

ARNOLD & HANSCHILDT.

Improvement in Furniture-Casters.

No. 126,433.

Patented May 7, 1872.

Fig 1.

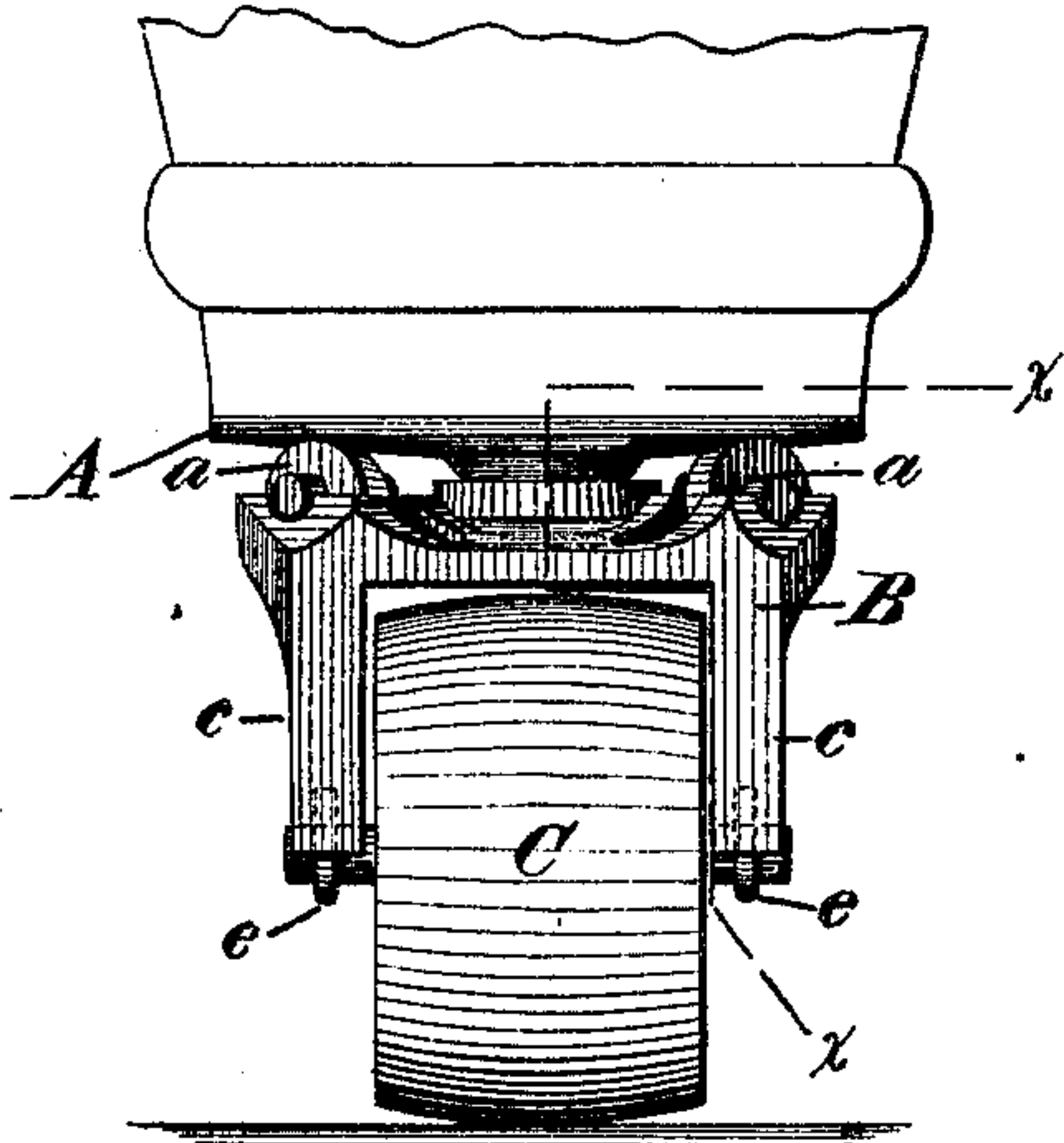


Fig 2.

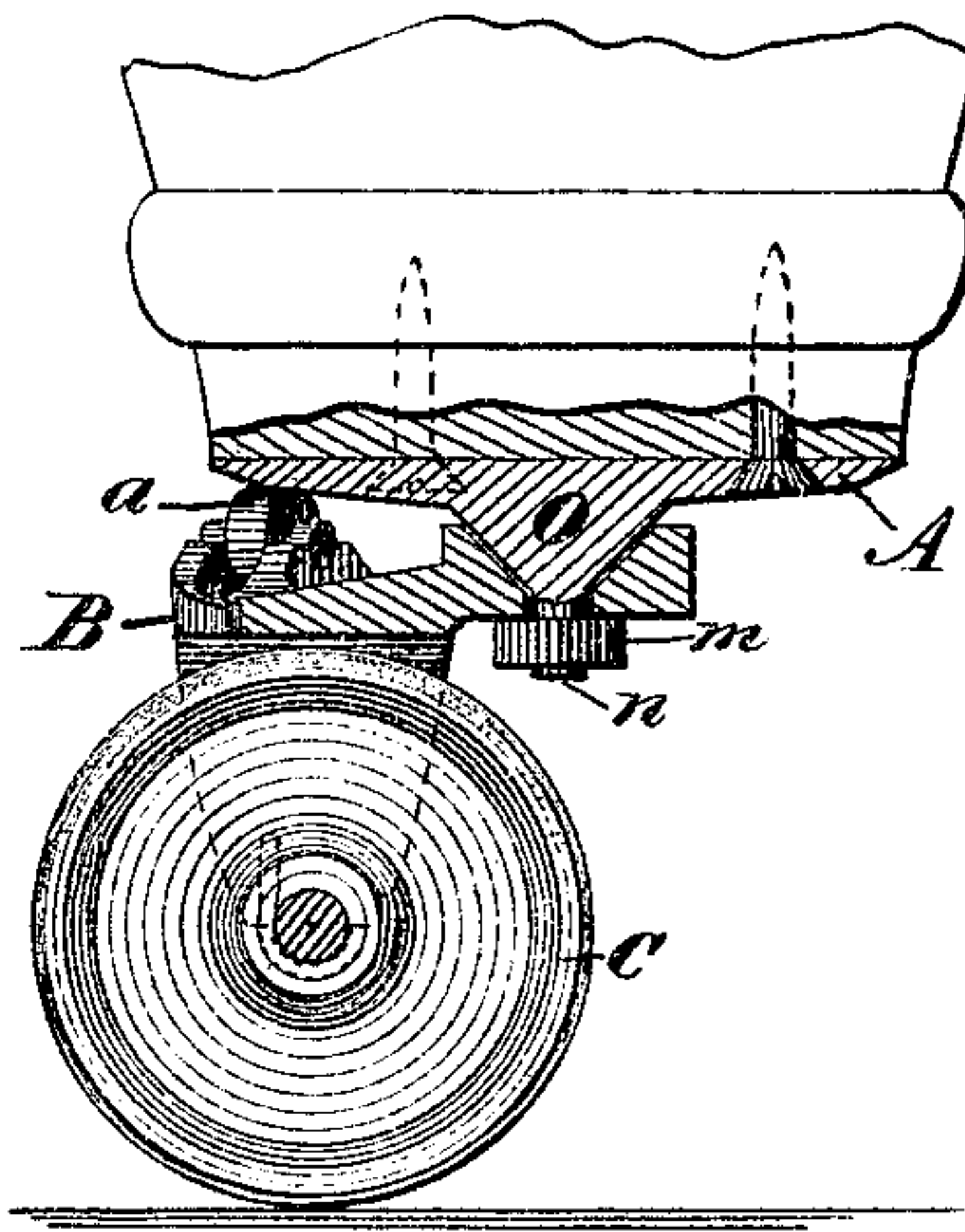


Fig 3.

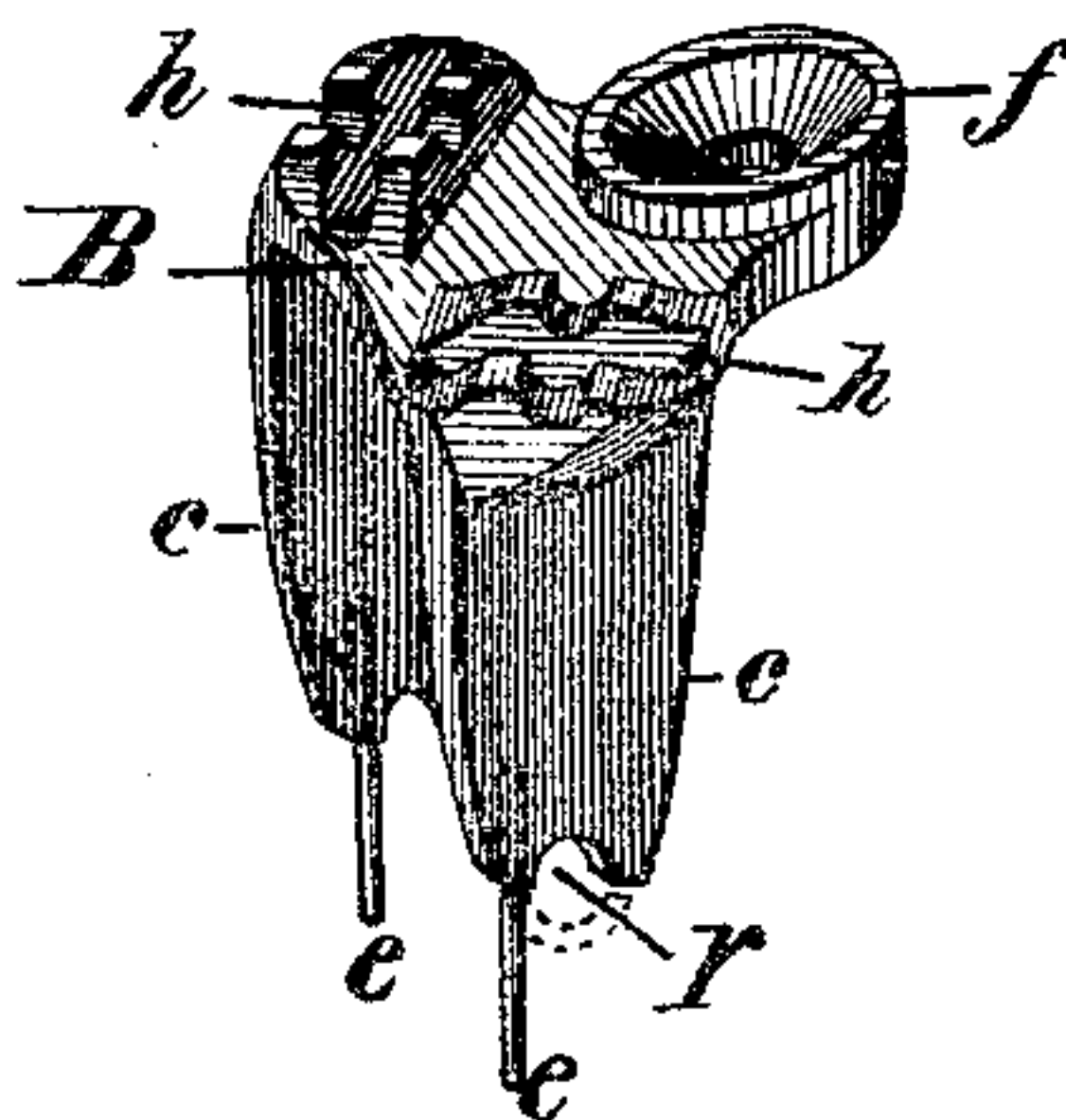


Fig 4.



Witnesses.

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN FURNITURE-CASTERS.

Specification forming part of Letters Patent No. 126,433, dated May 7, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that we, ALONZO C. ARNOLD and OTTO G. HANSCHILDT, of Norwalk, in the county of Fairfield and State of Connecticut, have invented certain Improvements in Furniture-Casters, of which the following is a specification, reference being had to the accompanying drawing.

Our invention relates to an improvement in furniture-casters; and the invention consists in so constructing and casting the various parts that they can be fitted together with less labor and fitting than heretofore, and so that when the parts are once in position, they will be retained there, all as hereinafter more fully explained.

Figure 1 is a rear elevation of the caster complete. Fig. 2 is a vertical section on the line *x x* of Fig. 2. Figs. 3 and 4 are views of portions detached.

This invention relates to that class of casters in which friction-rollers are mounted in the frame that holds the wheel; and it has for its object the simplifying and cheapening of their construction.

In constructing our improved caster we provide a circular plate, A, which is provided with screw-holes for securing it to the furniture in the usual manner, this plate having its under side slightly beveled around its outer edge, as shown in Fig. 2. This plate also has at its center a conical hub or projecting stud, O, the lower end of which is made straight, and has a screw-thread cut thereon to receive a nut, *m*, as shown in Fig. 2. If desired, this straight part *n* of the conical hub O may be made of wrought iron, and set in the mold and the plate cast on it. We then make a frame, B, the form of which is clearly shown in Figs. 1, 2, and 3, the latter representing it detached. The horizontal or top portion of this frame is provided with a conical hole, *f*, to form a seat or bearing for the conical hub O; and near its outer edges it is also provided with two recesses, *h*, as shown in Fig. 3. On each side of these recesses semicircular grooves are formed to afford the bearings for the journals of small friction-rollers *a*, which are to be set in said recesses. This frame B has its depending arms

or legs *c* formed with semicircular grooves *r* in their lower ends; and on one side of each groove a small piece of wire, *e*, is secured by casting the metal of the frame on the wire, as shown in Fig. 3. We then make for each caster two small friction-rollers, *a*, the body of which is beveled to correspond with the beveled edge of the plate A, and which are cast with their journals all complete, as represented in Fig. 4, they being of the proper size to fit in the recesses *h*, with their journals resting in the grooves at the sides thereof. We then provide a wheel, C, of proper size to fit between the arms *c*, and which is also cast with its journals complete and of proper size to fit in the bearings *r*. This wheel C is then placed in position, and secured there by bending the wire *e* at each side around the journal of the wheel, as represented by the dotted lines in Figs. 2 and 3. The friction-rollers *a* are then set in their recesses, and the plate A applied and secured by the nut *m*, as represented in Fig. 2, when the caster is complete.

It will thus be seen that all the parts may be cast complete, and the parts put together without the drilling of the wheel, the rollers, or the bearings, as has heretofore been the custom; and that when the plate A and the frame B are united, the friction-rollers will be held in place and prevented from becoming detached.

Having described our invention, what we claim is—

1. A caster consisting of the plate A provided with a conical hub, O, having a screw-stem cast therein, with the frame B provided with a corresponding bearing, *f*, all constructed and arranged to operate substantially as described.

2. The frame B, provided with the recesses *h* having the friction-rollers *a* set loosely therein, in combination with the plate A, whereby the said rollers can be cast with their journals complete, and be held in place without the use of any additional parts, as set forth.

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Witnesses:

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