S. H. & E. Y. MOORE.

DOOR SHEAVES.

No. 188,170. Patented March 6, 1877.

Fig. 1.

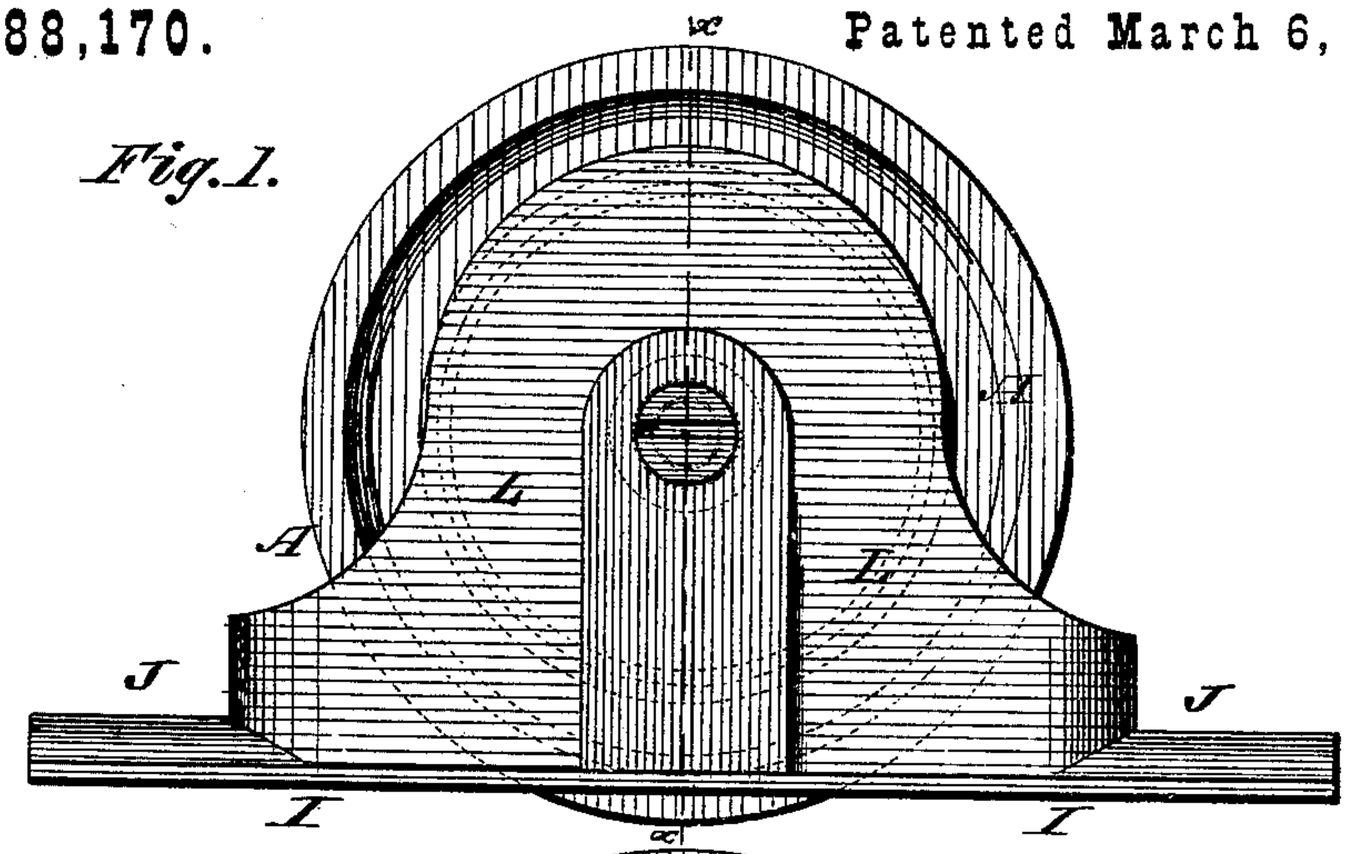


Fig. 2.

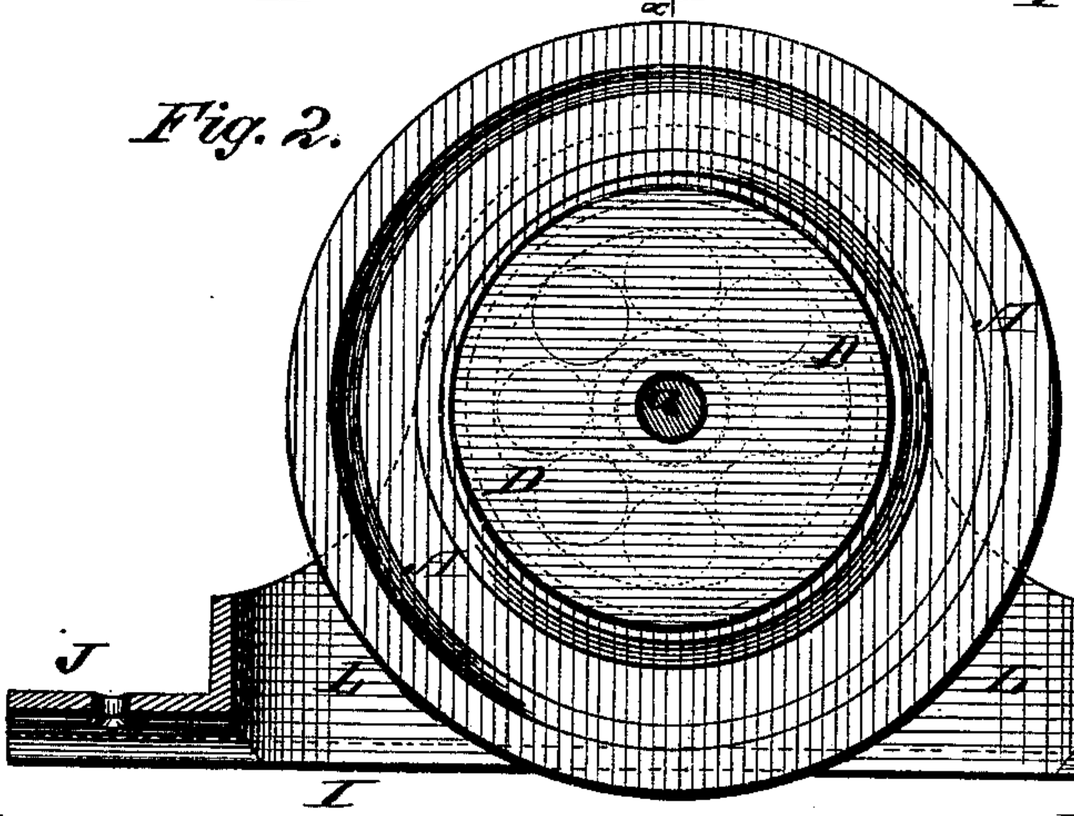


Fig. 6.

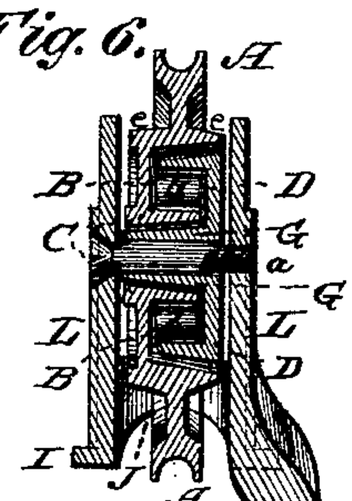


Fig. 4.

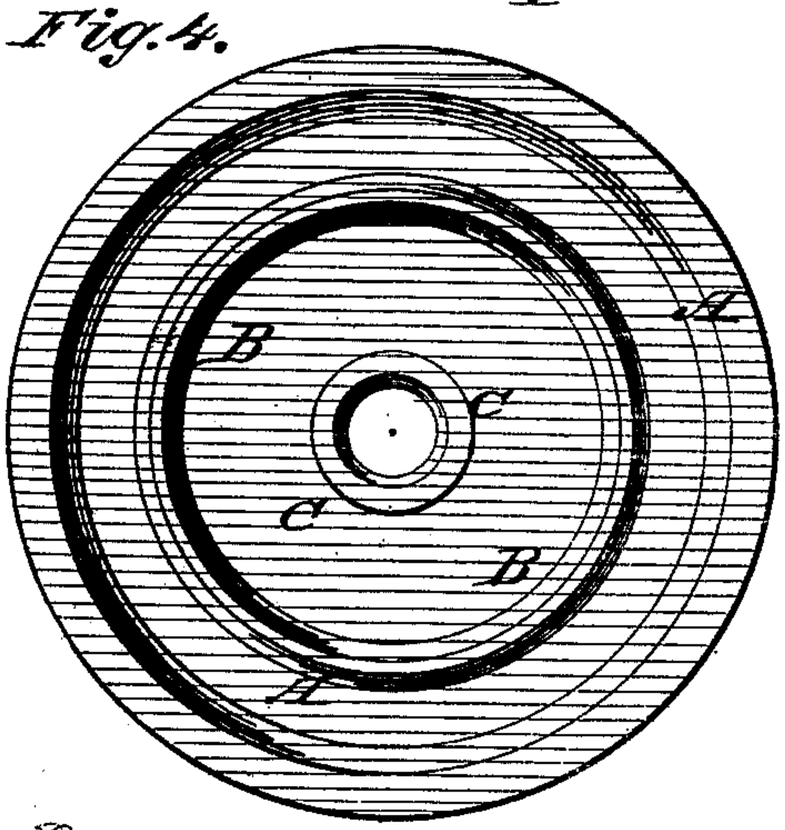


Fig. 3.

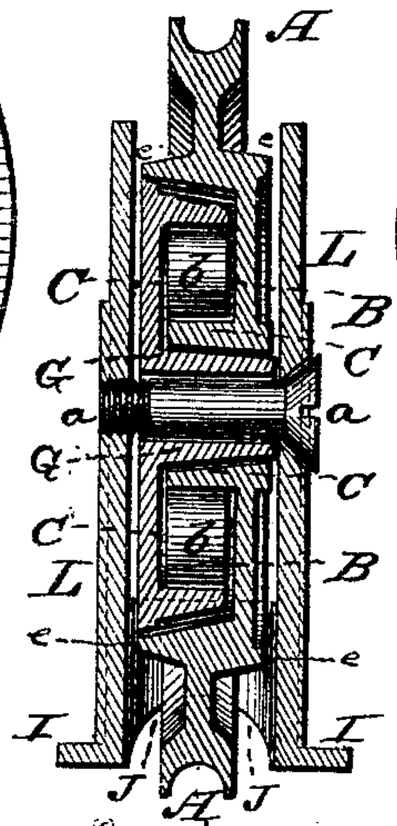
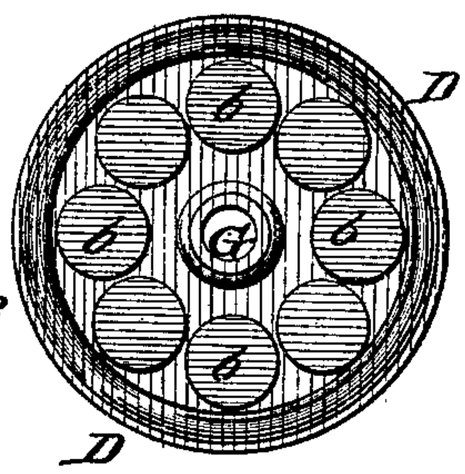


Fig. 5.



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UNITED STATES PATENT OFFICE.

SAMUEL H. MOORE AND EDWARD Y. MOORE, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN DOOR-SHEAVES.

Specification forming part of Letters Patent No. **188,170**, dated March 6, 1877; application filed February 14, 1877.

To all whom it may concern:

Be it known that we, SAMUEL H. MOORE and EDWARD Y. MOORE, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Door-Sheaves; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention consists in an improvement upon our Patent No. 180,619, bearing date August 1, 1876, by providing a wheel having projecting flanges on each side, forming a hub around a central hub, in which a loose cup is entirely inclosed, holding the friction-rollers, which construction allows the entire device to be placed within the sheave, as hereinafter more fully set forth, and definitely claimed.

In the annexed drawing, which fully illustrates our invention, Figure 1 is a front view. Fig. 2 is a rear view, partly in section. Fig. 3 is a central vertical section on the line *x x*, Fig. 1. Figs. 4 and 5 are detailed views of parts of our invention, and Fig. 6 shows a modification of the same.

A represents the wheel or roller, constructed with a circumferential groove to play on a rail on the floor. This wheel is on one side formed with an annular concentric recess, B, in the center of which is a projecting hub, C, made slightly tapering on its inner side. D represents a circular cup provided in the center with a conical hub, G, having a longitudinal orifice for the passage of the fastening-screw *a*. Within the rim of the cup D is placed a series of rollers, *b b*, of such size as to leave sufficient space between them and the hub G for the hollow hub C of the wheel or roller, the rim of the cup fitting within the recess B, as shown fully in Fig. 3. The wheel or roller A is provided on opposite sides with outward-projecting flanges *e*, which extend outward on a line with the outer portion of the hub on one side, and on a line with the outer portion of the cup on the other, whereby the cup and rollers are entirely inclosed within the wheel A, so that the wheel-rollers and cup, when together, may be inserted between the side pieces as one part, thus saving casting the same in two pieces, as commonly done in this particular class of sheaves.

The complete wheel or roller thus constructed is placed within a shell cast in one piece, and constructed as follows: I I are two parallel bars or rails, connected at their ends by concave projections J J, in which are made suitable holes for the passage of screws for fastening the shell in the bottom edge of the door. From the bars or rails I I project wings or side pieces L L, extending the entire length between the projections J J, and forming connections therewith. This completes the shell, which, as stated, is cast all in one piece, and the wheel or roller A is placed between the wings or side pieces L L, and the screw *a* is passed through from one side through the hub G and screws into the wing on the opposite side, G, thus firmly clamping the hub G of the cup D between the two wings L L, and holding said cup firmly in position, and securing the wheel in the shell.

In Fig. 6 we have shown our invention applicable for hanging doors from the top by simply fastening a strap, S, to the shell of the sheave.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The wheel A, having recessed hub C, and outward projections *e*, and the loose cup D, inclosed centrally within the recess and hub G, and the rollers *b*, likewise inclosed within the recess, in combination with the shell I J L, cast in one piece, substantially as and for the purpose set forth.

In testimony that we claim the foregoing as our own we affix our signatures in presence of two witnesses.

SAMUEL H. MOORE.
EDWARD Y. MOORE.

Witnesses:
W. F. FURBECK,
JUDD L. WHAPLES.