

Water Is Rival of Electricity

Wave Power Transmission Hailed as Newly Come Conqueror on Industrial Horizon.

IS INVENTION OF AN ITALIAN

New Method Is Coming Into Practical Use—Piles Driven and Granite Drilled—Not Same as Hydraulic Power.

New York.—Unheralded except among a narrow circle of engineers and technicians in England and Italy, a new method of harnessing water, invented only a few years ago, is coming into practical use. We make the waves of the air work for us in a thousand ways, and through ages have striven to chain the tides to machinery, but wave power transmission is hailed as a newly come conqueror on the industrial horizon. It is, says Marian Storm in the New York Post, by no means the same as hydraulic transmission of power in the sense now popularly used, and it proposes, in certain fields, to rival electric transmission.

Capt. L. G. Culleton, R. E., who is at present in New York, and who is a friend of the Italian inventor of the system, George Constantinesco, talked with enthusiasm of the service which he believes wave power transmission is destined to render when the theory is more commonly known, declaring it comprehensible to almost every one in days when little boys build their own airplanes and automobiles, although, of course, a description of the method cannot be given without some technical terminology.

The Principle.
"The transmission of power through a pipe full of water is the simplest thing imaginable—if anything, simpler than the transmission of electric current over a wire," he said. "You wonder why it has never been practically applied before, since theorists have discussed it so much.

"The principle of the system differs fundamentally from the usual conception of the hydraulic transmission of power, where liquid is made to flow through the system. For in wave power transmission the liquid does not flow, but power is handed on from particle to particle of the liquid, these vibrating about a mean position and transferring the impulse received from one to another, until at last the power received at one end of the system has been delivered at the other end."

So far it seemed quite understandable. "These impulses in the form of waves," he went on, "travel through water at the rate of about 4,707 feet a second. The machines are built to work at forty impulses or cycles a second—2,400 per minute."

"What are some of those machines—what can they do?"
"Well, wave power generators and transmission piping are on the market now in England, and tools of a good many kinds are obtainable—rock drills, riveters, coal cutting drills, disc and chain type coal-cutting machines, impact screens, concentrating tables, even pile-drivers."

"Wave power transmission doesn't seem so very different from alternating current electrical transmission," some one reflected.

Wave Transmission.
"There is a similarity, and it's not coincidence," Capt. Culleton answered. "Many of the laws that govern wave and electrical transmission are interchangeable. You'll be interested to know that in wave transmission there are the equivalents of what we call in electrical practice volts, amperes, frequency, angle of phase, induction, capacity, resistance, condensers, transformers, single-phase and poly-phase systems—"

He was interrupted by the question whether anybody could conscript his private pond for service by aid of wave power machines.

"Oh, naturally, world-wide patents cover the storage of energy in liquids. Experimental work has been carried on in England since 1914, and early in the war the British government took

GOLD STAR MOTHER



This beautiful statue, the Gold Star Mother, now stands in front of the building of the Chicago Historical society.

over the entire experimental plant and made all the patents secret, but I understand that considerable use was made of the system in equipping allied battle planes.

He explained how docile water must needs become in the grasp of this inventor: "As long as your pipe is strong enough to do the work, the power imparted to the particles at one end of the pipe line by the generator can't help being delivered at the other end."

"Do you think, then, that wave power will even chase electricity out of the field?"

"No, certainly—but it can be used in cases where it is not desirable to use electric power, or in fields where electrically operated machines do not give the best results, as in mines, or in boiler shops and shipyards where direct vibratory machines are required. Compressed air at present has practically a monopoly in these fields."

NEBRASKA IN BRIEF

Timely News Culled From All Parts of the State, Reduced for the Busy.

SCORES OF EVENTS COVERED

J. G. Ludlam has been appointed postmaster at Lincoln.

Three hundred and fifty-seven names were added to the Geneva farm bureau during one week.

The infant child of Mr. and Mrs. Emory Pickett of Auburn accidentally swallowed a safety pin.

Dr. Fred Broder, aged 80, said to be the oldest free mason in the state, died last week at his home in Beatrice.

The Norfolk canning factory has been closed down until next January due to lack of buying on the part of jobbers.

C. C. Smith of Exeter was elected president of the State Manufacturers' association at the session held in Omaha last week.

The Farmers' State bank of Verdon is a new banking institution, which has made application for a charter from the state banking bureau.

Fire Chief Harry Whiteside, who was overcome by smoke while fighting a fire in a printing plant at Beatrice, has recovered and is again at his post.

There are 35 counties in the state without public libraries of any kind, according to Miss Nellie Williams, secretary of the state library commission.

State university fraternities will combat high prices by refusing to patronize hotels, cafes, movies, dances and other places until prices are reduced.

Four business houses at Burchard were entered by burglars who escaped on a velocipede which they stole from the Burlington railroad. They left the machine at Pawnee City.

George W. Holdrege, general manager of the C. B. & Q. lines west of the Missouri river, after fifty years of active service with that road, will retire on Friday, December 31.

At the state sheriff's association meeting at Grand Island last week Carl Quinton of Plattsmouth was elected president for the ensuing year and Peter Duffy of O'Neill, secretary-treasurer.

Kearney dealers are paying a premium on corn, and as a consequence corn is being marketed there from distances of twenty miles and more, the majority coming from south of the Platte river.

The housing problem at Lincoln is becoming serious, according to an estimate just presented of the shortage. It is said that five hundred houses are needed at present to adequately accommodate the people who are hunting homes.

Congressman Andrews has named Charles H. Blyvens and Daniel Stubbs as principals to take the examination for midshipmen at the naval academy, and Theodore F. Barnes of McCook as a candidate for a cadetship at West Point.

Because recent surveys have revealed considerable numbers of undernourished children in small towns and on farms, the college of agriculture is joining in a campaign to encourage greater use of milk and butter and the serving of hot lunches at school.

Students of the university at Lincoln have been asked to contribute to a relief fund for students in France, Germany, Austria, Hungary, and Czechoslovakia. The matter was presented to the representatives of various organizations and the movement endorsed, but action has been postponed till after the holidays.

The Nebraska college of agriculture again won a notable victory when its live-stock judging team triumphed over college teams from several other big cornbelt states at the International live-stock exposition at Chicago. Nebraska ranked ahead of such states as Iowa, Kansas, Missouri, Minnesota, Illinois, Ohio, the Dakotas and Texas. It was defeated only by Purdue university of Indiana, and that by a narrow margin.

The obtaining of a fair price for agricultural products will be the general keynote of the discussions at the meetings of organized agriculture in Lincoln January 3 to 7. Increased production and the general betterment of farming will not be neglected, and will come up for prominent consideration at several meetings, but farmers just now are more interested in better prices than in anything else.

Hard times is filling Nebraska churches, according to Rev. John H. Garrettsen, of the Nebraska welfare association who has just completed a visit to churches in the state. He attributes a 20 per cent increase in attendance to lack of employment and the financial depression.

Nebraska municipalities, school districts and counties have issued treble the amount of bonds in the last biennium as in the preceding two years, according to records compiled by C. E. Lawrence, clerk in charge of bond registration at the state auditor's office.

The Cass County Farm Bureau, cooperating with the state and national organizations, is planning a big membership drive for the week of December 13.

The Hobb Motors company and the Patriot Motors company, two Lincoln corporations, have been held to be insolvent in a decision made by United States Judge T. C. Munger.

The new Platte county courthouse at Columbus was dedicated last week by the Masonic grand lodge. Grand Master Frandenberg of Omaha and Grand Custodian Robert E. French of Kearney had charge of the services.

NEBRASKA RELIEF COUNCIL.

Organized to Help Feed the Starving Children of Europe.

Omaha.—For the purpose of assisting to feed 3,500,000 children in Europe who will die of starvation this winter unless America feeds them, the Nebraska relief council has just been organized by the state committees of the Red Cross, Y. M. C. A., Knights of Columbus, Y. W. C. A., Church Federation, Friends' Service association, American Relief association and the Jewish relief. The organization was perfected at a meeting in Omaha last Monday, at which representatives of the eight state-wide organizations chose G. W. Wattles of Omaha chairman and L. W. Trester executive secretary. The council will conduct a campaign during the holidays for \$300,000, every cent of which is to be used for the children of Europe.

The Nebraska campaign is to be waged as a portion of the nationwide campaign of which Herbert Hoover is chairman. The organization through which Mr. Hoover carried on the great relief work in Europe immediately following the war will be utilized for this work among the children of Europe.

"Unless America feeds and clothes these children this winter they will die," said Mr. Wattles, reading from a telegram from Mr. Hoover.

"This is the last campaign in which America will be called upon to assist Europe," said Mr. Wattles. "And this is for the children. Not a cent goes to grown folks—it's for the little children. They must not be left to starve."

Arrangements were made to organize the European Relief council in every county in the state. Representatives of each of the eight organizations which have merged into the European Relief council will get together in each county immediately and will arrange to conduct a local campaign beginning at once and ending with the year.

The English Lutheran church at Valparaiso celebrated its twenty-fifth anniversary last week with an all-day meeting.

Members of the former Plattsmouth Home guard company voted \$350 remaining funds in their treasury to the American Legion for use in outfitting club rooms.

Bill Rourke, who for the last 21 years has been sole owner of the Omaha base ball club of the Western league, has sold his franchise to Fagna Burch of Houston, Texas.

Automobile bandits operating in Omaha stole ten automobiles between 8 and 9 o'clock one night last week. This is a record number for one hour, according to official reports.

Mike Curtin, alleged slayer of his father on June 2d last, pleaded guilty to murder in the second degree, and was sentenced at Grand Island last week to imprisonment for life.

An explosion in the gas plant at Kearney set fire to the building and caused a damage of \$90,000. The shock of the explosion was felt all over the city.

Replies to a questionnaire sent to county agricultural agents by the college of agriculture indicate that between a third and a fourth of the corn crop was still in the field December 1.

The Gothenburg Community club has decided to bring some of the big musical attractions to Gothenburg this winter and the first number will be the Polish pianist, Leopold Godowsky.

The report of State Land Commissioner Dan Swanson shows a total increase of \$103,467.66 in receipts from lands leased and lands sold by the state for the two years ending November 30.

Nebraska will be required to enlist 6,400 officers and men for the national guard in the next four years, according to a statement just issued by Adjutant General Paul, who has plans for the reorganization of the guard almost completed.

Farmers of the Canadian settlement in the Stanton neighborhood have cut all farm laborers' salaries to \$50 a month. Many farmers have been paying their men, who had families, \$100 a month, furnishing free house, giving them milk, potatoes and fuel as well as allowing them to keep a flock of chickens.

In addition to hundreds of letters to the College of Agriculture from farmers regarding the keeping of cost accounts, communities are organizing to do the work in a co-operative way. Farmers of Cheyenne county recently voted to keep accounts in every school district. Three communities in Platte county have also organized to know the cost of producing next year's crops.

Fire which started in the basement of the Greenwood block at Wynmore caused a loss of about \$5,000 to the postoffice and the building in which it is located. The origin of the fire is supposed to have been spontaneous combustion.

The home of Dr. Edwin Maxey, former well-known professor of law at the state university, at Collegeview, was set on fire, a damage estimated at \$1,000 resulting. Kindling in a basket and rags in closets and bureau drawers, saturated with kerosene indicated that the fire was of incendiary origin.

Nebraska university is now a full-fledged member of the Missouri Valley Conference, ready to comply with all the rules of the organization and will compete for the football championship in 1921.

Patrolman Joe Treglia is to be given the first medal awarded under a new plan for rewarding extraordinary bravery and efficiency in the police department at Omaha. Treglia thwarted an arson plot to destroy a restaurant and rooming house in that city, by carrying out of the building several blazing basins filled with inflammable material and oil soaked shavings.

CANADA BIG WINNER

Captures Many Prizes at Leading American Fairs.

Remarkable Showing Made at International Live Stock Show at Chicago—Carried Off Sweepstakes For All Wheat.

Something that lends emphasis to, and affords definite proof of, the generosity of the soil and climate of western Canada, is shown by the numerous exhibits made by both the government and individual farmers and stock raisers of that country, at many of the leading state and county fairs in the United States this season. Particularly is this the case with regard to exhibits made at the International Live Stock Show recently held at Chicago.

First and foremost to the average farmer will appeal the fact that Canada carried off the Sweepstakes for all wheat, and that out of a total of twenty-five prizes, Canada took twenty. In oats the Grand Championship was won by a farmer living in the Province of Alberta. Canada also was awarded the championship for Durum wheat, while for Flint Corn out of a total of ten prizes, Canada took first, second, third, sixth and seventh.

Not only in grains did Canada prove her right to rank as a first class agricultural country, but she carried off many prizes for cattle, horses, sheep and hogs, a partial list of which follows:

Cattle, Canada was awarded the championship for Grade Shorthorns, also in the College Special class, Canada gained first, fourth and sixth prizes.

Horses, Grand Championship for Clydesdale stallion, also Grand Championship for American bred mare, as well as first for three-year-old Clydesdale stallion, first for one-year-old Clydesdale stallion, and second for the aged class.

In the Belgian class, Canada obtained first and reserve for Championship Belgians, as well as second for Aged stallion.

Sheep, Canada obtained Championship for block, male and female, in addition to first prize in all group prizes.

Hogs, in the Yorkshire class Canada was very prominent, taking the Championship for pen of Yorkshires, and championship for best single barrow, as well as over twenty first, second and third prizes in other classes of Yorkshires.

With regard to the live stock shown it must be borne in mind that these have not been fed on corn, on which the average western farmer places his reliance, but on the wonderful oats and barley grown in western Canada, supplemented by the native grasses, of which a most artistic display was made by our neighbors to the north.

Canada has conclusively proved that not only can she take prizes for the grain she raises, but can also take prizes with the animals to which these grains have been fed, and this in open competition with the world.—Advertisement.

Their Choice.

The children were going to have a stepfather. Mother had just made the announcement and was waiting to hear their opinions of her choice. Nine-year-old Ruth's came first. "But, mother, he hasn't any hair," she protested.

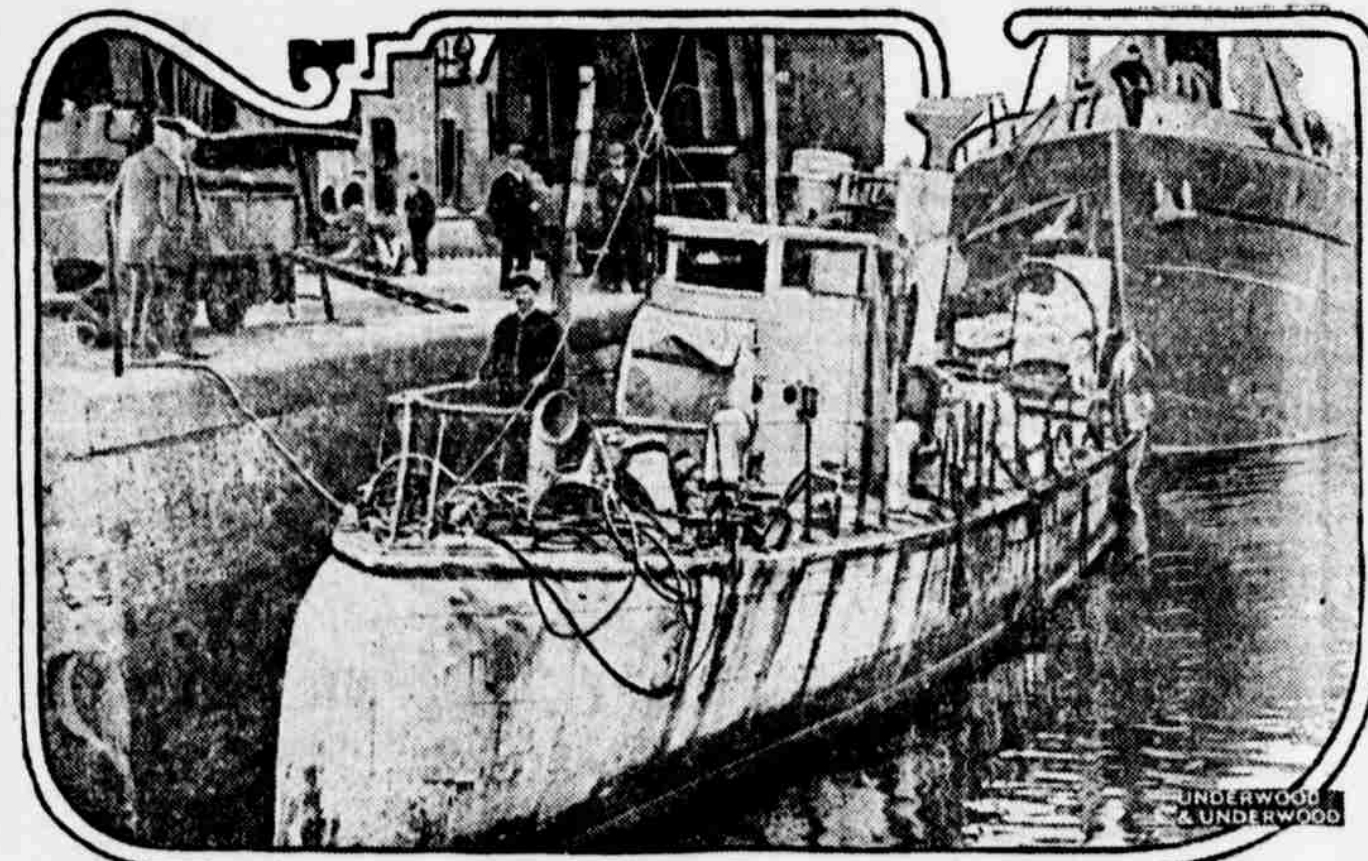
Mother smiled. She had been afraid they might offer worse ones than this. "But your own daddy didn't have much," she smiled.

For a minute Ruth was silenced, but she was thinking. "I know, mother," she admitted. "but you were young when you chose him. Now you know more and it does seem like you ought to be a better chooser."

Under Fire.

"What sort of speaker is he?"
"I don't know. He seems to be all right for plain talking, but I don't know how'd he'd be if they started to heckle him."

Crewless British Torpedo Boat Picked Up in Channel



The French trawler Wagram recently arrived at Plymouth, England, with the British torpedo boat O-76 in tow. The Wagram had picked up the little war vessel while on her way to Boulogne. No trace could be found of the torpedo boat's crew.

Strangers Seek Buried Treasure

Hidden a Century Ago by Counterfeiters on Shore of Lake in Maine.

OLD EPISODE IS RECALLED

Gang Worked in Secret for Many Years, but Refrained From Passing Any of Their Product in the Neighborhood.

Bangor, Me.—The fact that a fortune lies buried in the dense forest somewhere along the shores of Money-maker lake, between Robinsonston and Red Beach, well-nigh forgotten by the few residents of that section who ever knew it, has again been brought to mind.

A Robinsonston farmer had, having strayed some distance from home in search of trout brooks, which might furnish better sport than those nearer the settlements, came upon two men digging under some giant spruce trees near the shores of Money-maker lake.

The men did not observe him at first and he watched them while they toiled in two or three spots. Later, when he accosted them, they told him they were digging for worms for bait. As they had no fishing tackle with them, and as Money-maker lake has

no fish worth catching, the boy thought this explanation somewhat remarkable.

When he reached home he told of his adventure, and at first none could account for the presence of strangers or for their actions until one of the older residents of the town declared his belief that the two unknown men were seeking the buried treasure which has lain in secret for almost a century and has defied the efforts of treasure seekers for years.

Long ago many men labored diligently along the shores of the lake, but the search was abandoned, and until this week no one had been known to have hunted for the treasure for a quarter of a century.

Money-maker lake is surrounded by a heavy forest growth and is in a somewhat inaccessible place in northern Washington county. It derived its name from a gang of counterfeiters who, early in the nineteenth century, dwelt in a cabin on the shore of the lake and pursued their unlawful employment of making money, chiefly imitations of silver coin.

Later their names were known to be Ball, Smith and Blaisdell. Here they lived for many years in secrecy until one day, almost a century ago, a Robinsonston farmer, looking for some cattle which had strayed from his pasture, came upon their cabin unawares and discovered the nature of their employment. He was seized by the three

lawbreakers and carried into their cabin. Ball, the leader of the gang, was in favor of killing the visitor to make sure that there would be no evidence against them.

If Smith had not strongly objected Ball would probably have killed the farmer, but Smith was determined that the crime of murder should not be his, and a compromise was effected. The farmer was obliged to swear by the most binding oath that he would not reveal his discovery, and was then permitted to go.

The farmer, after his return home, hesitated between his fear of the counterfeiters and his sense of duty for a day or two, and then told the town authorities what had befallen him and what he had discovered. Deputy Sheriff Downes started for the forest at once, along the route described by the farmer.

Before reaching the cabin of the counterfeiters the officer came upon Ball, who was doing sentry duty. Deputy Downes, a courageous man advanced upon Ball. The latter fired bringing down the officer at the first shot. Other officers later captured Ball, but Smith and Blaisdell escaped and have never been heard from since. Ball was tried, convicted of murder and was executed.

Before his death by hanging the counterfeiters said that a large sum of money had been hidden by him at the foot of a tree near his cabin, but he defied any one to find it, and refused to tell its exact whereabouts. He said most of the money was in genuine silver coin, the spurious money having been distributed elsewhere.

As soon as the story became known, and for many years after, hundreds tried vainly to find the hidden hoard.

This Is Shoe Insurance

\$5.00 CASH

and a

New pair of Shoes

will be given to the wearer who finds PAPER in the heels, counters, insoles or outsoles of any shoes made by us, bearing this trade-mark

"It Takes Leather to Stand Weather"

See your neighborhood dealer and insist on the Friedman-Shelby "All-Leather" Trade-Mark. It means real Joe economy.