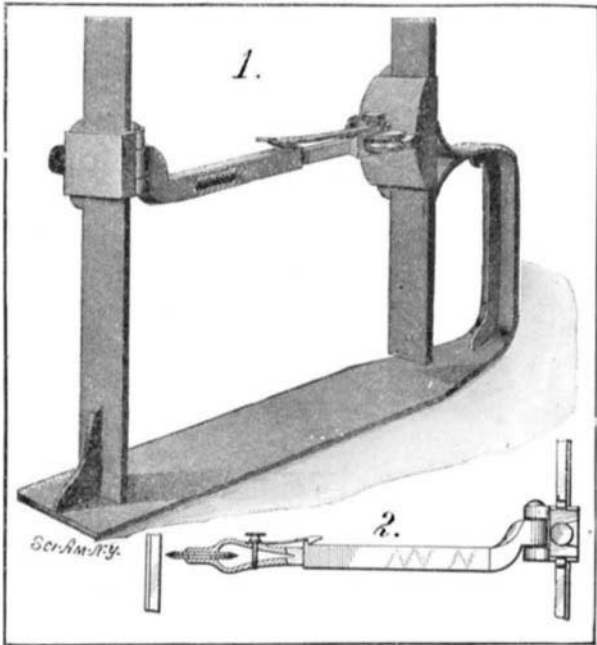




GAGE AND MARKER FOR GARMENTS.

Adjusting the hem at the bottom of the skirt so that the garment will hang evenly, that is, at a uniform

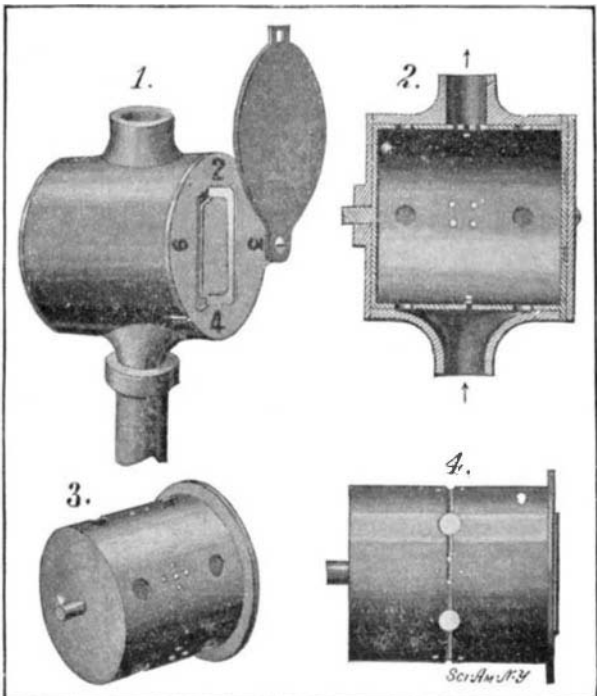


GAGE AND MARKER FOR GARMENTS.

distance from the floor all around, is a task that tailors and dressmakers find very tedious. Ordinarily, the work is done by pinning up a narrower or deeper hem, according to the amount that appears necessary to the eye, and the result is often far from accurate. A recent invention provides a device which marks the skirt at an absolutely uniform height above the floor. As shown in the accompanying drawing, this device consists of two standards firmly secured to a flat base. Each standard is provided with a slide movable thereon, but adapted to be set at any desired position by tightening a thumbscrew. Hinged to one of the slides is a hollow arm, within which the marking rod is fitted. Two rods are provided, one adapted to carry a piece of marking soap, and the other a grooved wheel by which the skirt may be marked with a crease. The groove is adapted to bear against a creasing rib formed on the opposite slide. The wheel is pressed against this rib by a spring in the hollow arm. A spring catch fastened to the marking rod and hooking over a lug on the arm keeps the rod in its socket. In use the bottom of the skirt is placed on the model, who stands stationary while the operator moves the device around the bottom of the skirt. The slides are first adjusted to the proper height, as indicated by a scale on one of the standards. The bottom of the skirt is then caught between the marking rod and the opposite slide, and the marking is done by swinging the marking arm laterally against this slide. For light fabric, such as lawns, etc., the creasing wheel may be preferably used. The device may also be found useful for marking tucks, ruffles, and the like. A patent on this device has been procured by George W. Sensbach and Margaret J. Sensbach, of Ronceverte, W. Va.

A GAS-SAVING DEVICE.

The amount of light given by a gas burner depends,



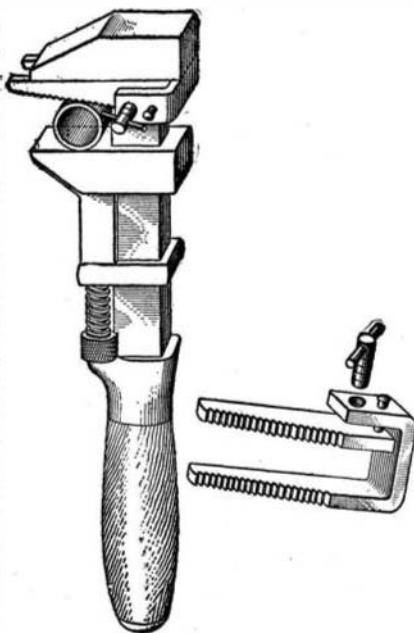
A GAS-SAVING DEVICE.

not on the quantity of gas consumed, but on the character of the flame produced. A gas flame comprises a central dark area and an outer bright yellow spread, the latter, of course, giving the light. As the pressure is increased, the area of the dark part increases more rapidly than the yellow part, until a degree is reached beyond which the dark area increases at the expense of the light-giving part. Under such pressure, one can increase the brilliance of the jet by partly turning off the gas. While the ordinary gas cock thus provides means for regulating the pressure to the proper degree, the average man does not care to be bothered with it, and prefers rather to turn on the full flow of gas, even though it results in less light. For the benefit of the careless man, a device has recently been invented which may be applied to the gas pipe near the meter, to regulate the pressure at all the burners in the house. As shown in the accompanying engraving, the device comprises a casing interposed between the meter and the burners. A hollow plug of the form shown in Fig. 3 fits snugly into the casing. This plug is formed with groups of small perforations, which vary in number corresponding with the numerals printed on the end of the casing as indicated in Fig. 1. A number of large openings are also provided to admit gas into the plug. A handle is hinged to one end of the plug, by which the latter may be moved to bring any of the groups of perforations into line with the outlet pipe above, and thus govern the pressure of the gas as it passes out of the plug to the burners. A socket is provided in the end wall of the plug, in which the handle may be folded, so that it will lie flush therewith, permitting the cover piece to be swung down. The latter is held closed by snapping it over a lug. In Fig. 4 we show a modification of the plug, in which a central groove is formed to provide a certain amount of gas to flow constantly, no matter in what position the plug is turned. We are informed that in a recent test of this gas check a saving of forty per cent was effected without diminishing the amount of light given. The flame produced was steady, and the flickering and noise which are commonly indicative of an uneconomical use of gas were entirely avoided. A patent on this gas-saving device has been secured by the Standard Development Company, 714 Union Street, New Orleans, La.

ODDITIES IN INVENTIONS.

PIPE-GRIPPING ATTACHMENT FOR MONKEY WRENCHES.

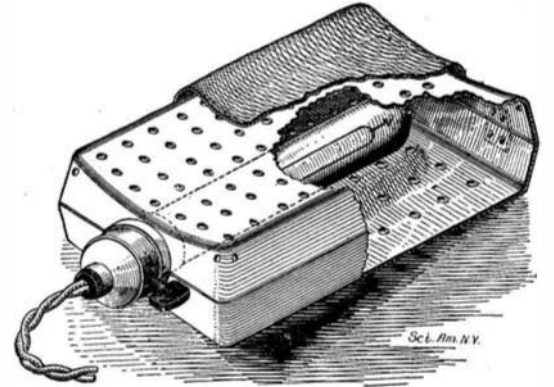
—A recent patent provides a very simple means for converting an ordinary monkey wrench into a pipe wrench. It consists of a pair of toothed members, adapted to be fitted under the upper or fixed jaw of the wrench. One of the toothed members is formed with a U-shaped body, adapted to embrace the stock of the wrench and overlap the other toothed member. The device is clamped to the wrench by means of a clamping screw in the overlapping end, which may be turned to press the adjustable member against the stock. The adjustable member carries a guide pin, which extends through the overlapping portion. At the top of the pin a head is formed which holds the two parts together, thus preventing one or the other being mislaid or lost. The advantages of this invention should be apparent to any mechanic.



PIPE-GRIPPING ATTACHMENT FOR MONKEY WRENCHES.

ELECTRIC HEATER.—As a substitute for a hot-water bag, a resident of Napoleon, Ohio, has devised the electrically-heated bag, which is illustrated herewith. It consists of an incandescent electric lamp inclosed by a perforated metal casing. The device may be connected to any electric lamp socket, and when the current is turned on the lamp will heat the casing. Over the latter a bag of soft fabric is placed, to prevent direct contact of the metal with the body. One side of the casing is made slightly concave, in order that it shall conform to the body when hot applications are made. The casing is made detachable, so that it may be removed when the lamp burns out, to permit of renewal. The advantage offered by this heater over the ordinary hot-water bag is that it will remain

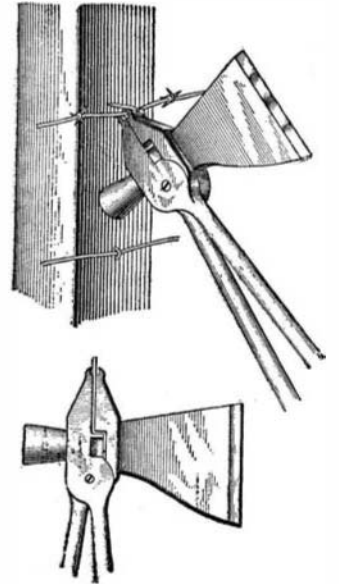
hot continuously and at a constant temperature, whereas a hot-water bag will rapidly become cooler as the water loses its heat.



ELECTRIC HEATER.

COMBINATION TOOL.—The combination tool illustrated herewith will be found of value in building and repairing wire fences.

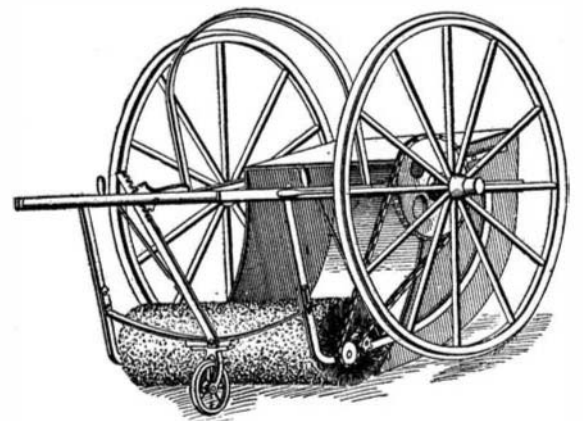
It comprises in one instrument a hammer, hatchet, pliers, wire cutters, wire benders, and staple pullers. The hammer head is attached to one, and the hatchet blade to the other of a pair of hinged plier jaws. Just below the pliers are the wire cutters, consisting of tapering blades, formed on the opposite jaws. When it is desired to bend a wire, preparatory to making a loop, it is seized between the plier jaws, in the manner indicated



COMBINATION TOOL FOR FENCE BUILDING.

by our side view of the tool, when the lower end will be bent at right angles by the lug projecting above one of the cutter blades. Each jaw carries at its upper end a pair of claws, which will be found useful for removing staples, etc.

STREET SWEEPER.—A manually-propelled street sweeper has just been invented, which operates somewhat on the carpet sweeper principle. The machine comprises a dirt receptacle, and a cylindrical brush or broom which is adapted to be rotated by chain-and-sprocket connection, with the main wheels on which the sweeper is supported, so that as the apparatus is pushed along the street, the wheels in rotating will



A MANUALLY-OPERATED STREET SWEEPER.

operate the broom, sweeping up the dirt into the receptacle. Ratchet clutches are provided between the main wheels and their axle, so that the broom will revolve only when the machine is moved forward. The frame which carries the broom is supported at the rear by a small wheel or castor, and provision is made for regulating the height of the frame thereon to adjust the pressure of the broom on the street paving. The dirt receptacle is carried on an auxiliary frame, which is hinged to the main frame. This facilitates dumping the contents of the receptacle when desired.

Among the recent deaths reported is that of R. G. Armstrong, formerly a resident of Wichita, Kans., where he was a member of the fire department. While residing in that city he invented the harness snap which is now in use in the fire department of every large city in this country. The business of manufacturing these snaps grew to such proportions that Mr. Armstrong was compelled to move to Chicago, where he engaged in their manufacture on a large scale.