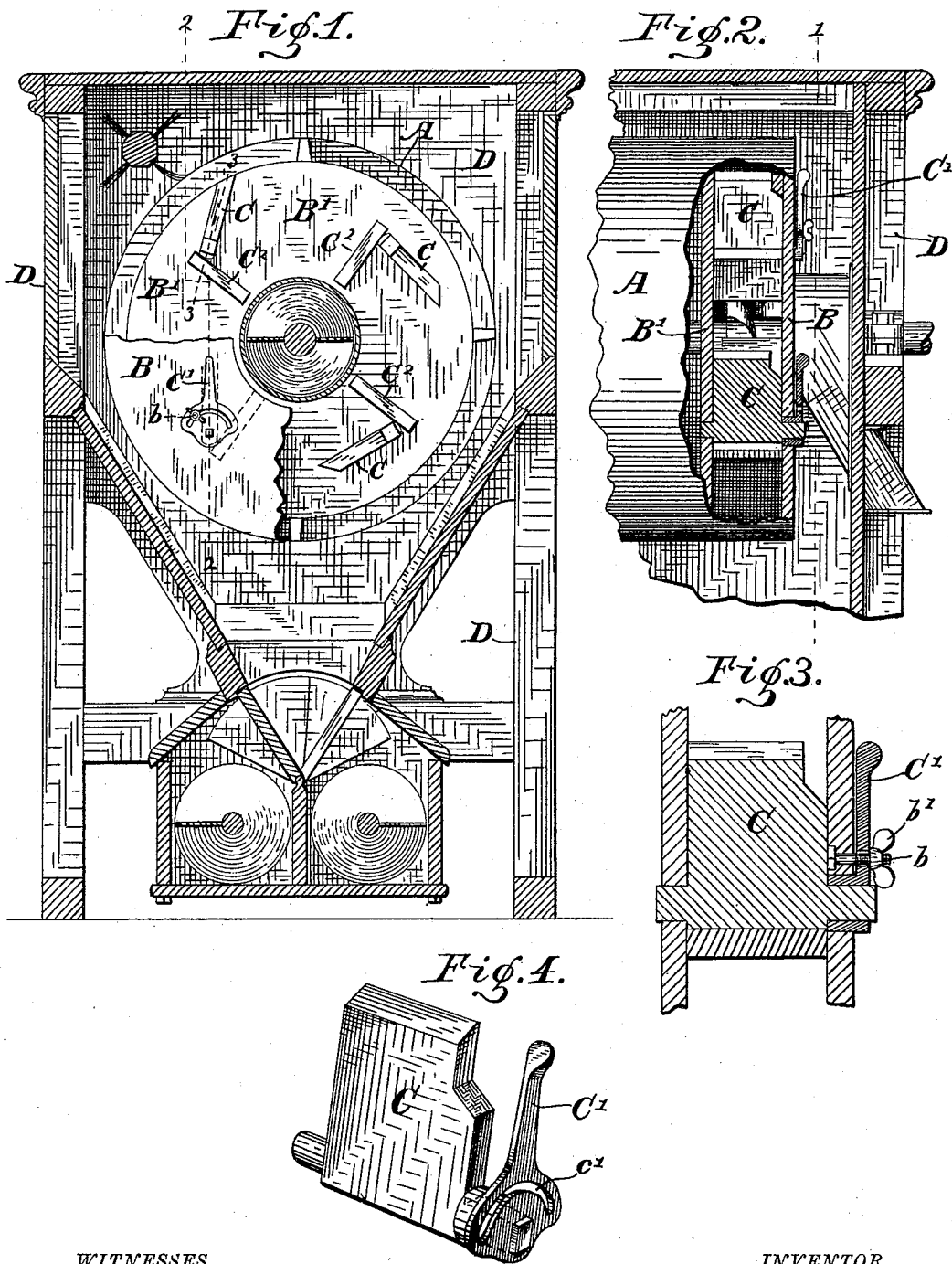


(No Model.)

J. WARRINGTON.
BOLTING REEL.

No. 404,810.

Patented June 4, 1889.



WITNESSES.

Cha. D. Leonard,
Charles L. Thurber.

INVENTOR.

Jeere Warrington,
PER
C. Bradford,
ATTORNEY.

UNITED STATES PATENT OFFICE.

JESSE WARRINGTON, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO THE
NORDYKE & MARMON COMPANY, OF SAME PLACE.

BOLTING-REEL.

SPECIFICATION forming part of Letters Patent No. 404,810, dated June 4, 1889.

Application filed May 31, 1887. Serial No. 239,760. (No model.)

To all whom it may concern:

Be it known that I, JESSE WARRINGTON, of the city of Indianapolis, county of Marion, and State of Indiana, have invented certain new and useful Improvements in Bolting-Reels, of which the following is a specification.

The object of my said invention is to provide a means whereby the load in the reel may be increased or diminished, as desired, without changing the feed; and it consists in a series of wings mounted in the reel-head and adapted to be turned on their shafts toward or from the cloth of said reel.

It further consists in certain details of construction all as will be hereinafter more particularly described and claimed.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a transverse vertical sectional view through the end of the bolting-reel and adjacent parts, substantially on the dotted line 1 1 in Fig. 2, but having a considerable portion of the head of the reel broken away to show the wings; Fig. 2, a longitudinal vertical sectional view looking toward the right from the dotted line 2 2 in Fig. 1; Fig. 3, a detail sectional view on the dotted line 3 3 in Fig. 1; and Fig. 4, a perspective view of one of the wings, its shaft, and operating-handle detached from the reel.

In said drawings the portions marked A represent the cloth covering which surrounds the reel; B B', the outer and inner heads of the reel at the discharging end; C, the wings which embody my present invention, and D the frame-work in which the reel and other parts are mounted. All these parts, except the wings C and the devices for operating and securing them in position, are of any ordinary or desired construction, and need no further description herein. Said wings C are provided with a shaft or equivalent bearing-points, preferably constructed in piece therewith, as shown, which enter suitable bearings in the heads B and B' and extend from the point where they are thus mounted toward the reel-cloth or periphery of the reel. Outside the outer head B is an operating-arm C', secured to each of said wings. Said arm is mounted on the shaft of said wing, which at this end is preferably formed square, as

shown, and covers said square portion by a sleeve formed thereon, which being round upon its outer surface serves as the bearing on which the whole is made to move as the wing is adjusted. Said handle C' has a curved slot c' therein, through which a bolt b, which is mounted in the head B of the reel, passes. From the inner end of the rocking wings stationary wings C² extend toward the center or discharging chute of the reel, down which the stuff will slide, as it leaves said rocking wings, into said discharging-chute, as will be readily understood.

The operation is as follows: When it is desired to give the reel a heavier load, the thumb-nut b' on the bolt b is loosened, and by means of the arm C' the wing C is moved away from the cloth of the reel, which has the effect to permit the stuff in said reel to accumulate, and thus load the reel heavier. When it is desired that the load should be lightened, the thumb-nut is loosened and the wing swung back closer to the cloth of the reel, which has the effect to make the stuff in the reel discharge more rapidly, and thus lighten the load therein. In each case, when the wings are swung to the desired position, the thumb-nut is again, of course, tightened up, thus securing said wings firmly in place. I have shown four wings, and regard that as a desirable number to use, but may, of course, use any number desired, and in the use of them may set them all at one angle or at different angles, as shown in the drawings, according to the work to be done.

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

The combination, with a bolting-reel, of one or more adjustable wings mounted in the head of its discharging end and stationary wings arranged at the inner end of said adjustable wings and extending toward the center of the reel.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 25th day of May, A. D. 1887.

JESSE WARRINGTON. [L. S.]

In presence of—

C. BRADFORD,
CHARLES L. THURBER.