

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."

Last Night's Dreams

—What They Mean

DID YOU DREAM ABOUT DRINKING?

NOW that booze has "gone glimmering through the dream of things that were" it is interesting to investigate the alcoholic conditions in Dreamland. "Where there ain't no Ten Commandments and a man can raise a thirst."

It is not too much to say that the situation there is positively shocking, and the drays ought to get busy at once in the realm of shadows. Old booze-fighters, now reduced to taking their tipple and consorting with their inebriated associates in Dreamland only, may gather what solace they can from the fact that oracles and soothsayers regard as of generally favorably omen dreams in which the late John Barleycorn conspicuously figures. And it may be laid down as a rule that if you take your "licker" in dreams alone it won't hurt you. In fact, it will have just the contrary effect to taking it over a real bar. To go into a Dreamland barroom—the only one now open—and there, seeing old acquaintances, say "What's your's, boys?" indicates, if everything is pleasant and convivial, that you will soon embark in some new speculation or business which will be highly profitable. Should one of these dream-friends refuse to join you, declaring that he is on "the water-wagon" you will soon meet an old friend and have a long and pleasant chat with him.

To dream that you are drunk and have accumulated your jag from Dreamland booze indicates that riches and honors, now wholly unforeseen, are to come to you; probably through making the acquaintance of a man now unknown to you who will put you in the way of making your fortune. To the unmarried man it signifies that he is beloved by a woman of whom he has, as yet, scarcely thought, and that she will make an excellent wife. But to dream that you have tasted no liquor and yet are drunk is accounted a bad sign. You will soon commit some foolish action.

If you dream that you got drunk on water you are going to boast of your rich relations, and of wealth which you do not possess. Also, to see another man drunk means that you will do something foolish. It is but fair to the oracle and soothsayers to state that these dream interpretations were expounded years and years before the dry amendment to the Constitution was thought of. (Copyright.)

THE GIRL ON THE JOB

How to Succeed—How to Get Ahead—How to Make Good

By JESSIE ROBERTS

THE JOB ABOVE YOU

IT IS perfectly legitimate for you to be keeping an eye with a view to future possession on the job above you. Some of us have perhaps reached the pinnacle of our ambition, but that number is small. There is something ahead that is better and it is right to try for it, to plan for it, to get it. But don't make the mistake of slurring your present job because you think you are fit for a better one. The best way in the world to get that rise is to fill your present position as well as it can be filled. There is very little really thorough work being done. The girl who is thorough in what she does, who can be definitely depended upon, will attract notice. Doing your work well is more important than many women think.

One woman whom I know was supposed to make clippings for her employer in regard to the business of the firm, clippings from a large number of papers, and to leave these on his desk. It occurred to her that he lost a good deal of time in running over these slips. She began arranging them according to topics, and she fastened to each bunch of clippings a resume of their contents carefully made. It wasn't much perhaps, but it looked good to that employer. He kept his eye on that young woman. She had aroused his interest.

Presently she suggested the feasibility of issuing a small pamphlet made up of items from these clippings, a monthly record of what appeared in the public prints that was most to the point. The idea was adopted and worked well.

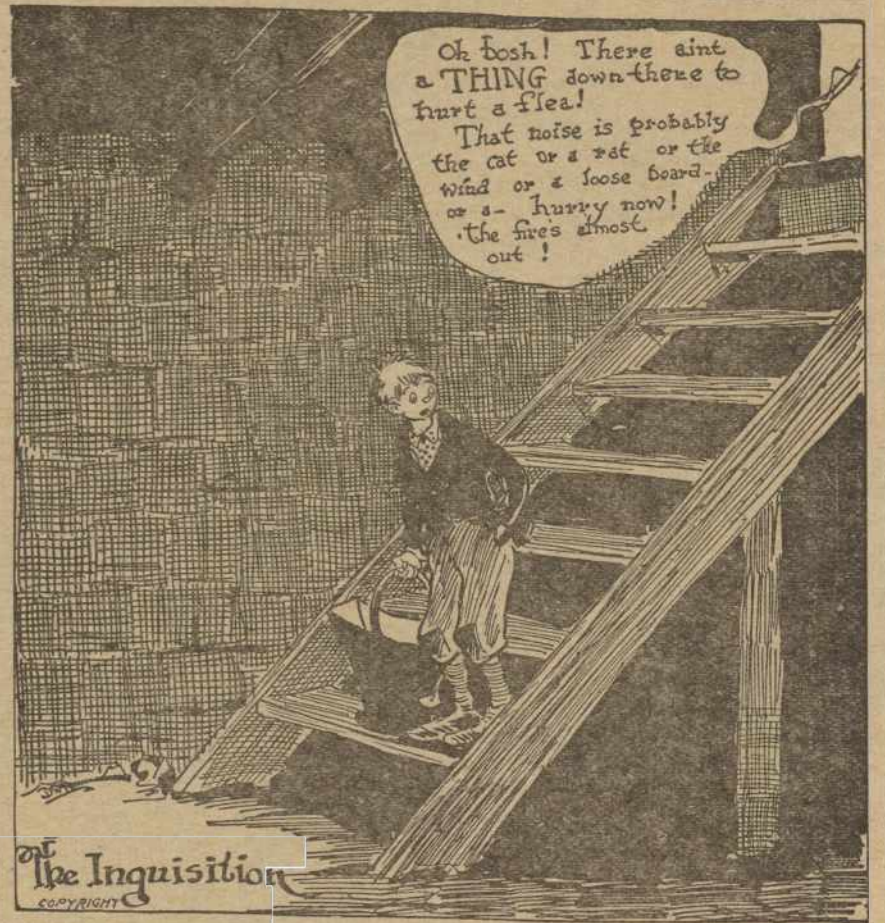
A girl like that does not stay down. She is now private secretary and advertising manager to that employer, at an excellent salary. And she will go farther.

You don't need to be a grind and a ludge to do your work so well that you will be taking the job above you as soon as it is vacant—or can be created. You do need to be interested in what you are doing now, to be ready to develop its possibilities, to see the relationship between what you are doing and the work of the organization as a whole. It is work done without interest and hope that is hard. It leads nowhere, and it is boring. Keep alive in the job you are in. (Copyright.)

For Scorched Garments.

Hold the stain left by too hot an iron under running water for a few minutes and it will quickly disappear.

SCHOOL DAYS



Mother's Cook Book

We play at our house and have all sorts of fun. An' there's always a game when the supper is done. An' at our house there's marks on the wall an' the stairs. An' ma says that our house is really a fright. But pa an' I say that our house is all right. —Edgar Guest.

GOOD THINGS FOR THE TABLE.

A nice spice cake which will keep moist a long time is the following:

Spice Cake.

Cream one-half a cupful of butter, add one and one-half cupfuls of brown sugar, two eggs without separating, one-half cupful of coffee and two cupfuls of flour sifted with three teaspoonfuls of baking powder and one teaspoonful of cinnamon, one-half teaspoonful of mace and one-half teaspoonful of clove. Add the coffee alternately with the flour and bake in a loaf pan.

Peanut Butter Fudge.

Boil together two cupfuls of brown sugar and one-half cupful of milk; when a soft ball is formed by dropping a little in cold water, add one-half cupful of peanut butter, reheat until melted, pour into a buttered pan and mark in squares when partly cooled.

Cereal and Nutmeat Chops.

Take three-fourths of a cupful of hot cooked cream of wheat, add one-fourth of a cupful of soft bread crumbs, two cupfuls of fine crushed nutmeats, one teaspoonful of salt, one-fourth teaspoon of pepper, one-half teaspoonful of powdered thyme and one egg beaten light. Mix all the ingredients together thoroughly and form into cutlet shapes. Place in a buttered pan and bake twenty minutes. Serve with bananas cut in quarters, rolled in flour and fried in hot fat.

Chocolate Mocha Cake.

Mix as usual the following ingredients: One-half cupful each of butter, brown sugar, white sugar and molasses, one ounce of melted chocolate, two egg yolks beaten light, one-fourth of a cup of cream, one-fourth of a cup of milk, one-half teaspoonful of soda, one-fourth teaspoonful of clove, one-half teaspoonful each of cinnamon and mace, two cupfuls of flour and the stiffly beaten whites of two eggs. Bake in a sheet twenty-five minutes.

Mocha Frosting.

Take one cupful of butter, if salt, wash it; add two and one-half cupfuls of sifted confectioner's sugar, then two squares of melted chocolate; finally beat in one-fourth of a cupful of coffee a few drops at a time. Make and freeze the orange ice as usual. To a pint of cream add a scant half cupful of sugar, and such flavoring as desired; beat until light but not firm or in the least dry. Fill the mold with layers of the orange ice and the whipped cream. Cover and pack to become firm.

Spanish Sandwiches.

Put into a small chopping bowl twelve anchovies wiped free from oil, two tablespoonfuls of capers and four or five branches of parsley; chop fine, then pound with a pestle, adding meanwhile half a teaspoonful of mustard, one tablespoonful each of oil and vinegar and the hard cooked yolks of two eggs. When all is mixed to a smooth paste spread upon buttered bread; sprinkle with the whites of eggs chopped fine and press together sandwich fashion.

Nellie Maxwell (© 1920, Western Newspaper Union.)

The Kitchen Bolshevik. "Are you a parlor bolshevik?" "No. The humbler phases of life interest me. The lettuce sandwich and the cup of tea are no inducements. I am directing my attention to the kitchen, where they really have something to eat."

THE ROMANCE OF WORDS

"KANGAROO."

WHEN Captain Cook's expedition anchored off the coast of Australia one of the first things the explorer did was to send some of his men ashore with instructions to bring back specimens of the plants, flowers and animals which appeared to be distinctive of the country. Two of the sailors returned with a beast which had extremely long hind legs, short fore paws and an exceptionally well developed tail. Cook, who had never seen anything of the kind, desired to learn something more about the strange animal and sent the men back to discover by what name the natives called it.

Upon their return they reported that the nearest they could come to it was "kan-ga-roo." "At least," as one of the men declared, "that's what all the natives said when I pointed to the animal." So, when Captain Cook returned home, he brought with him the body of an animal which was introduced to natural history under the name "kangaroo."

It was not until a number of years later that it was found that "kan-ga-roo" was the Australian equivalent for "I don't know," which was the reason that the natives said this when Cook's men asked them a question they didn't understand! (Copyright.)

THE WOODS

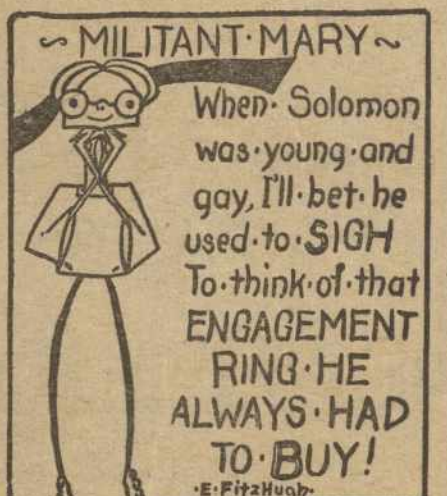
By DOUGLAS MALLOCH

THE SKY PILOT.

Oh, that I had in the wilderness a lodging place of wayfaring men.—Jeremiah 9:2. BY THE wall of the busy city, Ye have lifted on high a temple, Ye have builded a house of grace, Amber and red the windows, Marble and tile the floor— But I weep for a thousand pilgrims far Who never have seen the door.

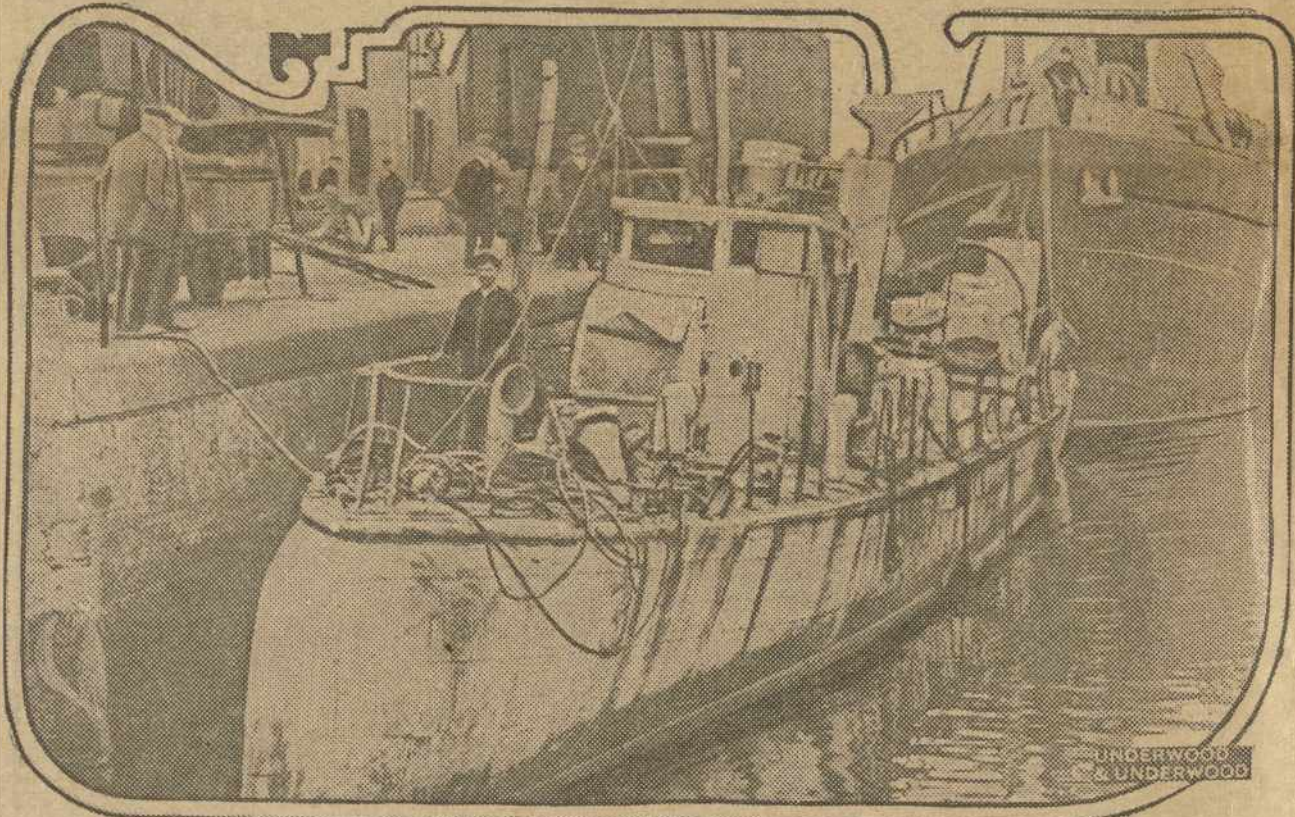
Gorgeous the gilded altar, Pleasant the cushioned pew, Thrilling the chorused music Ringing the cloister through, Wonderful thing the sermon, Grilling the creeds absurd— But I weep for a thousand woodsmen strong Who never have known the Word.

Build me no mighty temple, Build me no jeweled shrine— Build me a house of worship Under the solemn pine, I'll speak from a rough-hewn pulpit To men of a rough-hewn race; And, with God's great help, I will bring them yet With the Master face to face! (Copyright.)



MILITANT MARY
When Solomon was young and gay, I'll bet he used to SIGH To think of that ENGAGEMENT RING HE ALWAYS HAD TO BUY!
—E. FitzHugh.

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 Robbinston and Red Beach, well-nigh forgotten by the few residents of that section who ever knew it, has again been brought to mind.

A Robbinston farmer lad, 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 Robbinston 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 counterfeiter 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.