catches me making connections on a 2 T. Electric Magnet suspended from a large Gantry Crane used to convey the iron to and from the Forge Shop of the International Harvester Works here in Chicago.

Mr. Lewis, what I learned in school has been a foundation on which I have made results that are gradually benefiting me more and more.

Sincerely yours,

Donald H. Stoffel

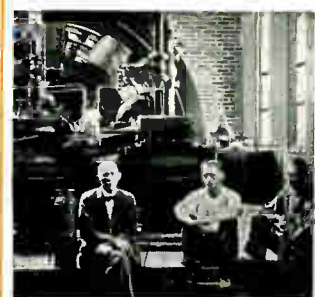
## The Demand for Trained Experts in A. C. Is Unlimited

**A**LTERNATING current work is more interesting than play. These jobs are duplications of the actual work which you will come in contact with when you leave our school to take a position. The same jobs you will have to wrestle with on the outside are reproduced right here in my school; not for you to look at, but to actually do. You do them with your own hands; that's why Coyne students make good. Many of our graduates have told us after they have gone out and taken a job, "Why my work isn't much different from the Coyne School; it's just like transferring to another job because the work I did in Coyne was just like the work I'm doing on my job."

The opportunities for advancement are probably greater in A. C. work than any other, but in this work you must also have a thorough understanding

of the other branches of electricity. That is why we train you thoroughly in every branch. No man ever made a success of electricity by trying to learn just one or two branches. To be successful you must be a well-rounded electrical expert thoroughly familiar with all branches in the electrical field. The demand for trained men in power work is unlimited. As you look at the "Coal Pile to Consumer," you will realize that each unit is a business in itself, requiring an executive at the head and many assistants, but you can easily see how helpless the man is who knows but one part.

When you finish your training at Coyne you will be ready for one of these big jobs and can look ahead to a future of pleasant work and independence.



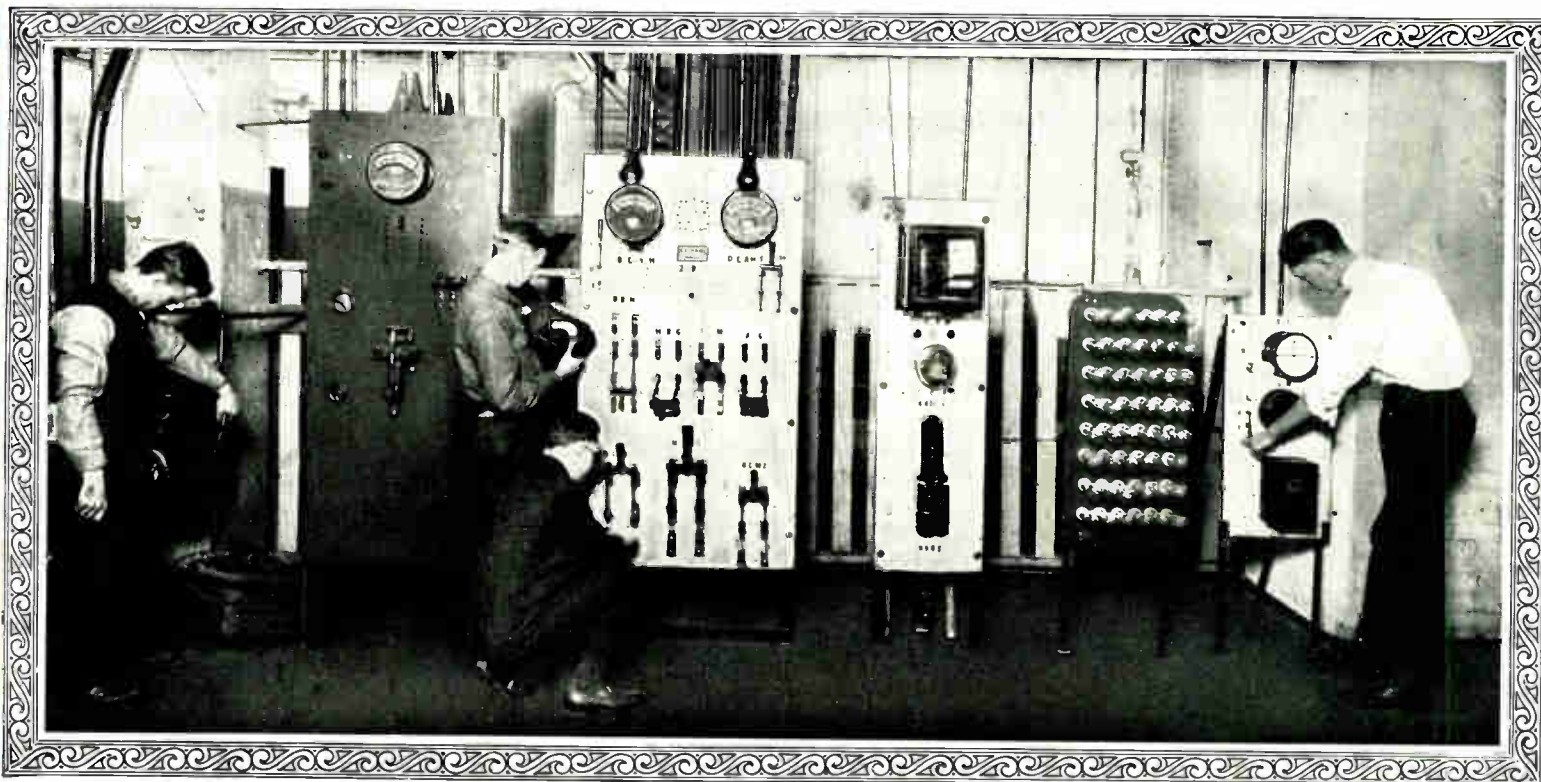
### Has Them All Licked

Dear Mr. Lewis:

I am working for the City Gas & Electric Company. Have been with them since I left your school nearly a year ago, and sure am getting a variety of work.

Thanks to the start I received at Coyne, I now have them most all licked. I will say that a fellow sure gets the right start in electricity at Coyne. Your booster,

Henry L. Waibel



Students at Work on A. C. Control Apparatus

There Is No Substitute for Practical Shop Training





# ARMATURE DEPARTMENT



## Armature and Stator Winding for Motors and Generators

**Y**OUR training in this department includes all armature and stator winding jobs from the smallest fan motor and automobile generator to the motors of large horsepower. Your work here must be done correctly because every job must be tested and found perfect before you are allowed to pass to the next one.

That's why Coyne men make good in the field. They are trained to do armature work with their own hands and to do it right. It's the same in all departments. That's why **Coyne men stand head and shoulders above** the crowd of so-called electricians who have obtained a little knowledge of electricity by the "pick-up" method. These men know electricity just the same as a parrot knows how to talk; they know how to do a few things but have no idea why they do them. But the Coyne man is first taught **why** a thing is done and then **how** to do it. That is why Coyne has enjoyed the reputation of being America's Greatest Practical School for the past twenty-eight years.

### Big Money for the Coyne Trained Armature Expert

Armature experts are in demand—and command big pay. Traction companies, electrical appliance and machinery manufacturers are in great need of practical men who are armature experts. Armature and stator knowledge is absolutely necessary if you are to become an electrical expert. All up-to-date industries use motors and generators which are subject to break-downs. These often occur in the armature or stator. That's why we train you to be an expert in this work. Few understand this work, so the pay is naturally big for the expert.

Your first jobs in this department are on direct current armatures. First, your instructor gives a short practical talk explaining the different types of windings. Then you go to the armatures shown below and lay in the windings with cord. The reason we use cord first is because it is a great deal faster than winding with wire, and in this way you can lay in all the different types of winding in a short space of time to get acquainted with coil throw, commutator pitch, etc. After you complete each job, the instructor will check you up and you make a diagram of each particular winding in your notebook. By doing the work this way, it sticks in your mind—you will never forget it. You then do the same work on stators.

### Nothing Left Out of My Training

You are now ready to wind armatures and stators with wire. Before doing this, however, you are taught to calculate the size of wire, number of turns and the method of forming coils and type of insulation. Now comes the most fascinating part; the instructor hands you an armature, a spool of wire and tells you to "go to it." Because the student has had the preliminary work with cord winding, he will be able to design and lay in a winding correctly.

The next job, of course, is to test your work with a "growler" and meters to see that there are no "grounds," "opens" or "shorts." If you find trouble, the instructor shows you how to correct the fault. This is just as important as laying in the winding because it makes you proficient in "trouble shooting." The real test of an armature expert is his ability to spot trouble and fix it quickly. Coyne training enables you to do this.



A Part of the Armature Department Showing Students Learning the Fundamentals of Armature Winding

Coyne Specializes in ONE Thing—Electricity





# ARMATURE DEPARTMENT

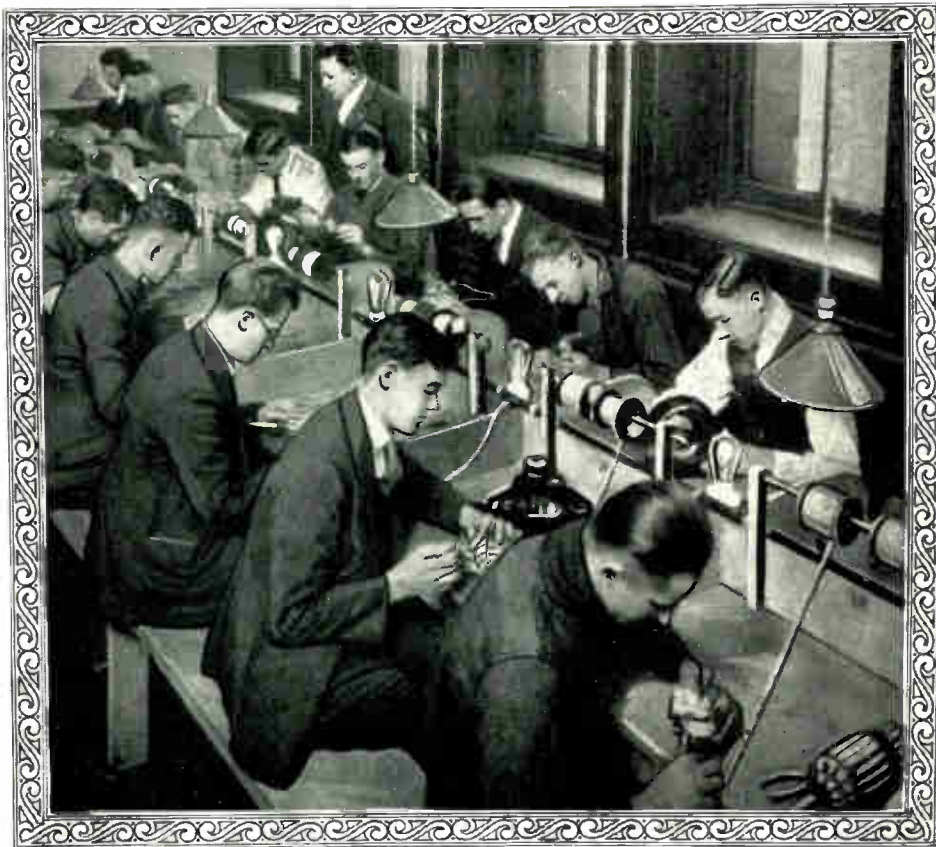


## Complete Equipment

WHEN you are sure that the armature you have just wound is free from "grounds," "opens" and "shorts," you take it over to the lathe shown below and true-up the commutator. The final step is to bake the insulation in the Bake Oven shown on the opposite page. Now you have done a real job—you have wound an armature, tested it and baked the insulation. And the best part of all is you understand it thoroughly because you designed the winding yourself and did all the work with your own hands. Is it any wonder that Coyne men know their business?



Practical Lathe Work Truing Up a Commutator



Students Winding Armatures and Stators. Note That This Is Actual Wire Winding

The jobs on A. C. winding are practically the same as D. C. except that you work with a different type of machine and most of the winding is done on the stator which is the stationary part of the "field." You start out the same as before with cord winding on single, two and three phase machines and then switch to wire winding when you have mastered the various types. One of the most important jobs in A. C. winding is changing the voltage or speed of a machine by reconstructing or rewinding. This kind of practical shop work is intensely interesting because it gives the student a chance to practice what he has learned in this department.

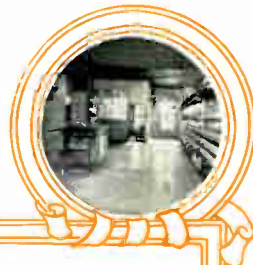
## Your Training Is Made Complete by Inspection Trips

In this connection you practice with series, multiparallel, star and delta connected alternators so that every known type is made familiar. When you have completed all this, we test your ability to "shoot for trouble" on all types, both D. C. and A. C. To make this training complete, our equipment includes over thirty different kinds of machines, both large and small, which the student is required to test. You will never be "floored" by a problem when you get out in the field, because you mastered the same problem in your training at Coyne. Your instruction is furthered by inspection trips to large plants where armature winding is done on a big scale.



Overhauling and Testing a Motor Before Rewinding

There Is No Substitute for Practical Shop Training



### Was Laborer—Now Chief Electrician

When I went to COYNE I was barely able to write my own name as I didn't go to school in my boyhood, but I had the ambition. I was a common laborer and only had \$300.00 when I reached Chicago. I am now Chief Electrician of one of the biggest mines in the state of Illinois, namely, the Superior Coal company, a subsidiary of the Chicago Northwestern Railroad company. I have under my care twenty-four locomotives and fifty-four coal-cutting electric machines, all the generating plant, two substations, pumps, etc. My salary is \$250.00 per month whether I work or not. I have fourteen men under my care.

Respectfully yours,  
ELI F. GARY

STUDENTS in armature work get a lot of practical experience repairing machinery in other departments of our great shops. You do maintenance work just like you would do it on the outside. If a machine "goes bad" in the A. C. room, one of the armature students will have to test it and make the necessary repairs. It's fascinating work and practical because it's the same kind of work you will have to do out in the field. So you see, we specialize on shop work—the only kind of work that will make you an EXPERT.





# ARMATURE DEPARTMENT



## You Wind and Form Coils by the Most Modern Machine Methods



Assembling and Testing Re-wound Armatures

### When You Have Finished this Training — You're Sure You're Right!

Above you see the armature Test Bench, on which students are testing motors they have wound. I want my students to do more than just a neat job of winding. I want them to know that the motors they wind will run, so that when they're out on the job they will be sure that they can handle the building up or rewinding of any kind of motor with absolute confidence that the job will be perfect.

Notice the armature wiring diagram on the blackboard. It is one of the many simple, understandable diagrams with which my instructors explain to you, the different types of windings, the methods of winding and connecting coils, what makes the armature revolve when current is passed through it, and how to determine the number of turns and the size of wire to use for different voltages, H. P. and speed.

This is just one example of the thoroughness with which you are fitted to handle the big jobs in Electricity here at Coyne.

THE students shown in the picture below are operating coil winding and coil forming machinery in my Armature Department.

There was a time when armatures were wound principally by hand—one wire at a time—as some of them still are. Except for larger armatures with open slots, machine methods have largely replaced the old fashioned way.

### You Learn to Do the Job in a Really EXPERT Way

This new machinery does the work much quicker and more economically than it could be done by hand, as well as producing neater and better coils.

When you come to Coyne, you yourself will wind coils on the winding machine and then form them on the forming machine. You will be taught hand winding, too, in case you ever have need for it.

This complete and practical training is one of the reasons why large employers are so eager to hire Coyne graduates. You will find, when you graduate, that Coyne thoroughness means many dollars to you, in the form of big salaries and steady work.

### Coyne Equipment Must Be Complete

It would be utterly impossible for me to give you this splendid training, if it were not for the expensive, up-to-date equipment which I am at all times adding to my course, to keep it always the most modern.

But I am glad to do so, because I like to know that when a Coyne man gets out in the field that man is so thoroughly and so practically trained that he will spread the fame of this institution just as thousands of Coyne men have done for the past twenty-eight years.

I like to feel that every man who leaves our doors is capable of holding down the big electrical jobs—that a Coyne-trained Electrical Expert is always ready to tackle any problem that might come up in his work with absolute confidence in his ability to handle it right.

My graduates will tell you what this means to you. Just look at the photos of some of my successful graduates on pages 40 and 41. See the kind of jobs they're handling.

Then you'll realize that training which fits men for jobs like these must be complete in every detail, must give students practical training on the same kind of apparatus that is used out in the field.

That's why I have spared no expense in keeping Coyne Equipment the most modern, up-to-date equipment of any practical Electrical school in the world.



Operating Coil Winding and Coil Forming Machinery

Coyne Specializes in ONE Thing—Electricity

#### MAKES \$500 MONTH IN OWN BUSINESS

"The Coyne School is the only place I know where a man can get a good knowledge in this line. I knew nothing when I went, was there 3 months, worked for Western Electric 1 year. Have been in electrical game for myself about 4 years and I have a good business now. I have made \$500 several months in the year, some months \$200 during winter."

D. S. HARVEY





# ARMATURE DEPARTMENT



## There Is a Big Field for Coyne Trained Armature Experts

**N**OW you want to know how you will use your armature experience and how much it will help you to get a good position. Well, it is simply this: No man could hope to qualify for a real big job such as superintendent of a power plant without a thorough knowledge of armature work. If you accepted a responsible position as motor maintenance man, looking after fifty or a hundred machines, you would be helpless without armature training, and the man who can quickly repair the armature of a machine without supervision or the expense, costly delay and trouble of sending the job outside or calling in an expert is a valuable man.

### You MUST Be Trained in ALL Branches of Electricity

I want to emphasize again the importance of a complete electrical training—not just one branch—but all branches. Coyne builds you up gradually, laying a solid foundation as you go along. One subject leads to another so that you are carefully prepared at every step in the road. Armature and stator work is absolutely necessary in A. C. and D. C., and unless your training included a thorough training in armatures and stators you would be greatly handicapped in practically any branch of electricity. When you have laid the coils and insulation in a blank core and connected it up and made it run yourself there are no mysteries about the operation of A. C. or D. C. machines.

By taking the subjects in their logical order the work is made easy and at the same time interesting. You know the work thoroughly because you have done the jobs yourself.

Can you imagine a man learning electricity any other way except by practical experience; could you learn to wind, test and bake the insulation on an armature by reading about it in lessons or books?

### Coyne Trained Experts Are the Pick of the Field

One of the best paying positions is that of armature inspector and motor maintenance man. You will find this job in any power plant as well as in countless numbers of manufacturing concerns operating A. C. and D. C. machinery. Wherever motors or generators are used on trains or steamships, you will find plenty of motor maintenance work. Only trained experts can qualify because the repairs must be done quickly and efficiently and the inexperienced man would not even "get to first base." Hundreds of Coyne men have made good and are now doing this kind of work in power plants and manufacturing concerns all over the country. Employers regard them as the "pick of the field" because they have had the practical experience combined with the necessary knowledge of the operating principle of electrical machinery. You can't afford to overlook this kind of training—it is the difference between success and failure.

#### Had Only 4th Grade Education

Oshkosh Electric Company

Dear Mr. Lewis:—  
I am writing you this letter as my personal thanks and appreciation, which I owe to you and the Coyne School.

I completed the course at Coyne School, and I had only a fourth grade country school education to start with.

With this confidence I got employment with the Sorgel Electric Company at Milwaukee.

During this time I worked beside men who have worked at the electrical machinery rewinding and repairing from eight to twenty years.

While some of these men were instructors for the U. S. Government during the war, and were considered good practical and technical men, I can say many a time I have shown them up.

With best wishes to Coyne.

Yours very truly,  
B. J. Rushka

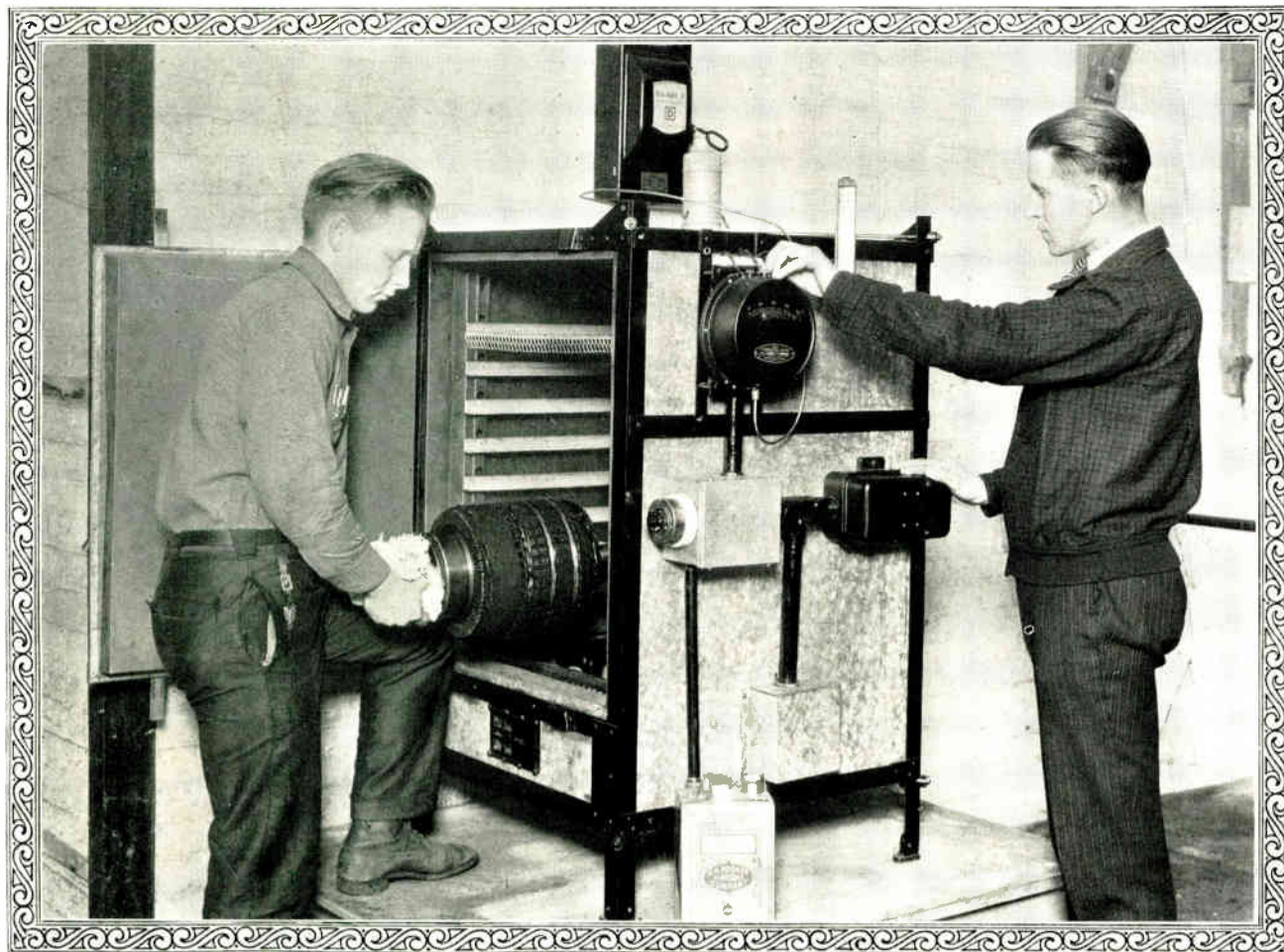
Armature Winding—  
Testing the Finished Job  
with the "Growler"



### Here's the Latest in Electric Ovens for Baking Armatures

**T**O the left you see the very latest type of modern Electric Bake Oven, used for baking and curing the insulating compounds on finished armature windings and field coils. This oven has automatic temperature control equipment so it can be set to maintain any desired temperature through any given period of time. It is heated entirely by electricity, using space heaters of nichrome ribbon coil type, and uses about three kilowatts current consumption. The baking of this insulation makes the finished winding waterproof and protects it from damage by dirt and injury from handling.

Working on modern equipment of this kind gives you a familiarity with its operation and construction that will be invaluable to you later out on the job. This equipment you will get your training on in my great shops will be the same equipment you will be paid for working on in the field. That's why Coyne training makes you sure and confident of yourself, after you graduate, and able to command a high price for your services.



There Is No Substitute for Practical Shop Training





# DRAFTING DEPARTMENT



## Electrical Drafting, Plan Reading and Estimating

**D**RAFTING and plan reading and estimating are very essential to the electrical expert, and without this knowledge the man in the field is absolutely "up against it." There is hardly any branch of electricity where this training is not necessary. In construction and power work you will use this knowledge almost every day. Naturally, then, we give you this training thoroughly. Your instruction would not be complete without it.

In this department you first learn how to read blueprint plans so that you can pick up any blueprint and read it like a book. The advantage of this is that it enables you to install equipment from the prints that manufacturers always furnish. Then you learn to make correct drawings of electrical parts, symbols, apparatus, installations and complete wiring plans for houses, stores, etc. And then you are taught how to estimate the cost of work. All this is absolutely necessary, for when you go to work for a firm or go into contracting for yourself, **you will be far ahead** of the man who can not draw his own plans and make a correct estimate on the work.

During your stay in this department you are under the personal supervision of an expert draftsman. The student is also given the necessary shop mathematics and a thorough training in the use of the slide rule. Note the large slide rule in the picture at the left that we use for this instruction. No one need be afraid of the mathematics given, for they are taught in such a practical way and all applied to such interesting problems that you will have no trouble mastering them regardless of your previous education.

### You Don't Need Education

A common school education is all you need to master the necessary mathematics by our practical system. No student need let the mathematical part of electricity worry him when he gets his training at Coyne.



Instruction in Use of Slide Rule

## Post Graduate Course in Drafting—Free

**Y**OU understand, the drafting, estimating and plan reading given is sufficient for anyone going out into practical electrical work, but any Coyne graduate who wishes to follow electrical drafting as a profession is privileged to do so after finishing the regular course or can return at any time and take up this Post-graduate Course without any additional charge. This is a very complete course dealing with advanced electrical drawings and projections. The student is given advanced work in A. C. and D. C. drawings, such as "Coal Pile to the Consumer," telephone layouts, metering station layouts, light and power layouts, etc. Many of our graduates who want to go into electrical drafting work take the Post-graduate Course. This is only one of the many extra helps given Coyne men.

Nothing is left undone to make the Coyne man a success, and whenever we can devise any means to make his success greater we spare no expense in adding this to his course.



Instructor Giving Student Individual Instruction in Blueprint Reading  
Everything Is Clearly Explained



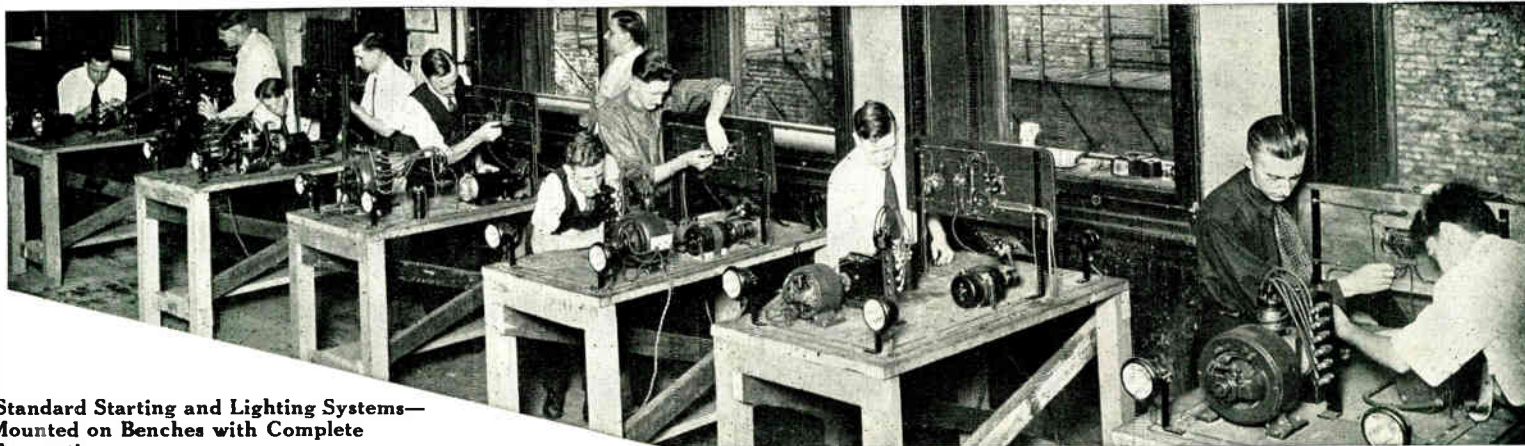
A Corner of the Drafting Department

Coyne Specializes in ONE Thing—Electricity





# AUTOMOTIVE ELECTRICAL COURSE



Standard Starting and Lighting Systems—  
Mounted on Benches with Complete  
Connections

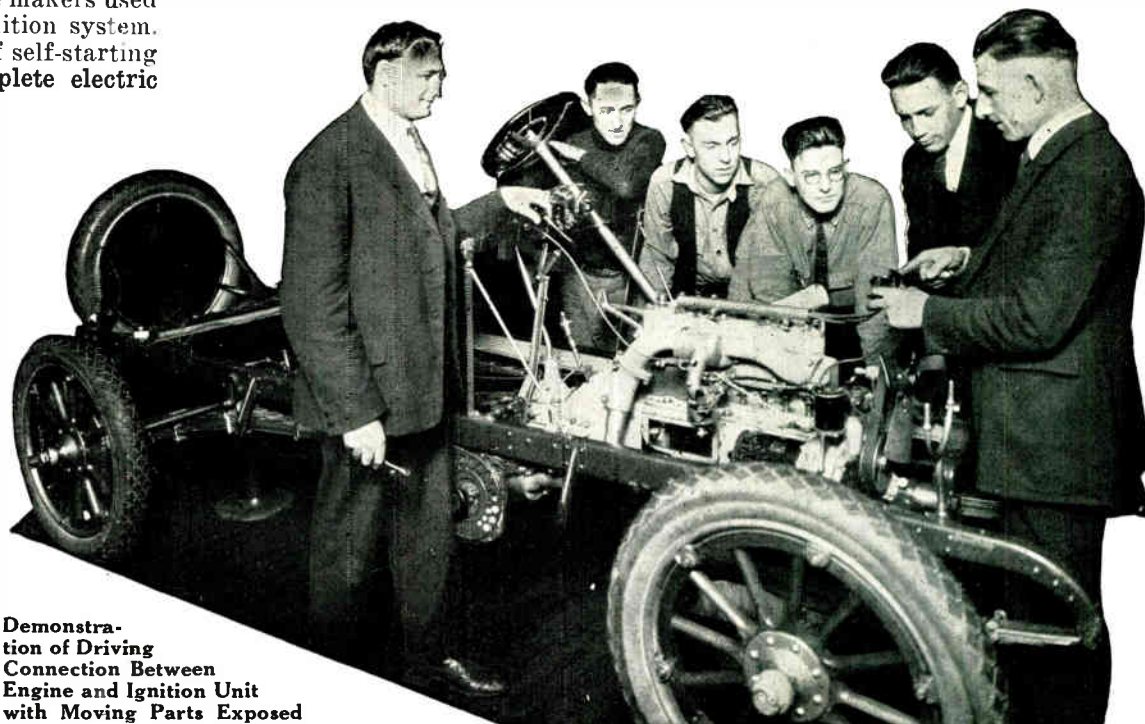
## Coyne SPECIALIZES on Electricity! It's the Only Logical Place to Learn Automotive Electricity

ONE of the latest and most important branches of electricity and one that offers great opportunities for the trained expert is Automotive Electricity—electricity as applied to the gasoline engine. This includes Automotive, Truck and Tractor Electricity as well as farm lighting plants. The tremendous development in this field has all been in the last few years. For several years after automobiles became a reality, the makers used a simple coil, spark plugs and dry cell batteries for their ignition system. Then came the development of the magneto, with many types of self-starting and lighting systems, until today the automobile has a complete electric power plant of its own.

The picture below shows students working with a stripped chassis. This is a very helpful piece of equipment because the side walls of the cylinders are cut away and you can see just how the electrical devices function in connection with the rest of the motor. You learn the position of the pistons when the spark is advanced and retarded.

### Thousands of Electrical Experts Needed!

Through this development there has come a tremendous field for the automotive electrical expert. Probably no other branch of the entire electrical field suffers so much for the lack of trained men. All of the tens of thousands of repair shops require EXPERTS in this work. They command big pay and are hard to find, because in order to handle this work properly they must be trained in electricity from the ground up, just the same as any other branch of electricity. Proper training of this kind can only be had in an electrical school such as Coyne, where you are trained in electricity first and then apply it to the auto, truck and tractor.



Demonstration of Driving  
Connection Between  
Engine and Ignition Unit  
with Moving Parts Exposed

### The Principles of the Gas Engine Are Fully Covered

YOU'LL see some real equipment here, too. We take pride in our automotive department and it has cost us a lot of money to keep the equipment up to date. You are trained on practically every electrical device in standard use as well as the wiring system of pleasure cars, trucks, tractors, motorcycles and farm lighting plants.

Your training in this department is not entirely electrical, for all mechanical work on the engine that is closely allied to the electrical systems is given and you will have many jobs on firing orders, carburetor work, etc. This is given so you will thoroughly understand how the electrical systems function with the rest of the engine.

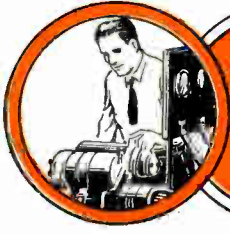
In addition, you learn the location of the various parts of the electrical system, such as the battery, generator, starting motor, magneto, distributor and spark plugs. You are taught to trace quickly the wiring systems for each. Without a stripped chassis like this, it would be difficult for us to give you practical instruction in the principles of the electrical system. Now you are ready for bench work on the various units.



Students Testing Standard Types of Magnetos

There Is No Substitute for Practical Shop Training





# AUTOMOTIVE ELECTRICAL COURSE



Bench Work in the Automotive Room—Students Training for a Big Future

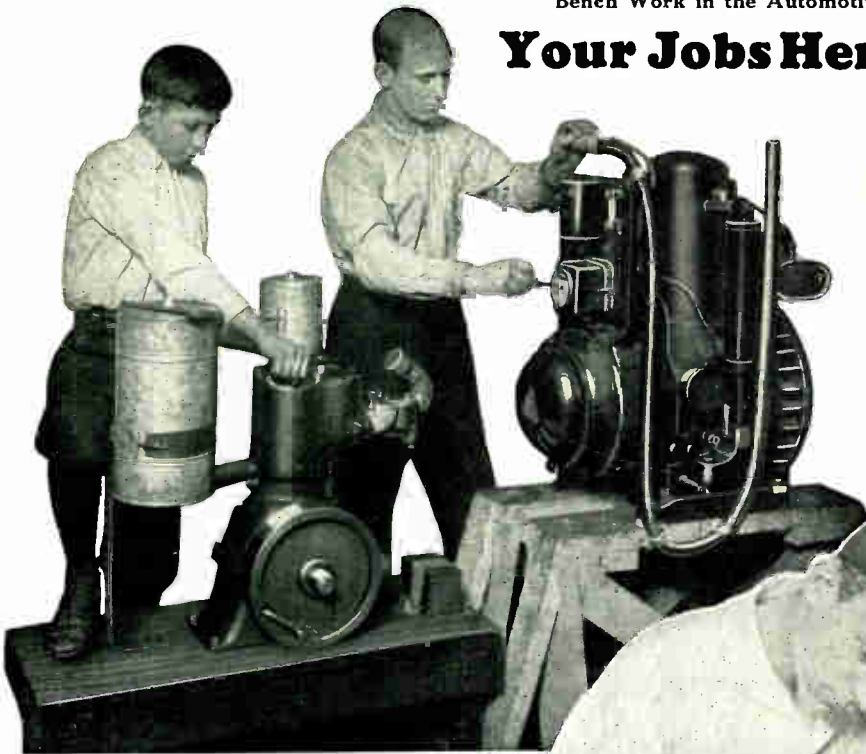
## Your Jobs Here Are the Same as You Will Do Outside

**D**O you see those benches in the picture above? Well, that's where you start your testing and repair jobs. The jobs on the bench cover all electrical equipment in automotive work. Here you tear down, build up and test motors, generators, coils, condensers, intensifiers, magnetos, and all other automotive electrical apparatus. This is a wonderful training because it teaches you to "spot" trouble and make a quick repair.

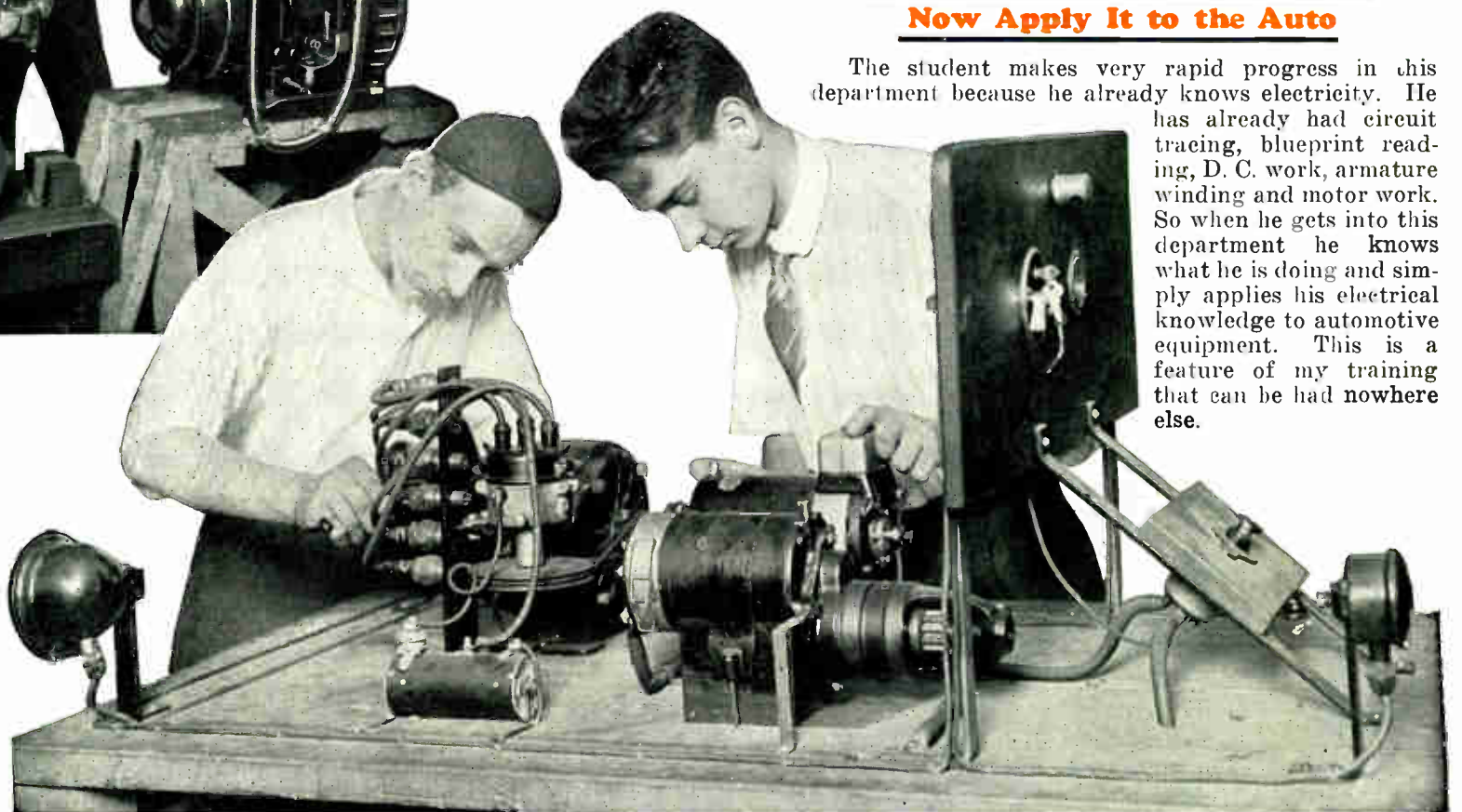
Your work on magnetos is very thorough. A magneto is like a small generator and produces electrical energy. You will find all standard types in this department such as the Apollo, Sims, Eiseman, Dixie, K. W., Lorrain, Teagle, Berling, Remy, Bosch, etc.

### You Have Learned Electricity— Now Apply It to the Auto

The student makes very rapid progress in this department because he already knows electricity. He has already had circuit tracing, blueprint reading, D. C. work, armature winding and motor work. So when he gets into this department he knows what he is doing and simply applies his electrical knowledge to automotive equipment. This is a feature of my training that can be had nowhere else.



Both Young and Old Find Plenty of Interesting Work at Coyne



Students Testing and Operating a Standard System

Coyne Specializes in ONE Thing—Electricity

Graduate Ireland Secured Dealership of Well Known Cars Wisconsin.  
The fact that I was successful in becoming the new Hudson and Essex dealer for Kenosha County I attribute largely to the reason that I know the electrical end of the business as well as the mechanical, which I received at the great Coyne School.  
**C. IRELAND**

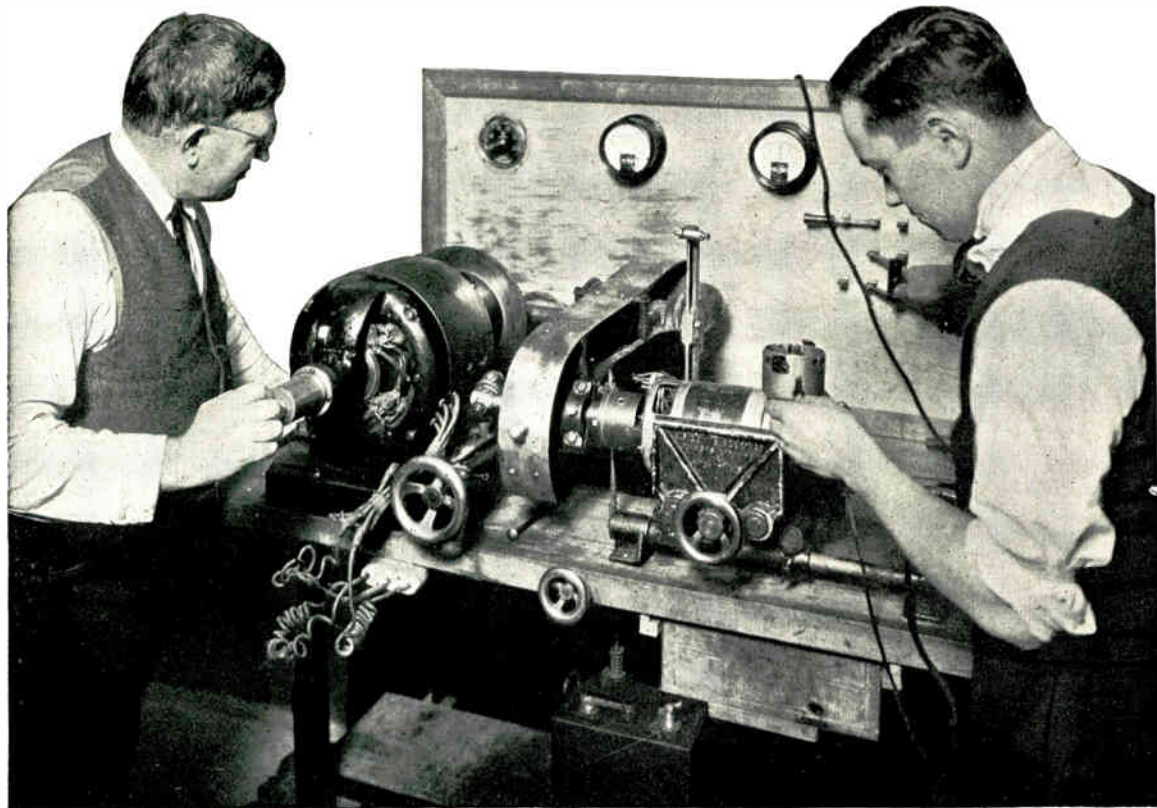




# AUTOMOTIVE ELECTRICAL COURSE



## Generator Testing Is Very Important Work



Students Operating Test Bench

THE development of starting and lighting systems in the last few years has increased the use of generators and starting motors. Your D. C. work will help here because you covered generators and motors thoroughly in the other departments. Automotive generators are very similar, but, of course, smaller. The illustration at the left shows a special apparatus for testing generators and locating their faults. Every student is required to make all these job tests and in addition, tear down generators and put them together again and make them operate properly. These particular jobs will come up many times out in the field, but it will be "duck soup" for you because you do the same work in our shops.

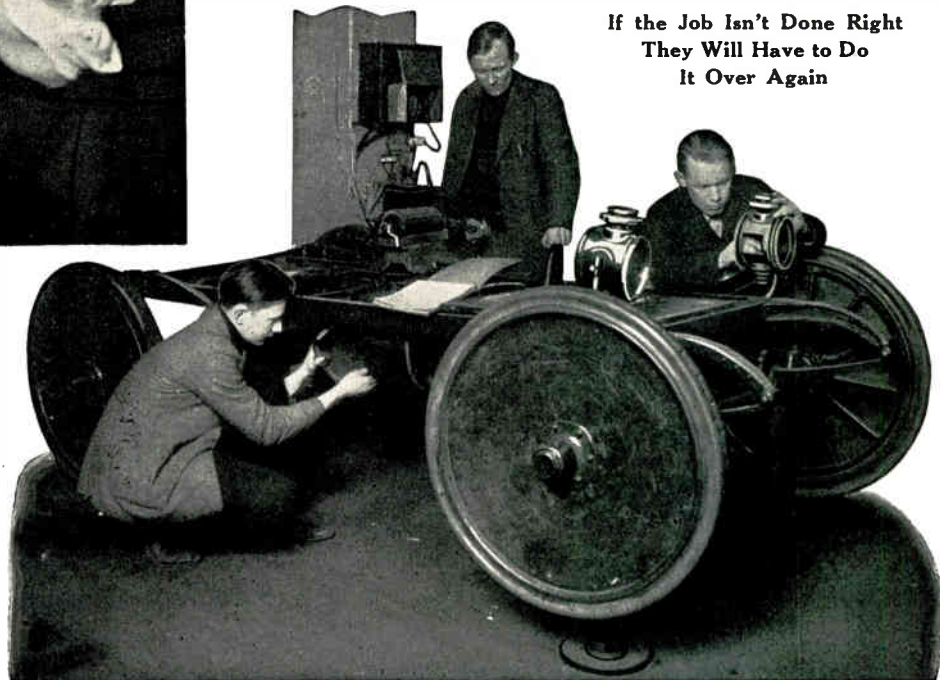
There is a series of systematic tests on generators, starting motors and magnetos, regulars and cutout relays; to be performed with this modern test bench at the left and it is charted to be used by the student for future reference.

## Your Training Must be Complete

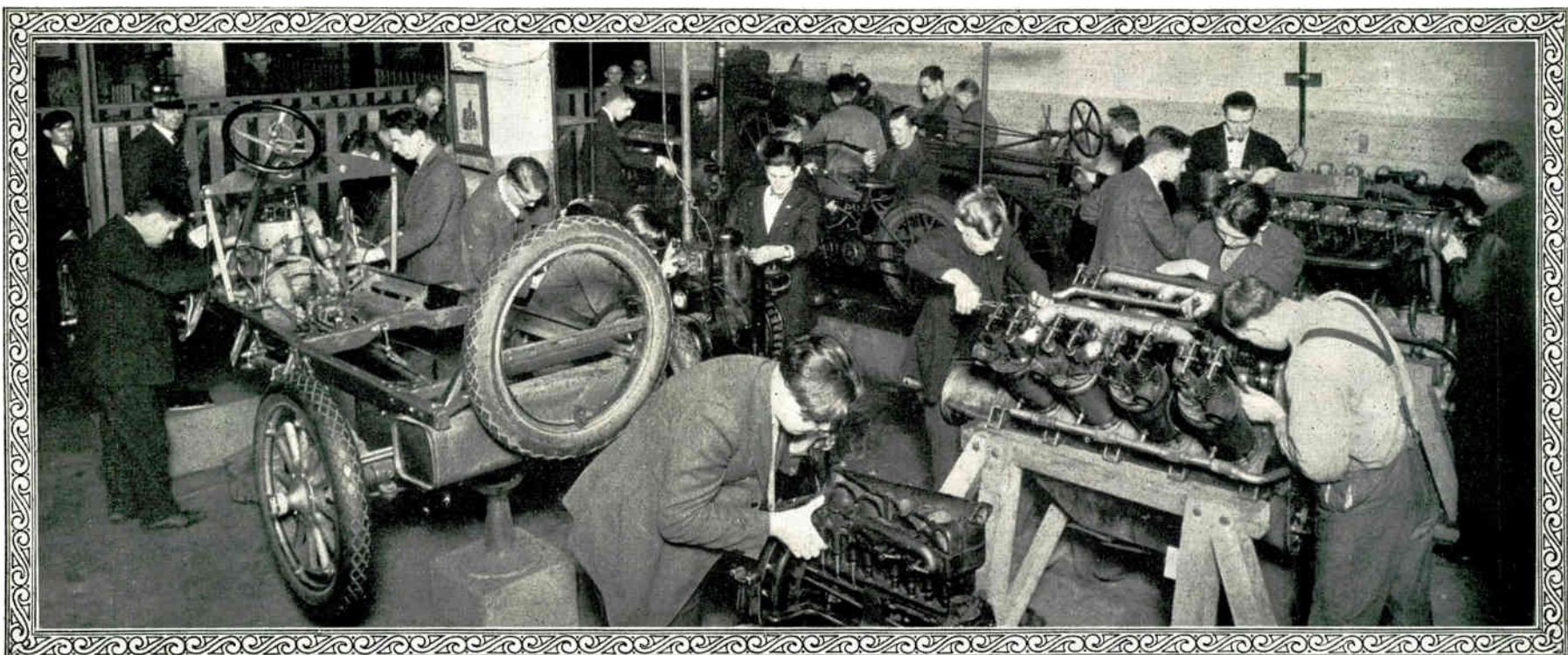
ELECTRIC energy is used to a great extent to drive electric pleasure cars and electric trucks. In order to give my students practical work, we have installed an electric car in this department so that they can do all the wiring from start to finish. You will enjoy these jobs in this work because they are different from anything you have done thus far.

Do you see the Ford motor mounted on the block in the picture below? This is your next job. You do all the wiring yourself, even to the lights and horn, and when you have finished, start and run the motor to prove to the instructor and to yourself that everything is O. K.

Next, you wire up many other automobile engines and a motorcycle. It's all practical and intensely interesting because you do the work with your own hands and remember it. If you should go in business for yourself, and hun-



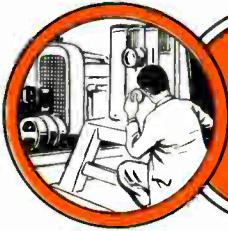
dreds of our graduates do, you will be able to handle any job that comes along to the complete satisfaction of your customers. You will be known as an expert and you will get more business than you can take care of.



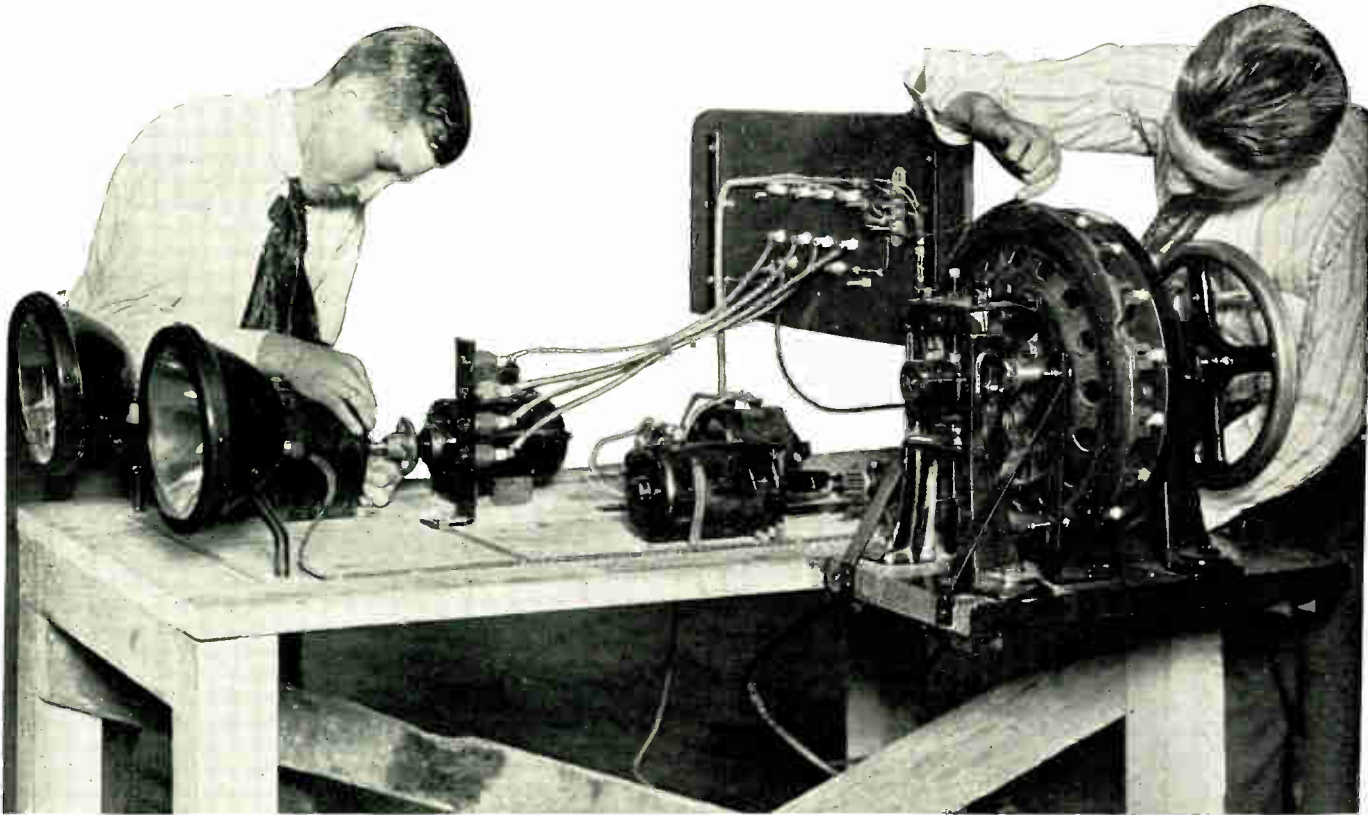
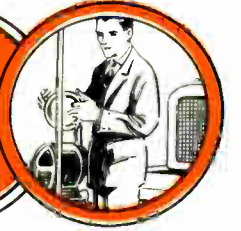
Another View of the Automotive Department Showing Students Working on Automobile Motors, Aeroplane Motors, Motorcycles and Farm Lighting Plants  
A new eight-in-line Packard, new Chevrolet four, a four-wheel-brake Paige and many other pieces of new equipment just added to this department do not show in picture

There Is No Substitute for Practical Shop Training





# FARM LIGHTING PLANT TRAINING



Students Working on a Complete Ford Ignition System

## Plenty of Work on Ford Systems

**H**ERE is a complete ignition system of a Ford, mounted on a bench. Because of the tremendous number of Fords in use, this job is very important. Every part is visible and the connections are arranged so that you can get at them easily. After studying the wiring system you will be required to wire up correctly and test each unit of a Ford electrical system.

There are additional jobs on the Ford system, such as charging the magnets in the magneto, also testing the magneto for "grounds" and testing the insulation of the Ford coil. This is a vibrating coil and we show you how to adjust the vibrators and keep them in repair.

By the time you leave Ford jobs you will know the ignition system of the Ford from A to Z. Lots of Coyne graduates are making good money specializing on this particular car.

## Farm Lighting Plants

**N**OW you are ready for farm lighting plants. You will enjoy this branch of electrical work because it is comparatively a new one, although great strides and improvements have been made in the last few years. Electricity has come to the farm to stay, and while there are already hundreds of thousands of these small plants in use, it is only a matter of a few years before practically every farmer will have one and enjoy the same electrical conveniences as city people. We have standard types of farm lighting plants in our shops and they are mounted on blocks and connected to an exhaust pipe so that the results are the same as an actual installation. You have several important jobs to do on these plants, such as wiring-up, testing, "trouble-shooting," repairing and the care of batteries.

### Coyne Men Qualified to Do Any Kind of Electrical Work

With the increasing demand for these plants, there are excellent opportunities for dealers and salesmen—men who understand the operation and can sell and install them intelligently. Farm lighting plant salesmen make big money and you can qualify because you have had the practical training. This offers a field that many of my graduates enter. It pays big money to the Coyne trained expert, because to be able to install these plants properly, you must be a thoroughly trained man. That's why I insist that my students be qualified to do any branch of electrical work.



Practical Work on Farm Lighting Plants



Charging and Testing Magneto Magnets

### Borrowed Money to Get Coyne Training

I borrowed the money to attend the Coyne School at Chicago, and, like any boy, was a little worried over the investment until I was in school and then the situation was rapidly cleared for me. When a man is sure he knows how to do a thing, the job is easy and it only took six months' work after leaving school to get enough money together to start an electrical shop of my own.

My shop was not fully equipped, for I had just started the business and customers hesitated a little about stopping, but after others had failed on jobs, we were given the last chance—our golden opportunity.

Business grew rapidly as satisfied customers spread the news to their friends, and today the shop is well stocked and well equipped. We are not limited to motors, generators and batteries alone, but can handle any electrical job, and as radio sprang up, we were the first on the job here.

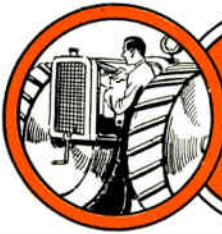
There is satisfaction in having a broad knowledge of electrical appliances and to never turn down a job. Many thought us foolish for starting against competition until the story was known.

Respectfully yours,  
CECIL W. DORSETT.



Coyne Specializes in ONE Thing—Electricity

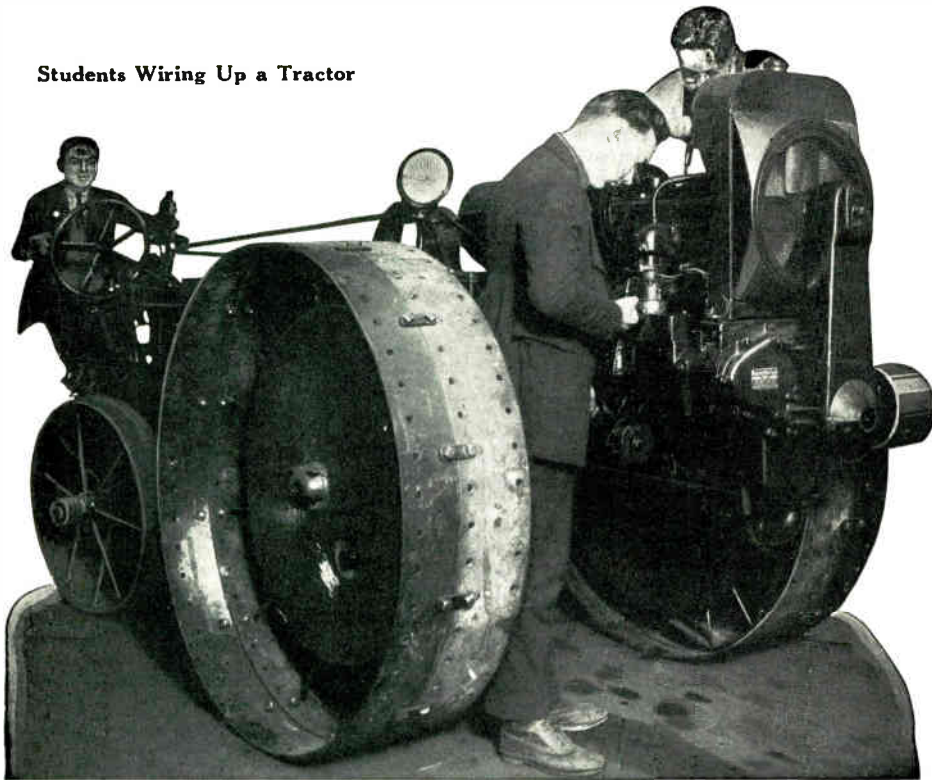




# ELECTRICAL TRACTOR *and* AEROPLANE TRAINING



Students Wiring Up a Tractor



## Now You Can Step on the Starter

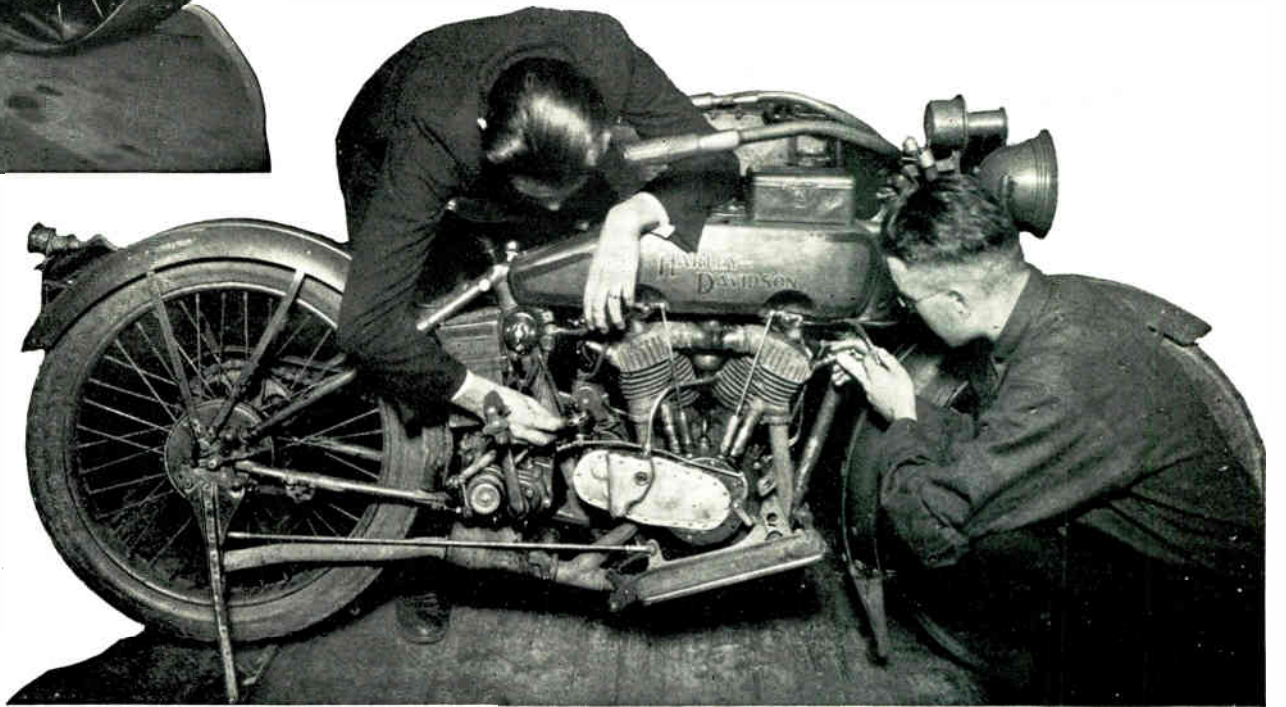
**P**RACTICALLY every car now contains a complete power plant. There is first the generator that charges the storage battery, which furnishes current for the starting motor, lights and horn, and the magneto which operates in connection with the coils and spark plugs. We give you jobs on many separate and complete systems so that no matter what car you want to repair, the systems will be familiar. The units differ in construction and arrangement of wiring, but you master them all before leaving this department.

Your instructor might assign you to the Delco, for instance, and you would have to wire it up, run tests and see that everything was in proper working order. If any units are defective, you take them off the block and bring them over to the bench. Maybe the generator is not working right; in that case you would put it in the testing apparatus and locate the trouble, and then repair it. Every job you do is the same as actual repair work in an automotive service station. Men who can do this work are at a premium because so few have had the training necessary to do the work properly.

### Tractor Electricians Are in Demand

**O**NE of the greatest developments of farm machinery is the tractor. A few years ago it was a novelty—now it is a reality. Coyne leaves nothing out of its training that you should have, so we give you plenty of practical ignition work on tractors. This is very important training as the average mechanic knows little or nothing about tractor electricity.

The ignition system of the famous Liberty Aero-plane motor is one of your jobs in this department. The recent development of flying has opened up a big field for aeroplane electricians.

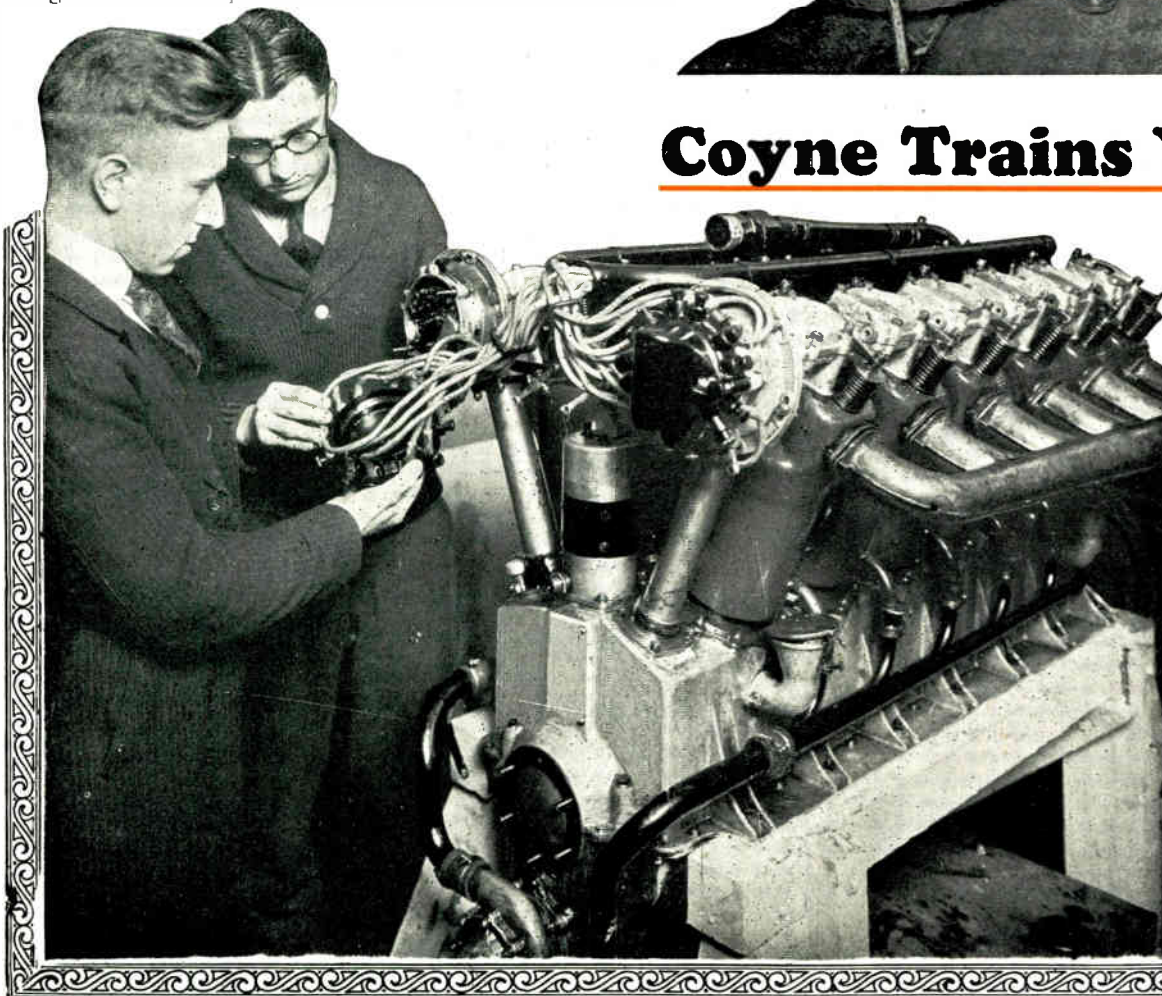


## Coyne Trains You to Go in Business for Yourself

**W**ITH more than 20,000,000 passenger cars now in use, not including several million trucks, tractors and aeroplanes, it doesn't take much imagination to appreciate the opportunities for the Coyne-trained automotive electrical expert when you stop to consider that there isn't one mechanic in a hundred who knows anything about electricity. Nearly 80 per cent of all auto troubles are electrical and quickly repaired by the man with a thorough knowledge of electricity. Nobody wants to waste time with the "tinkers," but experts are always in demand and hard to find. So, here at Coyne we have concentrated on practical work. We have given you jobs to do on the same kind of equipment that you will come in contact with after you leave here.

Many of my graduates go in business for themselves, opening up electrical service stations. They are making big money and do not hesitate to credit their success to Coyne training. And you will be successful because we give you a practical foundation—a training that is not duplicated anywhere in the entire country.

Every automobile, truck and tractor contains a miniature power plant in itself and electricity is no different in this plant than it is in a large power plant. That is why we teach you electricity first. Then we apply the knowledge you gain in electricity to the automobile. Catch the idea? Simple, isn't it? Coyne specializes in electricity—that's why Coyne leads.



You Learn the Ignition Systems of Famous Aeroplane Motors from Start to Finish

There Is No Substitute for Practical Shop Training





# BATTERY TRAINING



## Battery Work

**L**AST, but not least, comes Battery Work. This subject is really a part of automotive work and forms a fitting conclusion to your training. As you look back over the previous work you will see how you are carefully advanced, step by step, so that each subject leads logically into the next one. So that after battery work you can step out into the world a full-fledged ELECTRICAL EXPERT. Now let's get busy on batteries.

Right at the start, notice this unusual fact about batteries; that, although there is a tremendous number of them in use, **nobody seems to know much about them!** If you ever have had much experience around battery stations, electrical repair shops, etc., you know that, surprising though this statement is, it's absolutely true! And yet batteries are in constant use on twenty million autos, trucks and tractors, on millions of radio sets, with nearly all farm lighting plants, and in many other places. What's more, these batteries are mighty important parts of the equipment on which they are used. When an automobile won't start, when a radio set fails to work, and when a farm lighting plant gives trouble—the whole difficulty is apt to be in the battery.

So a thorough knowledge of batteries is absolutely vital to the COYNE trained EXPERT. It will help him win a wonderful reputation as a "man who KNOWS" and will add many dollars to his income. That is why COYNE trains you so completely and thoroughly in battery work.

### Millions of Dollars Spent on Batteries Every Year

The first step is naturally to become acquainted with the various parts of a storage battery. The instructor explains them, one by one, taking up the function of each as he goes along. You learn the "why" and "wherefore" of positive and negative plates, the mixing of acids, separators, specific gravity, and the electro-chemical reaction which takes place in the cell. These points are all covered in an **interesting and understandable** way with practical demonstrations. The student is also taught the construction and uses of various kinds of storage batteries, such as those used in automobiles, farm lighting plants, Pullman cars and telephone work. You are then given a series of jobs, testing for trouble in batteries and you are trained in the proper methods of caring for the battery and in keeping the solution right. The training in batteries equips a man with the necessary knowledge and skill for

a very profitable electrical specialty. There are **hundreds of millions of dollars'** worth of batteries now in the field, every one of which, at regular intervals, demands the services of an expert.

The average auto mechanic is handicapped, for he generally knows absolutely nothing about the storage battery. That's why there is a **big field for the Coyne trained EXPERT!**

The most important job in battery work is lead burning. You will use this training every day in battery work when you get on the outside, not only for tearing down and overhauling old batteries but for building up new ones as well. Note the well equipped benches in the picture below. This is where you practice lead burning; every place at the bench has an individual torch. This saves time because you do not have to stop your work and wait to borrow another man's tools.

Your first job consists of tearing down defective batteries, burning off the lead straps, melting off the cover and, finally, breaking up the cells. You learn the right and the wrong way to handle a torch and how to adjust the flame to get the required amount of heat. After the battery is "knocked down," the instructor shows you how to locate the trouble. Maybe it is in the negatives or possibly it is the separators; at any rate, you will find the fault and commence to rebuild the battery.

### You Learn to Rebuild Batteries Right

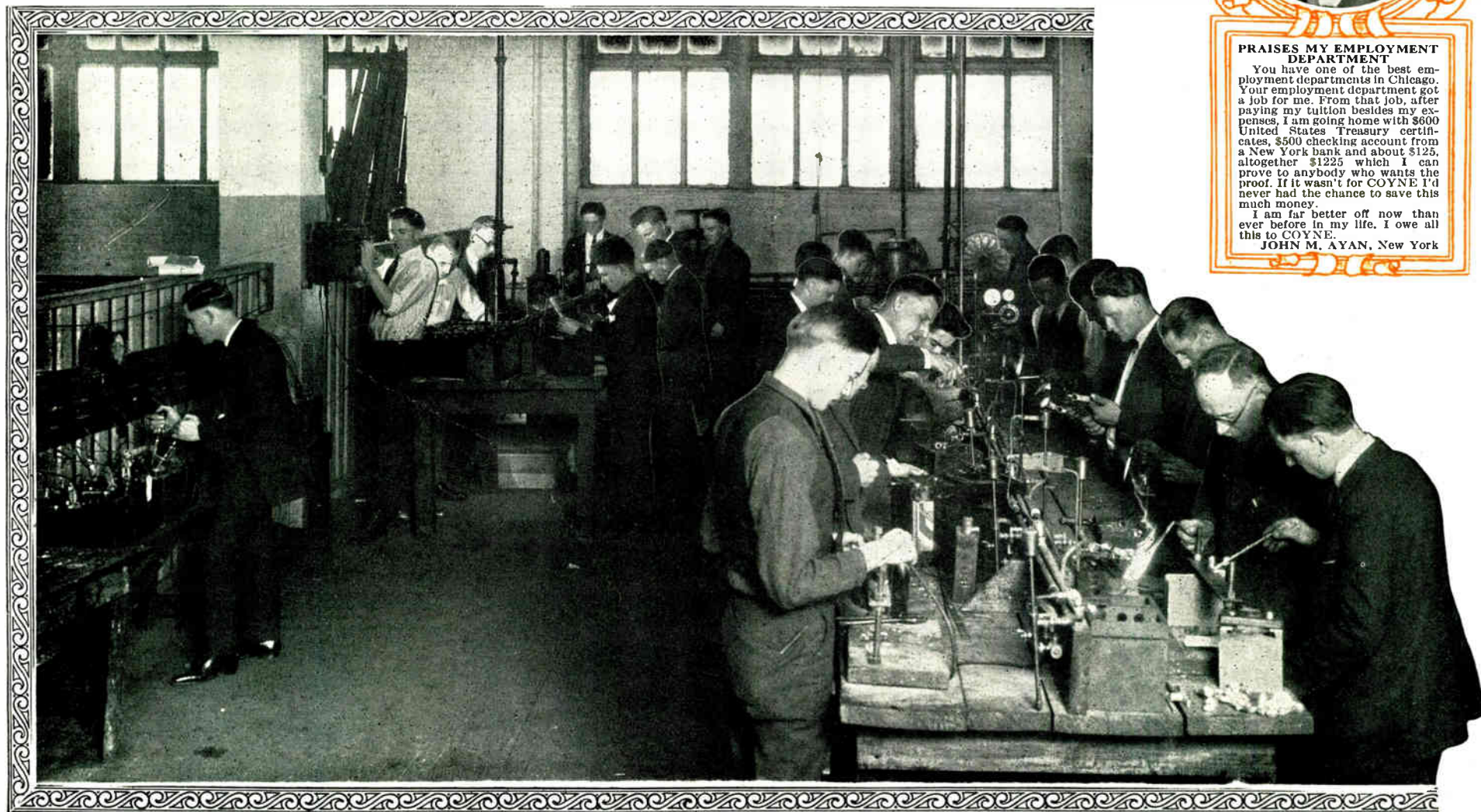
First, you wash off and press out the plates and assemble them in a rack. Your next step is to connect the cells. You do this with lead burning. Then place the separators between the plates and set them in the jar or container. Next, you fit the cover and melt on the sealing compound so that you have an air-tight job. Now comes more lead burning. Build up your terminals that are attached to the cells in order to get an electrical connection. Mold your straps, drill them and burn them on to the terminals. Mix your "electrolyte," pour it in and your battery is finished—all except charging.



#### PRaises My Employment DEPARTMENT

You have one of the best employment departments in Chicago. Your employment department got a job for me. From that job, after paying my tuition besides my expenses, I am going home with \$600 United States Treasury certificates, \$500 checking account from a New York bank and about \$125, altogether \$1225 which I can prove to anybody who wants the proof. If it wasn't for COYNE I'd never had the chance to save this much money.

I am far better off now than ever before in my life. I owe all this to COYNE.  
JOHN M. AYÁN, New York



A Corner of the Battery Department Showing Students Receiving Practical Training in Battery Testing, Building and Repairing





# BATTERY TRAINING



## You Build a Battery Complete and Understand It



Pressing Out Negatives—Putting Plates in Containers and Drilling Straps

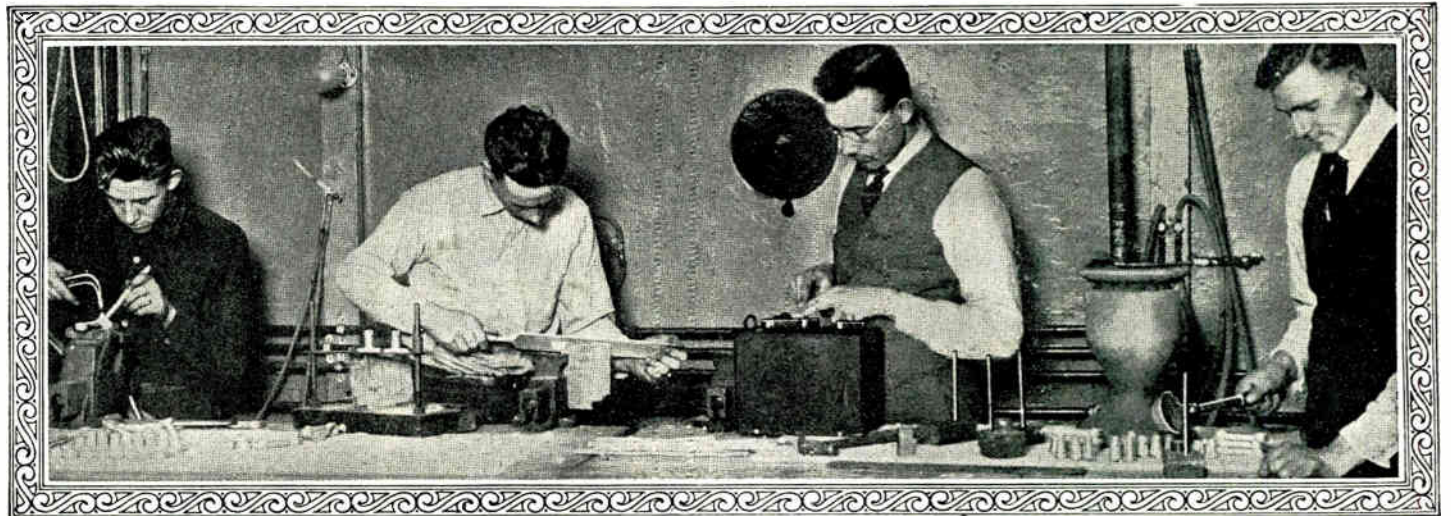
**N**OW take your battery over to the charging bench and put it on charge. Leave it there a day or so and watch your meters until it has a full charge. Then you test it to see that it stands up. If we find that any of the work is incorrect you are required to do it over until you can do it right. That is one thing I insist upon all through the course, that a man stay on each job until he masters it before going on to the next.

Now you accomplished something, didn't you? You built a battery from the ground up and you understand it because you did all the work yourself—with your own hands. Of course, the instructor was right on the job to help you out whenever you got "stuck" and he explained every step of the process so that you understood it thoroughly.

### Everything Is Practical

This is the kind of practical work you get in batteries—just exactly like the jobs you will find on the outside. Our battery department is really an up-to-date battery service station. The only difference is that the students do the work. Defective batteries are brought in from all sources and my students repair them. This is where you get a world of "trouble shooting" experience. Also, you get practical work on farm lighting plant batteries, because this department looks after this type of battery which is used in the automotive room.

Many students build one or more batteries for their own personal use. All you will have to pay for is the bare cost of materials; thus you get a first-class battery for about one-half the regular price.



Students Acquiring Speed in Battery Repairs. Tearing Down and Rebuilding a Modern 3-Cell, 6-80 Battery

Students Charging Batteries That They Built Themselves



## You Can Open a Battery Service Station

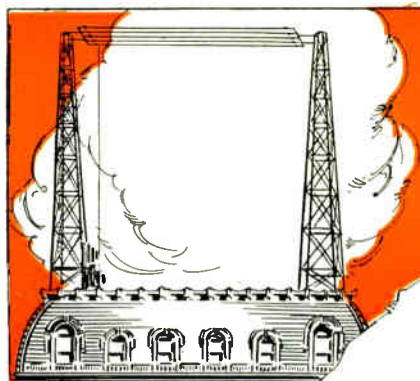
**T**HERE is a world of money in the battery business for the Coyne trained expert who wants to specialize in this branch. With over twenty million autos, trucks, tractors, motorcycles, aeroplanes, motorboats and farm lighting plants in use, you can appreciate the amount of battery work. Every one of these batteries requires rebuilding and charging at regular intervals or replacing with new ones. As in other fields, the EXPERT is the man who "cashes in." The man who "knows" and who has had the practical experience to do efficient repair work is the man who gets the money.

### Many Coyne Graduates in Business Make Big Money on the Side

Coyne graduates in business have added batteries as a side line and are making big money on them because of the number of batteries needing replacement or repair in every city and town, for automobiles, radio outfits, etc.; many have opened battery service stations all over the country. In addition to this there is a big field for battery experts in connection with farm lighting plants. Besides this, every railroad and telephone company uses a tremendous number of storage batteries in their various electrical systems.

There Is No Substitute for Practical Shop Training





# RADIO COURSE



Practical Training Like This Means Money in Your Pocket Later

## Big Opportunities for Coyne Trained Radio Experts

**S**TUDENTS are also given various jobs on the construction and operation of sending apparatus and they are given an opportunity of visiting some of the greatest broadcasting stations in the country. Chicago is not only the Electrical Center but the Radio Center as well.

### Merchandising and Selling Radio is Included in this Course

This department is one of the most interesting in the entire course because there are wonderful opportunities for the radio expert to make big money. We not only train you to build, operate and install radio equipment, but we train you in radio merchandising as well. As a result, many of our graduates are going into the radio business and are going BIG.

Millions of dollars will be spent on radio equipment and service in the next few years and it makes just one more field of golden opportunity for the Coyne-trained man.

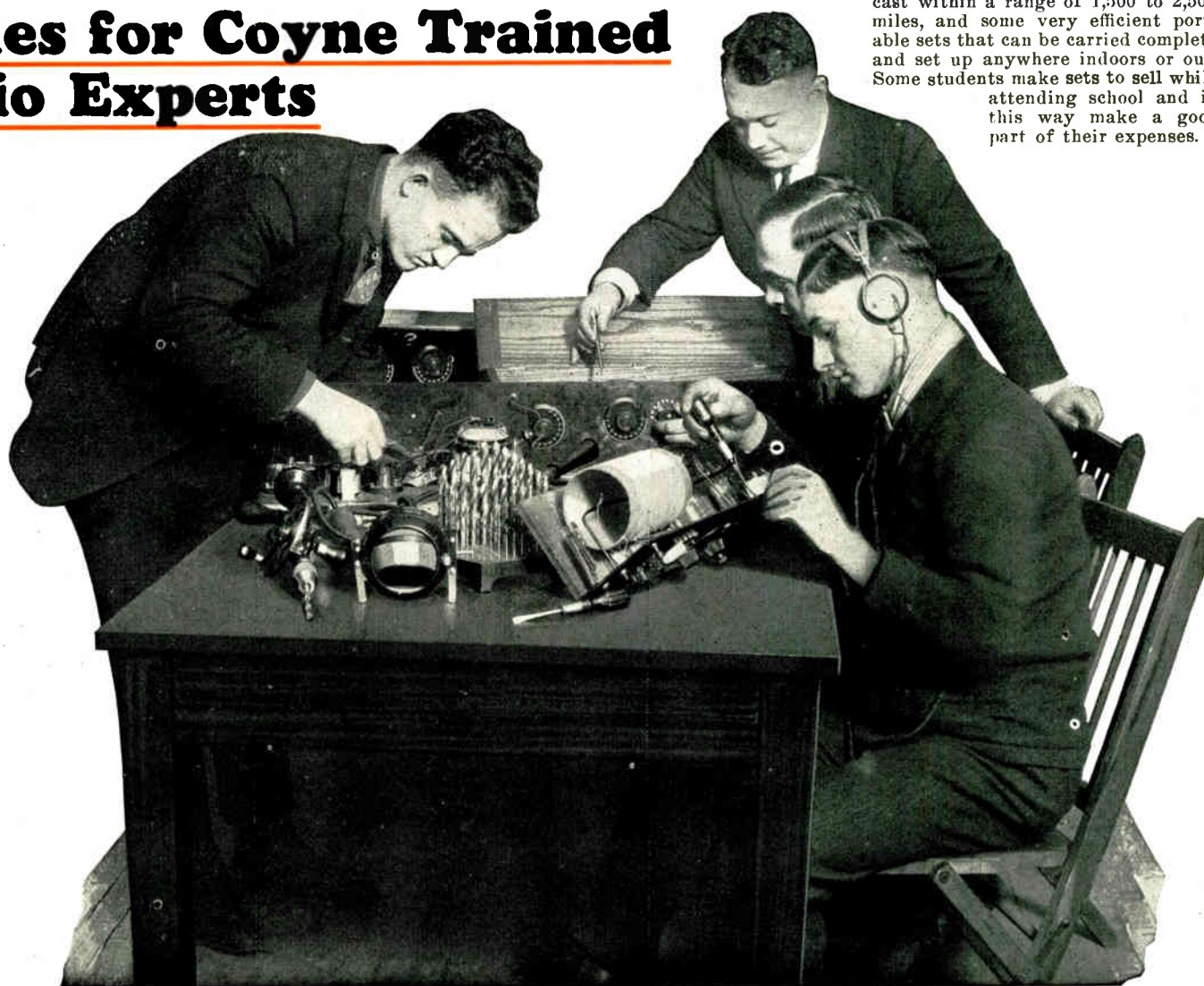
**W**HENEVER anything new is brought out in the great field of electricity you can be sure Coyne will have it. As soon as Radio arrived, Coyne was the first to teach it, and today the training you will receive in this work is very thorough indeed.

You are taught the names and uses of all the various parts of both sending and receiving apparatus. When you know the parts thoroughly, you learn to build, install and operate all kinds of sets from the simplest crystal set to the most complex regenerative radio and audio frequency amplifying sets. Then you are given instruction in antenna construction, loops, grounds and counterpoise. Also, a thorough study of the operation of tubes, crystals, transformers, condensers, variometers and all kinds of tuning devices.

### Students Make Extra Money Building Sets

Last of all, you cover diagram reading, symbols, panel and apparatus layout, radio telephone transmitting, broadcasting, equipment and the rules and requirements for obtaining amateur licenses.

A great many of the students make their own sets right here at school. This they can do at very small expense. The necessary parts can be obtained at practically cost through the school if the student desires, and the entire set built and assembled in our Construction Department under the direction of a radio expert. Some of the students have built sets in this manner that are capable of receiving broadcast within a range of 1,500 to 2,500 miles, and some very efficient portable sets that can be carried complete and set up anywhere indoors or out. Some students make sets to sell while attending school and in this way make a good part of their expenses.



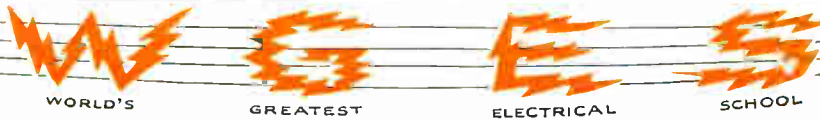
Students Building Their Own Receiving Sets

Coyne Specializes in ONE Thing—Electricity





# COYNE OPERATES ITS OWN RADIO BROADCASTING STATION



## Broadcasting My Graduates Into Big Jobs

A FEW years ago when my radio station first went on the air there were very few others in the field. Since then radio has grown, and the army of listeners has grown, so that today millions of homes have a radio.

My station, WGES, goes into these homes, furnishing them three programs a day, and my listeners live not only in every state in the Union, but in foreign countries as well. The Coyne Electrical School name reaches the ears of millions of people.

Some are big Electrical Engineers. Some are department heads. Others are Employment Managers, Personnel men, Superintendents. Others are the heads of large business concerns. There are tens of thousands of these Captains of Industry who listen to Coyne programs and hear the Coyne name repeated time after time.

When you graduate and you tell these employers you got your training at my school, think what an advantage it is to you. They know all about my school. They know I have a big, reliable and successful school and they know that a graduate of mine is the man they need.

### Many Radio "Scoops" Over WGES

There is scarcely an important exposition or affair of consequence held in Chicago that my radio station has not been closely identified with. A few of these include the great National Radio Exposition, Chicago Radio Show, the million dollar Illinois Products Exposition, the National Golf Show, the Own Your Home Show, and the great Outdoor Show, and many others.

Many prominent men speak over my station from time to time—Senators, the Mayor of Chicago, big railroad men, engineers and Captains of Industry in many different branches of endeavor.

### Prominent Men Speak Over WGES

Chicago, the Electrical Center of the World, was the natural, logical city in which to hold the great Midwest Power Conference held here recently. Samuel Insull, one of America's most powerful figures in Electrical development work in the central west and Mississippi Valley region, addressed the Conference on its opening day, and every word was faithfully caught up by WGES microphones and broadcasted to the world.

Samuel Vaucain, president of the great Baldwin Locomotive Works, was another notable speaker. His company has been identified with pioneer work in the development of the Electric Locomotive for the coming railroad electrification and his talk was confined to that subject. Many other nationally known men, such as W. S. Monroe and A. A. Potter and others too numerous to mention, also spoke.

### World's Finest Music Over WGES

My station broadcasts exclusively the very finest class of popular orchestral music. No cleaner quality music can be had, as it is all under the supervision of J. Louis Guyon, America's leader and fighter for strictly high grade, ballroom music. It costs \$120,000.00 a year to provide this music, and WGES fans—mothers, fathers, sons, and daughters, and the little tots—can listen and enjoy it in their homes without costing them a penny. A unique and important feature is the fact that while this music is broadcast direct from the largest ballroom in the world, measuring 300 feet by 106, yet there is absolutely no echo. This unheard of achievement has been accomplished by a specially engineered and constructed ceiling of wire mesh screening. You will be amazed, when you tune in on WGES, to note how purely toned and echoless the strains of this wonderful music roll in.

### All Students Will Have Privilege of Inspecting My Radio Station

I have made special arrangements whereby my students can visit the station, see and hear the broadcasting, and observe every movement in my beautiful visible studios. You can see the artists as they assemble before the microphone, the announcer flashing his little colored light signals—the entire "play" stretched before your eyes and ears, disclosing the inside story of radio broadcasting.

Then, in another visible, glass-enclosed space less than fifty feet from the studio, is the complete operating room. Here you will see my engineers working the broadcasting equipment, checking up constantly with instruments the quality and volume of the music, and by switches "cutting" in or out with first one microphone, then another, and literally keeping their fingers on the pulse of every radio heart beat.

### My Radio Station Gives Coyne Students A Big Advantage

My operation of WGES gives every Coyne student a big advantage in mastering my radio course. First, it places the final supreme stamp of authority on my course in radio work. It insures first-hand, authentic training. Naturally, I could not own my own radio station and give anything but the very finest kind of radio instruction in my school.

Then all students have the opportunity to inspect a real station and familiarize themselves with the kind of equipment used and study its operation from beginning to end. No one will deny that this is a tremendous help to anyone desiring to study and master this highly paid new profession.



H. C. Lewis at Radio Conference, Washington, D. C. Herbert Hoover is at his left.

### Tune in on YOUR Station, WGES! Wave Length 250

MY wave length is 250. I selected that wave length because I foresaw a great future demand for the lower wave lengths. That was when broadcasting stations had practically no trouble in picking most any wave length they wanted. I originally had a wave length of 283 meters, but decided that 250 was even better.

Of course, if later developments should make a higher wave band more satisfactory, undoubtedly I would consider a change, as it is my policy to give the radio public the greatest possible broadcasting efficiency.

Tune in on WGES. As broadcasting hours are subject to change, I can not print the schedule in this book. If your local newspaper does not, by chance, publish our program, ask them to write us to be put on our program list.

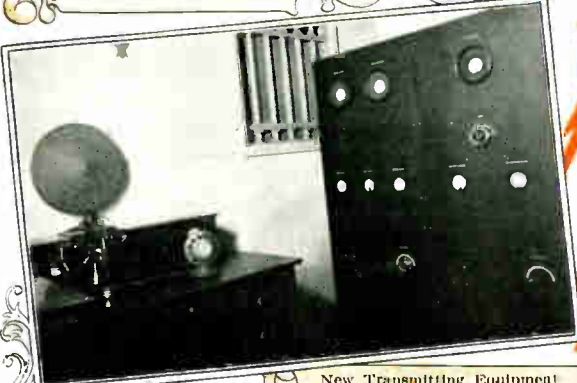
### Midwest Power Conference Broadcast Over WGES.



This picture taken on "Coyne Day" at Mid-West Power Conference, shows Coyne Student Body before entering \$10,000,000 American Exposition Palace, in background where Conference was held. WGES was official broadcasting station for Conference.



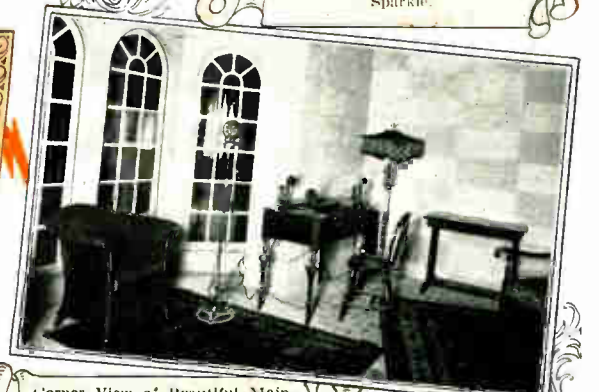
Inside View of 40 foot Glass Enclosed Studio Used for WGES Broadcast of Big Exposition Held in Chicago Recently



New Transmitting Equipment and Main Control Board (Front View) Just Installed for WGES.



A Little Fun Over the Radio—One of the Many Novelties that Make WGES Programs Sparkle.



Corner View of Beautiful Main Studio of WGES. The entire Broadcast Visible to Public.

There Is No Substitute for Practical Shop Training





# SCOPE OF COYNE COURSE



## A Brief Outline of 12 Happy Weeks in My Great Shops

### Elementary Department Jobs

Your first day at Coyne! You are in a bright, sunshiny department with windows all around. You see wires stretched across the room, galvanometers, static machines, and a host of other similar equipment. You soon find out what these are for.

Because you now learn by actual demonstration the principles and laws of electricity. But your instructor doesn't give you any dry professor talks. For instance, one kind of electric current travels through the center and whole area of a solid wire, while another type travels nearer the surface. Your instructor then proceeds to prove this by means of tests with solid and hollow wires that you see stretched above. Do you think you will ever forget this demonstration? Never.

He will tell you about static electricity, describe its characteristics. Then he takes a static machine and proceeds to manufacture this current before your eyes. You look on, listen to every word, thrilled and fascinated, run the machine yourself, and when you are through you KNOW all about static electricity—nobody can ever "stick" you on what it looks like and how it acts. And part of your time in this department is spent on work benches where you use batteries, meters, induction coils, magnets, Geissler tubes, etc., to test and prove the fundamental electric laws.

Before you realize it, you have learned thoroughly in this department ALL important electrical laws, ALL theories, and ALL principles you need to go on into the next department. ALL of it has been explained to you in simple talks and actual demonstration—the "Learn by Doing" method that stamps this knowledge into your brain never to be forgotten.

### Circuit Department Jobs

Now you step into the real applications in a practical way of the electrical laws and principles you have learned. Here in the circuit department twenty-one (21) separate jobs on circuit tracing and sketching are given you, and twenty-four (24) more on circuit testing and trouble shooting. You wire burglar alarms, telephones, signal systems, etc.

You hook up, test, and trace through all of these jobs yourself. These jobs must be done before you can go on with your other work. You make drawings of each one. Your instructor punches your card as you complete each job, and this is some of the best preparation in the world for future trouble shooting and maintenance jobs.

Interesting, isn't it? Thrilling. And amazingly simple. You work on the actual equipment; you make your own mistakes and correct them; you make your own drawings; you study and examine with your own hands a vast amount of equipment, such as special mine type telephones, party line telephones, messenger call systems, telephone switchboards, etc., and when, later, you get out onto the job or into your own business you don't have to guess what this equipment looks like or how it acts—you KNOW because you've seen it and worked on ALL of it before in my shops.

### Construction Department Jobs

Perhaps you think splicing a cable is simple. It is—for the Coyne trained man. But ask the average "electrician" to splice a multiple strand cable. See how he goes about it. Test the splice for (a) mechanical strength, (b) for perfect electrical connection, (c) appearance—that is, the splice must be as smooth and even as the cable itself. In this department you get thorough training on making and soldering all types of splices. Also connecting and testing all kinds of switches for ordinary, selective and master control of lights and circuits. Now you begin to really appreciate what Coyne training means.

House wiring! A big field. Coyne men can wire the best house ever built after he has climbed through the rafters, bent conduit pipe, and fitted his connections in my skeleton houses. His job will pass city inspection and meet code requirements. Yes, sir, and you get store and office wiring systems, too, B. X. wiring, new polarized wiring, three-wire systems, motor installation, testing the finished job, and trouble shooting. Thousands of Coyne men are making big money doing house and building wiring of all kinds, both "on the job" and in business for themselves.

### Illumination Department Jobs

You are working for an electrical contractor. The boss sends you to a customer. He owns a store. He wants the best window lighting arrangement he can get. Insists on a perfect white light. Do you know that the only perfectly white light is a combination of several colors of the rainbow? Well, you will know when you are a Coyne man. You, as an Electrical Expert, can give this customer just what he wants, please him and please your boss.

You also get, in this department, training in how to illuminate a store window, that is, where to put your lights, spacing, candle power of lights, different types of shades and reflectors for getting different tones and effects.

Another firm, we'll say a big factory, wants an illumination installation in its shops that will throw no shadows. As a Coyne man, you will know the type of light, the mercury vapor lamp, if he needs it; you'll know how it works, how to install it or mazdas, yes, and how many and what size because you've worked on just such equipment in my shops, here in the Illumination Department.

You also are taught the many different types of light fixtures for all different purposes, store, office, factory, home and street lighting. ALL of those types of fixtures are here for you to work on, study, and familiarize yourself with. No guesswork, no "talking through your hat" or consulting a printed lesson when you get out on the job.

### Sign Department Jobs

Perhaps you've often wondered how electrical signs are made to perform so many stunts, blinking on and off, changing in colors, chaser and continuous motion effects, and so on. Now you are going to find out—first-hand! You learn all about sign construction, wiring methods, how sign lamps are arranged in series, multiple, or combination wiring. And here's some of the "mysterious" equipment that makes all those funny effects—motor-driven drum and brush-type sign flashers. You study it, trace every move, and learn just how it "works."

Whatever it is in signs, wiring and operating and calculations and installations—it's all laid before you here in living, breathing reality for you to work on and know and understand from start to finish. NOTHING has been left out.

### Armature Department Jobs

A good armature man is scarce and hard to find, consequently he pulls down big money. Here in my armature department are hundreds of motors and generators of all types for you to work on with your own hands.

You wind your own armatures, both cord practice and real wire, D. C. and A. C. You bake the insulation on finished windings. You do lathe work. You do your own testing. You tear down and build up. You are taught the constructional features of A. C. machines and laminations, etc. You get the theory and principles of A. C. armature and stator windings backed by actual work. I only wish I could stop and tell you all about this huge, vital department.

### D. C. Department Jobs

As you go from department to department you are more and more amazed at the simplicity of my training. One big important thing after another is learned without any seeming effort because you are really working on the job with high-class "bosses" right at your elbow, spending all their time doing nothing but helping you, cor-

## Is This Brief Outline Fair to Me?

On this page I've endeavored to give you a glimpse of the progress you will make from department to department, but I have not tried to go into the tiny details because I feel that these would have comparatively little interest or meaning to you at this time.

The main point is that here at Coyne you don't skip anything, nothing is overlooked, spared or economized on. New equipment is being constantly added, new and improved methods continually adopted, and an entire organization of trained, experienced instructors are at your service the moment you step into my doors.

You can read this book through in an hour or two. You can read what is on this page in probably ten or fifteen minutes. Naturally I could not begin to tell you everything about my course either on this one page or in the entire book. I have just given you this outline in order that you may realize the vastly greater things you can look forward to upon your arrival.

## Coyne Training Is Complete in Every Detail

I could easily string this page out. But I'm going to let a letter I received from Mr. W. E. Boyden, who is Chief Electrician of all the schools in one of the larger cities in Indiana, take the floor and tell you his experience and knowledge of Coyne.

Mr. Boyden writes, in part:

"I have been through your school and believe there is none to equal it in the U. S. From time to time I have boys coming to me, asking about the method of learning the Electrical Game, and I have always recommended your school to them as the BEST and QUICKEST way to learn the Electrical Trade and learn it RIGHT. As the present enrollment of the ——— schools runs close to 11,000, I have this question asked quite often."

Hundreds of Electrical Authorities, Captains of Industry, Superintendents, Department Heads, Employment Managers and other big business men have visited my great shops. Not once, not one single time, have they walked out of my doors without expressing themselves as astonished and amazed at the vast outlay of electrical machinery and the thoroughness and efficiency of my training.

recting your mistakes, and explaining everything by actual demonstration.

In the D. C. department you are "cashing in" on the knowledge you have gained in all the previous departments—it has all led up to where you are now. Here you are instructed in switchboard operation and care and operation of generators and power plant equipment, manual and automatic starters and rheostats of all types, drum controllers for electric crane and railway motors, characteristics and uses of shunt series and compound motors, and their care, testing and repair.

Operating rules, Prony brake tests for motor horse power, efficiency tests and calculation, dynamic brake testing on a big 65 K. W. generator, and generator load tests. D. C. voltmeters, ammeters, multipliers and shunts, Watt-hour meters, meter reading, testing and care. Overload trip devices, automatic remote control motor starters, and so on—these descriptions may sound "Greek" to you now, but wait until you get your hands on this big floor full of Direct Current electrical machinery—it'll be so fascinating and thrilling that it will all seem just like rolling off a log. You take one thing at a time, study and operate the machinery, and each time you do this you learn some big thing about electricity, never to be forgotten. My D. C. Department is complete in every last detail—I wish I could take the space to tell you the rest of the great facts in this wonderful department.

### A. C. Department Jobs

A storm has come up. Somewhere a big feed line breaks. The town is in darkness. How you do suppose the power company locates the break. By sending out a score of men to check up the lines? No. It's all very simple to the trained man. And it's a trained man who must now come to the rescue. Without moving a foot out of the power house or the substation he can calculate, often to within six inches, just where that feed line is broken. This is called the Wheatstone Bridge method. You, as a Coyne man, KNOW how to do this because you've done this same work here in my great A. C. department. Also how to operate the great generators that supply this energy and the switchboards that control it.

This is only one example of the valuable and thorough training I give you. Alternating Current today is the country's greatest development. It makes possible transmission of electrical energy over long distances with low losses. Thus we now have before us our great railroads with whole divisions completely electrified, never before possible. With railroad electrification will come service to farmers and others living in remote places. At present only about half of the homes in America are served with electricity. Yet we think we are living in an Electrical Age—we are, but pause to think what is yet to come!

Your training at Coyne, particularly in my A. C. department, will enable you to play a great part in this development, at big pay for yourself. Not an item of importance has been overlooked, not an important piece of electrical machinery but what is here, available for you to work upon with your own hands.

Refer to page 21, for instance, and note the huge substation that is built complete and in daily operation in my A. C. department. Note the huge switchboards, the generators and motors of all types and practically all sizes. This vast floor of electrical machinery is all connecting up, roaring with "juice" and power, and in full daily operation every school day of the week, month and year. Not any toy equipment, but huge, man-sized equipment such as you find in the field. You connect, test and overhaul these motors, and actually build transformers and condensers.

I could go and tell you about the details of your training in this department—I could tell you about rotary converters and overload and reverse current relay, tests, circuit breaker work, oil switches, exciter generators, lightning arresters and a host of other things—but suffice to say, no school in America, yes, in the world, even begins to compare with Coyne in size and vastness and quantity of equipment, in A. C. or any other departments. Everything you need in your training to be a real, full-fledged, 100 per cent Electrical Expert is here provided for you, backed by 28 years of experience and specialization!

### Automotive Department Jobs

Anybody will tell you that 75 per cent of all automotive troubles originate in the electrical systems. These troubles also are the most difficult to locate and remedy, as nine out of ten garage men don't know the first thing about electricity. That's why automotive Electrical Experts are hard to find and command such big money.

I say if you want to learn how to handle a wrench and tools around a car, go to an auto school, but if you want to learn the Electrical Branch of automotive work, there isn't a school on the face of the earth that can come within gunshot of my electrical training. That is no more than common sense. I specialize in ONE subject, electricity, and whether it's electricity applied to power house work or automobiles, it's all the same. I teach it, better than anyone else in the world can. No, sir, I don't try to straddle the fence and teach you garage work or so-called mechanics but Electricity—and nothing else.

You will be amazed when you step into my Automotive Electrical Department. You will see stretched before you dozens of ignition systems of all types, complete little power plants in themselves. You'll see Liberty and Curtiss airplane engines, motorcycles, electric car system, complete new Packard eight-in-line engine and Paige automobile, Hudson, Ford, Dort, Chevrolet, Dodge, Reo, Case, Oakland, Buick, Cadillac, Moon, Daniels, Overland, Franklin, and many other ignition systems. Nothing has been left out that would make your automotive Electrical training complete.

Many of my students say this course alone has been worth to them more than my entire tuition for my complete electrical course and hundreds of my graduates have stepped right out into splendid, prosperous businesses of their own.

### Battery Department Jobs

A Coyne trained Battery Expert can command big money anywhere. Opportunities for going into business exist on almost every hand. My training teaches you lead burning, thoroughly, easily one of the most important branches of battery work. You learn how to tear down and build up batteries and how to charge and test them. You are taught all about plate composition and materials and plate development, positive and negative, chemicals used in electrolyte, and chemical action during charge and discharge. You learn about separators, wood and rubber, high rate discharge tests, in short, everything it is possible and necessary for you to know about batteries is given to you in this department.

### Drafting Department

The Electrical Expert is the man who can be given a job installing, say, a motor or other piece of equipment, then go and do it without some one standing over him telling him every move to make. All electrical installation work, power plant, house, factory, office and store wiring are done from blue prints. That's why I give you simple drafting, all you need, so you understand how to read a blue print, or draw up a blue print yourself and how to estimate size of wires and cost of materials, etc. You get every single essential of drafting you will require as an Electrical Expert. Furthermore, if you desire, you can take my post-graduate course in advanced drafting. This fits you for electrical drafting work and estimating, a well-paid profession in itself.

### Radio Department Jobs

As the oldest and biggest electrical school of this kind in the world, also as operating one of the pioneer broadcasting stations in the country, WGES, one of the very earliest on the air in the Middle West, I naturally would not be content to give you anything but the best radio instruction which money, brains and experience can provide.

The experience of your friends and yourself will tell you that the country is flooded with radio tinkers and fellows who have "set" opinions about what's what in radio, but strangely enough, they can't agree among themselves, and you find very few of them really understand their subject. Consequently, the field is wide open for the Coyne trained Radio Expert.

Anybody can throw a few parts together and call himself an Expert. But radio is a far bigger profession than that. It calls for a knowledge of ALL BRANCHES of electricity. By getting your training in my school you understand all about circuit tracing, magnetic fields, induction, transformers, and many other things vital to radio, consequently, when you get my radio instruction, you are building from the ground up. You KNOW the principles, theory and practice of radio from start to finish.



# Inspecting World's

## Our C Would Not Without Our I

ONE of the great features of Coyne Electrical Training, and one that only the students of Coyne can enjoy, is the inspection trips to the Mammoth Power Plants and Electrical Manufacturing concerns that have given Chicago the name and fame of being the World's Greatest Electrical Center.

These inspection trips are made frequently and the students are always accompanied by the instructors and the engineers in charge of these plants. I would not consider my training complete if it were not for these trips, and my students tell me that they are an education in themselves.

I have reproduced on this page 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

### Generates Over T

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 three billion Kilo-

### Inspection Trips Dou

Chicago, besides being the electrical center of the world is also the radio broadcasting center of the country. There are more high-class broadcasting stations in Chicago than in any other city. Our students are given an opportunity to inspect these various stations and see just how they are constructed and operated.

Students are also shown how the incandescent lamps are made, for just a few blocks from the school is located the Illinois Lamp Division of the General Electric Co., which our students visit regularly.

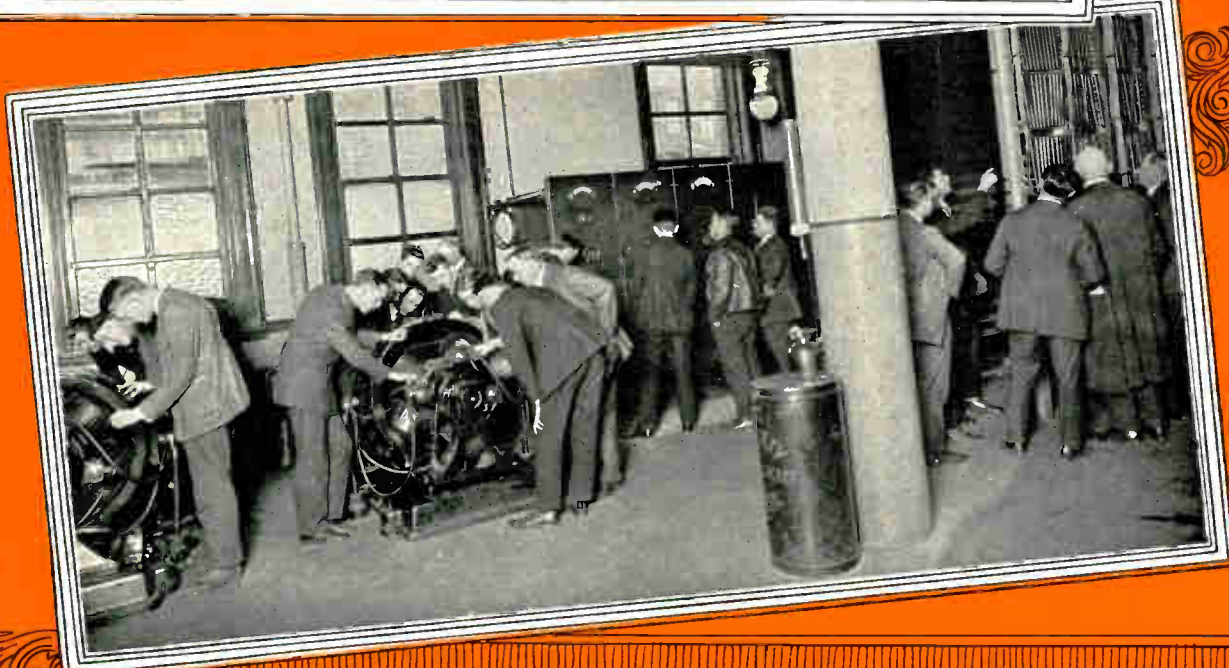
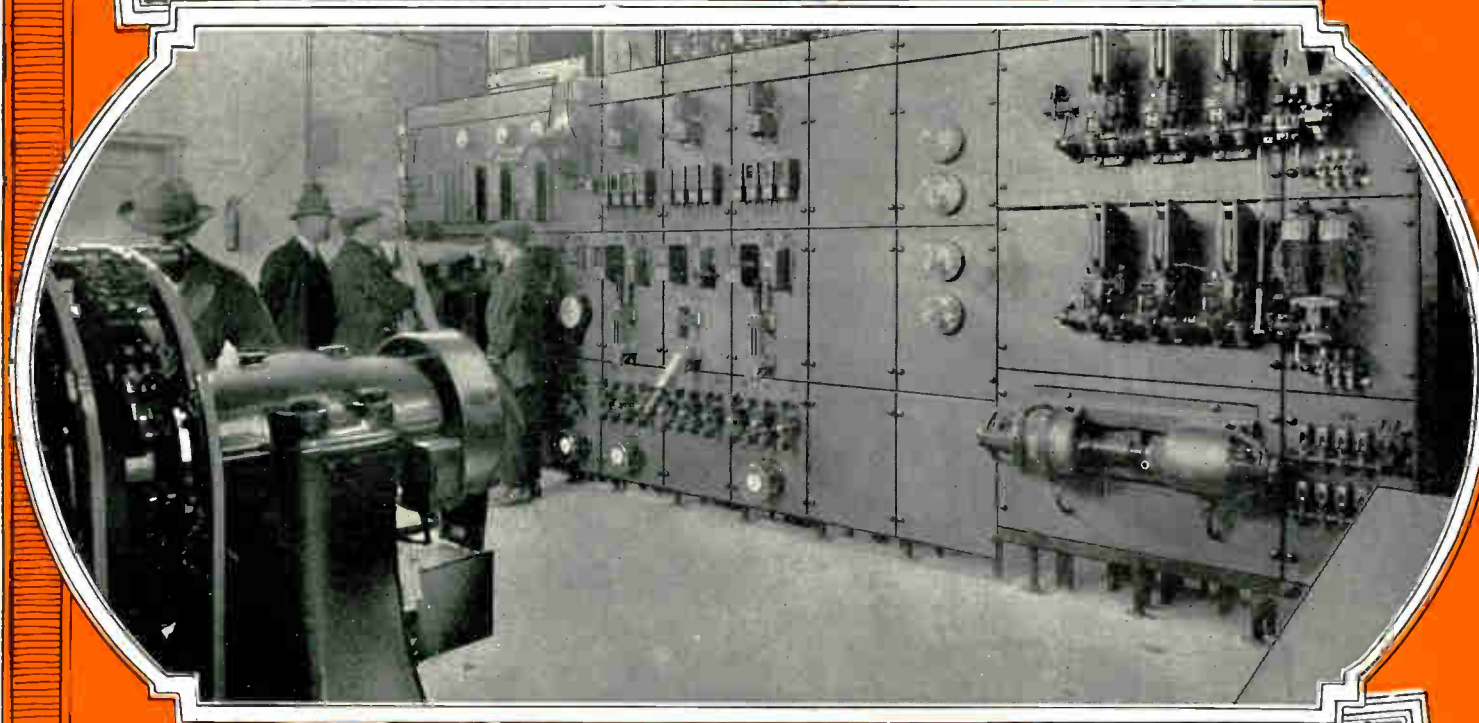
### You See the Great

The students are also taken through the Western Electric Company, which has 40,000 employees and spreads over dozens and dozens of acres. Here they see the world's largest manufacturers of telephone and radio equipment.

There probably isn't any electrical device known that isn't 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 the fractional H. P. to the gigantic ones running into hundreds of H. P.

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





# Electrical Center

## Course Be Complete Inspection Trips

a very few to give you an idea of the wonderful advantage in getting your training at Coyne.

Look at the picture in the upper left-hand corner which 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 Rapid Transit Company, which operates the gigantic Elevated electric lines of Chicago. This station is the very latest type and a wonderful sight for anyone interested in Electricity.

The students in this picture are inspecting a 2000 K. W. rotary converter.

## Two Billion K. W.

watt-hours. When you stop to think that one Kilowatt-hour will keep twenty average size incandescent lamps burning for one hour, 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.

## Real Value of Course

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 immense magnitude 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.

## Interest in Electricity

at 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 shown in the bottom right hand picture. 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 power plants along the North Shore toward Waukegan and Milwaukee.

So again I say—the place to learn electricity is at Coyne, the world's greatest electrical school, located in Chicago, the world's greatest electrical center. Here you get the many advantages that can not be had anywhere else on earth.





# A Few of the Great Army Proving

## We Owe Our Success to the

HERE'S visible proof of what Coyne Graduates are doing out on the firing line, actual evidence of the success they are having in their own business or "on the job." Space does not permit reproducing more than these few of the hundreds of pictures our Graduates have sent us, thrilling, inspiring stories of success made by just plain, everyday fellows who, in a great many cases, had little education, and in the majority of cases had no previous electrical experience.

Coyne is built on the success of its Graduates!

No institution could possibly live and prosper for more than a quarter of a century, as Coyne has, if its graduates did not make good and we realize



1. T. G. Grantham, Texas  
Testing a Finished Armature Winding.
2. R. K. Beal, Ohio  
Handling Switchboard Operation.
3. E. Pilkington, Kansas  
Installing Transformers and Oil Switches.
4. R. E. Lowe, Pennsylvania  
Doing Electrical Testing in his Own Shop.
5. A. Kleinstueber, Illinois  
Electrical Maintenance in Private Power Plant.
6. Geo. Bradley, Ohio  
Repairing a Power Motor.
7. Aurelio Navarro, Illinois  
Doing Switchboard Inspecting.
8. Hulbert Nelson, New York  
Electrician in U. S. Navy.
9. Floyd G. Cady, Illinois  
Showing Generating Room Where Mr. Cady is an Operator.
10. B. P. Lansky, Ohio  
Operating a Mammoth Switchboard.
11. J. M. King, Michigan  
Meter Testing Work.
12. Alex J. Kleinstueber, Illinois  
Doing General Power Work.
13. Geo. W. Miller, New York  
Repairing a Large A. C. Rotor.
14. Chas. Watkins, Ohio  
View of Battery Department in His Own Business.
15. C. W. Chevalier, Illinois  
"On the Job" as Power Plant Operator.
16. Louis J. Rethy, Illinois  
Operating Rotary Converter.
17. Andrew Adamson, Canada  
General Electrical Work in Huge Paper Mill.
18. E. G. Allen, Canada  
Winding Motor Armature in Own Shop.
19. C. W. Dorsett, Colorado  
In act of Pulling Main Switch cutting off entire town during a storm.
20. E. L. Gonnors, Colorado  
Doing Circuit Breaker Repairing.
21. Emil C. Young, Wisconsin  
At Work on a Mammoth Switchboard.
22. B. J. Rushka, Wisconsin  
Showing view of his own Electrical Repair Shop.

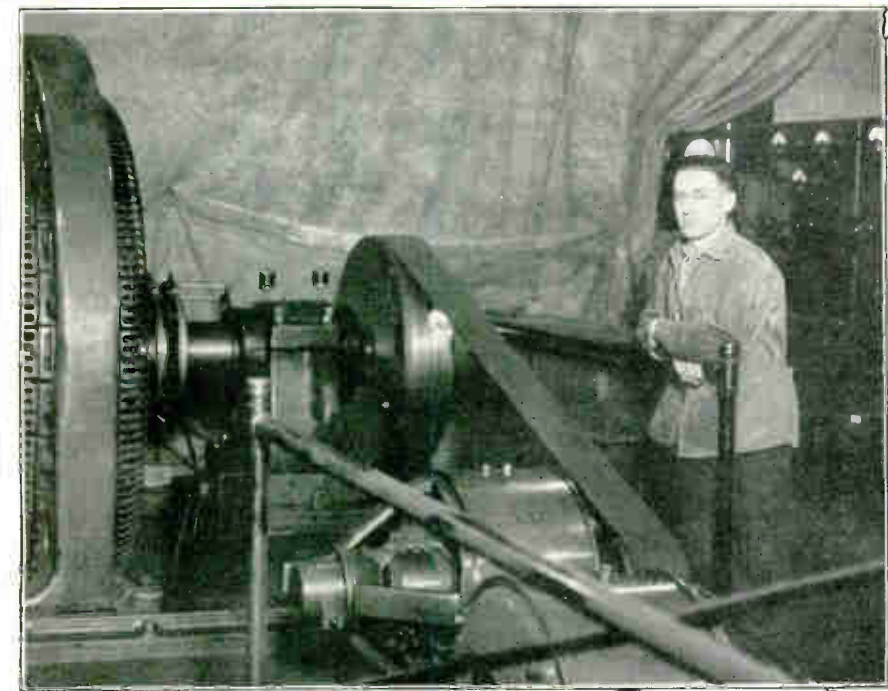


# the Success of Coyne Trained Men

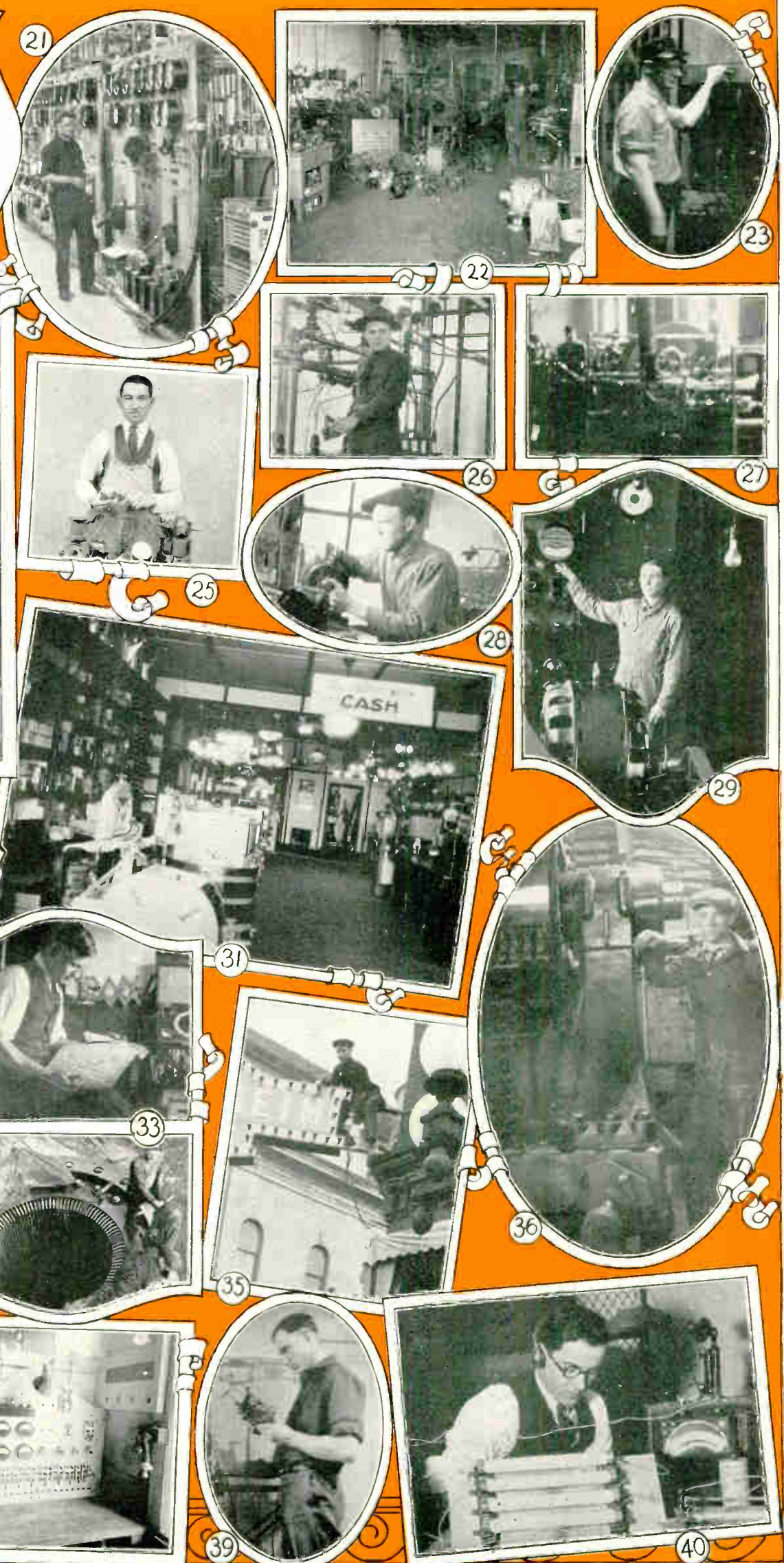
## Success of Our Graduates

that our future success, the same as our past success, must be and will be built upon the success of the men who take our training.

The volume of letters we get every year from our graduates telling of their success and rise to independence, many of them almost unbelievable, is a tribute to Coyne and its methods of training and a real inspiration to you and every other ambitious man to let Coyne train you for a successful career in this great field of electricity. Look closely at these pictures, then realize that those fellows were once just where you are today—at the cross-roads. But they were men of decision, men of action and after reading this book I want you to be decided and then act. Make up your mind that you too will be a Coyne Trained, Big Pay Electrical Expert.



23. **Robert Birno.** Illinois  
About to pull main switch on huge power-board in one of the largest Electrical Plants in Chicago.
24. **Eugene W. Feller.** West Virginia  
Standing by big alternator in his charge.
25. **John Amore.** New Jersey  
View in His Own Electrical Repair Shop.
26. **Edw. A. Walenga.** Illinois  
Another piece of high tension work.
27. **F. Fichtner.** Pennsylvania  
Employed in a steam engine driven generating plant.
28. **Geo. Kanninen.** Illinois  
Shooting armature troubles.
29. **Clarence E. Leaman.** Oklahoma  
Plant operator.
30. **Jno. W. Martin.** Pennsylvania  
Military radio operator in signal corps work.
31. **G. G. Gasal.** Iowa  
Showing view of electrical store owned by him. "Doing \$75,000.00 business yearly."
32. **James C. Bates.** California  
"On the Job" in High Power Transmission Work, Tropical substation.
33. **C. J. Reich.** Pennsylvania  
Reading the plans for his next construction job.
34. **E. P. Barnes and D. P. Danielson.** Illinois  
Construction Work, Helping Install Generating Unit in Commonwealth Edison Company's Huge Crawford Avenue Plant. One of the Largest Steam Generating Plants in the World.
35. **C. A. Knudtson.** Wisconsin  
Electrical Contractor, wiring electric sign.
36. **S. Kosakowski.** Illinois  
At the commutator end of big machine.
37. **Robert Dahl.** North Dakota  
Another Successful Graduate in Power House Work.
38. **Joe W. Glenn.** Illinois  
Showing Automotive Test Bench in Joe's Own Business, One of the Livest and Most Successful in that Section.
39. **John Kueny.** Wisconsin  
In action doing automotive electrical work.
40. **F. W. Dippel.** Wisconsin  
Doing testing in engineering department of Telephone Company.







# CHICAGO The Electrical Center of the World



## There Are Many Different Branches of Electrical Work

### Coyne Trained Men Can Specialize Successfully

FROM my students' point of view, one of the most important branches of Electricity right now is the fast-growing branch that covers the transmission of power. Why? Because as perfection develops in power transmission, the use of Electricity is bound to double and treble in a very short time.

I explained something of this when I told about the plans now being made for the coal piles. Improvements in transmission will hasten this work and will also permit cheap power being carried by wire from the mountain waterfalls right to the firesides of the people as is now being done in some localities in the West, where already the houses are built without chimneys and all the cooling, lighting, heating, refrigerating, etc., are done by Electricity.

More efficient power transmission means cheaper power. And, in turn, this means extensive use of Electricity in homes all over the country, as well as in the Western homes mentioned above. This tremendous jump in the domestic use of Electricity opens up a marvelous field for the Coyne trained master Electrical EXPERT!

### Specialization

Within the Electrical Profession itself, there will spring up off-shoots and special departments. We will have all kinds of Electrical Specialists. You may decide to devote all your time to just one of these special lines.

Millions of dollars are spent annually in the purchase of Radio Equipment alone, one of the recent developments in Electricity, and the Radio field is only started. The branch is a rich one for the Coyne trained Expert—both in financial returns and opportunity for varied, interesting work.

And yet, this is only one branch of the wonderful field of Electricity!

### Contractor Dealer— Maintenance Engineer

Many of my graduates enter business for themselves as contractors and dealers, and this field offers a big opportunity for the Coyne Trained Expert. There are thousands of old homes to be wired, to say nothing of the new buildings and homes which require trained men to do the work. Then they have the sales from their store of Electrical appliances and the repair of small and large motors. This field offers an opportunity for Coyne trained men to make from \$3,000 to \$20,000 a year.

Think of the tremendous opportunities as a maintenance Engineer in the big Power Houses and the large industrial institutions, many of them which have their own generating plant and need competent trained men to see that this machinery is kept in running condition. This branch of work offers a big future to the Coyne Trained Expert.

### This Spells Your Success in Any One of a Dozen Lines!

Naturally, this tremendous rush to Electricity on the part of the whole world means hundreds of thousands of opportunities to men who are completely trained to profit by them. As electric stoves come into general favor, for example, men are need to—

1. Maintain the power equipment in the factories in which they are built, as in all the ordinary factories, too, which are expanding their Electrical equipment.
2. Design the electric stoves.
3. Work on new models and test them.
4. Build the stoves.
5. Sell them.

6. Build the new power plants which will have to be built to take care of the increased demand for current that electric stoves will create.
7. Maintain and operate these power plants.

You see for yourself how many opportunities—specialized opportunities—are waiting for COYNE Trained Electrical EXPERTS, who are thoroughly trained, as a man MUST be, to take advantage of the best openings wherever and as quickly as they occur.

### Warning!

But don't think that you can "get by" in any of the specialized branches of Electricity mentioned on this page, unless your training has covered all branches. It is better to know this now than to waste a lot of your valuable time and money in finding it out later, and so I am giving you fair warning.

### Your Training MUST Be COMPLETE—No Matter WHERE You Get It!

Yes, sir! How could even the Dealer-Contractor properly service so simple a thing as an Electric suction cleaner, if he did not understand the armature that is used in its motor? How could the Superintendent of a mammoth Electric Power Plant hold his position if he did not understand the circuits which are among the very first things you learn here at Coyne?

And so it goes throughout the entire Industry. Every branch overlaps every other branch and has something to do with it. To make good in even one branch, you must know all branches—which is why Coyne gives only ONE big Complete training, the MOST COMPLETE and THOROUGH that money can buy, instead of merely half-training men by means of small, incomplete, so-called "branch courses."

Coyne offers you COMPLETE training—the kind you MUST have!

### And It Must Be PRACTICAL!

That's another important qualification besides completeness. And so I say to you, no matter where you get your training, be sure that it is PRACTICAL and COMPLETE.

The great Electrical Profession today has no use for day-dreaming theorists or mere "paper electricians." It wants EXPERTS, Completely Trained Practical Experts—who know what they are doing. And who KNOW that they know it, because of having done the same work before as you do here at Coyne.

You know, a piece of machinery looks a whole lot different in a shop or power plant than a picture of it looks in a book. That explains why we do not teach by books at Coyne. You work on actual equipment, as you noticed in the photographs throughout this book. Therefore, when you get out on the job, you are SURE OF YOURSELF! Things that you will be called upon to do you have already done at Coyne—and a skilled instructor, a practical man himself, has watched you do it, so that you know you

did it right. With such training to prepare you, you'll prove, on any job you may tackle, that you are a genuine practical EXPERT, fully entitled to an EXPERT'S pay!

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

There's no better way to make sure! Come to Coyne—the Electrical School that is endorsed by Electrical Industry. This endorsement proves what the big Electrical Companies think of my instruction. The success of my graduates is additional proof of what I can do for you. The COYNE reputation, built up through 28 years of honest, sincere dealing with ambitious men who have won big salaries, important positions, or profitable business of their own because of Coyne Training—is the third proof that you will be acting with good judgment when you come here.

Therefore, my friend, do not hesitate. Big money and marvelous opportunities are waiting for you. Coyne has proved that it can place them within your reach, with only 12 weeks training. So make up your mind promptly—because the sooner you get here, the sooner you can qualify as a Big Electrical EXPERT, able to earn \$2,500 to \$10,000 a year!

## You Have Many Opportunities For Quick and Big SUCCESS—If You Are a COYNE Trained MASTER ELECTRICAL EXPERT

#### Contractor-Dealer

All kinds of house wiring, construction work and electrical appliance sales offer splendid opportunities to make from \$5,000 to \$15,000 a year.

#### Power Plant and Sub- Station Operator Maintenance Engineer

General operation, upkeep and repair of power plant apparatus, as well as keeping track of the various meters, a well paid field.

#### Switchboard Operator

Maintaining Electrical equipment in factories, mines, railroads, etc., etc.

#### Armature Expert

An easy and sure stepping stone to BIGGER THINGS. Openings in every city at good pay.

#### Power Plant Engineer

Every motor and generator has an armature. Millions must be kept running by big pay EXPERTS.

#### Radio Expert

Laying out construction plans, supervising installation, operation, etc., etc.

#### Sales Engineer

In operating broadcasting stations; selling, repairing and installing apparatus, a new field and tremendous opportunities in your own business.

#### Signal Engineer

Electrical manufacturers want trained men to sell their products. Make up to \$15,000 a year.

#### Electrical Draftsman

Every railroad has complicated Electrical signals in charge of highly paid Electrical Experts.

#### Auto, Truck and Tractor Electrician Battery Expert

A fascinating big pay field if you like inside work. Auto troubles are largely Electrical. Most mechanics know nothing about Electricity. Coyne men make big money.

#### Farm Lighting Plant Expert

Millions of autos, radio sets, farm lighting plants, need battery service and a big field for your own business.

#### Electrical Sign Expert

Splendid for the man who wants to get away from farm work and still live in his own community. Big opportunities.

#### Service Station Owner

A big field if you work in the cities. Includes many advertising devices.

An enormous field with wonderful opportunities to make big money practically everywhere!

**But You Must Be Trained COMPLETELY in All Branches in Order  
to Make Good!**

Remember, the above list of specialized branches is only a partial list. A complete list would more than fill this page! And then notice that, small as the list is, it nevertheless shows how practically every branch of Electrical work absolutely requires a knowledge of every other branch. Therefore, in order to succeed, you must be COMPLETELY trained—as COYNE trains you.





# AMERICA'S OLDEST PRACTICAL SCHOOL OF ELECTRICITY



## I Urge You to Investigate My School!

**I** NOT only cordially invite you to investigate my school but I urge you to, because only in this way can you puncture the high-sounding claims and fancy words used by so many schools and learn the actual naked facts. Back in the nineties when Electricity was growing its first real muscle, the great school of Coyne was founded. Ask any of the "old timers" if there were any "learn by doing" electrical schools in those days except Coyne.

So, as your first acid test of reliability, apply the age test.

But age, fine in itself, isn't everything. Many old concerns go out of business from dry rot, lack of new ideas, lack of leadership and progressiveness. So, apply that as acid test number two, the growth and size of a school. Again your own Coyne will score because there isn't a school of this kind in the United States that even begins to compare in size. In spite of the fact that I am unable to get enough students to meet the continued shortage of trained men, I still enroll, in six months' time, more students than any other school of this kind enrolls in two years.

There must be a reason!

## The Two Biggest Banks West of New York Know Me

Either the great Continental and Commercial National Bank of Chicago or the powerful National Bank of the Republic knows me.

The School Sections of any of the large Chicago newspapers, a few of which are The Chicago Tribune, Chicago Daily News, Chicago Herald-Examiner or the Chicago American, know all about the great work Coyne is doing.

This also applies with the Illinois Chamber of Commerce or the Chicago Association of Commerce.

Or the Electric Club of Chicago or the West Town Chamber of Commerce, Chicago, and hosts of other organizations.

Then let your good judgment decide.

Don't, my friend, take chances with the most precious thing in your life, your investment in your future.

Apply the acid tests!

And, back of it all, keep in mind,

"Founded in 1899."

## I Owe My School's Success to My Students and Graduates

Note the letter from Mr. McCleary on page 8 of this book. Read the few other letters I have been able to find space for. These letters, for lack of space, must represent thousands, yes, tens of thousands, of other letters that I have received.

The other day a student enrolled from Hammond, Indiana, and in talking with him he said he enrolled due to the fact that his "chief" was a Coyne Graduate and had recommended Coyne to him. This Coyne Graduate was General Foreman of the car wiring department of one of the largest builders of railroad coaches in the country.

I am deeply proud of the fact that nearly half of my students come to me on the recommendation of my other students and graduates. It seems to me this is the greatest testimonial any school could possibly have.

## A Tremendous Outlay of Equipment Awaits You

**H**ERE in the great shops of Coyne you won't find any doodads or toy outfits to play with in the front parlor but real Electrical Machinery, on a huge scale, all hooked up, thrilling and surging with life, in actual operation every school day of the year, just as you find it later out on the job.

You learn on exactly the same Electrical Equipment that later you are paid for working on, out in the field.

Skeleton houses for real wiring work, hundreds of armatures, motors and generators, mine type telephones, telephone switchboards, telegraph call systems, remote control apparatus, power house switchboards, transmission lines, Wheatstone Bridge testing work, detecting a line break on a stormy night to within a few feet without leaving the power house, a real outdoor type substation and vast quantities of other Electrical Machinery I couldn't even begin to describe in this short space.

Is it any wonder that when a Coyne man leaves my shops he walks on air, and tackles confidently the most difficult and highest paid jobs? Is it any wonder that Coyne men are absorbed into the industry just as fast as they can possibly graduate?

## Nothing Takes the Place of Practical Training

Imagine, if you can, trying to substitute my kind of training with musty, dry books or printed lessons by mail taken from a book. Why, there is absolutely no comparison. I have no complaint about books in their place. But you are putting the cart before the horse if you try to wrestle with dry theory out of books or mail lessons first.

My training is just 22 times faster and more efficient than any other method. That is because your eye has been proven by science to be that much faster than your other senses. By my "Learn by Doing" method your eye sees, and follows, and understands every piece of machinery and every movement of your hands.

## Don't Gamble With Your Future—Give It the Best Training You Can Get

Whatever you do, don't gamble with the most precious thing in your life—your future. Do all the "shopping" you wish, but shop for quality in the school you go to, not for "bargains" or to save a few dollars.

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, and no single detail is skimmed or overlooked or "economized" on, even though my training would still be "good enough."

Neither do I confuse you or lower the efficiency of my training by having half a dozen chestnuts in the fire at one time. I don't try to teach half a dozen different trades! No! I can't get enough men and young men right now for the opportunities in the Electrical Profession, let alone taking on something else.

## I Practice What I Preach—I Specialize

What kind of a fellow would I be, anyway, if I told you that this is the age of Specialists, and for you to be an Electrical Specialist, then turned right around and run my school on the Jack-of-all-trades plan? But that isn't my method or style. I believe in practicing what I preach.

If your horse gets sick, you call a horse doctor, and he may be the finest horse doctor in the world, but if your little sister or brother gets sick you wouldn't expect your horse doctor to be a physician, too, and on top of that be your barber, banker and lawyer, and so on. No—you expect him to be a specialist. That, in a nutshell, is why I don't believe in trying to ride several horses at one time—I know it can't be done.

## Why I Can Train You in only Twelve Weeks

**T**HE Electrical Industry is not amazed at my ability to give a man a thorough, solid training in ALL branches of Electricity in the short space of twelve happy weeks. They have long since ceased to wonder.

They have seen and employed Coyne graduates and KNOW that I am doing it. Results speak louder than words. But nevertheless it is not so amazing when you get right down to the plain facts.

To begin with, the great shops of Coyne aren't run like an ordinary school, such as, say, a public school. Every school day here means seven hours of practical training (except half day Saturdays, of course). Then again, ordinary schools aren't open on Saturdays at all, so that adds some more time.

We all work at Coyne. We don't have a lot of holidays, observing only the big national holidays. The school is never closed down during the summer; in fact, that is one of my busy times, as I find a great many boys can not enter at any other time.

So, you see, three months in my shops means a full three months of fruitful, happy, intensive work—not a minute lost.

There are some schools that have very long, drawn out courses stretching over a period of several years. I have investigated the efficiency of my methods and found that the course of training I give is equivalent, in practical work, to what you would get in one of those places in several years. Think of saving precious years of your life at one stroke.

That has been possible, not by so called "short cut" methods, but by sticking to practical theory and principles of Electricity which are at least 98 per cent of the theory used on Practical Electrical Work. I have weeded out the useless, far-fetched, dry theory that most persons wouldn't have the slightest use for anyway, except somebody like Einstein or a professor.

## Regular Schedule of Course—12 Weeks Stay Longer Than Average Time If You Like

Every student at Coyne receives individual guidance and is checked and charted through his course strictly as an individual. He passes an individual examination, and is not governed in the slightest by whether other students take, or do not take, a given examination.

This is made possible by the fact that there are no classes at Coyne to push you ahead or hold you back, as the case might be.

On the other hand, I want it plainly understood that, while every student is under personal and individual guidance from the moment he comes under my care, that this does not mean that he can not stay in any of the departments for a longer period if he chooses. Some students desire to stay longer in one department or another because they want to specialize more in that branch of work; some absorb their training a trifle slower than others, and so on—for various reasons a student may want this extra work.

The average time for graduation is three months and nearly all of my students finish in this time, but I don't require them to under any circumstances! I ask and require of every student that before he tries to pass the examination to go on to the next department that he have a thorough knowledge of his subject.

I have always believed that the old time system of putting a fellow in a class where he's got to move right along with all the other students is wrong. Sometimes a fellow doesn't grasp things just as quick as another and for that reason he should be given encouragement and more time. That's why I train my students by individual instruction. No student at Coyne is hurried along or held back; he goes along just as his individual case demands.

**FOUNDED  
1899**

## Apply the Acid Tests of Age and Size

Keep in mind, my friend, what I have said elsewhere on this page, that Coyne is 28 years old, and stands today a PIONEER and ORIGINATOR and PACE SETTER. Ask anybody who knows whether there were any schools like Coyne back in the nineties! He'll tell you that, except Coyne, there wasn't one—NOT ONE!

But, old as Coyne is, Coyne retains her youthful vigor and progressiveness, romping so far ahead of her field of imitators and trailers that there is no comparison whatsoever.

You have only ONE training to give yourself; look for the best money and experience can give you. Don't take a chance with your future, the most precious thing in your life.





# EMPLOYMENT DEPARTMENT



## 60,000 New Electrical Experts Needed Yearly

**S**IXTY 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. Those 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!

## Hundreds of Big Pay Electrical Jobs Being Created Daily

You will be amazed to find big-pay opportunities bobbing their heads at you from every side, once you get into the field. Time and again my graduates have written about having two and three offers at one and the same time.

Many big jobs are in radio service work, in radio stores, in house wiring, inspection work, maintenance of electrical machinery, electrical maintenance and construction on railroads, block signal systems, coach wiring, power house men, substation men, opportunities in electrical stores, contracting, and hosts of other activities I could not begin to mention in this short space.

## Many a Time I'm Unable To Fill Jobs I Have Open

My Employment Manager is not one of those Professional Employment Managers who gets firms disgusted by sending them anybody he can lay his hands on. No, sir!

My Employment Manager is a trained Electrical man. He knows Electricity from top to bottom. When a firm wants a power house man he knows better than to send them a graduate who prefers construction work. He won't send an expert radio man out to fill a job wiring houses or doing substation work. No. He knows just how to pick out the right job for every graduate.

That is the kind of service and attention you will get. You won't be asked to go into a different branch than the one you like best.

That, in short, is why my Employment Department has been so successful. Employers have learned that the employes we send them are carefully selected. My Employment Manager knows how to talk their language and fill the jobs they have open as good or better than they themselves could. Is it any wonder, then, that employers, more and more, are looking to Coyne to keep them supplied?

## A Few of the Score of Branches You Can Enter

Here is a partial list of the kind of trained men called for right along:

- |                                       |   |
|---------------------------------------|---|
| Power Plant Operators.                | Maintenance Men for Oil Companies.                    |
| Substation Operators.                 | Field Engineers for Oil Companies.                    |
| Power Plant Trouble Shooters.         | Radio Service Men.                                    |
| Substation Trouble Shooters.          | Electric Vehicle Construction.                        |
| Power Plant Construction Work.        | Illumination Experts.                                 |
| Substation Construction Work.         | Sign Flasher System Experts.                          |
| Field Construction Men.               | Automotive Ignition Experts.                          |
| Field "Gang" Bosses.                  | Battery Experts.                                      |
| House Wiring Experts.                 | Farm Lighting Plant Experts.                          |
| Expert Armature Winders.              | Switchboard Control Men.                              |
| Motor and Generator Men.              | Electrical Draftsmen.                                 |
| Car Wiring Experts.                   | Radio Broadcasting Operators.                         |
| Railroad Signal Work.                 | Radio Installation Experts.                           |
| Maintenance Men for Hotels.           | Power Plant Engineers.                                |
| Maintenance Men for Office Buildings. | Electrical Salesmen in dozens of branches             |
| Maintenance Men for Factories.        | and scores of other openings too numerous to mention. |
| Maintenance Men for Mines.            |   |

## What a Few Firms Say:

A big cast-iron pipe company in Alabama writes: "We think we understand your interest in Mr. Hayes and it shows a fine spirit of co-operation in endeavoring to place in the industry those students who have completed the preparation which you are able to give them."

The Electrical Engineer of a big railroad in Canada writes to a prospective student: "I know the school has a good reputation. Chicago is also the home of a great deal of electrical development, so it is quite in order that a good electrical school should be located there. I think the possession of a diploma from this school would be of value."

The School and College Bureau of one of America's most powerful newspapers writes: "We are always glad to recommend Coyne, because we believe in the school."

A large Electrical Society writes: "We know it to be a fact that there are thousands of successful Coyne graduates all over the country."

A concern that has employed scores of Coyne men writes: "Allow me to compliment you on your judgment of men to fill positions with us. Each man sent fills the position required and we find him well qualified with a thorough, practical knowledge of our business which he evidently received in your school shops."

"It is indeed a real pleasure to call on you for help from time to time, and should you need a recommendation or a reference, do not hesitate to use our name. Be assured you will hear from us from time to time, as we have openings for men who want to cash in on the splendid foundation you are laying for them."

NOTE: The above few must speak for countless other similar letters in my files. It is absolutely impossible even to start publishing them in this limited space. Every letter is unsolicited, and the signed original with full name and address is on file. It will gladly be shown to you, or full name and address sent you by mail, upon request.

## My Employment Department Helps Place You in the Branch You Want

When you graduate from my school you do not have to ask for employment help. No! That's not my way of doing things. Every student receives instant help on or before the time he receives his diploma.

Why has my Employment Department been so successful? Why have I been able to go right along, week in and week out, year after year, helping thousands of my boys into their life work without once making a "promise" or so-called "guarantee" of jobs to anyone? I am asked that question every day.

The main reason for this success, of course, is the fact that I have the sincere determination to "see you through." My Employment Manager knows that; he knows he's on my payroll to carry that policy out, and that he is successful in doing it is proven by the fact that he actually lands from 2,000 to 3,000 jobs a year.

## "Send as Many Electrical Men as You Can Get"

That's a very common request received by us right along. One big firm requested eleven (11) Armature Experts at one time, the pay running as high as \$1.25 an hour to start. Another

large radio concern asked for twenty radio experts in one day, and many times we can not supply the demand.

Another large company building electric coaches which had to be wired up and power equipped called up frantically one day and said to send all the Electrical Men we could lay hands on. This company was filling a large order for a giant railroad which was electrifying its lines.

I could go on and tell you of hundreds of incidents just like the above. They only prove, once more, the tremendous opportunity in the world's fastest growing and greatest profession, the Electrical Industry, for the men and young men, of all ages, with and without education, who are willing to invest a little time and effort in themselves to qualify.

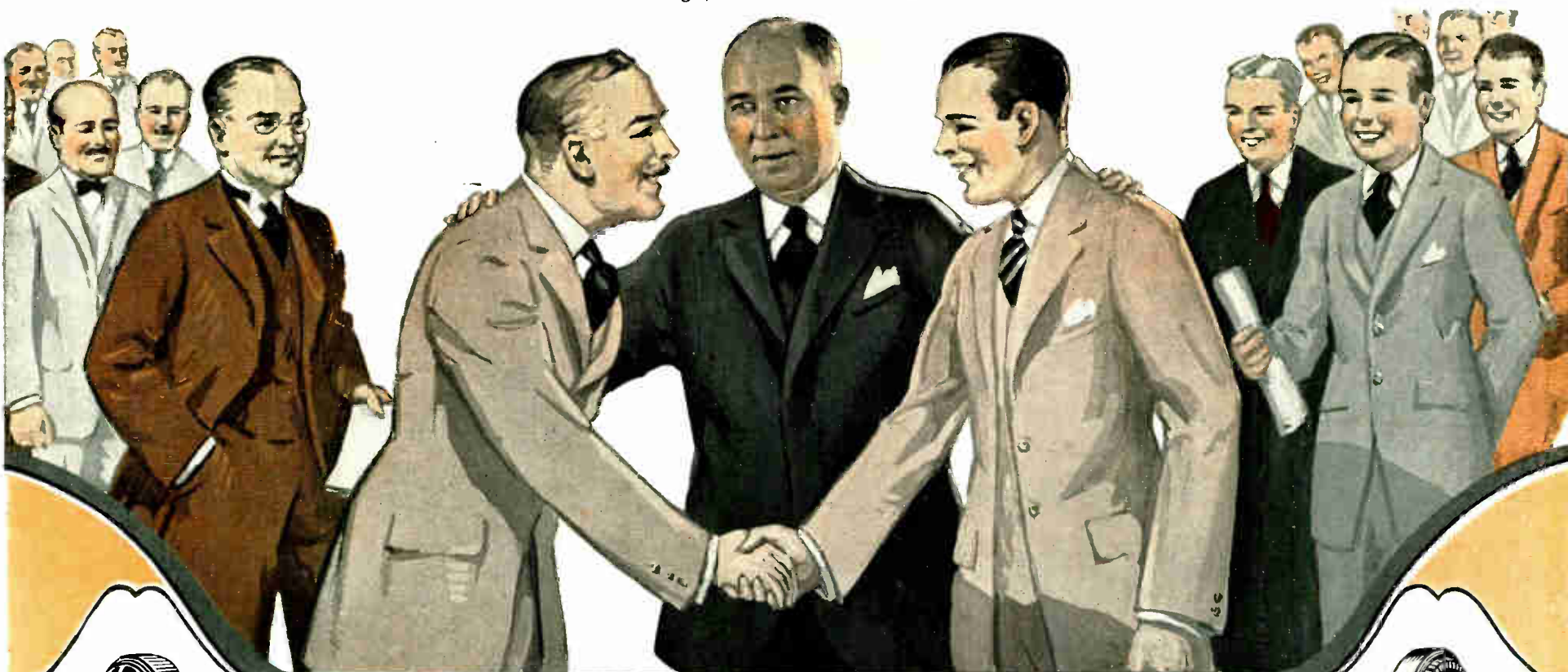
## Shortage So Great Many Firms Send Their Employes to Me For Training

Every once in a while I receive letters from big firms asking terms of tuition and other information about my course.

Many of my students have come here on special Leaves of Absence granted them by their employers so they could get my training.

Other firms not only grant Leaves of Absence but help pay the cost of the training for their employes as well. This certainly should prove to the most skeptical the tremendous demand for the TRAINED Electrical Expert.





### What Some of My Graduates Say

*E. J. ARNOLD: Thank you for the letter written regarding my record to the Edison Co. I am now an employe at the 27th Street substation.*

*THOMAS B. BIRD: Thank you for your help in getting me placed with the Public Service Co. I have now been given a regular shift in spite of the fact that another man started breaking in for the position some weeks before I did.*

*ARTHUR E. BRITTIN: I wish to let you know that I accepted the position you offered me and am well pleased in every way.*

*MILO D. CARPENTER: Am working now with (large light and power company) thanks to your card.*

*W. G. CLARK: Thank you for the position you procured for me as an electrical man in a garage. When I was in need of help Old Coyne was right on the job.*

*E. W. CONNELL (father of two of my graduates): My son Oswald, as you remember, took your electrical course and is now making good in this work. To show you how much we think of your course, I am sending you another boy, my son Armand.*

*E. J. DAVIS: Just a line to notify you I got the position at \_\_\_\_\_ Company in the Electrical Department.*

**NOTE:** My files are overflowing with letters like the above. Addresses in full furnished upon request, or signed originals gladly shown at any time.



### What Some of My Graduates Say

*AMOS C. HARTZLER: I have taken the job with the \_\_\_\_\_ Electric Company and am starting to work this morning.*

*E. J. HEISLER (who played on my baseball team): This is to let you know that I successfully landed the job. Starting to work tomorrow morning. They sure are well pleased with their other Coyne men.*

*R. D. HICKERSON: I wish it were possible to express in mere words my appreciation for the services rendered me by your school through the assistance of your employment department in securing a place for me. My work here is a delight—and it pays.*

*WM. A. HILAS: Last week I went to the place you told me about and I applied for a job. I was hired the same day, and I went to work the next day.*

*S. C. JUDY: Having landed the position with the \_\_\_\_\_ Electric Mfg. Co. as demonstrating salesman and service man, I want to thank you personally for assisting me to this position. Were it not for the simple, perfect, learn-by-doing method of training given me by Old Coyne I should never have been competent to accept such a position.*

*BRUCE F. LINDSAY: I wish to tell you I landed the job you sent me on and have held it. When I worked two weeks I received my first raise, which I think was due to the training I received at Coyne.*

**NOTE:** My files are overflowing with letters like the above. Addresses in full furnished upon request, or signed originals gladly shown at any time.

# I Have Introduced Thousands of Men to **BIG PAY JOBS** IN **ELECTRICITY**

**O**NE of the first things that happens when you enroll in my shops is a very personal interview given you by my Graduate Manager. He asks you what branch of electrical work you want to take up after you graduate, what part of the country you want to locate in, and other important questions. This information is carefully kept on file.

My Graduate Manager then confers with the Employment Department, your work in the various departments of the shops is watched carefully, and finally when you graduate I am prepared to help you in a definite, carefully thought out way.

I have at my finger tips the name and street and town address of every important light and power company, every switchboard manufacturer, and every important electrical contractor in the United States. I can help you locate in any part of the United States; I don't care how small and out-of-the-way the community may be.

I also get weekly reports on every important new electrical project started, the size of it, when it will be started or completed, and as every one of these projects calls for trained men, I will put you in touch with them when you receive your diploma.

I also furnish you a handsome letter of introduction. In addition I write special letters for you either before or after you have been employed, or both.

I offer you this Employment Service, not only upon graduation, but immediately upon your entering my shops. Many students have laid their plans very carefully and have some firm in mind they want to work for after graduation. I will gladly send special confidential reports to these employers for you, informing them of your work in the various departments.

Another very important feature of my Employment Service is putting you in touch with other Coyne graduates who hold big positions and who employ many Coyne men on their own authority. Whether you desire to get in touch with them for this purpose or merely to meet another loyal member of the great Coyne family, you will get lasting pleasure and benefit from meeting them and many times they are in a position to give you many a little boost or "inside tip" that no one not living in their same town could give you.

## Do I Guarantee Jobs?

I would not insult your intelligence by saying that I guarantee jobs to every Tom, Dick and Harry who came along. That would be just like trying to guarantee the weather, or that good seeds would produce a good crop. Any farmer knows he can buy good seeds and still grow a poor crop. He wouldn't think of asking the merchant who sold them to guarantee a good crop, because how does the merchant know that they will be planted in the right soil, properly weeded, and cultivated.

Now I am a good deal in the position of that seed merchant. I guarantee my training. I know that with the right diligence, determination and hard work it will grow into a fine job when my student graduates. If you have the desire and determination to work hard, the job part of it will be the last thing in your thoughts. Find the man, is the hue and cry today, the trained man.

No, my friend, my school has too good a reputation for honesty and square dealing. I know that a so-called job "guarantee" appeals only to the most ignorant, weakest class of fellows. And they will find there's a "catch" in it—that success isn't handed out on a silver platter without plenty of hard work.

The amazing thing, however, is that while I refuse to "guarantee jobs," I still am actually placing more students into jobs than any other school of this kind in the country. In fact, I often have jobs left over. I could go out and land at least as many more positions if I had the students available for them. My school has been built on the reputation I have made of giving my graduates service and help. I couldn't afford to hurt this reputation, and that's one of the big reasons I'm anxious to place every one of my graduates in a big paying job.





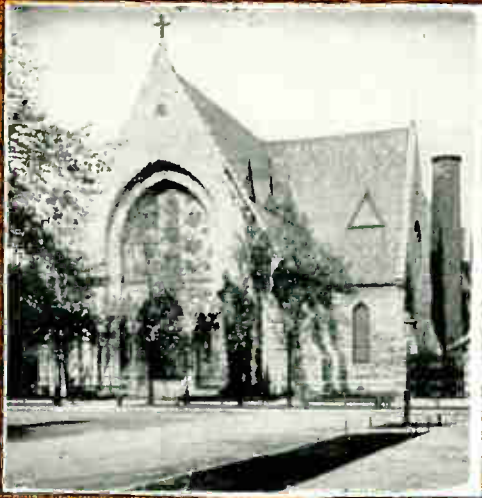
GRACE M.E. CHURCH.



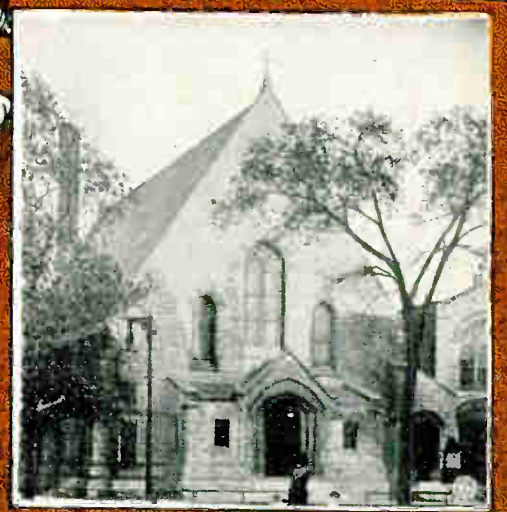
HOLY NAME CATHEDRAL.



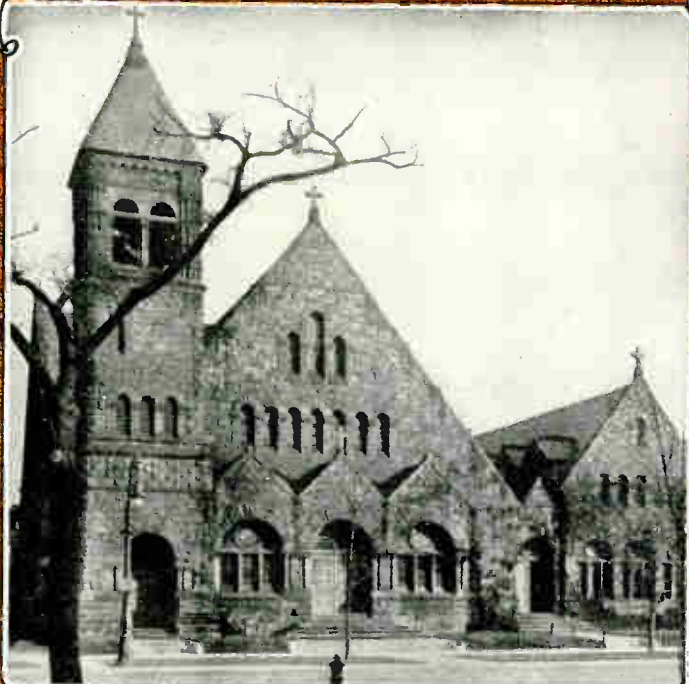
FOURTH PRESBYTERIAN CHURCH.



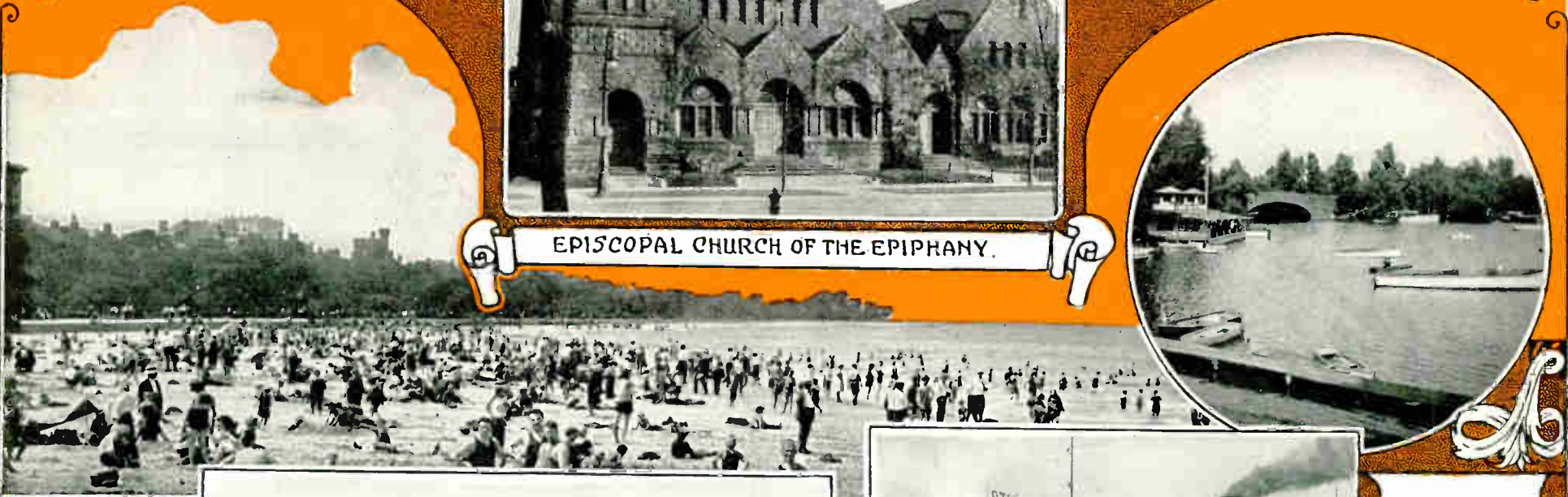
NEW ENGLAND CONGREGATIONAL CHURCH.



CHURCH OF THE ASCENSION.



EPISCOPAL CHURCH OF THE EPIPHANY.



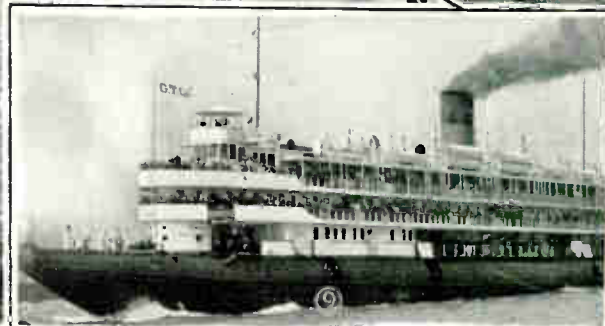
OAK STREET BATHING BEACH.



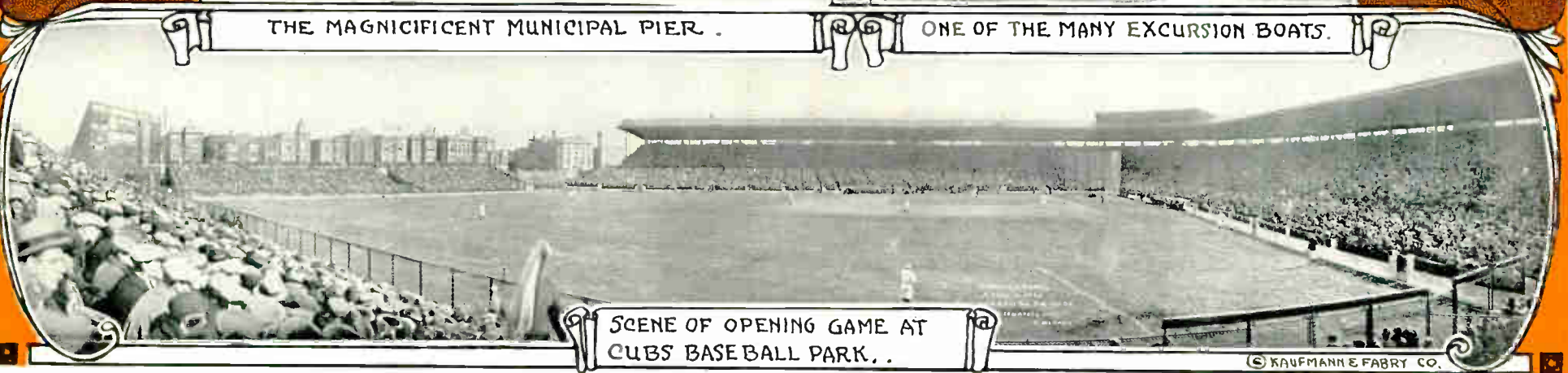
BOATING IN THE JACKSON PARK LAGOON.



THE MAGNIFICENT MUNICIPAL PIER.



ONE OF THE MANY EXCURSION BOATS.



SCENE OF OPENING GAME AT CUBS BASE BALL PARK.

© KAUFMANN & FABRY CO.





# WELFARE AND RECREATION



## My Welfare Department Looks After You

THE 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. I am very "touchy" about this because I am a father myself. I know what I would expect of a school in looking after a son of mine and it is only natural for me to put myself in the position of parents who entrust their sons to my care.

My Welfare 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; in fact, he takes the place of "Dad" in many an instance.

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 the opposite page.

Once every week at the close of the school hour, a Bible Class is held in the Assembly Room. 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, in order that we may lead fuller, more useful and better lives.

### 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 Friday, I stage, during the noon hour, a high-class entertainment. The double size stage is lowered 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.

### 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.

During the summer months, Coyne always has a fine baseball team, and usually from two to three teams. There are usually two student teams, and one team made up of instructors. You will never enjoy anything more in your life than seeing the instructors' team match bats with the student team. It's usually nip and tuck—and you never saw any hotter games than these, and side-splitting with fun.

All games are played on regulation diamonds in Chicago's great park system not far from the school and outside teams are scheduled right along throughout the season.

The Coyne orchestra is another interesting feature. This orchestra has secured many outside engagements through the Y. M. C. A. and Y. W. C. A., who hold entertainments for their members and they have always stated that they were more than pleased with the quality of music furnished.

But, of course, this orchestra also plays regularly for the student body during the noon hour, and it would do your heart good to hear the rest of the students crowd up around and sing out their popular songs. It just sort of sends a thrill through you. If you happen to play an instrument, don't fail to bring it along and join the boys. New members always welcome.

Basket-ball is another athletic activity the boys get a great "kick" out of. The Jefferson Park Institute, located right on Throop Street about two blocks up from the school, has a splendid gymnasium which you might as well call the Coyne gymnasium, as probably 80 per cent of the boys there are Coyne students.

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

WHEN you arrive, one of the first things you'll want to do will be unpack the suitcase, get your clothes hung up, and maybe wash off the "signs of travel." So let's get that off our mind. Right near the school is a fine, cheerful, private home that you will select from the large number my assistant will offer you. The prices run as low as \$2 and \$2.50 a week. They are fine, clean rooms, cheerful, quiet, and in the homes of fine people who welcome Coyne students and usually accept nobody else in their homes.

They are located within walking distance of the school, so you have no carfare to pay out. Regarding your meals, I can arrange for these for you as low as \$4.75 a week for 21 full meals, or a fraction less than 23 cents a meal.

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, promptly and cheerfully.

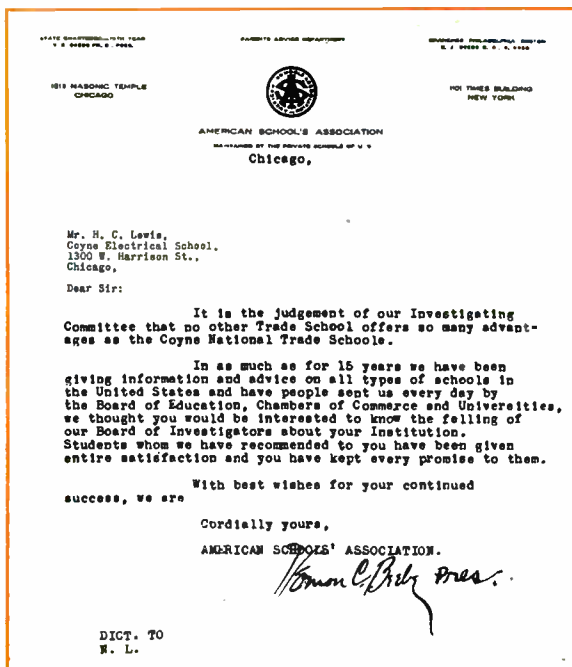
### The Y. M. C. A. Right Near Coyne

The Y. M. C. A. is only a short step from Coyne. Coyne students are especially invited to attend the social events that take place both at the Y. M. C. A. and the Jefferson Park Institute. The boys get together regularly every week, have their debating teams, "feeds," athletic activities, and here you will make friendships that will ring down the corridors of time in your memory.

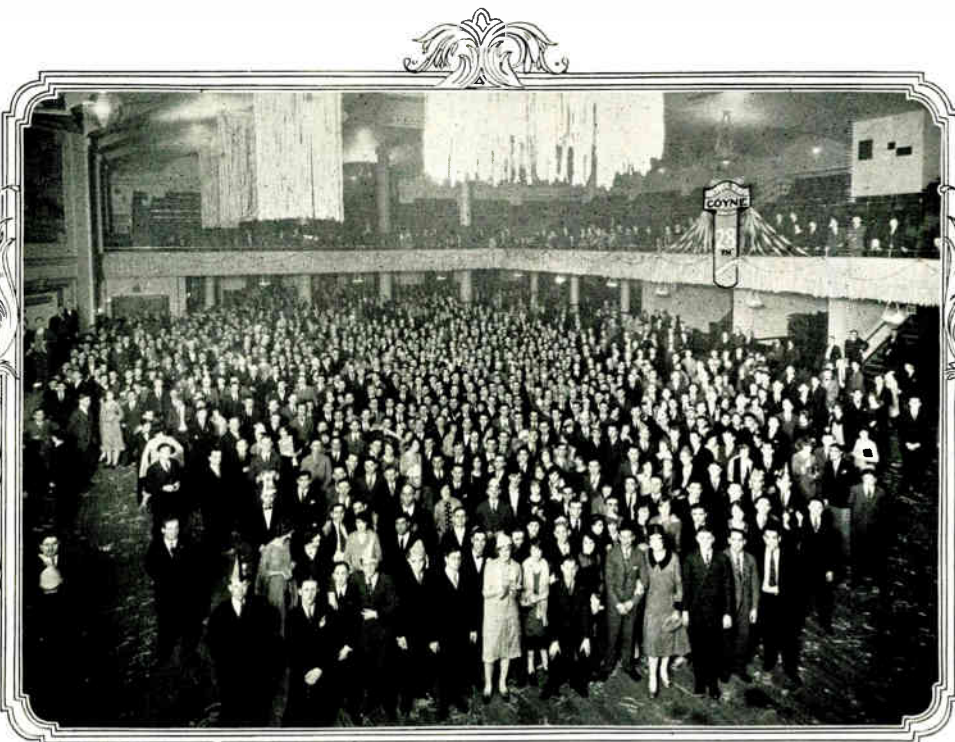
### Notice To Parents

DO you wish to receive regularly my special reports on the progress of your son in the various departments? If so, ask him to convey to me your wishes and I shall be glad to give you this service, promptly, regularly, and, of course, without extra charge. Or, if you wish, you can drop me a line requesting this service.

To the son: Your parents and my parents are our best friends. They are intensely interested in every move, every sign of progress, improvement and development you and I make. If you are not living with your folks perhaps you would like to surprise them by having me send these reports. I shall be mighty glad to do it for you. If you desire this service, just speak about it when you arrive.



Can you imagine a cozier little nook than this? Many a thrilling letter to THE girl back home has been written from "nooks" like this by my students who have tasted of victory in the great shops of Coyne.

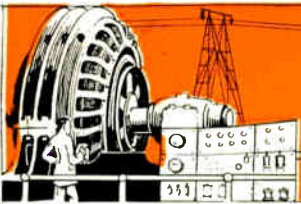


A Barrel of Fun for the Whole School When These Boys Get Under Motion—Introducing the Coyne Orchestra, well known to radio fans over WGES, the Coyne broadcasting station.



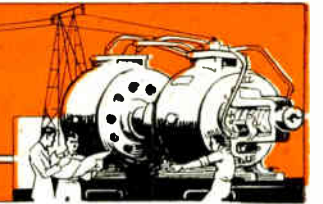
H. C.'s Treat, the Great 28th Anniversary "Blowout," to which all Coyne Graduates as well as Students Were Invited.





# COYNE

## Indorsed by Electrical Industry



# Coyne Trains You for the Rest of Your Life

### Life Membership STUDENTS' ASSOCIATION



COYNE ELECTRICAL SCHOOL  
Chicago, Illinois

This CERTIFICATE is issued, for his sole personal

use, to .....  
It certifies that he has complied with all the requirements of the School, and is enrolled for full life membership.

In consideration whereof, for the period of his natural life and without any further payment of dues than the regular price at this time, The Coyne Electrical School hereby guarantees:

- To furnish him with the Complete Electrical Training Course taught at the School.
- To allow him to remain at School as long as he desires and return whenever he desires.
- To furnish him home instruction after graduation.
- To furnish Technical Advisory Service for life.
- To furnish Employment Service at any time and as often as desired.

Signed by the School and the Holder, this.....

day of.....192.....

COYNE ELECTRICAL SCHOOL

By.....  
President

Holder

### To Those Living Out of Chicago

If you arrive at 9 o'clock in the evening or on Sunday, and are unable to reach us on 'phone (Monroe 6780), then take a Yellow Cab Co. cab to the Y. M. C. A. Hotel, 822 South Wabash Avenue, then come over to the school the next morning. If you should arrive before 9 o'clock, you can follow any of the directions below according to where you arrive or, if you prefer, take a Yellow Cab and tell the driver to take you to the COYNE ELECTRICAL SCHOOL—1300 WEST HARRISON STREET, and he will drive you right to the door.

#### From Union Station

Chicago, Burlington & Quincy Ry.  
Chicago, Milwaukee & St. Paul Ry.  
Chicago & Alton Ry.  
Pennsylvania System.

Take car marked "Harrison" on Adams Street going west; get off at Throop and Harrison at Coyne entrance.

#### From North Western Station

Chicago & North Western Ry.

Walk two blocks south to Adams; take car marked "Harrison" going west; get off at Throop and Harrison at Coyne entrance.

#### From LaSalle Street Station

Chicago, Indiana & Southern Ry. (N. Y. Central Lines)  
Chicago, Rock Island & Pacific Ry.  
Lake Shore & Michigan Southern Ry. (N. Y. Central Lines)  
New York Central Railroad Co.  
Nickel Plate Road (N. Y. C. & St. L. Ry.)

Take Van Buren Street car at entrance to depot, going west, get off at Throop Street and walk two blocks south.

#### From Polk Street Station

Atchison, Topoka & Santa Fe Ry.  
Chesapeake & Ohio Ry.  
Chicago & Eastern Illinois Ry.

### What Your Living Expenses Will Amount to

Below you will find a fair estimate of your living expenses while studying at Coyne. These figures are drawn from our own practical experience in assisting students through the Welfare Department:

Room at \$2.00 to \$3.00 per week for 12 weeks	\$24.00 to \$36.00
Board at \$4.75 per week for 12 weeks	57.00
Laundry at 50 cents per week for 12 weeks	6.00
	\$87.00 to \$99.00

Add to this amount the cost of your tuition and you will have a good idea of your expenses.

### Terms of Tuition

Tuition charges cover all expenses of tools, materials and equipment. Every student is required to make a deposit of \$5.00 at the beginning of the course to cover necessary tools and instruments he uses. This deposit is refunded when he has completed the course and returned the tools. We furnish all materials necessary, such as magnet wire, armature wire, No. 14 wire, conduit, B. X., switches and fittings of all kinds, battery materials of all kinds, and numerous other things free of charge.

**Post Graduate Help.** We have a special department to help graduates secure positions and solve technical problems arising out of their work. Service free.

**Outfit.** Students are required to provide themselves with pencil and notebook; everything else necessary is furnished by the school.

**Diploma.** A diploma is granted to each graduate. There is a charge of three dollars to cover the cost of individual engraving.

### Your Coyne Diploma

A COYNE Electrical School Diploma is favorably recognized by employers and contractors all over the country. The endorsement of a man by this school in the shape of a diploma is therefore an important feature of the service this school renders its students.

THE Coyne Electrical School has a feature in its training that, to my knowledge, is not given by any other school, anywhere. It is the Students' Association.

The idea of educational institutions throughout the world has been to give a person a certain training, and then it is up to that person to go out and make good. But just as Coyne has always been a leader in educational methods, it being the originator of the "Learn-by-doing" method, so today it leads with this new idea in education. The idea is based on the principle that a man never stops learning; that when he stops learning he stops growing and succeeding.

### Once a Coyne Student, ALWAYS a Coyne Student

From this thought I developed the continuation school, that is, "Once a Coyne Student Always a Coyne Student." I mean that after you have finished your practical work here at school and received your diploma, am I through with you and you with me? NO. POSITIVELY NO. You leave school, yes, but you are promoted to my Students' Association and you keep on continually studying with Coyne.

### This Feature Goes Hand in Hand with Your Work "On the Job"

How is this done? It is very simple. When you are promoted to the Association, you are assigned to whatever division branch you intend to work in. It may be power-plant work or dealer contractor or automotive electricity or construction work, etc. It is my aim to work with you continu-

ally, giving you information on all the latest developments in your line, submitting things for you to read and study, helping you with any work you are doing and assisting you to get a position whenever necessary. Any time you wish to return to school for more training on new equipment that comes on the market from time to time, you are free to do so.

### I Give You This FREE!

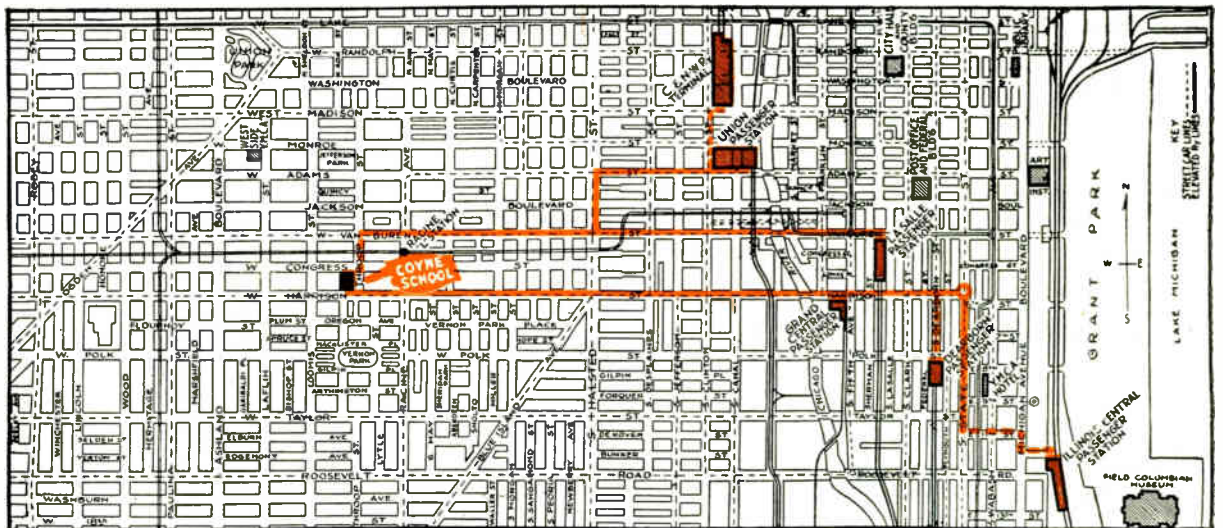
Now you ask if I charge extra for this. I do not. It is all free to members of the Association.

### The Remarkably Fast Development of Electricity Makes This Service Positively UNLIMITED in Value!

I feel that this is the greatest service ever rendered by any institution to its students, and is particularly valuable because the field of electricity is so new and is changing so rapidly that there are new developments almost every day. I consider this service about as important to your ultimate success as the practical training received here at the school.

Just as the "Learn-by-Doing" method originated at Coyne more than a quarter of a century ago has been copied by scores of universities and public schools throughout the land, so will this great new idea of continuous education be copied in years to come.

Coyne trains you for success and keeps training you to hold success. It is one thing to gain success and another thing to hold it. Remember my slogan—"Once a Coyne Student, ALWAYS a Coyne Student."



Map of Downtown District Showing Location of Coyne Electrical School and Railroad Stations

Chicago & Western Indiana Ry.  
Erie Railroad  
Grand Trunk Railway System  
Monon Route (C. I. & L. Ry.)  
Wabash Ry.

Walk one block north to Harrison Street and take Harrison Street car going west. Get off at Throop Street at Coyne entrance.

#### From Grand Central Station

Baltimore & Ohio Ry.  
Chicago Great Western Ry.  
Pere Marquette Ry.  
Soo Line (M. St. P. & S. S. M. Ry.)

Take Harrison Street car at entrance to depot, going west; get off at Throop Street at Coyne entrance.

#### From Illinois Central Station

Big Four Route (C. C. & St. L. Ry.)  
Illinois Central Ry.  
Michigan Central Ry.

Walk three blocks west to State Street; take State Street car going north. GET TRANSFER; get off at Harrison Street; take Harrison Street car going west; get off at Throop Street at Coyne entrance.

#### From Y. M. C. A. Hotel

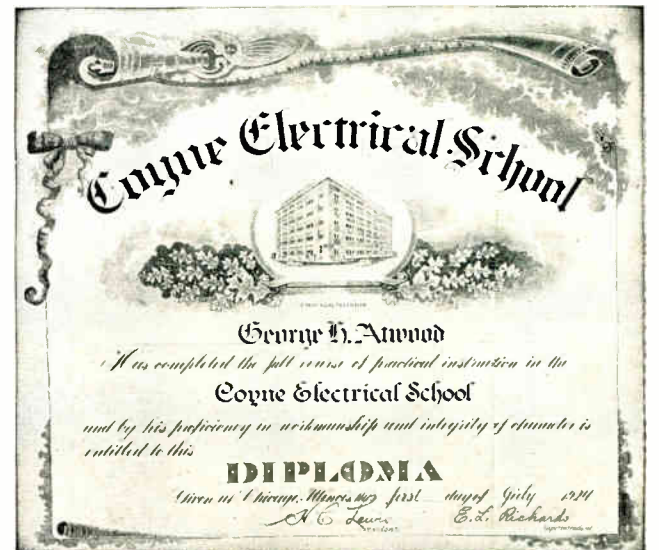
Walk one block west; to State Street, then take car going north; get a transfer, and get off at Harrison Street. Take Harrison Street car going west, and get off at Throop Street, at Coyne entrance.

### Certificate of Recommendation

In addition to this diploma, the graduate receives a letter, or certificate of recommendation, so that he may have something with him all the time testifying to his ability to show his future prospective employers. Of course, a man can't carry his diploma around with him, and so each deserving student is given one of these letters of certification.

### This Proves Big Help to Coyne Graduates

This letter has been used with remarkable success by great numbers of my graduates, not only on leaving school but even months or years after. This speaks highly for the confidence placed by employers all over the country in the recommendation of the Coyne Electric School.



Diploma to Which Students Are Entitled on Graduation





# AN OPEN LETTER TO MOTHERS AND FATHERS



## I Want You To Put the Faith in Your Boy That I Do!

**P**ERHAPS you have a son who is about to tackle the duties and responsibilities of manhood. His school days are ended, or nearly ended. Or maybe he has already started out and learned, to his disappointment, that the inexperienced lad is not heralded into the business world with pomp, ceremony and offers of big wages.

Right now is the time to help him do some straight thinking on the problems of life and the ways and means of getting ahead in the business world.

These are his "wavering" days, his days of indecision, when he himself, in the midst of immature and conflicting advice, hardly knows which way to turn to prepare himself for a happy future. You are the logical one to counsel with him, because you love him, understand him, and want him to go forward.

You have done much to help him prepare for the future activities of life. The ground-work for success and independence has been given to him. He now possesses valuable *general* knowledge, and perhaps plenty of it, thanks to you.

But "ground-work" alone is not quite enough. A superstructure of *practical, money-making* knowledge should be added to the training already provided. Don't let YOUR boy fall short of the mark when just a little more training—training that can be converted into cash to meet the inevitable obligations of "the butcher, the baker, the candlestick maker"—can be acquired by him in a short time for a trifling additional outlay on your part.

**BACK YOUR BOY TO THE LIMIT!** Do your part to keep him from being a perpetual job-hunter, a drifter, a "misunder-

stood" lad. Help to turn him into a steady, upstanding, responsible, self-supporting and self-respecting member of your family and of the community. Keep him from the depths by guiding him to the heights. You've gone almost the limit for him. **NOW FINISH THE JOB!**

The electrical field is rich in big, money-making opportunities. It offers clean, dignified, fascinating work at good pay—everywhere—all the time! It provides wholesome, productive employment for mind and body. It satisfies all of the cravings of inventive and constructive genius. It perhaps transcends all other fields of human endeavor in providing developments that affect the welfare and activities of mankind. It is the backbone, the nerve and the sinew of thousands of other fields of endeavor. It is self-perpetuating and can never die out. It is rich and noble, and prodigious in size and importance.

**YOUR BOY IS YOUR BOY!** He will continue to be yours even after you have passed on and he has been left to shift for himself. Make him a credit to himself and to you! Help to put him into a field that offers rare opportunities for service to others and rewards for himself.

Win his everlasting gratitude by presenting him with a Course in Practical Electricity at COYNE, America's oldest practical school of electricity, located in CHICAGO, the Electrical Center of the World.

*A. C. Lewis*

## Important Questions Asked and Answered

### What is the cost of the course?

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

### Does your tuition price cover full training?

Yes. You never pay us any more than one tuition price, and in addition receive a Life Scholarship in the Students' Association.

### 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.

### 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.

### 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.

### 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.

### 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. We are usually able to place those who desire this work. See Pages 50 and 51.

### 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, only the rudiments of reading and writing are necessary. We teach by practical training. Of course, the more education you have the more it helps you. Many of my

successful graduates attended only the second, third and fourth grades, and in some unusual cases have never attended school a day in their life.

### Must I know electricity to enter?

No. We teach you this work in all its branches from the very beginning. Most of our most 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.

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

Yes. But he must work. You will find that the trades that are easy to learn are not worth learning. Any man who applies himself—who works faithfully—can master the Coyne course.

### 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 60. Some of the best men we ever turned out were mature in years. Fathers and sons have taken the course together. Many of our students are experienced men who come to master advanced methods of doing their work.

### 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.

### Do you have school all year round?

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

### Do you grant a diploma?

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

### When were you organized?

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

### 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 7 and on opposite page.

### Do you use books?

There are no books used in the course. We do not condemn books, however, and believe that they are of assistance to any man when used in connection with practical work. We have prepared a highclass set of lessons which a student can purchase if he desires, at a very nominal price. These, however, are optional and not necessary, but are excellent for reference purposes.

### 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.

### School Rules and Service

**Rules of the School**—The rules and regulations of this school are simply those which insure respect for the right of others and a proper regard for the principles of honor and honesty.

**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 which, however, is not an ordinary written examination, before leaving each department.

**Care of Students**—Students are lodged in clean, respectable homes only. We make frequent inspections of student's quarters and require that they shall meet with our approval. (See Welfare Department, page 53.)

**Reports**—I will send report of student's progress and conduct to parent 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 Welfare Department, page 53.)

**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 we conduct no regular classes, 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.

**No applications accepted from negroes**





## The Decision Rests With You

Here we are at the end of the book, and at the beginning of a New Day for you!

Step by step I've shown you through the great shops of Coyne. With your own eyes you've seen the vast outlay of electrical machinery. You've read the letters of men and young men who now are getting big money for working on this same equipment but out "on the job."

You've seen the mountains of proof, living, breathing facts that no man can deny. You've read of the fellows who came here under handicaps, probably far greater than yours could ever be, but who are today a success.

### Will You Put Your Dreams Into Action?

If my big book has done what it should have done, it has made you realize the great fact that success is NOT hard to achieve, that it lays right now at your very finger tips, waiting for you to grasp it.

The moment you do this, the moment you have made the big GO AHEAD decision, you have, at one stroke, put your dreams into action; you've put behind you, forever, all dilly-dallying and those cold ashes of despair, and in their place you've put at work for you the fierce fires of ambition.

Keep them on the job and they'll carry you through and put you on top!

You want the fine things of life. You know that nothing on

earth but training will bring them to you. You are tired of being the world's "goat" any longer.

But remember, Old Man Procrastination won't agree with you. He'll go to the floor with his boots on. He's a tough bird and not easily licked. He may be down, but he'll never be out just so long as there is a single doubt or a single put-it-off thought in your mind.

The decision rests with you. The great battle between your "Tomorrow" self and your "Go Ahead, Do It Now" self will be the supreme test. If you have the right stuff, there's only one kind of victory possible.

### No Man Can Cash Excuses at the Bank

Excuses find fertile soil in the minds of mankind. They flourish and multiply like weeds on every hand. Most men are victims of them. They dream, but find excuses for not carrying their dreams into action. Successful dreamers like Edison and Steinmetz carried their dreams into ACTION because they laughed at obstacles and ignored "excuses."

There isn't a successful man living today who can not look back and think of excuses for not succeeding. Instead, they looked ahead for reasons why they should succeed—and they found them!

No, sir! There's no excuse for "excuses." Excuses don't go in this world. They don't pay bills. You can't cash them at the bank. They don't even bring sympathy; no, indeed, they only bring scorn and pity.

## Show Me You Want Coyne Training and I'll Show You a Way

My friend, it doesn't matter how discouraged and blue you may have felt in the past. I don't care whether you have very much money or not; it doesn't matter how helpless you may have felt. I don't care whether you have had much education or not, or what any of your other circumstances may be—if you'll do but ONE thing I'll see you through.

All I ask is for you to show me your good faith, show me that you mean business, that you want my training and the good things of life my help will bring to you. Show me that you want Coyne training more than any other single thing in the world and I'll go the limit to help you.

### The First Test of Character Is Capacity for Action

You may be unable to start for Chicago at once, but that won't prevent you, for one minute, from getting my assistance at once.

You can start making your plans right away, and I can be helping you in any way you need it, all before the Big Day arrives when you pack your suitcase.

You may need help before you get here. Or you may need my assistance after you get here. Either way, or both, let me register your now, and I'll get real pleasure in doing anything I can for you.

The moment you send me your advance enrollment the faith I am putting in you is confirmed. I know you are Sincere, Earnest, and a Man of Action. I know that you are deserving and worthy of every bit of assistance I can give you.

### Write Me a Letter Today

Write me a long letter today. Tell me all about your life ambitions, your hopes and dreams; take me into your confidence. You'll get a personal reply and a personal plan that will just fit your case. It will seem to you almost "too good to be true."

Nothing in the day's work means more to me than the opportunity to write these personal letters, to offer a helping hand to those who need a little friendly counsel, a word of encouragement, as well as definite assistance along other lines.

Please write me that letter today! No mail time will pass without my looking for it.

*H. C. Lewis.*  
President







