No Printed Specification Available

9508X

J. C. GENTRY.

Grain Mill.

Patented Mar. 18, 1836.

Fig 1

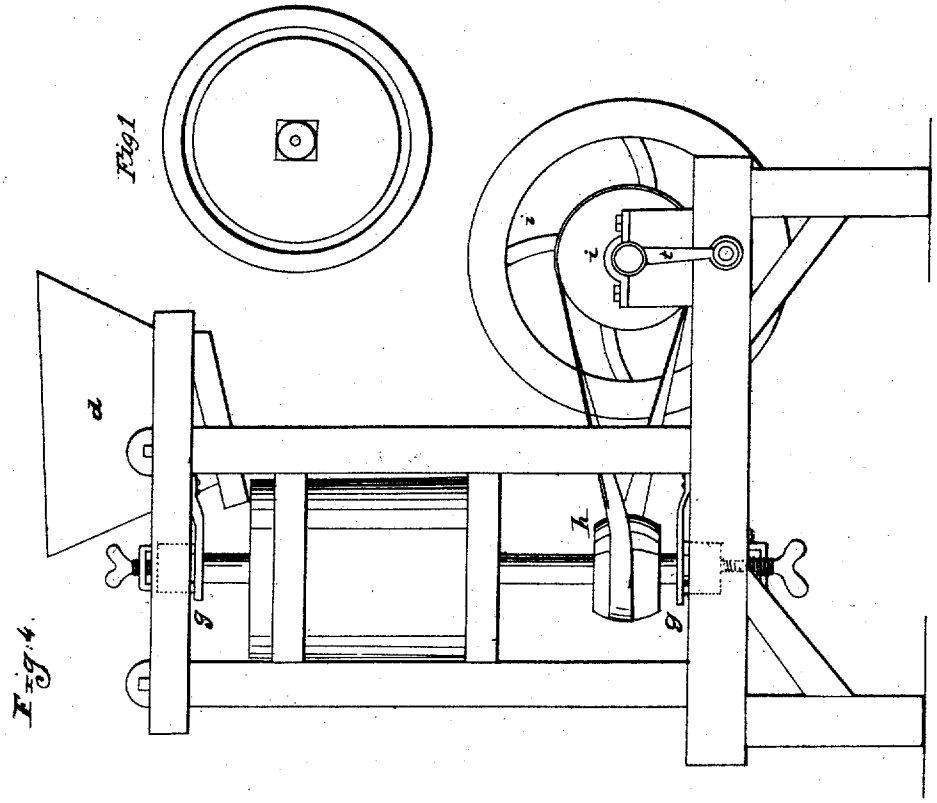


Fig 4.

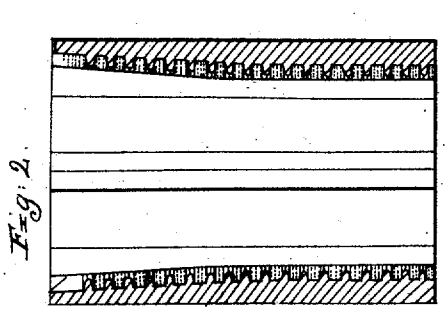


Fig 2.

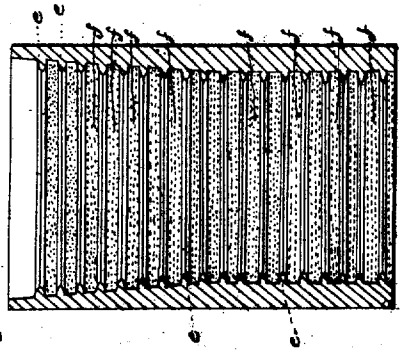


Fig 3.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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Joseph C Sentley of Dayton Ohio

Letters Patent.

The Schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Joseph C Sentley himself of his Improvement in the Metallic Mill for grinding Grains and other substances.

To all to whom these presents shall come: Be it known that I Joseph C Sentley of Dayton in the County of Montgomery and State of Ohio, have invented a new and useful machine which I denominate "Sentley's Metallic Mill" for grinding all kinds of Grain and other materials usually ground upon Mills and which I describe as follows Viz. The "Sentley Metallic Mill" is constituted of one metal cylinder of any dimensions, the body of the Cylinder to be composed of cast Iron, corded and plaited or banded exteriorly with cast steel, or any other suitable metal, and turned to a true surface: and a metalic concave, (with steel plates inserted), with a smooth interior surface, being of the same length of the cylinder, and nearly of the same curve, and so formed as that the interior surface shall nearly correspond to half the circumference of the exterior surface of the cylinder, ranging from such corresponding circle only, from a point to commence about half way from the lower edge of it when placed horizontally against the cylinder: and the variation from that point up to be such as to admit the various kinds of grain to be introduced above, whilst the other portions of the concave are near enough to the cylinder to gradually reduce the grain to flour or meal. This cylinder and concave are to perform the operation of grinding. The concave being permanently placed in a frame of wood or iron, and the cylinder so connected with it as to turn within it. The concave being placed in such relation to the cylinder that the person tending the mill, may by turning screws above and below, set the mill to grind coarse or fine as he may desire. A hopper and shoe are to be placed above, to hold and introduce the grain &c. The interior surface

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of the concave is to be so cast as to receive the cast steel or other metalic ribs at small intervals. These ribs being formed in the manner of a dovetail, to be driven into the grooves, left in the castings, and made to project their surfaces, about one sixteenth of an inch beyond the inner smooth surface of the concave. The smooth surfaces, both of the ribs in the concave and the cylinder, are to be picked by a cast steel pick so as to produce serrated surfaces to each other. For the purpose of avoiding any injury which these surfaces might sustain from any foreign substance which might accidentally be introduced into the mill a stiff spring is placed at each box in which the cylinder revolves, which springs will yield to any resistance offered by substances of the kind referred to, and will enable them to pass through the mill without of feeling an injury. At either or both ends of the shaft which passes through the cylinder there is a pully to attach the mill to the driving power. What I claim as my invention, discovery, or improvement in the above machine, is the steel or other metalic ribs, and the manner of fixing them in the concave, and the cast steel or other suitable metal plates or bands on the cast cylinders. The manner of relieving the action of the cylinder by springs back of the box, on which the journals rest. The manner of picking the cylinder and ribs presenting the sharp edges to each other as described above

Witnesses
Wm. Richards.
Jas. Hunter.

Joseph C. Stanley

Drawing rec'd.

(689 words