

A. B. DISS.
CASTER FOR FURNITURE.
APPLICATION FILED MAR. 26, 1908.

Fig. 1

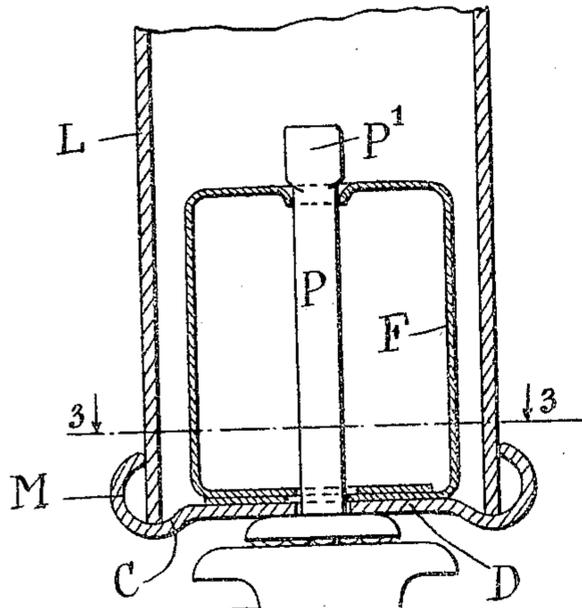


Fig. 5

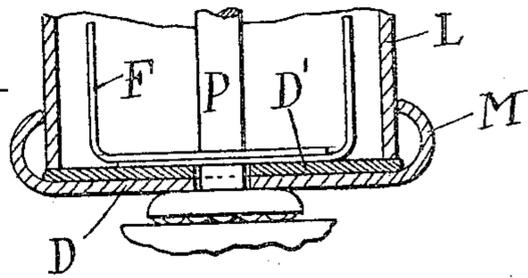


Fig. 4

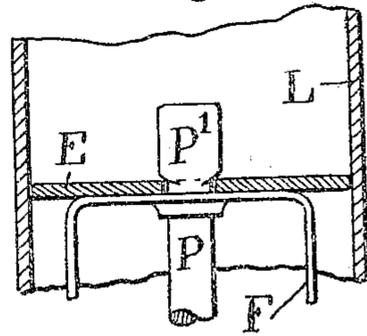


Fig. 3

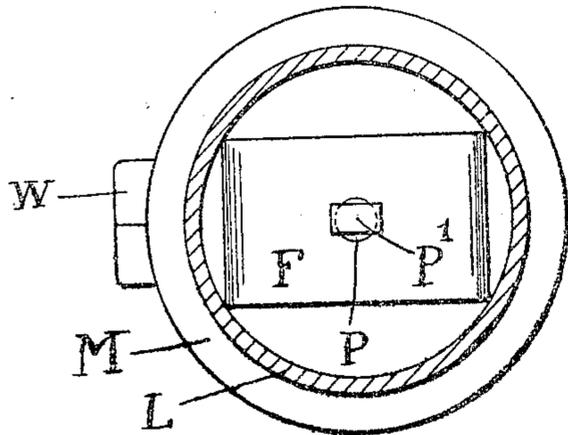
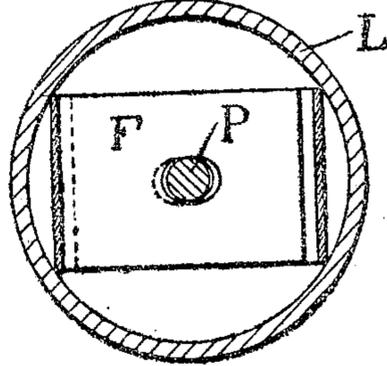


Fig. 2

Witnesses
Heruan Morris
E. Van Landt

Inventor
Albert B. Diss
By *James Ogden*, Attorney

UNITED STATES PATENT OFFICE.

ALBERT B. DISS, OF NEWARK, NEW JERSEY, ASSIGNOR TO UNIVERSAL CASTER & FOUNDRY COMPANY, A CORPORATION OF NEW JERSEY.

CASTER FOR FURNITURE.

No. 891,045.

Specification of Letters Patent.

Patented June 16, 1908.

Application filed March 26, 1908. Serial No. 423,364.

To all whom it may concern:

Be it known that I, ALBERT B. DISS, a resident of Newark, State of New Jersey, have invented certain new and useful Improvements in Casters for Furniture, of which the following is a specification illustrated by drawings.

The invention relates to the class of casters having a caster-wheel, jaws and pintle adapted to be held and centered in a relatively large tubular leg and provided with resilient means for holding the caster frictionally to the leg, so it will not drop out when the leg is raised, and for centering and supporting the pintle relatively to the leg when in use.

It is customary to provide tubular legs with an ornamental collar, ring or beading around the foot of the leg and to secure the same thereto either by riveting or casting it about the leg, or in other suitable ways. The present improvement obviates the necessity of doing this and utilizes the ornamentation, which I will refer to as a leg mount, as a part of the caster attachment operating in connection with the spring retaining means to center the leg and pintle by means of the exterior surface of the leg, which is commonly of more accurate size and shape than the interior of the leg, and if a leg of unduly small exterior diameter is used with the new caster, the leg mount serves largely to conceal this fact and prevent unsightly appearance.

In the accompanying drawing: Figure 1 shows partly in cross section the preferred construction of the invention. Fig. 2 is a plan view, the leg being shown in section. Fig. 3 is a horizontal cross section on the plane 3—3 of Fig. 1, showing the construction of the lower end of the frame. Figs. 4 and 5 are detail views showing some modifications.

In Figs. 1, 2, and 3 the pintle P is shown provided with a usual form of spring frame F and with a leg supporting disk D which is upturned exteriorly to form the ornamental leg mount M which substantially fits the exterior of the tubular leg L when such leg is of the accurate maximum size that will fit within the leg mount M. In addition to centering the leg exteriorly, the disk D may be dished or convex upwards, as indicated at C, to aid in the centering function when the leg is a loose fit externally.

The spring frame F, as illustrated in Figs. 1 and 2, is relied upon to substantially fit the interior of the leg around the upper end of the pintle so as to center and afford support for the upper end of the pintle within the leg. The spring frame is of sufficient strength and resilience to expand outwards against the inner surface of the leg and produce enough frictional resistance to prevent the caster dropping out when the leg is raised. The upper end of the pintle extends through a bearing in the top of the frame, as shown, and is enlarged to form a head P' and prevent its dropping out of the spring frame. The lower ends of the spring frame may be overlapped and perforated to receive the pintle, as shown in Figs. 1 and 3, the perforations being of sufficient length to allow some lateral movement of expansion of the spring frame. This may be accomplished by elongating the two holes in the ends of the spring, as shown in Fig. 3. This form of spring frame is not novel with the present invention, but I prefer to employ it in the present invention because it can be cut out of a single straight strip of spring metal and bent to the form shown at very little expense.

In the operation of the caster shown in Figs. 1, 2, and 3, it will be seen that when in use the weight of the leg L rests upon the disk D and is transmitted by the disk D to the jaws of the caster. I have indicated a well known form of ball bearing beneath the disk D instead of a simple shoulder on the pintle P, but the ball bearing is not part of the invention. The pintle is centered at its upper end directly by the spring frame and at its lower end it is centered by means of the leg mount M which bears against the exterior surface of the leg L, and if the legs with which the invention is used vary appreciably for the given normal size for which the caster is fitted, then the dishing or cupping of the disk D to approximately fit the leg interiorly or any other well known interior centering means may be resorted to in addition to the leg mount M.

In Fig. 4 is shown a centering disk E for the upper end of the pintle P which may be superposed upon the spring frame to center the upper end of the pintle without departing from the principle of the invention.

In Fig. 5 is shown a stiffening plate or disk D' which may be used to reinforce the disk D

when it is made of light brass or insufficiently strong material. The disk D' will directly take the weight of the leg L.

5 By the expression "leg supporting disk and leg mount" I do not mean to specify that these are necessarily separate elements or not integral.

What I claim and desire to secure by these Letters Patent, is the following:

10 1. A caster for tubular legs, having a leg-supporting disk and leg mount centered in respect to the pintle of the caster and exteriorly surrounding and centering the foot of the leg and having means for centering the
15 upper end of the pintle and means acting resiliently outward to hold the pintle frictionally within the leg.

20 2. A caster having a spring frame for frictionally retaining its pintle within a relatively large tubular leg and having a leg-supporting disk on which the lower end of

the leg rests, and a leg mount secured to the caster for receiving and surrounding the lower end of the leg.

3. A caster having a pintle and spring re- 25 taining means for holding the pintle in a relatively large tubular leg and a leg supporting disk which has an upturned leg mount for surrounding the lower end of the leg.

4. A caster for tubular legs distinguished 30 by having a leg mount which is centered on the pintle and which surrounds and centers the tubular leg and by having spring means for holding the pintle and leg mount to the
35 leg.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses, March 25th 1908.

ALBERT B. DISS.

Witnesses:

E. VAN ZANDT,
HERMAN MORRIS.