

(No Model.)

N. J. TILGHMAN.

HOMINY MILL.

No. 305,546.

Patented Sept. 23, 1884.

Fig. 1.

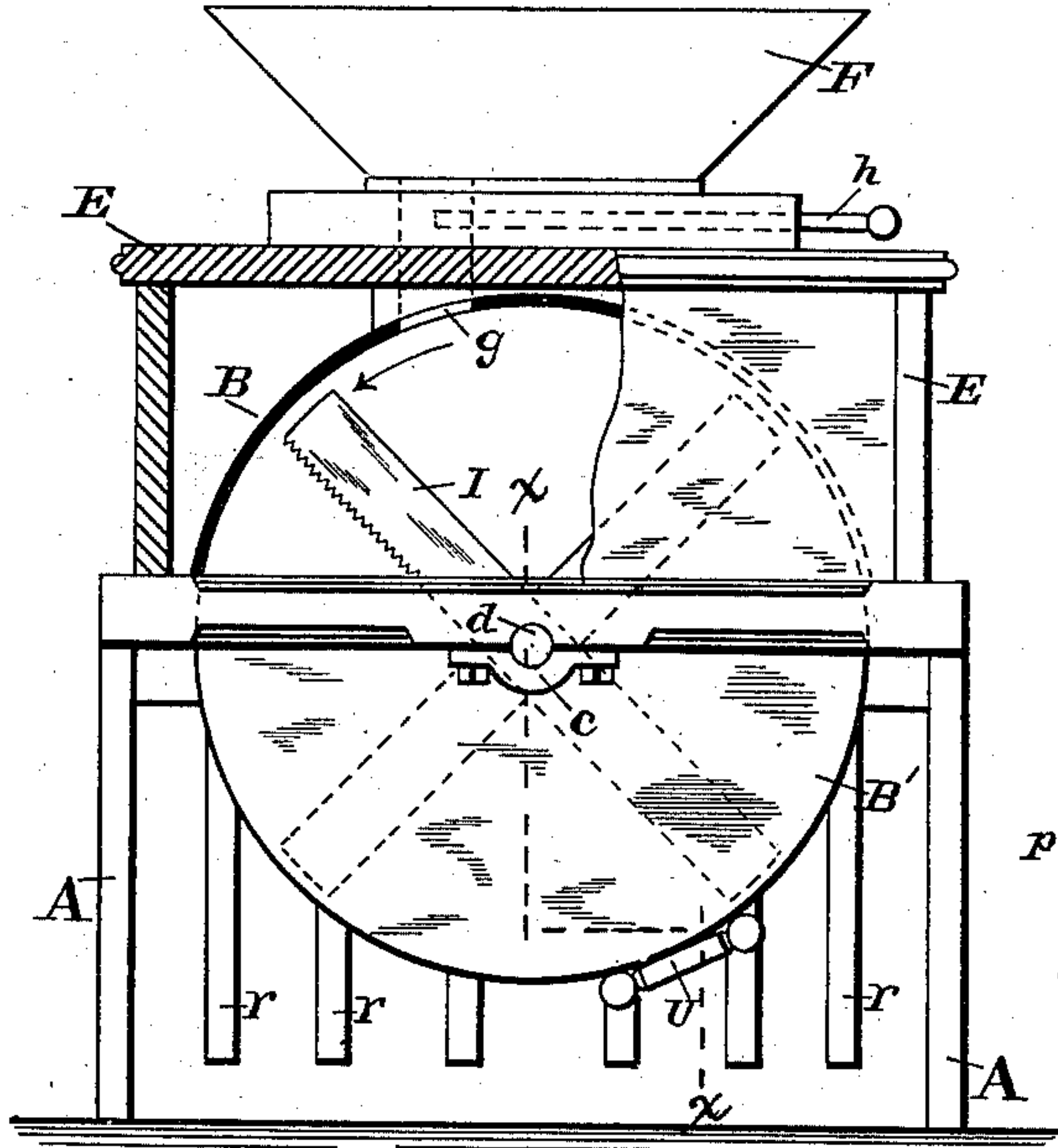


Fig. 2.

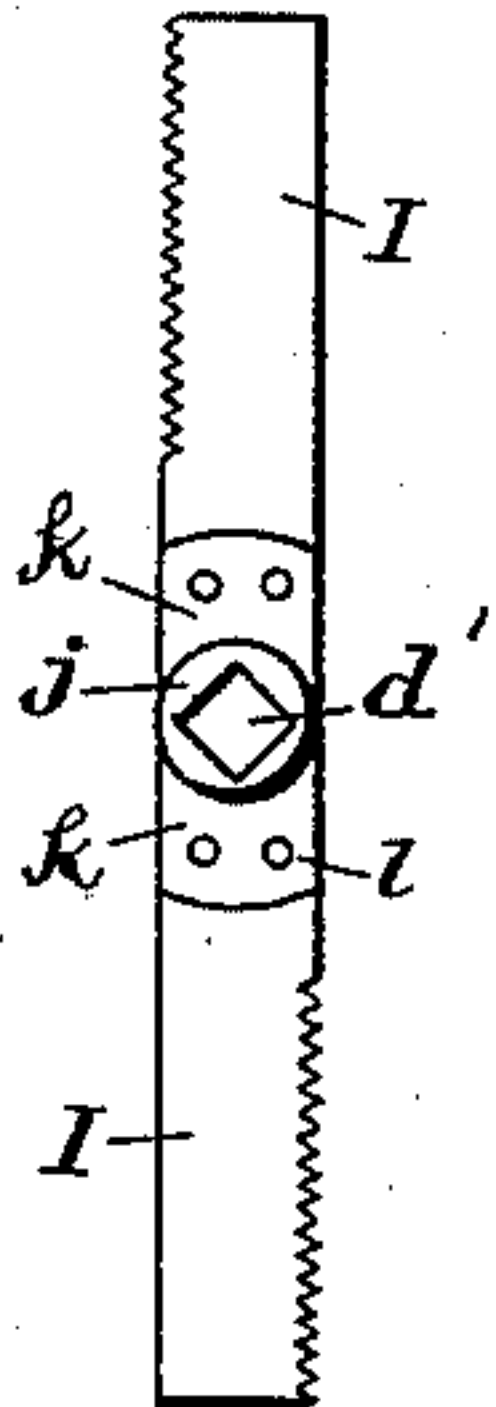


Fig. 3.

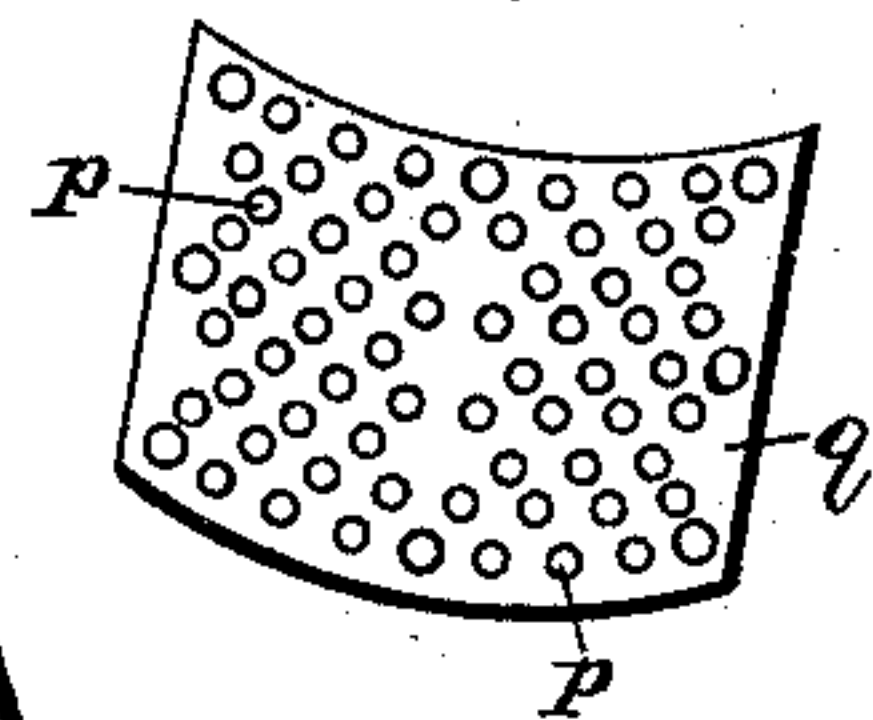


Fig. 4.

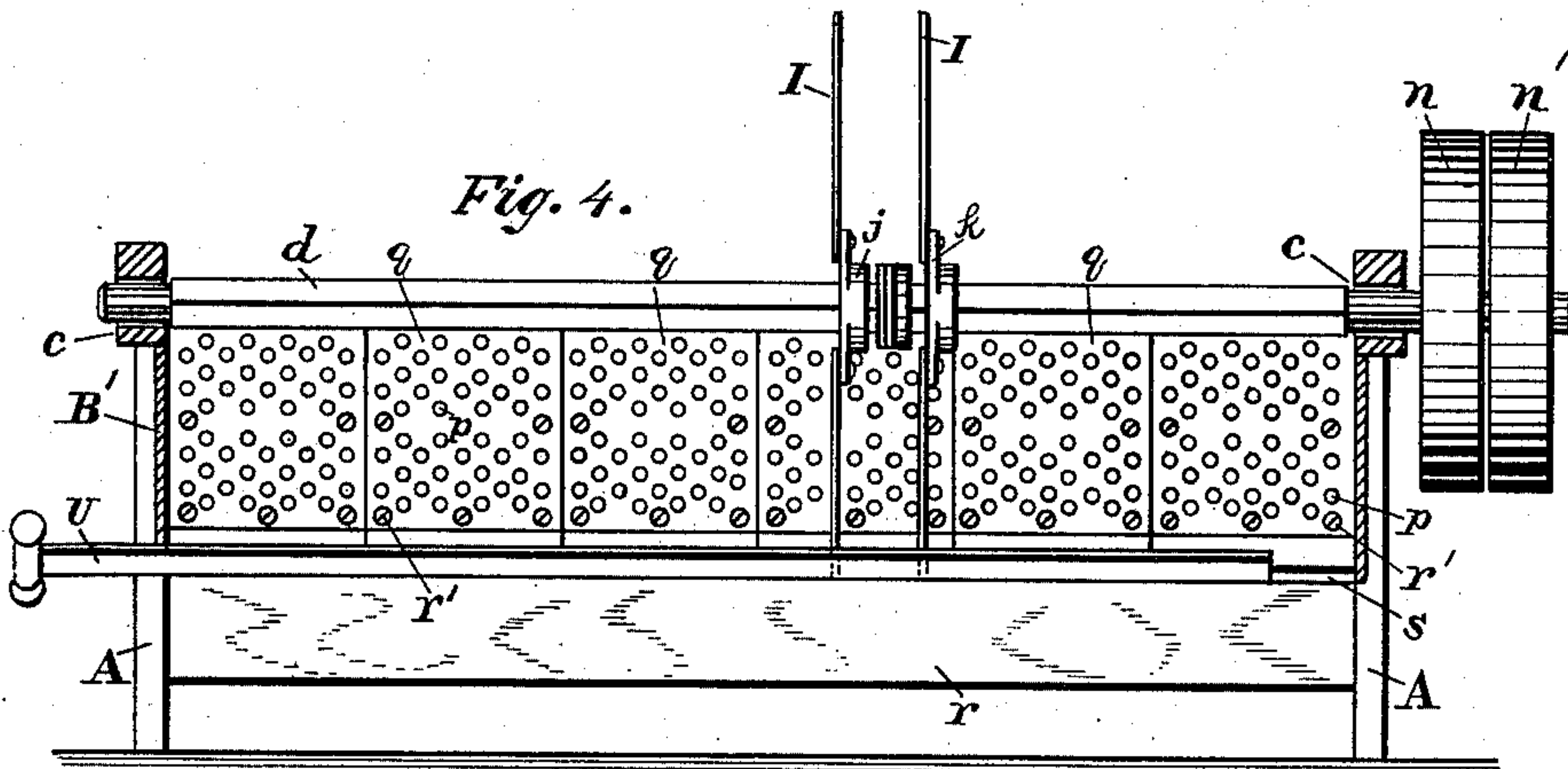


Fig. 5.

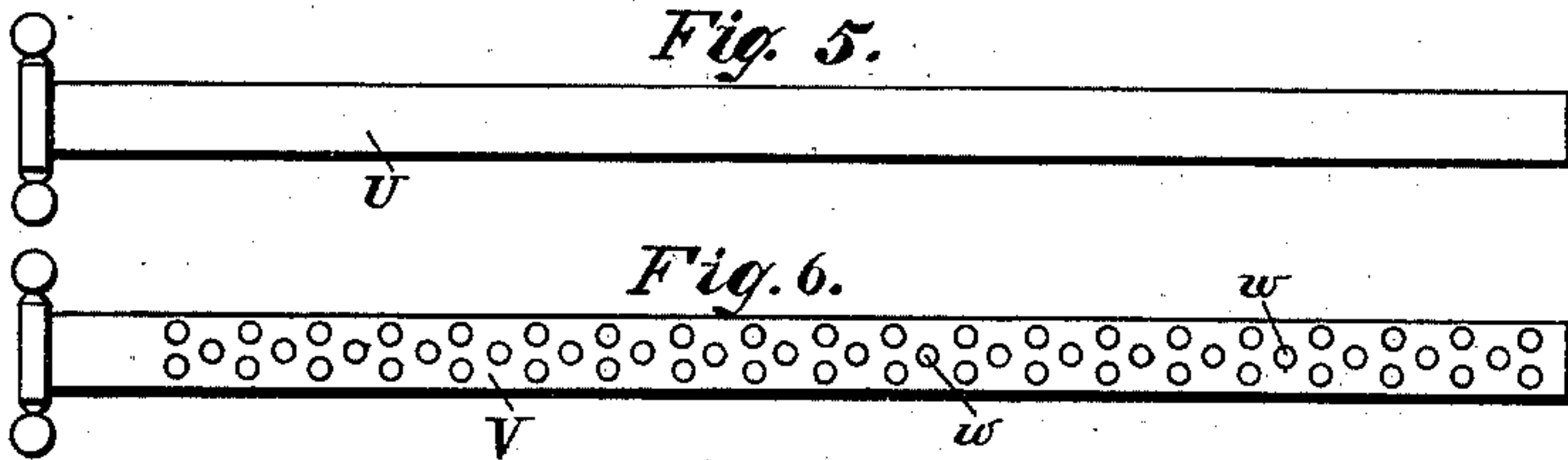


Fig. 6.

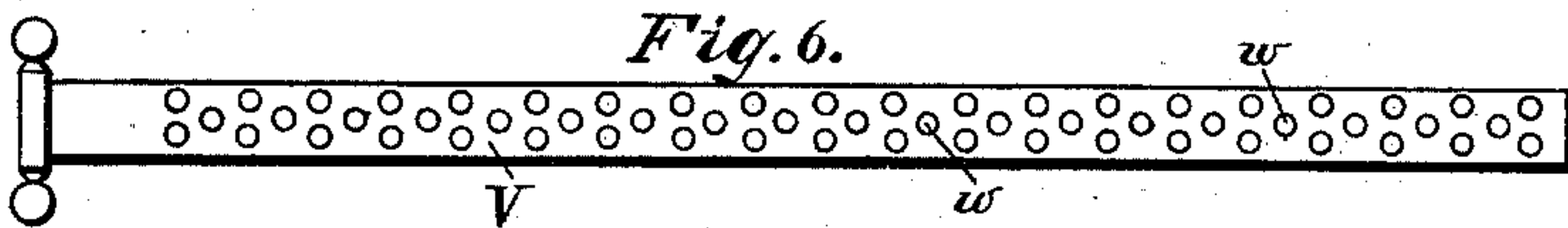
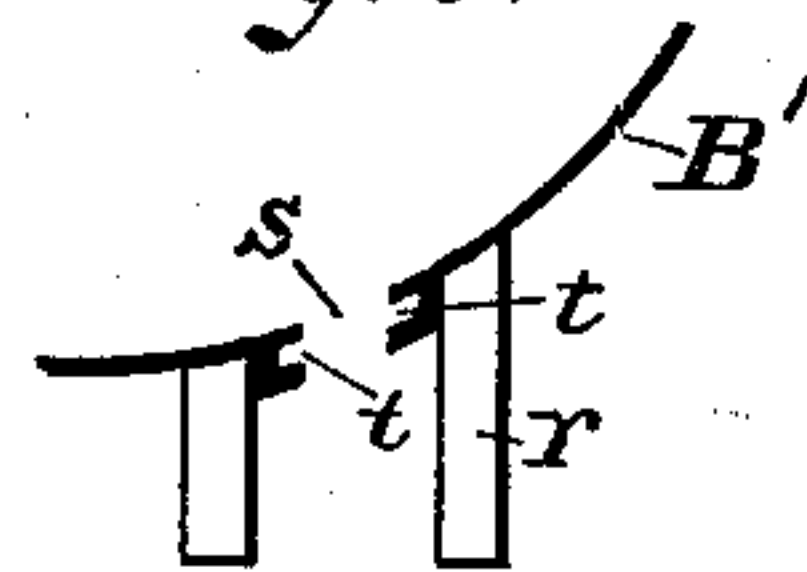


Fig. 7.



Witnesses:
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UNITED STATES PATENT OFFICE.

NOAH J. TILGHMAN, OF SALISBURY, MARYLAND.

HOMINY-MILL.

SPECIFICATION forming part of Letters Patent No. 305,546, dated September 23, 1884.

Application filed January 14, 1884. (No model.)

To all whom it may concern:

Be it known that I, NOAH J. TILGHMAN, a citizen of the United States, residing at Salisbury, in the county of Wicomico and State of Maryland, have invented certain new and useful Improvements in Hominy-Mills, of which the following is a specification.

My invention relates to an improved hominy-mill; and it consists in certain features of construction and combination of parts, which are hereinafter described, and then claimed.

The invention referred to is illustrated in the annexed drawings, in which Figure 1 is an end elevation of the mill, in which the upper left corner of the case and upper part of cylinder are broken away to expose to view one of the saws. Fig. 2 is a view of one pair of saws. Fig. 3 is a view of one of the perforated sections which compose the lower part of the cylinder. Fig. 4 is a longitudinal vertical section of the mill, except the hopper, upper part of the case, and cylinder. Fig. 5 is a view of the removable slide. Fig. 6 is a view of the perforated or continuous discharge-slide. Fig. 7 is a detail view showing the slide-grooves in the cylinder.

The machine is supported on legs A, and consists of a cylinder composed of the upper part, B, and lower part, B', which parts are separable on a horizontal line at the bearings c of the saw-shaft d. The upper part, B, of the cylinder is inclosed by a case, E, both of which are removable. A hopper, F, surmounts the case, and a passage, g, leads from the hopper to the cylinder, while a slide, h, at the bottom of the hopper controls the passage. A square shaft, d, has journaled ends resting in bearings c at the ends of the cylinder, and a series of straight-bladed saws, I, are mounted on the shaft. A hub, j, has a square eye, d', adapted to fit on the shaft, and two flanges, k, thinner than the hub. The flanges are diametrically opposite each other, and to each of them a straight saw, I, is secured by rivets or bolts l. Thus by means of the hubs the saws are mounted in pairs, and the hubs are readily slipped on the end of the shaft. (See Fig. 4.) One half of the saws—that is, every other pair—extend in one direction, while the other half are placed so as to extend crosswise of the first half, as indicated

in Fig. 1. The saws turn in a vertical plane. The entire length of the square shaft is occupied by the saw-hubs, and as these are close together and in contact there is no need to fasten each one separately. By this construction the removal of all or any of the hubs and saws from the shaft for sharpening is easily effected, and is done by simply lifting the shaft from its bearings and slipping the hubs from the shaft. The shaft has a loose pulley, n, and a drive-pulley, n', and turns in the direction toward which all the saw-teeth point, as indicated by the arrow in Fig. 1. The shelled corn passes from the hopper into the cylinder, where it is subjected to the action of the straight saws I, revolving with shaft d. These thin saws readily pass through the bulk of corn in the cylinder, effectually hull the kernels of corn, remove the germ, and split the kernels, thereby doing all the work of converting the corn into hominy. I find these saws never get choked. They are peculiarly well adapted to do good work, do it rapidly, and with as little power as or less power than some machines. The lower part, B', of the cylinder is perforated, as at p, and I have constructed it in sections, q, which are secured by screws r' to longitudinal bars r below, extending from end to end of the cylinder. These sections are preferable to forming the lower half of the cylinder in a single piece, because in case of damage at one place repairs may be easily and cheaply made by inserting a single section. The perforations p are for the escape of the chaff or hulls and germs. A discharge-slot, s, is formed the entire length of the lower part the cylinder. At each edge of the slot a groove, t, is formed (see Fig. 7) in any suitable way, and a bar, U, slides endwise into these grooves, and thereby closes the discharge-slot. To allow the hominy to be discharged, the slide-bar U should be entirely drawn out, whereupon the hominy would all discharge instantaneously. This arrangement is desirable in some work; but in producing a different character of product it is desirable to have a continuous or perpetual discharge. I therefore provide a second slide-bar, V, having holes or perforations w larger than those in the lower part of the cylinder, and of proper size to allow the exit

of half-grains but to prevent the escape of whole grains of corn. This perforated slide-bar, being in position to close the slot *s*, will provide for the continuous discharge of the hominy. Thus the operator can adapt the machine to do the work required.

Having described my invention, I claim and desire to secure by Letters Patent of the United States—

10 In a hominy-mill, the combination of a rotating square shaft, *d*, with hubs *j*, having

square eyes *d'*, adapted to slip loosely on said shaft and rest against each other, and provided on opposite sides with thin flanges *k* and straight thin saws *l*, substantially as and 15 for the purpose described.

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

NOAH J. TILGHMAN.

Witnesses:

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