(No Model.)

W. L. RICE.

STRING HOLDER.

No. 371,977. Patented Oct. 25, 1887.

FIG. 1

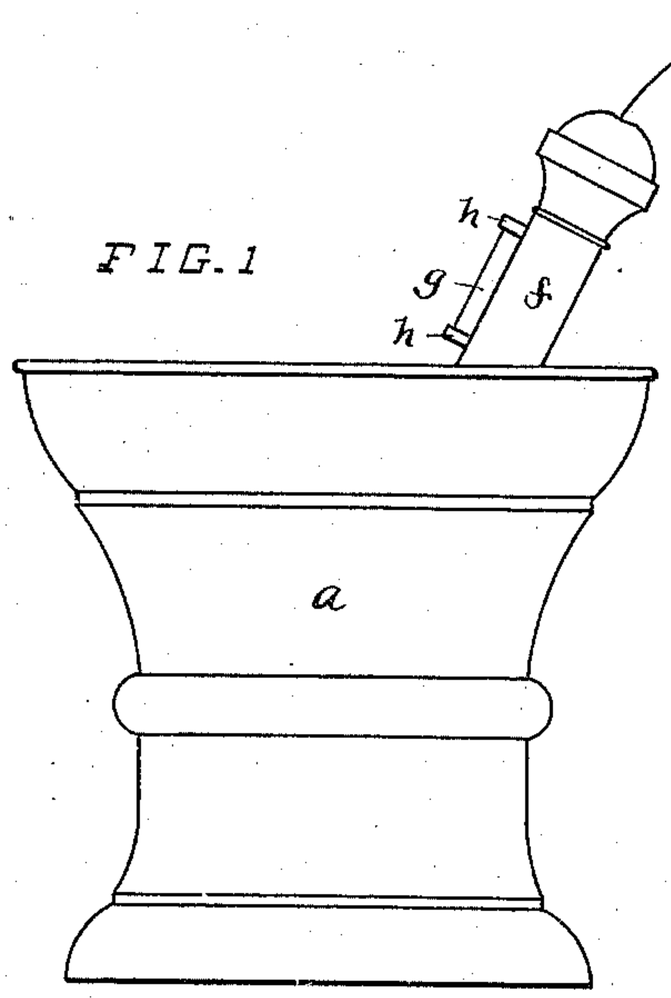


FIG. 2

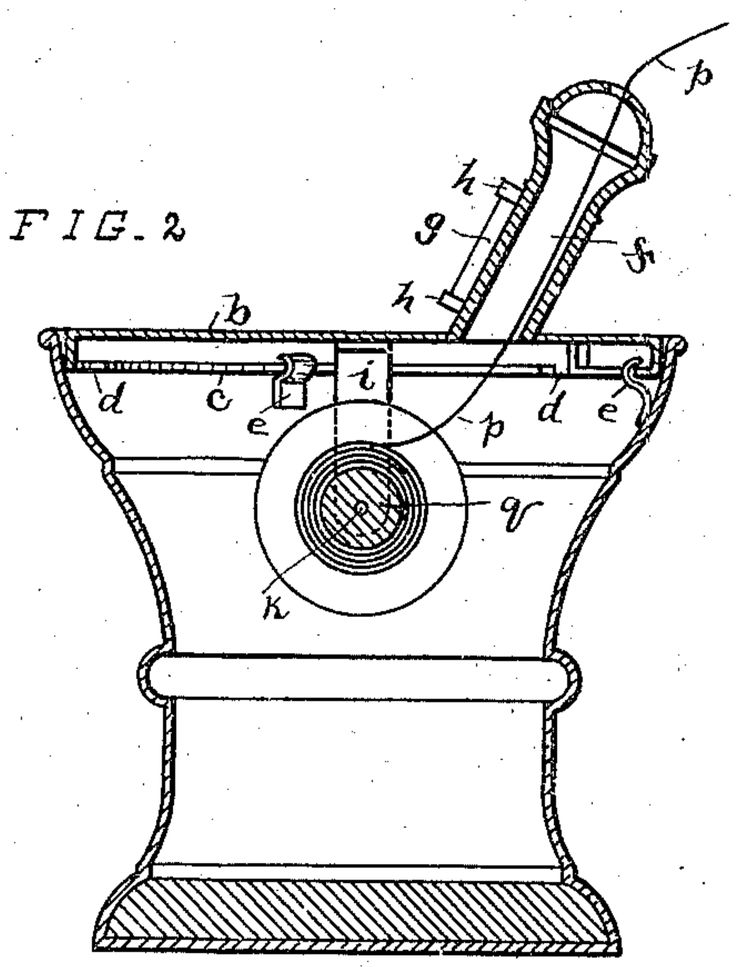


FIG. 3

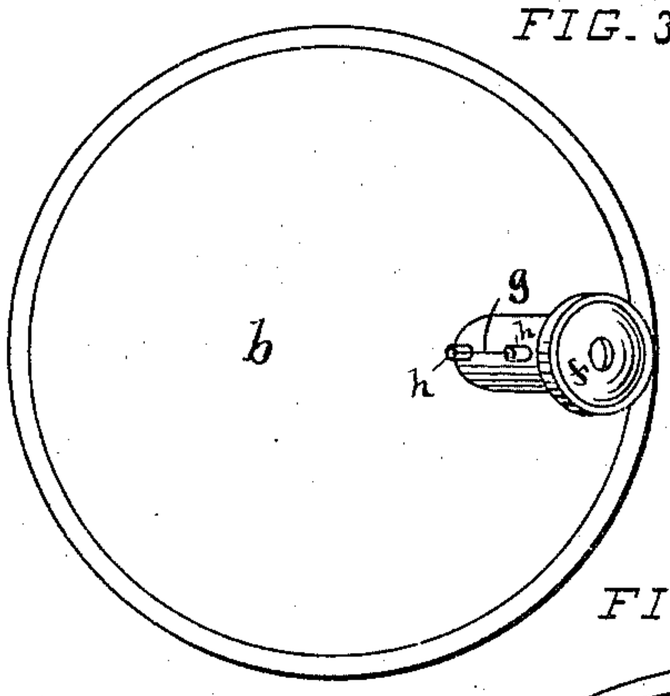


FIG. 4

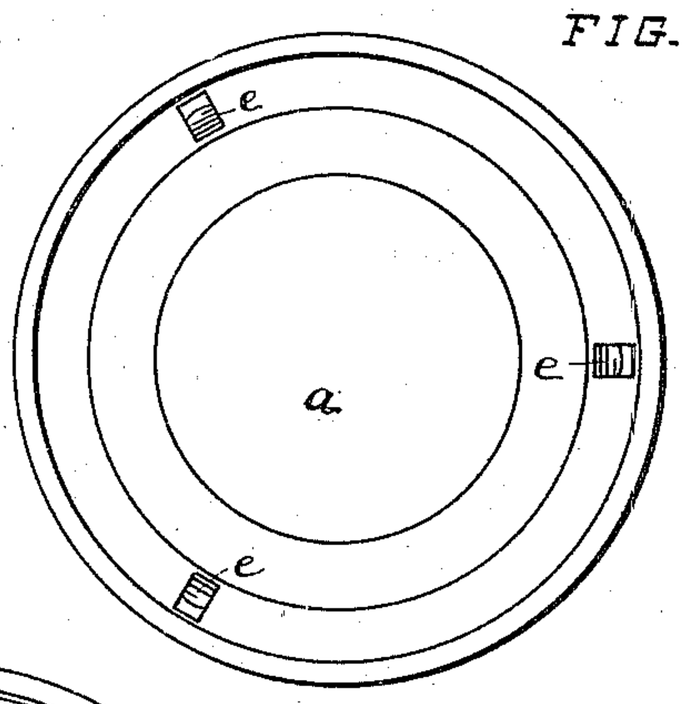
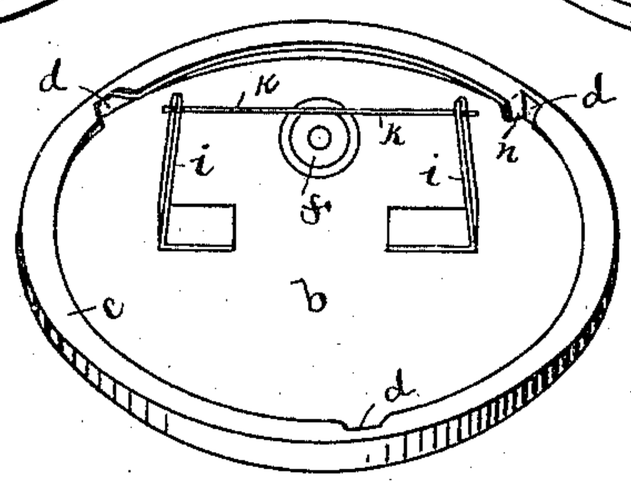


FIG. 5



WITNESSES

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UNITED STATES PATENT OFFICE.

WILLIAM L. RICE, OF COLUMBUS, OHIO.

STRING-HOLDER.

SPECIFICATION forming part of Letters Patent No. 371,977, dated October 25, 1887.

Application filed July 30, 1887. Serial No. 245,667. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. RICE, a citizen of the United States, and a resident of Columbus, county of Franklin, and State of Ohio, have invented a certain new and useful Improvement in String-Holders, of which the following is a specification.

My invention relates to the improvement of string-holding devices, and has particular relation to that class of string-holders adapted for the use of druggists and chemists; and the objects of my invention are to provide a neat, simple, and inexpensive device of this class, to so construct the same as to admit of the wrapping-string being held within the holder, either in the form of a ball or wound upon a reel so pivoted within the holder as to admit of its being readily unwound for use from the exterior, and to provide a suitable outlet-tube for the string, and to combine with the latter a string-severing knife, as hereinafter described. These objects I accomplish in the manner illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my improved string-holder. Fig. 2 is a sectional view taken through said holder and the string-reel. Fig. 3 is a plan view. Fig. 4 is a plan view with the top removed. Fig. 5 is a view in perspective of the cup-cover, showing the under side thereof.

Similar letters refer to similar parts throughout the several views.

a represents a cup formed of metal or other suitable material, and shaped to represent a druggist's mortar. This cup *a* is provided with a detachable disk-shaped top plate, *b*, having a downwardly-extending flange about its outer edge, said flange being so seated and adapted to fit within the mouth of the cup as to bring the upper surface of the top plate flush with the top of the cup.

The flange of the top plate above described is provided with an inward bend at its lower edge, thus forming a circular guide-flange, *c*, for the purpose hereinafter described. This guide-flange *c* is cut away at intervals to form two or more notches, *d*.

e represents two or more track-lugs, consisting of short strips of metal having their lower ends riveted or otherwise secured to the inner surface of the cup at intervals corresponding with the intervals between the notches *d*. The upper portion of each of the lugs *e* is provided with an inward and thence outward bend, as shown.

f represents the string-outlet, consisting of a metallic tube made to project upwardly at an angle with the top plate in the form of a pestle. The tube *f* is preferably formed with the top plate, and, having a string-opening in its outer end, has its lower end communicating with the interior of the cup through a hole formed in the top plate, from about which the pestle-shaped tube projects.

g represents a thin knife-blade made to project from one side of the tube *f*. This blade *g* may be formed with the tube, but is preferably held, as shown in the drawings, between two outwardly-projecting lugs, *h*, said lugs having formed in their lower and upper side, respectively, slots adapted to receive and hold the ends of said knife-blade.

Made to extend downwardly from the under side of the top plate, on opposite sides of the center thereof, are short metallic arms *i*, which may be formed with said top plate or secured at their upper ends thereto in any well-known manner. The lower ends of the depending arms *i* are perforated to receive loosely the ends of a reel or spool rod, *k*. The arms *i* are formed of thin metal, and are made to incline slightly toward each other. The rod *k* is somewhat longer than the distance between the arms *i*, and having had a spool of string or cord mounted loosely thereon, it has its respective ends inserted within the perforations of the arms *i* by forcing the lower ends of the latter apart sufficiently, and then allowing them to spring back to their normal position. The loose end of the string having first been passed through the tube *f* and out through the opening in the top of the same, the top plate may be secured in its position by so placing it on the cup as to cause the lugs *e* to enter the notches *d*. The plate is then turned, allowing the guide-flange *c* to slide within the bent portions of the lugs *e* until the flange *c*, by its engagement with the lugs *e*, prevents the escape upwardly of the top plate. A stop-lug, *n*, formed beneath the flange *c* at one edge of one of the notches *d*, prevents, by its engage-

ment with one of the lugs *e*, the turning of the top plate in more than one direction, and serves to limit the movement of the top plate.

By the construction above described it will be observed that the string *p* may be unwound from the reel or spool *q* by pulling on the free outer end, and that after the desired portion is used the string may be severed by forcing it against the sharp edge of the blade *g*. It will also be seen that, when desired, an ordinary ball of wrapping-twine may be placed within the mortar and allowed to rest on the bottom thereof, while its free end is made to pass out, as above described, through the tube *f*.

In case the reel is used, the spool *q* may be, as above described, readily replaced, when exhausted, by new ones.

While the shape of my newly-invented string-holder is designed especially for the use of druggists and chemists, it may be utilized as a string-holder in all branches of business.

Having now fully described my invention, what I claim, and desire to secure by Letters Patent, is—

In a string-holder, the combination of the mortar-shaped cup *a*, having the internal bent lugs, *e*, with the top plate, *b*, having the notched flange *c*, depending arms *i*, supporting reel-rod *k*, and the pestle-shaped tube *f*, the latter having projecting from one side thereof a knife-blade, *g*, substantially as and for the purpose specified.

WILLIAM L. RICE.

Witnesses:

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W. S. SHEPHERD.