

(No Model.)

E. Y. MOORE.  
DOOR HANGER.

No. 418,530.

Patented Dec. 31, 1889.

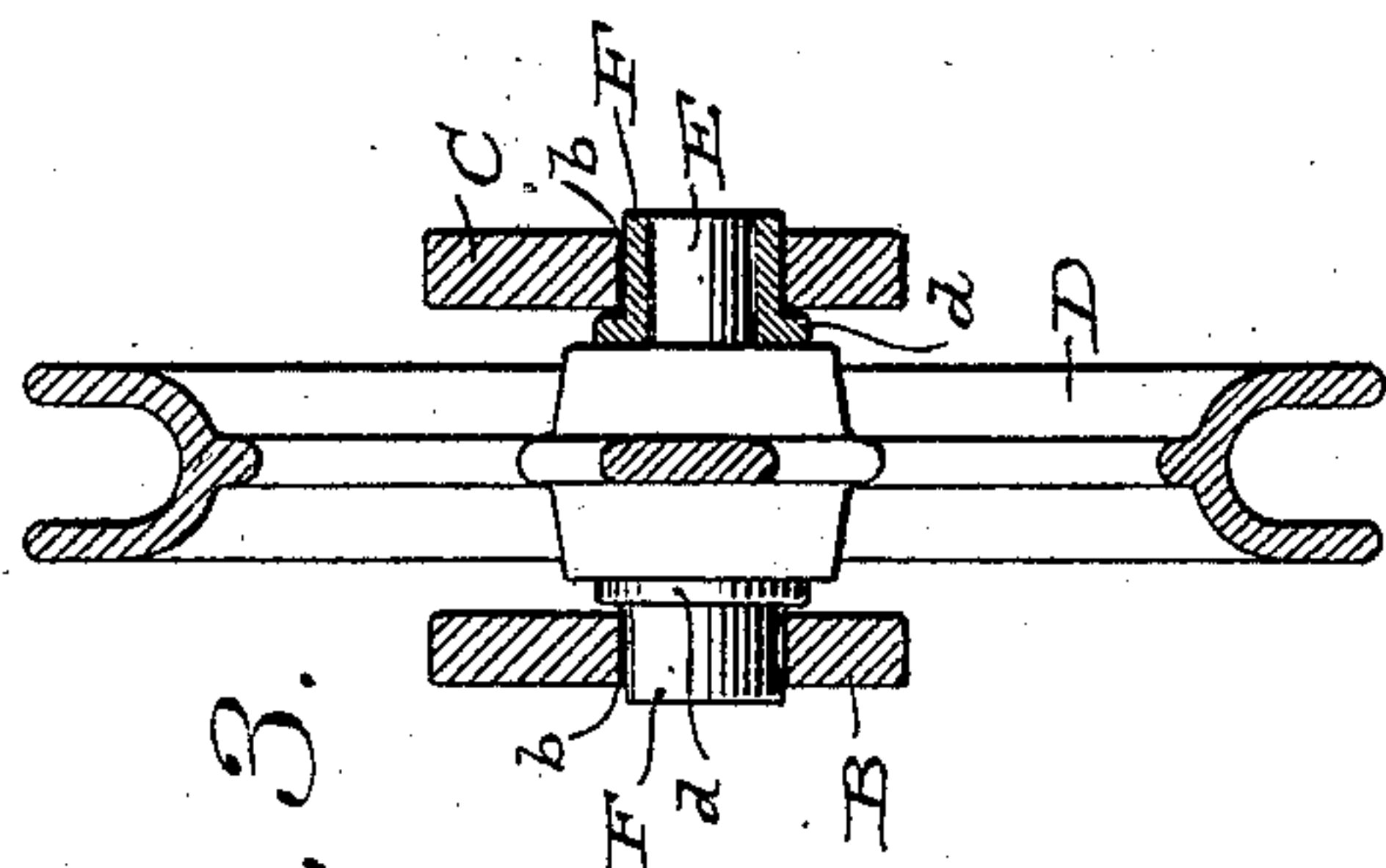


Fig. 3.

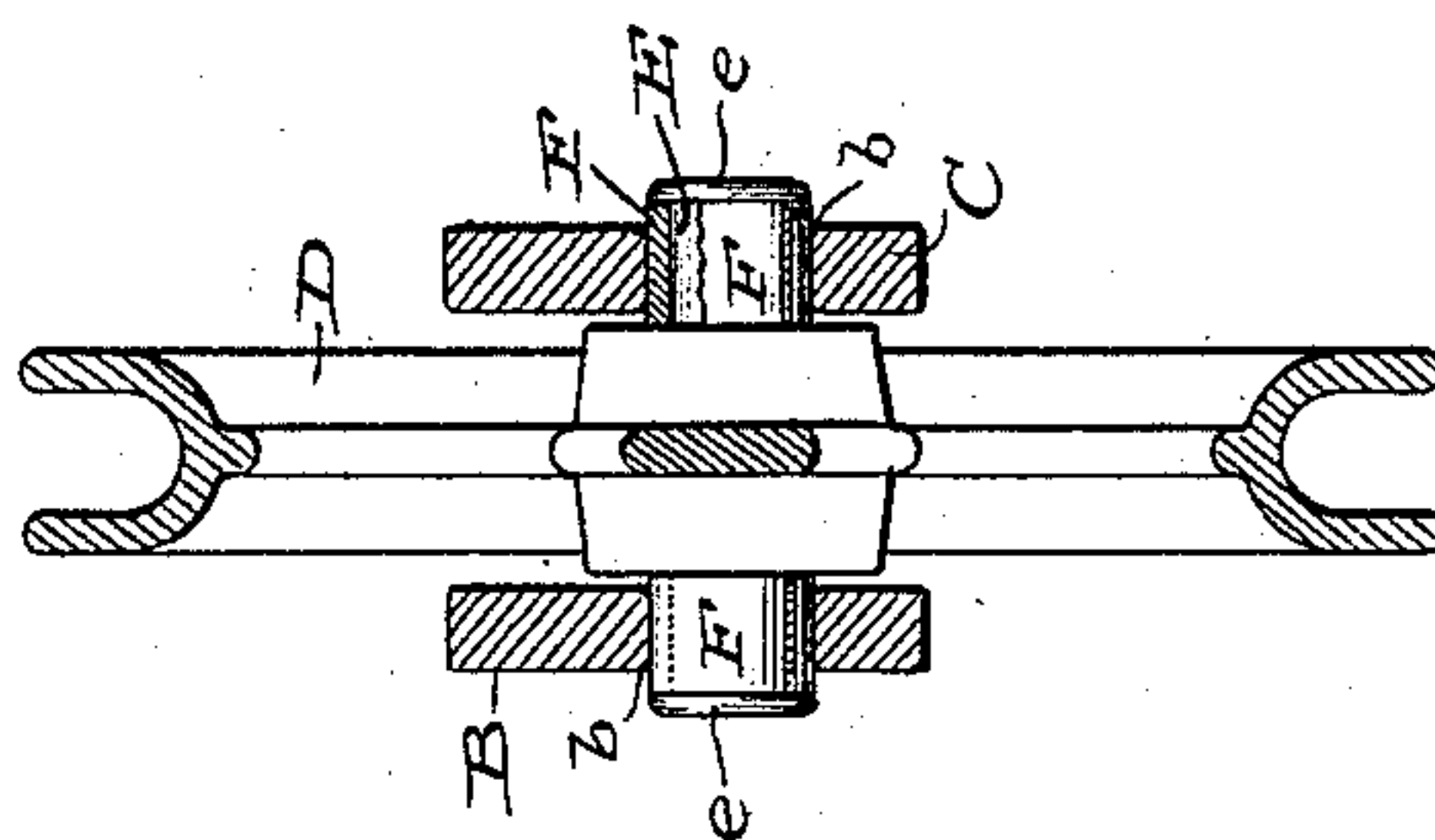


Fig. 4.

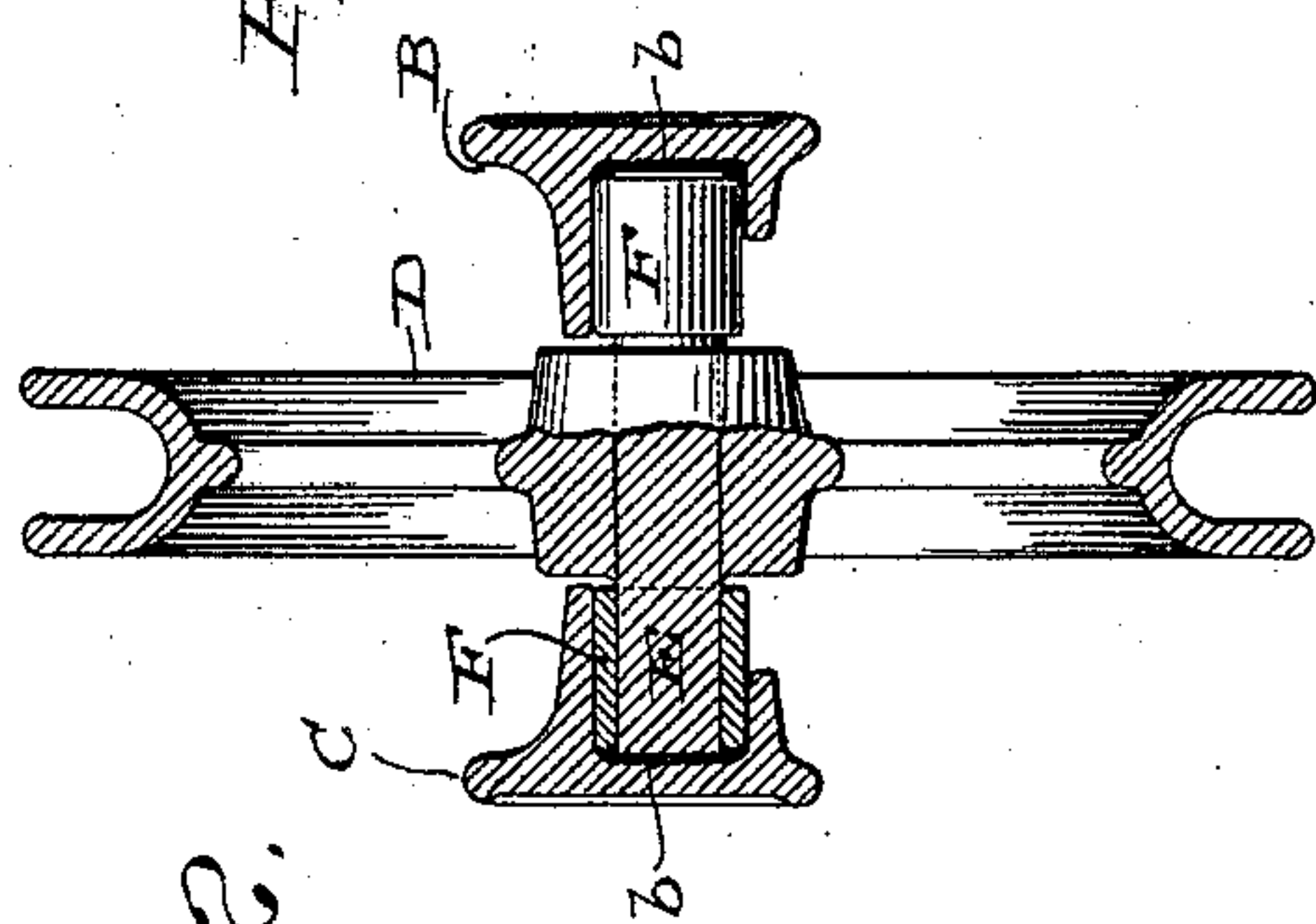


Fig. 2.

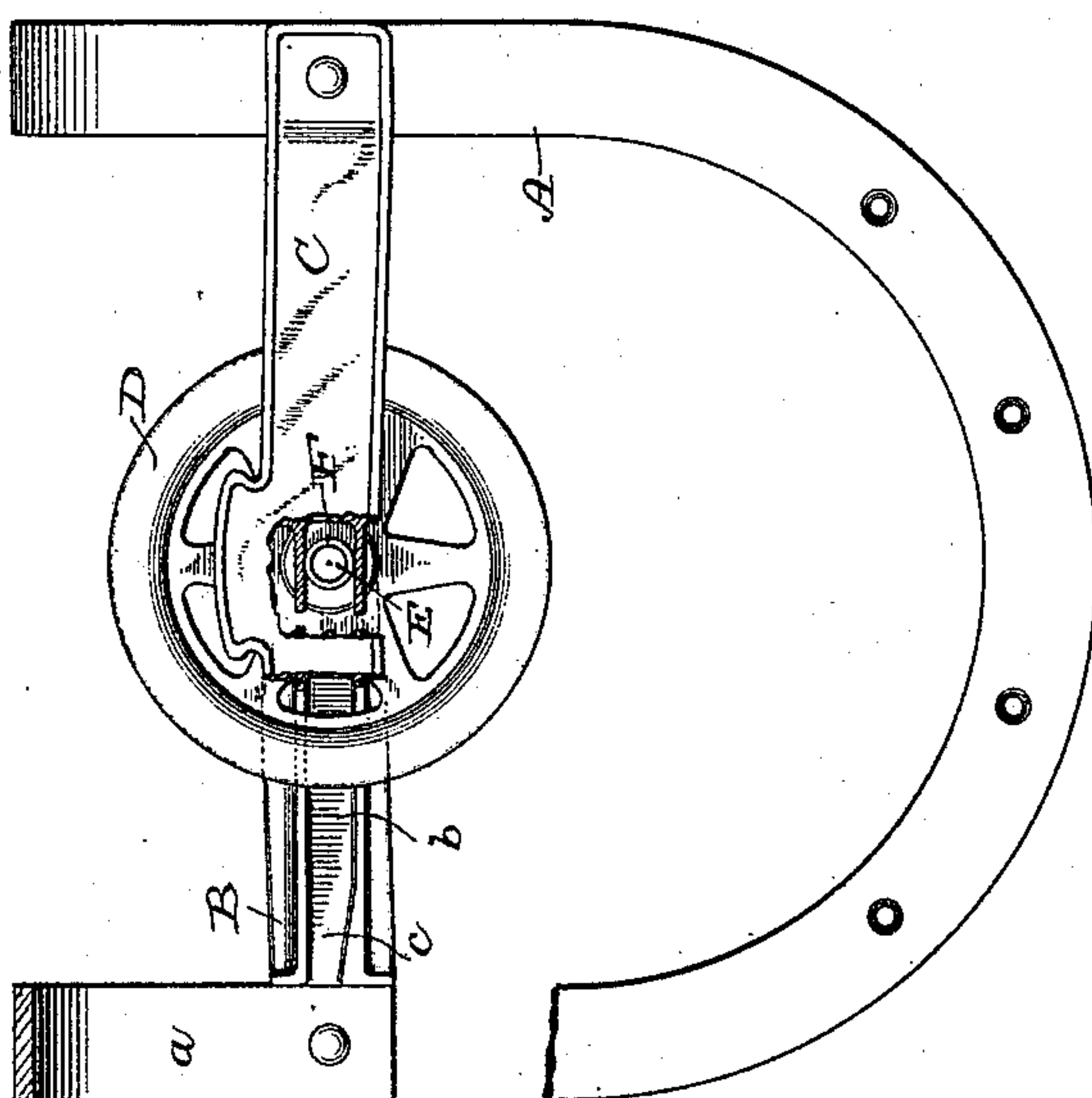


Fig. 1.

Witnesses  
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# UNITED STATES PATENT OFFICE.

EDWARD Y. MOORE, OF MILWAUKEE, WISCONSIN.

## DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 418,530, dated December 31, 1889.

Application filed August 22, 1889. Serial No. 321,641. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD Y. MOORE, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Door-Hangers; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to door-hangers; and it consists in certain peculiarities of construction and combination of parts, to be hereinafter described with reference to the accompanying drawings, and subsequently claimed.

In the drawings, Figure 1 represents a side elevation of a door-hanger constructed according to my invention and partly broken away. Figs. 2, 3, and 4 are transverse sections of a portion of a door-hanger and illustrate as many different forms of my invention.

Referring by letter to the drawings, A represents a bow provided at its ends with bends *a* for the support of a bar B, the latter being arranged parallel to another bar C, that is secured to the main portion of said bow.

As shown in Figs. 1 and 2, the parallel bars B C are channeled upon their inner sides to form guideways *b*, having contracted ends *c*, the construction thus far described being similar to what is more particularly set forth in my patent, No. 394,873, issued December 18, 1888. In the patent just referred to the sheave is shown as provided with a loose axle; but in the present invention the sheave D is rigid on its axle E, and the latter has the ends thereof loosely arranged in thimbles F, that rotate in the guideways *b*, above described.

In that form of door-hanger just specified the thimbles F are plain and limited as to lateral movement by the parallel bars B C and hub of the sheave D; but when said bars are slotted to form the guideways some means must be employed to prevent said thimbles from working off the axle E and out of the slots.

In Fig. 3 I show the thimbles provided at their inner ends with flanges *d*, that extend above and below the slots in the parallel bars, and thus said thimbles are retained in position on the ends of the axle E. Instead of flanging the thimbles, I may upset the ends of the axle, as shown at *e* in Fig. 4, and accomplish the same result; or various other means may be as readily employed for a like purpose.

By employment of the thimbles F, as above described, the sheave D is free to rotate when said thimbles have arrived at the limit of travel in either direction within the guideways *b*, and thus I obtain the same advantages set forth in my previous patent, wherein the sheave is described in connection with a loose axle.

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

1. In a door-hanger, the combination of the guideways, thimbles arranged to rotate therein, and a sheave provided with a rigid axle having the ends thereof arranged to turn in the thimbles, substantially as set forth.

2. In a door-hanger, the combination of the guideways, thimbles arranged to rotate therein, a sheave provided with a rigid axle having the ends thereof arranged to turn in the thimbles, and suitable means for preventing lateral displacement of said thimbles, substantially as set forth.

3. In a door-hanger, the combination of the guideways, flanged thimbles arranged to rotate therein, and a sheave provided with a rigid axle having the ends thereof arranged to turn in the thimbles, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

EDWARD Y. MOORE.

Witnesses:

VAN ZANDT M. MOORE,  
THOMAS W. DAVIS.