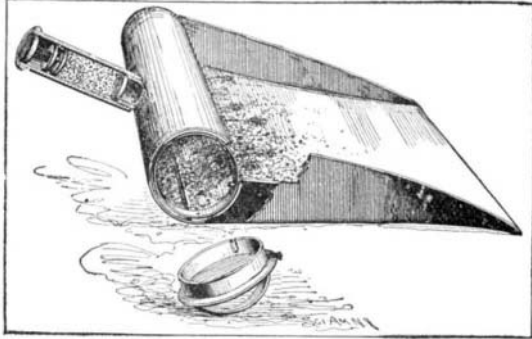


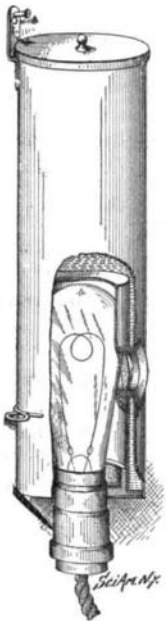
## ODDITIES IN INVENTION.

**IMPROVED DUST-PAN.**—A Philadelphian has invented a dust-pan which differs from the ordinary type in having a receptacle in which the sweepings may be temporarily stored and from which they may be conveniently discharged when desired. This prevents scattering of the dust around the room as the pan is carried from place to place. The receptacle is located at the rear end of the pan and has the form of a cylinder with two slots or openings, one leading into an auxiliary chamber below the pan proper, and the other lying at the top of the incline of the pan. These are adapted to be covered by a pair of gates which may



IMPROVED DUST-PAN.

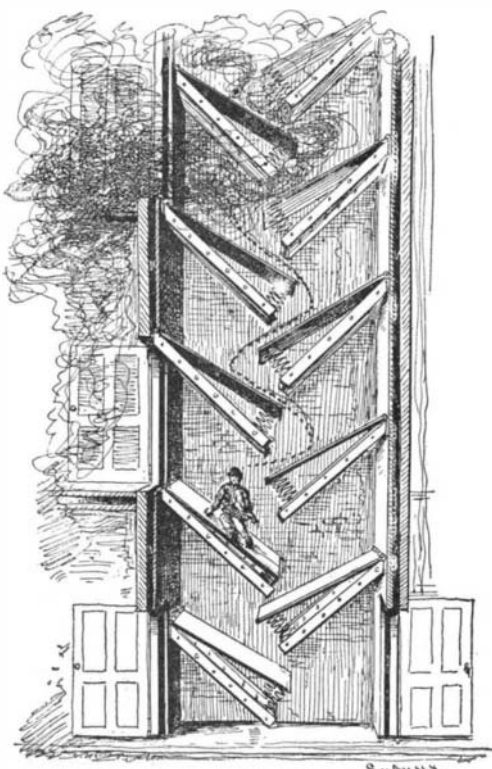
be swung to open or closed position by a turn of the handle at the end of the receptacle. When using the pan the upper slot is uncovered and the dirt is swept up into the receptacle. On closing this opening, the other is uncovered and the dirt may enter the auxiliary chamber. A cap at the end of the receptacle may be removed to permit emptying the pan. The handle of the pan is provided with a disinfectant which, by means of a plunger, may be forced into the receptacle to disinfect the accumulated dirt.



MILK-WARMER AND NIGHT-LAMP.

**NURSERY MILK-WARMER AND NIGHT-LAMP.**—A New York inventor has hit upon the idea of utilizing the heat of the nursery night-lamp for warming baby's milk. The device comprises a vessel for containing the milk, having at its lower end an inner chamber adapted to receive an incandescent electric lamp. The lamp is held in place by a bottom plug thereon, which fits snugly into the chamber. Light from this lamp is shed through an opening in the walls of the vessel. A double-convex lens is here situated to diffuse and soften the light. The device is adapted to be hung from a nail in the wall, but is held out of contact with the wall by a bend in the hanger piece and a double loop of wire soldered near its lower end. The safety, convenience, and economy of this device are readily apparent.

**NOVEL FIRE-ESCAPE.**—Something decidedly unique in fire-escapes is here illustrated. It is the invention of Mr. P. H. Dedrick, of Grand View-on-Hudson, New York. The device comprises a series of spring platforms so arranged that a person may slide from one platform to another until he reaches the ground. The fire escape is located in the shaft or well



NOVEL FIRE ESCAPE.

of a building, and this shaft is provided with yielding walls from which the platforms are hung. Obviously, from the illustration, the fire escape is accessible from any floor of the building, and since the platforms overlap each other, there is no danger of falling between them directly to the ground. Instead, the unfortunate individual who, driven by desperation, trusts himself to this fire escape, will slide and bounce from one spring platform to another with increasing momentum until he reaches the bottom of the shaft.

## Brief Notes Concerning Inventions.

There seems to be a craze for things wireless. The latest addition to this line is a wireless armature, which has been invented by Roy Snedegar, living near Owingsville, Ky. A company has been formed to promote his invention.

Mrs. J. Mitchell Clarke, of Fifth Avenue, New York, whose invention of a resounding piano lid has already been referred to in these columns, recently received a patent on the invention. It is a convex lid which fits over the piano in place of the ordinary lid, and is applied to a grand, square, or upright instrument, but its function is best filled on a grand piano.

Charles D. Rodgers, the director and general superintendent of the American Screw Company, of Providence, died during the latter part of May at his home in that city. He had been in the screw-manufacturing business for thirty-five years, and being possessed of rare inventive ability, was the patentee of a great many inventions and improvements which have been made during that time in the manufacture of screw-making machinery. Mr. Rodgers was 76 years of age.

A cablegram says that a poor watchmaker named Fritz, of Berlin, has recently been made immensely wealthy by the invention and sale of a mechanical time-fuse for projectiles. The arrangement made by him with the Krupp company called for a cash payment of \$50,000 and a royalty of one mark (a trifle over 20 cents) for each one of the fuses made by them. The French, English, and American rights have also been disposed of recently. The fuse is said to be capable of the most delicate adjustment.

Garabed G. Heghinian, an employe of the Bureau of Highways of the Borough of Brooklyn, is the inventor of an automatic level rod, by which surveying is done with very much less work and computation than heretofore. The ordinary additions and subtractions involved in leveling are dispensed with entirely, since by proper setting of the rod, cuts, fills, and elevations are read direct; that is, the rod reading itself is the cut, fill, or elevation. Not only are errors reduced to a minimum, since there is no chance of errors of calculation, but the field work is greatly reduced.

Hans Neimend, of Ida Grove, Iowa, has invented a device operating on slot machine principles, with the device serving to take the place of the time-honored custom of passing the collection box in church. The apparatus consists essentially of an air compressor, which is to be placed in the basement or some other place convenient to the church where it is to operate. From the air compressor pipes will be run to each seat in the various pews, the seats being upholstered with individual pneumatic cushions, and each one provided with a slot machine device, the insertion of a coin in which will permit air from the compressor to inflate the pneumatic cushion to a limited extent. It is evident that the more coins inserted, the more inflation of the cushion, and consequently more comfort for the occupant of the pew.

A Catholic priest of Gardenville, Md., has patented a device designed for the protection of parishioners from accidents which sometimes happen from the use of candles at the celebration of the feast of St. Blasius. This occasion takes place early in February, when the saint is invoked on behalf of many devoted church people, that they may be freed from throat troubles of various kinds. The ceremony is performed by crossing two blessed candles and holding them lighted at the throat of the parishioner while a prayer is offered. The reverend father's invention consists of a shield, by which the hair is protected from the flame of the candles and the clothing from the falling candle grease. A number of these have been made for use, and have been used in different churches, and a company has now been formed for the purpose of making them in large quantities for general use.

An old man living at Alto Pass, Ill., named Eastman, claims to be the inventor of the pilot as it is now used on the front of the American locomotive. The Mad River and Erie Railroad was the first in Ohio, and he was one of the builders of it. The first engines supplied to that line had an arrangement of iron rods fitted on the front, which picked up an animal which might be in the way of its passage and carried it along. This was not satisfactory, and after this the "cow bumper" was devised, which led to endless trouble. Eastman heard some one say once that what was wanted was a device which would push or

throw an animal to one side when struck, and he designed the pilot as it is now in use all over this country, and which was found to be satisfactory as soon as it was tried on the line which he was then working for. The pilot was, according to his account, never patented, and he never received any direct substantial benefit from the thing.

Frederick Sedgewick, formerly of Elgin, Ill., is the inventor of a cipher code typewriting machine by which it is possible to put a communication in cipher which will defy solution except by some one supplied with the proper facilities for doing so. This device was offered for patent some time ago, when it was at once opposed by George C. Blickensderfer, who claimed that it was an infringement on the patent which he already held. The usual time allowed to make out a case in such instances expired without any further effort on the part of Mr. Blickensderfer, and in all probability the patent will be granted. An ordinary message transcribed by this machine, which has a keyboard in many respects the same as a typewriter, issues forth a jumbled mass of letters, but the usual methods of unraveling a cipher message are defied. This is accomplished by an automatic device which changes the relationship of the keyboard and the letters at irregular intervals. In this way no one character is in use more than another, and no clew whatever is given for anyone receiving the message surreptitiously to decipher it, and the only way in which this can be done is by copying the message in another machine which has been adjusted to correspond with the one on which the original message was written. This implement has been called to the attention of the proper government authorities, and it is probable that it will be adopted for use in the army and navy. Senator Mason and Congressman Hopkins are said to be using their influence in this direction.

There was recently exhibited at the Franklin Institute, in Philadelphia, by Frank A. Brunner, of that city, a means of making photographs on papers of the ordinary slow-printing kind used by all professional photographers, without regard to the weather. The business of the professional photographer has been heretofore very largely dependent on the sun. A few days of rainy weather throws his business back just that long, as he is unable to make prints without the aid of the sun. With the machine referred to, it is possible not only to make the prints at all times, but to do the work in half the time usually required. The invention embraces two features, one in the construction of the lamp giving a light very rich in the violet rays, and which have by far the greatest chemical action, and the other in the construction of a frame, by which the plates are held around the light at the point where they receive the greatest and most diffused illumination. The machine is octagonal, occupying a floor space of about three by three feet, and each one of the spaces will accommodate a printing frame 11 by 14 inches, or a greater number of smaller ones. The daily capacity of the machine is about 800 or 900 prints, 5 by 7 inches. In the demonstration given, a print of a negative of a very dense character, which the operator said required thirty minutes to print by bright sunlight, was made in sixteen minutes, while prints of a normal density were readily made in much less time. The machine is designed for the use of all commercial photographers, and is made in three sizes to meet all demands.

Few persons contemplating the line of homely telegraph poles standing along a road or highway, realize the amount of money there is invested in these tall sticks of wood. Each one of these represents an expenditure of from twenty-five to one hundred dollars, and occasionally, in the instances of the very large ones sometimes required, the cost overtops the maximum mentioned. Any scheme which will tend to prolong the lives of these poles will be welcomed by the telegraph and telephone companies. One of the greatest sources of annoyance to the companies is the tendency of the poles to deteriorate at a point where they enter the ground, by reason of the rotting of the timber caused by the moisture from the earth. If the pole is not removed in time it will fall, and sometimes carry with it a number of neighboring poles, which have also become more or less weakened at the foot. The poles thus damaged are unfit for further service, but a means of making use of such poles has been devised in the resorting to a foot or butt of cement. These are made in different thicknesses about five feet long, and when used on new poles permit of the purchase of poles five feet shorter than would be otherwise required. One of the greatest advantages, however, is the fact that a weakened pole can be set on a strong leg and given a new existence without the necessity of disturbing the overhead work. This is accomplished by cutting the pole at the ground and slipping a new cement butt in the hole where the wooden end formerly rested. This same scheme is resorted to in the construction of fencing, the cement slabs being used for the support of the posts.