

994,014.

Patented May 30, 1911.

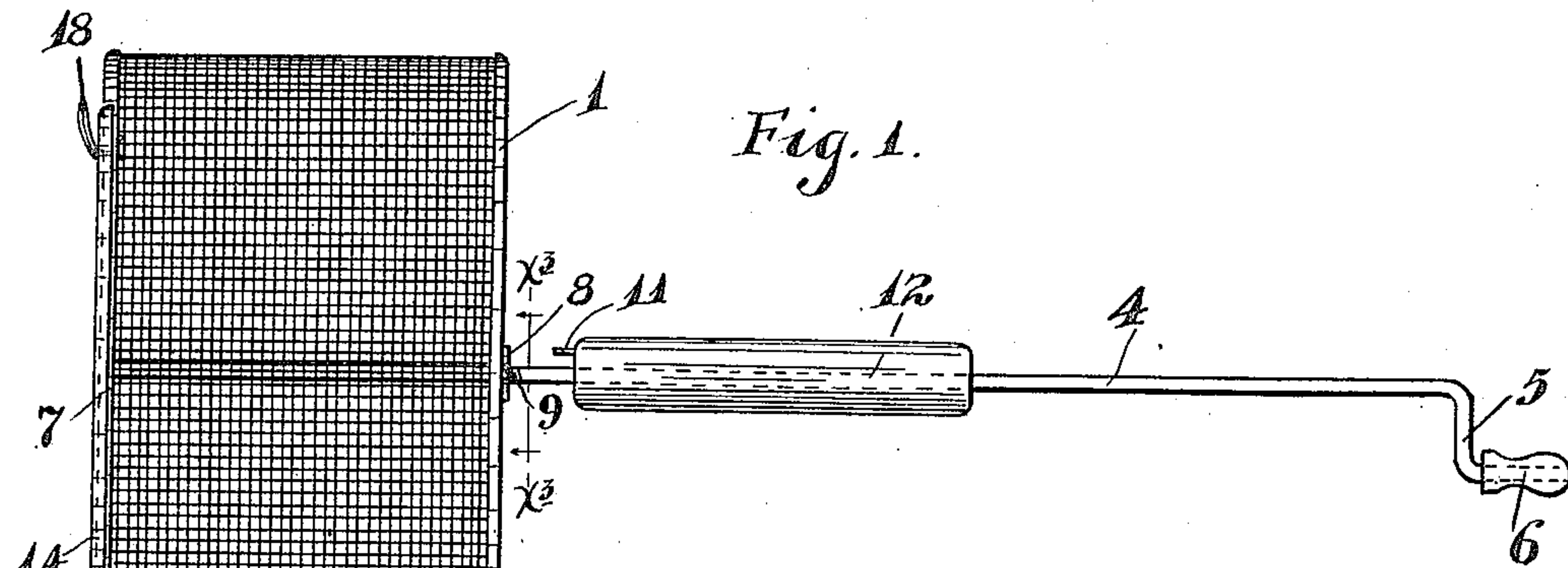


Fig. 2.

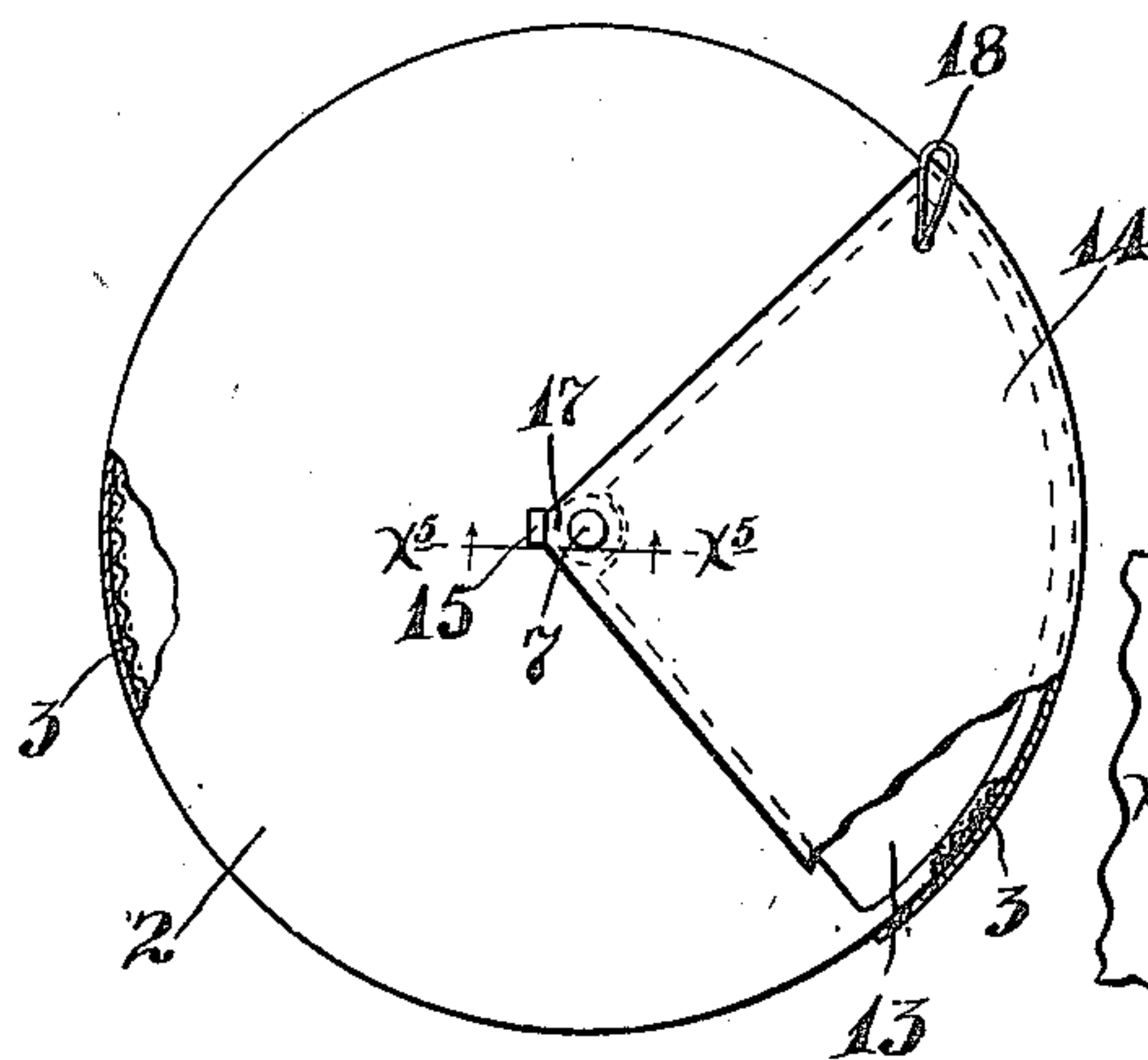


Fig. 3.

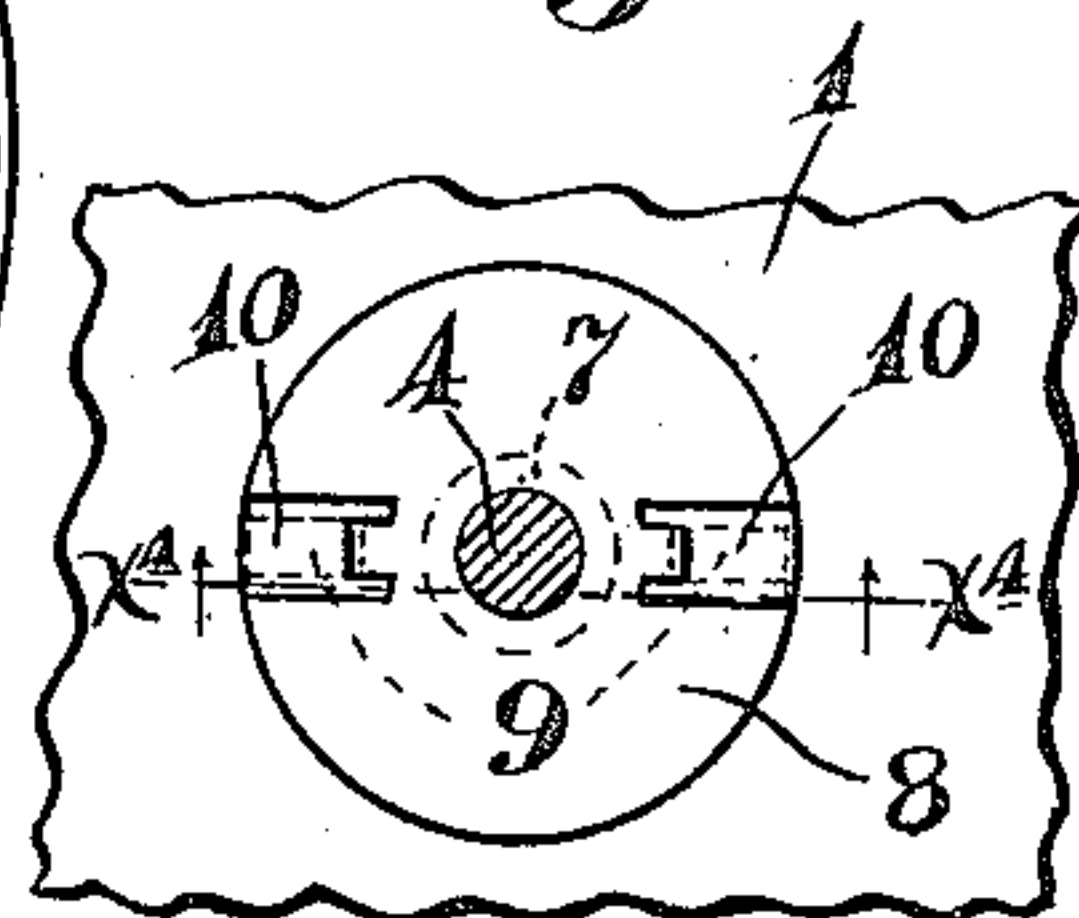


Fig. 4.

Fig. 6.

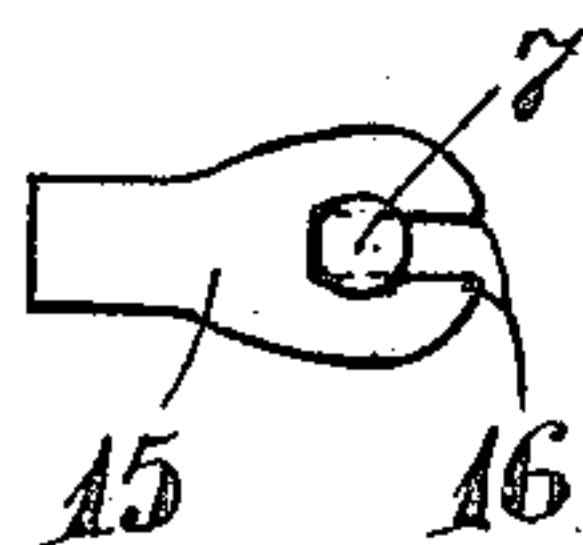
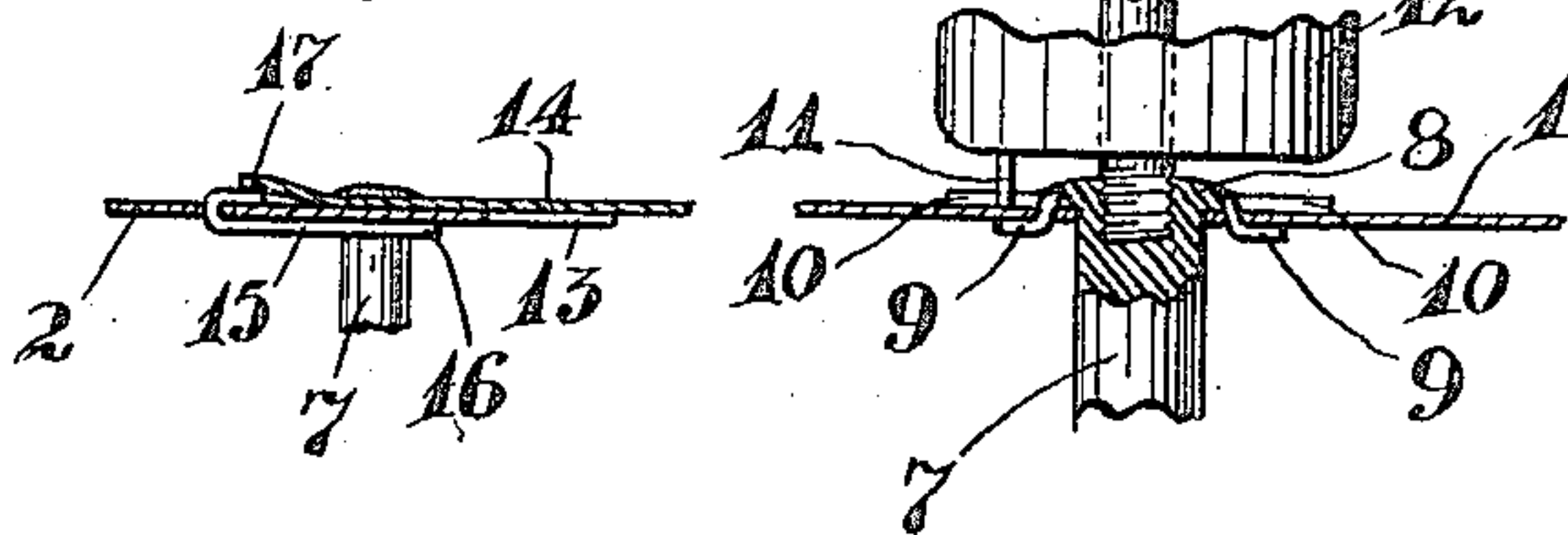


Fig. 5.



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# UNITED STATES PATENT OFFICE.

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## CORN-POPPER.

994,014.

Specification of Letters Patent. Patented May 30, 1911.

Application filed August 18, 1910. Serial No. 577,869.

*To all whom it may concern:*

Be it known that I, SIDNEY L. LONG, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Corn-Poppers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to provide a simple inexpensive and highly efficient corn popper, and to this end the invention consists of the novel devices and combinations of devices hereinafter described and defined in the claims.

In the accompanying drawings which illustrate the invention in its preferred form, like characters indicate like parts throughout the several views.

Referring to the drawings: Figure 1 is a view in side elevation showing the improved popper; Fig. 2 is an end elevation of the popper with some parts broken away; Fig. 3 is an enlarged section taken on the line  $x^3 x^3$  of Fig. 1, some parts being broken away; Fig. 4 is a fragmentary view partly in plan and partly in section on the line  $x^4 x^4$  of Fig. 3; Fig. 5 is an enlarged section taken on line  $x^5 x^5$  of Fig. 2; and Fig. 6 is a detail showing one of the shaft connecting devices.

The body or corn receptacle of the popper, as preferably constructed, is made up of a pair of thin sheet metal disks, or heads 1 and 2, and a reticulate, or perforate cylindrical shell 3, the latter of which, as shown, is made from wire screen, but may be otherwise formed, and in some instances, will be made of perforated sheet metal. The margins of the heads 1 and 2 are flanged and telescoped over the ends of the perforated cylinder 3, and they are both rigidly secured to an operating shaft 4, the other end of which is bent to form a crank 5, and is provided with a swivel finger piece 6. Preferably, the operating shaft 4 is formed with a detachable end section 7, to which the heads 1 and 2 are secured in a novel manner presently to be noted. Said section 7 is of larger diameter than the outer body portion of the shaft 4, and the latter has a threaded end which is screwed into a threaded seat in the adjacent end of the said section 7 as best shown in Fig. 4. This same end of the shaft section 7 is formed with a thin projecting

head, or flange 8, which, at diametrically opposite points is cut to form barbs 9, that are passed through perforations in the head 1, and are clenched at the inner side thereof, so as to thereby rigidly secure the said head 1, to the shaft section 7. Also the cutting of the barbs 9 forms diametrically opposite seats 10, in the outer portion of the flange or head 8, that are adapted to be engageable by a pin or stud 11 projected from the end of a tubular hand piece 12, preferably of wood, which is mounted for both rotary and sliding movements on the body of the shaft 4.

The outer head 2 has a segmental opening 13 that is normally closed by a segmental door 14, which is pivotally mounted on the adjacent end of the shaft section 7, the said end of the shaft section 7 being also passed through an axial perforation in the said head 2. The said head 2 is secured to the shaft section 7, preferably by a small metal clip 15, having a pronged end 16, that embraces said shaft section 7, being preferably engaged with notches cut therein, as best shown in Fig. 6. The projecting end of the clip 15, is passed outward through a perforation in the head 2, and is bent over to afford an abutment with which the end flange 17 of the segmental door 14 is adapted to engage, when the door is closed, to thereby tightly press the outer edge of the door against the incut rim of the head 2, so that the said door will not be accidentally opened. For moving the door, it is preferably provided with a loosely attached wire loop 18 which affords a finger piece. This metal loop affords a finger piece that will not burn and at the same time, on account of its small diameter, and its loose connection with the door, will cool very rapidly, when the popper is removed from the flame.

When the corn is placed within the reticulate popping cylinder or receptacle, the popper should be held with its operating shaft approximately horizontal and with the cylinder shell 3 in or close to the source of heat, such as a gas flame. The device will be supported chiefly by the hand which holds the sleeve-like hand piece 12 and the cylinder will be rotated by the other hand which engages the crank finger piece 6. The shaft 4 may be projected through a supporting hand piece 12, to any desired extent. When the corn has been popped, or at any other time when the cylindrical receptacle is hot and it



is desired to open or close the door 14, the said cylinder may be held against rotation simply by turning the shaft 4 into an upright position and engaging the pin 11 of the sleeve 12, with one or the other of the notches, or seats 10, formed in the head 8, of the shaft section 7. The sliding movement of the sleeve 12 on the shaft 4 is therefore, in this arrangement, of the utmost importance as it permits the sleeve or hand piece 12 to perform a double function, to wit, that of a support for the popper while it is being rotated, and as a means for holding the popper against rotation while its door is being opened or closed, at a time when the body of the popper is hot, and hence, cannot be engaged with the hand.

The sleeve 12, as already stated, is preferably of wood, but it may be of any suitable material, but should, nevertheless, be a poor conductor of heat.

Poppers of the character above described, have been made and put into actual use, and have been found highly efficient for the purposes had in view. By the rotary movement of the perforate or reticulate holder, the corn will be rolled over and over, thoroughly mixed, and all parts thereof brought into contact with the flame.

What I claim is:

1. The combination with a shaft provided with means for rotating the same, of a popping receptacle applied to said shaft and having a movable door, a hand piece mount-

ed to normally rotate on said shaft, and means for locking said hand piece at will against rotation in respect to said popping receptacle.

2. The combination with a shaft having a crank at one end, of a perforate popping receptacle applied to the other end of said shaft and provided with an oscillatory segmental door, and a hand piece mounted to rotate and slide on said shaft and having interlocking engagement with said receptacle, for holding the same against rotation while the door thereof is being opened or closed.

3. The combination with a shaft having a crank at one end, of a popping receptacle made up of a pair of laterally spaced heads and a perforate cylinder held by the said heads, said heads being secured to said shaft, one of the said heads having a segmental pivoted door and the other of the said heads having a notched hub, and a hand piece in the form of a sleeve mounted to rotate and slide on said shaft and provided with a projecting pin or stud engageable with the notched hub of the said receptacle while the door is being opened or closed.

In testimony whereof I affix my signature in presence of two witnesses.

SIDNEY L. LONG.

Witnesses:

ALICE V. SWANSON,  
HARRY D. KILGORE.