

(No Model.)

2 Sheets—Sheet 1.

M. INGRAHAM.
BOLTING REEL.

No. 259,160.

Patented June 6, 1882.

Fig. 2.

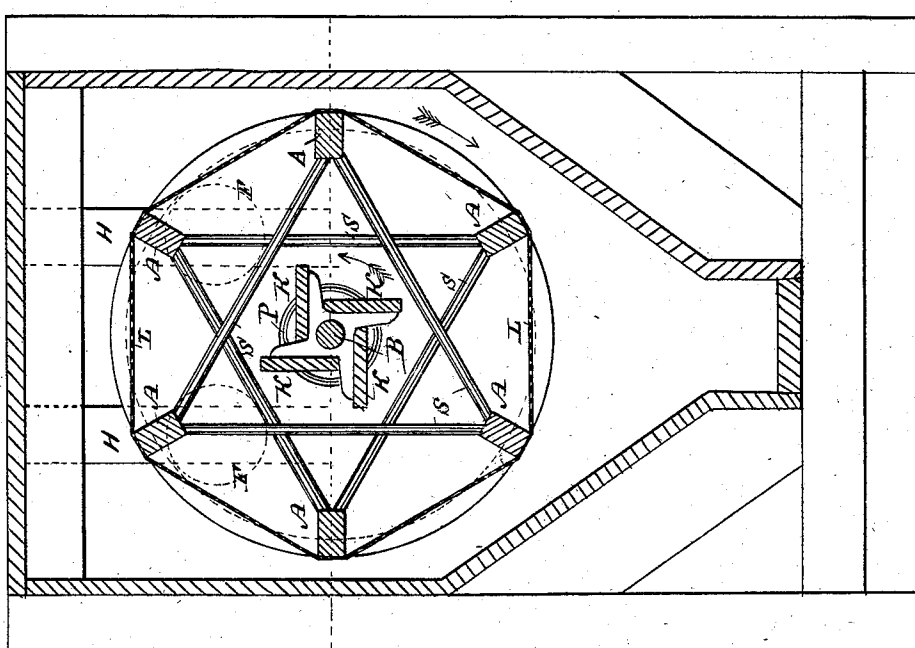
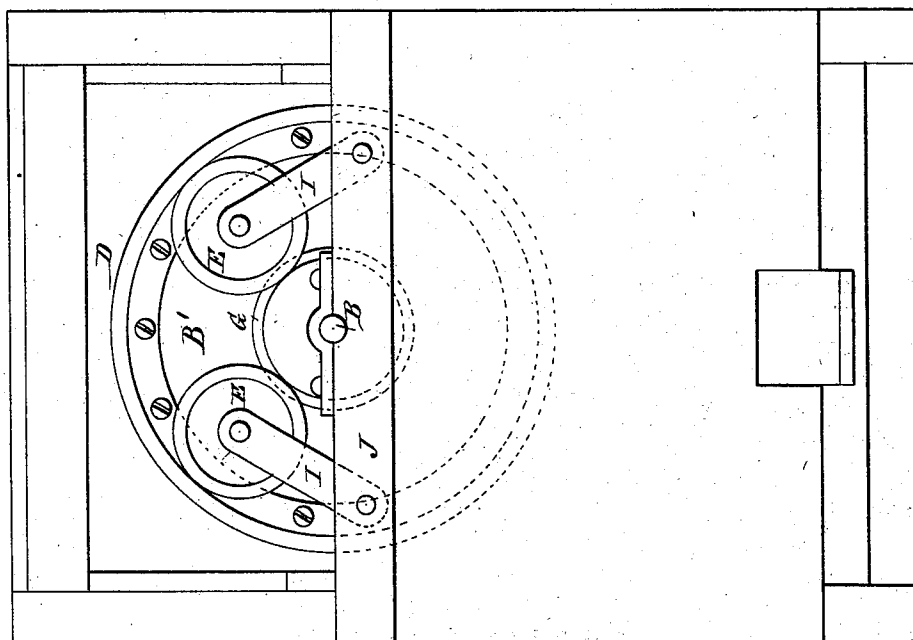


Fig. 1.



WITNESSES:

Theo. G. Hoston
C. Sedgwick

INVENTOR:

M. Ingraham

BY

Munn & Co

ATTORNEYS.

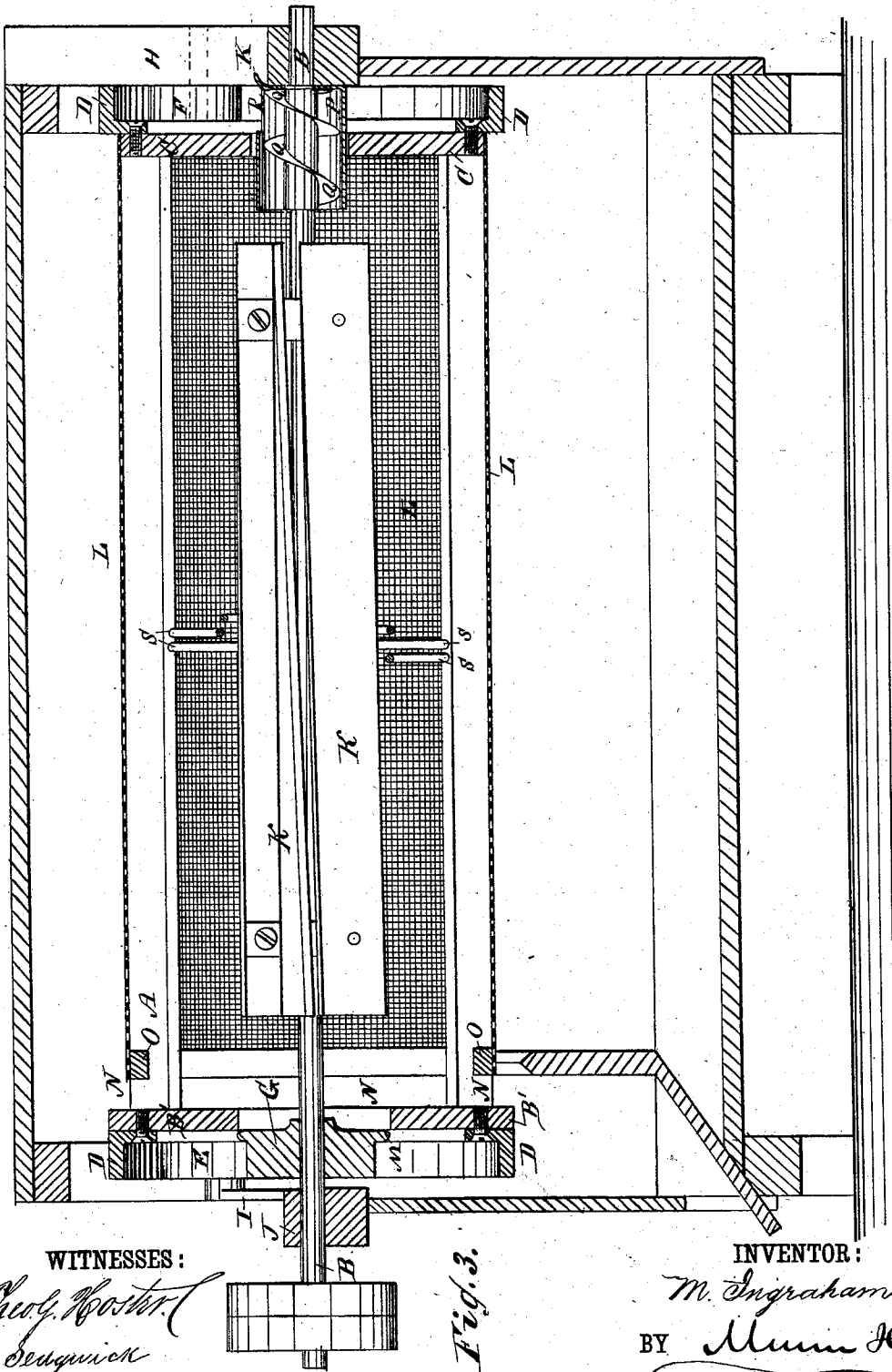
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2 Sheets—Sheet 2.

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No. 259,160.

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WITNESSES :

Theo. Foster.
C. Seagwick

INVENTOR:

M. Ingraham
BY *Mum Ho*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

MONROE INGRAHAM, OF DADEVILLE, MISSOURI.

BOLTING-REEL.

SPECIFICATION forming part of Letters Patent No. 259,160, dated June 6, 1882.

Application filed March 17, 1882. (No model.)

To all whom it may concern:

Be it known that I, MONROE INGRAHAM, of Dadeville, in the county of Dade and State of Missouri, have invented a new and Improved Bolting-Reel, of which the following is a full, clear, and exact description.

The invention consists in a novel construction and arrangement of parts, as hereinafter described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is an elevation of the tail end of the bolt. Fig. 2 is a transverse sectional elevation as seen from the tail end of the bolt, and Fig. 3 is a longitudinal sectional elevation.

A represents the bars of the reel, which, instead of being supported by arms or spokes of the shaft B, are in this improved bolt attached to heads B' and C, on each of which a flanged metal rim, D, is attached, the inner faces of which bear and roll upon the friction-wheels E and F for support and operation of the reel. At the driving end the wheels E rest on the driving-wheel G on the shaft B, to be driven thereby and to drive the reel, and they are held in position by links I, pivoted to them and to beam J. At the other end the wheels F, which are carriers only, are mounted in the uprights H. The reel is thus mounted with the interior space free for the application of fan-blades K to the shaft for urging the meal from the center to and through the cloth L by gentle currents of air, also for urging the bran and other matters to be discharged tailward, said fans being set with a spiral inclination for that purpose. The fan revolves reversely to the reel and turns more rapidly, and thereby is more efficient than if turning in the same direction. In connection with the fan I propose to use a tubular shaft, if desired, to admit the air, and with perforations along the sides for issue of the air along the blades of the fan. The speed of the reel may be changed by substituting other wheels E G of different sizes. Wheel G is provided with a flange, M, at the inside to control wheels E. In consequence of this method of driving the reel I construct the latter with an open space at N inside of the head B', and between it and cross-

bars O, on which the cloth terminates, for the discharge of the tailings, so as not to pass them over flange D and interfere with the driving-wheels E G.

Through the upper head, C, of the reel I arrange a short case, P, around the shaft B, with a spiral conveyer, Q, on said shaft for feeding the meal in from the chute R, to which it is to be delivered by a spout. For stiffening the middle of the reel in this construction I brace the bars A by the rods S, connecting alternate bars and forming the diagonal and triangular arrangement shown in Fig. 2, surrounding the fan, but not interfering with it. By this construction the reel is braced at the center of its length without obstructing its central interior space.

It will be seen that the method of supporting and operating the reel is very simple and substantial, and well adapted for working smoothly and easily, and it is believed that the capacity of the bolt is largely increased by the use of the fan, as described.

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

1. The combination, with the flanged heads of the reel and the reel-shaft provided with a driving-wheel, of the wheels E F and means, substantially as described, for supporting the said wheels, as and for the purpose set forth.

2. The combination, with a reel provided with the flanged head B', and the shaft B, provided with the wheel G, of the wheels E and the links I, substantially as and for the purpose set forth.

3. The combination, with the reel-head B', provided with the flanged rim D and the shaft B, of the wheel G, provided with the flange M, the wheels E, and the links I, substantially as and for the purpose set forth.

4. The combination, with the bars A of the reel, of the diagonal braces S, substantially as herein shown and described, whereby the reel is braced at its center without obstructing the central interior space, as set forth.

MONROE INGRAHAM.

Witnesses:

SEYMOUR HOYT,
JAMES A. HENDERSON.