H. A. WALLIS.

WHEAT SCOURING MACHINE.

APPLICATION FILED FEB. 25, 1910.

981,828. Patented Jan. 17, 1911.

Fig. 1.

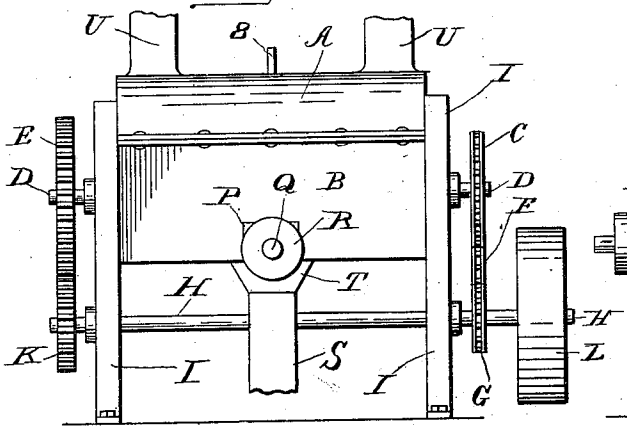


Fig. 2.

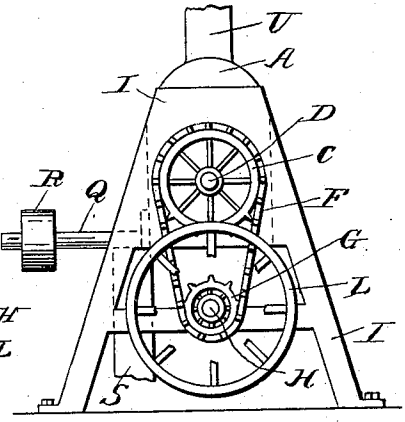


Fig. 3.

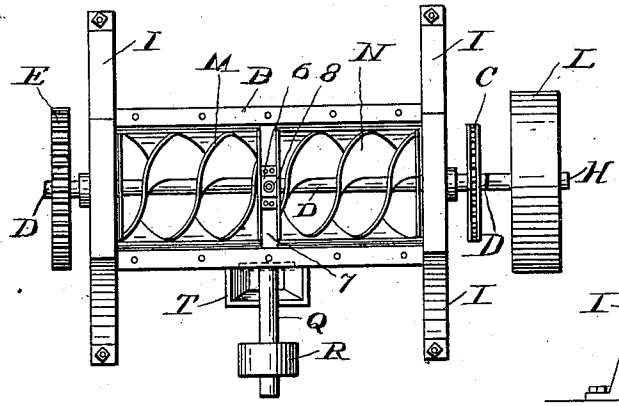


Fig. 4.

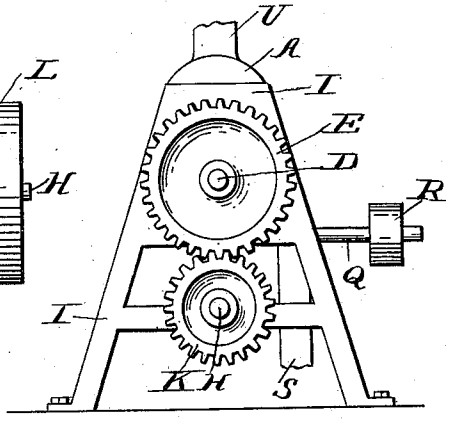
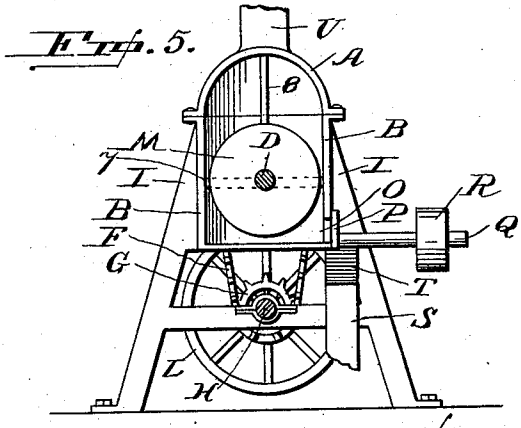


Fig. 5.



Witnesses

Wm. E. Valk Jr.

L. C. Barkley.

Inventor

Henry A. Wallis

by Franks. Ackerman

Attorney

UNITED STATES PATENT OFFICE.

HENRY A. WALLIS, OF MARTIN, TENNESSEE.

WHEAT-SCOURING MACHINE.

981,828. Specification of Letters Patent. **Patented Jan. 17, 1911.**

Application filed February 25, 1910. Serial No. 545,827.

To all whom it may concern:

Be it known that I, HENRY A. WALLIS, a citizen of the United States of America, and resident of Martin, in the county of Weakley and State of Tennessee, have invented certain new and useful Improvements in Wheat-Scouring Machines, of which the following is a specification.

This invention relates to milling machinery and particularly to a wheat scouring machine designed for the purpose of thoroughly scouring and cleaning wheat.

An object of this invention is to provide a machine to which the material is delivered at opposite ends thereof, means being provided for carrying the material longitudinally of the machine to the center thereof and for delivering it to a discharge spout.

Furthermore, an object of this invention is to provide a conveyer of the screw type the portions of the conveyer on opposite sides of the machine being turned in opposite directions but the blades of the conveyer being of the same pitch, thereby enabling the employment of "left hand" conveyers on each side of the center, means being provided for rotating the sections of the conveyer in opposite directions.

A still further object of this invention is to produce a casing having a discharge opening guarded by a pressure door and in connection with the said opening, a discharge spout is also provided in order that material delivered at the ends of the machine may be taken therefrom at the central portion thereof and conducted to any machine or receptacle designed for its admission.

Finally, an object of this invention is to produce an improvement in milling machinery which will be simple in construction, efficient in practice and comparatively inexpensive to manufacture.

With the foregoing and other objects in view, the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail, reference will be had to the accompanying drawings forming part of this specification wherein like characters denote corresponding parts in the several views in which—

Figure 1 illustrates a view in elevation of the exterior of the scouring machine embodying the invention; Fig. 3 illustrates a top plan view thereof with the cover removed; Fig. 2 illustrates a view in elevation of one end of the machine; Fig. 4 illustrates a view in elevation of the opposite end thereof; and Fig. 5 illustrates a view in elevation of one end of the machine shown in Fig. 1 with the end thereof removed and with the shafts in section.

In these drawings A denotes the cover and B a casing or hopper to which the cover is applied. The hopper is provided with a shaft D and a shaft H which extend through the ends of the hopper and the sprocket wheel C is mounted on one end of the shaft D, whereas a spur gear E is mounted on the outer end of the shaft D. The sprocket wheel C has a sprocket chain F which runs on a sprocket wheel G mounted on a shaft H, which shaft H is journaled in the frame I. The spur gear E meshes with the pinion K also on the shaft H and a power wheel L is provided for driving the shaft H.

Within the hopper E are two conveyers M and N, each of which has blades which are of the "left-hand" type, one of the conveyers N taking motion from the sprocket wheel C and the other conveyer M taking motion from the spur gear E. As the sprocket wheel C and the spur gear E are both driven from the power shaft H, they will rotate in opposite directions and therefore the conveyers M and N will likewise be rotated in opposite directions, in order that both of the conveyers will feed or carry material toward the center of the hopper.

The hopper is provided with an opening O guarded by a door P, which door has a lever Q attached to it with a weight R on its outer end or adjustable longitudinally in order to change its effectiveness. The spout S has its upper end flared or enlarged to form a mouth T which is in such relation to the opening O of the hopper that material fed to the center of the hopper by the conveyers will be forced out of the opening O and find its way into the mouth T of the spout S from whence it may be conducted to a bin or machine for further use.

In operation, it will be observed that the lever Q may be adjusted through the medium of the weight to control the door and that when the machine is in operation and material is delivered to it through the supply pipes or spouts U which lead into the hopper through the top A and that material so supplied will be acted on by the convey-

ers as heretofore indicated, and that by reason of the construction of the machine, grain may be treated expeditiously and inexpensively.

The shafts D and D′ have their inner ends journaled in a bearing 6 mounted on a cross bar 7; said cross bar being supported in the hopper at the sides of said hopper. The bearing 6, is provided with an oil supply tube 8 which extends through the top of the hopper so that dust cannot reach the bearing through the oil tube to any appreciable degree.

I claim—

1. In a wheat scouring machine, a hopper and a supporting frame therefor, a cover for the hopper, spouts leading into the hopper near the ends thereof, a shaft comprising two sections extending through the hopper, a conveyer having left-hand blades mounted on each of said sections within the hopper, a door intermediate of the hopper to which the conveyers carry material, and means for rotating the conveyers in opposite directions.

2. In a wheat scouring machine, a hopper and a supporting frame therefor, a cover for the hopper, spouts leading into the hopper near the ends thereof, a shaft comprising two sections extending through the hopper, a support located centrally in the hopper, the adjacent ends of the sections of said shaft being journaled in the support, a conveyer having left-hand blades mounted on each of said sections within the hopper, said hopper having a central opening therein to which the conveyers carry material, a pressure door guarding the opening, a spout for receiving material discharged through said opening, and means for rotating the conveyers in opposite directions.

3. In a wheat scouring machine, a hopper and a supporting frame therefor, a cover for the hopper, spouts leading into the hopper near the ends thereof, a shaft comprising two sections extending through the hopper, a support located centrally in the hopper, the adjacent ends of the sections of said shaft being journaled in the support, a conveyer having left-hand blades mounted on each of said sections within the hopper, said hopper having a central opening therein to which the conveyers carry material, a pressure door guarding the opening, a spout for receiving material discharged through said opening, a gear fastened to the other end of one section of the shaft, a sprocket wheel on the end of the other section, a second shaft journaled in the frame and extending parallel to the shaft in the hopper, a gear on the second shaft meshing with the first mentioned gear, a sprocket wheel on the second shaft, a chain connecting the first mentioned sprocket wheel and the sprocket wheel on the second shaft whereby a single source of power rotates the shafts in opposite directions.

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

HENRY A. WALLIS.

Witnesses:

A. STAFFORD,

D. W. HARPER.