

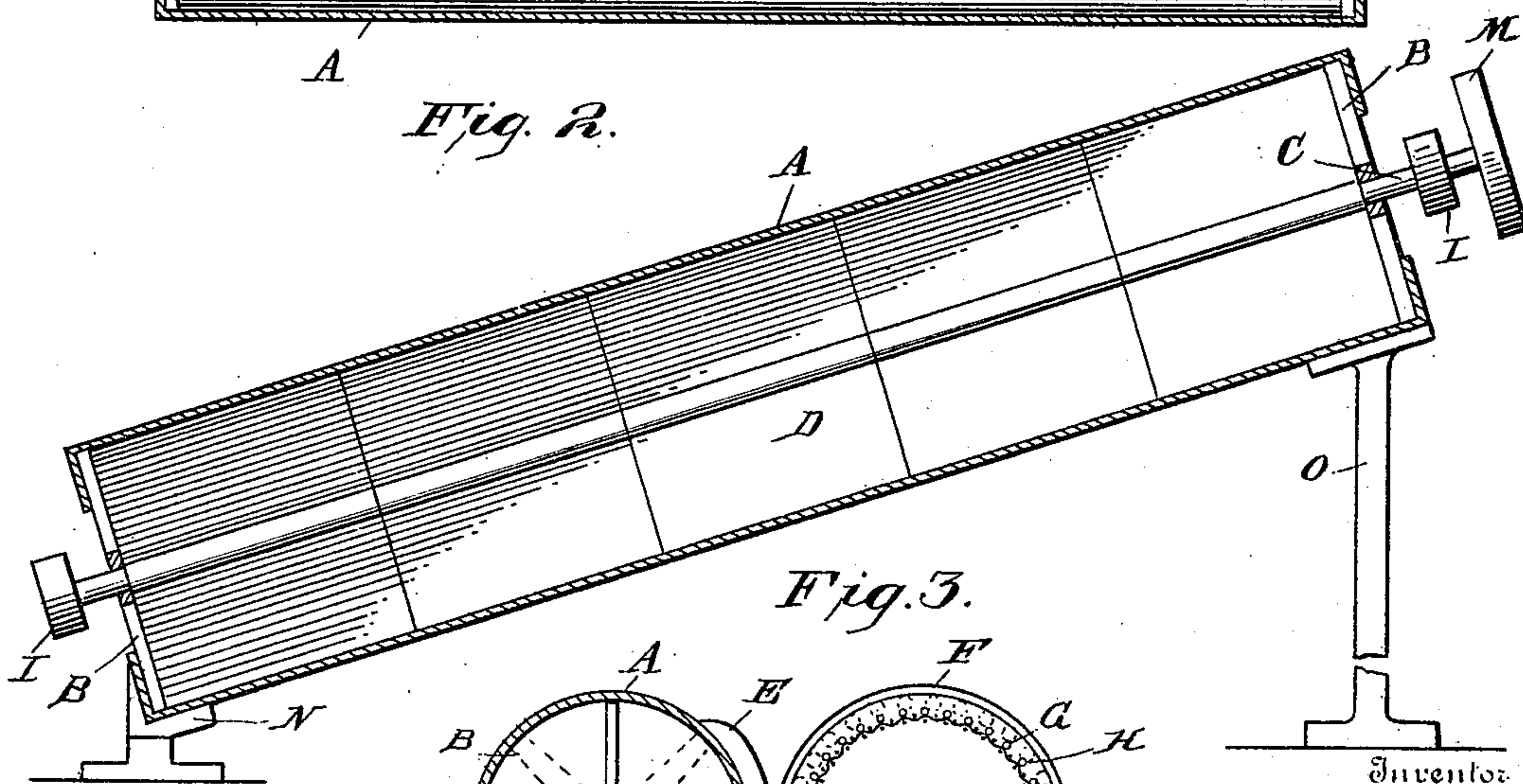
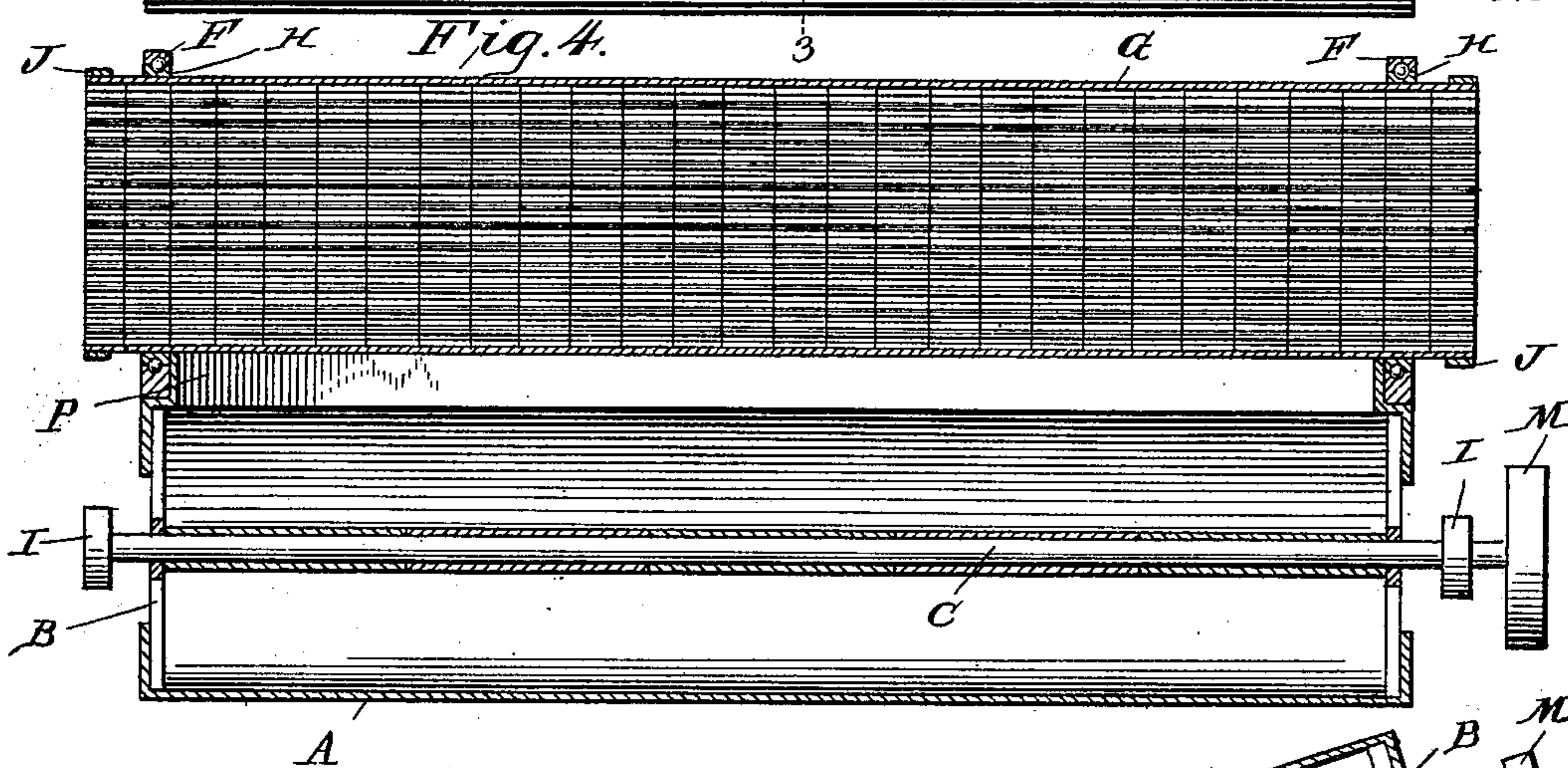
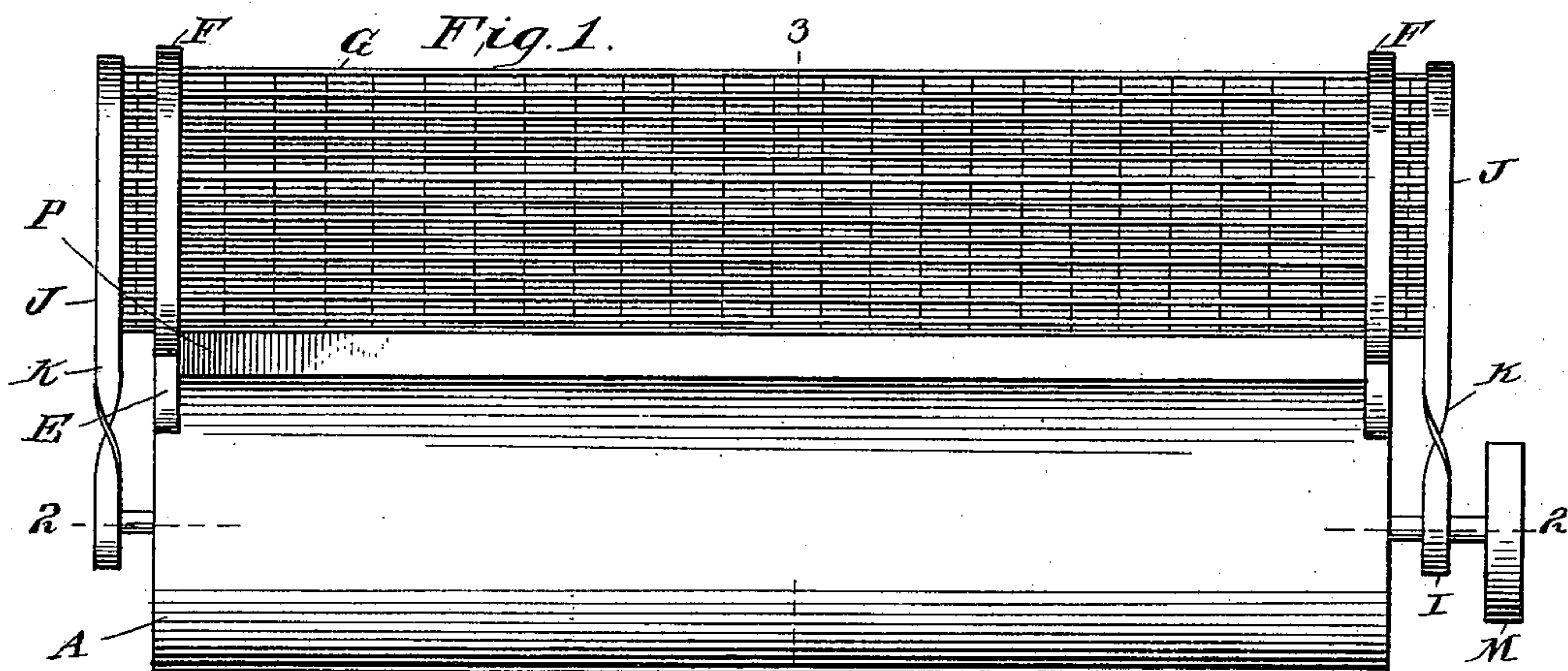
No. 644,145.

Patented Feb. 27, 1900.

T. J. OVERSTREET.
SEED COTTON FAN MACHINE.

(Application filed Apr. 15, 1899.)

(No Model.)



Witnesses

J. P. Britt

Chas. Brock

Inventor
T. J. Overstreet,
My
Quarant
Attorney

UNITED STATES PATENT OFFICE.

THOMAS JEFFERSON OVERSTREET, OF NORMAN, OKLAHOMA TERRITORY.

SEED-COTTON-FAN MACHINE.

SPECIFICATION forming part of Letters Patent No. 644,145, dated February 27, 1900.

Application filed April 15, 1899. Serial No. 713,196. (No model.)

To all whom it may concern:

Be it known that I, THOMAS JEFFERSON OVERSTREET, a citizen of the United States, residing at Norman, in the county of Cleveland and Territory of Oklahoma, have invented a certain new and useful Seed-Cotton-Fanning Machine, of which the following is a specification.

My invention is in the nature of a fanning-machine for cleaning seed-cotton prior to ginning.

Seed-cotton is usually sucked into the gin-house; and the object of my invention is to provide a machine to be set up just inside of the opening through which the cotton passes into the gin-house, which machine will receive, fan, and clean the cotton and deliver it in a much cleaner and better condition than usual to the gins.

With this object in view my invention consists in the improved construction, arrangement, and combination of parts hereinafter fully described, and afterward specifically pointed out in the claims.

In order to enable others skilled in the art to which my invention most nearly appertains to make and use the same, I will now proceed to describe its construction and operation, having reference to the accompanying drawings, forming part hereof, in which—

Figure 1 is a top plan view of a machine constructed in accordance with my invention. Fig. 2 is a longitudinal vertical section through the fan and its inclosing cylinder on the dotted line 2 2 of Fig. 1. Fig. 3 is a transverse vertical section through the whole machine on the line 3 3 of Fig. 1. Fig. 4 is a longitudinal section through the axis of both cylinders.

Like letters of reference mark the same parts wherever they occur in the various figures of the drawings.

Referring to the drawings by letters, A indicates a cylinder open at each end, except that it is furnished with a spider or cross, frame B in each end, (shown in Fig. 2 and in dotted lines in Fig. 3,) in which a shaft C is journaled, said shaft carrying inside of the cylinder a fan D, in this instance shown with two diametrically-opposite blades, which may be provided with three or more blades, if desirable.

The cylinder A is provided on one side with curved arms E partially encircling it and carrying rings F, on which is journaled a screen-cylinder G by means of steel journal-rings H, secured to the screen at each end, said rings H fitting in the rings F and provided with ball-bearings therein, if desired, the balls of such bearings being indicated in the dotted lines at I in Fig. 3. At the outer ends thereof the screen-cylinder is provided with pulley-rings J to receive the crossed belts K, leading from driving-pulleys I on shaft C of cylinder A, said shafts being also provided with a pulley M at either end to be driven by a belt from the ginning machinery or other suitable power.

The cylinder A and screen-cylinder G are arranged side by side in an inclined plane of about forty degrees and are supported in suitable frames N and O, the latter being the support of the high end.

As before stated, the seed-cotton is usually sucked into the gin-house, and upon passing thereinto it is received in the upper open end of the screen-cylinder, whose meshes are too small to permit the passage of the cotton therethrough. The shaft C being driven so that its under side moves toward the screen-cylinder, the latter, due to the cross-belt, will rotate in the opposite direction and will carry the cotton up toward the fan-cylinder A until it reaches the level of a longitudinal opening P on the side of the fan-cylinder, when the blast of air through the opening striking the outside of the screen-cylinder will cause the cotton to be blown rapidly across the screen-cylinder and to come violently in contact with the opposite side, thus causing dirt contained in the cotton to be sifted through the screen-meshes, such operation being continually repeated until the cotton has reached the lower or discharge end of the screen-cylinder. Each time the cotton is thrown across the screen-cylinder it will progress slightly down it toward its lower end, and it will finally be discharged in a much cleaner condition and will be of a higher grade and bring a better price.

While I have illustrated and described what I consider to be efficient means for carrying out my invention, I wish it to be understood that I do not restrict myself to the exact forms

and constructions shown, but hold that any slight changes in or variations therefrom, such as might suggest themselves to the ordinary mechanic, would be clearly included within
5 the limit and scope of my invention.

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

1. The combination with a cylinder having
10 a longitudinal opening in one side thereof, a fan journaled longitudinally in the cylinder, and a screen-cylinder journaled alongside and parallel with the fan-cylinder adjacent to the longitudinal opening, whereby the contents
15 of the screen-cylinder are thrown across it by the blast from said opening, and means for rotating said fan and screen cylinder, substantially as described.

2. The combination of a cylinder arranged
20 at an inclination and provided with a longitudinal opening on one side, a fan journaled longitudinally in the cylinder to throw its blast through said opening and a screen-cylinder arranged alongside of, and at the same
25 inclination with the fan-cylinder, in position

to receive the air-blast from the opening of the fan-cylinder, substantially as described.

3. The combination of the fan-cylinder having an opening in the side thereof, the curved arms thereon carrying the bearing-
30 rings, the screen-cylinder journaled in said bearing-rings adjacent to said opening, the fan, its shaft, pulleys thereon, and belts on said pulleys extending around the screen-cylinder, substantially as described. 35

4. The combination of the fan-cylinder, having longitudinal blast-openings on one side, the shaft journaled in the cylinder, the fan and belt pulleys on the shaft, the screen-cylinder alongside of and parallel with the
40 fan-cylinder, journaled rings on the screen-cylinder mounted on said bearing-rings, pulley-rings in the line of the blast from the fan on the screen-cylinder, and belts connecting
45 them with the pulleys on the fan-shaft, substantially as described.

THOMAS JEFFERSON OVERSTREET.

Witnesses:

J. D. COCKRELL,
J. P. BURFORD.