

THE ELECTRICAL WORLD

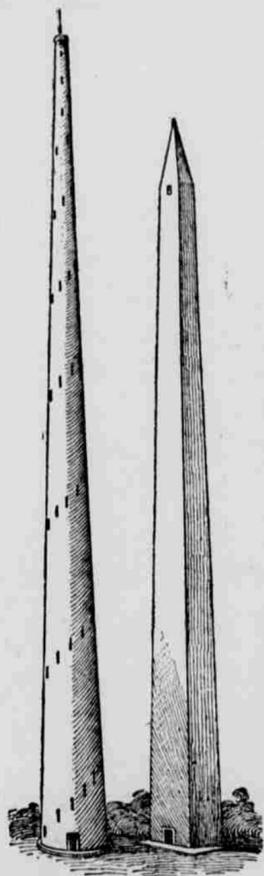
TO BUILD WIRELESS STATION

Navy Department to Construct Tower 600 Feet High—Taller Than Washington Monument.

The United States navy department will soon let out bids for the erection of the tallest wireless telegraph station in the world. It will be located near Washington, and will be one of the most modern and powerful stations in the country.

Shooting up into the air to a distance of 600 feet, 45 feet taller than the Washington monument, it will be a marvel in construction and wireless communication.

The tower will be of concrete with steel reinforcements. It will measure



Wireless Tower and Washington Monument.

from 50 to 60 feet at the base, and from 8 to 10 feet at the apex.

At the apex will be a long, slender wooden pole, not unlike a flagpole. From the top of this pole, a wire or steel umbrella-shaped frame will be erected for the purpose of attaching wires which will run to the station on the ground floor of the tower.

The most powerful wireless machinery in the world will be installed in the tower, says Popular Mechanics. When completed the navy department will be able to send a message from Washington to within a short distance of the shore of Africa, and to within a few miles of the Spanish and English coast.

ELECTRICAL STATIC WONDER

Machine Invented to Furnish Any Amount of Electricity—Will Revolutionize Aviation.

Llano A. Whyte, a machinist of Spokane, Wash., claims to have perfected and patented a machine capable of furnishing any amount of electricity, which will revolutionize aviation and wireless telegraphy and telephony. He has been at work on the principle of static electricity since 1907 and claims to have invented an apparatus which, in transmitting static electricity to three motors, will generate 150 horsepower.

He is now at work on an airship of 200 feet in length and capable of carrying a car of 200 pounds which, he announced, will be publicly demonstrated in Spokane within 90 days. The motive power is to be furnished by the static machine. Whyte is backed by a party of capitalists, who believe his invention has merit and that he will be able to make good on his claims. He has made a model of the big aerial craft to be constructed and with this he has been successful in all kinds of winds.

Electricity and Bacteria.

Among interesting papers read before the Royal Society in London recently was one by C. Russ upon the electrical reactions of certain bacteria as applied to the detection of tubercle bacilli in urine by means of an electric current. Another by Prof. H. A. Wilson described his experiments to determine the effect of a magnetic field surrounding it upon the electrical conductivity of a flame.

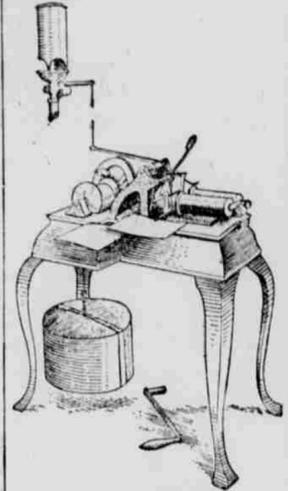
Canadian Pacific Cable.

According to the Times (London) the Canadian Pacific railway will grant use of its right-of-way for a special wire forming the connecting link between the Atlantic and Pacific cables of the proposed all-British round-the-world system.

MACHINE TO BLOW WHISTLES

Electrical Device Designed to Work by Means of Armature and Regulated by Weight.

This whistle-blowing machine is composed of a standard, a 75-pound weight, three gears, a set of fans, a blowing lever, and the necessary electrical installation to release the weight.



Electrically-Operated Whistle Blower.

says Popular Mechanics. It will operate any whistle in any system, the length of the blast being determined by the speed of the gears, and being regulated by the fans.

The gears are held in check by a release lever, the end of which rests on the studs of an electric-magnet armature. It is so arranged that the movement of the armature away from the magnet when a closed circuit is used, or towards the magnet when an open circuit is used, releases the lever, allowing the gears to start. The center gear, which engages with the end of the blowing lever, makes one blast of the whistle at every revolution.

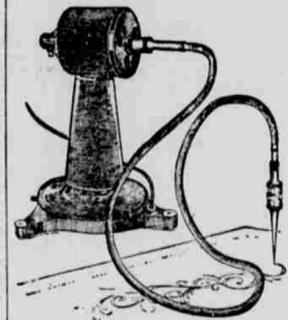
The weight is used in preference to springs because it does not change its tension, and when once adjusted only requires to be occasionally rewound.

CUTS OUT PAPER DESIGNS

Electrical Perforator or Needle Device Designed for Following Wallpaper Friezes and Patterns.

An electric perforator or needle cutting device has been designed for cutting out wallpaper friezes, crowns and stencils, and perforating pounce patterns. The needle fits into a tool which is attached to the motor by means of a flexible shaft. The motor can be attached to any electric light socket.

By use of the apparatus the figures in ordinary commercial wallpaper can be made to appear like hand-painted decorations. The needle point has a speed of 5,000 oscillations per minute,



Cuts Out Figures in Paper.

says Popular Mechanics. It runs without vibration and it is as easy to follow a pattern with it as if tracing with a pencil.

Sound from Electric Lamp.

Experiments in electricity by students of the Texas university engineering department have resulted in the production of articulate sound from a common arc lamp, the feeding wire of which is connected with a telephone.

Dr. A. C. Scott has interested himself in the experiment and says the result is due to the fact that the vibrations in the carbon of the lamp correspond exactly to those of an ordinary telephone receiver. The talking lamp is located in a room some distance from the phone in the engineering building, and students standing directly under it are able to hear conversations over the phone with perfect distinctness.

Noises or conversations in the phone room cannot be heard at that distance when communication with the phone is cut off.

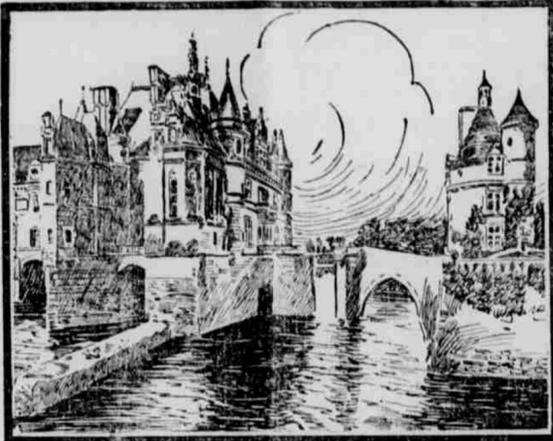
Overcome Electric Welding.

A patent recently granted to Mr. A. F. Rietzel is expected to overcome the difficulty often encountered in electric welding due to the arc jumping at the nearest points of two not quite smooth surfaces, and the exact position of the weld not being easily controlled. Raised portions on both sheets to be welded are placed in contact with each other, and the welding temperature reached only at the points desired, with a result similar to riveting, a saving of electrical energy and elimination of burning of metal resulting.

Long Distance in Europe.

A long distance telephone service with four lines is expected to be opened next year between London, Paris, Madrid, Barcelona and San Sebastian.

ROYAL GHOSTS HAUNT FRENCH CHATEAU



WONDROUS CHENONCEAU HAUNTED CHATEAU

WOULD you give millions for a chateau besieged by royal ghosts, vainly haunting the scenes of their old loves and crimes?

The ghosts are dread French kings, from Francis I. to Charles IX., with beautiful but cruel Diane de Poitiers and Catherine de Medici, the terrible queen-mother. Even the unhappy Mary Stuart knew the lovely scene.

The scene is outside wondrous Chenonceau, said to be again for sale—unless already sold—in the division of the Terry estate.

If you can pay the millions, take the ghosts as an extra attraction. They cannot harm plain Americans. Here is a mystery. The ghosts cannot enter the chateau so long as plain, untitled folks live in it. The potential influence of its builder—an untitled business woman of the renaissance—will keep the royal robbers out in the park!

Go back a century. Claude Dupin, plain tax-farmer, purchased Chenonceau in great dilapidation for 200,000 francs in 1733 and spent 100,000 francs in restorations. Here the Dupins held a brilliant literary court, with Buffon, Voltaire and Rousseau; and the chateau went peacefully to their descendants from whom Wilson's daughter bought it.

For the strong business woman of old days, who built the unique palace: Catherine Briconnet descended from a small shopkeeper's family of Tours, fostered to greatness like so many other "little people"—Barthelemy, Pouchers Bohlers—by democratic Louis XI. Behold Catherine Briconnet, daughter of a banker who died archbishop, married to Thomas Bohler, a farmer general, and rich enough to buy the marquis's fief.

While Thomas financed the armies of two kings Catherine left at home, built Chenonceau.

Catherine's husband, Bohler, died in the rout of the French army in Italy. Catherine died a year later. Francis I., finding his treasury emptied by Italian wars, brought suit against all the crown's financiers. The object was not to judge, but to grind money.

In five years the rich family of Bohler was ruined and Catherine's son, Antoine, was glad to humbly offer Francis I. his chateau of Chenonceau at a valuation of 90,000 livres as a quit claim. (It had cost his father 60,000 livres, or \$120,000 in our money. Some 40,000 livres remained of the king's claim. The Bohlers were sucked dry.)

Francis visited Chenonceau twice, an ill, melancholy man, and died a nasty death. But Diane de Poitiers had seen and liked the chateau of the waters.

Diane de Poitiers, celebrated in French history for her beauty, grace, crookedness, wickedness and unlimited influence over King Henri II, was married at 15 years to the hunch-backed Louis de Brezy, grand seneschal of Normandy, who was 60. Two years later her father, implicated in a plot, was being led off to the Place de Greve, Paris, to have his head cut off, but youthful Diane was talking with the dauphin. The father was reprieved at the last moment, and Diane became a political figure.

On the death of Francis I., her first act was to have the dauphin become king, dispossess her old rival, Duchess d'Etampes, of all her property. Finally, by letters patent, Diane obtained "our chateau of Chenonceau." Here is one of the crimes of Chenonceau. A young gentleman, La Chateigneraine, knew too much about Diane. Another De Jarnac, married the sister of her old rival, Duchess d'Etampes.

"Ask De Jarnac how he dresses so well!" said Diane to La Chateigneraine. "My mother-in-law helps me out," explained the unsuspecting De Jarnac. On which Diane caused the hateful whisper to go round:

"Do you know what La Chateigneraine says about De Jarnac and his mother-in-law?"

"They fought with swords and daggers in the presence of the court. Like Iago, 'Which one kills the other, I care nothing,' thought Diane; but she felt safer when, to everybody's surprise, De Jarnac suddenly seemed to slip, fell to one knee, and hamstring his superior adversary with a



LA CHATEIGNERAIE KISSING DIANE DE POITIERS

back pull of his sword. La Chateigneraine bled to death. To-day a "coup de Jarnac" means almost a foul; but the maneuver was perfectly regular, if new.

Here is another crime of Chenonceau. Diane, having finished the bridge-wing at a cost of 9,000 livres (\$18,000 to-day), built Italian gardens in the style of Passolo de Mercolegiano. The archbishop of Tours lent her a remarkable young gardener, Nicquet, to train up her fruit walks. Nicquet was handsome, distinguished, seductive, innocent; the court was at Blois; there was a passing escapade of a summer's afternoon or two; and then the handsome young gardener died of alleged cholera.

Of all Diane's crimes, this one stuck most. The victim was a servant; and the vengeful clan whispered the tale to their masters far and wide. Later, when Henri II. lay dying it became the pretext on which Taverannes offered the queen to go and cut off Diane's nose. Instead, the philosophical Catherine de Medici offered to spare the fallen beauty's mutilation—on condition that Diane should give her Chenonceau.

Catherine de Medici got Diane's clear title to Chenonceau by the ostensible trade of mortgaged Chaumont. (An American woman, Esther Alexander, legal French wife of Robert de Broglie, is, with him, co-heir apparent to the latter historic chateau at this moment.)

Her first great fete at Chenonceau was a triumphal entry for the new king, her son, Francis II. and his young wife, Mary Stuart. Arches, obelisks, columns, statues, fountains, antique altars, fireworks, music and 300 cannons made a wonderful effect. These were the happiest days of Mary Stuart.

They say, indeed, that her ghost is the only one that has been seen inside the chateau in the time of the Terrys. She appears as an elderly woman (as of the time of her death) in a black gown and white ruff, an elderly woman who walks through the bridge-wing, melancholy, surprised, content, as returning late to empty scenes of bygone happiness!

Chenonceau, in the hands of the Vendome-Mercœur family, went through a long period of abandonment. The court had quit Touraine. Young Louis XIII. passed the door without entering. Vendome and Mazarin were reconciled at Chenonceau; Louis XIV., 14 years old, came with his mother to the fete; and from that dates the splendid gilded furniture which the Terrys retain to-day in the middle salon. It was the last royal visit to Chenonceau.

A dowager duchess of Vendome dying without children in 1718—"killed," says Saint-Simon, "by abuse of strong liquors"—long abandoned and neglected Chenonceau passed by inheritances to the Prince de Conde, who sold it to the plain, untitled business man, Dupin.

A business man, an untitled middle-class man, at last again owned the fairy chateau of the water for which kings, queens and favorites committed crimes.

The ghosts of Chenonceau fled the interior. Voltaire, visiting Dupin, saw Diane de Poitiers kissed by La Chateigneraine in armor, in a thicket by the river.

Jean-Jaques Rousseau, visiting Dupin, saw the same love scene, while a nun mourned and a jealous woman smiled.

Georges Sand, a descendant of Dupin, saw the end of the wicked festival where three young noblemen and two young noble girls were stabbed to death.

Grevy, president of the republic, visiting the sister of his son-in-law, sat in the park at midnight watching. He beheld a rabble of pale shades besieging the chateau. They could not enter. STERLING HEILIG.

EASY



Mrs. Henpeck—Did you ever hear of anything worse than a man who who smokes in the house?
Mr. Henpeck—Yes. A smoking lamp. Ask me another!

Origin of Word "Bible."

The word bible is derived from the Latin name biblia, which was treated as a singular although it comes from the Greek neuter plural, meaning "little books." This Greek diminutive was derived from byblus, or papyrus, the famous material on which ancient books were written. The title "Bible" was first used about the middle of the second Christian century in the so-called second epistle of Clement (xiv., 2).

Laundry work at home would be much more satisfactory if the right Starch were used. In order to get the desired stiffness. It is usually necessary to use so much starch that the beauty and fineness of the fabric is hidden behind a paste of varying thickness, which not only destroys the appearance, but also affects the wearing quality of the goods. This trouble can be entirely overcome by using Defiance Starch, as it can be applied much more thinly because of its greater strength than other makes.

Secret of Happiness.

I have lived to know that the great secret of human happiness is this: Never suffer your energies to stagnate. The old adage of "too many irons in the fire" conveys an untruth—you cannot have too many—poker, tongs and all—keep them going—Adam Clark.

HAVE YOU CHILBLAINS?

If so, you will welcome Perry Davis' Pain-Reliever, with its soothing and healing effect. Equally good for rheumatism, lumbago or frost-bites. In Sec. Sec. See bottles.

Smith—So the will was read?
Jones—Yes; but the air was blue.

Many who used to smoke 10c cigars are now smoking Lewis' Single Binder straight 5c.

The only way to get something for nothing is to start a fight about it.

Dr. Pierce's Pleasant Pellets regulate and invigorate stomach, liver and bowels. Sugar-coated, tiny granules, easy to take as candy.

After breaking a \$5 bill the pieces are soon lost.

FAMOUS DOCTOR'S PRESCRIPTION.



SICK HEADACHE

Positively cured by these Little Pills. They also relieve Distress from Dyspepsia, Indigestion and Too Hearty Eating. A perfect remedy for Dizziness, Nausea, Drowsiness, Bad Taste in the Mouth, Coated Tongue, Pain in the Side, TORPID LIVER. They regulate the Bowels. Purely Vegetable.

SMALL PILL. SMALL DOSE. SMALL PRICE.

Genuine Must Bear Fac-Simile Signature
CARTER'S LITTLE LIVER PILLS. REFUSE SUBSTITUTES.

PROOF in the Morning!

We tell you about how good you'll feel after taking a CASCARET—that millions of people—buy, use and recommend them—But that's talk—you buy a box now—take as directed to-night and get the proof in the morning—After you know CASCARETS you'll never be without them.

CASCARETS are a box for a week's treatment, all druggists. Biggest seller in the world. Million boxes a month.

PATENTS Watson E. Coleman, Washington, D.C. Bookfree. High-class returns. Just send.

W. N. U., OMAHA, NO. 42-1909.

Facts For Sick Women

We know of no other medicine which has been so successful in relieving the suffering of women, or secured so many genuine testimonials, as has Lydia E. Pinkham's Vegetable Compound.

In almost every community you will find women who have been restored to health by Lydia E. Pinkham's Vegetable Compound. Almost every woman you meet has either been benefited by it, or knows some one who has.

In the Pinkham Laboratory at Lynn, Mass., are files containing over one million one hundred thousand letters from women seeking health, in which many openly state over their own signatures that they have regained their health by taking Lydia E. Pinkham's Vegetable Compound.

Lydia E. Pinkham's Vegetable Compound has saved many women from surgical operations.

Lydia E. Pinkham's Vegetable Compound is made exclusively from roots and herbs, and is perfectly harmless.

The reason why it is so successful is because it contains ingredients which act directly upon the female organism, restoring it to healthy and normal activity.

Thousands of unsolicited and genuine testimonials such as the following prove the efficiency of this simple remedy.

Minneapolis, Minn.:—"I was a great sufferer from female troubles which caused a weakness and broken down condition of the system. I read so much of what Lydia E. Pinkham's Vegetable Compound had done for other suffering women, I felt sure it would help me, and I must say it did help me wonderfully. Within three months I was a perfectly well woman."

"I want this letter made public to show the benefits to be derived from Lydia E. Pinkham's Vegetable Compound."—Mrs. John G. Moldan, 2115 Second St. North, Minneapolis, Minn.

Women who are suffering from those distressing ills peculiar to their sex should not lose sight of these facts or doubt the ability of Lydia E. Pinkham's Vegetable Compound to restore their health.



FOR PINK EYE

DISTEMPER CATARRHAL FEVER AND ALL NOSE AND THROAT DISEASES

Cures the sick and acts as a preventive for others. Liquid given on the tongue. Safe for broodmares and all others. Best kidney remedy. 50 cents and \$1.00 a bottle; \$5.00 and \$10.00 the dozen. Sold by all druggists and horse goods houses, or sent express paid, by the manufacturers. SPOHN MEDICAL CO., Chemists, COSHEN, INDIANA



GREAT FOR PAIN THE OIL THAT PENETRATES