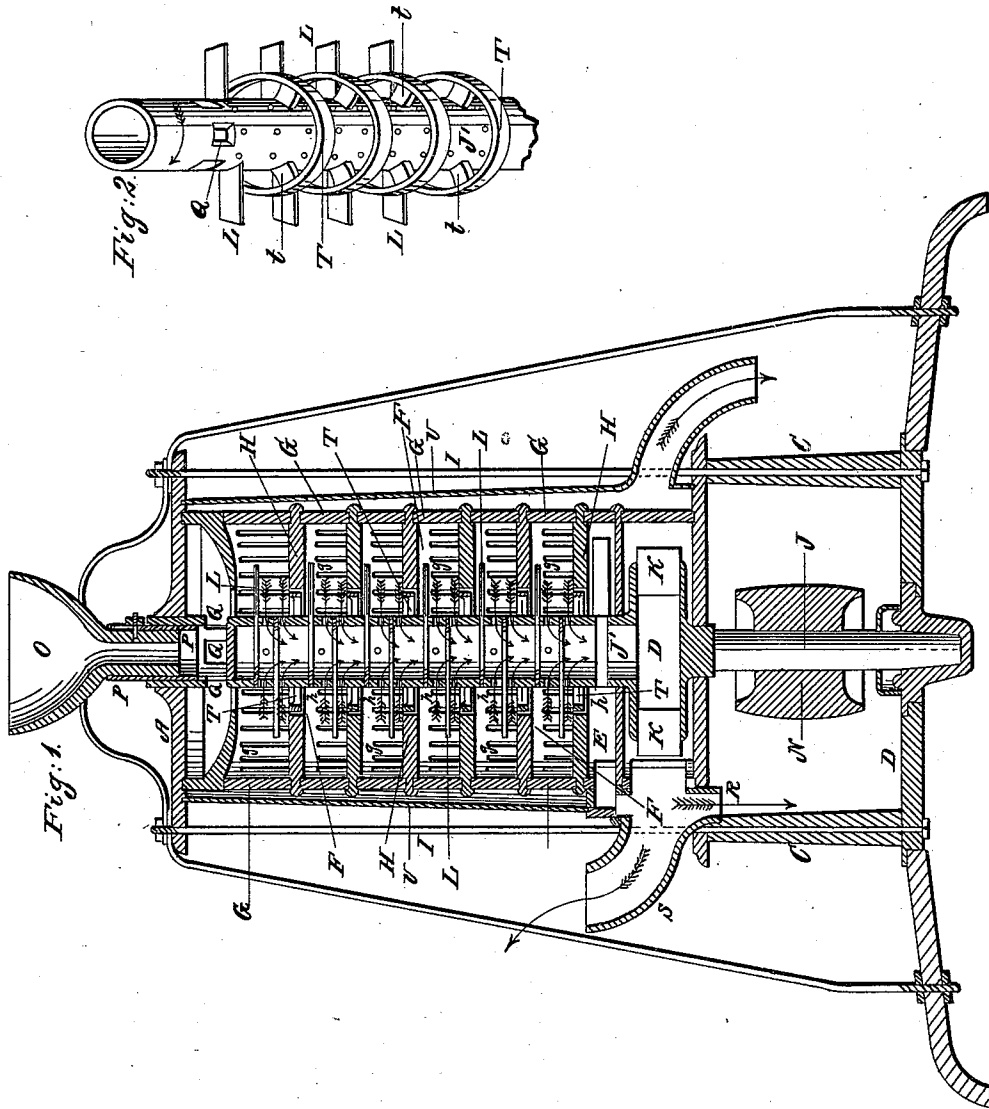


W. WRIGHT.

Hominy Mill.

No. 44,136.

Patented Sept. 6, 1864.



Witnesses:
James H. Layman.
Roper Jones.

Inventor:
W. Wright
for Knight Bros.
attys.

UNITED STATES PATENT OFFICE.

WARREN WRIGHT, OF SPRINGFIELD, OHIO.

IMPROVEMENT IN HOMINY-MILL.

Specification forming part of Letters Patent No. 44,136, dated September 6, 1864.

To all whom it may concern:

Be it known that I, WARREN WRIGHT, of Springfield, Clark county, Ohio, have invented a new and useful Improvement in Hominy-Mills; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

My invention relates chiefly to provisions for the continuous, rapid, and equal action of the hulling and cracking devices.

Figure 1 is an axial section through a mill embodying my improvements. Fig. 2 shows a portion of my shaft.

A and B are the base and cap plates, respectively. C are pillars supporting a suction-fan case, D, which supports the discharging-chamber E, which in turn supports a series of hulling and cracking compartments, F, composed of cylinders G, having numerous minute vertical apertures *g*, and of floors H having round central apertures, *h*. The apertures *g* should regularly decrease in width toward the lower end of the machine. Each cylinder G *g* and floor H *h* is a distinct casting, but the floors H are cast from one pattern whose upper and under sides are precisely alike. All the parts above described are firmly secured together by tie-bolts I.

The surfaces of the floors H *h* are in their most effective condition when rough from the foundry, and as some parts of their surfaces wear smooth more quickly than other parts, according to their relative positions in the mill, it becomes a desideratum to be able, frequently, to reverse any particular floor which may have worn unequally or to substitute or transpose any particular floor or floors where the hulling-surfaces have been rendered smooth by excessive service. Such substitution, transposition, or reversal is made practicable by the fact of each floor being a distinct casting, while at the same time entirely symmetrical and the precise duplicate of every other.

J is a revolving shaft, carrying a suction-fan, K, whose interior communicates with and exhausts from the hollow upper portion,

J', of the shaft, which is provided with numerous minute apertures for the entrance of air and dust from the compartments F.

L are the beaters, roughened so as to resemble coarse files. The said beaters may be secured to the shaft by screwing, in the manner represented.

N is the driving-pulley. O is the hopper, having a register or sliding-sleeve, P, by means of which the area of the feed-apertures Q may be graduated for different grades of corn. This provision is very essential in a hominy-mill, which always produces a certain maximum effect with a certain charge of grain, and such charge is a matter of nice and careful regulation differing with every grade and condition of the grain.

R is a spout for the delivery of hominy. S is a spout for the discharge of dust, eyes, hulls, and other light refuse.

In order to insure a continuous flow of corn down the central apertures, *h*, the hollow shaft J is provided in the planes of the floors H *h* with open rings or wheels T, which are connected to the shaft by spokes *t*. The said rings T *t* act, in conjunction with the beating and sacking devices, to keep the corn agitated and "lively" without obstructing the passage. This provision is found to entirely do away with the choking and bunching of the corn and to result in a continuous and uniform cracking-and-hulling action, which greatly expedites the work and saves power. The rings or agitators T *t*, as they approach the bottom of the series, should have their rims somewhat thicker than those above, in order to contract the issue as the corn approaches the condition of hominy, and is, at the same time, more powerfully acted upon by its acquired momentum and the suction of the fan. The corn, on entering each succeeding compartment, receives a severe abrasion from the beaters L, which project it violently against the cylinders G, through which the hulls and other refuse portions escape into the shell U, while the corn, being drawn into the next compartment by the combined effects of weight, suction, and the agitation of the mass by the rings T *t*, under-

goes in each succeeding compartment a repetition of the hulling-and-cracking action until wholly converted into hominy.

I claim herein as new and of my invention—

1. The agitators *T t*, revolving within the apertures *h* of the floors *H*, and in the plane of said floors, substantially as herein described.

2. The combination of the centrally-perforated floors *H h*, perforated hollow suction-

shaft *J J'*, beaters *L*, agitators *T t*, fan *K*, and spout *S*, all arranged and operating as specified.

In testimony of which invention I hereunto set my hand.

WARREN WRIGHT.

Witnesses:

GEO. H. KNIGHT,

ROBERT L. HOLMAN.