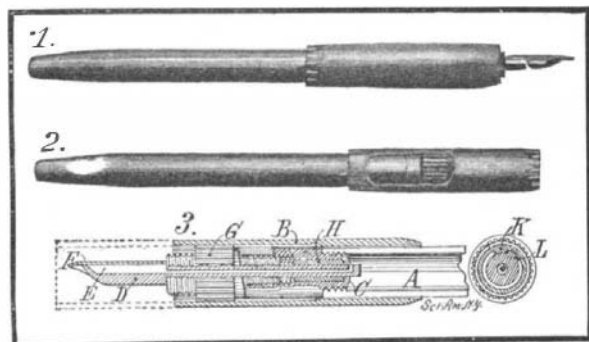




**AN IMPROVED FOUNTAIN PEN.**

The accompanying engraving illustrates a novel construction for fountain pens which is calculated to do away with the leaking of the pen when carried in the pocket and to provide means for regulating the flow of ink to the pen point. In our illustration the body of the pen is indicated at A. Mounted thereon is a sleeve B which serves as a cap to protect the point of



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the pen and also as means for regulating the valve which controls the flow of ink. Threaded into the body A is a thimble C into which, in turn, is threaded a feeder D. The latter is formed with a channel E which conducts the ink to the pen F. Secured on the feeder D is a sleeve G which is formed with a corrugated outer surface adapted to engage corrugations in the outer sleeve B. Owing to these intermeshing corrugations the sleeve B is prevented from turning relatively to the sleeve G, but may slide axially thereon. When the sleeve B is rotated it rotates the sleeve G and feeder D therewith, causing the latter to be screwed into or out of the thimble C. The feeder D is formed with an extension which passes through an opening in the thimble C. The channel E terminates in a transverse bore in the extension just referred to. When the feeder D is threaded inward the transverse bore is brought into communication with the ink reservoir in the body of the pen, permitting the ink to flow through the channel to the pen. On unscrewing the feeder D the extension is withdrawn and the bore therein is closed by the cork lining H of the thimble C. In this position no ink can flow out of the reservoir. The flow of ink through the pen is regulated by the extent to which the feeder is screwed in and this is determined by the relative position of a set of graduations on the sleeve B with respect to a fixed mark on the body A. When it is desired to lay the pen aside temporarily the sleeve B may be drawn forward to the dotted position without turning the feeder. When it is desired to carry the pen in the pocket the sleeve B is first turned to close the channel E, when the stops K and L will be brought into engagement, after which further turning will unscrew the thimble C from the body A. The device may be inverted and screwed point downward into the reservoir, as indicated in Fig. 2, a threaded shank being formed on the sleeve G to engage the threaded end of the reservoir A. A patent on this improved fountain pen has been secured by Mr. William A. Houston, of Tracy, Minn.

**SOME NOVEL TYPES OF SHAVING BRUSHES.**

Shaving brushes acquire a good name mainly through the capacity of retaining the bristles in place, the means of withstanding antiseptic treatment and practical methods of casing the brush to protect it from dust, abrading, spacing, etc. These and other features make this familiar and useful implement something for inventors to conjure with. Several recent novel forms are shown in the accompanying illustrations. In Fig. 1 the shaving brush is of the fountain type. The handle forms a reservoir holding liquid soap. The knob is operated to turn a screw rod at the end of which is a spiral conveyor that carries the liquid into the bristles. The disk above the liquid acts as a follower to force the soap into the grooves of the spiral. The cap of the handle unscrews when it is desired to refill or clean the reservoir.

Fig. 2 shows a rather unique brush body of oval or egg shape made of rubber sponge. The inner end of the rubber is ingeniously formed for proper connection with the handle through the medium of a cup-like neck.

The improvement is a characteristic departure from the use of bristles.

The third brush is of a type which leans to economy in the use of lathering material. The soap in liquid form is contained in a soft metal tube such as oil paints are kept in. The outer casing of the brush is made of pliable hard rubber or light spring metal. Pressure on this affects the inside tube so that the soap is forced out into the midst of the bristles. The orifice in the end of the handle is controlled by a valve and the displacement of the liquid from the tube to the bristles is thus pneumatically performed and in a manner similar to the operation of an oil can.

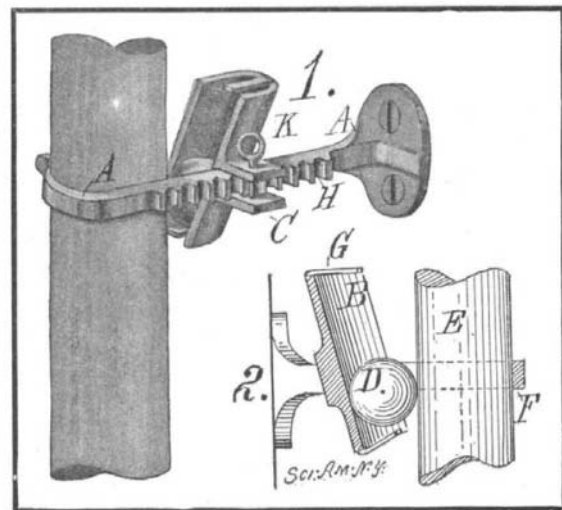
The next illustration pictures a device particularly adapted for the traveler, but should be found useful for others as well, because it will not drip and because the bristles can be incased to protect them from the dust. By unscrewing the handle cap the bristles part is removed and then screwed into the other end of the handle for use in lathering. The surplus water and lather drops through orifices at the base of the bristle-setting into the cup, leaving the outside of the holder perfectly dry. These drippings may serve for a finishing shave. When the user is through shaving the brush is snugly fitted into the casing as indicated by dotted lines and is thus folded into a small compass for packing.

The fifth illustration shows an adaptation to sterilization. The bristles are carried by a sleeve consisting of two parts which surround the inner end of the tuft and clamp the same between them. This sleeve is held in clamped position by an outer casing. The tuft is released from the handle by pushing out the inner sleeve which when free from the outer holder or casing will fall open. The tuft may then be sterilized and replaced in the sleeve and holder. In the last figure a brush is represented whose improvement is in the setting. The bristles are solidly imbedded in soft rubber. A metal belt which is covered with a rubber ferule binds the rubber mass. The whole is then placed in a die and vulcanized under heat and pressure. The vital point and one not secured in the ordinary processes is reached in this case through absolute resistance to various actions that tend to dissolve a setting of bristles.

**HOLDER FOR BROOMS AND SIMILAR ARTICLES.**

A patent has recently been granted on a holder of ingenious form which should be useful in the kitchen or household, to hold brooms and similar articles. The holder is so arranged that the handle of the broom is gripped under action of its weight as it is inserted, and it is suspended in a substantially vertical position. The device may be adjusted to suit handles of different sizes, and its gripping action is proportional to the weight of the article. It comprises a bracket A, which is secured to the wall and a member B mounted thereon. The latter is formed with a recessed portion adapted to receive and retain a ball D, and with a pair of laterally projecting lugs C between which the arm of the bracket is engaged. The handle of the broom, or other article is gripped between the ball D and a finger F on the bracket A. The recessed member in which the ball D is contained is inclined at an angle with the vertical and the ball normally rests against a stop at the bottom of the recess. A similar stop

G is placed at the upper end of the recess to prevent the ball from being accidentally disengaged from the member B. To adjust the holder for different sizes of handles the member B may be secured at any position along the projecting arm of the bracket A by means of a pin K which passes through the lugs C and engages any one of a series of vertical grooves H. It



**HOLDER FOR BROOMS AND SIMILAR ARTICLES.**

will be clear that on passing the handle of the broom up between the finger F and the ball D the latter will be raised but on releasing the broom the ball will be drawn down by the weight of the broom and will wedge the handle against the finger F, thus securely holding it in a substantially vertical position. The inventor of this improved holder is Mr. Elgin Morell, of 44-48 West 18th Street, New York, N. Y.

**Shoe Varnish.**

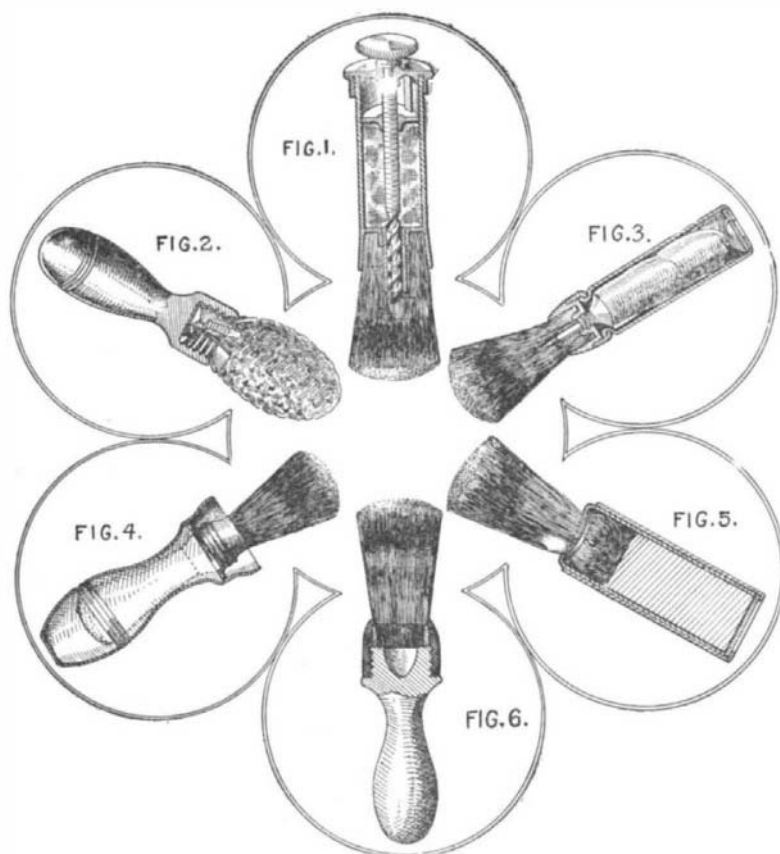
A waterproof shoe varnish resembling patent-leather in luster is compounded of shellac, one ounce; alcohol, three ounces; a pinch of lampblack to color. Owing to the unfavorable action of alcohol on leather, this shoe varnish is not to be recommended for brand-new shoes; but to rehabilitate old shoes to a pristine shine it is unsurpassed.

The tendency of shoes being cracked by it may very largely be averted by first treating the leather to several coats of fish oil or vaseline well rubbed in, over which a very thin coat of paraffine is applied hot, and the excess immediately wiped off; the shoes should then be burnished with cotton flannel until the surface is smooth, and apparently dry and free from oil or paraffine. The shoe varnish is then thinly applied with a small sponge fastened to a wire. Several thin coats put on several hours apart may be necessary to get full luster. After that, usually one thin application is sufficient. Patent-leather paste polish, rubbed over it and burnished with flannel, softens the glitter, and leaves a very handsome bright surface. The chief other advantage to be derived from its use comes from its resistance to water. It is, therefore, invaluable when applied to preserve the good looks of the sides of the soles and heels of shoes to be worn in bad weather; and even to waterproof their bottoms.

**A Simple and Effective Method of Christening Umbrellas.**

Name plates on the handle seldom assist in the recovery of even borrowed, to say nothing of lost, umbrellas. But there is a way by which you may so mark your umbrellas that the finders and borrowers thereof will be reminded of your name and address every time they stealthily sally forth with your umbrella over their heads. Make a paste of cornstarch with water; brush over the inner surface of the umbrella where you wish to have your initials, or your name in full, either with or without your street address. When this paste is dry, paint your name on the cornstarch, using pure white lead. Let the paint dry thoroughly; rub a stiffish brush over the whitened surface until the cornstarch is removed.

You will thereupon find the white letters of your name standing forth immaculately against the black background of your umbrella cover. The cornstarch paste is applied to keep the oils of the paint from penetrating the umbrella cover, and showing on the outer side. As it is, no unsightly grease spots come through. Your name is fixed, and if painted near the tip, it will be unobtrusive to you, though a constant reminder to the borrower or finder.



**SOME NOVEL TYPES OF SHAVING BRUSHES.**