

(No Model.)

T. S. GREENMAN.
COTTON CONDENSER.

No. 352,538.

Patented Nov. 16, 1886.

Fig-1-

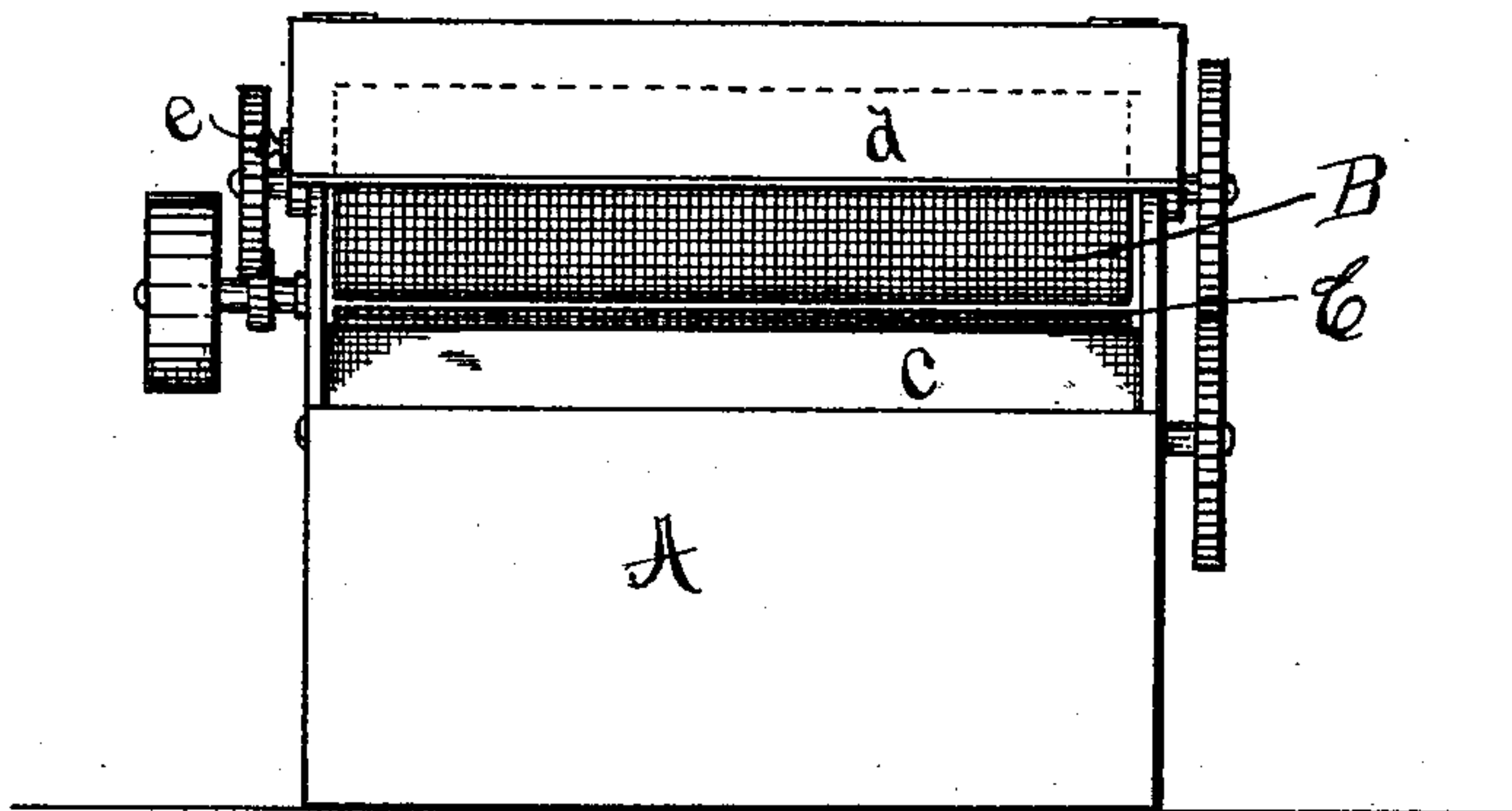


Fig-2-

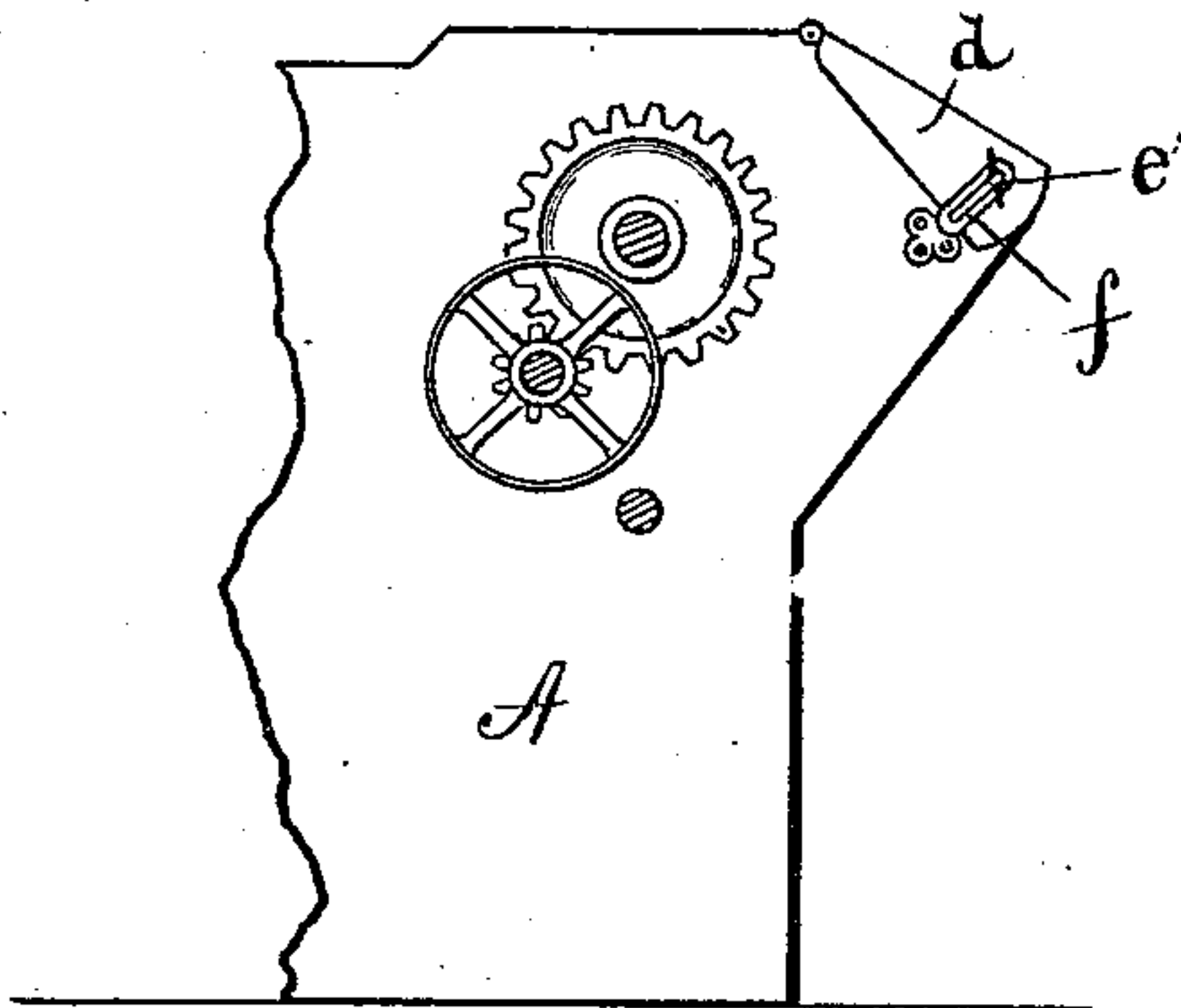
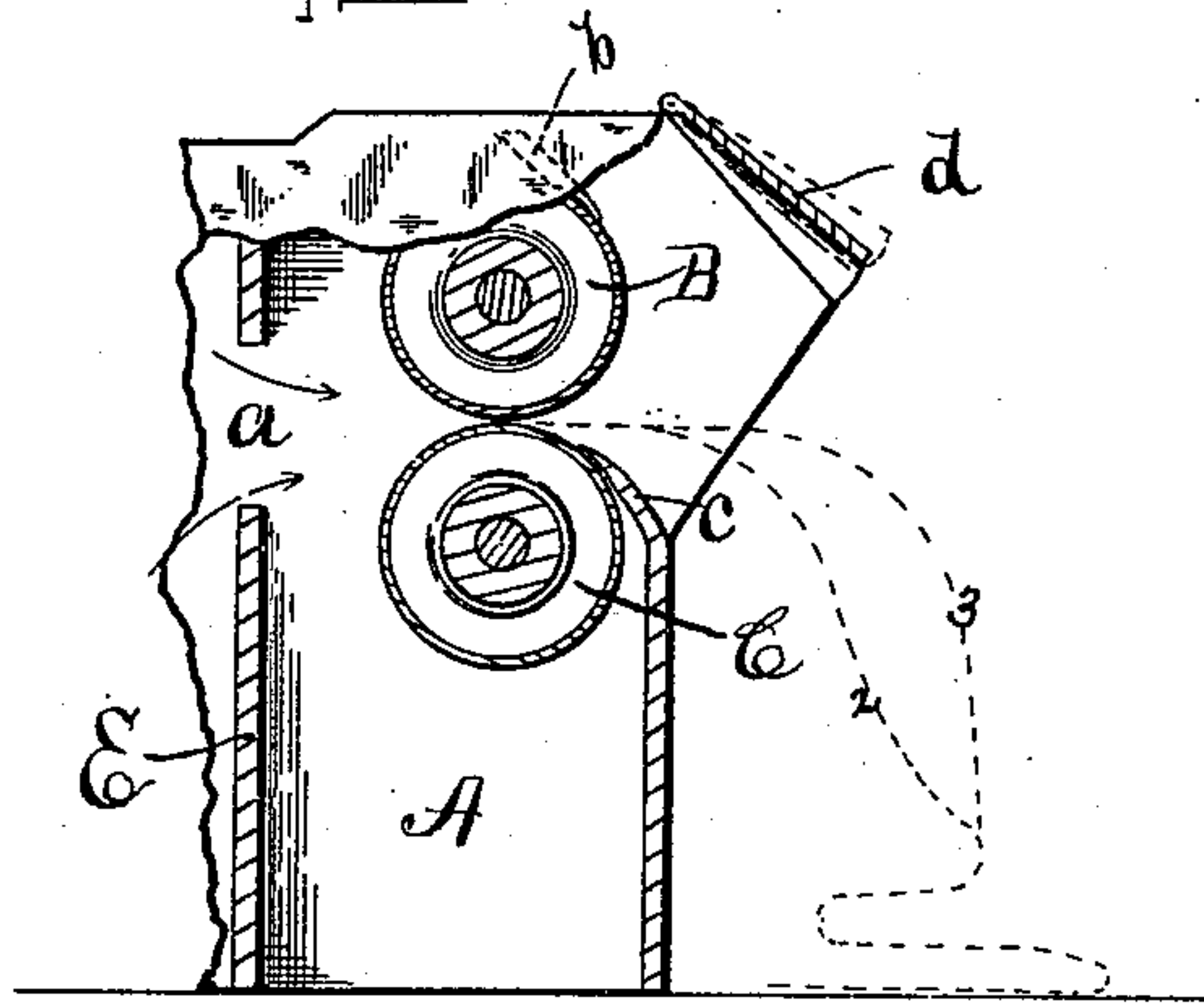


Fig-3-



Witnesses-
A. J. Coultas.
J. Howard.

Inventor-
Thomas S. Greenman
By his Atty.
Frank H. Allen-

UNITED STATES PATENT OFFICE.

THOMAS S. GREENMAN, OF MYSTIC BRIDGE, ASSIGNOR TO THE STANDARD
MACHINERY COMPANY, OF MYSTIC RIVER, CONNECTICUT.

COTTON-CONDENSER.

SPECIFICATION forming part of Letters Patent No. 352,538, dated November 16, 1886.

Application filed June 18, 1886. Serial No. 205,557. (No model.)

To all whom it may concern:

Be it known that I, THOMAS S. GREENMAN, a citizen of the United States, residing at Mystic Bridge, New London county, Connecticut, have invented certain new and useful Improvements in Cotton-Condensers, which improvements are fully described in the following specification, reference being had to the accompanying drawings.

My invention relates to that class of condensers in which the ginned cotton passes from the gin proper into a suitable chamber, where the dirt settles by gravity, and from thence the cotton is forced outward between a pair of perforated or wire-cloth rollers, which condense and slightly compress said cotton into a so-called "bat," a familiar type of said class of condensers being shown in Patent No. 232,736, granted to F. H. Lummus, September 28, 1880. In condensers of this class (so far as I am familiar with them) the strong current of air which forces the bat of cotton outward between the compressing-rollers also acts, in a measure, to again separate the fibers after they pass said rollers and blow them about the room, rendering the ginning and condensing both uncomfortable and unhealthy operations.

The immediate object of this invention is to provide devices adjacent to the delivery side of the condenser which shall control the current of air as it passes outward, and cause said current to lay the bat smoothly and intact, instead of blowing it about, as above described. I accomplish this result by the use of a deflecting-hood secured adjustably to the main frame or case of the condenser, and by fixed shields located in rear of the condensing-rollers.

In order to explain my invention clearly, I have annexed hereto a sheet of drawings, in which—

Figure 1 is a front view of my improved condenser. Fig. 2 is an end elevation of said condenser; and Fig. 3 is a similar view, largely in section.

The letter A designates the case which incloses the condensing-rollers, being formed as an extension of the gin-case.

B C designate the condensing-rollers, which are formed of wire-cloth and kept in continuous rotary motion by a system of gears, as shown, or by belt, as provided in the Lum-

mus patent above referred to. The wall E, which separates the gin and condenser proper, is cut away, as at *a*, and through the opening thus formed the fibers of cotton are carried by the strong current of air from the gin.

b c represent shields located adjacent to the rear sides of the rollers B C, and are provided to turn the current of air between said rollers, instead of allowing it to pass outward above and below. Said current, being thus compelled to pass outward between the rollers, carries with it the fibers of cotton, which, as above stated, are compressed into a bat as they pass between the rollers, the dirt and other foreign matter settling by gravity to the bottom of box A. The case A extends a considerable distance beyond the condensing-rollers, its outer end being closed from the shield *c* to the floor. The upper part is formed as a hood, (see *d*,) which is hinged to the main case, being held in the desired position by a thumb-screw, *e*, passing through a slotted bracket, *f*.

I find by experimenting that when the case A does not extend beyond the rollers B C the current of air, as it spends itself after passing said rollers, acts to separate the fibers and cause them to float about, instead of allowing the bat to settle immediately; but by extending said case, as shown, and providing what I term the "deflecting-hood" *d*, the bat is carried slightly forward by the current of air, and then settles intact to the floor, following the course indicated by the dotted lines 2 in Fig. 3. This course may be readily controlled and varied by raising or lowering the hood *d*, the result when raised being to carry the bat of cotton farther outward, as indicated by the dotted line 3 in Fig. 3.

My improvements cause but slight additional expense, yet they effectually overcome the serious objection above referred to.

Having described my invention, I claim—

In combination with the condensing-rollers B C, an inclosing-case extending beyond said rollers, guards *b c*, and a deflecting-hood hinged adjustably to said case at the delivery side, substantially as described, and for the purpose specified.

THOS. S. GREENMAN.

Witnesses:

I. O. FISH,
A. H. SIMMONS.