S. P. MOORE.

Hemp Brake.

No. 19,255. Patented Feb. 2, 1858.

Fig. 1.

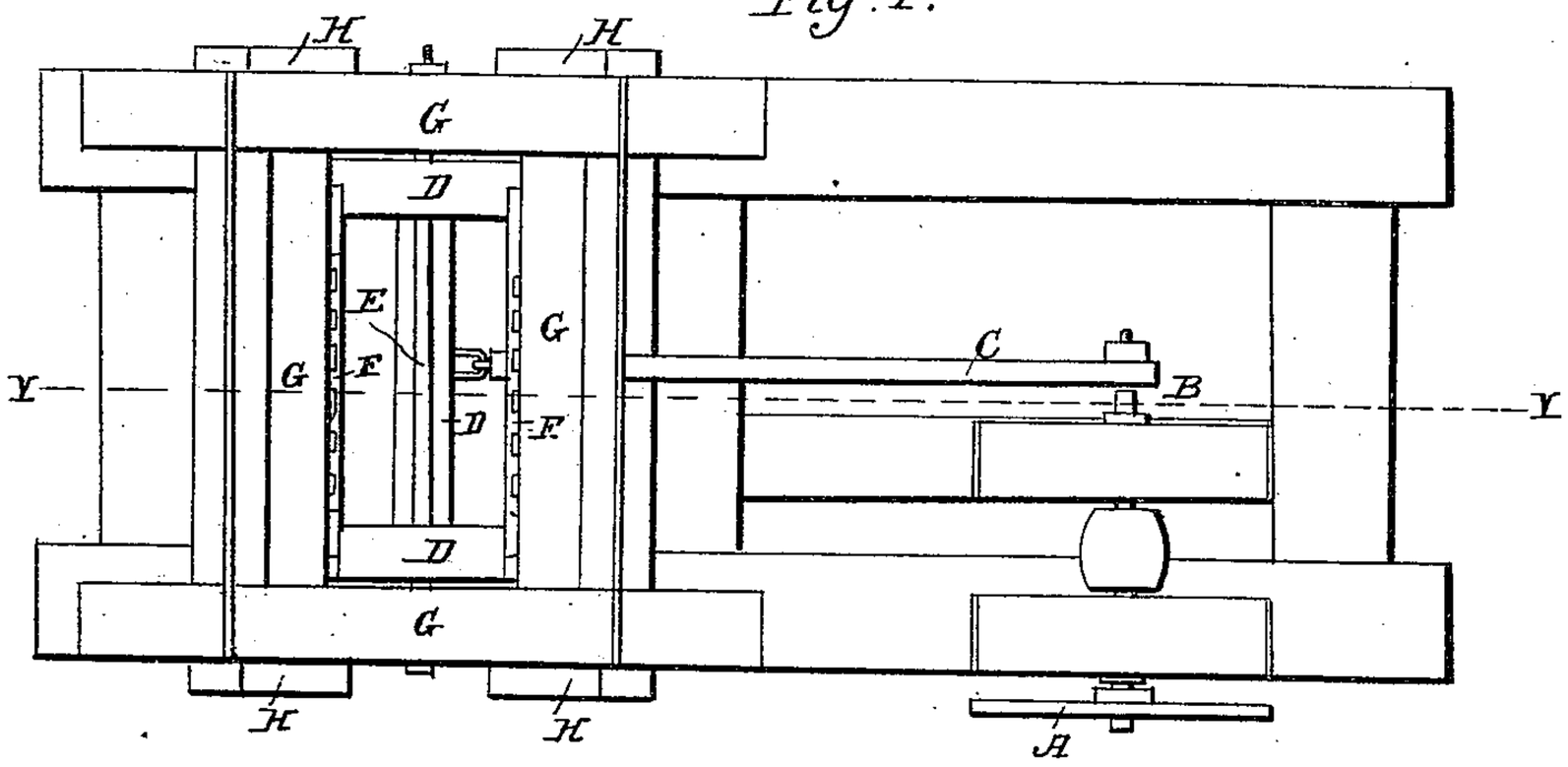

Fig. 2.

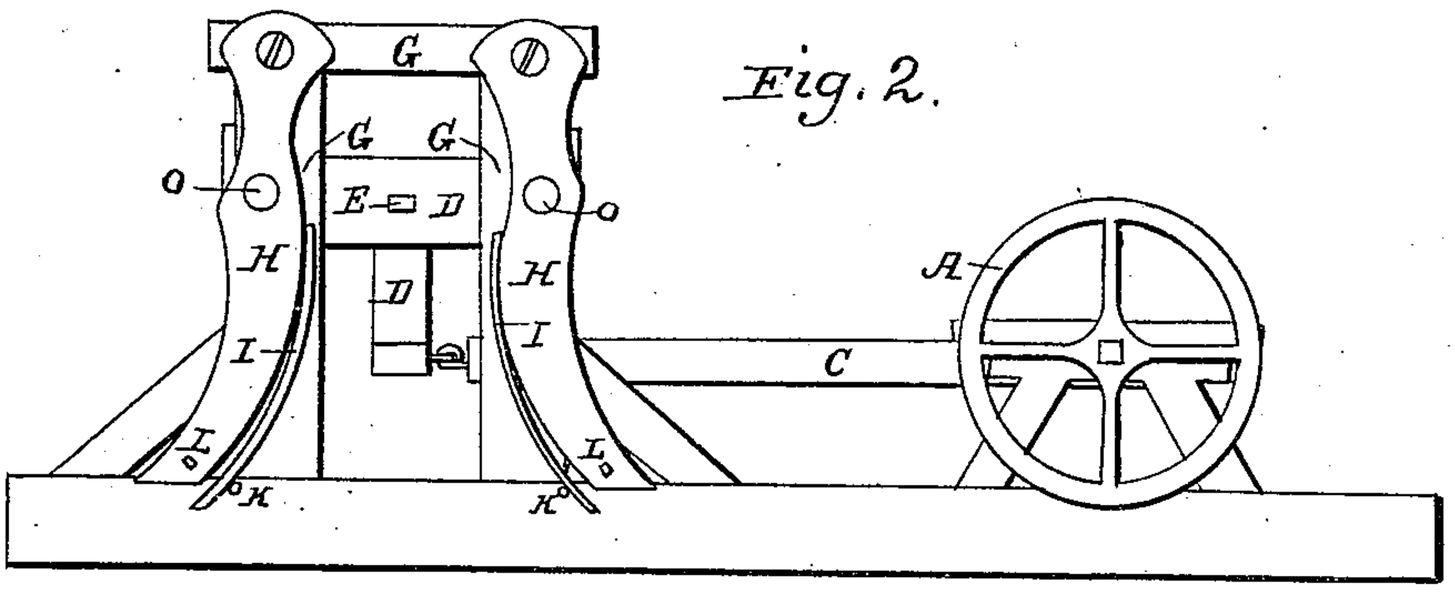

Fig. 3.

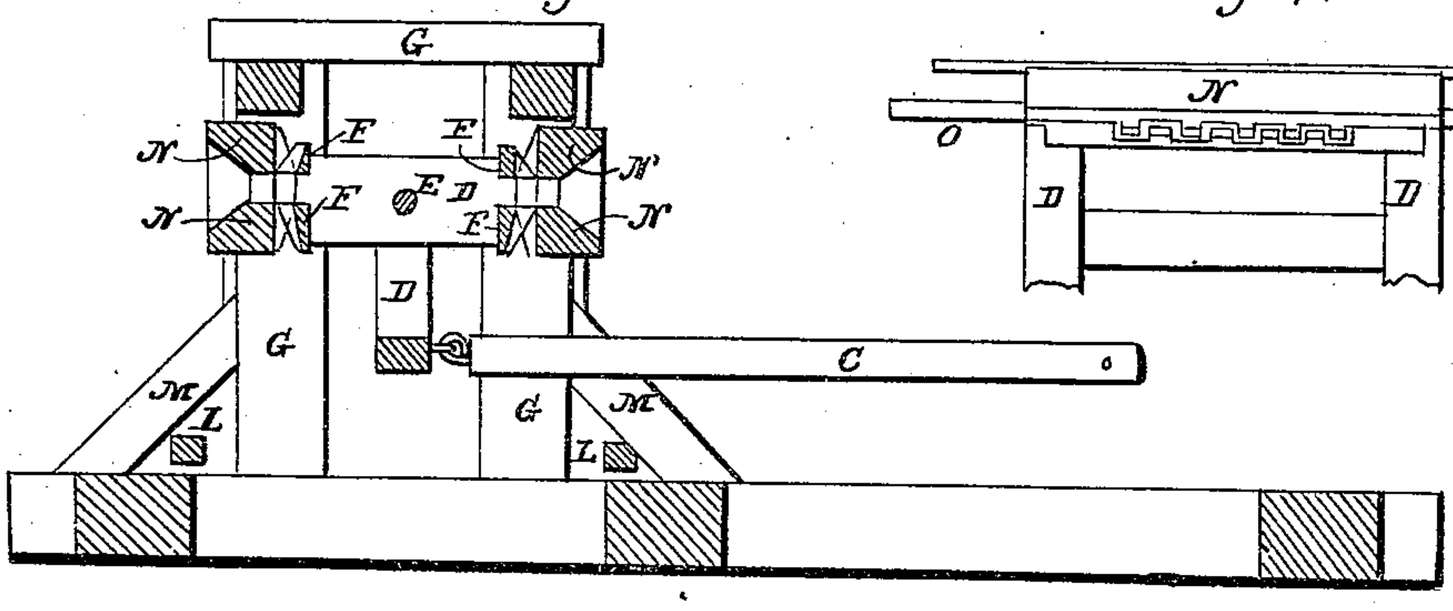

Fig. 4.

Witnesses:

Jos. Boyston

Locke Hardeman

Inventor:

Solomon P Moore

UNITED STATES PATENT OFFICE.

SOLOMON P. MOORE, OF ARROW ROCK, MISSOURI.

IMPROVEMENT IN HEMP-BRAKES.

Specification forming part of Letters Patent No. **19,255,** dated February 2, 1858.

To all whom it may concern:

Be it known that I, S. P. MOORE, of Arrow Rock, in the county of Saline and State of Missouri, have invented an Improvement in Hemp-Brakes, the construction and operation of which I have described in the following specification and illustrated in the accompanying drawings with sufficient clearness to enable competent and skillful workmen in the art to which it pertains or is most nearly allied to make and use my invention.

My said invention consists in serrating or corrugating the faces of the vibrating brakes in a transverse direction to their breaking edges, between which the hemp is passed, so that the fibers may be thoroughly broken whatever direction the hemp may take in passing between the said surfaces, as hereinafter more fully set forth.

In the accompanying drawings, Figure 1 is a plan of the machine. Fig. 2 is a side elevation. Fig. 3 is a vertical section through the line Y Y. Fig. 4 is a plan, looking downward, of one of the jaws or crushing-surfaces, hereinafter described.

The motive power being applied to the wheel A, causes the crank B on the same axis to revolve, thereby communicating a reciprocating motion to the horizontal bar or rail C, and this, being attached to the frame D D in the manner shown, causes it to swing or oscillate on the horizontal axis E through a small circular arc. The outer vertical faces, F F, of the sides of this frame are serrated or corrugated, and are two of the surfaces claimed as part of this invention. This frame D D works in a larger frame, G G, which supports the axis E of the smaller frame. The larger frame supports also the curved pieces H H, attached to it outwardly at the points J J, upon which they are permitted to vibrate. The springs I I are attached by their upper ends to the inner edges of these pieces, as shown, and are prevented from expanding in consequence of their lower ends being confined by the dowels K K, let into the sill of the machine and projecting from its surface. By this arrangement the two curved pieces H H on either side of the machine are so acted upon by the springs as to force the lower extremities farther apart; but this action of the springs is limited by means of the rail L, (which connects the lower extremities of the pieces H on the opposite sides of the machine,) being forced against the inclined pieces M M of the larger frame, and thereby preventing any further motion in that direction. These pieces H H support two other pieces or jaws, N N, at the points O O, around which points these jaws N N have a small angular motion. These jaws are hollowed on the outer vertical surfaces to receive the ends of the hemp, the inner surfaces being serrated, as before described, and coming nearly in contact with the outer serrated surfaces of the smaller movable frame, D D, the projections on either surface corresponding with and fitting into the indentations of the opposite contiguous surface. The hemp is broken by being passed in at the hollow or slot in the outer faces of the pieces N N, from which it is delivered and passed by the action of the machine between the serrated surfaces, before described, and in consequence of these surfaces being wholly serrated the fibers will be broken whatever direction they may take in passing through.

The pieces H H having a small angular motion round the points J J, and carrying the jaws N N, as before described, may, by pressing on the rail L, be moved in the direction of the springs, carrying with them the jaws N N, and thereby decreasing the distances between the serrated surfaces, thus enabling the operator to crush the fibers to any extent deemed necessary.

The approximation of the crushing-surfaces may be partially maintained by the pressure of the operator's foot against the rail L, or it may be adjusted and rendered permanent by the pressure of a screw, which may be easily adapted to that purpose.

I do not claim any of the improvements embodied in the machine for which a patent was granted to S. A. Clemens in 1853.

The particular improvement which constitutes my said invention, and which I claim as having been originally and first invented by me, is--

So corrugating the contiguous faces of the brakes in a transverse direction to the general line of the feed and general line of the longitudinal surfaces of said brakes as to prevent the fibers or stalks from escaping the proper action of the machine by a change of direction, when combined with the brakes vibrating in relation to each other, substantially as described and shown.

Witnesses: SOLOMON P. MOORE.

JESSE MELLAHAN,

J. LOCKE HARDEMAN.