

(No Model.)

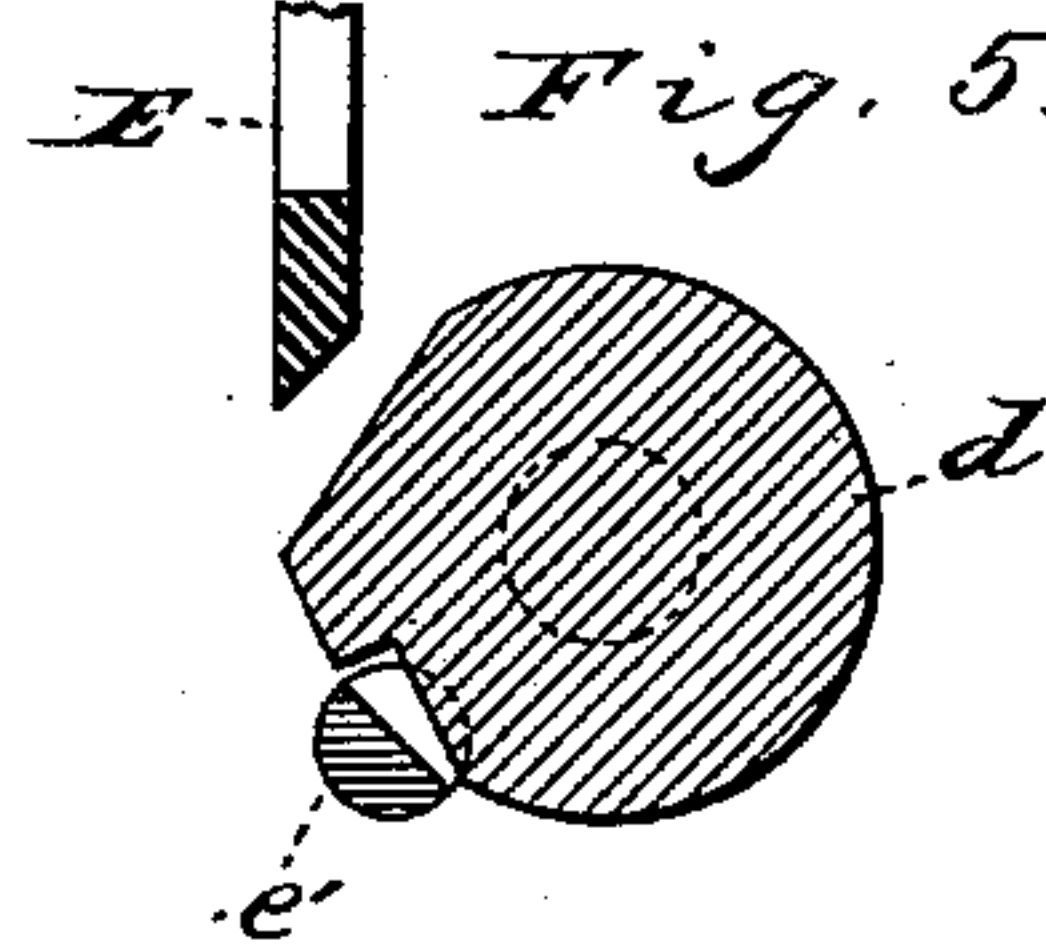
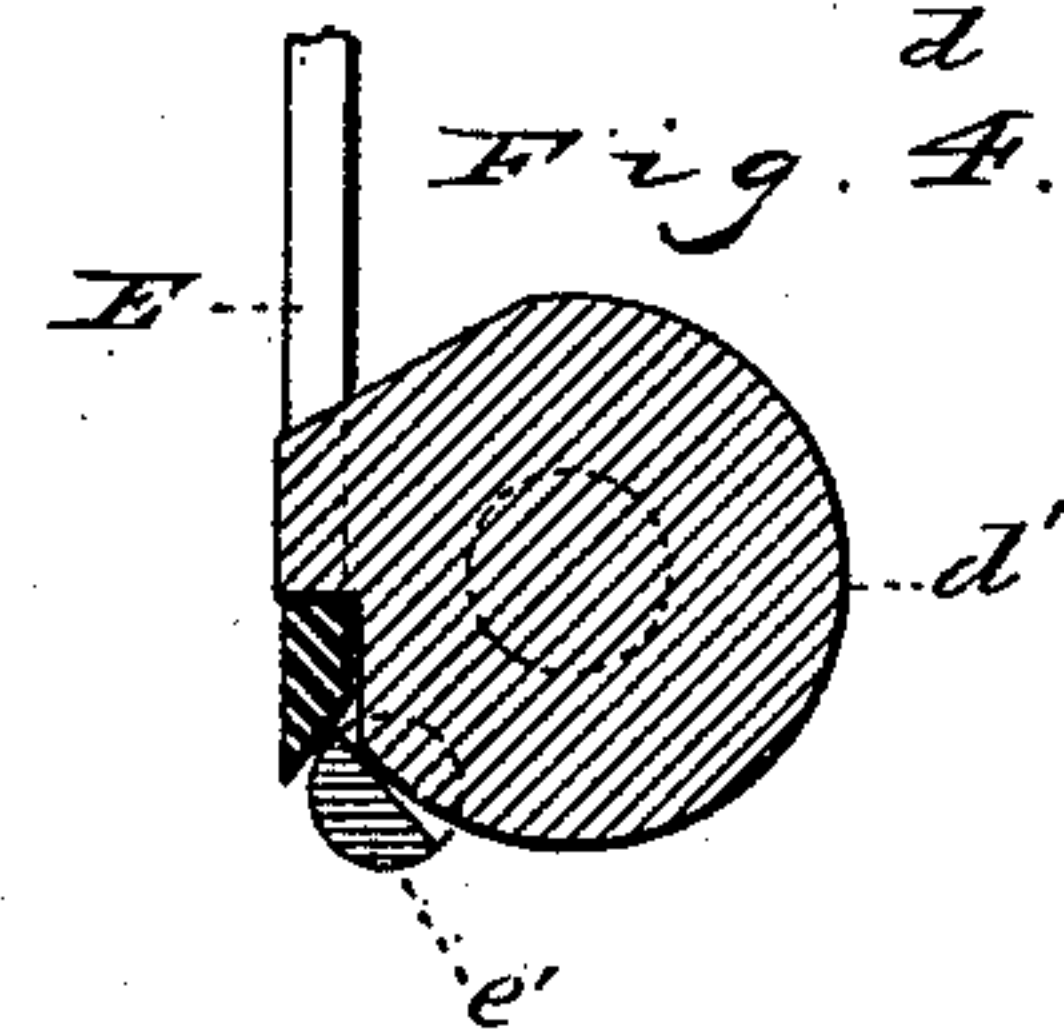
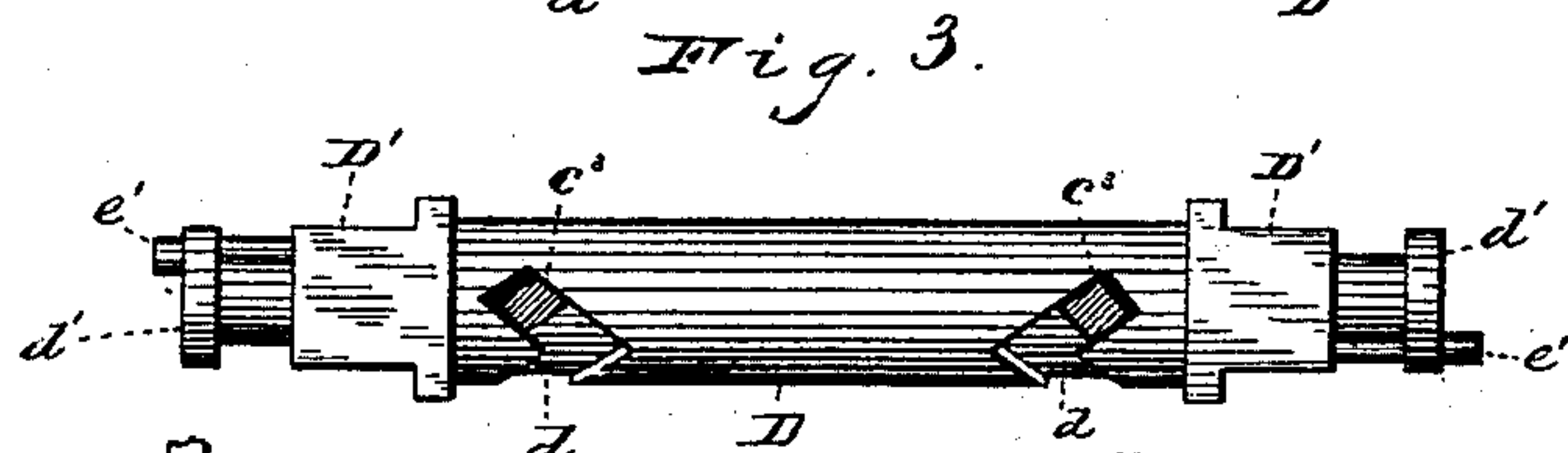
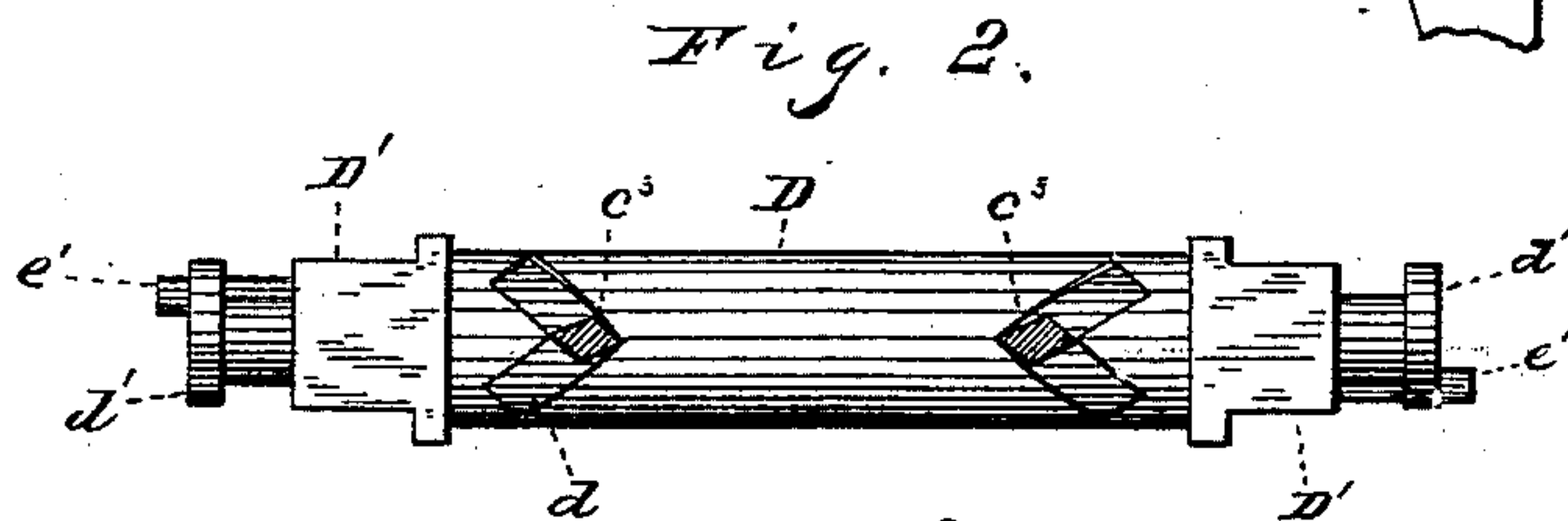
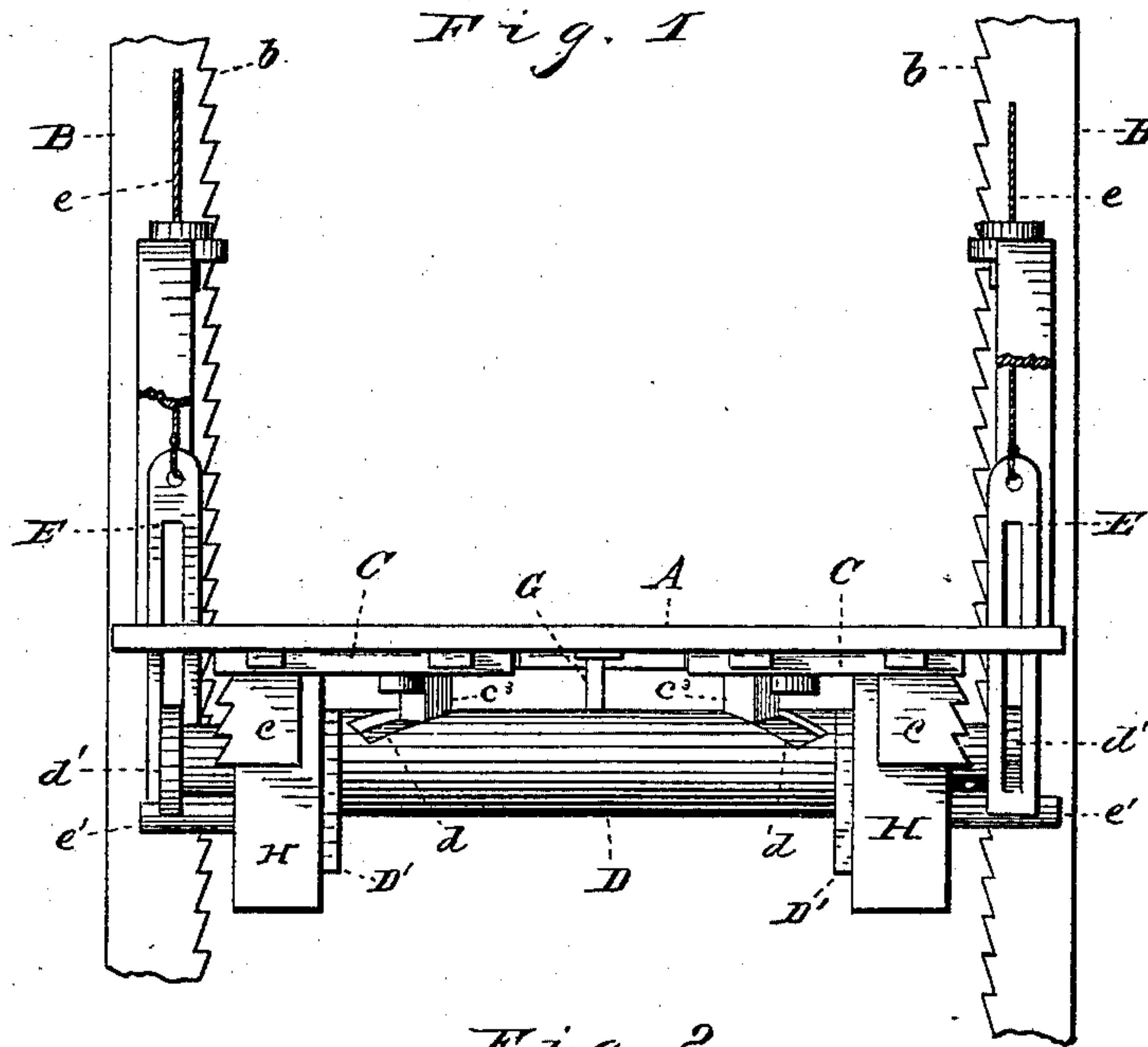
2 Sheets—Sheet 1.

C. LOSSOW.

SAFETY BRAKE FOR ELEVATORS.

No. 285,760.

Patented Sept. 25, 1883.



WITNESSES

W. Engel
Geo. W. King

Cassimir Lossow INVENTOR

By Leggett & Leggett

ATTORNEYS

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2 Sheets—Sheet 2.

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Fig. 6.

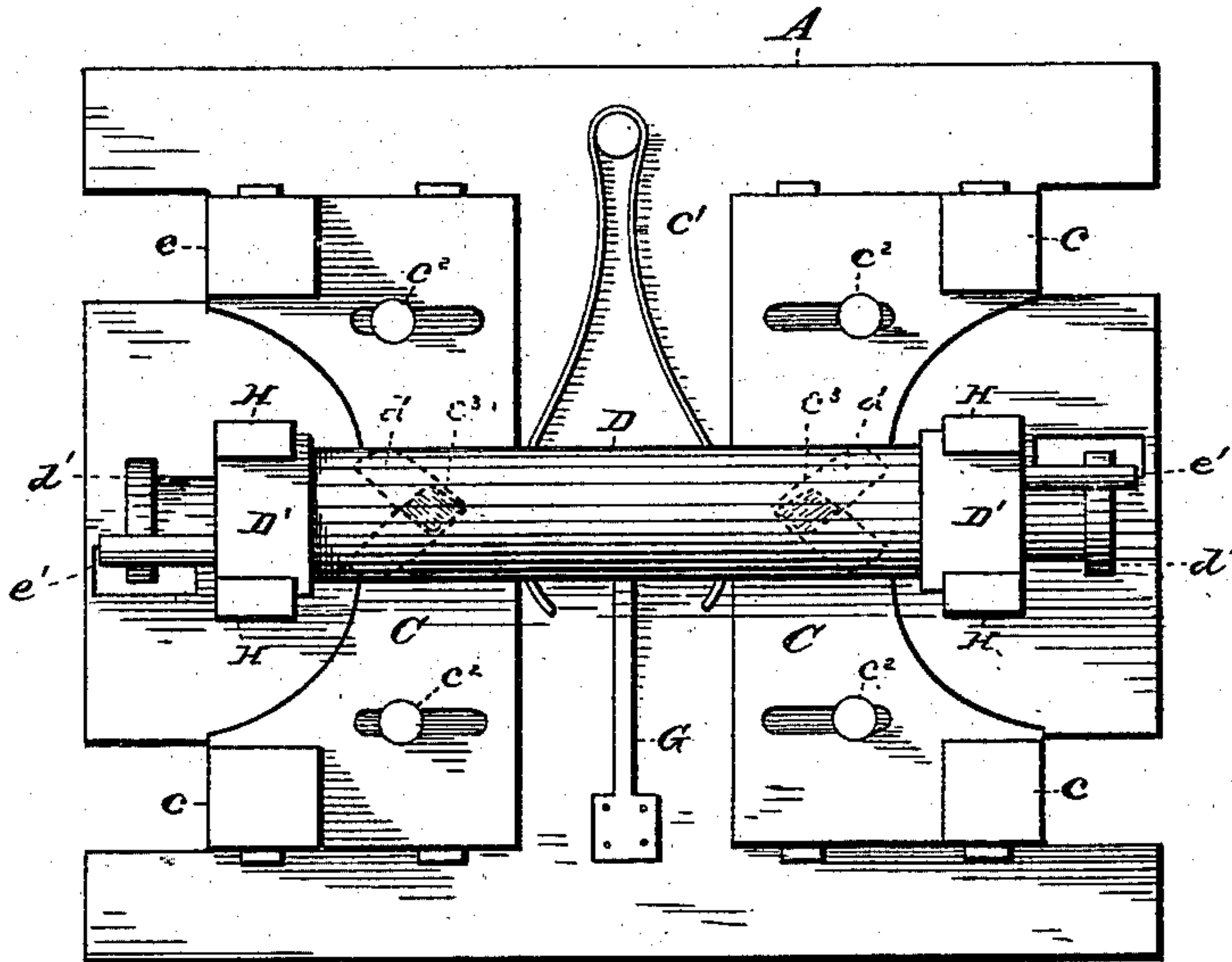
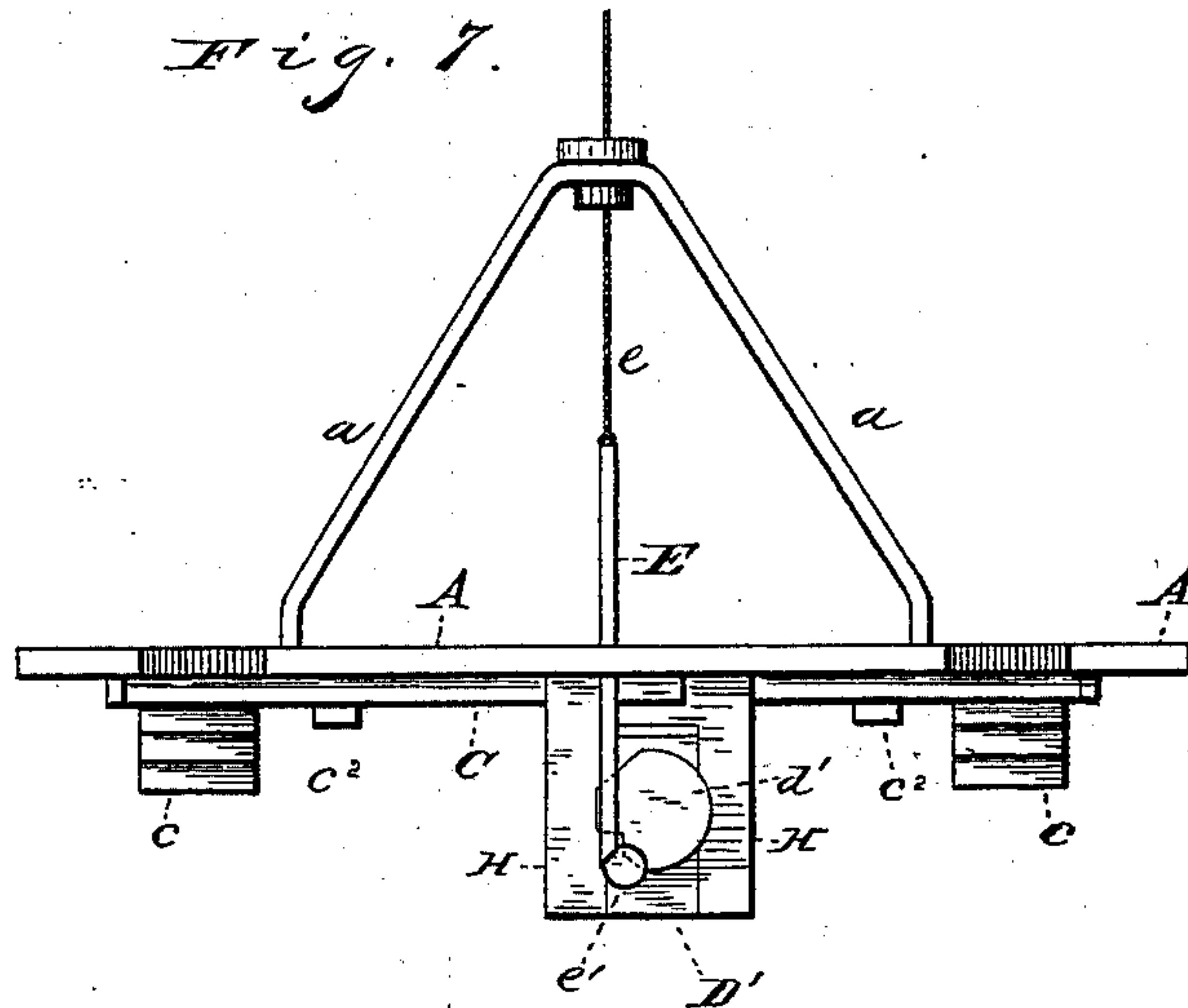


Fig. 7.



Casimir Lossow

WITNESSES

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UNITED STATES PATENT OFFICE.

CASIMIR LOSSOW, OF CLEVELAND, OHIO.

SAFETY-BRAKE FOR ELEVATORS.

SPECIFICATION forming part of Letters Patent No. 285,760, dated September 25, 1883.

Application filed June 16, 1883. (No model.)

To all whom it may concern:

Be it known that I, CASIMIR LOSSOW, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Safety-Brakes for Elevators; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

My invention relates to improvements in safety-brakes for elevators; and it consists in certain features of construction, and in combination of parts hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a side elevation of an elevator-platform and guides made in accordance with my invention. Figs. 2, 3, 4, and 5 are detail drawings illustrating different parts of the mechanism. Fig. 6 is a plan view of the bottom of the platform, and Fig. 7 is an end view of the same.

A represents the platform of an elevator, with the braces *a*; and B, the guides, that are four in number, but the device may easily be modified so as to use but two. These guides are provided, in the usual manner, with racks *b*, for engaging the dogs of the safety-clutch.

C are slides, to which are attached the dogs *c*. These slides are pressed outward by the spring *c'*, and are guided by the pins *c''*.

To each of the slides C is attached a square stud, *c''*, projecting below and engaging grooves *d*, respectively, in the roller D, as shown. This roller is journaled in the boxes D', and has a flange, *d'*, attached to each end. (Shown also in Figs. 4 and 5.) These flanges are each provided with a notch to engage the links E, to which the cables *e* are attached that actuate the elevator. These links have each a beveled end, that engages the pins *e'* under conditions hereinafter shown. These pins extend from the boxes D', to which they are respectively attached. The boxes D' are held in position by the guides H, that are attached to the platform A.

G is a spring attached to the said platform and pressing against the roller D in a direction away from the platform. The notches on the flanges *d'* are on opposite sides of the roller, as shown. When the platform is properly supported by the cables and the respective links attached to their respective flanges *d'*, as shown in Figs. 1 and 4, 6 and 7,

the weight on the two flanges is equal and the roller remains at rest, with studs *c''* in the position shown in Figs. 1, 2, and in dotted lines in Fig. 6, with the slides C in the position shown in Figs. 1 and 6, with the attached dogs *c* drawn back, so that they cannot engage the racks *b*. If one of the cables should break—for instance, the right-hand cable—the remaining or left-hand cable, by means of its attachment to its respective flange, would instantly turn the roller D and press the studs *c''* into one leg of the grooves *d*, as shown in Fig. 3, which, by means of the slides C, forces the dogs *c* into an engagement with the racks *b*. If the other cable had broken instead of the right-hand one, the result would have been the same, except the stud *c''* would have been forced into the other leg of the groove *d*. In case both cables should break at once, the spring G would force the roller away from the platform, so that the studs *c''* would not extend into the said grooves. This would release the slides C, and the spring *c'* would press them outward until the dogs engage the racks as aforesaid. In case one of the cables should be too long, the taut cable would turn the roller a little, when the pin *e'*, engaging the beveled end of the link, would disengage it from its notch on the flange, as shown in Fig. 5. The platform would then stop the same as if one cable had broken.

What I claim is—

1. The roller D, with its grooves and notched flanges, substantially as shown and described.
2. The notched flanges, in combination with links E and the pins *e'*, substantially as and for the purpose set forth.
3. The slides C and the attached studs *c''*, substantially as shown and described.
4. The combination of the slides C, dogs *c*, and the spring *c'*, substantially as described, and for the purpose specified.
5. The spring G, substantially as set forth.
6. The combination of the studs *c''* and the grooves *d*, substantially as shown and described.

In testimony whereof I sign this specification, in the presence of two witnesses, this 6th day of June, 1883.

CASIMIR LOSSOW.

Witnesses:

CHAS. H. DORER,
ALBERT E. LYNCH.