

AARON BOLANDER.

2 Sheets--Sheet 1.

Improvement in Machines for Crushing Corn.

No. 118,188

Patented Aug. 22, 1871.

Fig. 1.

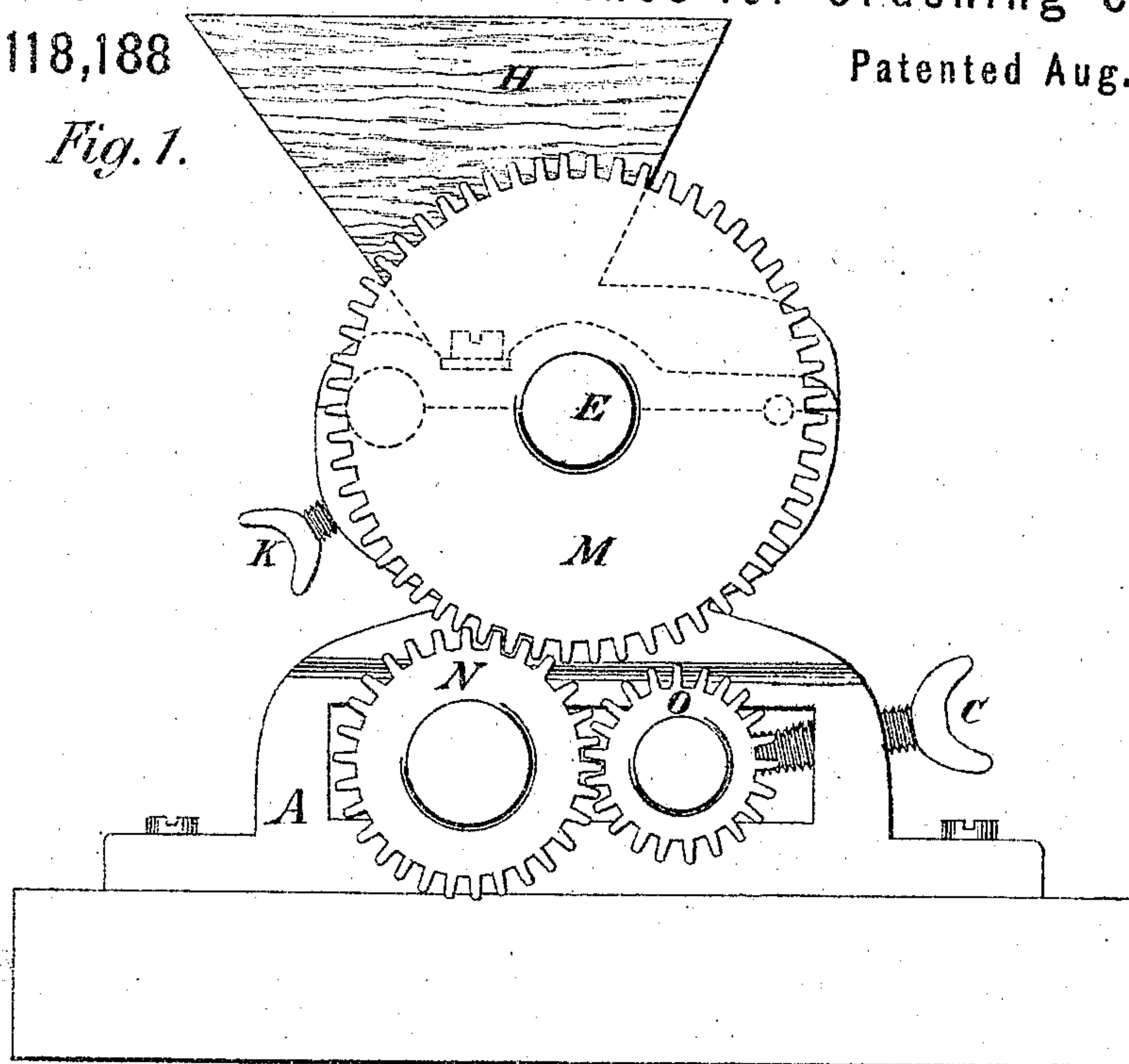
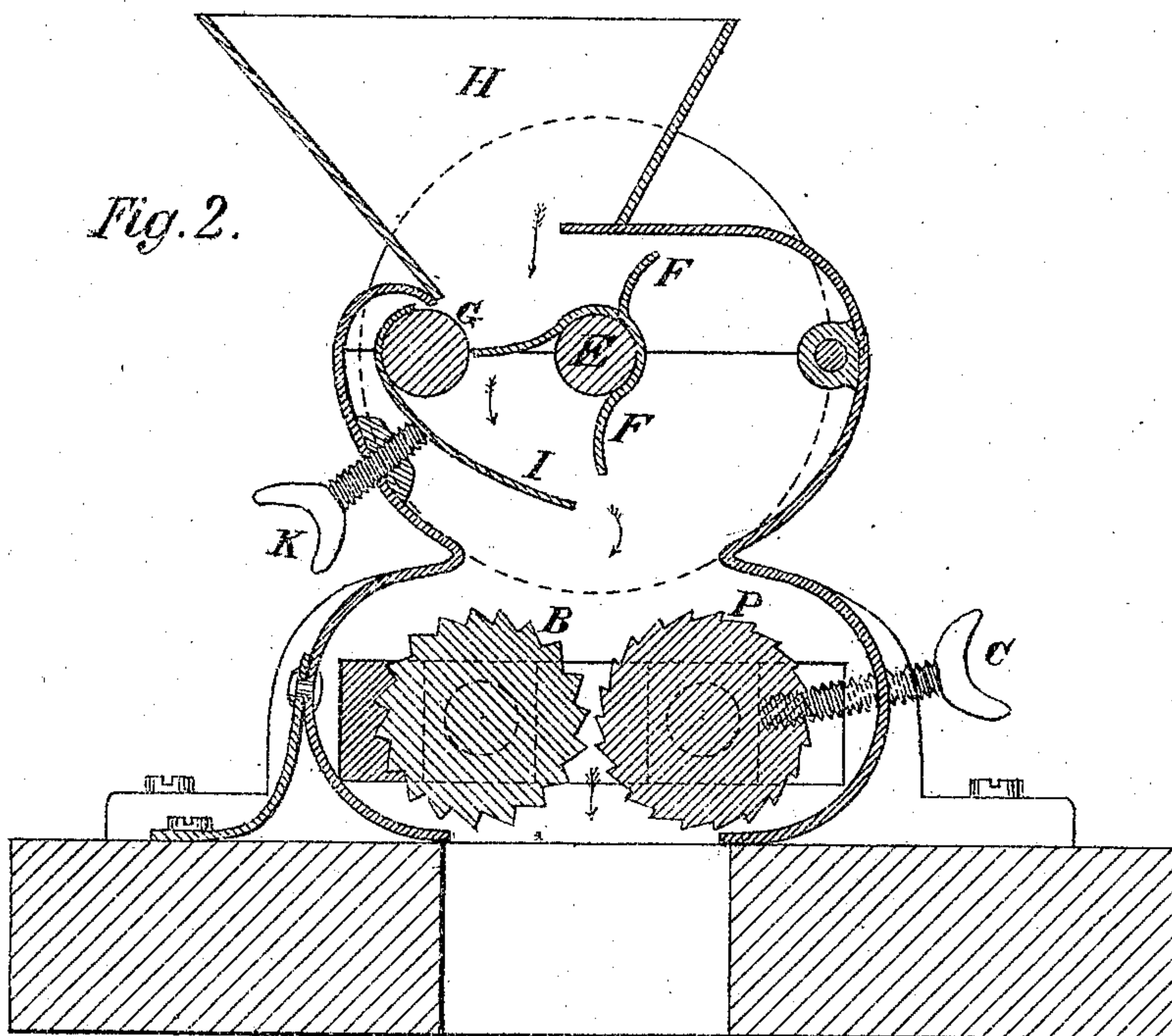


Fig. 2.



Witnesses:

Great Atos.
J. M. Pool

Inventor:

Aaron Bolander
By Daniel Breed
Atty.

AARON BOLANDER.
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Fig. 3.

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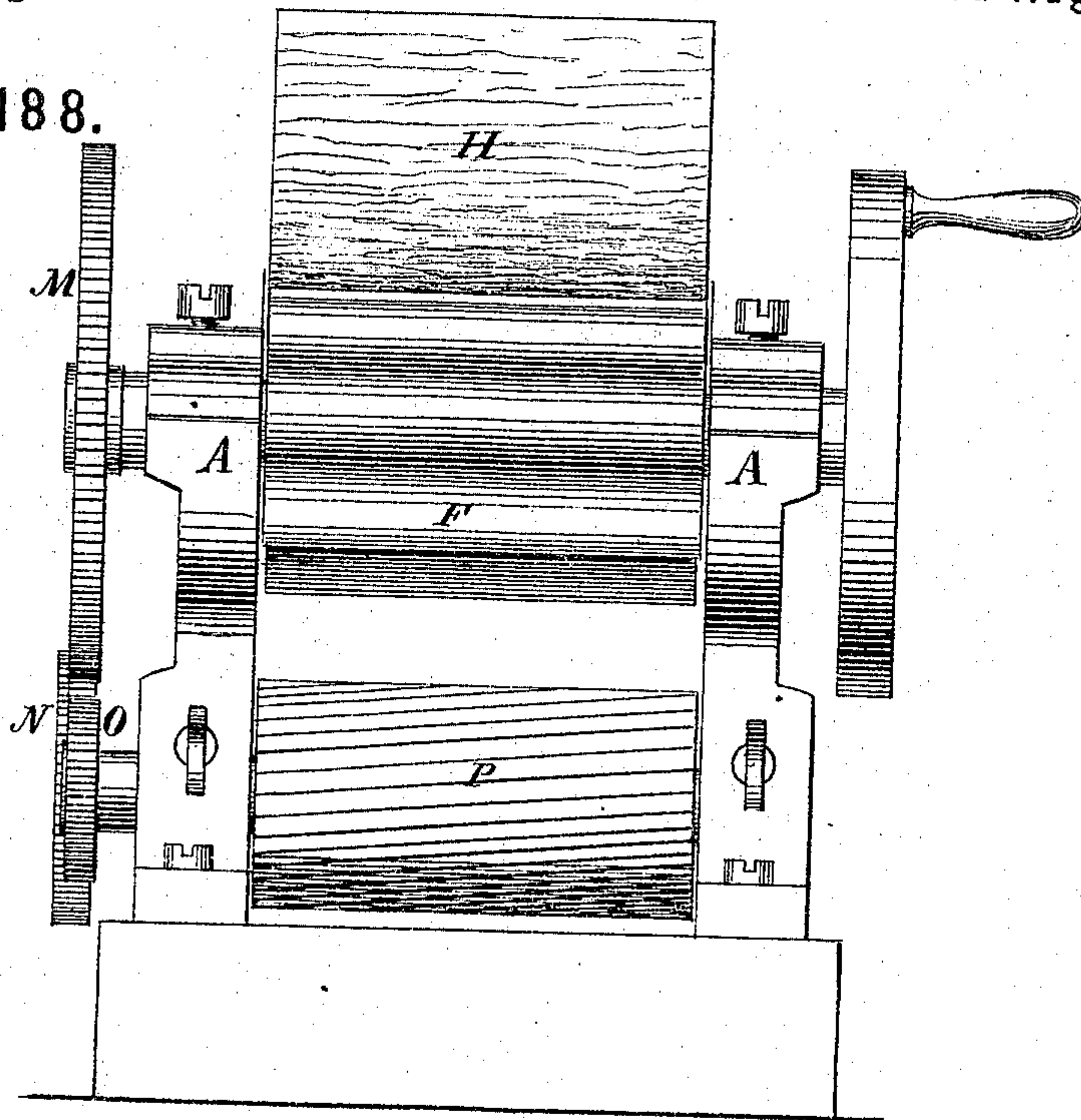
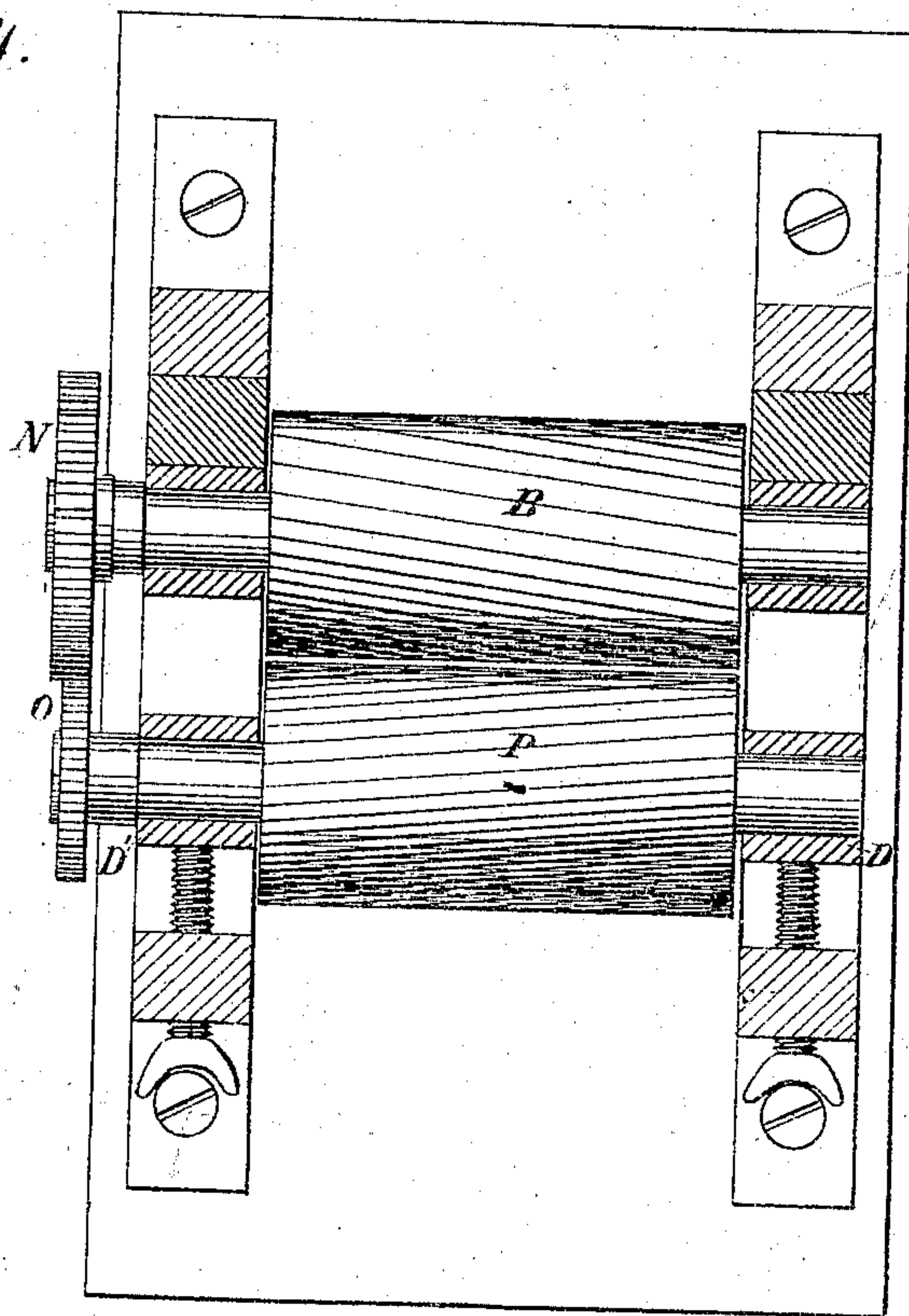


Fig. 4.



Witnesses:

Fred. A. A. A. A.
S. M. Pool

Inventor:

Aaron Bolander
By *Daniel Breed*
Atty.

UNITED STATES PATENT OFFICE.

AARON BOLANDER, OF AKRON, OHIO.

IMPROVEMENT IN MACHINES FOR CRUSHING CORN.

Specification forming part of Letters Patent No. 118,188, dated August 22, 1871.

To all whom it may concern:

Be it known that I, AARON BOLANDER, of Akron, in the county of Summit and State of Ohio, have invented certain new and useful Improvements in Corn-Crushers, of which the following is a specification:

In the accompanying drawing, Figure 1 is an end view of my machine. Fig. 2 is a vertical section of the same. Fig. 3 is a front view with the case removed so as to show the crushing-rollers. Fig. 4 is a horizontal section, showing the lower rollers.

Upon any suitable frame A is arranged a pair of rollers, B P, provided with grooves and sharp edges for crushing the cobs or ears of corn. These grooves and sharp edges are set spirally upon the rollers, as seen in Fig. 4, the spirals running in opposite directions on the two rollers. One of these rollers is made adjustable by means of a set-screw, C, Fig. 4, working against a movable bearing, D, in order to crush the corn or ears finer or coarser, at pleasure. Upon the frame A is also a horizontal shaft, E, carrying a series of rotating knives, F, which works close to the roller G, so that the ears of corn are more or less crushed in coming from the hopper H down past this roller G, below which is an adjustable directing board or curved plate, I, against which

the knives F also work in cutting, shelling, and crushing the ears as they descend to the lower rollers B. This plate I is adjustable by means of the set-screw K, Fig. 2.

Motion is given to the axle or shaft E and knives F by the crank-wheel L, or by hand or other means, and the gear-wheel M upon the same shaft gives motion to the gear-wheel N, which, in turn, gives a faster motion to the smaller gear-wheel O. Thus the wheels B P have a different motion, so that their sharp edges slide upon each other and thus give a drawing cut, which greatly facilitates the complete crushing of the ears or cobs.

The arrows indicate the direction of the corn through the machine.

Having described my invention, I claim—

1. The combination of the revolving knives F with the roller G and the plate I, substantially as described.

2. The combination of the rollers B P with the knives F, the roller G, and plate I, all arranged and operated substantially as above described.

AARON BOLANDER.

Witnesses:

S. S. PERKINS,
D. ALLEN.