THE ELECTRICAL WORLD

ELECTRIC INSOLE IN SHOE

Portable Battery Carried in Pocket Connects With Conducting Material—Continuous Treatment.

A Colorado man recently asked himself: "If electricity is good for rheumatism and other ailments in spasmodic treatments, why wouldn't it be better if the treatment could be taken for hours at a time and without any inconvenience to the subject?" He decided that it would and forthwith designed what is known as the "electric insole." This device consists of a pair of insoles of conducting material connected by wires with a portable battery, which is carried in the

Electric Insole.

trousers pocket or suspended inside the trousers by a hook that catches the belt. The wires run down the inside of the trousers legs and connect with the metal members of the insoles. The current, of course, can be switched on or off at will and the treatment can be taken as the subject is walking about the street or attending to his business. As it is spread over a much longer time and has more opportunity to work, it should be more effective.

AID PLANTS BY ELECTRICITY

Experiments Show Spinach, Strawberries, Peas, Etc., Both Better and Earlier Than Others.

Electric agriculture is now attracting a great deal of attention, and the simple system devised by M. Basty should be worth further investigation. It consists of standing upright in the ground in the neighborhood of the plants thin iron rods provided with noncorrosible points. The rods may be about six feet long for cereals and about one inch diameter. The theory is that these rods cause discharge from their points, and create electric oscillations in the ground which benefit the plants.

M. Basty showed at a recent exhibition a number of plants raised in this way, spinach, strawberries, green peas, etc., which were both earlier and better than others grown in the ordinary way in neighboring plots. It would be interesting to know if the chemical effect of the iron had anything to do with the results.

PHONE ATTACHMENT IS HANDY

Jointed Arm Holds Receiver Against Ear of User, Leaving the Hands Free for Writing.

The Canadian who devised the automatic holder for telephone receivers, of which an illustration is shown herewith, was a friend of the ladies. It will enable a woman to carry on an hour's conversation on a six-party wire without tiring her arm in the least. The holder is a joined metal affair fastened to the receiver hook and having at the free end its own set of hooks to hold the cylinder. When not in use it takes up little room, but when called into play it can be extended until close to the ear and hold the receiver as well as it can be held

New Telephone Attachment.

by hand. This leaves both hands free for writing or for attending to any other duties which the person talking through the phone may have before him. In case where papers have to be sorted or turned it is inconvenient to have only one hand free, and the implement here overcomes this difficulty.

ELECTRICITY AID TO GROWTH

Swedish Scientists Interested in Experiments Which Have Been Carried on for Some Years.

Considerable interest has been aroused among Swedish scientists in regard to the remarkable electrical experiments which have been carried on for some years in one of the public schools in Stockholm. The object has been to test the beneficial influence of electricity on the development of the human body.

Hitherto it had been found possible to force the growth of vegetables by means of electrical currents distributed from a powerful dynamo. This idea has been carried out with signal success in several places.

It was accordingly contended that the human organism was equally susceptible to "expedited growth," as it has been called, through practically continuous applications of an electrically charged atmosphere to the body. Two groups of 25 children were selected, as nearly alike as possible in general health, size, and weight. The respective groups received their instruction in two rooms, both equal in size, ventilation, lighting and other general conditions. But the group in one was constantly exposed to the influence of electric currents, while the other group pursued its studies under normal conditions.

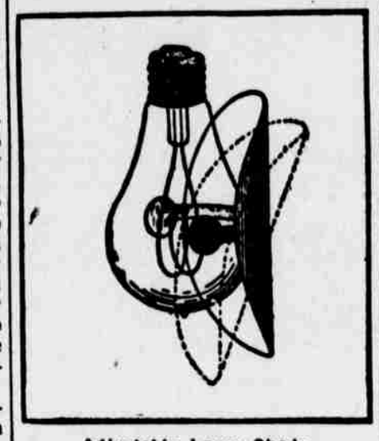
After a test of several years the two groups of children have been compared, and it is claimed that the electrified children have outstripped the others mentally and physically; that they have grown faster, put on weight more quickly, and have shown more physical fitness generally, besides possessing superior mentality.

Skepticism is displayed in some quarters, and the result of the experiment is not altogether regarded as decisive. It is expected, however, that similar experiments will be conducted in some other schools in order to demonstrate the supposed efficacy of the electrifying process in improving the mental and physical condition of the rising population.

ADJUSTABLE SHADE ON LAMP

Device Consists of Metal Disks Bent Into Semi-Cylindrical Form With Clamps on Each Side.

An ingenious shade for use on incandescent lamps is here shown. It consists of a metal disk bent into a semi-cylindrical form and provided at opposite sides with spring clamps adapted to press against the lamp globe, holding the device in position, says the Popular Electricity. As can



Adjustable Lamp Shade.

be seen the shade may be fastened in any position so that the shadow is cast in any desired direction. This arrangement will be found especially useful for hospitals and sick rooms, enabling the nurse to protect the patient's face from the direct rays of light yet leaving other parts of the room illuminated. By painting the interior of the shade with white enamel it may be used to a certain extent as a reflector also.

ELECTRICAL NOTES

Chicago has 37,994 street lamps.

The only railroad in Lapland is being electrified.

Electric fans are a great boon to the sick during hot weather.

Nearly all the large packing houses are now equipped with electric power

It is estimated that electric light is used by 700,000 American households.

It is planned to put moving pictures shows on some of the transcontinental trains.

There are 110,000 telephones in use in Japan at the present time, and the number is rapidly increasing.

A simple tool that twists two or more wires together as it is drawn along them is a Texan's invention.

The government of India has authorized wireless stations to connect the scattered garrisons of the country.

There are 1,850 electrical works and central stations in Germany in addition to more than 45,000 private plants.

An ingenious employe of the General Electric Company has invented a meter for measuring the flow of steam in pipes.

Birds, it seems, rarely if ever get accustomed to the sound of electric bells so as not to be startled by the ringing of one.

Engineers declare that the waterfalls of the Alps are capable of generating enough electrical power to run all the railroads of Switzerland.

IT MAY BE NO BETTER

SPECULATIONS ON QUALITIES OF RELIGION OF FUTURE.

Will Be More Definite and Dogmatic Than the "Advanced" Faith of the Present, Is Opinion of One Writer.

Theorists concerning the religion of the future usually plant themselves upon one of two assumptions: that the religion of the future will necessarily be better than that of the past; or that it will be characterized by fuller allegiance to certain views now held by exponents of so-called "advanced thought."

We see no reason for knuckling under to either of them, says the St. Louis Republican. It does not necessarily follow, because all things change, that they must need change for the better. Architecture in Paris in the thirteenth century was so infinitely superior to the architecture of the present day as to be impossible of comparison with it. Oratory in the United States senate in 1820, just 81 years ago, was so far beyond the oratory of today in form, finish and inner spirit that it is difficult to realize that the body is the same in function and method of selection of membership. The violins Antonius Stradivarius made in Cremona in the early years of the eighteenth century are unmatchable in the workshops of today, either here or elsewhere. No present day builder can equal the cement mixed by Roman artisans in the time of Constantine.

Now we make bold to prophecy that the "religion of the future" will have more of definiteness than the "advanced faith" of the present. It will demand more of its votaries. It will be—inveigh if you will!—more dogmatic.

The religion of "advanced thought" suffers from too much width, like a shallow river smothered among sandbars. It has "broken the shackles of dogmatism." Very good; but it has failed to substitute for them any definite obligation or tie to anything else. It stands for "progress"—toward what it cannot tell for the life of it. It believes in "the uplift of humanity." But what is uplift? And what is the thing that humanity ought to be uplifted toward? It is silent.

"Advanced thought" goes on the assumption that with wideness of vision comes necessarily happiness of spirit. It has evidently never read the lives of the philosophers. It goes on the assumption that the champion of advanced ideas will, in his age, be honored of all men. It evidently has not pondered the history of the martyrs. It ignores death, inherited disease, and the apparent lack of connection in this world between the service rendered by life and the reward returned by its own age, whether in the form of gold, praise or love.

The religion of the future will have in it less of the spirit of revolt. It will be humbler and have a keener sense of its responsibilities. It will ask fewer questions, and strive to answer more. A youth once told Charles G. Finney that he did not need the formal service of the church; he went forth into the Ohio forests, and worshiped there. "Young man," demanded Finney, "what do you do when it rains?" The religion of the future will concern itself with the devotional possibilities of wet days more than has the "advanced thought" of the present.

Tracing Growth of Iceberg.

"When I was in the Arctic," once said General A. W. Greely, "I found an aged floe-berg in which the yearly stratifications of growth could be traced with great accuracy. I measured them, and by careful calculation was able to discover that the oldest layers of that ice probably dated back to the years when Solomon was building his temple! That temple, massive as it was, has utterly perished, and men differ as to its exact site. But that ice was still in existence when I was in the polar seas and it may be is there yet. You see a bit of fresh-water ice, once immersed in a salt sea that has a constant temperature of about 28 degrees, cannot very well perish. It is in a sort of perpetual cold storage plant, colder than its own melting point. And that accounts for the long endurance of what, in our climate, would have lasted perhaps but a few brief seconds!"

Russia Is Roadless.

Russia is a roadless land. It is inconceivable to the foreign visitor who has ever left the beaten track of the railways in Russia now a great empire can have subsisted so long and so successively amid the competition of the rival states beyond its borders without even a pretense at roads.

The secret, of course, lies in the fact that for five or six months in the year Nature herself provides roads over the greater part of the expanse of all the Russians, admirable smooth, glassy roadways over hardworn snow. The traffic is further cheapened over these roads by the sustitution of a sledge runner for the wheel and axle. This brings the cost of land carriage as near the cheapness of water borne freight as possible, and it is the principal reason why Russia, in the Twentieth Century, is still a roadless land.

Always Dodging.

"You are afraid to go along a country road at night?"

"Yes. Every time I hear a hoot owl I imagine it's some new kind of an automobile shriek."

TANGLE of the MAINE IS APPALLING

WRECK OF THE MAINE

THE work of raising the Maine in Havana harbor is not more than half finished. While reports have been sent out from time to time fixing the date for the final raising of the derelict, not one of such reports has been authorized, not one of them is or can be reliable. It was stated nearly a year ago that the ship would be raised by February 1, 1911. Today the greater part of the ship is buried in sticky, black mud and there is every possibility that six months will lapse, if not a much longer time, before the hull is fully exposed and raised, if it is ever found possible to float any part of it. And no one is to blame for the delay. The job has proved itself just about ten times greater and more formidable than it originally gave promise of being.

Ship a Mass of Twisted Steel.

No one who has not seen the wreck and been on it and through it can understand its almost impossibly tangled condition. The stern of the ship, is comparatively intact. But not more than a third of what was the original vessel is recognizable as such. Amidship the tangle begins. Funnels, conning towers, decks, cabins, engines, machinery, are all a tangled pathetic mass that even the most expert of naval engineers and constructors have been unable to classify properly. The whole bow was blown off and turned around and pointed back toward the stern. The old controversy of what caused the explosion is still on, but experts declare the uncovering of the Maine will never solve the mystery.

The titanic force of the explosion—or explosions, for there were two of them without question—impresses the observer as having been appalling. Think of a force that would break a steel battleship in twain and dance the half of it about like a cork.

The old controversy as to whether the Maine was blown up from without or within will not be settled by the uncovering of the wreck—not if a million experts render their "indisputable" opinions. The consensus of opinion is now, as it ever was, that an outside mine explosion preceded and precipitated the interior explosion—that of the ship's magazine. All testimony goes to establish the fact that there were two distinct explosions. But the Spanish folk will never admit that there were two. Those who even incline to listen to the suggestion that there might have been two contend that if two occurred that within the ship must have been the first. Some, but not many, Americans hold to the opinion that the wreck was caused solely by an explosion of the vessel's magazine.

Lends Color to Theory.

But the fact that the destruction of the vessel celebrated on Calle Cuba, in Havana, before it occurred, and that that celebration was participated in by Spanish royalists, has a decided tendency to lend color to the theory that the wreck was planned.

Lurid stories of all sorts to "new discoveries" which are calculated to "clear up the mystery" are on constant, daily tap in Havana. Within a week a circumstantial yarn to the effect that a wire cable leading from the bow of the Maine to Cabanas had been discovered went the rounds. All such stories are myths. But the impressiveness, the wierdness, the creepiness, the oppressive uncanniness of the wreck itself is by no means mythical. It gets on one's nerves.

Eighty-eight men perished when the Maine went down. About 25 skeletons — or parts of skeletons — have been recovered. As this is written three skulls gleam their ghastly welcome from the slime that covers the tangled wreckage. The bodies cannot be reached until the tons of twisted metal that lie upon them are cut away and removed. Here a thigh bone, there a rib, over yonder part of a hand—these are the grewsome finds that the workmen make every day.

Although the explosion occurred in February—over 13 years ago, by the way—the night was hot and many of the crew slept out on the port side of the berth deck. Most of the bodies recovered have been from this part of the ship. Down in the engine room—when that is reached—from 25 to 30 bodies probably will be found—bodies of the poor devils who worked down below the water line and who hadn't a condemned man's chance to get away.

In the Captain's cabin and in the other quarters that have been uncovered and mud-relieved, articles of various sorts in most remarkable preservation have been found. The most striking thing in this line is a box of rubber bands in a perfect state of elasticity and preservation. Their immersion in the intensely salt waters of Havana harbor appears to have improved them, if anything. Bits of leather sword hilts, shoes, caps have come out practically uninjured. All metals, however, show the effect of the immersion.

There is, roughly, 25 feet of mud to take out yet before the Maine can be "raised." The piling that forms the exterior of each of the caissons composing the cofferdam is 50 feet long. Between 25 and 30 feet of water was pumped out. There is nothing but mud remaining. But it is glue-like mud and is 10 times harder to get rid of than the water was. Hydraulic pumps have been installed, but the work put upon them is so unusual that they haven't been successful as yet.

Oxygen-acetyline apparatus has been used to separate—"cut up"—the steel and iron of the ship where it was necessary to remove those tangled portions hampering the further work of excavation. This apparatus resembles, in a way, a plumber's blow lamp. Only the intense heat cuts through metal as a knife would through butter. A five-inch square piece of steel was seen severed so quickly that the operation appeared to be almost magical. The method of cutting away the opposing metal parts will be continued until the wreck is entirely removed.

Incrusted With Oysters.

The whole part of the ship so far exposed is incrusted with oysters and barnacles—mostly oysters. Hundreds of thousands of the bivalves have attached themselves to the hulk. The incrustations appearing in the picture are all oysters. When the water was being removed from the cofferdam thousands of fish and eels splashed and struggled in the inclosure. There were many of the several hundred workmen employed by Major Ferguson who took home strings of fish every night when they quit work Now, of course, there is nothing but slimy mud within the inclosure.

The work of constructing the cofferdam, and, in fact, practically all of the executive labor connected with the "raising," has been conducted by Major Hartley B. Ferguson, who is one of the main board. Colonel William Black and Colonel Mason Patrick are the other two. The cofferdam has been repeatedly tested and in several places re-enforced, and, while it is the first one of the sort ever constructed, the complete success of it has marked a place in the history of engineering. But successful as the work has been remarkable, the cold fact probably is not more than half finished.

IN THE ITALIAN WAY

HOW THE PEOPLE OF SUNNY LAND COOK CHICKEN.

Recipes for Italian Tripe, for a Risotti, and for a Delicious Fruit Dish Designed for Holiday Feasts.

Chicken Italian.—One large fricassee chicken, cut up in pieces as for fricassee. Take two good sized onions and chop fine and fry in olive oil until about done. While onions are frying add one-fourth teaspoon each of powdered cinnamon, nutmeg and allspice. Add chicken and let the pieces sear a little in the olive oil, then add some clear soup stock boiling hot, or hot water will do. Some Italian conserve, about tablespoon diluted in some of the stock, and a cup of dried Italian mushrooms previously soaked in hot water. Let all cook slowly about one hour, then add some parsley and garlic chopped fine and about two or three French carrots cut in fine strips. Cook slowly again until chicken and mushrooms are tender. Serve on deep platter. Do not have too much gravy. In using Italian conserve be careful about putting in salt, as the conserve is already salted.

Italian Tripe.—Take the tripe and cut into strips about two and a half inches long. Boil in salted water about one minute, drain and put on to boil in fresh water. Let come to boiling point, drain and once again put on in clean, fresh water. Take onions (as many as needed for the amount of tripe), chop fine and fry in olive oil to a golden brown. While onions are frying add half teaspoon each of powdered cinnamon and nutmeg, add to the tripe. Add a can of strained tomatoes and some clear soup stock, some garlic and parsley and the top green part of one stalk of celery chopped very fine. Take half tin of sardines and mash fine and add to the tripe. Let all cook slowly until tripe is tender. Salt and pepper to taste.

Italian Dish for the Holidays.—Take large ripe peaches and remove the stone without cutting the peach in two pieces, place them in bake pan with some melted butter in bottom. Take some macaroons and mash them up in good port wine into a thick paste. Take almonds, blanch them and chop very fine and add to macaroon paste. Fill up the peaches with this paste, put a good sized piece of butter on top and bake in medium oven until peaches are soft. Baste frequently with the melted butter. These are delicious. Serve hot.

An Italian Risotti.—Wash about half a dozen large potatoes and boil until done with their skins on. Remove skins and mash them, adding as much flour as the moisture of the potatoes will take up. Roll out on bake board about half an inch thick and cut in squares about inch square. With the thumb press in the center and roll toward edge; they will form into shapes like little shells. Let them dry for about fifteen minutes, then put on to boil by dropping them into boiling salted water. Boil for about three-quarters hour. Drain and put in large bowl, add a good sized slice of butter, some thick strained tomatoes and a cup of grated Parmesan cheese. Mix all together and serve at once.

HINTS FOR THE HOUSEWIFE

Various Suggestions That Will Enable Her to Save Considerable Money in Purchasing.

Few things can be bought in bulk to advantage. Soap improves with age and is cheaper bought by the box. Bacon is best purchased by the slab, and the dripping should always be saved in a little jar kept for the purpose. Except for baking, it is a good substitute for lard. Always reserve the tails of steaks for hash. This is a wholesome dish when made of fresh meat. All left overs should be saved and are better reserved in their original form than mixed with half a dozen ingredients. Lump sugar bought loose is cheaper than cut sugar in boxes, and granulated should be bought by 25 cents' worth. For laundry work, especially flat work, a mangle is indispensable, saving the material and lightening labor. You would not be without it, once tried. Washing sent out to laundries is more or less expensive, considering the awful wear on material. Dishcloths sprinkled with the following preparation—equal parts of coal oil, vinegar and sweet oil—will be rendered dustless; that is, no shaking will be necessary. All scraps of soap from bathroom and kitchen should be thrown in the boiler for wash days.

Glass Tops.

Clever housekeepers are beginning to discover that the most practical covers for dressing tables and library writing tables are plain glass sheets.

Lace and embroidered doilies and runners show under them as well as if on the top, and the glass protects them and keeps them clean indefinitely.

These glass tops are not expensive and they safeguard the handsome oak or mahogany table and dainty linens from the careless guests, who are so apt to lay fruit and burnt matches about wherever they happen to be.

Devilled Whitebait.

Wash the whitebait thoroughly and drain on a soft cloth. Dip them in milk, then roll in flour and fry, about a half-cupful at a time, in deep, smoking hot fat. Drain on soft paper and sprinkle with cayenne, then send at once to the table.