

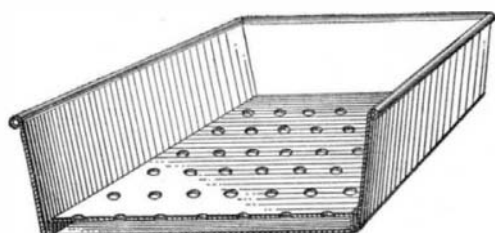


HOUSEHOLD SUGGESTIONS.

AN IMPROVEMENT FOR THE BROILING PAN.

BY J. A. BERGSTROM.

When broiling steak, chops or the like in a gas-range, the suet that is tried out from the fatty part invariably catches fire. As a rule the fat is overheated and burns fiercely, and many efforts to put it out, when taken from the oven, fail.



DOUBLE-BOTTOMED BROILING PAN.

The accompanying illustration shows a very simple way to avoid this. In the pan used for broiling is placed a perforated false bottom, made out of black iron of any thickness. The edges are turned down, say one quarter of an inch, forming supports for the bottom. This false bottom should be nearly the same size as the pan. On large pans, of course, the bottom should be braced with strips of iron, to prevent warping from the heat.

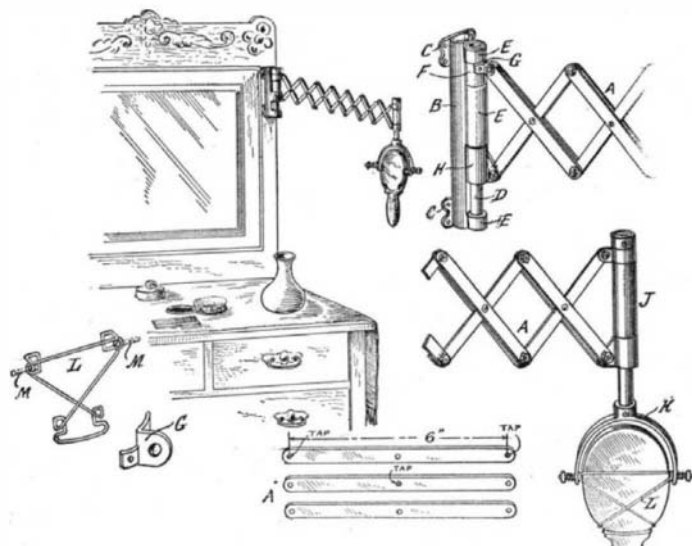
In service the suet melts, and runs down through the perforations to the bottom of the pan. No matter how hot the fire, the suet will not catch fire, as it is protected from the flames by the perforated bottom which acts like the screen of a miner's lamp. The bottom can easily be removed and cleaned and the suet in the pan be emptied out.

FOLDING BRACKET FOR THE HAND GLASS.

BY A. R. VAN DER VEER.

A very useful adjunct to the dressing table is a small mirror, supported in such a way as to permit a person to view the side or back of the head without having to hold the glass in the hand. The writer after searching the city over for an article of this character, was forced to make one for himself. The task was not a difficult one, and directions are given herewith, which will enable anyone who knows anything about the use of tools to make such a bracket. Instead of having the mirror secured permanently to the bracket, it was decided to make a holder in which an ordinary hand glass could be inserted at a moment's notice. The bracket is illustrated in the accompanying drawing. It is of the lazy tongs type, consisting of a series of brass links joined together after the manner of a ferryboat gate. These links are all of the same size, 6 inches long and 1/2 inch wide. Each of the links *A* is provided with three holes, one at the center and one at each end. One set of links is provided with tapped holes at the ends only, another set of equal number with tapped holes at the center only, and a third set of equal number with plain holes only.

At the end which is secured to the wall, or the dresser, a half-round piece *B* is provided, which consists of a 1 1/2-inch brass tube cut in two lengthwise. Plates *C* are soldered to the upper and lower ends of the piece *B* to provide lugs, through which the screws are passed that secure the bracket



FOLDING BRACKET FOR THE HAND GLASS.

to its support. Two pieces of tubing are procured, one with a half-inch outside diameter, and the other a half-inch inside diameter. The former is smoothed down with emery paper, so that it will slide easily into the latter. A section of the smaller tube is cut to form a pintle *D*, and three pieces *E* of the latter tube are fitted on to the pintle, the whole being secured to the half tube *B* by means of screws, which pass through the sections *E* and are threaded into the pintle *D*. Before the pintle is made fast a collar *F*, cut from the larger tube, is mounted thereon between the upper sections *E*. To the collar *F* a lug *G* is soldered. A detail of this is shown in the drawing, and it will be seen that the base of this lug is slit to form two ears, which are bent in opposite directions, and curved to fit the surface of the collar *F*. This construction provides a broad surface for soldering, and is made necessary by the fact that in use this point is subjected to a great strain. Between the middle and the lower sections *E* a sleeve *H* is mounted to slide. This sleeve is also cut from the larger tubing. A pair of lugs are soldered to this section, to receive one of the links of the lazy tongs between them. It will be observed that the lazy tongs consists of pairs of links alternating with single links, the latter being the ones with the plain holes. The links are held together by machine screws, and jam nuts are used to prevent them from working loose. It will be observed that the nuts for the center pivots are on one side of the lazy tongs, while those for the end pivots are on the opposite side.

At the opposite end of the lazy tongs the links connect to a pair of sleeves of the larger tubing, which slide on section *J* of the smaller tubing. Sections of the larger tubing are fastened to the tube *J* by means of screws, so as to form shoulders thereon. Soldered to the bottom of the tube *J* is a strap *K*, which is bent to form a semicircle. The mirror is supported in a wire frame *L*, which is bent to the form indicated in the drawing. The upper ends of this frame are fitted with bolts *M*, soldered fast. The threaded ends of these bolts pass through openings in the ends of the strap *K*. A light spring on each bolt and a nut to press this spring against the strap *K* provide sufficient friction to hold the mirror at any desired angle. The hand glass may be slipped into or out of its holder at will.

ELECTRIC COFFEE POT.

BY HOWARD M. NICHOLS.

A simple electrically heated coffee pot can be made as follows:

Procure a round tin can of about two quarts capacity. This can should be about 5 inches in diameter



AN ELECTRIC COFFEE POT.

and should be open at one end. The open end should be round and smooth, so that a wooden cover can be easily fitted into it.

Cover the bottom and sides of the can with heavy felt, sticking it on with shellac. Put on a layer of electrician's tape over the felt, and stick a piece of fiber or cardboard on the bottom. Then give the whole outside of the coffee pot a couple of good coats of shellac. It is very important that this part of the work be well done, since if the can is not properly covered with felt, the heat generated in the coffee pot will be conducted off so quickly by the air, that it will be impossible to boil water in it.

The next step is to make a cover for the can. This cover should be made from hard wood, should fit tightly, and should have a small hole in it to allow steam to escape. A standard water-proof lamp socket should be screwed to the inner side of the cover, and the leading-in wires should be brought out through small holes drilled in the cover for that purpose. Each wire should be brought through a separate hole, so as to avoid possibilities of a short circuit; and wherever there are live metal parts care should be taken to insulate them, as it is very easy to get a short circuit where all parts are exposed to steam.

The leads from the socket should be connected to a screw plug by a suitable length of flexible lamp cord.

Screw an ordinary 32-candle-power lamp in-

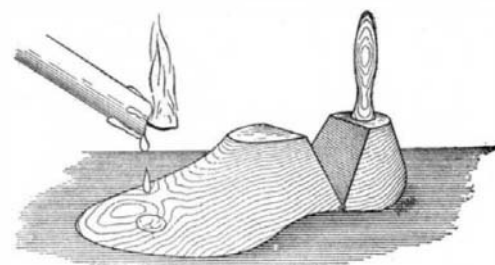
to the water-proof socket. Cover the joint with tape and shellac to keep the steam away from it.

The coffee pot is now complete, and all that is required is to fill the pot with water and coffee, put the cover on with the lamp projecting down into the pot, and screw the plug into the handiest lamp socket.

AN IMPROVED SHOE STRETCHER.

BY JOHN E. BRACHVOGEL.

Nearly every person, at some time or other, has wished he could stretch a shoe which at a particular point pinched the foot or irritated a corn. It is not necessary to go to a shoemaker to have the leather stretched. It can easily be done at home by means of a shoe tree of suitable form upon which an enlargement is formed at the necessary point. The enlarge-



AN IMPROVED SHOE STRETCHER.

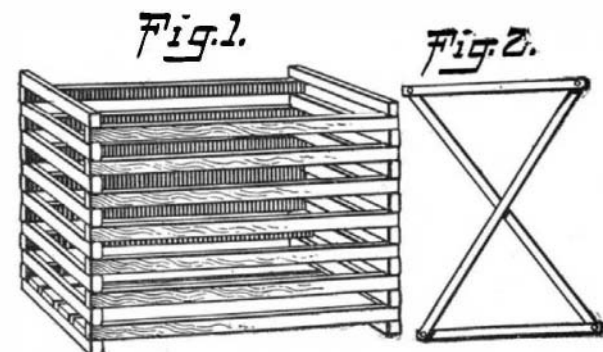
ment must adhere firmly to the tree and must be of such a nature that it can be easily molded, and that it will not become detached from the tree when the latter is forced into the shoe. A material answering all these requirements is ordinary candle wax. Sealing wax might be used but the candle wax is preferable as it will not injure the tree, and as it is easier to manipulate. The enlargement is formed by dripping a suitable quantity of the melted wax upon the tree at the desired point, and molding the resulting excrescence into proper shape while the wax is plastic. It adheres to the tree with remarkable and unexpected tenacity, and owing to its waxy nature tends to slip easily into the shoe with the tree. The shoe can be slightly moistened at the troublesome part, to facilitate the stretching action.

TABOURET MADE FROM AN ONION CRATE.

BY WILLIAM P. GOEBEL.

The accompanying illustrations show how a simple crate, used in shipping potatoes or onions, can be readily converted into a tabouret or flower stand.

A crate such as shown in Fig. 1 can be secured from any grocer or from a vegetable dealer. The sides and ends of the crate, which are comprised of slats ar-



COMMON ONION CRATE AND THE REARRANGEMENT OF THE SLATS.

ranged as shown, are fastened at their corners by a long nail, passing through holes in the ends of the slats.

To construct a tabouret, the nails in each corner are withdrawn and the slats, being separated, are then



ARTISTIC POSSIBILITIES IN AN ONION CRATE.

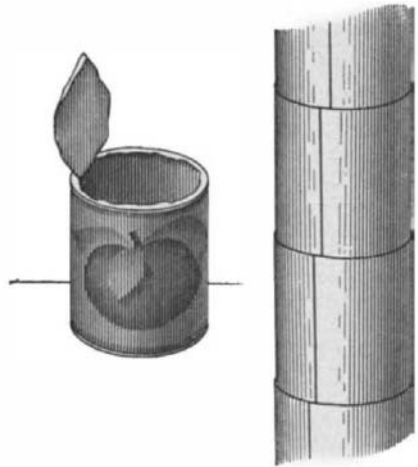
taken and slipped on the nails, and arranged as shown in Fig. 2, the long slats forming a cross and the short slats arranged horizontally. After the slats have been assembled, the point of the nail can be riveted, holding the slats together, and producing an article of rigid construction, as shown in the photograph.

The same can be stained or painted at a small cost. While the slats are fairly well planed, the appearance of the article can be improved by planing the slats a trifle more before assembling them.

A TIN CAN LEADER.

BY WILLIAM C. M'KENZIE.

A friend of mine who hates to see anything go to waste has found an excellent use for old tin cans. The rain pipes or leaders of his house are all home made, and built up of tomato cans. He claims that



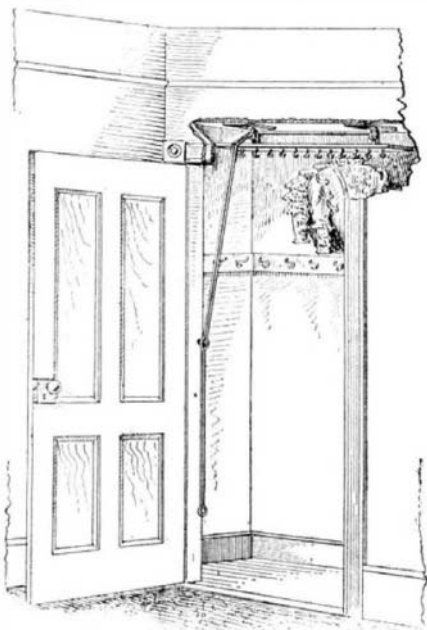
A LEADER MADE OF OLD TIN CANS.

they are much more satisfactory than the ordinary galvanized iron leader, for the reason that they were thickly coated with paint on the inside as they were built up can by can. The first step in the operation was to remove the top and bottom of each can. The solder was melted off by placing the cans on a hot stove. After the tops and bottoms dropped off, one end of each can was expanded slightly so as to receive the end of the next can, which was fitted in, to a depth of about a quarter of an inch. Then they were soldered together and, as an extra precaution, the longitudinal seam of each was re-soldered so as to close any leak that may have been sprung during the process of removing the top and bottom of the can. To increase the strength of the leader the cans were so arranged that the longitudinal seams of the successive sections were staggered as shown in the illustration so as to form a symmetrical and regular spiral running around the leader. Each can as it was soldered to the leader was painted on the inside wall with a thick coat of paint, special attention being given to the joints. After the leader was completed the outside also was protected with several coats of paint.

CONVENIENT HANGER FOR THE CLOTHES CLOSET.

BY MRS. T. G. HOSMER.

The accompanying illustration shows a hanger, for shirtwaists and other garments, located in the upper part of a clothes closet to utilize space that is usually



CONVENIENT HANGER FOR THE CLOTHES CLOSET.

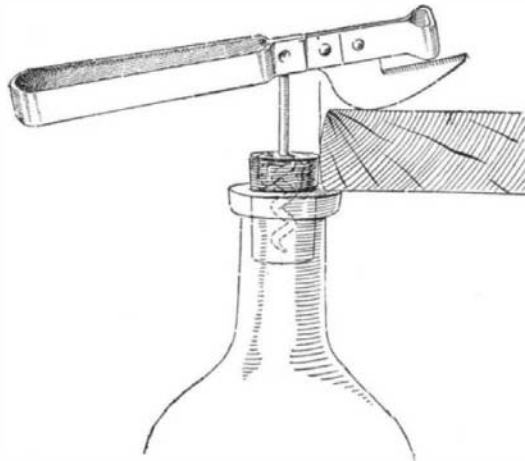
wasted. The hanger is so placed that garments hung thereon will not interfere with clothing that is hung on the usual hooks. But it may be lowered wherever desired so as to provide access to the garments thereon.

The boards are fastened to the ceiling of the closet and are provided with pulleys one of which is a double pulley to receive its own cord and the cord running

over the other pulley as well. The cords are secured at one end by means of screw eyes to the top of a board hanger which is provided on the under side with a row of hooks properly spaced to support the shirtwaists or other garments, one alongside the other, without crumpling them. The cords are fastened together at the opposite end and are provided with two loops for engagement with a hook fastened to the side of the door casing. One loop when caught on the hook holds the hanger in its highest position, as illustrated, while the other is used when the hanger is lowered for the purpose of hanging or removing a garment. The hanger may be raised or lowered at will by operating the cords.

SIMPLE METHOD OF PULLING A CORK.

If you own a corkscrew of the kind illustrated, you



SIMPLE METHOD OF PULLING A CORK.

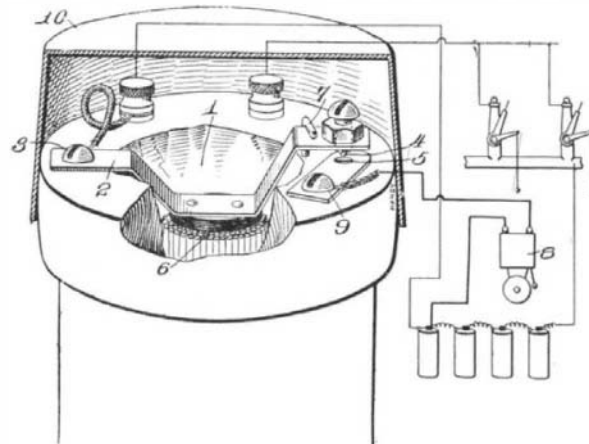
can easily remove the tightest cork without fear of soiling your clothes. After turning the screw well into the cork, place the lip of the bottle under the edge of a table or shelf, then with the upper surface of the table as a rest, lift up on the handle of the implement, and the cork will follow smoothly.

ALARM FOR BATTERIES OF ELECTRIC GAS LIGHTERS.

BY L. G. HANDY.

My home is equipped with electric sparking devices for lighting the gas jets. The system as I found it had one serious drawback, namely, that in some mysterious way the current would become short circuited and exhaust and ruin the battery. Upon investigation, I found that a device could be bought which would give an alarm in time to correct the short circuit before the battery was affected, but that the device was attached to and made a part of a spark coil. I proceeded to construct one on the spark coil which formed part of the lighting system. It is an extremely simple arrangement and can be made in a few minutes.

Cut away the wood of the end of the spark coil as shown at 1 in the illustration, so as to get to the ends of the core wires. Bend a piece of thin sheet spring brass $\frac{3}{8}$ inch wide into the shape shown at 2. Fasten one end with a screw 3 to the end of the coil. Fix a platinum contact point to the under side of the opposite end at 4. Under this contact place the co-working contact 5. The contacts taken from an old bell will be found satisfactory. To the under side of the bent portion of the piece 2 secure a small disk of soft iron 6. Care must be taken to bend the piece 2 so as to bring the iron against the core at the same



ALARM FOR THE BATTERY OF AN ELECTRIC GAS LIGHTER.

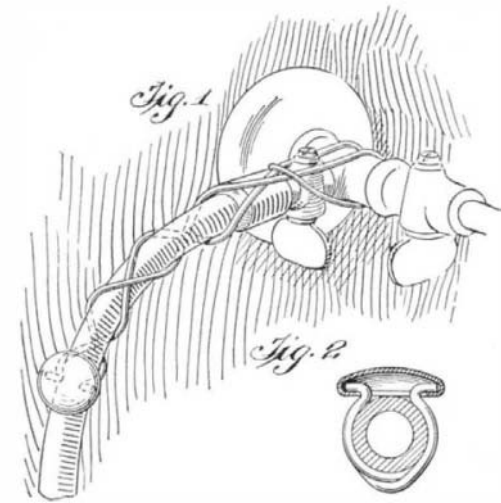
time that the contact is made at the platinum points. Arrange a small stop 7 to prevent the iron rising too far from the core. The movement at the contact points should not be more than $\frac{1}{16}$ inch, and the spring of the piece 2 should be very light. Place a small bell or buzzer 8 at any convenient point to give the alarm. This should be connected to the device as shown; one of the posts on the coil is connected by insulated wire to one of the contacts as at 3, the opposite contact 9 is connected to one side of the bell. The return wire is connected to the battery so as to

place only a single cell in the alarm circuit. A cap 10 of pasteboard or other material must be used to keep out the dust.

This device has been in use upward of three years, and has saved the battery on several occasions.

GAS-TUBE SUPPORT.

To prevent your gas tube from breaking where it hangs from the fixture, use a piece of spring-brass wire, 16 gage, 18 inches long. Fold this double, and wrap about the fixture as illustrated. Bend the free ends outward, and set into the under side of a large paper-tack head or similar article as in Fig. 2. This arrangement, if neatly executed, will support the tube



GAS-TUBE SUPPORT.

in a graceful curve. It is extremely simple, and will not prevent removal of the tube.

SUBSTITUTE FOR ROD THREADER.

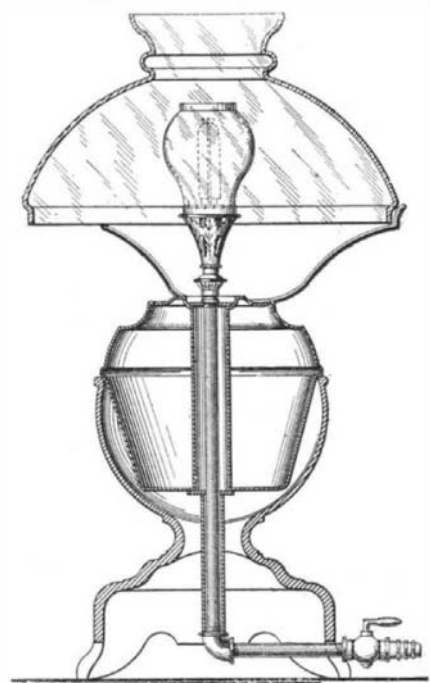
Not long ago the writer hit upon the following idea for a rod threader for quick and accurate work on rods from $\frac{1}{16}$ to $\frac{3}{8}$ inch in diameter. All one needs is a bench or blacksmith's drill, with a three-jawed chuck. Clamp the rod to be threaded in the chuck of the drill. Place the die in the holder as usual, hold the die against the end of the rod to be threaded, and turn the drill at slow speed. Those trying this method will find it a much quicker and better way than threading by hand in the usual manner.

DROP LIGHT MADE FROM AN OIL LAMP.

BY B. A. JOHNS.

Since gas has supplanted kerosene for illuminating purposes many quaint and highly prized oil lamps have been put out of commission. These lamps may be changed into attractive drop-lamps in the manner illustrated herewith.

A center-draft lamp is best adapted for the purpose, but any kind will answer. The hole on top of the oil reservoir is first soldered up, and through the central draft tube a small gas pipe is placed, with a threaded end on top, to receive the burner. Any mantled burner may be used. Under the burner is placed a washer, resting on top of the oil reservoir, which keeps the burner in place. At the lower end



DROP LIGHT MADE FROM AN OIL LAMP.

of the gas-pipe an elbow is screwed on. Between this elbow and the bottom of the oil reservoir is placed a short piece of pipe, so that, when the elbow is screwed up, the tube will be tight, thereby holding burner secure to the oil reservoir. From the elbow, a short piece of gas pipe is screwed in, with the ordinary stop-cock and attachment for the gas hose.