

E. H. AUSTIN.

Improvement in Grain Mills.

No. 118,672.

Patented Sep. 5, 1871.

Fig 1

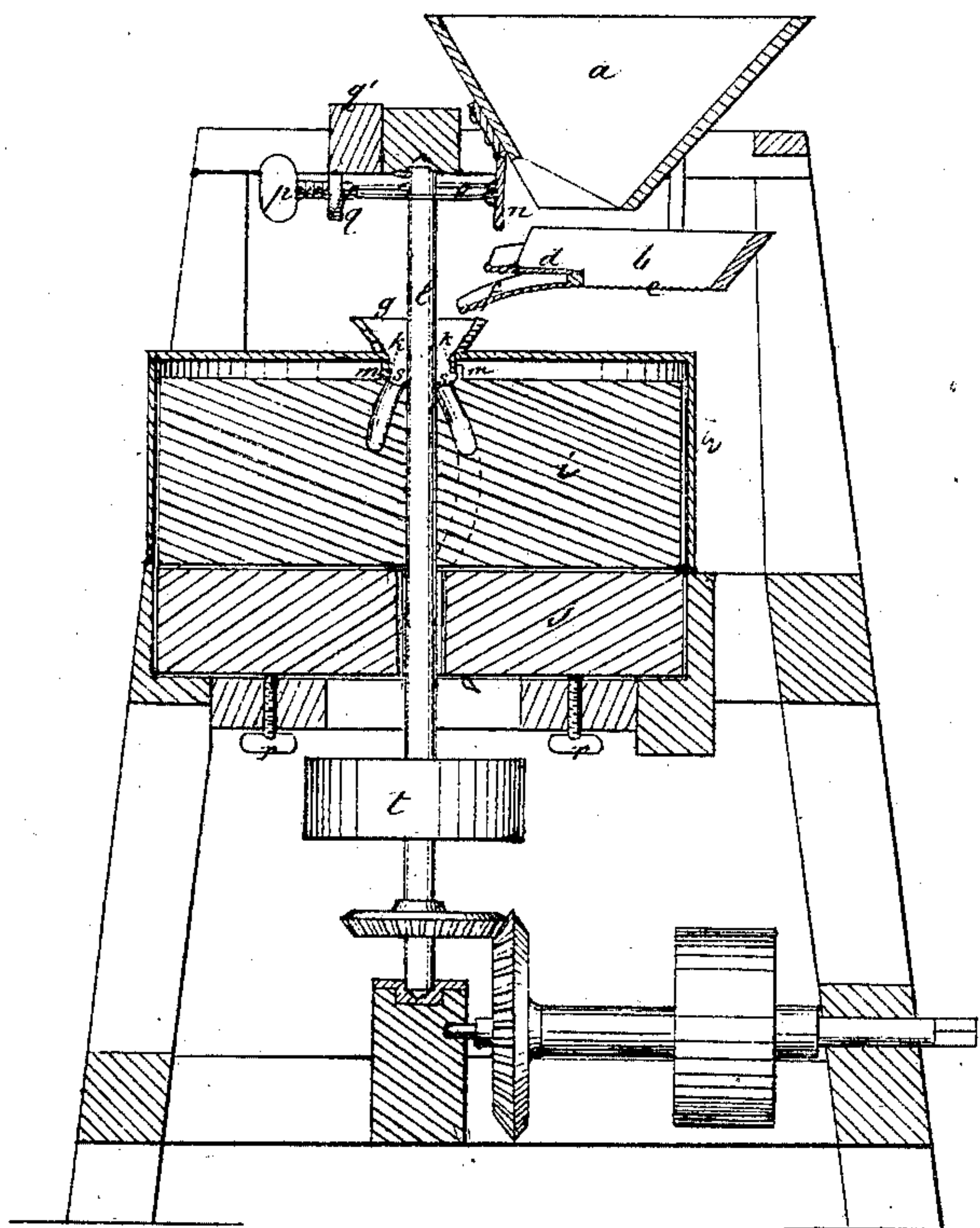


Fig 2.

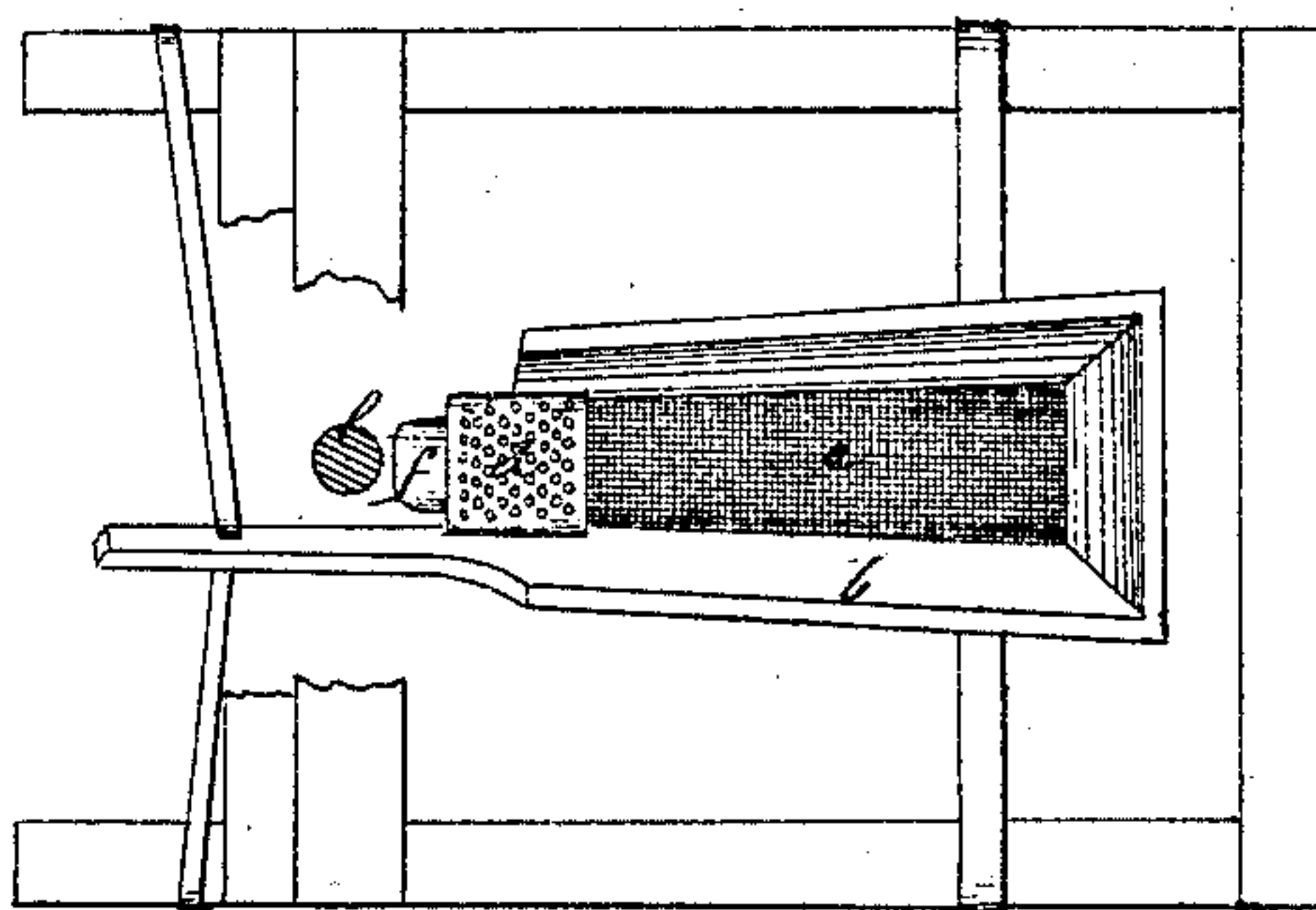
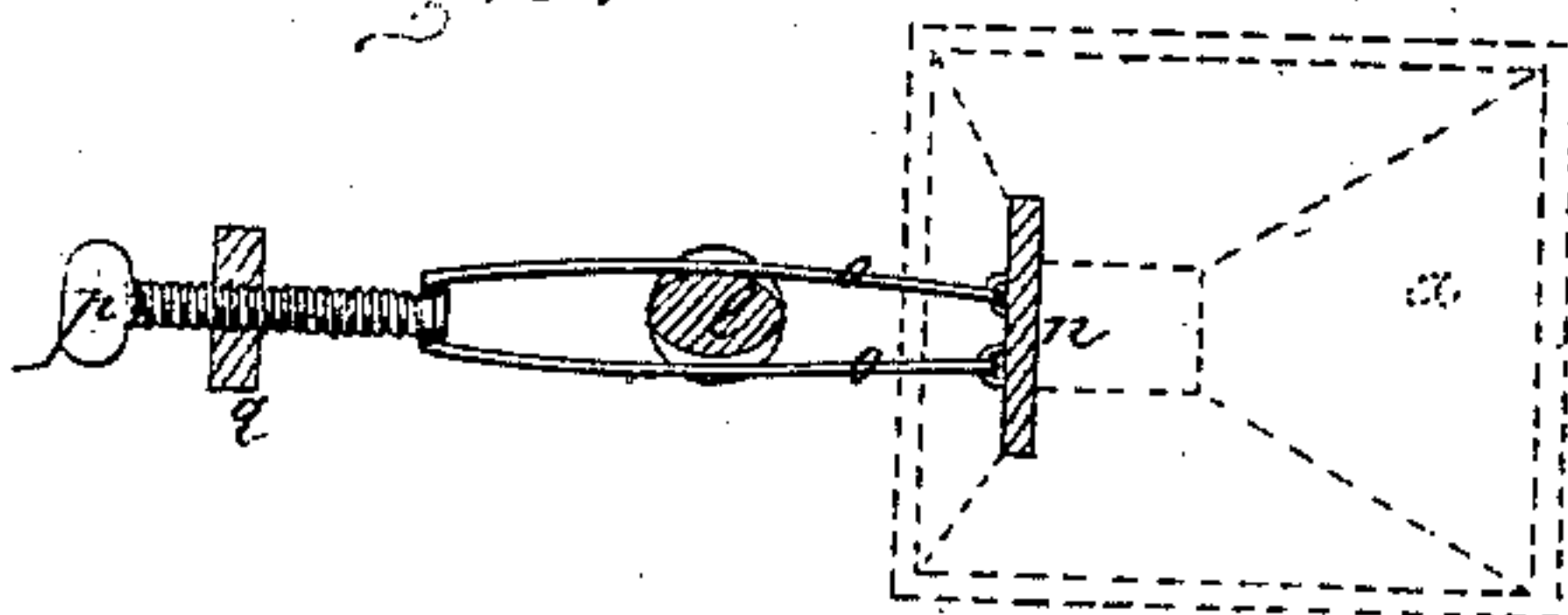


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

EPHRAIM H. AUSTIN, OF SCOTT'S HILL, TENNESSEE.

IMPROVEMENT IN GRAIN-MILLS.

Specification forming part of Letters Patent No. 118,672, dated September 5, 1871.

To all whom it may concern:

Be it known that I, EPHRAIM H. AUSTIN, of Scott's Hill, in the county of Henderson and State of Tennessee, have invented a new and Improved Grist-Mill; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a sectional elevation lengthwise of the hopper and screens. Fig. 2 is a horizontal section just above the screens; and Fig. 3 is a horizontal section, showing the screw-rods and flap.

This invention relates to sundry improvements in grist-mills; said improvements having for their object to thoroughly separate grain prior to grinding from all kinds of foreign matter that may be mixed with it, to regulate the passing of grain from the hopper to the stone, and to facilitate its passage through the stones.

Referring to the drawing, *a* is the receiver, and *b* the shaking hopper underneath the receiver. The hopper *b* has an opening in its bottom covered with fine wire-netting *c*, whose office is to cause the separation of fine dirt from the corn. A plate, *d*, placed at the discharge end of the hopper, has a number of coarser perforations, which discharge the grain and retain larger matter. The grain falls upon a leather tongue, *f*, attached to the hopper, which tongue conducts it to the orifice *g* in the curb *h* which surrounds the stones *i j*. A ring, *k*, inclosing the shaft *l* that bears the runner *i*, is attached to the under side of the top of the curb *h*, and this ring surrounds the hole *g*, and the lower edge of the ring *k* meets the upper edge of a ring, *m*, that projects upward from the top of the runner and surrounds the eye of the same. The rings *k* and *m* assist in con-

ducting the grain into the eye. A flap, *n*, depends from the receiver over the perforated plate *d*, which flap is connected by rods *o o* with a ring placed on a horizontal screw, *p*, that passes through a plate, *q*, attached to and extending partly below the cross-bar *q'* at the top of the frame. By means of the screw *p* the flap *n* can be turned in or out, so as to regulate the quantity of grain issuing from the hopper within any given time. The eye of the runner is divided into four (more or less) spiral passages, *s*, which act like screws, facilitating the passage of the grain through the eye. Four (more or less) screws, *r*, pass vertically through the frame under the bed-stone *j*, and are employed in the leveling of the same. A balance-wheel, *t*, to govern the motion of the stone, is secured to the shaft *l*.

The power by which this mill is driven is not here represented.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The runner *i*, with spiral passages *s s* leading through the same so as to deliver the grain between the stones, as shown and described.

2. In the grain-mill herein described, the hopper *b*, provided with the screen *c* and perforated plate *d*, for the purpose set forth.

3. The hopper *b*, combined with the flap *n*, rods *o*, and screw *p*, as explained.

To the above specification of my invention I have signed my hand this 16th day of May, A. D. 1871.

E. H. AUSTIN.

Witnesses:

SOLON C. KEMON,
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