

**How to Get the Most Out
of Your 7 Volume Set on**

**APPLIED
PRACTICAL
ELECTRICITY**



****READ THIS BOOKLET CAREFULLY
BEFORE YOU EXAMINE
THE COYNE ELECTRICAL LIBRARY***

THE FAMOUS INSTITUTION
BEHIND THESE
ELECTRICAL BOOKS



- Founded 1899.
- Has trained over 100,000 men in Electricity and Radio.
- Has grown with the Electrical and Radio Industry.
- Approved G.I. Training Institution.
- A *practical* school giving shop training courses and publishing practical books.

Educational Book Publishing Division

COYNE ELECTRICAL SCHOOL

500 S. PAULINA ST.

CHICAGO 12, ILL.

A Challenge to Every Ambitious Man

Success in any endeavor comes from planning. A man without a plan is like a ship without a rudder. To get the most out of the set of books, whether you use it as a home study set, or for an on-the-job reference set, you must *plan to use it properly*.

This booklet gives you 9 practical suggestions that should enable you to get more out of your set.

Before explaining these specific suggestions I'd like to make clear, a point of great importance to you. All the books of this 7 volume set were written so they make *interesting reading*. The facts are there, presented in a style never before used in technical books. The men who wrote or edited these books are the instructing staff of Coyne Electrical School. These men have years of experience in explaining electrical subjects. Their daily job is to explain to men of *little or no experience*, the *construction, installation, and maintenance* of electrical equipment. They have put into this set the same, clear, easy to follow instructions they use in our training shops. In addition they have developed a personal progress check, in the self examination questions after most chapters, so that you can see the progress you are making. This is an extremely important point in using a set of this kind.

Thousands of men have already found these interesting books the pathway to success in electricity. They followed our suggestions on *how to use the books*.

What these books have done for others—they can do for you — but you must have a plan and here is your plan for using Applied Practical Electricity.

How to Use This Set as a Home Study Set of Books

Here are some specific ideas to use to get the most out of Applied Practical Electricity, or any other books or set of books that you ever have an opportunity to read.

1. ARRANGE TO SPEND AT LEAST 30 MINUTES PER DAY ON THESE BOOKS

First and foremost, I would advise you to try to arrange to set aside at least 30 minutes per day for reading and studying Applied Practical Electricity. Try to systematize either your work or your home life so that you can devote at least this much time to these books.

However, I would like to make clear that you should *never at any time, try to study if you do not feel like studying*. It would be far better for a man to skip a day, 2 days or even 3 days, if he was ill or not "in the mood" to study, than to try to force himself to do something which he is not mentally at the moment able to concentrate on. When you sit down to read these books, your mind should be free to concentrate on them in a way that you should.

2. READING CAN BE A PLEASURE

Above all, approach the reading of the Coyne books as a pleasure, since you are going to learn something that you want to know and something that will enable you to progress in life.

Look on your time spent on these books as you would the building up of a bank account. Every minute you put in, in reading and studying Applied Practical Electricity, builds up your "bank account" for success. Just think of the advantage you will have over a man who is not willing to put in this extra time. Keep saying to yourself: "The time and effort I put into the study of Applied Practical Electricity will prepare me for my opportunity when it comes—I am giving myself, my family and my job a fair deal by putting in this spare time to improve my knowledge." If you can think along that line, you will find that the time you put in on Coyne's Electrical books, will be a pleasure and will differ from any other studying you have done in your life.

3. HOW TO CONCENTRATE

In order to get the most out of your reading, you *must concentrate*. First of all, find a quiet spot, secondly, make yourself comfortable, and see that you remain undisturbed while you read. An important point is to make sure you have a good light, and determine to devote your time to study, allowing nothing to interfere with your purpose.



4. MAKE NOTES

Be sure to have a paper and pencil handy for making notes on points of special interest. If a particular electrical principle or law is explained, that you feel you will have constant use of on the job, it might be well to write out the principle or law. When you write, you learn *TWO WAYS*—you learn by *first reading* the printed page and *secondly, by the sense of touch* which you actually write.

5. READ A PARAGRAPH AT TIME AND MAKE SURE YOU UNDERSTAND IT BEFORE GOING ON IF YOU HAVE TO READ IT SEVERAL TIMES

One of the difficulties with many men who take a set of books to read and study, is that they try to progress too rapidly. They quite often will read a paragraph and because they are thinking of some point further on in the particular volume they are studying, they will pass over the immediate paragraph they are reading, too lightly. The result is that they do not thoroughly understand the point and since in many cases it has an important bearing on anything they read further in the book, they have difficulty as they proceed. The important thing is to *read each paragraph and thoroughly understand it before going to the next*. A good practice is to stop at the end of the para-

TAKE YOUR TIME TO MAKE THE FACTS "STICK"

graph and ask yourself, "Do I understand the point brought out in that paragraph." If you do, then proceed to the next paragraph. But if not, go back and read it over again—if necessary, read it several times until you get the point. If you do this, in the beginning of your reading and studying of

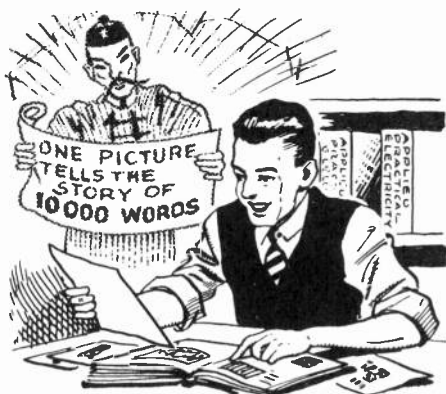
Applied Practical Electricity, it will become a habit and you will unconsciously "double check" yourself on each paragraph. The best example of what I mean on this point is to outline that you cannot possibly make a home run in baseball without first touching first, second and third bases.

6. BE SURE TO ANSWER THE REVIEW QUESTIONS

You will find beginning in Volume 1 and progressing through all of the volumes of Applied Practical Electricity, that many chapters have review questions at the end of the chapter. These have been especially prepared for your benefit. They provide a "yard stick" that will enable you to understand how you are progressing in your reading of this set of books. By all means, stop when you reach the end of a chapter wherein a set of review questions is listed, and answer these questions. The thing to do would be to write them out on a sheet of paper and beneath each question place your answer. Then double check the answers with the explanation in the preceding chapter and in this way you will have the best possible guide as to how you are understanding the subject matter.

7. USE THE ILLUSTRATIONS CONSTANTLY FOR CLEARER UNDERSTANDING

An old Chinese philosopher once said: "One picture tells the story of 10,000 words." You will find that one of the advantages of this set is the fact that it is profusely illustrated with photographs and diagrams. We feel that these illustrations—(although they greatly increase the cost of preparing this set of books)—are a vital necessity and a great help to a man who is reading and studying these books. Throughout the set,



wherever we can more clearly illustrate the point by a photo or diagram, you will find it included. By all means, stop when you come to these diagrams, study them and you will find one of the most enjoyable points in reading these books, will be the tracing of the circuits on the various diagrams and the analyzing of the Electrical apparatus by virtue of the photographs.

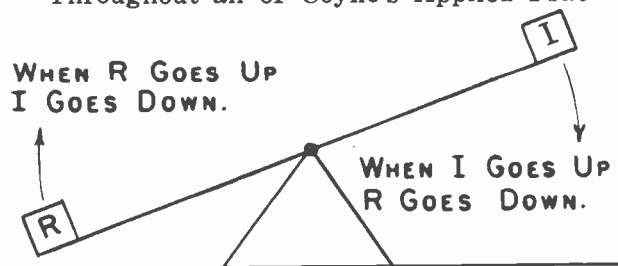
8. DIRECT ASSOCIATION HELPS YOU TO REMEMBER FACTS

One of the best ways to remember what you learn, is to try to associate the facts with something you already know. Let me illustrate at this point just what we mean by this. In explaining the principle of *Inverse Relation* in Electricity, we bring out the relation between resistance and current in a circuit.

You are undoubtedly familiar with the ordinary "teeter-totter" in a playground. This is a long board set midway on a stand, and when a youngster on one end goes up, the youngster on the other end goes down. Well the principle of Inverse Relation in electricity is, that when the resistance in a circuit goes up, the amount of current goes down. In like manner, when the current goes

up, the resistance goes down. The following illustration shows you what we mean and is based on the principle of the association of facts with things you already know. In other words, while it might be difficult for you to retain the actual formula of inverse relation in Electricity, it is certainly easy for you to remember it when you think of it in terms of a "teeter-totter."

Throughout all of Coyne's Applied Prac-



tical Electricity, you find simple, down to earth illustrations like these, to explain a point in such a way that the reader can retain it by an "idea picture" that anyone can understand.

Another way is use the information you have at once. As an example, suppose you find that a certain fact on an early page of the first volume applies to something you did that very day or do soon on a job. If you apply the fact to your specific problem, you will be able to remember it due to the association with definite use.

9. TALK TO FELLOW WORKERS ABOUT THE FACTS YOU ARE LEARNING

Another good idea is to talk with your fellow workers on the various information you are reading in Applied Practical Electricity. Show them how you have information which is of practical use. In this way, you too will be aided in remembering these



things because *by actually speaking and explaining these principles, you are using still another sense, namely, speaking.* When you read a book, you use *sight*, when you write out certain facts or statements that you want to especially understand, you use the *sense of touch*; then if you add to that the *sense of speech* when you explain these matters to your fellow workers, you are using *another method that all helps to "cement" these ideas in your memory so they will never be forgotten.*

In these few pages, I have given you 9 ways for successful reading and study that have been the foundation for the success of many thousands of *self-trained* and educated men. Remember to one man the printed page is nothing more than a "mass of words," to another it is a "gold mine" of information—a stepping stone to success. It is a source of knowledge to make a man's job easier, safer, and definitely improve his own personal efficiency.

You have the books that have meant success to thousands of other men who have been willing to devote a little of their time along the definite, *well planned method of reading or study.*

Here Are Some Pointers to Get the Best Results When You Use Coyne's Applied Practical Electricity, *as a Straight Reference Set*

In the preceding pages, I have told you how to use this 7-Volume Set as a home study set. In addition to the "beginner," who buys our books to learn Electricity, there are at least as many more men who are interested in using these books mainly as reference books. These types of fellows are home owners, electricians, mechanics, garage owners, hardware store owners, farmers or anyone who either has occasional use for electrical information or in the case of the electrician *needs* a set of authentic reference books for use on the job.

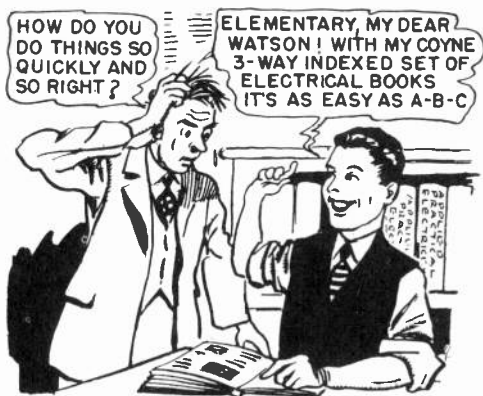
If you come under any of those classifications, then here *is the way you can get the most out of this reference set of Electrical books.*

USE THE MASTER INDEX TO LOCATE ELECTRICAL SUBJECTS

To begin with, the first thing you should do is to review the table of contents in each of the volumes. A table of contents is an abbreviated digest of what each volume contains. When you have a fair understanding of what is covered in each volume of the set, you can more quickly look up electrical information.

One of the features desired in any good electrical set of books is a good index system. Without it, any set doesn't mean much because a fellow cannot find what he wants to know, without spending a lot of time. When we planned this set of books, we made sure

that it had the most modern system of indexing. Here is how you will find the books indexed. First, as explained, each book has a *table of contents*. This outlines in a general way what the book covers. Then at the back of each individual volume, you will find an *index of each specific subject covered in that volume*.



In addition, we have a "master reference index" at the back of Volume 1. This is an index that lists **ALL OF THE SPECIFIC ELECTRICAL AND RADIO SUBJECTS IN ALL OF THE VOLUMES**. This *Master Reference Index* tells you the name of the electrical subject, the volume it is to be found in and where it can be found in that volume. This *modern 3-way method of indexing* gives the man who wishes to use these books as a reference set, an opportunity to locate any subject covered in these books, **QUICKLY** and **ACCURATELY**.

If some particular type of electrical problem presents itself, refer immediately to the **MASTER INDEX**. This will give you the section and the volume of this set in which the subject is covered.

Then turn to that section and carefully read the instructions outlined. Also read any other sections of the set mentioned in the article. As an example, in checking over some information on electrical motors, some reference might be made to an electrical law or principle contained in another volume of the set. In order to thoroughly understand the procedure to follow in working out your electrical problem, you should refer to the other volume mentioned, to get a better understanding of the electrical law or principle involved.

Because of the tremendous strides that have been made in the electrical industry in the past several years, it is advisable that even though you may be an electrician and plan to use this set strictly for reference purposes, that you give some thought to reviewing the entire set from beginning to end. If you devote just a little time each evening to "brushing up" on electrical subjects, with which you are familiar, you will find the time not only profitable but enjoyable as well. In doing this, you will be able to get valuable information on subjects that you may have thought you were entirely familiar with but in reality, due to increased uses of electricity and improved methods, you may not be thoroughly posted on specific improved applications.

To sum up again for the benefit of the man who uses our set as a reference set, he should do the following things: 1. Review the table of contents in each volume of the set; 2. study the index in each volume of the set; and 3. be sure to go over the Master Reference Index in Volume 1 of the set. When you are familiar with these three sources of information, then, when you need electrical knowledge quickly, you will have a systematic method of locating it in a hurry.

Thousands of Successful Men Found a Helping Hand in Their Coyne Books

Throughout the United States you'll find men who have made notable achievement in electricity, radio, electronics, diesel engines and many other fields—men who find their information in Coyne books for specific data. At the head of large electrical manufacturing companies, and in electrical laboratories, you'll find electrical engineers who place tremendous value on the information they secure from Coyne books. In the libraries of these men you will find Coyne books—serving day in and day out with charts, tables, diagrams and other aids which save valuable time, and cut corners to greater achievements and personal success. If you were to ask them, these men would tell you how valuable these books are to them, and they have, in many cases, counseled both beginners and old timers to “get yourself a set of Coyne books and USE THEM!” These men have found that, when their opportunity arrived, they were ready for it—their investment in spare time reading paid off! The following are a few testimonials taken from our large files, to show you what men who know say about Coyne books.

SALARY More than Doubled with Coyne Books

“I purchased your Electrical Set. At the time I received the set I was earning \$38.00 a week. Since that time I have had my pay raised five times. Today I am earning an average of \$78.00 per week.” A. T. Dozier, Ohio.

Most Practical and Easy to Understand

"I can say this much for the books. They are the most practical and easy to understand that any tradesman or electrician could want. I've been at the electrical trade for over eleven years and have had several sets of reference books but none can compare with yours. I know they will be a great help to me in any electrical problems I may have."
L. A. Wessels, Ind.

Books Used by Large Company to Prepare Men for Bigger Jobs

"I am enclosing a check for ten more Electrical sets. These books will be used to train workers in our Electrical Department for higher jobs. Your books are being highly praised by all of the men to whom I have sold them. I just received a letter from one of the boys, who is a Navy Electrician, 2/c stating that his Reference Set has become his Bible and he wouldn't take \$500 for the set unless he was sure he could get another one."
Frank Krize, Johns-Manville Corp., Va.

"Most Complete Set on Electricity"

"If you wish you may use my name as a recommendation for your library of Electricity. I have found them a great aid in my work and I agree wholeheartedly in the fact that they contain the most complete knowledge of electricity that has ever been put into 7 volumes." R. Cardenas, Pa.



Complete Personal Success Course **FREE**

Coyne's Nationally Famous "Putting Yourself Over" Series of Lessons:

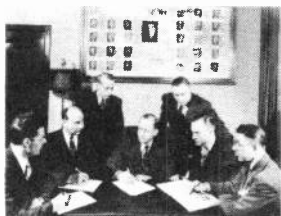
- 1 — Selling your Services and Getting the Job You Want.
- 2 — Self-Confidence and Proper Mental Attitude.
- 3 — Leadership and How to Gain Recognition on the Job.
- 4 — Analyzing Your Personality.
- 5 — Getting Along with People, and Developing a Pleasing Personality.
- 6 — Imagination, Studying the Job Ahead, and the Employers' Problem.
- 7 — Loyalty, High Thinking, and the Habit of Saving.
- 8 — Setting a Goal, How to Avoid Failure.

This valuable course of lessons on *putting yourself over* is an outright gift to you when you purchase and keep the Coyne Books. These lessons are unique—easy to understand—cover important points concerning personality, actions, and ways of thinking which will help you to handle yourself successfully. Examples taken from every day life are used to illustrate important points. The object of these splendid books is to tell you how to sell yourself, as a "product" worth money, to the people best able to use and pay for your services. We feel there is a direct relation between these lessons and the Electrical knowledge you get from Applied Practical Electricity. If you purchase Coyne books on the payment plan we will send you lessons 1 and 2 of the "Putting Yourself Over" series as soon as your first payment is received, and then you will get additional lessons with each payment you make. If you pay cash for your books we will send you the entire series of 8 lessons as soon as your check or money order is received. These books are endorsed as being of great help to success by electricians, educators, employers and others, like yourself, who have used them as a springboard to a career. **REMEMBER YOU GET THEM FREE.**

COYNE STANDS BEHIND YOU

With These FREE PRICELESS Services!

ONE YEAR TECHNICAL COUNSEL BY THE COYNE STAFF

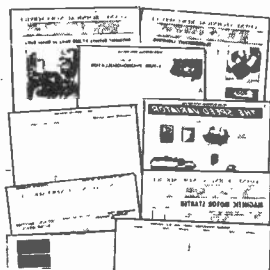


When you buy the Coyne 7-Volume Set, you automatically get the services and attention of the entire staff of Coyne experts. These highly-trained electrical men are at your service to answer your

questions, by mail, for one year. Any time you want further explanation of any subject in the 7-Volume Set; any time you face special problems on the job, you can write to Coyne, and they will give you the correct answer. In this way, you will have no difficulty in getting the most from your Coyne books.

Furthermore, you can use this service to speed your progress on the job. Tell your employer that this personal service is available to you, and ask him to bring you any special problems *he* wants Coyne to answer. In this way, you let him know that you are "on-your-toes," and you remain in his attention. In other words, you increase your value to him. *That's the road to the Top!*

Free Subscription to Coyne Technical News for One Year



This free service is designed to keep you abreast of all new developments in your field. Coyne gets advance news of inventions, improvements, etc., and forwards them to you through these technical bulletins, *before the public*

hears of them. This puts you in an *advance* position where you can talk to the boss about what's coming, gain his respect and admiration as a man who is watching every move in electricity! These bulletins are sent periodically for one full year.

"How many a man has dated a new era in his life from the reading of a book." — Thoreau

***You Now Have
Our Plans for
Your Success—
The Rest Is Up
To YOU!***



B. W. COOKE

The information in this booklet was gained from carefully observing the rise of men like yourself. For over 25 years I have seen ambitious men go into electricity and rise to the top. Talking with these men and noting our own observations on typical successes, we have arrived at the information presented to you in this book. And we can say this to you, without qualification:

If you will use your head—if you will make the most of your ambition and energy—if you will concentrate on the road ahead of you, opportunities *will* come your way, *and you will be* ready for them! The first opportunity EVERYONE has, is to acquire knowledge. This opportunity is always present; whether you are 16 or 60 you can take advantage of it. Of course, the earlier you start, the more time you have left to put that knowledge to practical, money-making use. But the opportunity to learn is always present—it is here before you, *now*, in the Coyne 7-Volume Set. Whether you use this opportunity or not is up to you. You alone are answerable to yourself—you *are* the “captain” of your future. I urge you to take advantage of your opportunity *now*.

Start today, in fairness to yourself. If you do—if you start using and learning from your Coyne 7-Volume Set of Applied Prac-

tical Electricity, I can make you this guarantee—THE GREATEST SATISFACTION OR MONEY BACK GUARANTEE EVER MADE BY ANY TECHNICAL BOOK PUBLISHER!!!!

**COYNE BOOKS MUST EARN 5 TIMES
THEIR COST—OR MONEY BACK!**

If you keep your Coyne Set Applied Practical Electricity and to read the books as outlined in this booklet, I *guarantee* that, at the end of one year, they must earn 5 times their cost, or you can return them and I'll refund every cent you paid! I do this because *I know* that they contain the information to put *you* on the road to success, as they have so many others. *It's all up to you!*



B. W. COOKE, *President*

COYNE ELECTRICAL SCHOOL

A Partial List of Large Industrial Concerns and Governmental Departments Who Use Coyne Books in Training Programs

<p>General Electric Company Western Electric Company Canada Wire & Cable Co. Cleveland Elec. Illuminating Co. Carrier Corporation Gulf Research & Development Co. Homelite Corporation Kansas City Power & Light Co. Pacific Mills Ltd. Standard Brass & Mfg. Co. Taft Pierce Mfg. Co. U. S. Coast Guard, Fla. U. S. Coast Guard, Conn. U. S. Navy, Texas U. S. Navy, Wash. U. S. Navy, Va. U. S. Navy, R. I. U. S. Signal Corps, N. J. U. S. Signal Corps, Fla. United Air Lines Transport Co., Calif. Wall Nichols Co., Hawaii Western Cartridge Co., Ill. Balfour Guthrie Co., N. Y. Wallace Barnes Co., Ont., Can. Board of Education, Newark, N. J. Engineer, Science Management War Training Exposition Cotton Mills, Ga. J. K. Gill Co., Ore. Wendell Holmes Ltd., Ont., Can. Charles E. Hires Co., N. Y.</p>	<p>International Brotherhood Electrical Workers Westinghouse Elec. & Mfg. Co. Borg Warner Corporation Chrysler Corp. Clinton Engineering Works Great Lakes Steel Co. General Motors Corp. Johns Manville Co. Nat'l Cash Register Co. Sylvania Electric Products Co. Tennessee Eastman Corp. U. S. Naval Training School, Mich. U. S. Naval Training School, Ky. U. S. Naval Training School, Ida. Navy Yard, Brooklyn, N. Y. United Fruit Co., N. Y. Virginia Mechanics Institute, Va. Consolidated Vultee Aircraft Corp., Texas Wheeling Steel Co., W. Va. Wright Aero. Corp., N. J. Wyman Gordon Co., Ill. W. Va. Pulp & Paper Co. Auto Solar Corp., Ga. Belmont Electric Co., Mass. Board of Education, Louisville, Ky. Dunwoody Institute, Minn. Engineering Products Co., W. Va. Firestone Tire & Rubber Co., Mich. W. W. Grainger Co., Ill. Huntington Trade School, W. Va. Hygrade Radio Co., B.C., Can.</p>
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**AND HUNDREDS OF OTHER COMPANIES ENGAGED DIRECTLY
OR INDIRECTLY IN ELECTRICAL, RADIO, OR ELECTRONICS WORK**

LOCAL ELECTRICAL UNIONS

*Using Coyne Electrical books as text or reference
books for courses*

Newark, N. J.	Pittsburgh, Pa.
Miles City, Mont.	Norfolk, Va.
Wisc. Rapids, Wisc.	Omaha, Neb.
Austin, Texas	Oakland, Calif.
Ogden, Utah	Stockton, Calif.
Chicago, Ill.	Wausau, Wisc.
San Diego, Calif.	Shelton, Wash.
Richmond, Calif.	San Diego, Calif.
Nashville, Tenn.	Sacramento, Calif.
Mt. Vernon, N. Y.	Cheyenne, Wyo.
Topeka, Kansas	Casper, Wyo.
E. St. Louis, Mo.	Denver, Colo.
Richmond, Va.	Fresno, Calif.
Anaconda, Mont.	Kansas City, Mo.
E. Liverpool, Ohio	Fairmont, W. Va.
Jacksonville, Fla.	Salinas, Kans.
Portland, Ore.	Michigan City, Ind.
Mobile, Ala.	Gary, Ind.
Birmingham, Ala.	Battle Creek, Mich.
Uniontown, Pa.	Newport, R. I.



