

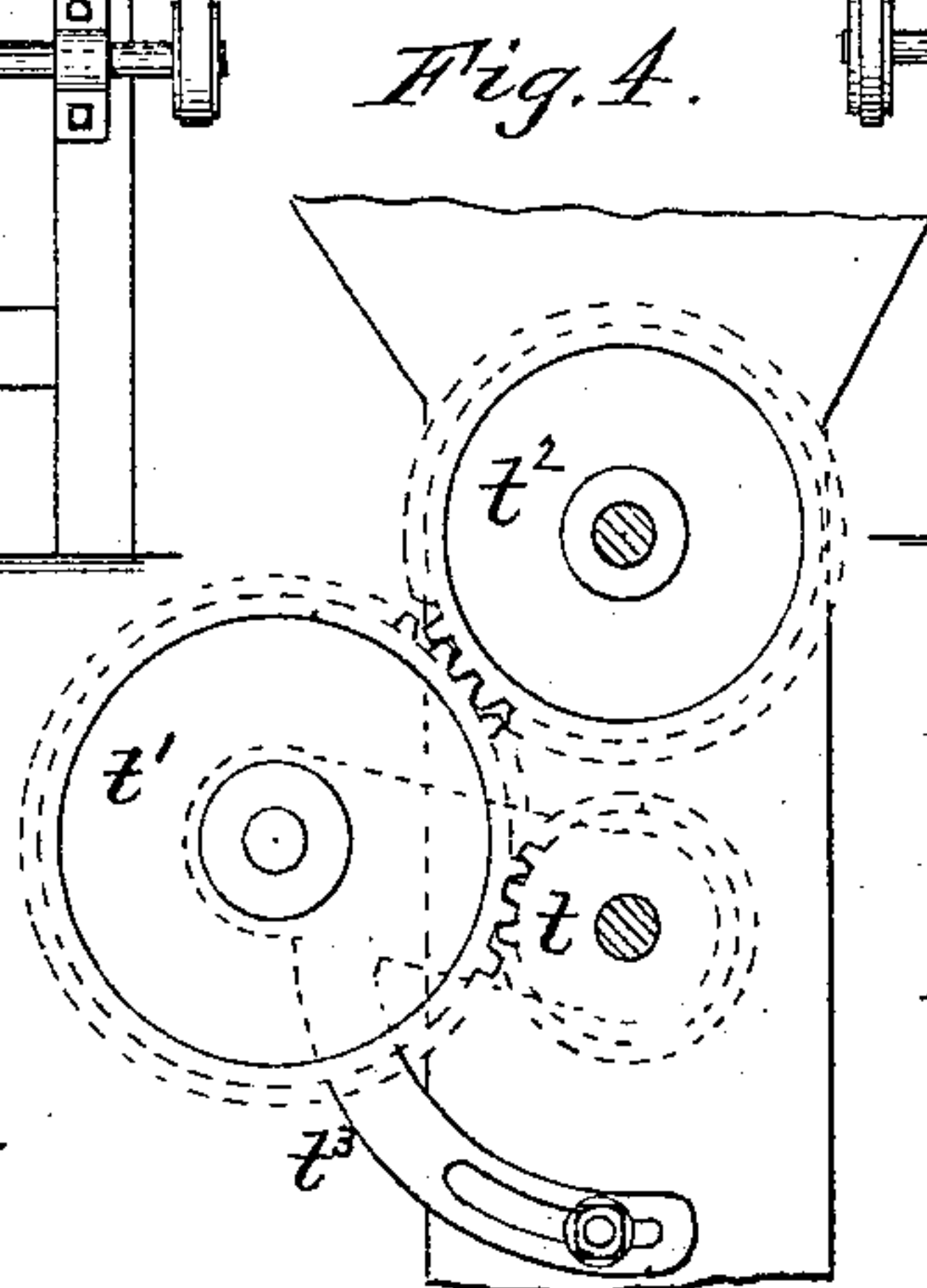
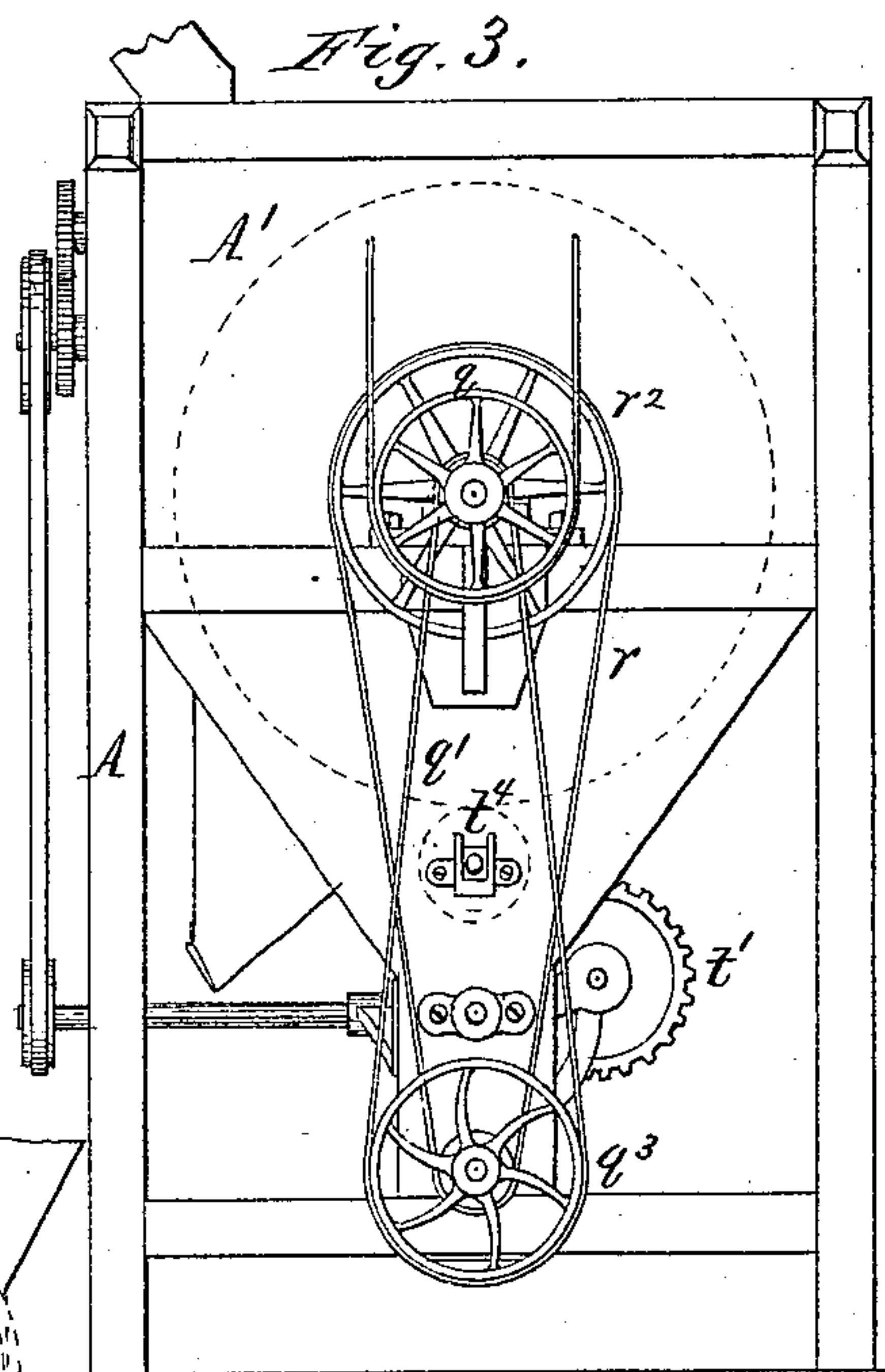
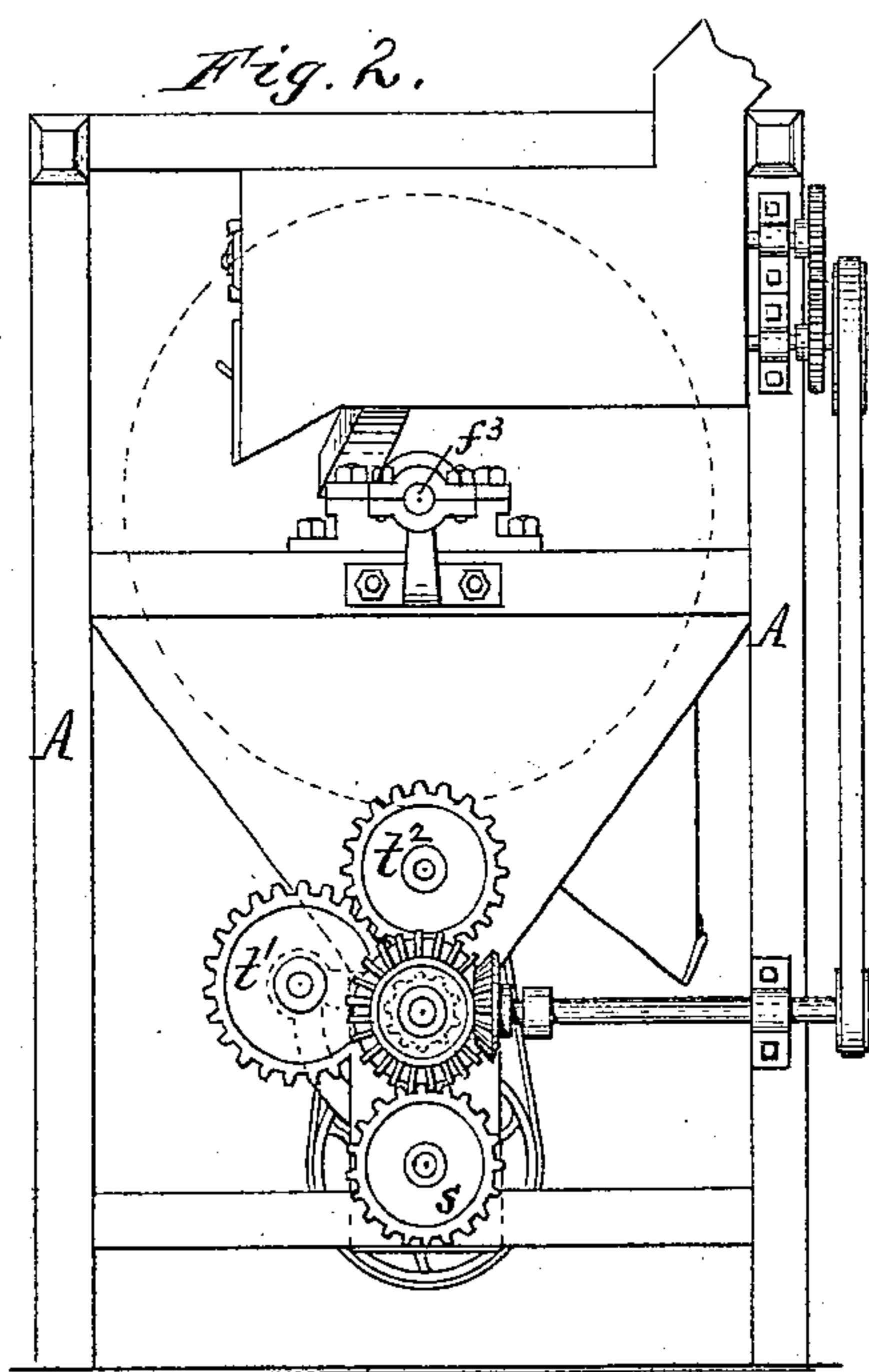
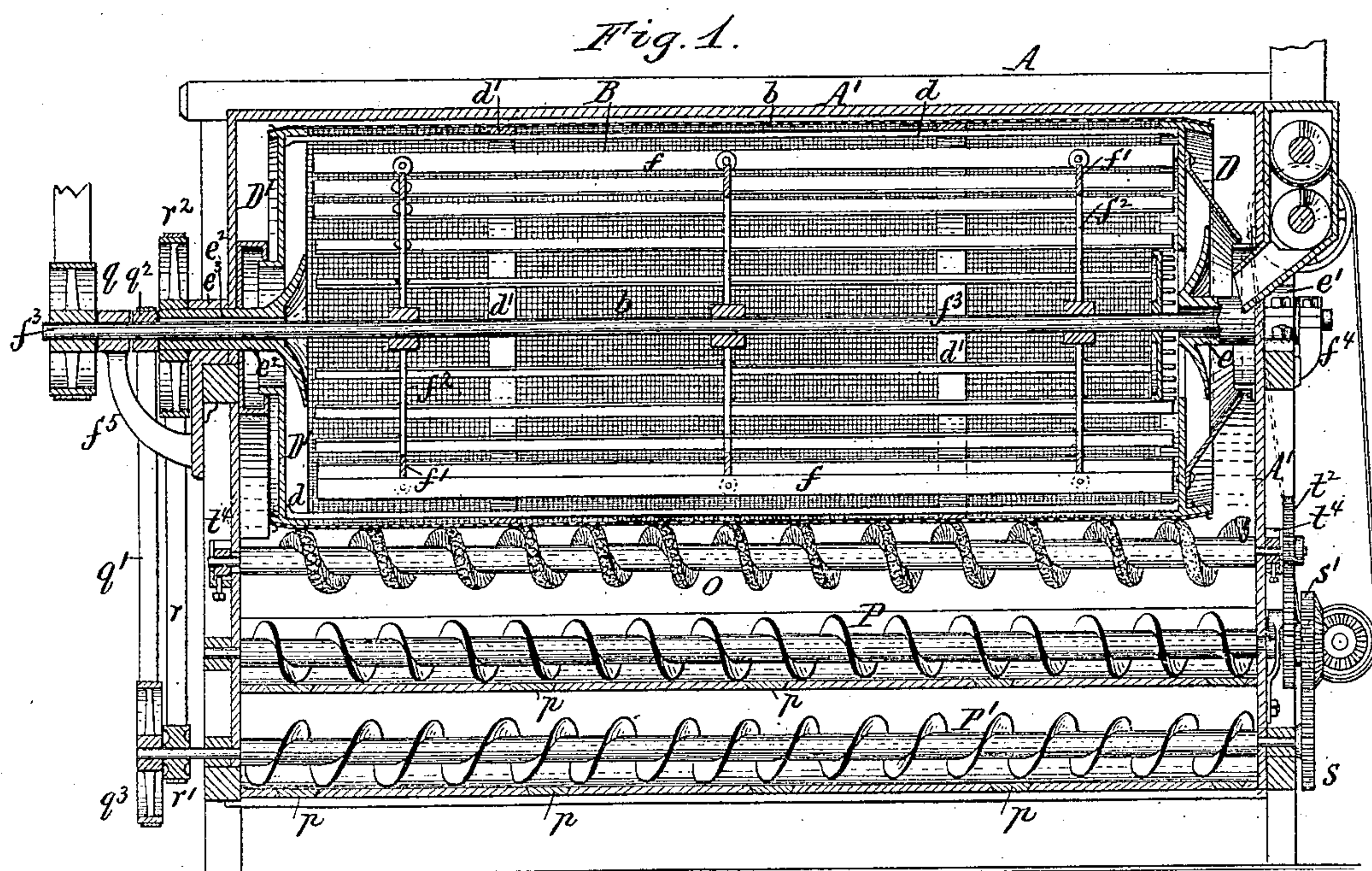
(No Model.)

A. P. HOLCOMB & A. HEINE.

CENTRIFUGAL FLOUR BOLT.

No. 267,529.

Patented Nov. 14, 1882.



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UNITED STATES PATENT OFFICE.

ABEL P. HOLCOMB AND AUGUST HEINE, OF SILVER CREEK, NEW YORK.

CENTRIFUGAL FLOUR-BOLT.

SPECIFICATION forming part of Letters Patent No. 267,529, dated November 14, 1882.

Application filed September 7, 1882. (No model.)

To all whom it may concern:

Be it known that we, ABEL P. HOLCOMB and AUGUST HEINE, of Silver Creek, in the county of Chautauqua and State of New York, have invented a new and useful Improvement in Centrifugal Flour-Bolts, of which the following is a specification.

This invention relates to certain improvements in that class of bolting-machines known as "centrifugal bolts," which are provided with a rotating cylinder and beaters rotating within the cylinder, whereby the material to be bolted is driven against all parts of the cylindrical bolting-surface.

The object of our invention is to improve the operation of this class of machines by freeing the rotating bolting-cylinder from the material which tends to adhere thereto, without at any time materially obstructing any portion of the cylindrical bolting-surface; and our invention consists, to that end, in combining with a rotating bolting-cylinder a rotating spiral brush which runs in contact with the outer side of said cylinder, as will be hereinafter fully described.

In the accompanying drawings, Figure 1 is a longitudinal sectional elevation of our improved flour-bolt. Fig. 2 is an elevation of the front end of the machine. Fig. 3 is an elevation of the rear end of the machine. Fig. 4 is a view of the gear mechanism for driving the brush of the bolting cylinder.

Like letters of reference refer to like parts in the several figures.

A represents the frame of the machine, and A' the inclosing casing, which is made airtight, as nearly as practicable.

B represents the bolting-cylinder, which is composed of two heads, D D', connected by stay-bolts, rods, or bars d , and which is covered with bolting-cloth b , of suitable mesh, supported by suitable rings, d' . The head D of the feed end of the bolting-cylinder is provided with a hollow journal, e , which turns in a bearing, e' , secured to the frame A, and the head D' at the tail end of the bolting-cylinder is provided with a similar hollow journal, e^2 , which turns in a bearing, e^3 .

f represents the rotating beaters, which are arranged in the bolting-cylinder and secured

to rings f' . The latter are attached by arms f^2 to a shaft, f^3 , which passes through the hollow journals e e^2 , and is supported in bearings f^4 f^5 . The cylinder B is slightly inclined from the head D toward the head D' to cause the material to pass slowly through the cylinder; or the beaters f may be arranged spirally to propel the material through the cylinder in the proper direction; or both means may be employed together to impart the necessary movement to the material.

O represents a spiral brush, arranged in the casing A' so as to run in contact with the bolting-cylinder B and remove the material which may adhere to the same. This brush reaches all parts of the outer surface of the rotating bolting cylinder and cleans the cloth thoroughly, and at the same time leaves the cloth substantially unobstructed, as the spaces between the threads or turns of the brush are ample to permit the free escape of the flour.

P P' represent two screw-conveyers, arranged below the bolting-cylinder B, one above the other, and provided in their troughs with a suitable number of openings controlled by slides p , so that the bolted material can be drawn off at any desired point.

q represents the driving-pulley, secured to the end of the shaft f^3 , and q' is an endless belt which runs around a small pulley, q^2 , on the shaft f^3 , and a larger pulley, q^3 , on the shaft of the lower conveyer, P', whereby the latter is rotated.

r represents an endless belt, which runs around a small pulley, r' , on the shaft of the lower conveyer, P', and a larger pulley, r^2 , on the hollow journal e^2 , whereby the cylinder B is rotated from the conveyer P' with much less speed than the beaters.

The upper conveyer, P, is driven from the lower conveyer, P', by gear-wheels s s' , and the spiral brush O is driven from the upper conveyer, P, by gear-wheels t t' t^2 . The gear-wheels t t^2 are secured respectively to the shafts of the conveyer P and of the brush, and the gear-wheel t' is an idler turning on an arbor secured to an adjustable arm, t^3 . The bearings t^4 of the brush-shaft are made adjustable toward and from the cylinder B to enable the brush to be adjusted as it wears off, and the

adjustable idler t' is provided to maintain the connection between the wheels t t^2 under these adjustments of the brush.

We do not in this application desire to cover
5 any improvements herein shown, except those which are specifically pointed out in the claim, and reserve the right to cover such other improvements by separate applications for patent.

10 We claim as our invention—

The combination, with a rotating bolting-

cylinder, of a rotating spiral brush running in contact with the outer side of said cylinder, whereby all parts of the cylinder are freed from the material adhering thereto, without
15 at any time materially obstructing any portion of the cylinder, substantially as set forth.

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