# Western Electric News



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#### Trend—



UITE distinctly, there is to be detected in magazine cover painting today a trend toward that which is generally known as modern art. By this we normally mean that there is a tendency to avoid

reproducing life in terms of photographic reality. Instead, the artist takes various elements or symbols and works them into a pattern. The resulting design, if it be comprehensible, is much more significant than a realistic painting could be.

For example, if Charles Ryan had painted for our cover this month precisely what he saw, we should have a picture of a man signalling a crane which was lifting a reel of cable. The meaning of the picture would have been a man signalling a crane which was lifting a reel of cable and nothing more. Instead, he took from the scene various elements—the black silhouette of the crane, the white gloved hand of the signaller, the mass of the cable reel—and combined them to make a strong, colorful pattern which suggests the sweep and movement of industry.

It seems probable that the ideas of the rebels of twenty years ago—such men as Gaugin, Cezanne, Picasso, van Gogh—have become a part of the public consciousness. Editors, advertisers, people who use drawings in their business recognize this. They begin to buy modernistic work. The success of the New Yorker stimulates the swing away from realism and confirms public acceptance. A trend is under way.





An Illustrated Magazine Devoted to the Interests of Western Electric Men and Women

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#### OURSELVES AND BUSINESS

T is now recognized that the modern corporation is a social unit in which the lives of the greater part of the American people are absorbed," observed Albert R. Erskine, president of the Studebaker Corporation in a recent issue of Nation's Business. "We realize that business is no longer a hermetically sealed department of life, from which men withdraw themselves when the clock strikes the quitting hour. On the contrary, the life of the nation and of every citizen is being moulded and colored by relationships with large corporate organizations."

There are, according to recent figures, some 20,000,000 people in this country gainfully employed in corporations. Probably half of the families in America have some direct connection with corporate life through the employment of father, son or daughter.

"These broad relations," continued Mr. Erskine, "have been accompanied by an increasing sense of social responsibility as the better established corporations have approached an institutional status and as the functions of management and ownership have been separated to a large extent by the diffusion of stock ownership."

THAT, of course, is becoming fundamental. Industrial management has, generally speaking, realized the efficiency of square dealing and has accepted a social responsibility. The sale of stock to employees, insurance and thrift plans, the extension of vacation privileges, the establishment of recreational facilities and the maintenance of medical service are some of the tangible results of this acceptance.

But does a relationship work only one way? Has management all the responsibility? Does not some of it rest upon the shoulders of individuals as well? Can we be content to get without giving? In the last analysis, a corporation is a group of people working together to create a commodity or a service which is useful. If American industry is to fulfill its promise, it will be because we individuals, who together build the corporate traditions, have contributed to its success—in ideas, in methods of work, in attitude of mind.



Photograph by Blank & Stoller

#### New Pear's Greetings

To Western Electric Men and Women:

The year which has just closed has been an eventful one in Western Electric history. While we entered the year knowing that our resources would be taxed to the limit, all of our expectations have been far exceeded. Sales have amounted to more than \$400,000,000, an increase of 65% over 1928 and the largest volume of business in the company's history.

Twelve months ago we numbered 57,000; today there are 82,000 of us. Working together, we have made substantial progress in increasing the volume of our production, the installation of equipment, and the distribution of apparatus and supplies to our telephone customers; while in all departments, we have evolved better methods of carrying on our work.

We enter the year 1930 with a record volume of orders on hand, and we contemplate during the year the expenditure of more than \$50,000,000 for additional plant and equipment. This is a part of our building expansion program determined upon last year, and we can detect, at present, nothing in the economic situation of the country which would cause us to modify our plans.

Having embraced the opportunities and met the responsibilities of the past year with credit, we face the future confident of our ability to measure up to the job which lies before us in 1930.

I extend to each of you my congratulations on the accomplishments of 1929 and my best wishes for the coming year.

Cordially yours,

Toyun Illoom
President.

#### **Preparing Cable for Burial**

Helmer J. Boe, of the Kearny Works Engineer of Manufacture Branch, Describes the Manufacture of Tape Armored Cable Which Is Laid Underground Without Conduit

EARNY Prepares Cable Burial In For Texas."

That startling headline announced the work being done at the Kearny Works to fill the first order for toll cable to be buried underground without

conduit. (This order was placed by the Southwestern Bell Telephone Company for about 200 miles of the new type, tape armored, cable to be laid from Fort Worth to Cisco, Texas.)

Tape armored cable is primarily lead covered long distance cable with coverings of asphalt, jute, impregnated paper and steel

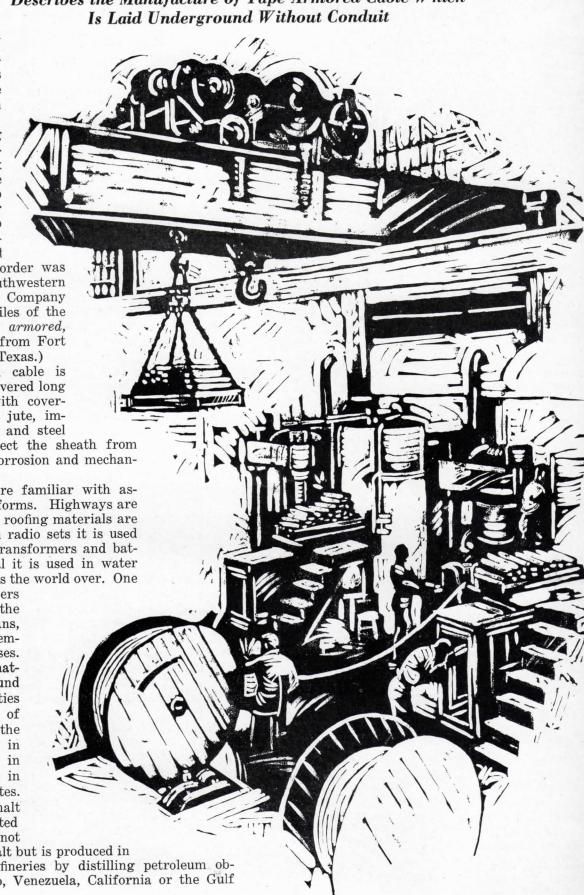
tape which protect the sheath from earth or water corrosion and mechanical damage.

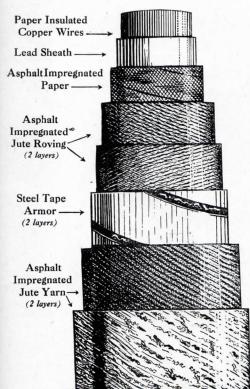
Most people are familiar with asphalt in various forms. Highways are surfaced with it; roofing materials are made from it; in radio sets it is used for sealing the transformers and batteries; in general it is used in water proofing processes the world over. One

of the earliest users of asphalt were the Ancient Egyptians, who used it for embalming purposes. Asphalt in its natural state is found in great quantities on the Island of Trinidad in the West Indies, in Venezuela and in certain localities in the United States. Much of the asphalt used in the United States today is not

the natural asphalt but is produced in American oil refineries by distilling petroleum obtained in Mexico, Venezuela, California or the Gulf

Coast States.





Jute is a fibre from several plants, natives of India, which grow to a height of from 10 to 12 feet and mature in a few months. Jute was introduced into Europe in 1828, at Dundee, Scot-

land. A 1though some jute is still processed

Besides the usual lead covering this cable has several protective coverings of jute and steel tape

the sun when the cables are placed in the open. During the armoring process the cable is taken up on a special all steel reel built to suit the customer's equipment for handling in the field. When the armoring process is completed the cable is tested for electrical defects. As a final test to make certain that the lead sheath is sound and free from holes, an automobile tire valve is sealed into one end and the cable filled with a dry gas under about 15 pounds pressure. If after several hours the pressure

ering of the compound upon which is wound a layer

of paper tape. The cable is then passed through two

or more compound tanks. Jute is wound around it

after each immersion. After the "serving" or cover-

ing of paper and the two "servings" or coverings of

jute, the steel tape is applied. The cable is then

passed through more compounds and receives two

more servings of jute after which it is covered with a

coating composed of a mixture of whiting, water and

a small amount of glue. This coating serves two pur-

poses, first, it prevents the layers of the cable on the

reel from sticking together and, second, because it is

white it lessens the rate of absorption of heat from

has not decreased, the cable is released

for shipment.

The problem of shipping the heavy reels, which weigh approximately 9,000 pounds, was solved by placing two reels side by side on a flat car and running a heavy rod through the center holes of the pair. This rod is fastened by heavy bolts to the stake holders of the car. A carload consists of from 8 to 12 reels depending on the size and condition of the car.

Besides the equipment at Kearny, four machines at Hawthorne and two at Point Breeze will prepare tape armored cable for burial.

ON January 1, 1930, the Ten-Year Convertible 4½% Gold Debenture Bonds of American Telephone and Telegraph Company become convertible into its stock. The bonds are convertible up to and including December 31, 1937, except that bonds called for redemption on any date prior thereto may be converted not later than their redemption date.

there, 85 per cent. of the jute used in the United States imported from India. After the jute comes from the spin-

neries in the form of yarn or roving it is impregnated with an asphalt compound and wound into cops of a size to suit Western Electric machines.

The steel tape used for the cables is soft annealed steel varying in

width and thickness with the diame-It is spiraled ter of the cable. around the cable in two layers, the outer layer overlapping the spaces in the inner.

Mike Lebo

Western Electric Kearny Works oper-

ates winding head for

winding steel tape on

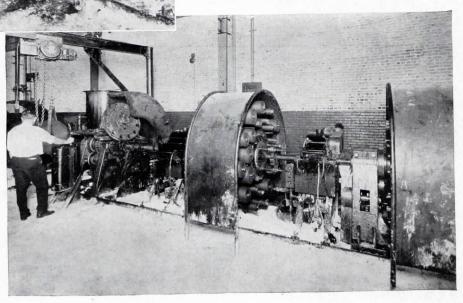
cable

of the

Electric

In the process of armoring, the lead covered cable is first pulled through a tank containing the asphalt com-This coats pound. the cable with a cov-

Victor Savary of the Western Electric Kearny Works at the operating control of the tape armored machine





### HEAWICH ORNE HEAPPENINGS





#### Fourteen Years Ago—

NEW YORK-The feature article of the NEWS of fourteen years ago told of the Western Electric's part in Electrical Prosperity Week. It was a week early in December which was celebrated by the combined electrical interests of the country. The purpose of this celebration was to educate the public to a more extensive use of electrical products and at the same time to help the members of the industry to work together to attain a common objective. The week was observed in various ways: through thousands of window displays all over the country; through special sales of electrical apparatus; by means of street parades and special illuminations; through electrical shows held in the larger towns and cities. Our distributing houses were very active in these events. They had exhibits at most of the electrical shows held in their respective territories, and furnished hundreds of Western Electric window displays to the Company's agents throughout the country. The houses also furnished electrotypes for newspaper advertisements and ran advertisements of their own in the local newspapers.

The electrical industry is now among the most prosperous industries in the country. A great deal of its success can be credited to cooperative movements which helped to build up public confidence.

In his statement of the business of our Company for the year 1915, Gerard Swope, Vice-president and Sales Manager, said that the sales would approximate \$62,000,000. It was \$2,000,000 less than the business done in 1914 but he said, "We are looking forward to 1916 as a year of great activity in the factory and all departments of the Company."

If he could have looked forward fourteen years he would have received the thrill of his life. He would have seen a company, which after disposing of two large departments of its business—the Supply Department and the Foreign business—was doing a business of approximately \$400,000,000, nearly seven times that done in 1915.





# Healing by Music

Modern hospitals put the Western Electric Public Address System on staff

Music hath charms—and healing powers. Lucky is the hospital patient whose convalescence is cheered and hastened by entertainment through the Western Electric Public Address System.

It amplifies and distributes sound to all parts of the hospital by means of loud speakers in private rooms and telephone headsets in wards. And patients can listen to radio broadcast, or entertainment put into a microphone in the building, or phonograph records played on the Western Electric Music Reproducer.

Here then is a soothing bedside visitor always on hand at the right moment.

The Western Electric System has many advantages which appeal to progressive hospital managements. Architects and engineers value it because it is electrically reliable, made by the makers of your telephone.

To hospitals, hotels, schools, amusement parks and communities, it offers new opportunities for service to their public.



Now all can hear in the hotels' large meeting rooms.



Dancing to the Music Reproducer at restaurant or country club.



The school principal can, by loud speaker, address all rooms at once.



The Western Electric Music Reproducer, ever ready to provide entertainment from phonograph records.

# Western Electric

PUBLIC ADDRESS AND MUSIC REPRODUCTION SYSTEMS

DISTRIBUTED BY Graybar Electric Company 1 1 1 OFFICES IN 72 PRINCIPAL CITIES

# Look for this SIGN

People are learning that there's a difference in SOUND QUALITY



THEATRES equipped with the Western Electric sound reproducer are featuring that fact in lobby programs, and newspaper advertising. Exhibitors display the name because the Western Electric sound system assures reproduction in the same clear and life-like tones which went into the making of the picture.

The satisfaction you have enjoyed in listening to your favorite actors and productions on the stage can now be duplicated by hearing their voices reproduced with absolute fidelity in the

sound picture. But there is a vast difference in the quality of sound. People are learning to discriminate in selecting theatres for their sound equipment as well as for the stars and

Western Electric made your telephone. Its experience in voicepictures shown. transmission apparatus was indispensable in this similar problem - the Sound Picture. That is why the Western Electric sign in a theatre is your assurance of quality.





Colored enlargements for lobby display are on their way to you. Use them as your tie-up!

This advertisement appears first in the Dec. 28th issues of "Saturday Evening Post" and "Liberty." Millions who will see it are going to look for the Western Electric sign.