(No Model.)

A. B. DISS.

FURNITURE CASTER.

No. 436,307. Patented Sept. 9, 1890.

Fig. 1.

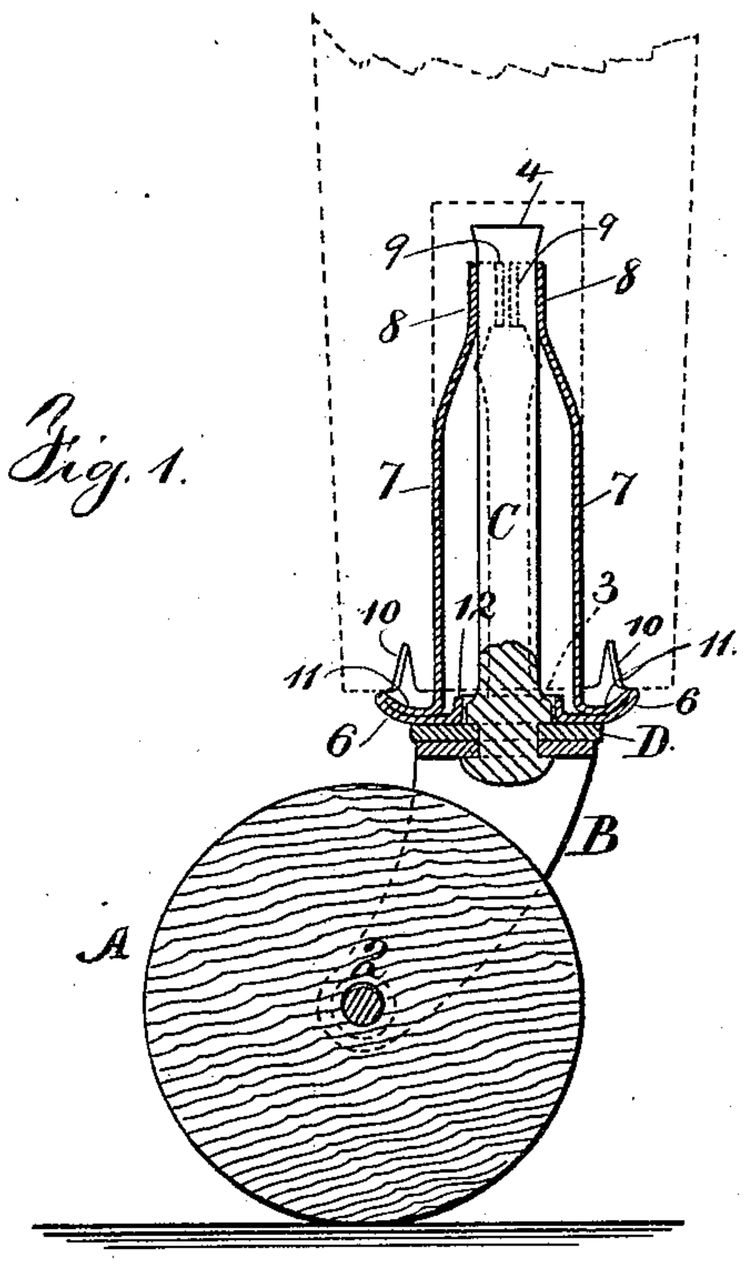


Fig. 3

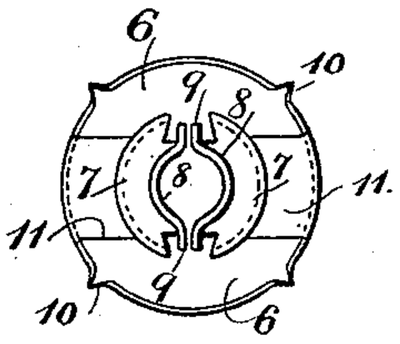
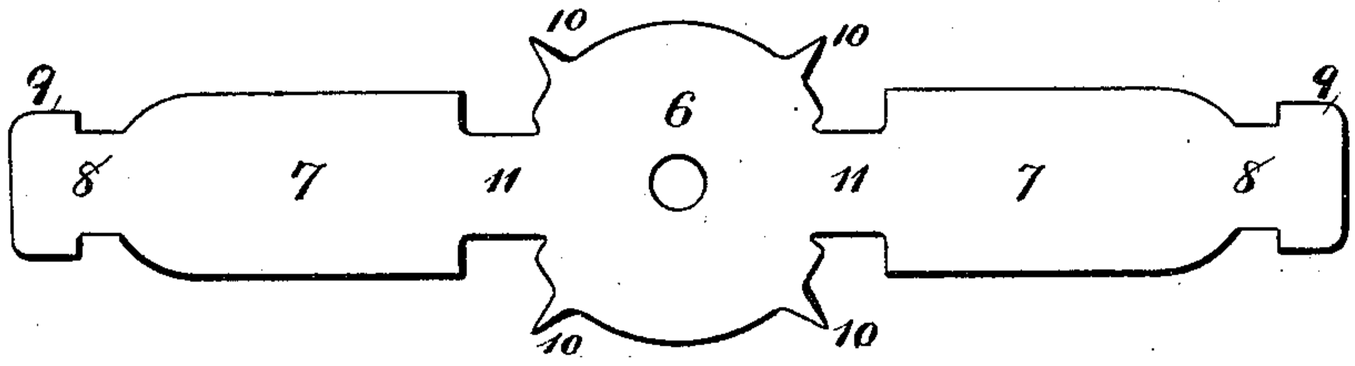


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

ALBERT B. DISS, OF BROOKLYN, NEW YORK, ASSIGNOR TO A. B. DISS & CO., OF SAME PLACE.

FURNITURE-CASTER.

SPECIFICATION forming part of Letters Patent No. 436,307, dated September 9, 1890.

Application filed February 12, 1890. Serial No. 340,143. (No model.)

To all whom it may concern:

Be it known that I, ALBERT B. DISS, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Casters for Furniture, &c., of which the following is a specification.

In Letters Patent No. 412,484, granted to me October 8, 1889, the socket for receiving the pintle is made of a sheet-metal strip having a central hole and stamped up to form semi-cylindrical shells for receiving the pintle.

My present invention is an improvement upon the same whereby the pintle of the caster is retained in the shell by the two parts of the shell forming a spring-clip, and there is a center plate having its edges turned up and provided with penetrating-points for preventing the rotation of the shell within the furniture-leg or other part to which it is attached.

In the drawings, Figure 1 is a vertical section of the caster-frame and the shells and center plate. Fig. 2 represents the sheet-metal blank as cut out previous to being stamped up into shape, and Fig. 3 is a plan view of the shell and center plate separately.

The roller or wheel A is upon an axis 2, passing through the horn frame or jaw B, which is preferably of sheet-steel cut out of the proper shape and bent up as represented, and the pintle C is upset to form a flange or collar 3, which rests either against the upper surface of the horn-frame B, or preferably against the washer D, that intervenes between such flange or collar and the upper surface of the horn-frame, and the pintle C below the collar 3 passes through the washer D and through the horn frame or jaw B, and its lower end is riveted up to connect such pintle and the horn-frame permanently. By upsetting the pintle to form a flange or collar 3 the the connection between the pintle and the horn-frame is rendered much stronger than in casters heretofore made, where the lower end of the pintle has been reduced in diameter where it passes through the horn frame or jaw, and the flange 3 becomes a wearing-surface for the center plate, hereinafter described, as well as serving as the collar against which the parts are riveted up firmly. The upper end of the pintle is made with a head 4, either by riveting up the end of the pintle to spread it or by turning off the pintle itself near the upper end to leave the head projecting.

The center plate 6 and the shells 7 are made of one piece of sheet metal cut out in the form shown in Fig. 2, or approximately so, and stamped up into the shape represented in Figs. 1 and 3, and the shells 7 are struck up in dies so as to be semi-cylindrical, or approximately so, and the end portions of such shells are drawn down to half-circles 8, corresponding to the pintle below the head 4, and there are wings 9 at each edge of the half-circles 8, which wings correspond, or nearly so, to the internal diameter of the hole that is bored for the socket of the caster, and in consequence of the wings 9 projecting at the edges of the half-circles 8 the parts can be struck up with greater facility and more accurately than they can when the blank is not cut out to form the wings, but is made with straight edges, as seen in my aforesaid patent. The middle portion of the center plate 6 is flat, but the edges thereof are turned up, similar to a saucer, and there are points 10 upon the edges of the center plate, which points are of a sufficient length to be driven into the wood of the leg or other article of furniture to which the caster is fastened, and the webs 11, which connect the shells 7 with the center plate 6, are preferably narrower than the metal of the shells 7, so that they can be folded over and bent down closely against the upper surface of the center plate 6, and they firmly hold the shells and center plate together when they are properly struck up in dies. It will now be apparent that the flange or collar 3 is to fill the central hole in the plate 6, and such collar forms a wearing-surface that is durable to prevent the pintle being cut or grooved by the pressure against the center plate when the caster turns upon its pintle, and I prefer to bend up the sheet metal of the center plate at its central hole to form an inturned bush 12, which renders the parts much more durable, because this inturned bush is of the same width, or nearly so, as the flange or collar 3. The sizes of the parts are to be such that after the

socket for the caster formed by the shells 7 half-circles 8, and wings 9 has been driven into the hole bored in the furniture the head 4 of the pintle will not pass through the half-circles 8, except by the application of sufficient pressure to spring the half-circle ends 8 of the shells 7 slightly apart as the head 4 passes through between them, and as this is done the upper ends of the shells spring together again sufficiently to prevent the head 4 from passing through between them and the caster dropping out when the bedstead, table, or other article is lifted; but when sufficient pressure is applied the head 4 can be drawn back through between the half-circles 8 and the pintle of the caster released from the socket. This caster is very strong and light, and in consequence of the center plate having a turned-up edge and the penetrating-points such center plate is well adapted to slide upon a floor or carpet without injuring the same or being itself injured when the bedstead or other article is being transported or when the caster-wheel and pintle have been removed, and the separate spring-tongue and similar devices heretofore made use of for holding the pintle into the socket are dispensed with. In consequence of the socket being of sheet metal and tubular and contracted at the top and bottom ends and the body of a larger diameter than the pintle, there is a space into which dust, lint, and foreign substances may accumulate from time to time without obstructing free movement of the pintle, and this socket having a spring-bearing for the upper end of the pintle lessens risk of injury to the wheel, the axis thereof, or the pintle, because such spring-bearing can yield slightly in cases where the caster is exposed to sudden concussion.

I claim as my invention—

1. The combination, with the caster-roller, horn frame or jaw, and pintle, of a socket formed of sheet metal having a center plate 6 with upturned edges, the semi-cylindrical shells 7 for receiving the pintle, and the webs 11, connecting the shells with the edges of the center plate, substantially as set forth.

2. The combination, with the caster-roller, horn-frame, and pintle, of a socket of sheet metal having a center plate 6 turned up on its edges and provided with penetrating-points 10, the shells 7, adapted to receive the pintle, and the webs 11, connecting the shells with the edges of the center plate, substantially as set forth.

3. The caster-socket having a center plate and shells for receiving the pintle formed of one piece of sheet metal, and an inturned bush around the central hole in the center plate, substantially as set forth.

4. The sheet-metal socket for a caster, having a center plate with upturned edges, the inturned center bush, the half-cylindrical shells, and the half-circle ends with wings, substantially as set forth.

Signed by me this 8th day of February, 1890.

ALBERT B. DISS.

Witnesses:
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