

J. AUBIN.  
Grinding Mill.

No. 55,792.

Patented June 19, 1866.

Fig. 1

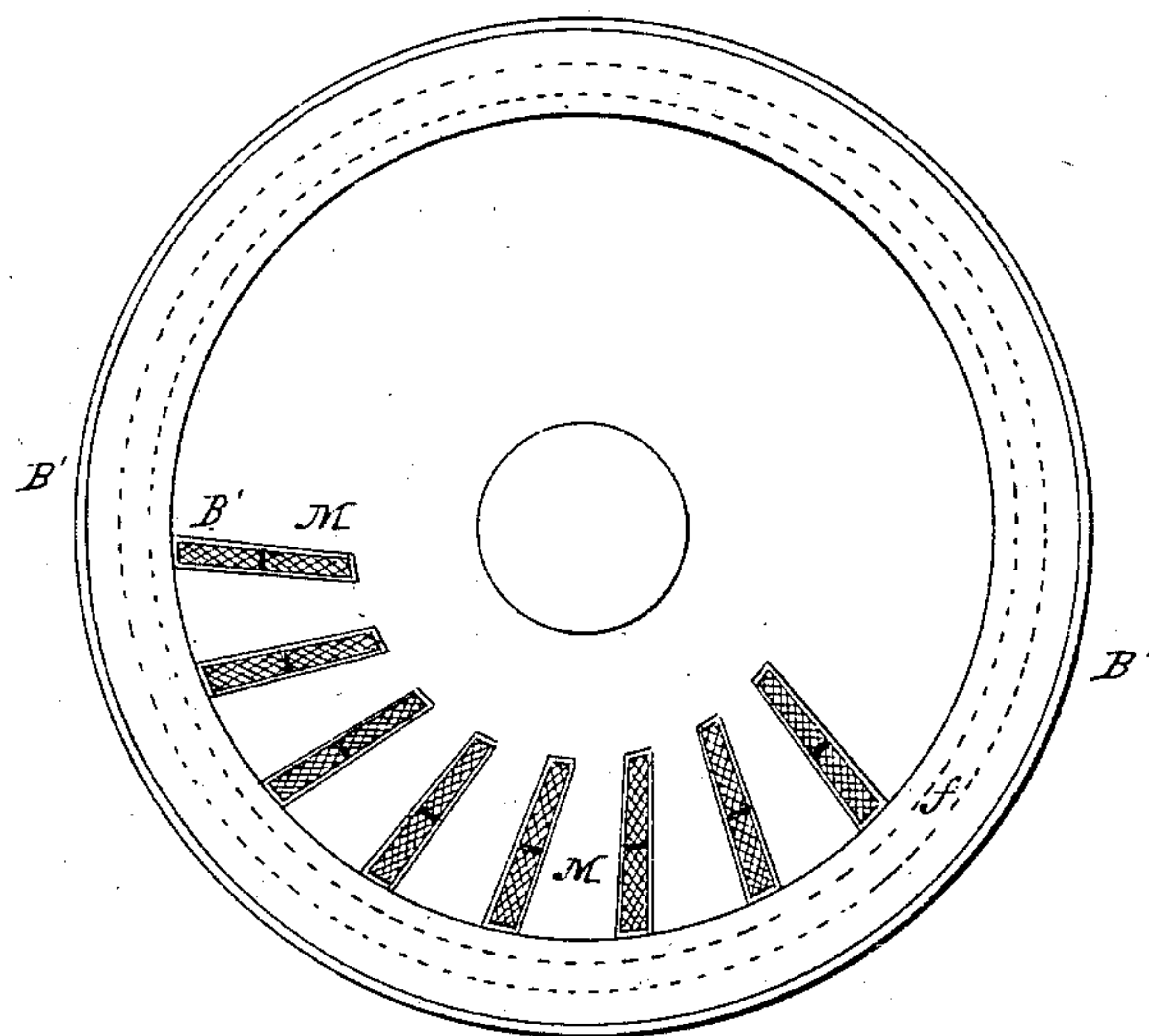


Fig. 2

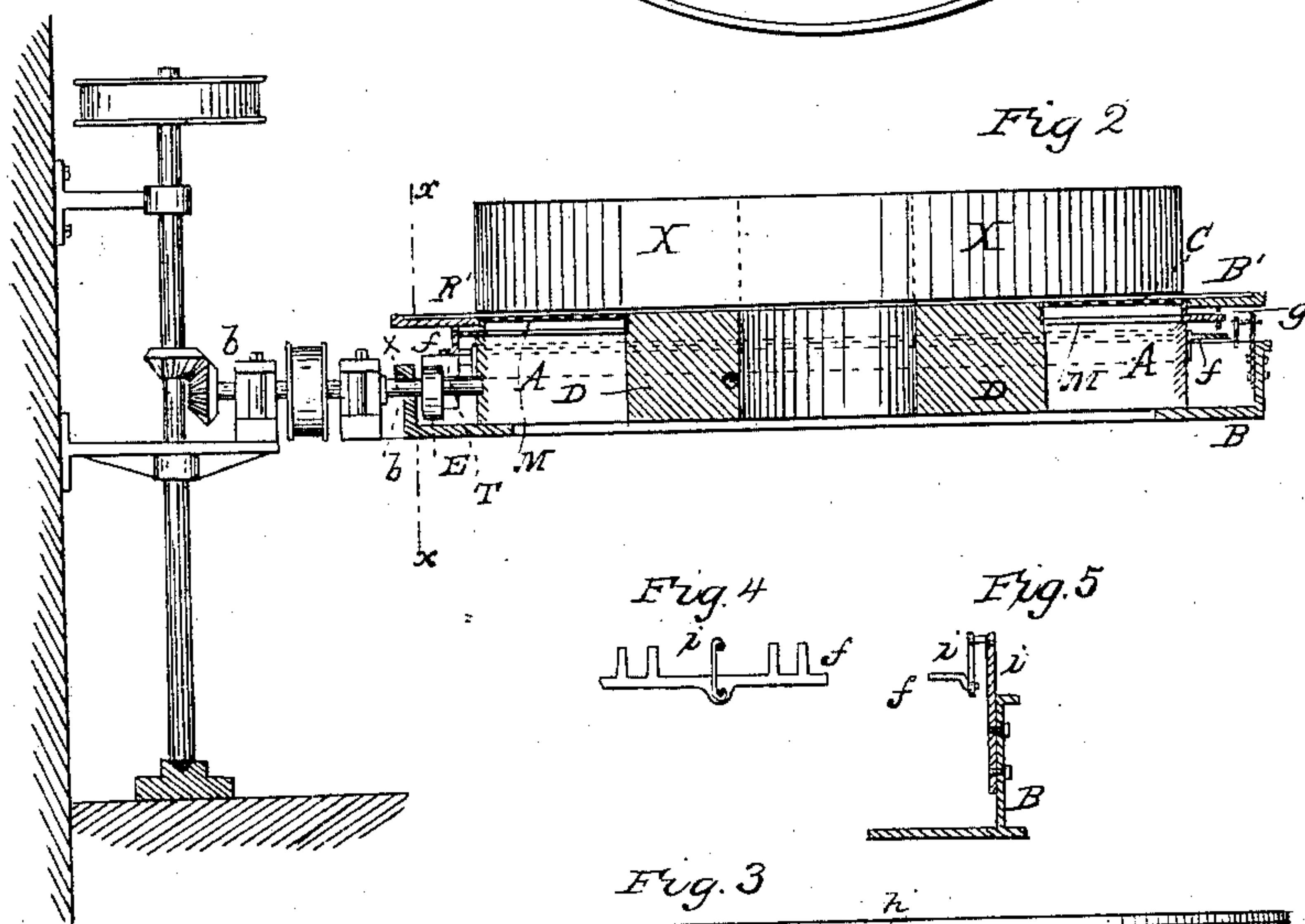
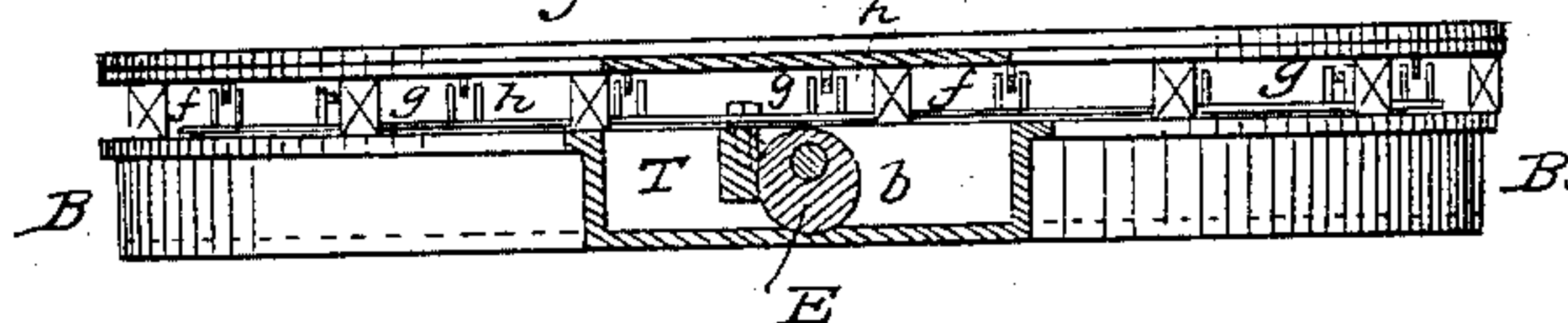
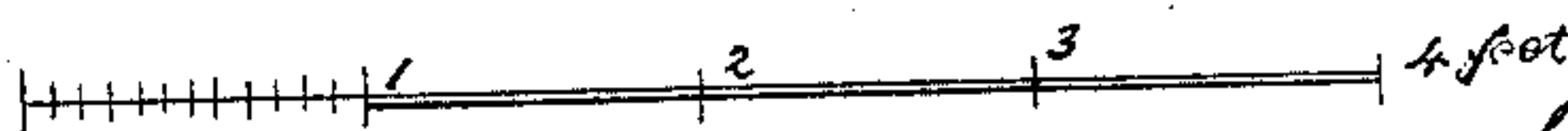


Fig. 3



WITNESSES  
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INVENTOR

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# UNITED STATES PATENT OFFICE.

JULES AUBIN, OF PARIS, FRANCE.

## IMPROVEMENT IN GRINDING-MILLS.

Specification forming part of Letters Patent No. 55,792, dated June 19, 1866.

*To all whom it may concern:*

Be it known that I, JULES AUBIN, of Paris, in the Empire of France, have invented certain new and useful Improvements in Millstones for Grinding Corn and other Substances; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings.

This improved millstone is composed partly of stone and partly of metal, as hereinafter described.

I take an iron plate with a number of iron boxes cast upon it, which boxes constitute hollow bolting-compartments. The stone proper is set upon this plate, occupies the center, and fills the interstices between the hollow compartments, and is the grinding agent. Each compartment forms a kind of channel, and is covered at top with a metallic or other cloth, to act as a sieve and afford passage to the flour. Such a millstone answers at the same time for grinding, bolting, and for aerating the flour. The top of each metallic compartment is just below the level of the stone proper, and in order to admit of adjustment upon the wearing of the stone I prefer to form the compartments in two parts, the upper of which is capable of being lowered by screws upon the lower part. In the rotation of the upper stone, placed over my improved millstone, the grinding takes place in the ordinary manner, and the flour, after passing through the cloth or sieve on the metal compartments, falls therein, while the bran or envelope is projected from the circumference of the stone.

Figure 1 of the accompanying drawings is a plan, and Fig. 2 a vertical section, of my improved millstone. Fig. 3 is a section through the line *x x* of Fig. 2.

B is a metal plate with a number of boxes, A, cast upon it. Each of these boxes is covered at top with a metallic or other cloth, C.

D is the stone proper. It is set upon the plate B, occupies the center, and fills up the interstices between the boxes A.

In the rotation of the ordinary upper stone, X, the grinding takes place in the ordinary manner, between the two stones X and D, the flour falls into the boxes A through the cloth C, while the bran or envelope is, as before stated, projected from the circumference of the stone.

To facilitate the bolting and prevent the

flour remaining on the cloths C, I produce an intermittent agitation of the upper part, M, of the boxes which receive the cloths. For this purpose I form an annular space round the periphery of the stone D, between the upper and lower plates, B' and B, in which space, at any convenient point, I fit an eccentric, E, actuated by a shaft, *b*. The eccentric E, by contact with a block, T, on which is a ring or disk, *f*, produces a slight movement of this ring. The ring gives a proper contour to the stone D, and on its surface I form blocks *g*, which, by butting against the ends *h* of the upper parts, M, of the boxes, impart a shaking movement to these parts, which repercusses on the cloths C, and thereby prevents adhesion of the flour and facilitates the bolting by a sifting motion.

The ring *f* may be connected by links or articulated joints, *i*, (see the detached views, Figs. 4 and 5,) or other analogous arrangement. I can avoid the connection of the ring *f* with the blocks *g*, or dispense with these blocks, by casting with the ring keys equal in number to the parts M. In the slight alternate movement imparted to the disk by the eccentric E, these keys, which receive the ends *h* of the parts M, transmit to them the vibratory motion which facilitates the bolting.

The plates B B' are prevented from shaking by blocks placed between them, or in any other convenient manner. The upper parts of the boxes can be lowered when required, in order that as the stone D becomes worn they may be prevented from coming in contact with the upper stone, X. The number, position, size, and shape of the boxes A may be varied at will; and,

Having now described the nature of my said invention, and in what manner the same is or may be performed, I declare that I claim—

Constructing millstones with metal boxes or compartments let into the stone and covered with metallic or other cloth, substantially in the manner and for the purposes hereinbefore described.

In testimony whereof I have signed my name to this specification before two subscribing witnesses.

J. AUBIN.

Witnesses:

E. PALLEGAIN,

E. SHERMAN GOULD.