

O. WASHBURNE.
Condenser for Cotton-Gins.

No. 202,611.

Patented April 16, 1878.

Fig. 1.

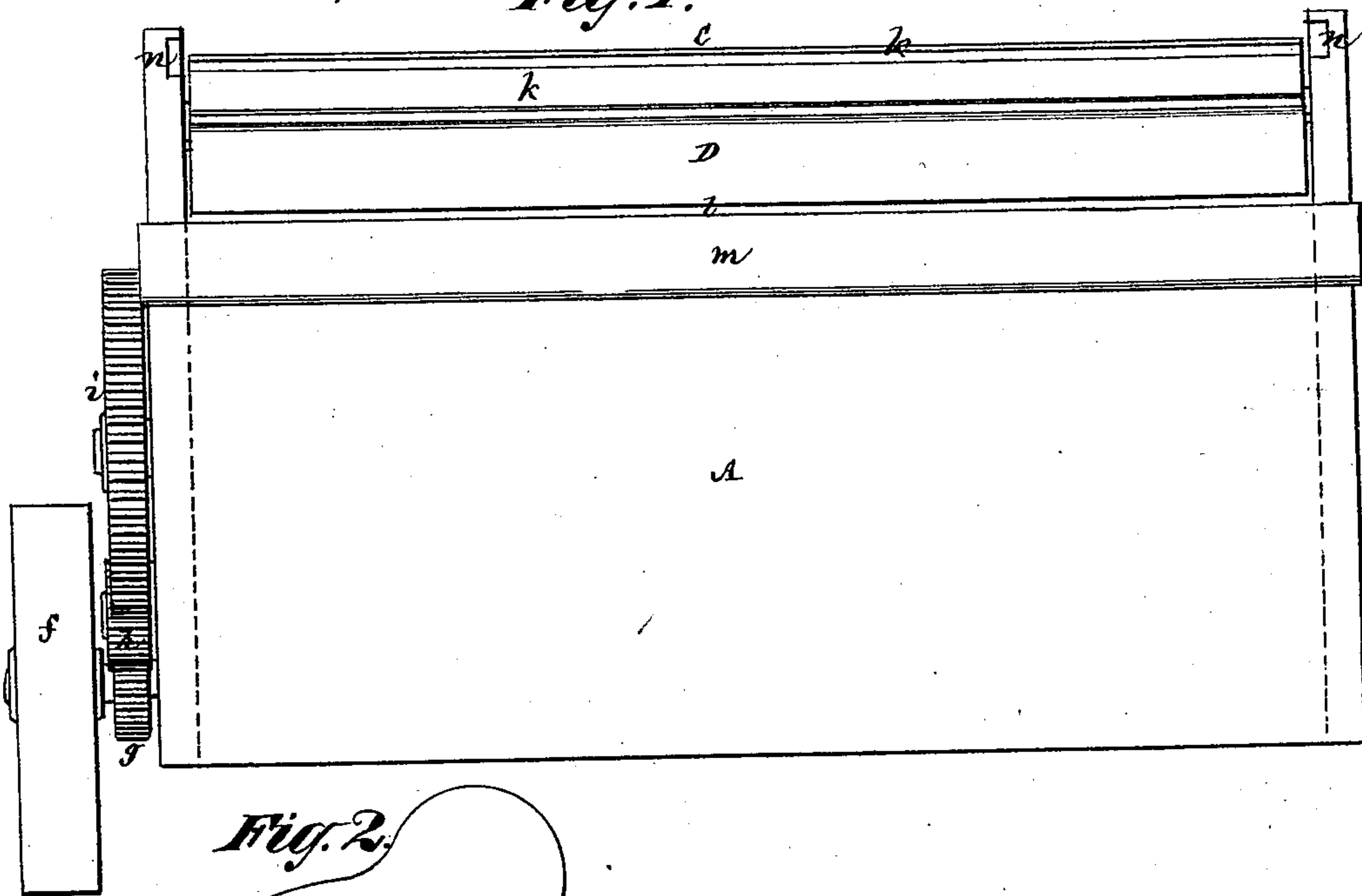


Fig. 2.

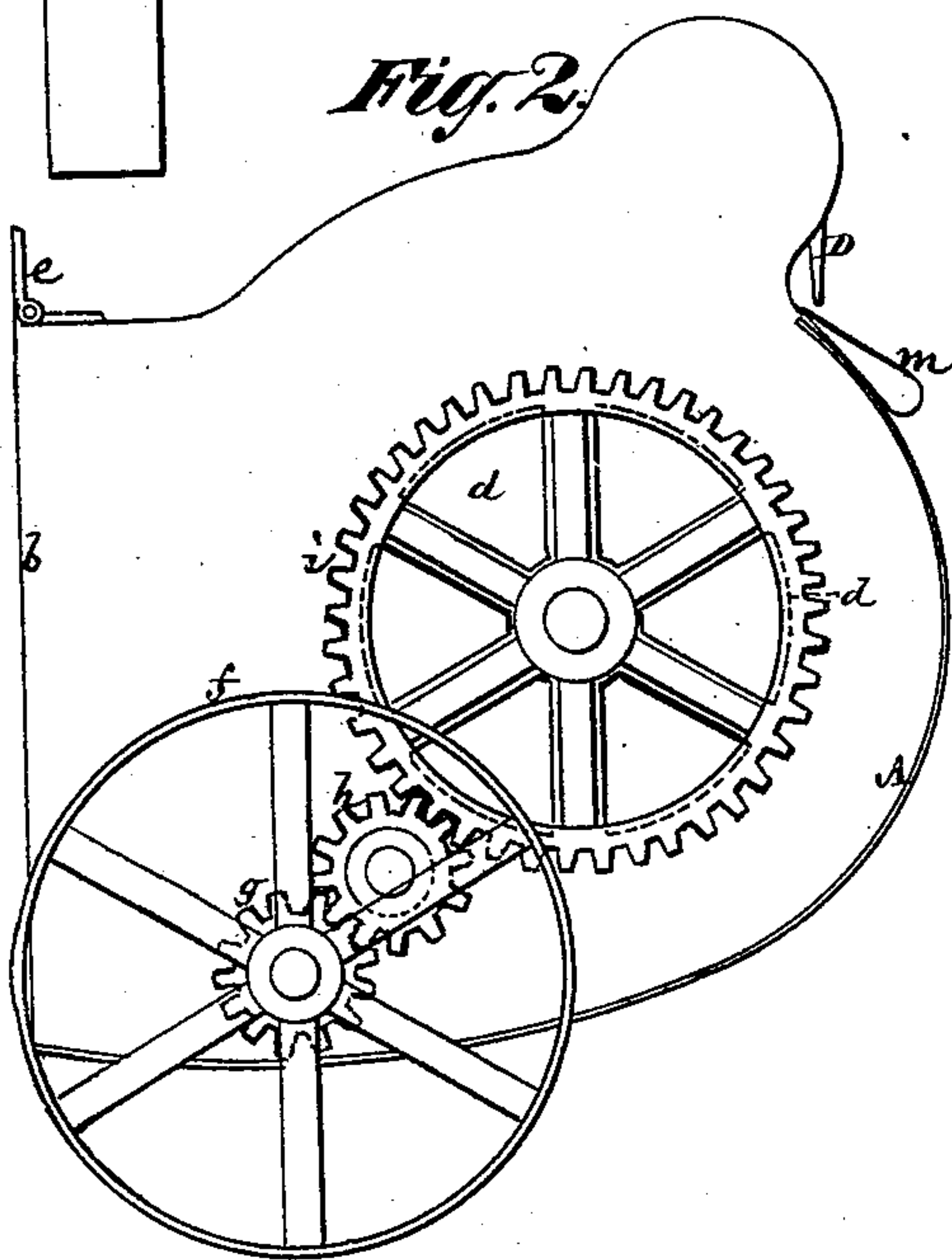
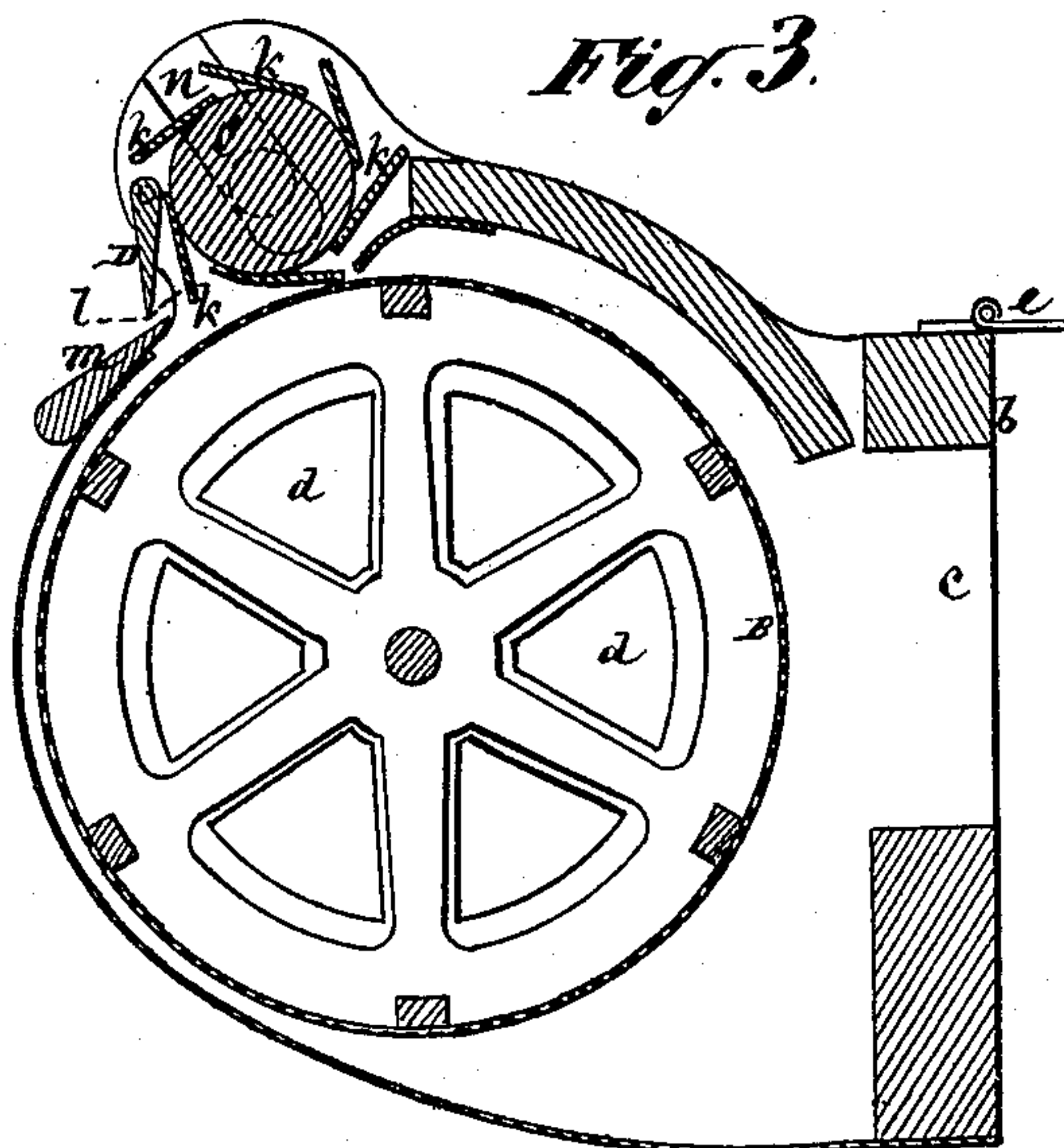


Fig. 3.



Witnesses

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OSCAR WASHBURNE, OF SING SING, NEW YORK.

IMPROVEMENT IN CONDENSERS FOR COTTON-GINS.

Specification forming part of Letters Patent No. 202,611, dated April 16, 1878; application filed January 23, 1878.

To all whom it may concern:

Be it known that I, OSCAR WASHBURNE, of Sing Sing, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Condensers for Cotton-Gins, of which the following is a description, reference being had to the accompanying drawing, forming part of this specification.

This invention consists in a pendent or drop board arranged at the delivery end of the condenser, for the purpose of preventing light cotton from being blown away by the blast derived from the gin, and allowing the free delivery of the bat of cotton from the gin, to effect a more thorough action of the blast on the cotton.

The condenser it is preferred to connect with the frame of the gin, so that it may readily be removed or adjusted out of the way when it is not required to condense the cotton as it comes from the gin.

In the accompanying drawing, Figure 1 represents a rear elevation of a cotton-gin condenser constructed in accordance with my invention. Fig. 2 is a side view of the same, and Fig. 3 a transverse section thereof.

A is the shell or case of the condenser, the face *b* of which is designed to butt up against the back end of the delivery-flue of the gin, to receive the cotton from the latter through a mouth, *c*, of the condenser-case, from whence it passes to and over a reticulated cylinder, B, arranged within the case A, and which serves alike to convey the cotton to the condensing roller or devices, and to pass off through it or through openings *d* in the end or ends of said cylinder, and openings in the end or ends of the case, dust or extraneous matter entering along with the cotton, and which the blast derived from the gin serves to expel. This reticulated cylinder, instead of being made of perforated zinc, as usual heretofore, is covered by wire-gauze, which provides for a more perfect or open construction of said cylinder, and takes the air from the gin to carry off the dust in a more perfect or freer manner than a perforated zinc cylinder can do. It also forms a softer and more positive feeder for the cotton.

The condenser-case A it is preferred to make readily attachable to and detachable from the frame of the gin at the outlet end of the flue

of the latter, to provide either for condensing the cotton into bats or not, as circumstances require; or said case A may be united with the frame of the gin by hinges *e*, whereby it may be turned up out of the way when it is not required to condense the cotton into bats as it comes from the gin.

The reticulated cylinder B may be driven by belt from a pulley on the saw-shaft of the gin through the instrumentality of a pulley, *f*, and gears *g h i*.

C is the compressing or condensing roller, which may be either a lap one—that is, be provided with flexible flaps *k k*—or it may be a plain one, and which is arranged on the delivery side of the condenser case over the reticulated cylinder C, and serves, in conjunction with said cylinder, to compress the cotton into bats, which pass out through the delivery-opening *l* in the condenser-case, and over a scraper or clearer, *m*, which detaches cotton from the flaps *k* when the condensing-roller C is a lap one. This condensing or compressing roller C, which is driven by friction of the cotton and not by gearing, is made capable of rising and falling automatically, to accommodate itself to different thicknesses of bats; and to this end said roller is fitted, by means of trunnions at its ends, in upwardly-inclined grooves *n* within the end pieces of the case of the condenser.

D is a pendent or upwardly freely-hung board, arranged to more or less close the delivery-opening *l* of the condenser-case, but admitting of the bats raising it when passing it in being delivered. This pendent or drop board serves to keep light cotton from being scattered or blown away by the wind, which is important in the operation of the condenser that also operates as a cleaner of cotton.

I claim—

The pendent or drop board D, arranged over the delivery-outlet *l* of the condenser-case, in combination with the reticulated cylinder B and compressing or condensing roller C, essentially as and for the purpose herein set forth.

OSCAR WASHBURNE.

Witnesses:

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