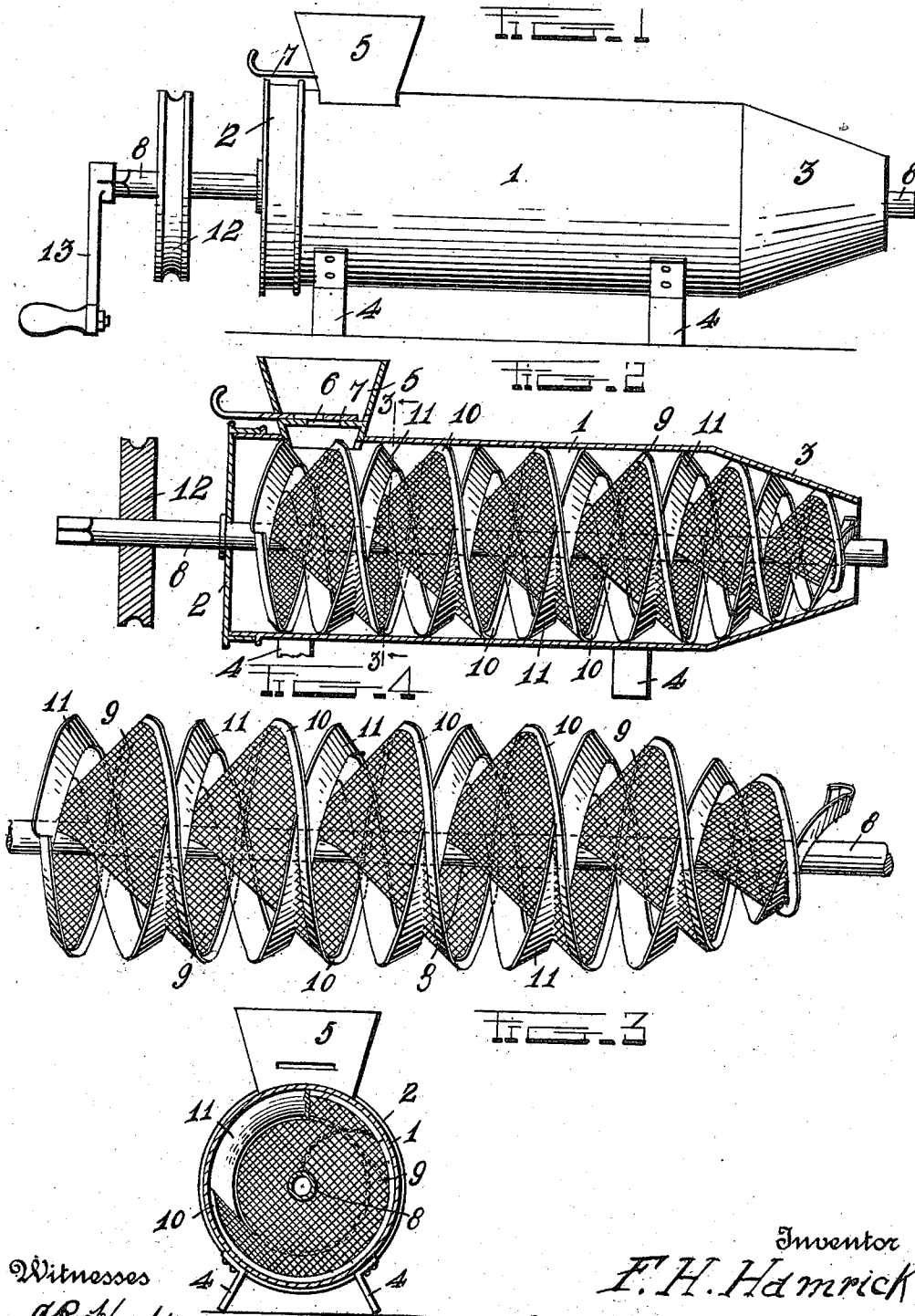


F. H. HAMRICK.
CORN POPPER.
APPLICATION FILED FEB. 7, 1910.

972,854.

Patented Oct. 18, 1910.



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UNITED STATES PATENT OFFICE.

FRED H. HAMRICK, OF SHAWNEE, OKLAHOMA.

CORN-POPPER.

972,854.

Specification of Letters Patent.

Patented Oct. 18, 1910.

Application filed February 7, 1910. Serial No. 542,463.

To all whom it may concern:

Be it known that I, FRED H. HAMRICK, a citizen of the United States, residing at Shawnee, in the county of Pottawatomie and State of Oklahoma, have invented certain new and useful Improvements in Corn-Poppers; and I do 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.

This invention relates to improvements in corn poppers.

One object of the invention is to provide a simple and improved construction of corn popper in which the operation of popping corn may be continuously carried on.

Another object is to provide a corn popper having means whereby the popped kernels of corn will be passed on through the device, while the unpopped kernels will be held back until popped.

With the foregoing and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a side view of a corn popper constructed in accordance with the invention; Fig. 2 is a longitudinal sectional view of the same; Fig. 3 is a cross sectional view; Fig. 4 is an enlarged side view, partly in section, of the double spiral conveyer removed from the casing.

In the embodiment of the invention, I provide a cylindrical casing 1 which may be of any suitable size and constructed of any suitable material. The casing 1 is closed at one end with a suitable head 2, and at its opposite end is provided with a tapering or conically-shaped discharge spout 3. The casing is provided with short legs 4 or other suitable supporting means. In the upper side of the casing adjacent to the closed end or head thereof is arranged a hopper 5, which communicates with the interior of the casing 1 by a feed opening 6, in which is arranged a feed valve 7, whereby the size of the feed opening may be regulated. Revolvably mounted in the casing 1 is a double spiral conveyer for feeding the popped grains through the cylinder and for holding back the unpopped grains until the same are heated sufficiently to pop.

The conveyer comprises a shaft 8, one end of which projects through a suitable bearing aperture in the head 2 of the cylinder. On the shaft 8 is arranged a spiral conveyer blade 9 formed of wire netting or screen, perforated sheet metal, or other foraminous material. The blade 9 is here shown as being formed of wire netting, the inner edges of which are secured to the shaft in any suitable manner, while the outer edges are covered by a suitable binding strip 10. The conveyer blade is arranged on the shaft 8 in the proper direction or position for feeding the material in the cylinder toward the discharge end thereof, and said conveyer blade is of such width as to closely fit the inner walls of the cylinder.

In addition to the conveyer blade 9, I provide a second spiral conveyer blade 11 formed of a strip of sheet metal which is arranged in or wound through the wire netting blade 9 adjacent to the outer edge thereof. The blade 11 runs in a reverse direction to the wire netting blade 9 and is in the proper position for pushing or holding back the material in the cylinder when revolved therein. The outer edges of the blade 11 also closely engage the inner wall of the cylinder or casing 1.

The conveyer blades 9 and 11 taper or are reduced in size to fit in the conical or tapered end of the casing 1. The projecting end of the shaft 8 is provided with suitable means for operating the conveyer, said means being here shown as consisting of a pulley 12 whereby a power belt may be applied to the shaft, and a crank handle 13 which is adapted to be detachably engaged with the end of the shaft, whereby the conveyer may be revolved by hand in the proper direction.

In the operation of the popper, the corn is fed into the cylindrical casing from the hopper 5 and as the corn pops, it is fed along through the casing by the wire netting conveyer belt until discharged from the open end of the casing. It will be noted from the drawings that, where the sheet metal conveyer blade 11 passes through the wire netting blade, a series of pockets are formed which, as the conveyer revolves, take up the popped and unpopped corn from the bottom of the casing and carry the same around. As the corn is thus carried around, the unpopped kernels will fall back through the mesh of the wire netting blade onto the

blade 11, the mesh of said wire blade being sufficiently large to permit the unpopped corn to drop therethrough, while the popped kernels will be carried on by the wire netting blade until discharged from the casing as hereinbefore described. It will thus be seen that the sheet metal blade 11 will hold back the unpopped kernels of corn until they are sufficiently heated to pop, when they will be carried forward by the wire netting blades, as described.

From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention as defined in the appended claims.

Having thus described my invention, what I claim is:—

25 1. In a corn popper of the character described, a cylindrical casing, a double spiral conveyer revolubly mounted therein, and comprising a foraminous blade arranged to feed the popped kernels of corn toward the discharge end of the casing, and an imperforate blade arranged to hold the unpopped kernels of corn back in the casing, both of said blades being substantially coextensive in length with said casing.

35 2. In a corn popper of the character described, a cylindrical casing having a feed opening, a double spiral conveyer revolubly mounted in said casing, and comprising a foraminous blade arranged to feed the popped kernels of corn toward the discharge end of the casing, and an imperforate blade arranged through said foraminous

blade and adapted to hold back the unpopped kernels of corn in the casing, both of said blades being substantially coextensive in length with said casing.

3. In a corn popper, a cylindrical casing having a double spiral conveyer revolubly mounted in the casing, and comprising a shaft, a wire netting blade arranged spirally thereon for feeding the popped kernels of corn toward the discharge end of the casing, and an imperforate blade consisting of a strip of sheet metal running through said wire netting blade in a reverse direction thereto and in position to form a series of pockets in connection with the wire netting blade, whereby the kernels of corn will be caught and carried around and the unpopped kernels of corn caused to drop back through the wire netting blade while the popped kernels are carried forward, thereby, to the discharge end of the casing, both of said blades being substantially coextensive in length with said casing, and means whereby the conveyer is revolved in said casing.

4. A corn popper comprising a cylindrical casing, a foraminous spiral blade revolubly mounted in said casing, and an imperforate blade of less width than said foraminous blade wound in an opposite direction to said foraminous blade and arranged to retard the progress of the unpopped kernels of corn, both of said blades being substantially coextensive in length with said casing.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRED H. HAMRICK.

Witnesses:

A. A. HUGHES,
L. J. DEVON.