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1,478,734

E. J. COMPTON

WHEAT TEMPERER

Filed May 5, 1922

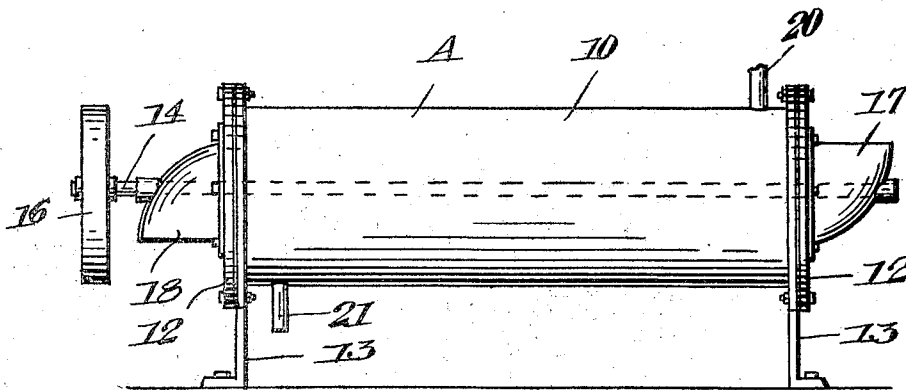


Fig. 1.

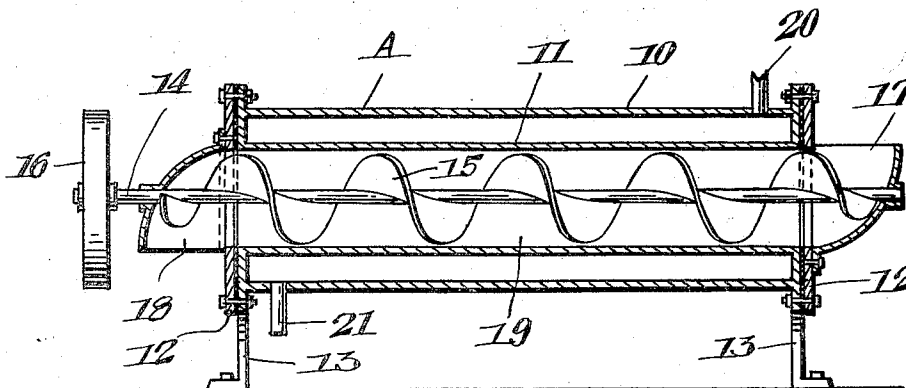


Fig. 2.

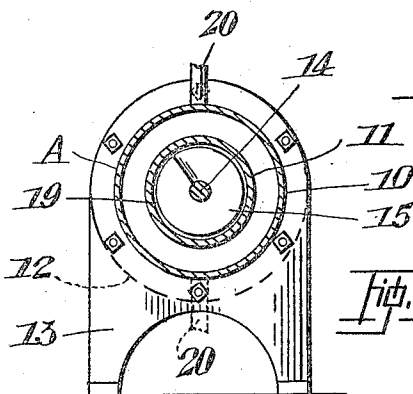


Fig. 3.

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UNITED STATES PATENT OFFICE.

EDWARD JOHN COMPTON, OF KAZUBAZUA, QUEBEC, CANADA, ASSIGNOR OF ONE-THIRD TO ANDREW PRITCHARD AND ONE-THIRD TO JOSEPH NOEL, BOTH OF KAZUBAZUA, QUEBEC, CANADA.

WHEAT TEMPERER.

Application filed May 5, 1922. Serial No. 558,714.

To all whom it may concern:

Be it known that I, EDWARD JOHN COMPTON, a subject of the King of Great Britain, residing at Kazubazua, in the Province of Quebec and Dominion of Canada, have invented certain new and useful Improvements in Wheat Temperers, of which the following is a specification.

This invention relates to improvements in wheat temperers, and the objects of the invention are to provide a simply constructed device of this class whereby wheat is conditioned into perfect form for milling.

Further objects are to improve and simplify the construction to better adapt the several parts to adequately perform the various functions required of them.

With the foregoing and other objects in view, the invention consists essentially of a double drum provided with a conveyor means for damping the wheat before entering the drum, and means between the drums for drying the wheat in the inner drum.

Referring to the drawings, in which like characters of reference indicate corresponding parts in each figure and in which:

Figure 1 is a side elevation,

Figure 2 is a longitudinal section,

Figure 3 is an end view, in section.

In the drawings:

A is the device as a whole comprising an outer drum 10 and an inner drum 11 suitably secured at their ends to an inter-post ring 12 by bolts or other suitable means. This drum is constructed to stand boiler pressure and is suitably mounted on standards 13.

Mounted on the driving shaft 14 in the inner drum 11 is a screw conveyor 15 driven by the pulley 16 mounted on one end of said shaft outside the drum. The other end of the drum is provided with a central opening and has secured to the outside a hopper 17 into which the wheat is fed and in which the wheat is damped. The shaft 14 with screw conveyor 15 extends through this hopper. 18 is a discharge hopper similarly constructed to the hopper 17, but on the other end of the drum 11. 19 is the space between the hoppers 17 and 18 into which steam or heat in any other form is injected, preferably as here shown, however, steam, and

through the pipe 20 to be discharged subsequently through the pipe 21.

In operation, the wheat is fed into the hopper 17 and thoroughly damped with water as it enters the drum. The conveyor 15, operated through the pulley 16 then moves the damped wheat slowly through the drum 11 which, being heated by the steam or otherwise through the pipe 20, the wheat in passing through this heated drum comes into direct contact with the heat and the water is accordingly driven or dried out into the outer coat of the wheat, thoroughly softening the bran and making it into perfect condition for milling purposes. The bran being softened, comes off the berry in large flakes and consequently is not reduced to powder, so that the particles remain, to be removed subsequently by the sifters without mixing with the flour stocks.

As many changes could be made in the above construction and many widely different embodiments of my invention within the scope of the claim, constructed without departing from the spirit or scope thereof, it is intended that all matter contained in the accompanying specification and drawings shall be interpreted as illustrative and not in a limiting sense.

What I claim as my invention is:

A drum formed with an inner casing and an outer casing in spaced relationship to the inner casing, supporting standards formed integral with the drum, openings in the end of the drum registering with the inner casing, a damping hopper at one end and a discharge hopper at the opposite end of the drum and a concentric ring and packing means between the hopper and the drum ends designed to form a watertight joint, a shaft journaled in said hoppers and extending through the inner casing, screw conveyor means on said shaft and driving pulley means carried by the shaft and steam intake and discharge means for the outer casing.

In witness whereof I have hereunto set my hand in the presence of a witness.

EDWARD JOHN COMPTON.

Witness:

W. T. CUFF QUIN.