E. H. KELLOGG.

Improvement in Grain-Cleaners and Scourers.

No. 114,688. Patented May 9, 1871.

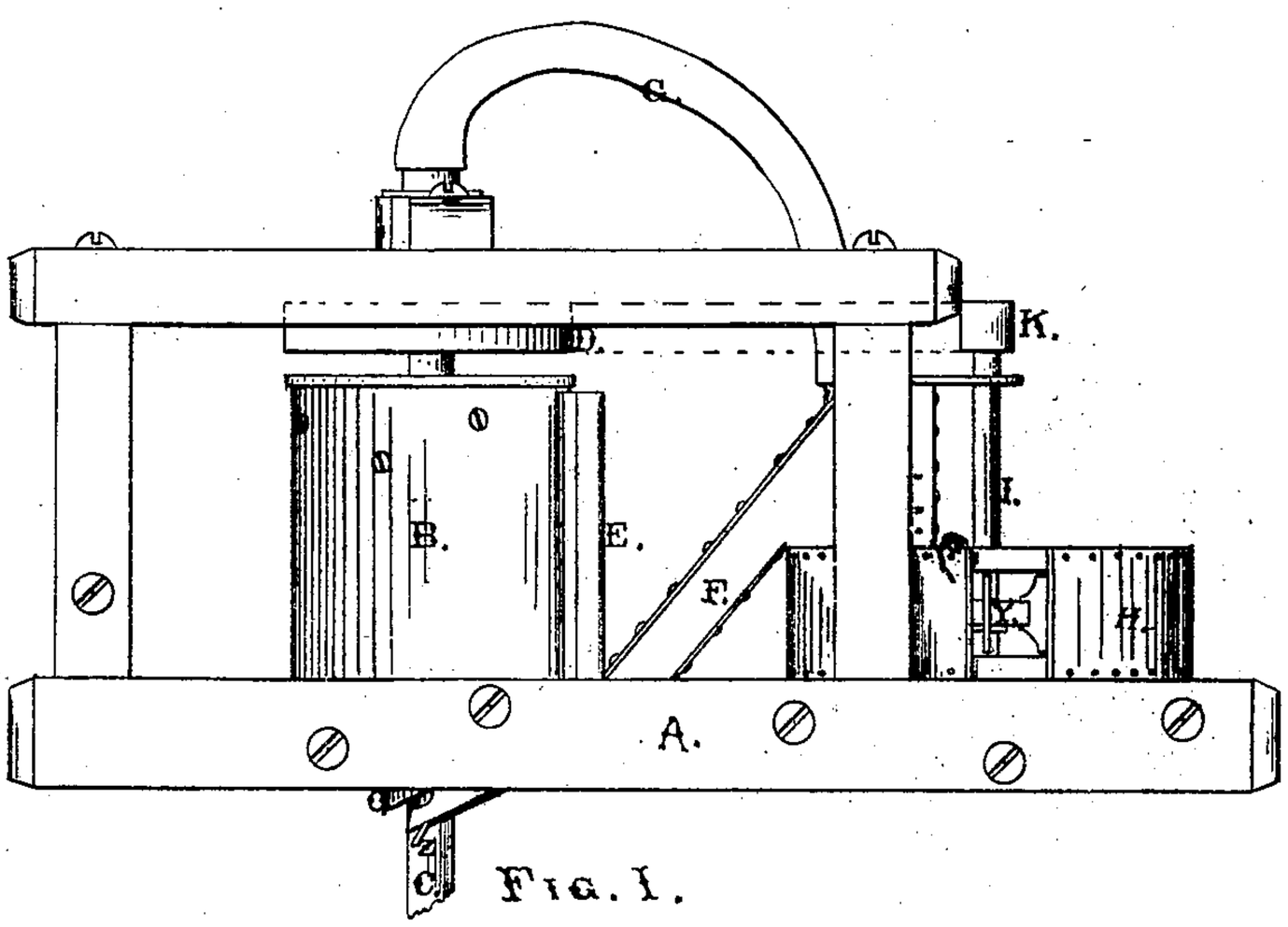

FIG. 1.

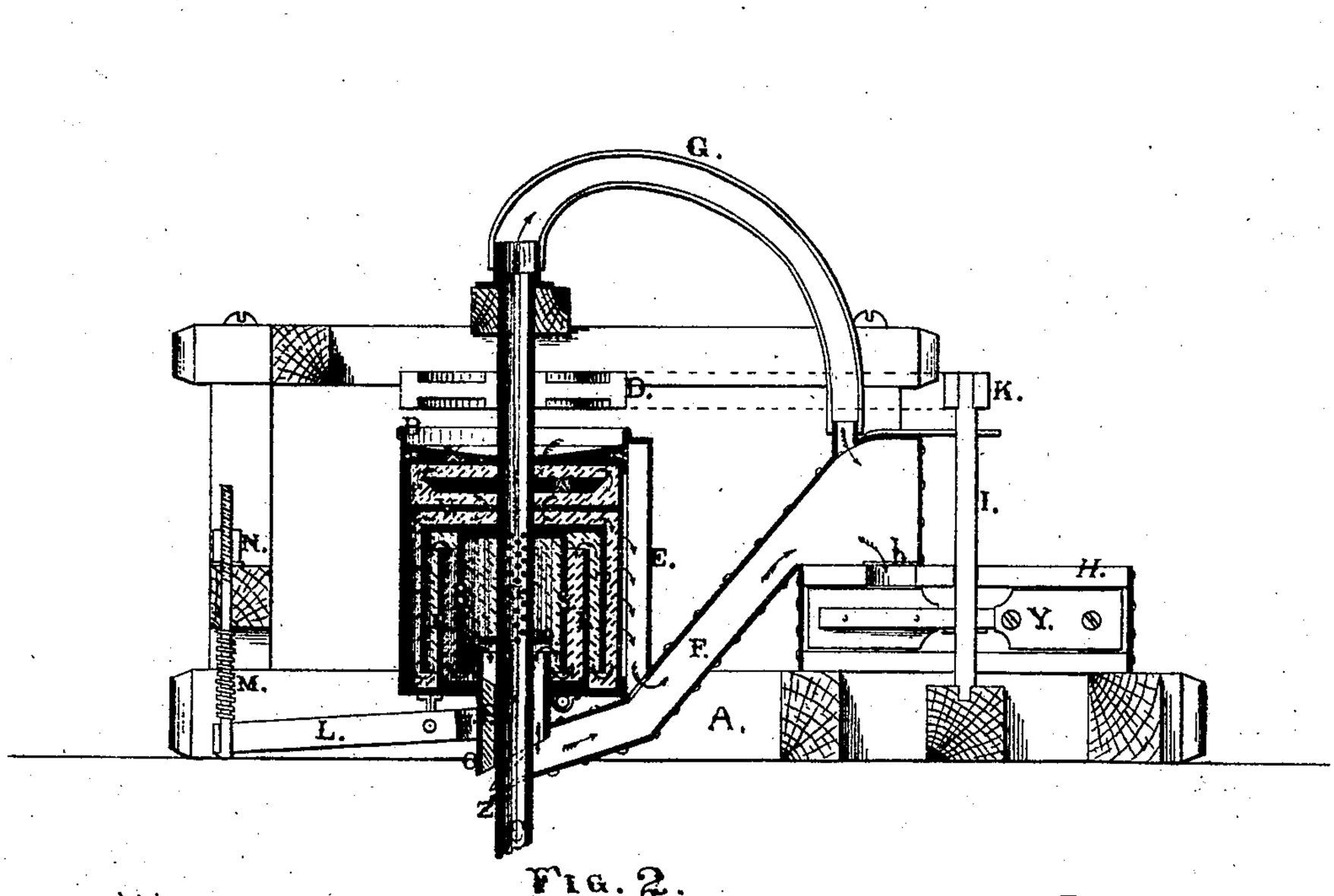

FIG. 2.

WITNESSES.

J. B. Smith

H. M. Hornor.

INVENTOR.

Chas Tus. H. Kellogg

United States Patent Office.

ERASTUS H. KELLOGG, OF MUKWONAGO, WISCONSIN.

Letters Patent No. 114,688, dated May 9, 1871.

IMPROVEMENT IN GRAIN-CLEANERS AND SCOURERS.

The Schedule referred to in these Letters Patent and making part of the same.

I, ERASTUS H. KELLOGG, of Mukwonago, in the county of Waukesha, in the State of Wisconsin, have invented certain Improvements in "Grain-Cleaners and Scourers," of which the following is a specification.

Nature and Object of the Invention.

My invention is for the purpose of cleaning and scouring grain for grinding; and consists of an apparatus with roughened surfaces for the grain to enter and a fan-blower to suck the dirt out of the grain. This machine stands above the grinding-stone and is revolved by it, or may be operated by any other power in any other place. And the grain is thoroughly-scoured and cleaned by coming in contact with the roughened surfaces and a scouring disk.

Description of the Drawing forming part of this Specification.

Figure 1 is a side view of my machine.
Figure 2, a sectional view of same.

General Description.

A is the frame-work of the machine.
B is the outside case into which the grain enters.
C, hollow shaft, with perforations *a* in it for the light dust to pass out of.
D, driving-pulley to drive the fan.
E, air-chamber for the dust to pass from the grain to the fan Y.
F, spout from the bottom or the case B, where the grain leaves it, for the purpose of sucking the dust from the grain.
G, rubber tube from the top of hollow-shaft C, to fan Y to take the dust out of shaft C; this tube may be made of any other material.
H, fan-case.
I, shaft which runs the fan.
K, pulley on shaft I.
L, feed-lever.
M, spring to hold the lever L down.
N, nut on the head of rod connected to feed-lever L to regulate the feed.
O, feed-tube on the end of lever L, operating in connection with wooden piece P to throw the grain on the opposite side of shaft C to bring it in contact with the air leading to the fan.
Q, collar on hollow shaft C, for the feed-tube O to operate against to regulate the feed.
R, stationary cylinder on the inside of case B.
S, inside revolving cylinder attached to shaft C.
T, outside cylinder on shaft C. There is a head which covers and connects these two cylinders together.
U is a cylinder on the inside of case B and is stationary; these cylinders, R S T and U, are all of them perforated as shown in the drawing.
V, a stopper on the inside of cylinder U, and fastened in position by a couple of screws passing through case B and cylinder U.
W, a composition or metal disk on shaft C.
X, head-stopper in case B, with openings large enough round shaft C for the grain to pass through to be scoured.
Y, fan.
Z are points on the end of spout F, to give the grain the right direction to the stone.
a, perforations in shaft C for the dust to enter.
b, slide to regulate the air to the fan-box.

To operate this machine, put a belt from pulley D to K and put the machine in motion. The grain is fed in by a spout, not shown, in opening in head-stopper X, and falls through around the shaft C, onto disk W, which throws it out over the edges onto stationary stopper V, and the pressure of the wheat above and the revolving disk W throws it in through the opening in stationary stopper V, and then falls on the head of cylinders S and T, and then outside of cylinder T, and down between cylinder T and stationary cylinder U onto bottom of case B; and then the revolving cylinder T, by the draught of the perforations, elevates the grain up over stationary cylinder R, and then the grain falls down between stationary cylinder R and revolving cylinder S onto the bottom of case B again; then it passes through between feed-collar Q and tube O, according to the regulation of the feed, and strikes the wooden piece P, and is directed to the stone or anywhere else by the points Z. The hollow shaft C, with its holes *a*, and the rubber or other tube G, connected with the fan Y, which in revolving makes a draught for the air and takes the fine particles of dust up out through during the process of scouring, and air-chamber E takes the dust from the grain in the cylinder U, and outside case B, and carries it to spout F and out through the fan Y and case H, and the imperfect grains and dust are taken lastly by the spout F up through and out through fan Y and case H.

Claim.

I claim as my invention—

1. The combination of the shaft C with disk W, stationary stopper V, revolving cylinders S T; and stationary cylinders R U, feed-collar Q, spouts O and F, and fan Y, all constructed and arranged substantially as shown and described, for the purpose set forth.

2. The arrangement, in the grain-cleaner and scourer herein described, of the shaft C, disk W, stationary stopper V, revolving cylinders S T, stationary cylinders R U, feed-collar Q, spout O, clamp P, lever L, and points Z on spout F, and fan Y, when all these parts are constructed and operated as shown, for the purpose set forth.

Witnesses: ERASTUS H. KELLOGG.
J. B. SMITH,
W. M. HORNOR.