

(No Model.)

D. NICKEL & E. W. WAINWRIGHT.
FURNITURE CASTER.

No. 467,952.

Patented Feb. 2, 1892.

Fig. 1.

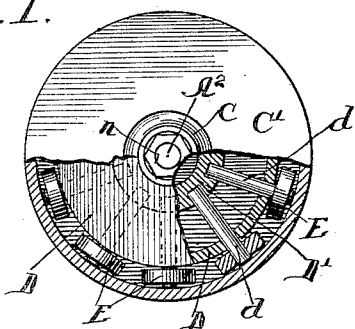


Fig. 2.

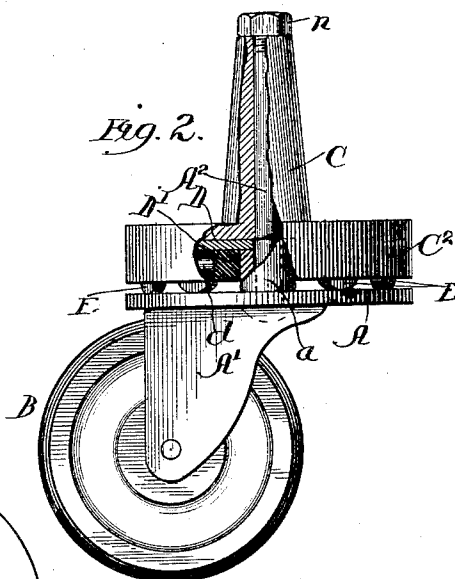
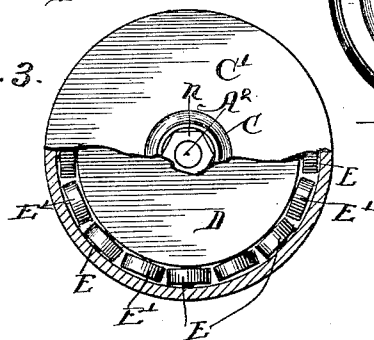


Fig. 3.



Witnesses:

Charles O. Hervey.

C. P. Smith.

Inventors:

David Nickel

Edward W. Wainwright

By Niles, Irvine & Pitner

Attys.

UNITED STATES PATENT OFFICE.

DAVID NICKEL AND EDWARD W. WAINWRIGHT, OF MORRIS, ASSIGNORS TO
THE COLEMAN HARDWARE COMPANY, OF CHICAGO, ILLINOIS.

FURNITURE-CASTER.

SPECIFICATION forming part of Letters Patent No. 467,952, dated February 2, 1892.

Application filed August 7, 1891. Serial No. 401,968. (No model.)

To all whom it may concern:

Be it known that we, DAVID NICKEL and EDWARD W. WAINWRIGHT, both citizens of the United States of America, and both residing at Morris, in the county of Grundy and State of Illinois, have jointly invented certain new and useful Improvements in Furniture-Casters, of which the following is a specification.

Our invention relates to improvements in furniture-casters, and is fully described and explained in this specification and shown in the accompanying drawings, in which—

Figure 1 is a top plan of a caster embodying our invention, certain parts being broken away to show construction. Fig. 2 is a view of the same, partly in side elevation and partly in vertical section; and Fig. 3 is a top plan of a modified form of caster embodying our invention, certain parts being broken away to show construction.

In the views, A is the circular base-plate of a furniture-caster, this base-plate being provided on its lower face with two integrally-formed lugs A', between which a roller B is journaled, and having on its upper face a vertical spindle A², preferably cast upon or otherwise permanently fastened to the base-plate. A sleeve or shell C encircles and turns freely upon the spindle A², and a cap C' is formed integrally with the sleeve at its lower end and covers the entire surface of the base-plate, the sleeve and cap being secured in place by means of a nut n, engaging the screw-threaded upper end of the spindle, and the cap C' being preferably provided with a vertical annular flange C², whose lower edge is slightly above the base-plate A. Between the cap and the base-plate is a spider D, concentric with the cap and plate and having in its margin a series of openings, in which are journaled a corresponding series of horizontal pintles d, extending inward very nearly to the axis of the base-plate and journaled at their inner ends in a collar D', which is preferably separate from and independent of the spider, as shown in Fig. 2, although it may be formed integrally with it, if desired. This collar may

be of such internal diameter as to fit closely about the spindle A²; but we prefer to form the base-plate A with a hub a, encircling the spindle and lying within the collar D', and where this construction is used we prefer to make the opening in the spider D of such diameter as to fit closely about the spindle A², the hub a and the collar D' being both directly under the inner margin of the spider.

On the outer end of each of the pins d is mounted an anti-friction disk or pulley E, resting on the base-plate, the whole series of wheels forming a support for the cap C', and an anti-friction bearing interposed between the cap and the base-plate. The distance between the pintles d should be somewhat greater than the diameter of one of the disks or pulleys, so that the various pulleys of the series are out of contact with each other.

Fig. 3 shows a modification of the form illustrated in Figs. 1 and 2, the rollers E in this form being separated by spaces somewhat greater than their own diameter, and loose rollers E' being inserted between them and held in their proper relative positions by them.

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

In a furniture-caster, the combination, with a wheel and a base-plate supported thereby and provided with a central vertical spindle, of a cap pivoted on said spindle, a loose ring encircling the spindle immediately above the base-plate, a spider interposed between the cap and base-plate and having a marginal flange, a series of radial horizontal pintles journaled at their inner ends in said loose ring and near their outer ends in the flange of the spider, and a series of vertical disks or rollers journaled on the outer ends of said pintles and forming an anti-friction support interposed between the base-plate and cap, substantially as shown and described.

DAVID NICKEL.

EDWARD W. WAINWRIGHT.

Witnesses:

H. C. CLAYPOOL,
FRED HARROD.