J. HURLEY.

TRAP.

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1,415,093.

Patented May 9, 1922.

Fig. 1

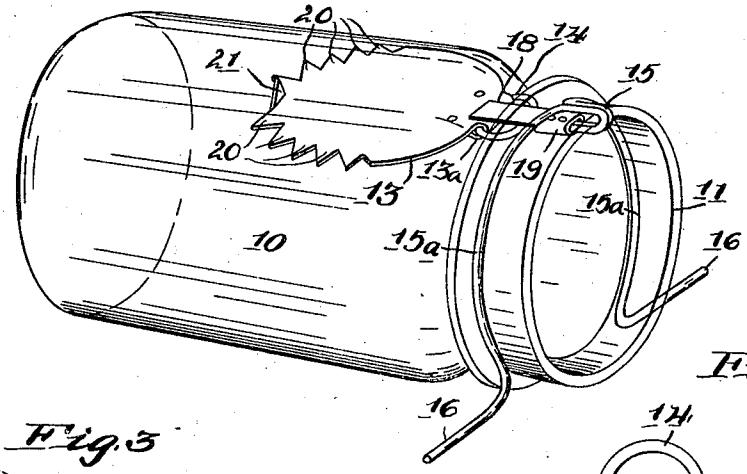


Fig. 4

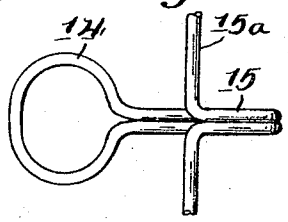


Fig. 3

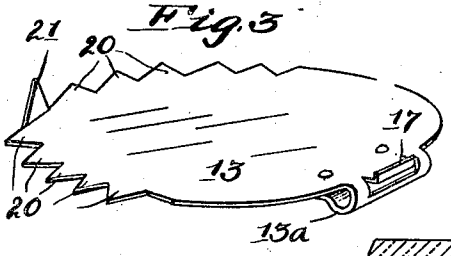


Fig. 2

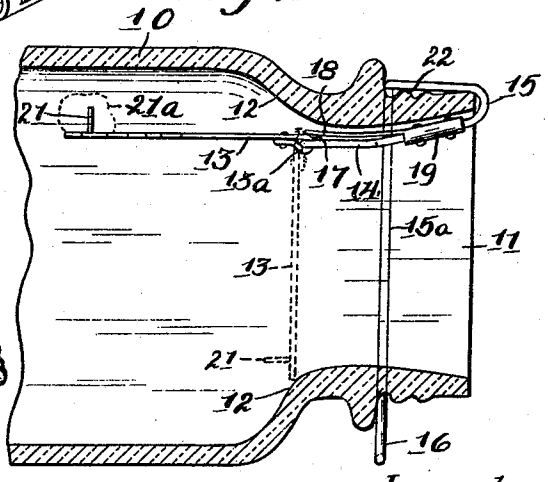
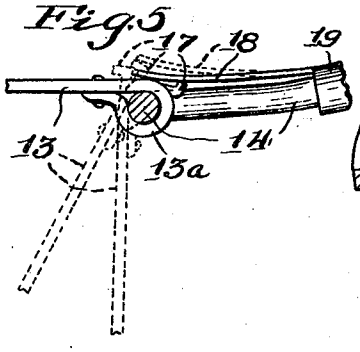


Fig. 5



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UNITED STATES PATENT OFFICE.

JAMES HURLEY, OF ST. PAUL, MINNESOTA.

TRAP.

1,415,093. Specification of Letters Patent. Patented May 9, 1922.

Application filed June 2, 1921. Serial No. 474,318.

To all whom it may concern:

Be it known that I, JAMES HURLEY, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented new and useful Improvements in Traps, of which the following is a specification.

The object of my invention is to provide an inexpensive and efficient trap for rodents and similar small animals.

A further object of my invention is to provide simple means for converting a standard preserve jar into an efficient trap.

Referring to the accompanying drawings Figure 1 is a perspective view of my improved trap; Fig. 2 is a fragmentary central vertical section of the same; Fig. 3 is a detail perspective view of the door or closure for the jar opening; Fig. 4 is a detail fragmentary view of the supporting rod and hinge loop and Fig. 5 is an enlarged detail view illustrating the operation of the detent spring and lug.

My device consists generally of a jar or casing 10, preferably made of glass, and having an open neck 11 at one end and means for closing the neck 11 to entrap a rodent. The inside diameter of the jar 10 is greater than the diameter of the opening in the neck 11 so that a shoulder 12 is formed within the jar. This shoulder furnishes an abutment for the lower edge of the door 13 and the upper edge of the said door is tiltably supported upon a hinge loop 14 formed in a rod 15. The rod 15 is bent outward from the loop 14 through the neck 11, then up and back over the rim of said neck, then downwardly around the outside of the jar at 15^a and finally is bent outward forming feet 16 at its ends.

The door 13 is turned at its upper edge 13^a to form a bead to encircle the loop 14 and is also formed with a lug 17 which is designed to engage a light spring 18. This spring is fixed at one end to a clamp 19 around the rod 15 and its opposite end is free to rest upon the lug 17 or bead 13^a. The lower half of the periphery of the door 13 is formed with a series of teeth 20 which abut against the shoulder 12 in the jar as described above and a tooth 21, diametrically opposite the lug 17, is bent at right angles to the face of the door. The tooth 21 is provided to impale the bait as indicated in dotted lines at 21^a (Fig. 2). The circumferential portion 15^a of the rod 15 engages threads 22 (Fig. 2) formed on the neck of the jar, or when used with a jar having a smooth neck, the resiliency of said rod is sufficient to hold the door 13 and adjacent parts in place.

To set my improved trap, bait is impaled on the tooth 21 and the loop 14, carrying the door 13, is inserted through the neck 11 into the jar 10, with said door in the horizontal position as illustrated in full lines in Figures 1 and 2. The door 13 is held in horizontal position by the action of the spring 18 and lug 17, the spring 18 being just rigid enough to support the weight of the door 13 and bait in said position. The trap is placed horizontally upon the feet 16 so that rodents may enter the jar through the neck 11. When a rodent attempts to reach the bait it is necessary for him to place part of his weight on the door 13. When this is done the spring 18 is bent upward to its dotted line position shown in Fig. 5 and the door 13 is impelled downward by the action of said spring and gravity. Thus, the door is swung to its vertical position closing the neck 11 and trapping the rodent. The door 13 is prevented from being opened by the entrapped animal by the lug 17 and spring 18 because said spring falls behind the lug 17 when the door closes. To re-set the trap the rod 15, carrying the door 13, is separated from the jar 10 by springing the circumferential portion 15^a outward and the spring 18 is raised from its position behind the lug 17 by inserting a finger through the loop 14. This allows the door 13 to be returned to its horizontal position.

Having described my invention what I claim as new and desire to protect by Letters Patent is:

1. In a trap, a horizontal jar having an opening in one end, a rod formed to engage the outer surface of said jar adjacent to said opening an inwardly projecting loop formed in said rod, a door tiltably supported on said loop and arranged to close said opening, an internal shoulder in said jar forming an abutment for said door, a lug on said door adjacent to said loop and a spring arranged to engage said lug to resiliently hold said door in horizontal position.

2. In a trap, a horizontal jar having an opening in one end, a ring formed to engage the periphery of said jar adjacent to said opening, an inwardly projecting loop

formed in said ring, a door tiltably supported on said loop and arranged to close said opening, an internal shoulder in said jar forming an abutment for said door, a lug on said door adjacent to said loop and resilent means arranged to engage said lug to hold said door in horizontal position.

3. In a trap, a horizontal jaw having an opening in one end, a ring formed to engage the periphery of said jar adjacent to said opening, an inwardly projecting loop formed in said ring, a door tiltably supported on said loop and arranged to close said opening, an annular shoulder in said jar forming an abutment for said door, a lug on said door adjacent to said loop and a spring arranged to resiliently hold said door in horizontal position and to engage said lug to hold said door in vertical position.

4. In a trap, a horizontal jar having an opening in one end, a rod formed to engage the periphery of said jar adjacent to said opening, an inwardly projecting loop formed in said rod, a door tiltably supported on said loop and arranged to close said opening, a shoulder in said jar forming an internal abutment for said door, teeth on the lower edge of said door, one of said teeth being bent to receive bait, a lug on said door adjacent to said loop and a spring arranged to engage said lug to hold said door in horizontal position.

In testimony whereof, I have hereunto signed my name to this specification.

JAMES HURLEY.