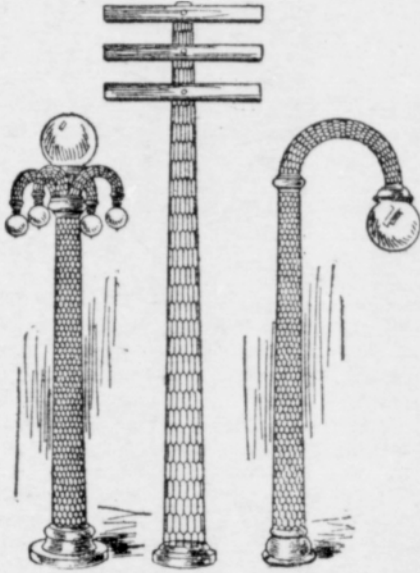


## Inventions and Appliances

### ORNAMENTAL LAMP POSTS MADE OF WIRE.

USING woven wire in cylindrical form for lamp posts, telegraph and telephone posts and supports for balustrade or newel-post lamps, a Chicago inventor has constructed a strong and ornamental support which,



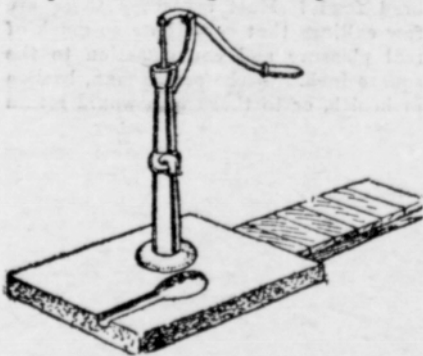
if bent or twisted by accident, may be pulled back into shape. Telephone posts made after this design, being of open wire-net work, offer much less resistance to the wind and are far less liable to destruction by fire.—Popular Mechanics.

### NOVEL WAY OF HANGING FARM GATE.

A SIMPLE and ingenious method of hanging and balancing is used by an Idaho ranchman in building his farm gates. The top bar consists of a cedar pole which projects four or five feet beyond the gate post, and the hinge is simply a long spike driven through this pole into the top of the post. On the projecting end of the pole is a rough box in which one or more stones are placed for balancing the gate. A little care in selecting stones of the right weight and placing them at the right distance from the post produces a balance that permits the gate to swing easily.

### NEAT WELL PLATFORM.

THIS cement well platform was observed on an Iowa farm. It is designed to prevent the water from flowing off on all sides, as happens with the ordinary level platform. The depression and channel may be readily made when the cement is being placed in position. Though the depression is



only three-fourths of an inch deep, it prevents the ground from becoming wet and muddy except on the side farthest from the approach to the well. It is made even neater by constructing a drain to carry off the surface water entirely.

### HIDDEN ORCHESTRA FEATURE OF MODERN THEATERS.

ONE of the most important of modern developments in theater construction is the hidden orchestra, which, with the other desirable features made possible by it, has already come into extensive use in Europe. The arrangement consists simply in providing an orchestra pit that is open at the top and is depressed below the floor of the theater so that the orchestra is hidden from the view of the audience. The original idea was to remove the distraction caused by an orchestra working in full view of the audience but it has since been found that the plan possesses other advantages of as great importance as this. One of these is that, in this position, the orchestra does not dominate a concert or operatic performance, as is often the case with

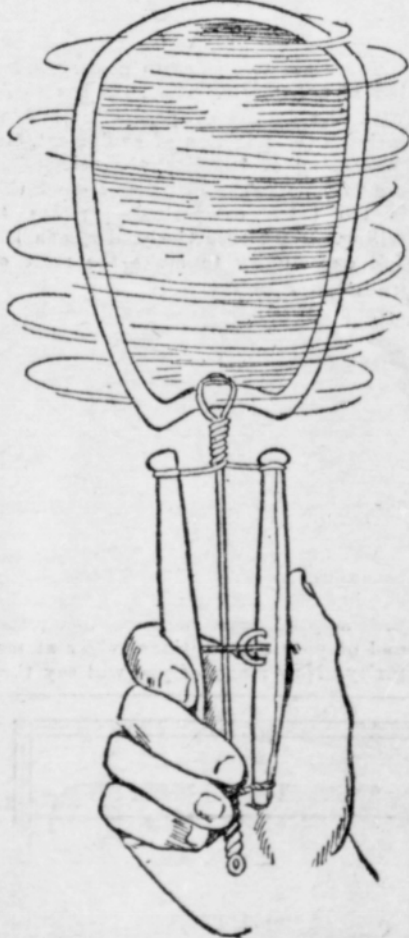
the old arrangement of theaters, but that the orchestral music takes its place as an adjunct to the stage singing and blends properly with it. The sunken orchestra pit also simplifies the arrangement of the stage, which, instead of being placed 5 feet or more above the floor of the theater, need be only about 1 foot above floor level when built in connection with a sunken orchestra pit.

### MANY-ANGLED SMOKESTACK.

A STEEL smokestack with many angles was built by the Keokuk Water Company in order that neighboring residences at the top of the bluff might be freed from the smoke which, from the brick stack previously used by the water company, formerly annoyed them. The engine house is built at the foot of a bluff 90 feet high. Stone piers were built to carry the steel stack on its devious way to the summit, where the vertical stack begins. From the boilers the smoke is carried on a horizontal plane for 30 feet, then it mounts at an angle for 90 feet, and enters the tall stack vertically, leaving it 150 feet above the summit of the bluff.

### GOOD FOR HOT DAYS.

A REVOLVING fan, which is worked by hand, has made its way into many of the stores in the larger cities this summer, and its inventor has made a big pile of money from his sales. It is a simple device, however,



that most anyone can make for himself. An ordinary oval cardboard fan is fastened to a strong wire about a foot long, the attachments being made by a twist of the wire at the base and an eyelet in the center.

The handle is formed of two pieces of hard wood. A piece of string is tied at each end of the handle, its middle being fastened to a wire between the two handles and twisted so that when the two sides of the handle are pressed together the cords make the fan revolve. A wire across the center keeps the handles an inch and a quarter apart and a piece of spring makes the upper ends close when the pressure of the hand is released, thus setting the fan revolving in the reverse direction. An examination of the accompanying drawing will show the construction.

### NEW TYPE OF LIGHTHOUSE LAMP.

FRENCH engineers have devised a lighthouse lamp which uses metallic reflectors instead of glass lenses. They have demonstrated that yellow light reflected from gilt-metal surfaces has a greater penetration in humid air than light refracted by a lens. The light is produced from a gas mantle.

The inventor of the safety pin made a fortune of \$10,000,000.

## Health and Sanitation

### ANTS CARRY DISEASE GERMS.

NO SUSPICION until lately has arisen that the industrious ant might upon occasion act as the transmitting agent of infection to man. It was known that some species, such as the white ant, had very destructive tendencies in certain parts of the tropics, and that the bites of some large tropical ants caused a good deal of general disturbance, being attended with faintness and shivering and sometimes with temporary paralysis. It was also known that some savage races used the dried bodies of ants, beaten into a paste, as an arrow poison, but it is only of late that suggestion has been made that this insect might convey pathogenic bacteria to man. The ant is commonly found in and around the dwellings of people residing in the tropics. It is, indeed, a matter of difficulty to keep this insect away from foodstuffs in such houses, and it is equally difficult to keep the ant away from human dejecta when these are not properly disposed of. So that it cannot be doubted that the ant has the opportunity of carrying from infected excreta the specific organisms of disease to the food stored in human dwellings.

Little or no experimental work, however had been done to obtain proof that ants were capable of transmitting diseases to man, but, in 1912, Dr. L. B. Bates, bacteriologist to Ancon Hospital in the Panama Canal Zone, undertook a series of experiments with the view of putting to the test whether or not the ant acted as a transmitting agent of such infections as enteric fever and bacillary dysentery. His investigations were carried out with the large yellow ants which are found in and around the houses in the Canal Zone. He fed a number of these insects on bread soaked with cultures of bacillus typhosus for five days, killing and examining some of them at certain intervals, but in no instance was he able to recover the typhoid bacillus from the intestines of the ants. The experiment was carefully repeated with like negative results. He then tried to determine if the ant could carry the specific organism on its legs or body in a purely mechanical way to human food.

To this end a number of the insects were dropped into a broth culture of the typhoid bacillus and allowed afterward to crawl out and walk over dishes in such a way that their footprints could be cultivate for bacteria. The typhoid bacillus was easily found in every instance. This experiment was repeated several times, and in the majority of cases positive results were obtained.

### THE COMIC SHEET'S SERVICE.

THE comic sheet of the newspapers is one of the most important of any portion of the paper. The people who do not think so are the ones who should read it with the most care and thoroughness. It is the best part of the paper because it causes the reader to forget himself and his troubles, to realize that there are people who suffer otherwise from the faults, heedlessness or vindictiveness of others, that there is another than the serious side to life, and that the best end to a depressing situation is an explosion that clears the brain and puts one in a condition to look at the world clearly and with charity for himself and the rest of the world.

Laughter is always healthy. It promotes the blood's circulation by exciting to action the muscles of the mouth and face, the stomach and diaphragm. A better exercise could not be obtained with the boxing gloves, roller skates or the tango. It is exercise unaccompanied with any violence. It may be taken lying down, standing up, or in a momentary recess from business of the most absorbing character. The man who can punctuate a business discussion with an amusing anecdote is the one who gets the orders. The speaker who can tell a good story when he finds his audience becoming listless is the one who gets votes on election day. For he's a jolly good fellow, you know.

The laugh is also an index of one's character. The fat, honest man gives himself right up to it when an amusing incident comes his way. The man who is trying to produce a situation that he may win his purpose, usually a selfish one, has an artificial laugh that is ap-

parent to about everyone except perhaps his intended victim. The cruel, brutal man not only has his distinctive laugh, but his features and voice become mixed up in his forced cackle. The next time you see a man laughing make a note of how he does it, and then if you do not know him inquire if your conclusion regarding him is not correct. Laugh a little yourself when you get an opportunity.

### WHOLESOME MEATS.

TO PROVIDE clean and wholesome meats to the rich and poor alike is one of the problems of modern civilization.

In these days when people are massed in large towns and cities, it is not possible for each individual to know from personal observation the source of his meat supply, whether or not it comes from healthy animals.

The principal object of meat inspection is to protect the consumer from diseased or otherwise unwholesome meat. This involves not only the inspection of the meat for the detection of disease and unwholesome conditions, but the requirement of sanitary conditions and equipment in the abattoirs and packing houses, and the enforcement of sanitary methods in the preparation, curing and handling of meats.

To meet the first requirement a competent veterinary inspection of the animal at the time of slaughter is necessary, for it is not always possible for an inspector, no matter how skillful, to detect disease in meat after it is dressed and the viscera disposed of. The most important requirement in meat inspection, therefore, is to protect the consumer against dangers from which he cannot protect himself.

Some idea of the necessity for local inspection may be obtained by considering the extent of disease among livestock slaughtered for food and the insanitary conditions under which much of the local meat supply is slaughtered and handled. Recent statistics of the federal inspection bureau show that nearly two per cent of the carcasses are affected with some disease or condition making it necessary to condemn them either in whole or in part. Of these condemnations nearly 70 per cent are from tuberculosis alone.

### MORE ABOUT THE FLY.

1. Continue to destroy the dangerous little fly.
2. If each householder would place a fly trap beside the garbage can, in a year's time Portland would be a flyless city.
3. Several gallons of flies can be caught in a day's time around butcher shops and slaughter houses.
4. In the milk laboratory a short time ago some flies were hatched from fly-blown milk; the same is possible upon any food; the eggs next become maggots, then pass into the cocoon stage and in about ten days hatch out into full grown flies. Do you relish the thought of eating food upon which maggots have crawled and wiggled?
5. There are fewer flies in Portland this summer than ever before. The goal is NO flies and it can be accomplished if everyone will help.
6. Work the fly trap in the back yard and the fly swatter in the house and be able to say you had a hand in this great fight upon the fly.

### HUNGER AND APPETITE.

ONE of the most frequent of dietetic errors is the mistaking of appetite for hunger. Appetite is no more hunger than sexual passion is love. That faint, sinking feeling at the pit of the stomach, with a morbid craving for something to eat, is due to catarrhal inflammation of the lining of the stomach, and collapse of that organ, not to hunger. Hunger is indicated by watering of the mouth for plain food—even for a crust of dry bread.

A New York woman has patented an emergency covering for hats, made of waterproof paper and fastened on by the customary hatpins.

In a new incubator the eggs are supported that the movement of a lever turns all of them at once the proper distance to produce the best results.