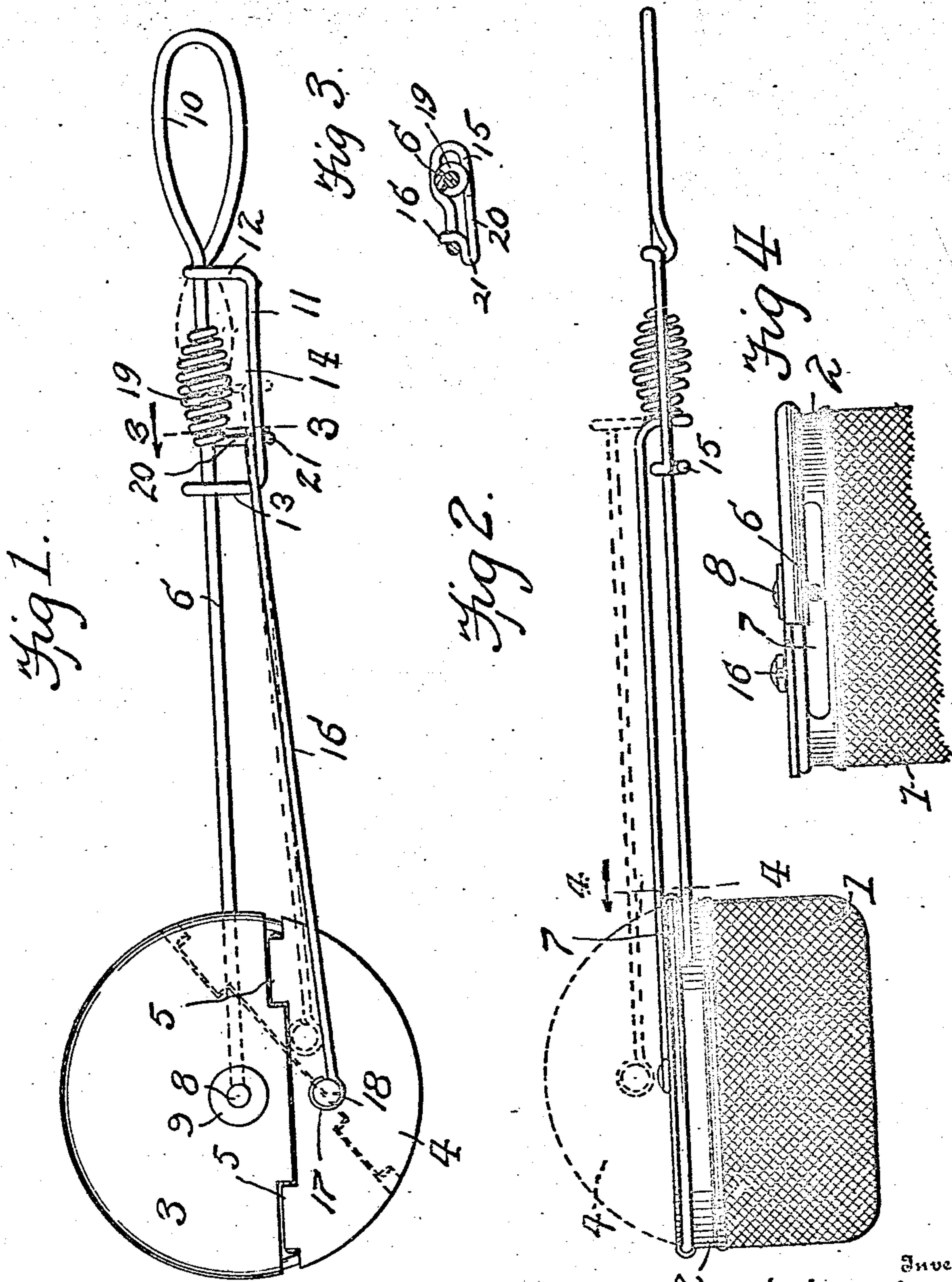


898,953.

W. AYRES.
CORN POPPER.
APPLICATION FILED FEB. 14. 1908.

Patented Sept. 15, 1908.



Witnesses
Hugh H. Ott
C. C. Hines.

Inventor
William Ayres
By Victor J. Evans
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM AYRES, OF PLAINFIELD, NEW JERSEY.

CORN-POPPER.

No. 898,953.

Specification of Letters Patent.

Patented Sept. 15, 1908.

Application filed February 14, 1908. Serial No. 415,929.

To all whom it may concern:

Be it known that I, WILLIAM AYRES, a citizen of the United States, residing at Plainfield, in the county of Union and State of New Jersey, have invented new and useful Improvements in Corn-Poppers, of which the following is a specification.

This invention relates to improvements in corn poppers, especially to those of that type employing an oscillatory basket or receptacle, the main object of the invention being to provide a simple, inexpensive and effective device of this character embodying a hinged or pivoted cover for the receptacle and an operating mechanism for oscillating the receptacle, said mechanism being connected with the cover and utilized as a means for opening and closing the same and also for holding the cover in closed position.

With this and other objects in view, the invention consists of the features of construction, combination and arrangement of parts hereinafter fully described and claimed, reference being had to the accompanying drawing, in which:—

Figure 1 is a top plan view of a corn popper embodying my invention, showing in full and dotted lines the oscillating action. Fig. 2 is a side elevational view of the same, showing in dotted lines the cover swung to an open position. Figs. 3 and 4 are, respectively, transverse sections on the lines 3—3 and 4—4 of Figs. 1 and 2.

Referring to the drawing, 1 designates a basket or receptacle in which the corn to be popped is placed, which basket or receptacle is preferably formed of reticulated material, such as wire, or of perforated sheet metal, and is provided with a rim portion 2, shown in the present instance in the form of a metallic band surmounting the upper open end of the body of the basket, which is formed of wire of a suitable gage. A plate or head 3 partially covers the open top of the receptacle formed by the band 2, leaving a mouth or inlet space at one side of its center for the insertion and removal of the untreated and popped corn, respectively. A cover plate 4 is provided to close this mouth or inlet space, and is hinged or pivoted at its inner edge to the fixed plate 3, as at 5, to swing in a vertical plane.

The basket or receptacle is pivotally mounted upon the outer or forward end of a supporting arm 6, which end of the arm extends into the top of the receptacle through a

segmental slot 7 in the rear portion of the rim band 2 and is bent upwardly to provide a pivot pin 8 projecting through an opening in the plate 3 in the central line of the basket, the upper end of said pin being upset or riveted to hold it from downward displacement and disconnection. A washer 9 is preferably disposed on the pin between the plate 3 and the riveted portion to prevent undue looseness at the point of connection.

The arm 6 is formed of wire, which is bent at the rear end of the arm to provide a looped handle 10, the opposite end of the wire then being bent into the form of a guide and keeper loop 11 embodying a rear transverse arm 12, a front transverse arm 13, and a connecting longitudinal arm 14. The arm 12 extends from the forward end of the handle 10 across the upper surface of the rod 6, while the arm 13 extends inwardly toward the arm 6 and is bent back in the form of a hook loosely embracing said arm, so that the arm 14, which lies parallel with said arm 6, may have a limited degree of movement at its forward end toward and from the same. The arm 14 is slightly longitudinally curved or bowed so as to project its end portions a slightly greater distance away from the arm 6 than its intermediate portion, for a purpose hereinafter described.

An actuating device is provided for oscillating the basket and is composed of a single piece of wire embodying a pitman rod 16 formed at its forward end with an eye 17 loosely engaging the shank of a headed crank or wrist pin 18 on the swinging cover plate 4. The eye 17 is formed at one end of the wire, and the opposite end of the latter is coiled to provide an operating handle 19 slidably mounted on the arm 6 between the handle 10 and the arm 13. The forward end of the operating handle 19 is connected with the rear end of the rod 16 by a right angularly bent portion 20, which portion is bent at its point of intersection with the rod 16 to form a runner 21 which is adapted to slide in contact with the underside of the longitudinal arm 14.

It will be understood that the spring action of the arm 14 normally maintains the forward end thereof and the arm 13 in the full line position shown in Fig. 1, while the loose engagement of the hook 15 with the rod 6 permits an outward and inward movement of the forward end of the arm 14 relative to the rod 6.

In operation, it will be understood that

when the receptacle is closed by the cover 4 to confine the corn to be popped therein, the body of the receptacle is supported in juxtaposition to a flame, the device being held by the handle 10 in one of the hands of the operator, while the other hand is employed to reciprocate the handle 19 back and forth, by which motion will be transmitted through the rod 16 to oscillate the receptacle on pivot 8, the receptacle having an oscillating movement in an arc limited by the length of the slot 7. In this operation, the runner 21 slides in contact with the under surface of the arm 14, which in conjunction with the arm 12 forms a catch to hold and guide the same in normal operative position, by which the cover 4 is held closed. The upper surface of the runner 21 is slightly beveled, curved or inclined, so that by simply twisting or turning the handle 19 to the right, when the runner is at the limit of its forward movement, the runner will be swung upward and will exert pressure on the forward end of the arm 14, thus forcing the latter to yield in a direction away from the rod 6, by which the runner is permitted to swing out of engagement therewith. The rod 16 will thereby be released to permit the same to be swung upward by the handle 19 to open the cover 4 for the discharge of the popcorn and replenishment of the basket with new corn to be popped. By then swinging the handle 19 in the reverse direction, the runner will engage and swing the arm 14 outward and will snap beneath the same to its normal position, in which it is held in guided contact with the lower surface of said bar. Hence, the actuating device is employed not only for oscillating the receptacle, but for opening and closing the cover thereof while the co-acting guide portion forms a spring catch to hold the same in normal operative position. The bowing of the arm 14 prevents disengagement of the runner 21 therefrom except when the runner is at or near the limit of its forward movement, at which point the arm 14 is not only located at a greater distance from the rod 6 but is free to have a yielding movement outward therefrom, whereby accidental disengagement of the runner from the bar during the reciprocation of the handle 19 will be prevented.

It will be seen from the foregoing description that the invention provides a simple form of device of the character described which is adapted to be inexpensively manufactured, and in which the parts are so combined and arranged as to obviate the necessity of employing auxiliary means for holding the cover closed, as well as to enable such cover to be readily opened and closed.

Having thus fully described the invention, what is claimed as new is:—

1. A corn popper comprising a supporting

rod having a handle, a receptacle mounted to oscillate upon the rod, a pivoted cover for said receptacle, a pitman operatively connected with the cover and provided with a handle mounted to reciprocate and rotate upon the rod, and coengaging catch members on said rod and pitman for normally holding the pitman in operative position and the cover in closed position.

2. A corn popper comprising a supporting rod provided with a handle and a spring catch, a receptacle mounted for oscillation upon the rod, a pivoted cover for said receptacle, and an actuating device comprising a pitman connected with the cover and having an operating member mounted to reciprocate on the rod and a guide member engaged with the catch to normally hold the cover in closed position.

3. A corn popper comprising a supporting rod, a receptacle mounted to oscillate thereon, said receptacle being provided with a pivoted cover, an actuating device connected with the cover, said device being mounted to reciprocate on the rod for oscillating the receptacle and pivotally mounted on the rod for opening and closing the cover, and guiding means on the rod and actuating device forming coengaging catch members to normally hold the cover in closed position.

4. A corn popper comprising a supporting member, a receptacle mounted to oscillate thereon and provided with a pivoted cover, an actuating device having a pitman portion connected with the cover and a handle arranged to reciprocate and rotate on the supporting member, a guide upon the supporting member, forming a spring catch, and a runner upon the actuating device acting as a catch engaging said spring catch to retain the cover in closed position.

5. A corn popper comprising a supporting rod having a handle and provided with a spring guide member forming a catch, a receptacle mounted to oscillate upon the rod, said receptacle being provided with a pivoted cover, an actuating device consisting of a pitman connected with the cover and provided with an operating handle mounted to slide and turn upon the rod, whereby the receptacle may be oscillated and the cover opened and closed, said actuating device being formed with a runner slidably engaging said catch and holding said device from pivotal movement on the rod, said catch being retractable under pressure to disengage the runner therefrom.

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

WILLIAM AYRES.

Witnesses:

WARREN AYRES,
NELSON RUNYON.