

C. H. CARLSON.
BUTTER AND LARD CUTTER.
APPLICATION FILED JUNE 24, 1909.

938,970.

Patented Nov. 2, 1909.

2 SHEETS—SHEET 1.

Fig. 2.

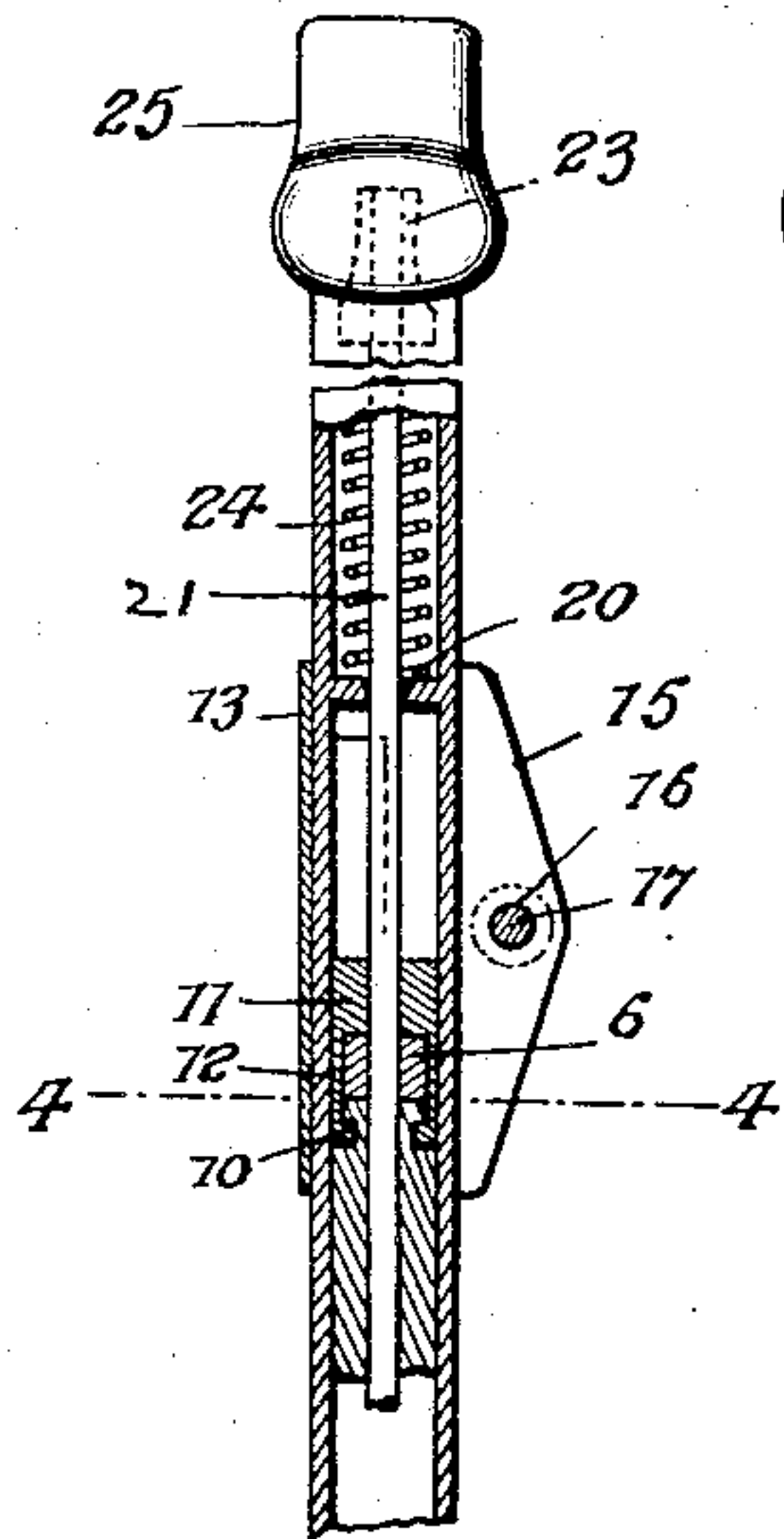


Fig. 1.

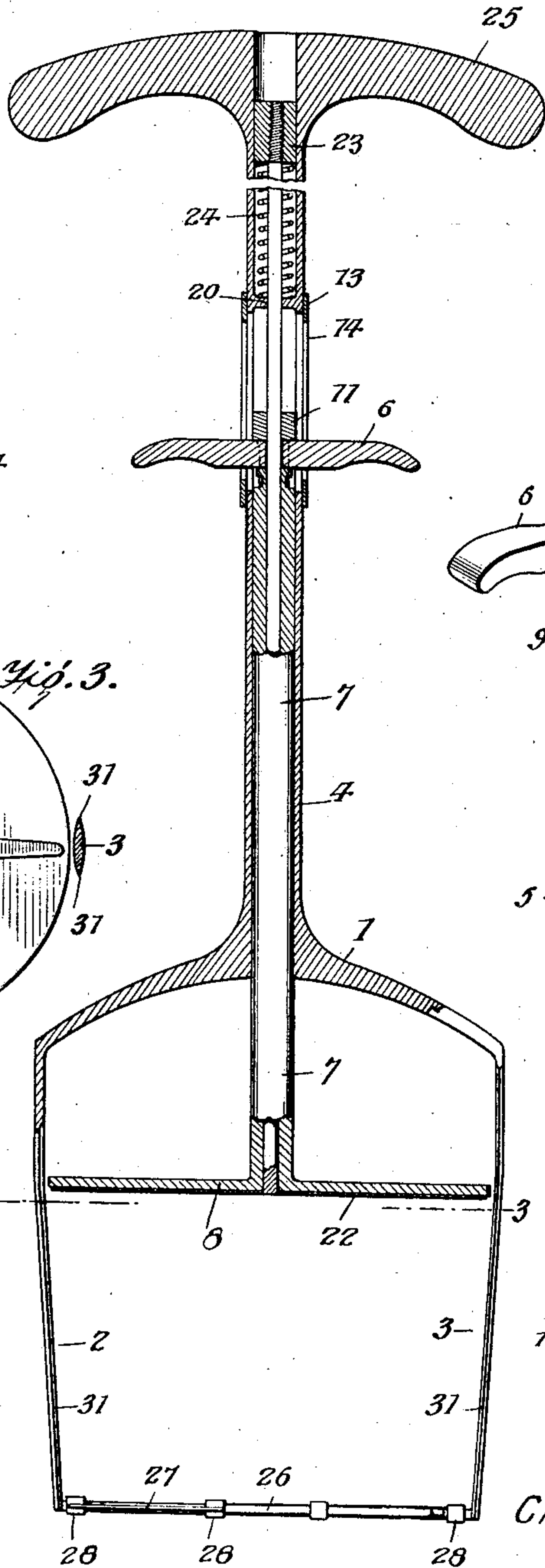


Fig. 4.

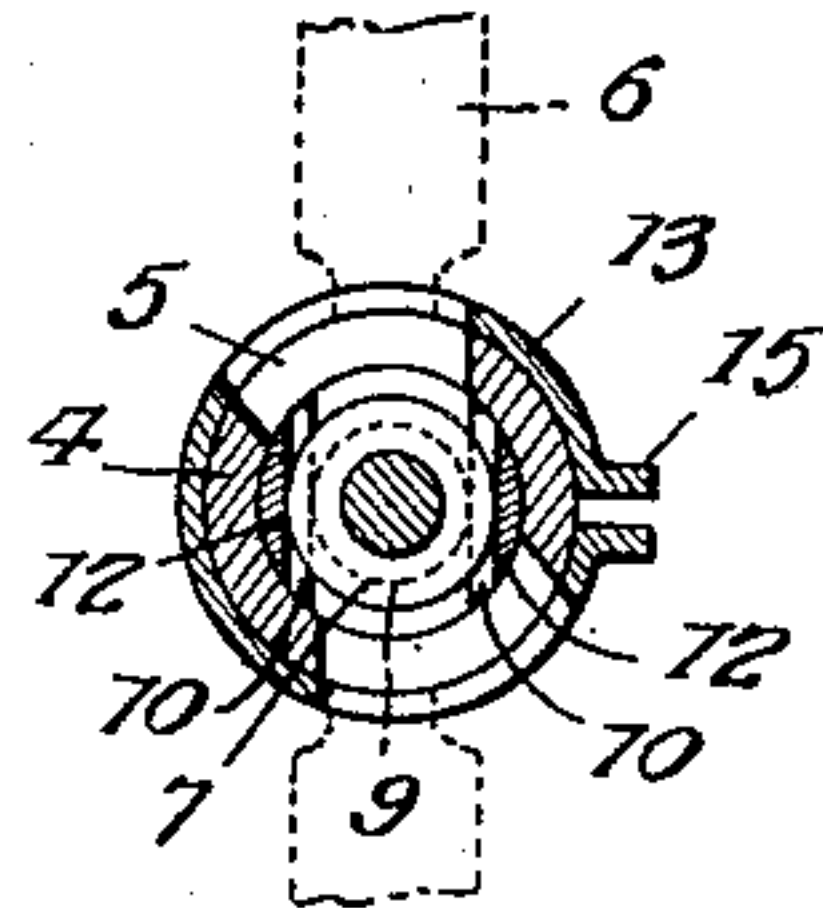


Fig. 5.

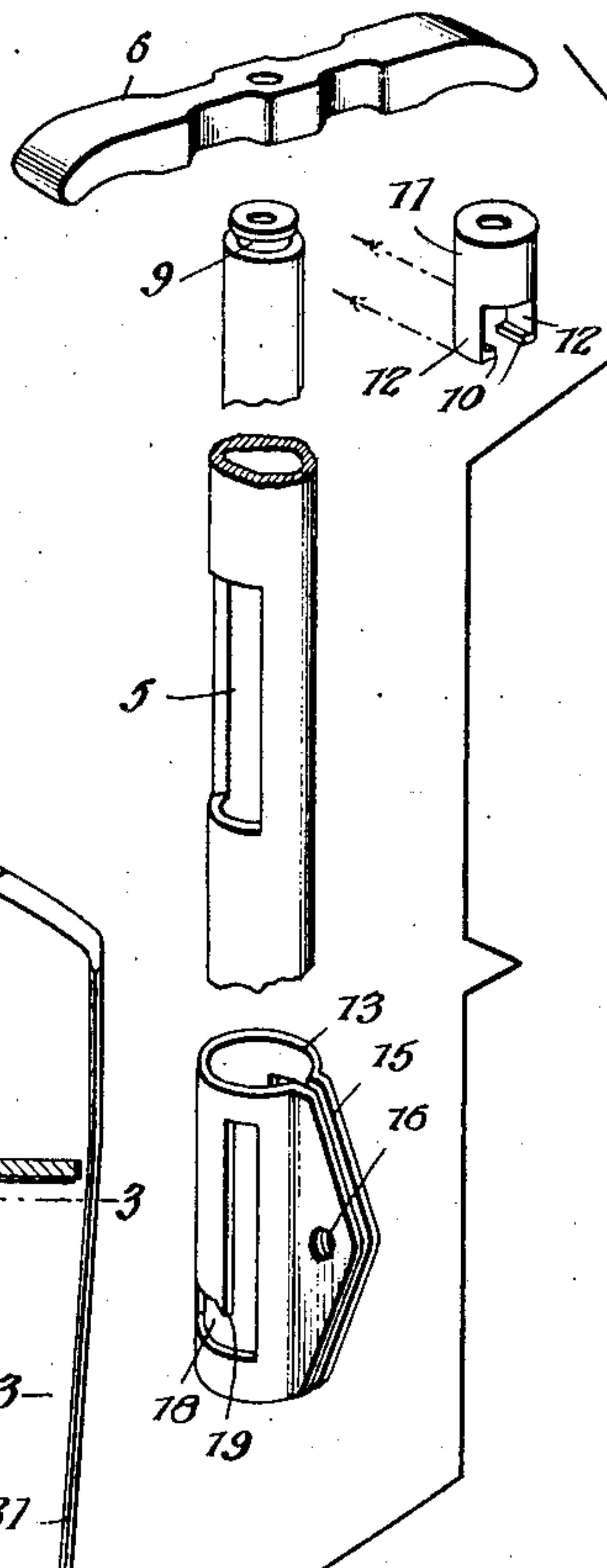


Fig. 3.

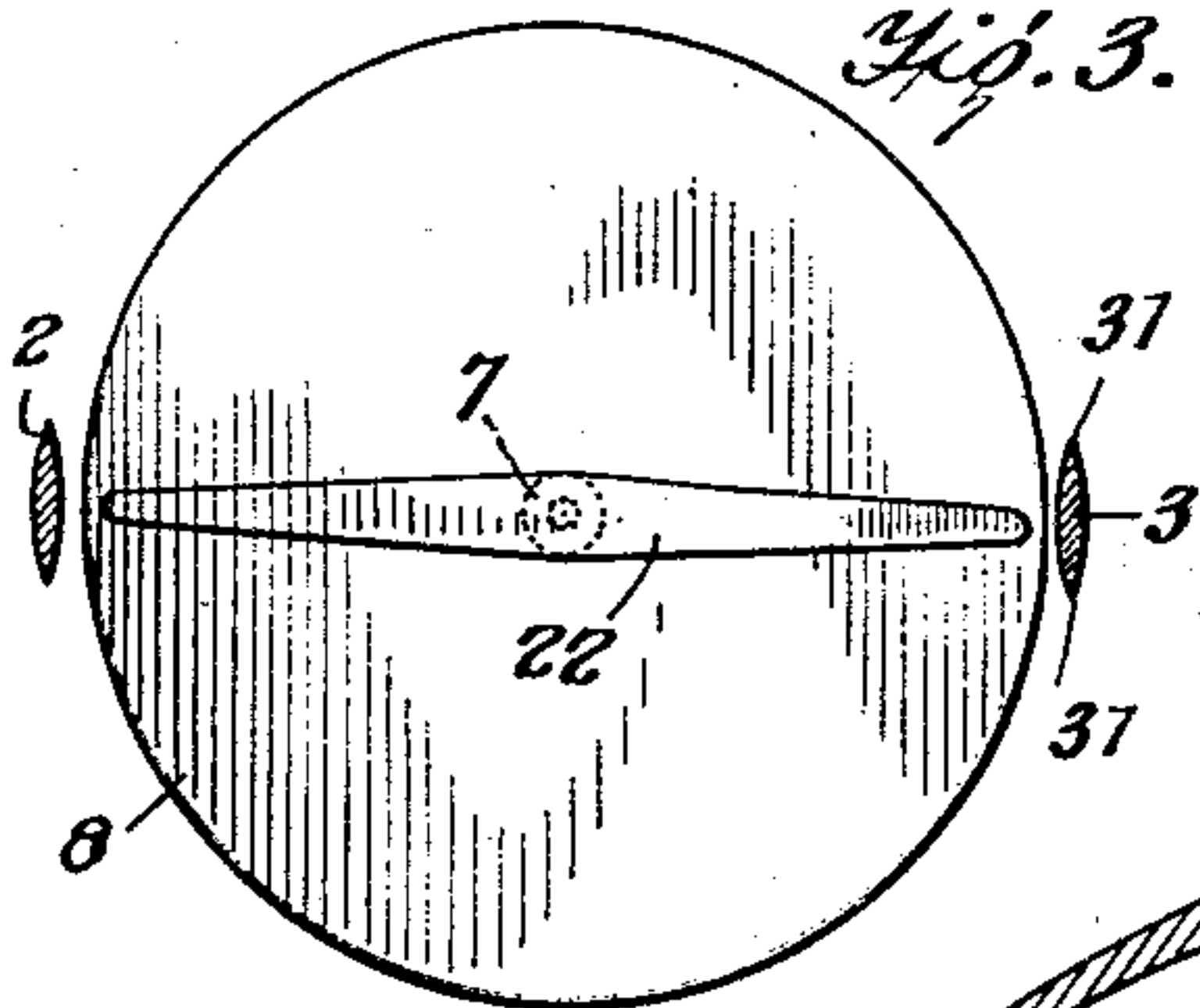
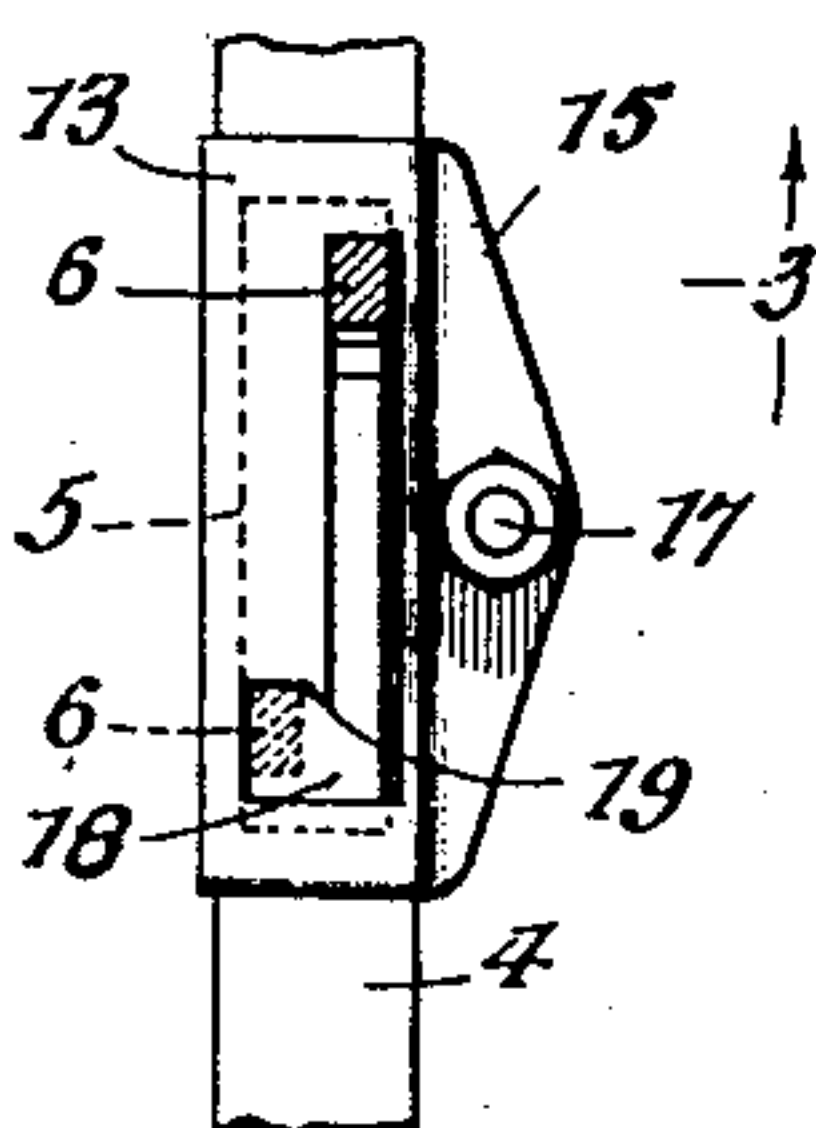


Fig. 6.



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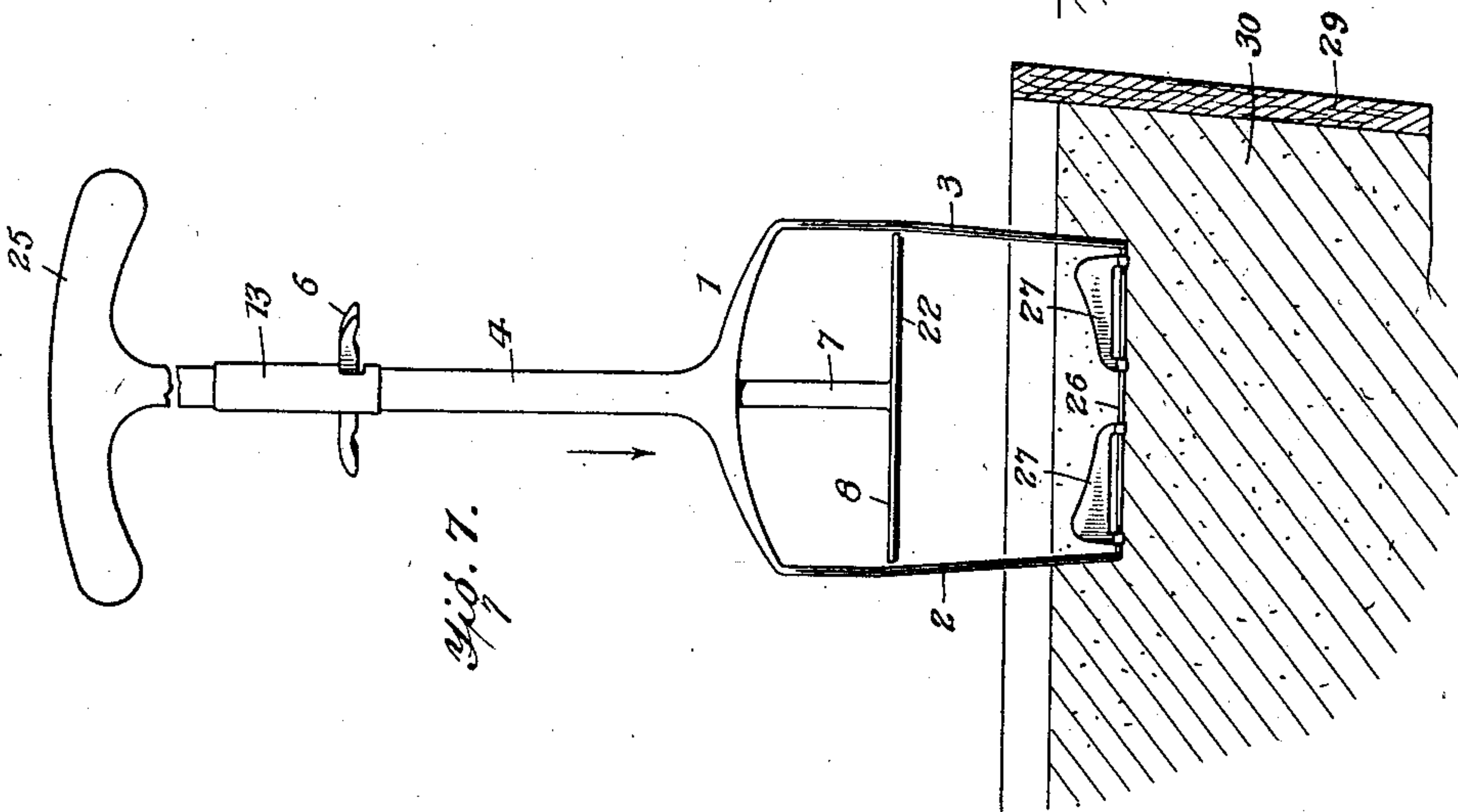
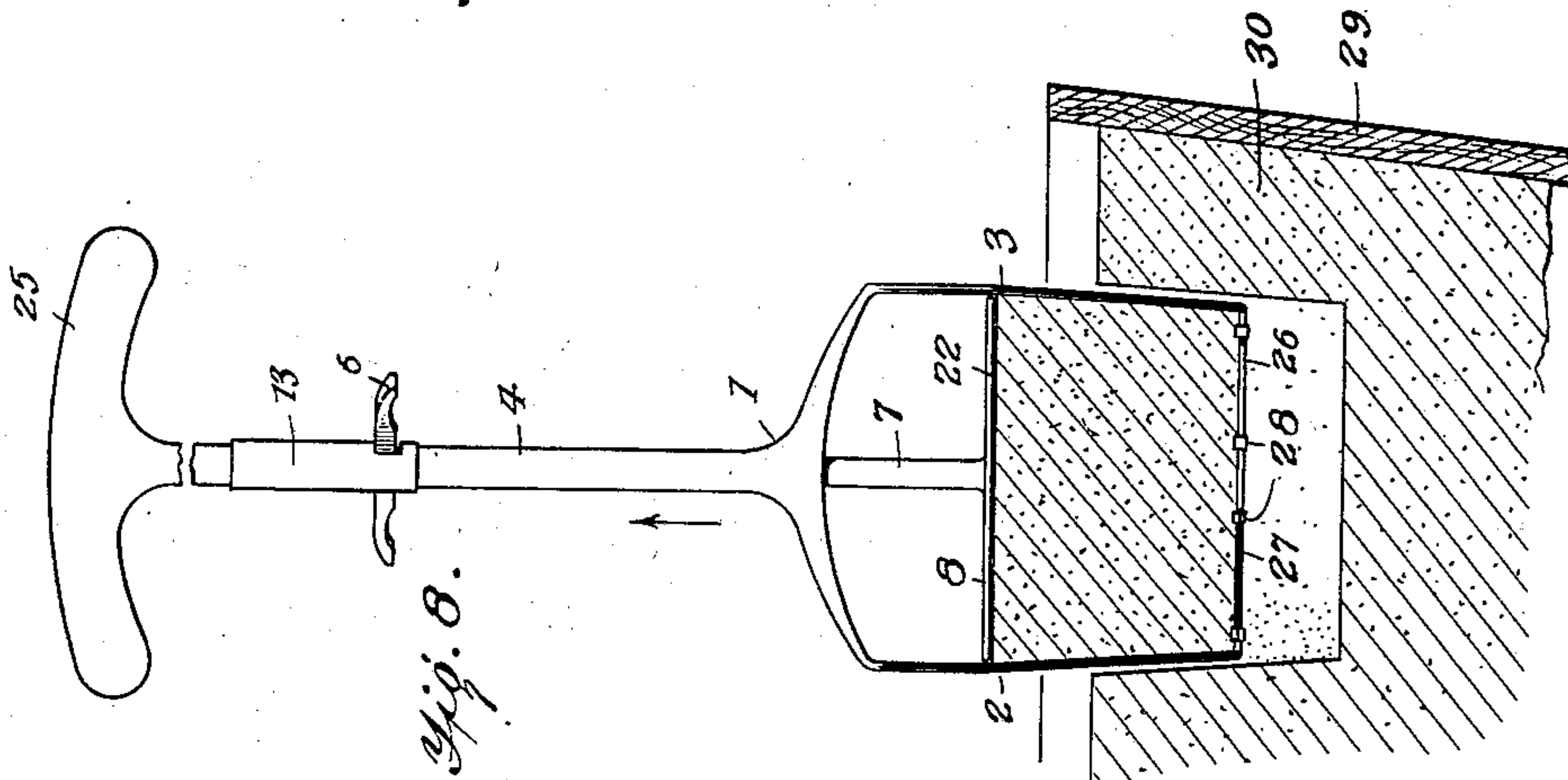
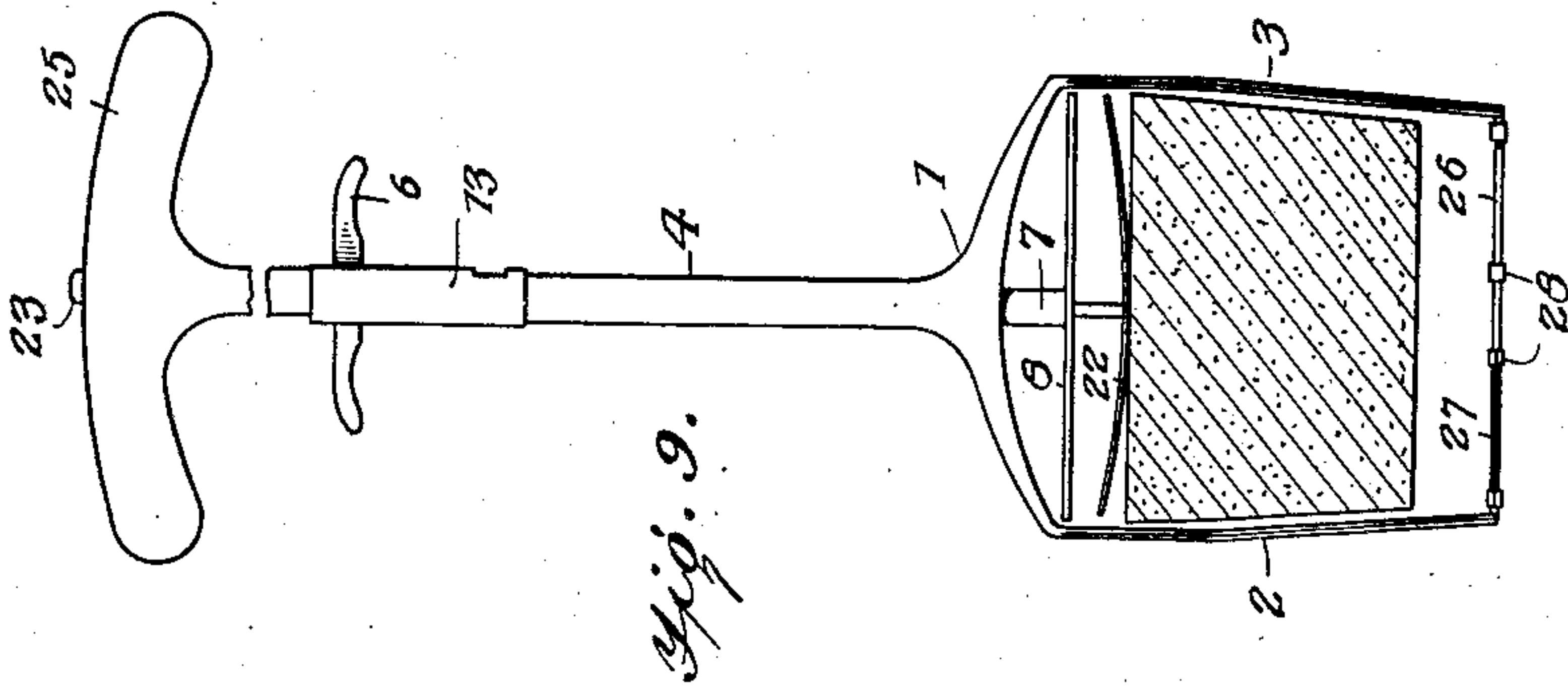
ATTORNEYS

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2 SHEETS—SHEET 2.



WITNESSES

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BUTTER AND LARD CUTTER.

938,970.

Specification of Letters Patent.

Patented Nov. 2, 1909.

Application filed June 24, 1909. Serial No. 504,127.

To all whom it may concern:

Be it known that I, CARL H. CARLSON, a citizen of the United States, and a resident of Iron Mountain, in the county of Dickinson, State of Michigan, have invented certain new and useful Improvements in Butter and Lard Cutters, of which the following is a specification.

My invention is an improvement in butter and lard cutters, and consists in certain novel constructions and combinations of parts hereinafter described and claimed.

The object of the invention is to provide a device of the character specified, especially adapted to cut out and remove a shaped pat of butter or lard from a firkin or other receptacle, and which is provided with means for ejecting the pat from the device without the necessity of touching it with the hands or with any other tool.

Referring to the drawings forming a part hereof: Figure 1 is a central longitudinal section of the improved cutter; Fig. 2 is a similar view of a portion of the handle at right angles to Fig. 1; Fig. 3 is a section on the line 3—3 of Fig. 1 looking in the direction of the arrow; Fig. 4 is a section on the line 4—4 of Fig. 2; Fig. 5 is a perspective view of a portion of the handle with the parts separated; Fig. 6 is a side view of a portion of the handle; Fig. 7 is a diagrammatic side view showing the method of use; Fig. 8 is a similar view showing a portion of the material cut out and in the act of being removed; and Fig. 9 is a similar view with the portion ready to be removed.

The embodiment of the invention shown in the drawings consists of a frame comprising a yoke-shaped body 1 provided with oppositely arranged substantially parallel arms 2—3 and with a tubular extension 4 projecting from the center of the body portion in the opposite direction from the arms.

Near its upper end the extension is provided with oppositely arranged longitudinal slots 5, through which extend the ends of a finger piece 6, which is secured by its center to the stem 7 of a plunger 8, which is movable between the arms 3 of the yoke, the stem sliding in the tubular extension.

The end of the stem 7 is provided with an annular groove 9, which is engaged by inwardly extending lugs 10 on the arms 12 of a sleeve 11, and the finger piece 6 is arranged between the end of the stem and the

body of the sleeve as shown in Figs. 1, 2 and 5. A sleeve 13 encircles the extension at the slots 5, the sleeve being provided with slots 14 registering with the slots 5 and with lateral flanges 15 having registering openings 16 through which is passed a bolt 17 for clamping the sleeve on the extension.

The slots 14 are of lesser width than the slots 5, and each is provided at its lower end with a lateral extension 18 having a lip 19 at the corner formed by the junction of the slot with the lateral portion, and the said lateral extensions extend in opposite directions, so that by partially rotating the finger piece it may be locked in the lateral extension, the lips preventing its disengagement.

Above the slots 5 the extension is provided with a diaphragm 20 having a central opening which registers with openings through the sleeve 11 and the stem 7, and a rod 21 is slidable in the stem and through the openings. The rod is provided on its lower end with a cross plate 22 and on its upper end with a nut 23 threaded thereon, and between the nut and the diaphragm a spring 24 is arranged for normally retaining the plate against the plunger.

The free end of the tubular extension 7 is provided with a handle 25, and the lower ends of the arms 3 are connected by a cross bar 26, upon each end of which is journaled a cutter. Each cutter consists of a substantially triangular plate 27 provided on one side edge with spaced bearings 28 in which the rod is loosely received.

In operation, the cutter is inserted in the firkin 29, containing the material 30 to be cut, with the parts in the position shown in Figs. 1 and 7. As the arms enter the material the cutters take the position shown in Fig. 7, since in this position they offer the least resistance. When the cutter is inserted deep enough to remove a pat of the desired size, it is rotated by means of the handle 25.

When the cutter is rotated, the cutters take the position shown in Fig. 8, for the reason above stated, and in their movement revolving about an axis coinciding with the longitudinal center of the tubular extension, the pat is separated at its bottom by the cutters, and on its sides by the arms 3, which have sharp edges 31, as indicated in Fig. 3. The pat is now completely separated from the remaining material, as shown in Fig. 8, and

is removed from the firkin, it being understood that during the above described operation the plunger 8 is locked in position by the engagement of the finger piece with the lateral extensions of the slots, while the spring, being under compression, holds the plate firmly against the plunger. The cutter with the pat in place is held above the receptacle in which it is to be placed, and the finger piece is disengaged from the lateral extensions of the slots, and moved upwardly into the position shown in Fig. 9. The plate as shown in Fig. 9 is curved and arranged with its convex face downward, and as soon as it is released from the pressure of the plate it resumes its curved condition, thus freeing the pat from the plunger and from itself, except at the central portion thereof.

As will be evident from an inspection of Figs. 1 and 7 to 9, inclusive, the arms 3 of the yoke 1 incline inwardly toward their free end, so that when the pat follows the plunger in its upward movement it enters the widest part of the frame, and is easily disengaged from the arms, slipping out at either side.

The diametrical division of the pat made by the rod 26 may be practically obliterated before removing the pat from the firkin by a downward pressure on the plunger, the arms 3 and cutters 27 also aiding, by compacting the pat, or the cut may be disregarded, in which case the pat will be in two semicylindrical sections.

The improved cutters may be easily separated for cleaning or other purposes, by slipping out the finger piece through the slots and unscrewing the nut 23, the sleeve 13 being first loosened and removed. The plate and rod may now be withdrawn. This procedure is indicated in Fig. 5.

The depth of the insertion of the cutter may be regulated by means of the sleeve 13, which may be adjusted on the extension, and when secured in adjusted position by the set screw 17 the plunger will limit the downward movement of the cutter, and the plunger is locked in fixed position by the engagement of the finger piece with the sleeve.

The nut 23 is moved out of the end of the extension by the spring 24, and into such position that it may be grasped to turn the rod and the cutter 22 a half turn, thus entirely releasing the pat from the plunger.

I claim:

1. A device of the class described, comprising a yoke-shaped frame having arms converging toward their outer ends, and a tubular extension projecting from the body portion in the opposite direction from the arms and provided with a handle, a plunger between the arms, a hollow stem connected therewith and movable in the extension, a finger piece detachably connected with the

outer end of the stem, said extension being slotted to permit the passage of the finger-piece, a sleeve on the extension having slots registering with the slots thereof, each of the slots of the sleeve having lateral extensions at their lower ends for receiving the finger piece to prevent movement thereof, a rod slidable in the stem, an arched plate on the lower end of the rod, a spring normally retaining the plate in contact with the lower face of the plunger, a rod connecting the outer ends of the arms of the yoke, and a cutter loosely journaled on the rod near each end thereof, each of said cutters comprising a substantially triangular plate having bearings in which the rod is received.

2. A device of the class described, comprising a frame having a tubular extension on one side, and a pair of arms on the other, said arms converging toward their free ends, a rod connecting said free ends, a substantially triangular cutting plate loosely journaled on the rod near each end thereof, a plunger between the arms and having a hollow stem in the extension, means in connection with the stem for locking the plunger, a rod slidable in the stem, a downwardly arched plate on the end of the rod, and a spring normally retaining the plate flat against the lower face of the plunger.

3. A device of the class described, comprising a frame having substantially parallel arms, and a tubular extension provided with a handle, a plunger between the arms, a hollow stem in the extension movable for operating the plunger, means for restraining the movement of the stem, a rod in the stem, a downwardly arched cutting plate on the rod, a spring normally retaining the plate flat against the lower face of the plunger, a rod connecting the arms, and a cutting plate loosely journaled on the rod near each end thereof.

4. In a device of the class described, a frame provided with a tubular extension, and with substantially parallel arms, a rod connecting the free ends of the arms, a cutting plate journaled near each end of the rod, a plunger between the arms, a hollow stem in the extension for operating the same, means for restraining the movement of the plunger, an arched cutting plate, a rod in the stem for operating the same, and a spring normally retaining the plate flat against the under face of the plunger.

5. In a device of the class described, a frame provided with a tubular extension and with substantially parallel arms, a rod connecting the arms, cutting plates loosely journaled thereon, a plunger between the arms, and provided with a stem in the extension, means for restraining the movement of the plunger, an arched cutting plate below the plunger, means for rotating the same, and means for normally retaining said

plate flat against the adjacent face of the plunger.

6. In a device of the class described, a frame provided with substantially parallel arms, a rod connecting the arms, cutting plates mounted for swinging movement thereon, a plunger between the arms, means for moving the same, means for restraining the movement thereof, a cutting plate below the plunger, means for rotating the same, and means for retaining the plate in contact with the plunger.

7. In a device of the class described, a frame having substantially parallel arms, a rod connecting the arms, cutting plates mounted for swinging movement on the rod, a plunger between the arms, means for operating the same, a cutting plate below the plunger, and yielding means for normally retaining the plate flat against the face of the plunger.

8. In a device of the class described, a frame having spaced arms, a rod connecting the arms, cutting plates rotatable on the rod, a plunger between the arms, means for moving the same, a rotatable cutting plate, and means for normally retaining the plate against the plunger.

9. In a device of the class described, a frame having spaced arms, a rod connecting the arms, cutting plates rotatable on the arms, a plunger between the arms, means for

operating the same, and a rotatable cutting plate cooperating with the plunger.

10. In a device of the class described, a stem having an annular groove at one end, a transverse finger piece, and a sleeve resting on the finger piece and having arms embracing the same and provided with internal flanges for engaging the groove.

11. In a device of the class described, a frame having spaced arms, a rod connecting the arms, and cutting plates rotatably connected with the rod.

12. In a device of the class described, a plunger, a rotatable arched cutting plate cooperating therewith, means for rotating the plate, and a spring normally retaining said plate flat against the plunger.

13. In a device of the class described, a stem, a finger piece connected therewith, a tubular extension in which the stem moves, and having slots for the finger piece, and a sleeve on the extension having slots registering with the slots thereof and having lateral extensions, and a set screw traversing the extensions, for the purpose set forth.

14. In a device of the class described, a bar, rotatable cutting blades near each end of the bar, and a support for the bar.

CARL H. CARLSON.

Witnesses:

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