J. AUBIN.

Mill.

No. 167,290. Patented Aug. 31, 1875.

fig. 1.

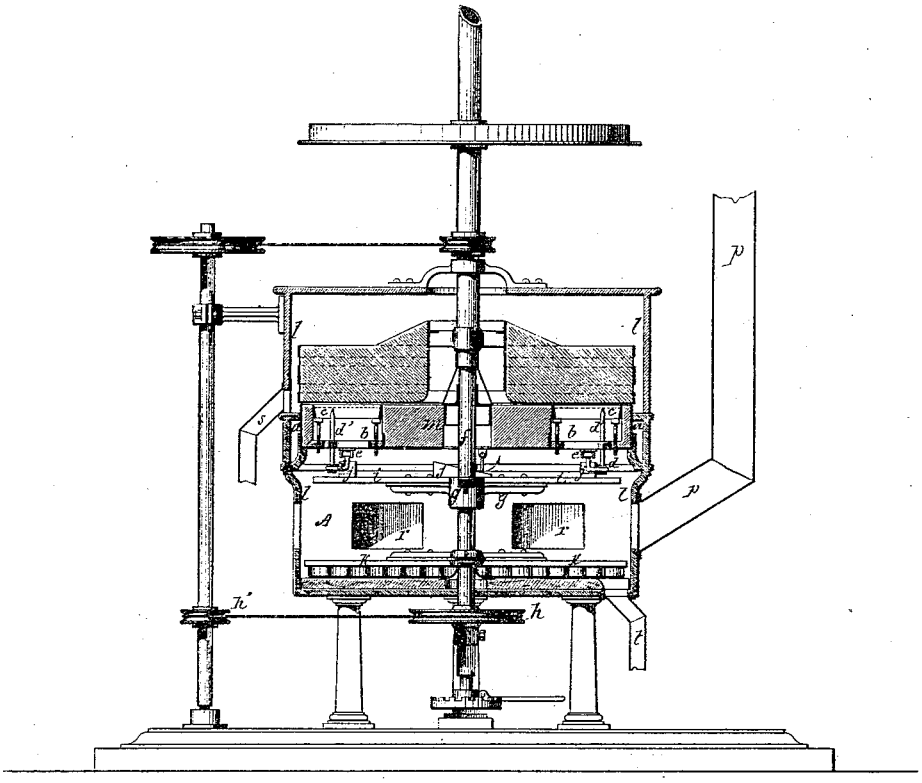


fig. 4.

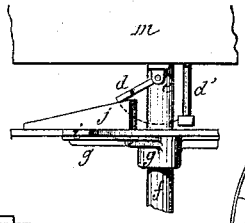


fig. 3.

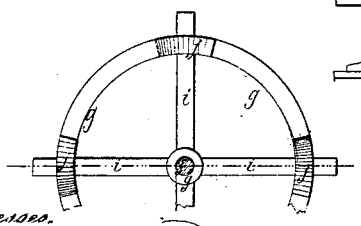
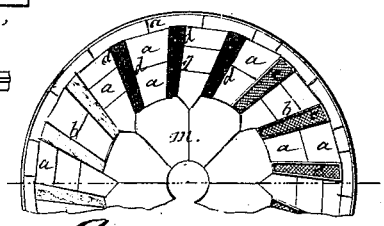


fig. 2.



Witnesses.

H. Shumway

Clara Broughton.

Jules Aubin Inventor.

By atty.

John O. Earle

UNITED STATES PATENT OFFICE.

JULES AUBIN, OF PARIS, FRANCE.

IMPROVEMENT IN MILLS.

Specification forming part of Letters Patent No. **167,290**, dated August 31, 1875; application filed April 20, 1875.

To all whom it may concern:

Be it known that I, JULES AUBIN, miller, of Paris, France, have invented an Improvement in Grist-Mills, of which the following is a specification:

My invention has for its object improvements in the mill for which Letters Patent were granted to me, dated the 19th of January, 1866, No. 55,792, and which consists in the arrangement of a cast-iron trough or platform, surmounted by tubes, with a filling of grinding-stones between the tubes, in order thus to constitute the body of the millstone. The tubes are inclined in relation to the direction of the platform, and upon the upper part of each a movable box, provided with a metallic cloth or wire-gauze, or other means of sifting, is placed. This millstone comprises, then, a metallic platform, serving as a seat for the grinder, subdivided into several compartments, to constitute as many orifices for ventilation and sifting for the passage of the flour.

My present improvement relates to a new arrangement for the purpose of giving to the metallic cloths or wire-gauze a vibratory movement, free from deterioration and excessive wear and tear, capable of easy application to existing millstones, while preserving to each pair of the latter their ordinary appearance.

Reference is made to the accompanying drawings, which form part of this specification, and in which Figure 1 is a sectional elevation of a mill embodying my invention; Fig. 2, a plan of the fixed stone; Figs. 3 and 4, detached views.

The millstone is composed of a trough, *a*, cast with perforations, so as to form hollow compartments *b*. This trough *a* serves as a seat or setting for the grinding-stone, which fills the interstices between the compartments and forms the active body of the mill. The sifting compartments or chambers *b* receive at their upper part the sifting-boxes *c*. These boxes are cast with a perpendicular stud, *d'*. *d* is a lever hinged to the under side of the fixed stone *m*. Each box has its lever arranged so as to be able to strike upon the corresponding vertical stud *d'*. A wheel, *g*, is arranged below upon an axis, *f*, driven by a pulley, *h*, receiving its rotation from another pulley, *h'*, which is mounted upon a driving-shaft. On this wheel *g* are fixed brackets *i*, having each an inclined plane, *j*, which forms a cam. The cams *j* and the levers *d* correspond, being arranged around the same circumference. These cams, four or more in number, successively lift the levers, and then leaving them, the latter fall of their own weight and strike upon the rods *d'*. The shock thus given to the wire-gauzes effects the sifting. The axis *f* carries a rack, *k*, leading the flour into lateral collectors. Each pair of stones, enveloped by its hooping *l*, preserves the ordinary appearance, and thus hides all the interior movement. The hooping *l* extends below the fixed grinding millstone, and in the form of a chamber, A, serving as a collector for the flour. In the side of the hooping *l* are arranged openings *r r*. With an exhausting-pipe, *p*, this constitutes an aspirator, in order to prevent the grinding from cumbering the stone and choking the return-chamber, and to facilitate, by the aid of the sifting, the passage of the flour through the sifting-boxes *b*. The bran falls by the conduit *s*, and the flour falls by the conduit *t*.

I may add, in case of need, to the conduits or pipes *s* and *t*, a system of sifting intended to extract the little particles of rednesses which may have got through the metal compartments.

Having described the nature of my said invention, and the manner in which the same shall be carried into practice, I declare that I claim as my improvement in millstones for grinding corn and other substances—

In combination with the sifting-boxes *c* in a millstone, the rod *d'*, extending down from each box, the levers *d*, and revolving cams *j*, substantially as and for the purpose described.

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

J. AUBIN.

Witnesses:

ROBT. M. HOOPER,

ARMENGAUD, Jeune.