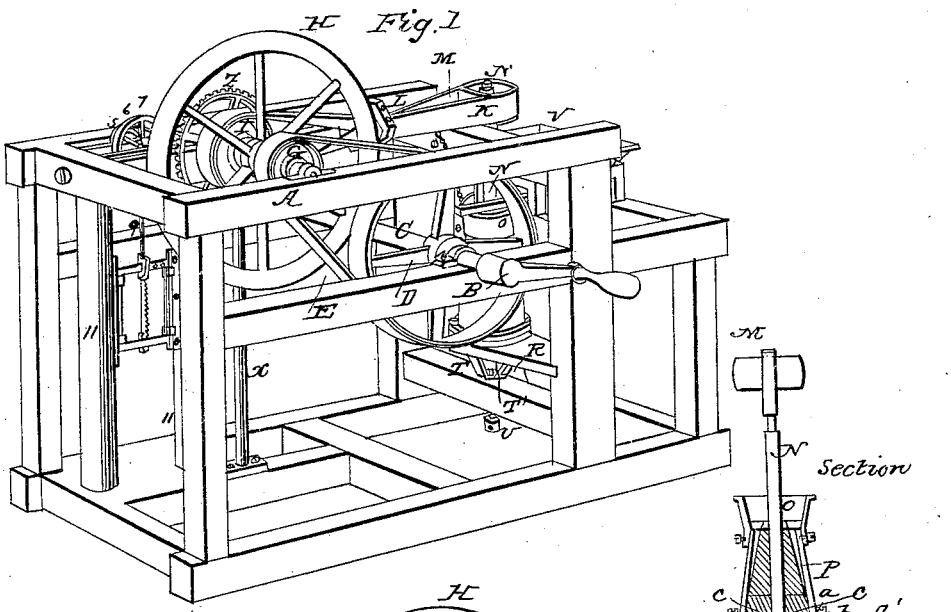
S. SHELDON.

Grain Mill.

No. 2,251. Patented Sept. 11, 1841.

Fig. 1



Section

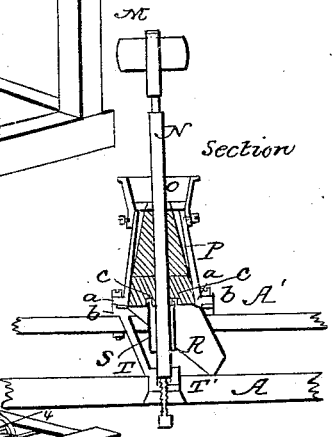
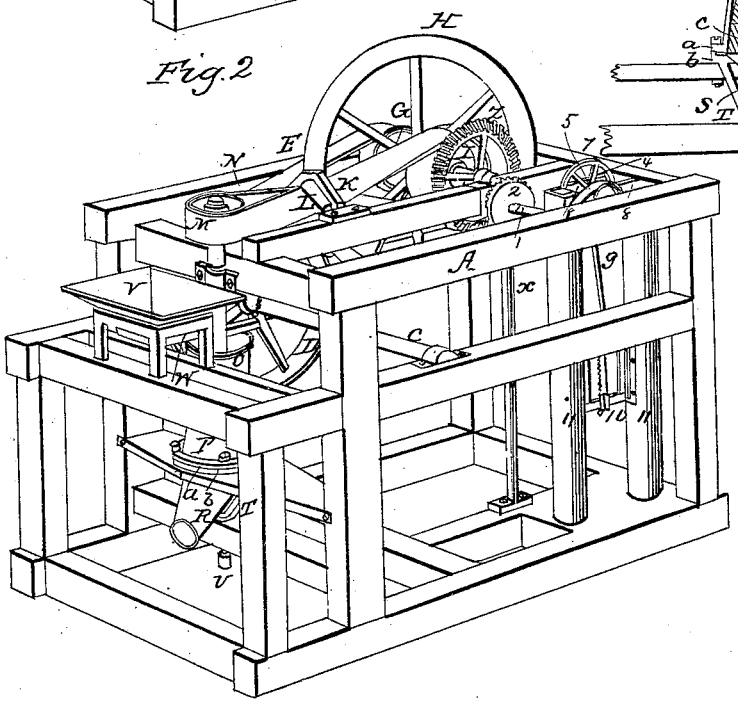


Fig. 2



UNITED STATES PATENT OFFICE.

SAML. SHELDON, OF CINCINNATI, OHIO.

CONICAL GRIST-MILL.

Specification of Letters Patent No. 2,251, dated September 11, 1841.

To all whom it may concern:

Be it known that I, SAMUEL SHELDON, of the city of Cincinnati, in the State of Ohio, have made an improvement in the Manner of Constructing a Mill for the Grinding of Corn and of other Seeds or Substances; and I do hereby declare that the following is a full and exact description thereof.

I usually combine my machine for grinding, with an apparatus for sawing, applying the same power, by a new and useful combination of machinery, so as to actuate both mills at the same time; and in the drawing which accompanies this specification, I have represented the two as so combined, but I will in this specification confine my claims to the improvement made by me in the apparatus for grinding, leaving the other parts shown in the drawings, so far as they have been, or may be, improved by me, to be secured by separate Letters Patent therefor.

Figures 1, and 2, in the accompanying drawings represent, in two perspective views taken from opposite sides of my combined sawing and grinding machine, the manner in which I intend to connect these with each other; but of the parts thereof which I do not intend to include in the Letters Patent of which this specification is to make a part, I deem it unnecessary to give any further description than that which is afforded by the references made on the sheet of drawings containing Fig. 3; which figure gives a sectional view of my mill for grinding. The parts thereof which are represented in Figs. 1, and 2, are designated by the same letters by which they are designated in Fig. 3.

My grinding mill consists principally of an exterior shell, or case, of iron, or steel, and of a cone, or nut, made to revolve therein, and which are duly furnished with teeth, grooves, or furrows, in the ordinary manner of forming such conical cases, shells, or nuts.

M, is a whirl, or pulley, on the upper end of the shaft, or spindle, N, by means of which the interior cone, or nut, Q, is made to revolve. At the lower end of the shell, or case, P, I affix a meal spout R. This spout, at its upper end, where it is attached to said case, has a mouth, or opening, somewhat larger than the lower end of the interior of said case, to enable it to receive all the meal, flour, or other ground substance, from every part of the circumference of the cone, or nut, Q, and to admit said nut to descend to the lower end of the shell, or case, P, or even lower, without obstruction from the meal spout. The lower end of the case P, is furnished with a flanch by which it is united at *a*, *a*, to a flanch *b*, *b*, which constitutes the upper part of a casting of metal connected to the oil box T′, by two, or more, arms T; said flanch *b*, being shown as resting upon the part A′, of the frame. The spout R, which leads the meal into the meal chest has a flanch turned around its upper edge, which is received, and confined, between the flanches *a*, and *b*; the meal, or other ground material, is thereby collected by the spout from every part of the lower edge of the conical nut Q, and said nut may descend to some depth within the upper edge of the spout, when it is set to grind coarse.

S, is a tube, which may be of tin, that passes through the spout R, and is closed by a plate at its lower end, which plate surrounds, and is in close contact with, the spindle N. This tube is soldered, or otherwise firmly attached, to the spout R, and it ascends up above the bottom of the conical nut, Q, passing into a groove *c*, *c*, made therein to receive it, this groove is to be of such depth as to allow the conical nut to be moved up or down to the required distance, while the tube is still retained within it. By this device, all dust from the meal, or other article, is prevented from passing down alongside of the spindle N, by which it might find its way into the oil cup T′. Within this cup the lower end of the spindle runs, and it is raised, or lowered, by means of the set screw U; the step is thus kept constantly lubricated.

Having thus fully described the manner in which I construct and arrange the respective parts of my mill for grinding corn, or other substances, what I claim therein as new and desire to secure by Letters Patent, is—

The manner in which I have arranged and combined the spout R, the tube S, and the nut, or cone Q, for the purpose of collecting the meal, or other article that has been ground, and of preventing dust from passing into the oil box, as set forth.

SAMUEL SHELDON.

Witnesses:

THOS. P. JONES,

M. JONES.