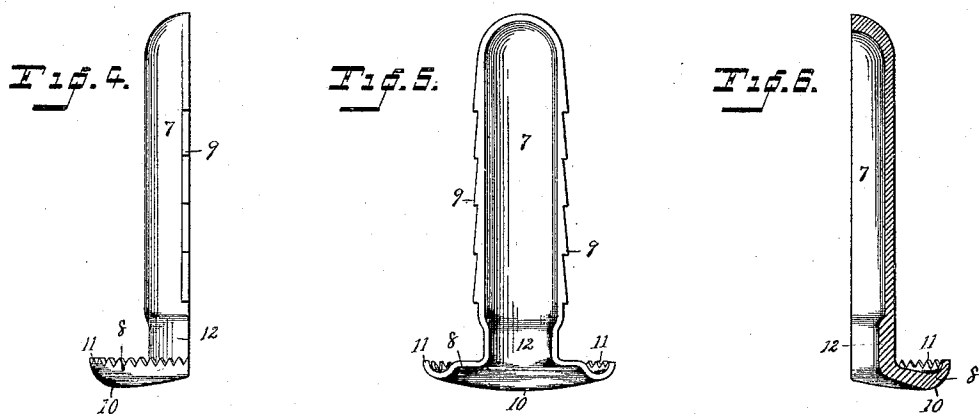
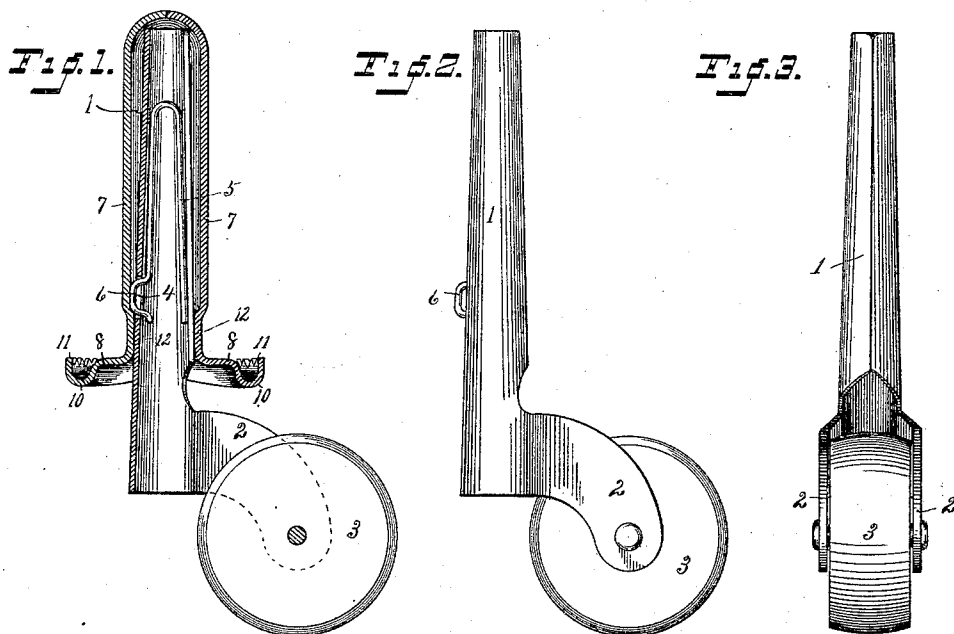


(No Model.)

H. V. SMITH.
CASTER.

No. 415,583.

Patented Nov. 19, 1889.



WITNESSES

C. M. Newman,

Etta J. Pettit

INVENTOR

Henry V. Smith
By A. M. Wooster
Att'y.

UNITED STATES PATENT OFFICE.

HENRY V. SMITH, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO FRANKLIN
B. BRADLEY, OF SAME PLACE.

CASTER.

SPECIFICATION forming part of Letters Patent No. 415,583, dated November 19, 1889.

Application filed April 23, 1889. Serial No. 308,266. (No model.)

To all whom it may concern:

Be it known that I, HENRY V. SMITH, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Casters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to the manufacture of furniture-casters, and has for its object to simplify and cheapen their construction, and at the same time to improve their operation in use.

With these ends in view I have devised the novel construction of which the following description, in connection with the accompanying drawings, is a specification, numbers being used to denote the several parts.

Figure 1 is a section of my novel caster complete, the wheel being in elevation; Fig. 2, a side elevation, and Fig. 3 a front elevation, of the combined pintle and arms, showing the wheel in position; Figs. 4 and 5, elevations from different points of view of one half of my novel two-part socket; and Fig. 6 is a section of one of said parts, Figs. 4 and 5 being intended to represent said part when struck up from sheet metal and Fig. 6 to represent said part as cast. The pintle and arms are formed from a single sheet-metal blank struck out and formed in dies.

1 denotes the pintle, 2 the arms, and 3 the wheel mounted in the usual manner between the arms.

4 denotes an opening in the back of the pintle, and 5 a U-shaped spring having a curved and recurved projection 6, which extends through the opening in the pintle for a purpose which I will presently explain. The shape and position of this spring are clearly illustrated in Fig. 1. It will be seen that projection 6, which extends through opening 4, holds the spring firmly in position when it has once been inserted into the pintle.

It is of course well understood that casters for ordinary articles of furniture are supplied by the manufacturers, and that in practice the sockets are placed in position before the

articles are shipped, the other parts of the casters being shipped separately. This is in order to avoid breakage in transportation. It is, furthermore, quite common when the goods are on exhibition to allow the legs of the articles to rest upon the bottoms of the sockets, or upon disks connected thereto. In practice I make the sockets in two parts, and form integral with each part a half-disk.

7 denotes the half-sockets, and 8 the half-disks.

An important feature of my novel construction is that I make the half-disks in the form of swelled crescents, the swell in each crescent being midway between the ends of the half-disks. I thereby form a rounded projection 10 at the center of each half-disk, so that when a pair of combined half-disks and half-sockets are driven into place in the leg of an article of furniture the sockets will be held firmly in position by teeth or projections 9 upon the edges thereof, and the entire weight of the article will be supported by the two rounded projections 10 at the lower ends of the combined half-sockets and half-disks. I thereby reduce the contact-surface and also avoid the possibility of any rough edges upon the parts of the sockets scraping upon or coming in contact with the floor. This construction is clearly illustrated in the drawings. It will be seen that the inner edges of the half-disks—that is, their lines of contact with each other—will be at such a distance above the floor as to avoid the possibility of contact therewith. The combined half-sockets and half-disks may be either struck up from sheet metal or cast, as indicated in the drawings. Upwardly-turned teeth 11 may be formed at the edges of the half-disks, if preferred. These engage the wood at the ends of the legs and act to prevent splitting, and also assist to hold the sockets in position. In order to prevent the other parts of the caster from dropping out in use, I provide inwardly-extending projections 12 at the bases of the half-sockets. These projections are engaged by projections 6 upon springs 5, and act to hold the pintles, arms, and wheels in operative position unless withdrawn by a pull, while at the same time they permit free

rotation of the pintle within the socket. When the half-sockets are struck up from sheet-metal, as in Figs. 4 and 5, these sockets are formed by closing in the metal. When the half-sockets are cast, as indicated in Fig. 6, the metal is left thicker to form projection 12, as is shown in said figure.

Having thus described my invention, I claim—

10 1. Combined half-sockets and half-disks for furniture-casters, the bottoms of which are swelled outward from end to end and from side to side to form rounded projections, so that in use before the casters are inserted
15 the article may rest upon the projections, the ends of the half-disks being out of contact with the floor.

2. The combination, with a hollow pintle

having an opening 4, of a U-shaped spring having a curved and recurved projection extending through said opening, as and for the purpose set forth. 20

3. In a furniture-caster, the combination, with a hollow pintle having an opening 4, and a spring within the pintle having a curved and recurved projection extending through said opening, of a socket adapted to receive the pintle and having a projection 12, which is engaged by the spring in use, as and for the purpose set forth. 25

In testimony whereof I affix my signature in presence of two witnesses. 30

HENRY V. SMITH.

Witnesses:

FRANKLIN B. BRADLEY,
A. M. WOOSTER.