

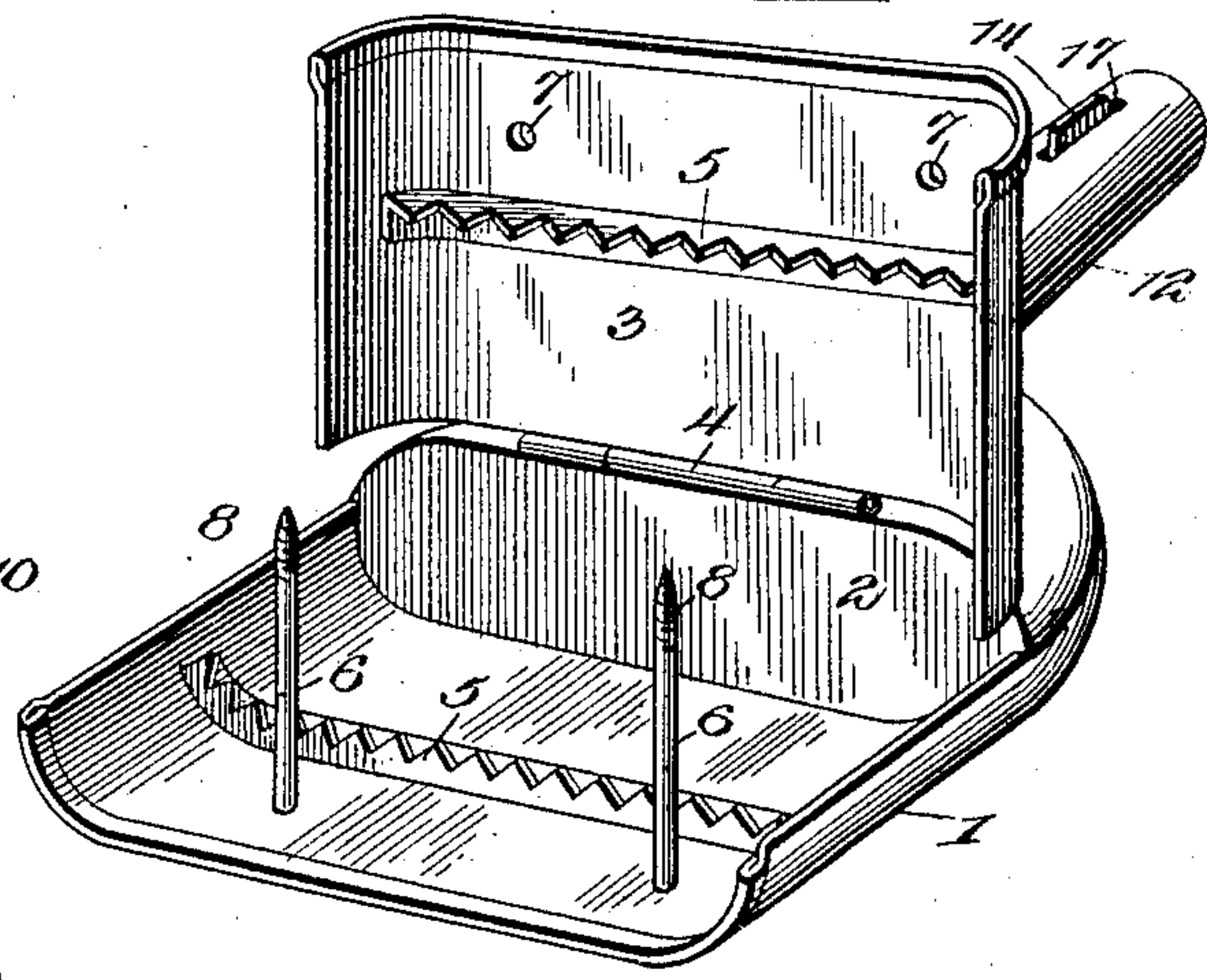
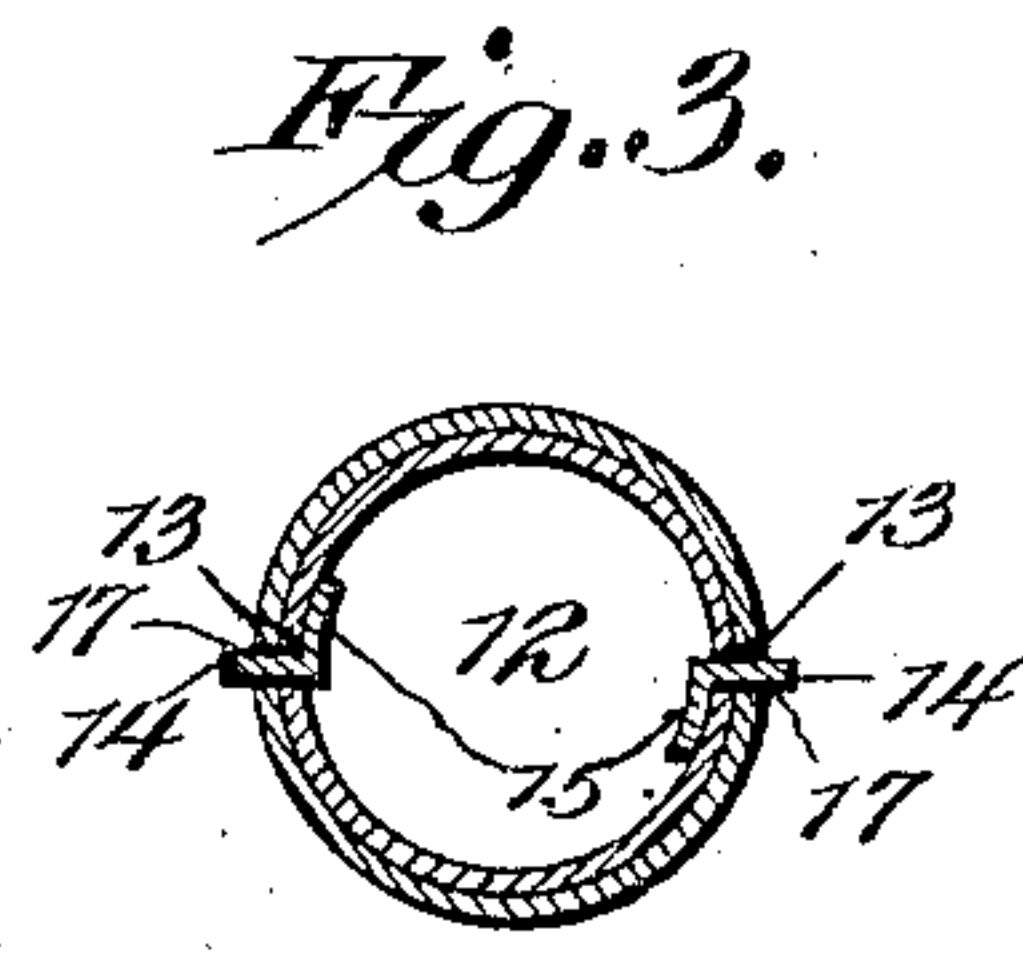
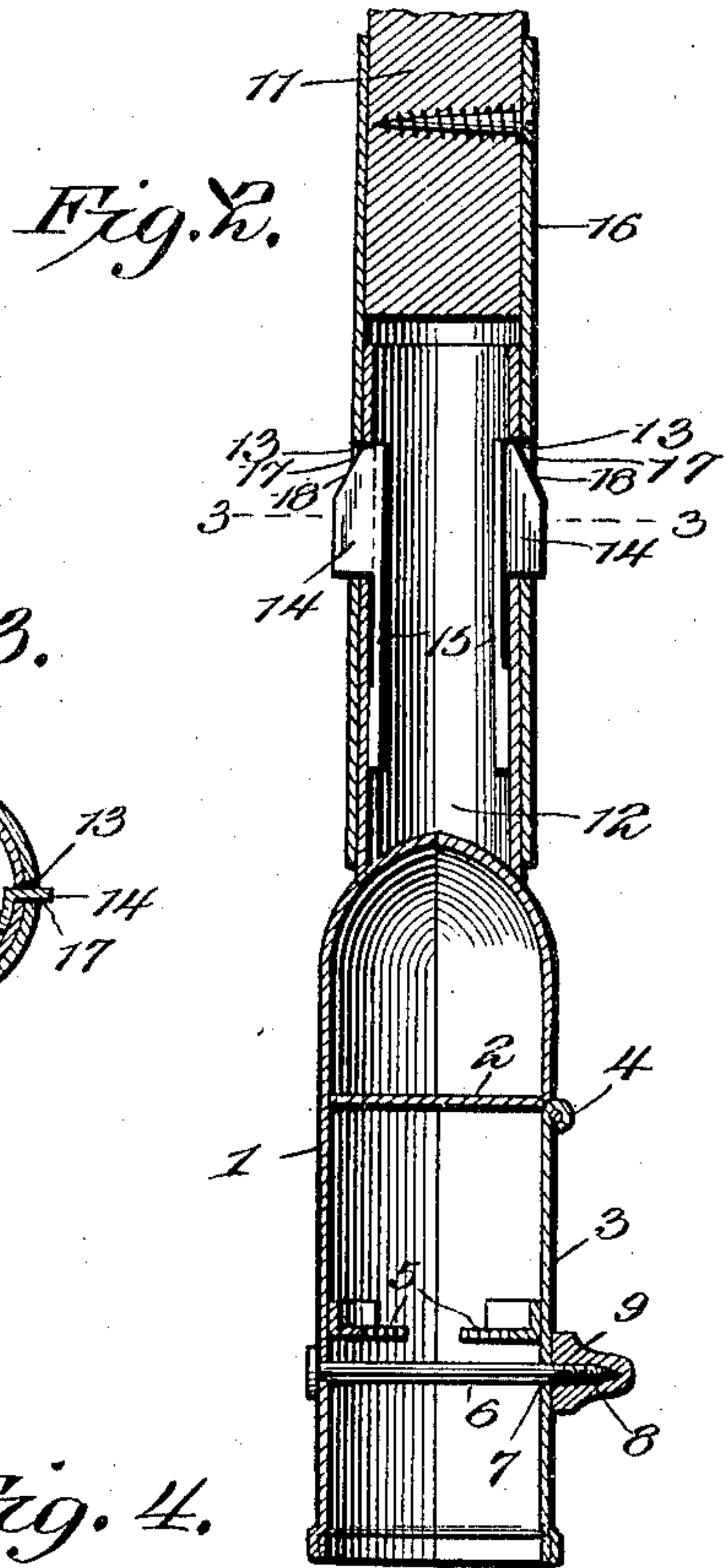
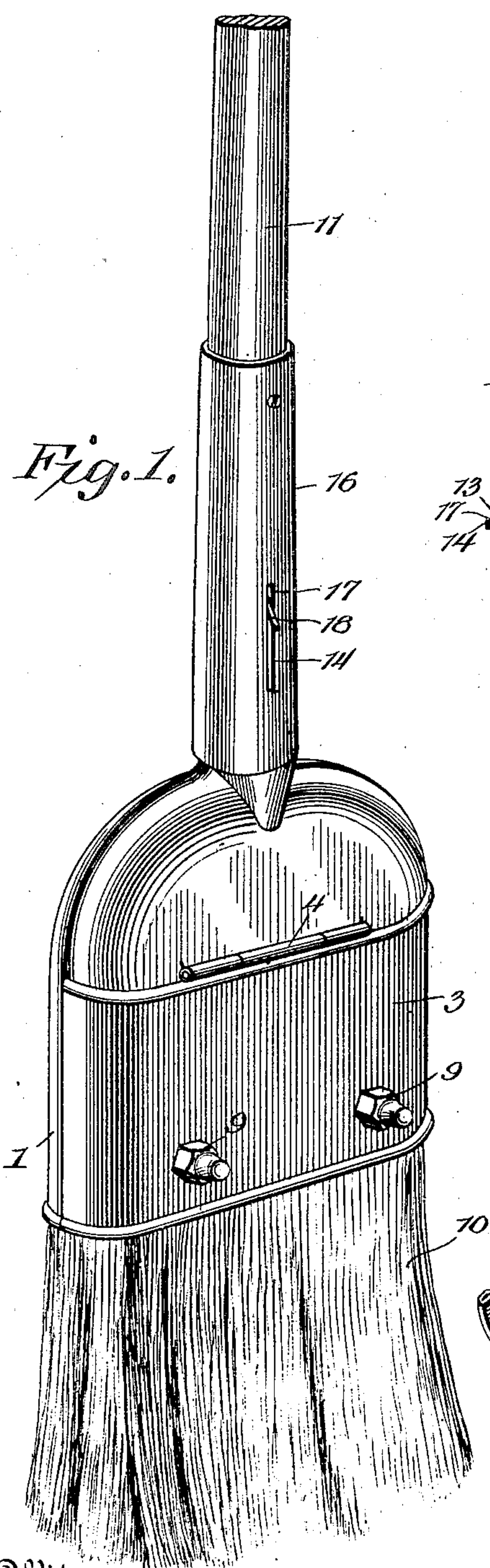
No. 704,483.

Patented July 8, 1902.

W. MANSFIELD.  
BROOM HEAD.

(Application filed Oct. 15, 1901.)

(No Model.)



Witnesses  
Howard W. Carr.  
H. J. Shepard.

William Mansfield, Inventor;

By *E. J. Siggers*  
Attorney



# UNITED STATES PATENT OFFICE.

WILLIAM MANSFIELD, OF SCRANTON, MISSISSIPPI, ASSIGNOR OF ONE-HALF  
TO CHARLES S. MERIWETHER, OF SCRANTON, MISSISSIPPI.

## BROOM-HEAD.

SPECIFICATION forming part of Letters Patent No. 704,483, dated July 8, 1902

Application filed October 15, 1901. Serial No. 78,709. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM MANSFIELD, a citizen of the United States, residing at Scranton, in the county of Jackson and State of Mississippi, have invented a new and useful Broom-Head, of which the following is a specification.

This invention relates to brooms, brushes, and the like, and has for its object to provide for the detachable connection of the brush or brush-heads with the handles thereof, so that these parts may be conveniently separated for the substitution of a new head for a worn head and also for convenience in storing these parts.

It is furthermore designed to insure a strong, durable, and rigid connection between the head and the handle, so as to obviate looseness thereof and at the same time to facilitate the separation thereof.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a broom embodying the present invention. Fig. 2 is a longitudinal sectional view thereof. Fig. 3 is a cross-sectional view on the line 3 3 of Fig. 2. Fig. 4 is a detail perspective view of the broom-head in its open position for the reception of straw or other material.

Like characters of reference designate corresponding parts in all the figures of the drawings.

Referring to the accompanying drawings, it will be seen that the broom-head consists of a hollow metallic box-like body 1, which is closed at its inner end and open at its outer end and is also provided with an intermediate transverse partition 2, located adjacent to the inner end thereof. One outer section of the box, as indicated at 3, is separate from the other portion thereof and connected there-

to by means of a hinge 4, so that the part 3 may be swung outwardly, as indicated in Fig. 4, to facilitate the reception and removal of straw or other material of which the broom may be formed. Both of the box members have corresponding series of teeth 5, which extend transversely upon the inner side thereof and substantially midway between the opposite ends of the hinged member 3. The fixed member 1 is provided with a pair of pins 6, which project at the inner side of the member and are designed to pass through corresponding perforations 7, formed in the hinged member, so that the screw-threaded terminals 8 may project exteriorly of the head for the reception of cap-nuts 9 to cover the pointed ends of the pins and also to effectually hold the box members in closed position. The straw or other material 10, of which the broom is formed, is placed within the stationary member of the box, and then the hinged member is folded down against the straw and the nuts 9 applied to the pins, thereby snugly clamping the straw within the box or broom-head. It is thus apparent that the straw or other material may be readily replaced when worn or otherwise damaged.

In order that an ordinary handle 11 may be connected to the broom-head, the latter is provided with a tubular shank or stem 12, having diametrically opposite slots or openings 13 for the reception of the heads 14 of spring-catches the shanks 15 of which are secured to the inner sides of the tubular stem. The handle 11 is provided with a tubular socket 16 of a diameter to snugly receive the stem or shank 12 and provided with diametrically opposite slots or openings 17 to correspond with the similar slots or openings in the tubular shank, and thereby to receive the heads of the spring-catches, as clearly indicated in Fig. 2 of the drawings.

In assembling the handle and the broom-head the shank or stem 12 is thrust into the socket 16, whereby the outer end of said socket engages the beveled outer edges 18 of the catch-heads, so as to force the latter into the tubular shank, and when the slots or openings of the shank and the socket are registered the heads of the spring-catches snap outwardly into these slots or openings, so



that their rear ends may snugly engage the inner ends of the openings, thereby holding the handle and the broom-head against accidental separation. It is preferable to have  
5 the shank and socket tapered, so that these parts may have a snug fit to obviate looseness thereof. To separate the head from the handle, the heads of the spring-catches are forced inwardly by pressing the fingers there-  
10 on, so as to force the catch-heads inwardly and out of engagement with the socket, after which the handle may be readily withdrawn from the shank or stem.

From the foregoing description it is appar-  
15 ent that the head and handle are connected in a strong, durable, and rigid manner, so as to obviate looseness thereof, and at the same time may be conveniently separated without removing bolts, screws, or similar fastenings,  
20 and the parts of the detachable fastening or coupling are always in position for interlocking engagement when the shank or stem is thrust into the socket of the handle.

What I claim is—

25 1. A coupling for handles, comprising a tubular stem or shank member, a socket member to receive the shank member, both of the members being provided with corresponding openings, and a spring-catch carried by the  
30 interior of the stem and having its free end provided with a head to snap into the corre-

sponding openings and detachably interlock the members.

2. A coupling, comprising a tubular shank or stem having a slot, a spring-catch carried 35 by the interior of the stem and having its free end provided with a head which is projected outwardly through the slot, one end of the head being beveled and the opposite end presenting an abrupt shoulder, and a socket 40 to receive the shank and provided with an opening for the detachable reception of the head, whereby the parts are held against independent rotation and endwise separation.

3. A coupling for handles, comprising a 45 tubular shank or stem member having diametrically opposite openings, spring-catches secured to the interior of the shank and having their heads projected outwardly through the respective openings, and a socket to 50 snugly receive the shank or stem and provided with diametrically opposite openings to register with the openings of the shank or stem and detachably receive the heads of the respective spring-catches. 55

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM MANSFIELD.

Witnesses:

B. F. BROUNE,

C. S. MERIWETHER.