(No Model.)

S. C. MENDENHALL.

CASTER.

No. 314,954. Patented Mar. 31, 1885.

FIG. I.

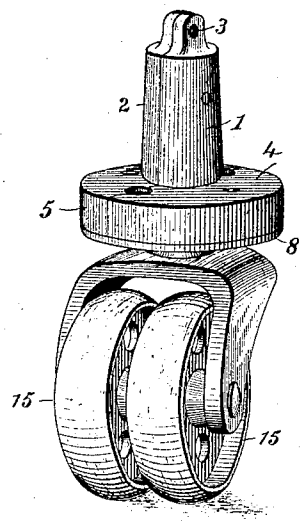


FIG. II.

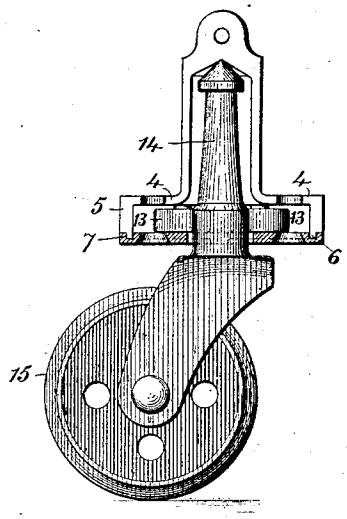


FIG. III.

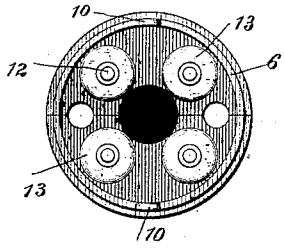


FIG. IV.

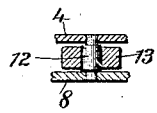
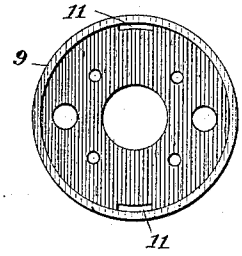


FIG. V.



Attest.
Geo. T. Smallwood
Geo. L. Wheelock

Inventor:
Stephen C. Mendenhall
By Knight Bros
attys

UNITED STATES PATENT OFFICE.

STEPHEN C. MENDENHALL, OF RICHMOND, INDIANA.

CASTER.

SPECIFICATION forming part of Letters Patent No. 314,954, dated March 31, 1885.

Application filed September 5, 1884. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN C. MENDENHALL, a citizen of the United States, residing at Richmond, in the county of Wayne and State of Indiana, (present business address Cincinnati, Ohio,) have invented certain new and useful Improvements in Casters for Furniture and other Articles, of which the following is a specification.

The object of the present invention is to provide a top for stem-casters which shall be cheap and durable, while affording to the spindle perfect liberty in swiveling. To this end I cast or stamp the stem of the top in two parts, each part carrying one half of a circular flange at the bottom. The outer edge of said flange is turned down in the form of a rim or cup, against the lower end of which bears an annular cast or wrought cap, thus forming a closed chamber for the anti-friction movement. The said flange and cap are riveted together by shouldered pins, which also serve the purpose of journals for the anti-friction rollers. Lugs are formed at the lower edge of the top rim, which enter slots or grooves in the cap-plate, and thus keep the said flange and cap in proper relative position, while a groove or a rim on the cap, in connection with the aforesaid pins and a rivet or screw at top of the stem, serves to hold the two parts of the top together.

In order that my invention may be more fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure I is a perspective view of a caster having a top embodying my invention. Fig. II is a vertical section of the same. Fig. III is an under side view of the top, the cap-plate being removed. Fig. IV is a detail view of one of the anti-friction rollers and its bearing-pin, showing the method of fixing the latter in the flange and cap. Fig. V is a plan view of a wrought cap-plate.

The two parts 1 2 of the stem-caster top may be cast or wrought separately and united at top by a single rivet or screw, 3. Each part of the top is formed with one half, 4, of a circular flange having outer downwardly-projecting rim 5. The rim 5 has an offset or feather, 6, which enters a circular groove, 7, in the cast annular cap, 8, Fig. II, or if said cap is wrought it has a circular rim, 9, as shown in Fig. V, which surrounds the feather 6, the purpose of either device being to hold the lower part of the top together.

In order to hold the top and cap so that the holes therein for wood-screws and bearing-pins may register, I cast lugs or projections 10 on the feather 6, which enter slots 11 in the cap. If the socket part of the top as well as the cap be made of malleable metal, the lugs 10 may be made of sufficient length to pass through the cap 8 and be riveted on the lower side thereof.

For fixing the socket or top and cap together I employ pins 12, which are shouldered, as shown at Fig. IV, to keep the flange and cap sufficiently apart not to interfere with the free movement of the anti-friction rollers. Upon the large central portion of the pins 12 the horizontal anti-friction rollers 13 are journaled. Four of such rollers are preferably employed, arranged as shown in Fig. III, with their inner peripheries touching and forming lateral bearing for the spindle 14, carrying the floor wheel or wheels 15. With this arrangement of parts all weight is received vertically on the conical top of the spindle, the anti-friction rollers only receiving strain at right angles to their axes.

The pins 12 will be seen in this caster to perform a fourfold office: first, they unite with cap 8 in holding the two parts of the top together, while, second, they hold the cap itself and top together; third, they spread the top flange and cap sufficiently to avoid any friction on the rollers; fourth, they afford rigid bearings for said rollers.

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

1. The combination, with a two-part top having flange with downwardly-projecting rim, of an annular cap adapted to rest against said rim and form a closed chamber, and lugs and slots for holding said top and cap to proper relative position, substantially as set forth.

2. In combination with a two-part top having flange with downwardly-projecting rim,

the cap having groove or rim for surrounding said top, and riveted pins for fixing said top and cap together, substantially as set forth.

3. In combination with a two-part stem-caster socket-top having flange at bottom with downwardly-projecting rim, a cap resting against said rim, horizontal anti-friction rollers, and vertical pins passing through said rollers and riveted in said flange and cap, substantially as set forth.

4. In combination with a stem-caster socket-top having flange at bottom with downwardly-projecting rim, a cap resting against said rim and forming a curved chamber, horizontal anti-friction rollers within said chamber, and shouldered pins passing through said rollers and riveted in said flange and cap, substantially as set forth.

STEPHEN C. MENDENHALL.

Witnesses:

HARRY E. KNIGHT,

GEO. L. WHEELOCK.