T. ROWE.

Machine for Crushing Linseed. &c.

No. 36,799. Patented Oct. 28, 1862.

Fig: 2.

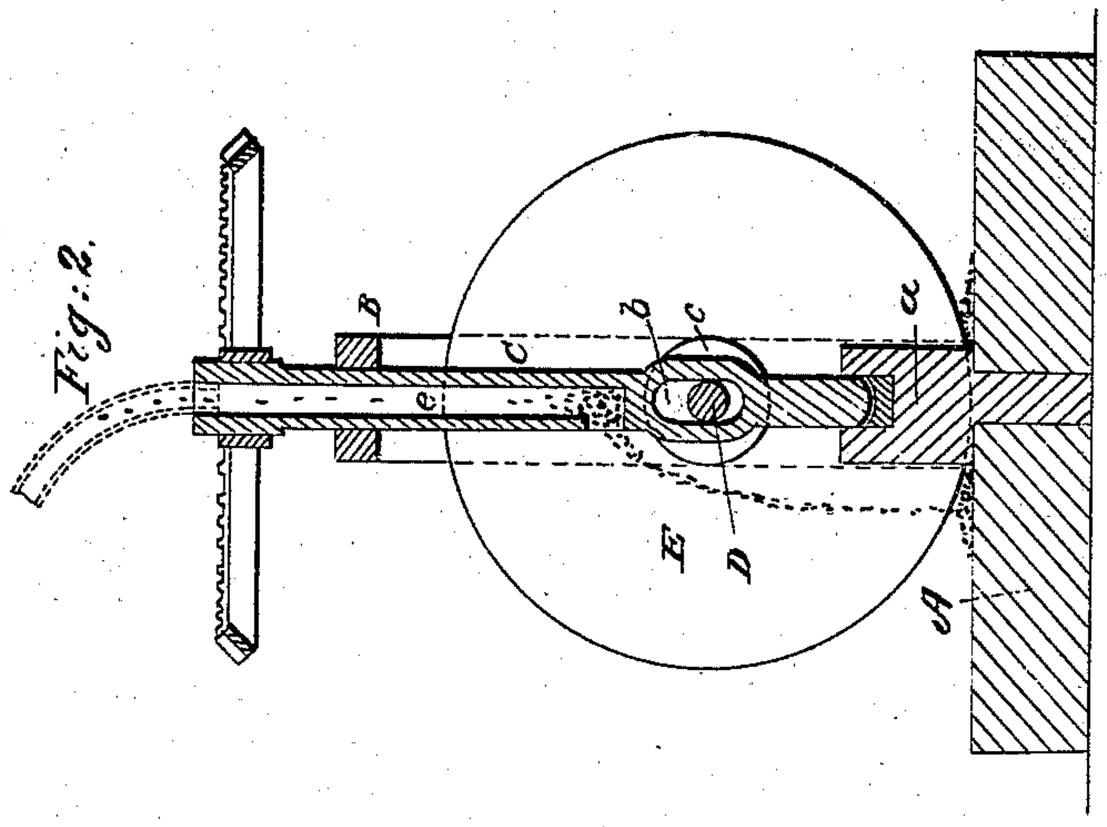
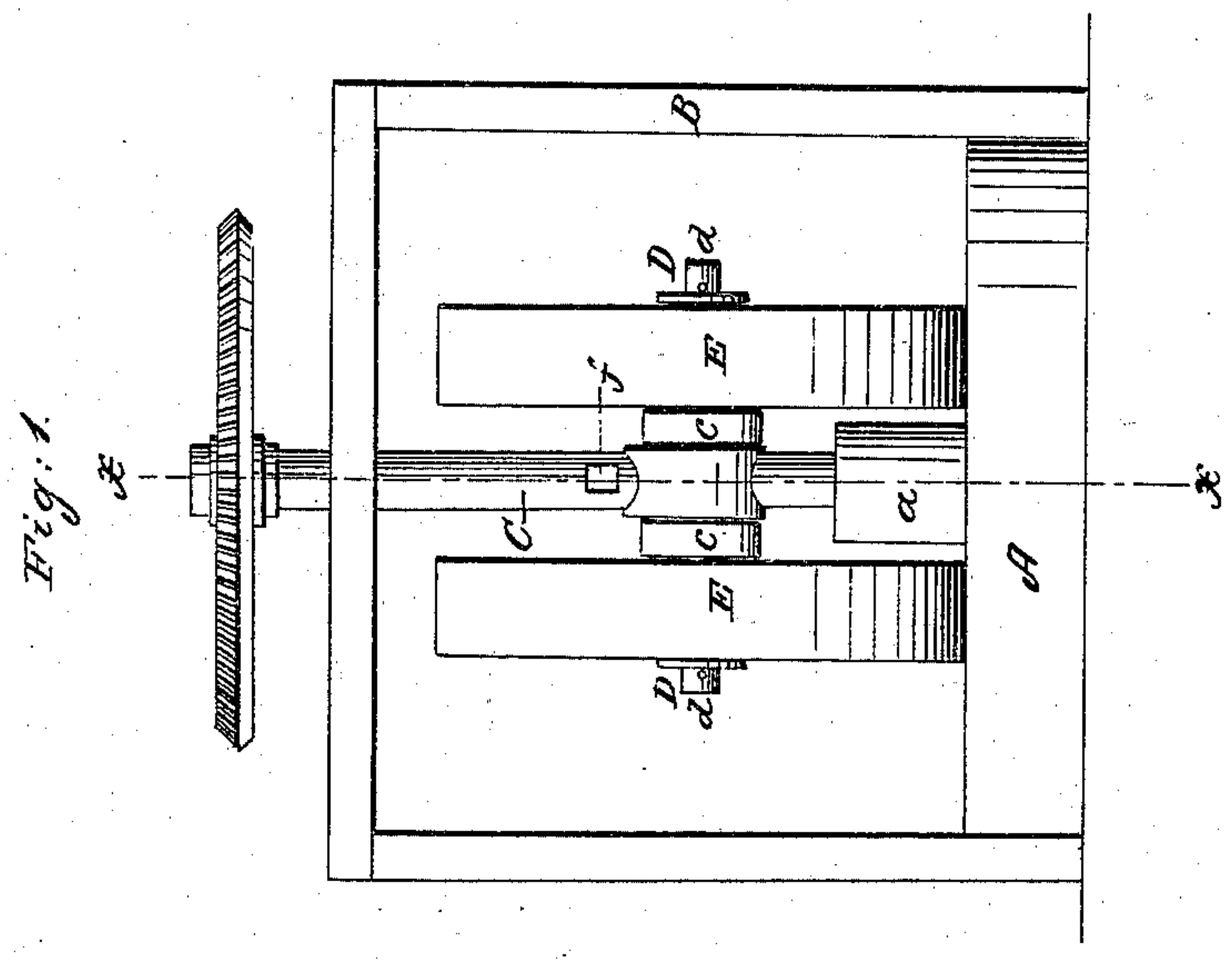


Fig: 1.



Witnesses:
A. Gawley
Timothy Shine.

Inventor:
Thomas Rowe.

UNITED STATES PATENT OFFICE.

THOMAS ROWE, OF NEW YORK, N. Y.

IMPROVEMENT IN MACHINES FOR CRUSHING LINSEED, &c.

Specification forming part of Letters Patent No. **36,799**, dated October 28, 1862.

To all whom it may concern:

Be it known that I, THOMAS ROWE, of the city, county, and State of New York, have invented a new and Improved Machine for Crushing Linseed or other Substances; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a side elevation of my invention. Fig. 2 is a vertical central section of the same, taken in the plane indicated by the line *x x*, Fig. 1.

Similar letters of reference in both views indicate corresponding parts.

The object of this invention is an improvement in that class of machines for crushing or mixing any substance or substances in which two disks or wheels are employed which are connected to a rotary vertical shaft by means of a horizontal axle, so that they have an independent rotary motion around said horizontal axle on a stationary trough or platform.

The invention consists in introducing the substance to be crushed through a channel passing down through the center of the vertical shaft in such a manner that said substance is fed between the crushing-wheels, and that the required supply can be effected by an elevator or other mechanical means, dispensing with the hand-labor generally employed for this purpose.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation with reference to the drawings.

A represents a platform or table on which the operation of crushing is to be performed. Said table is intended to be provided with a projecting flange, to prevent the substance to be crushed dropping off over the edge of the table before the operation of crushing is accomplished. This table is surmounted by a frame, B, the upper cross-bar of which is perforated so as to form the bearing for a vertical shaft, C, which is stepped in a boss or projection, *a*, rising from the center of the table A. Said shaft is provided with a longitudinal slot, *b*, to receive the horizontal axle D, which carries the crushing wheels or disks E. The axle D passes loosely through the slot *b*, so that it is free to rise and fall, and that the crushing-wheels can accommodate themselves to the larger or smaller quantity of the substance to be crushed, that may be distributed over the table A. That part of the shaft C through which the axle D passes is made thicker than the rest, so that the slot *b* does not weaken it too much, and that it retains sufficient strength to resist the strain to which it will be exposed during the operation of crushing. The crushing-wheels E are put loosely on the axle D, leaving them free to rotate independent of each other and of said axle; and they are kept at the desired distance apart by means of thick washers or plates *c*, placed between them and the shaft C. They are prevented from moving on the axle in a longitudinal direction by pins *d*, inserted in the ends of the axle, or by any other convenient means.

The substance to be crushed is introduced through a channel, *e*, which passes down through the center of the vertical shaft C, and said substance discharges through an aperture, *f*, which is close above the slotted part of the shaft. A suitable apron may be attached to the shaft opposite the aperture *f*, to prevent the substance to be crushed flying out beyond the crushing-wheels. By the use of this central channel the substance to be crushed is introduced, always and without fail, between the crushing-wheels; and, if desired, said substance may be raised to the mouth of the channel by means of an elevator, so that it runs down into the same without requiring any hand labor.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

Introducing the substance to be crushed, through a channel, *e*, passing down through the center of the vertical shaft C, and discharging through the aperture *f*, between the crushing-wheels E, substantially as and for the purpose herein shown and described.

THOMAS ROWE.

Witnesses.

TIMOTHY SHIVE,

R. GAWLEY.