B. P. KENYON.

CASTER SOCKET.

APPLICATION FILED JAN. 15, 1910.

973,514. Patented Oct. 25, 1910.

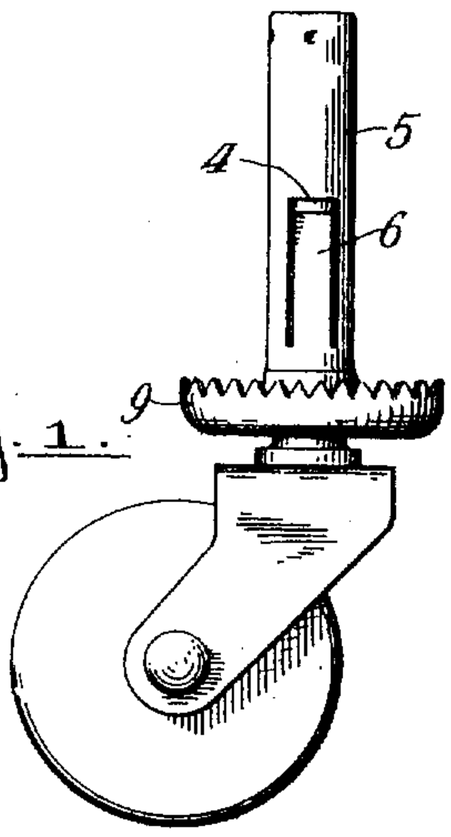

Fig. 1.

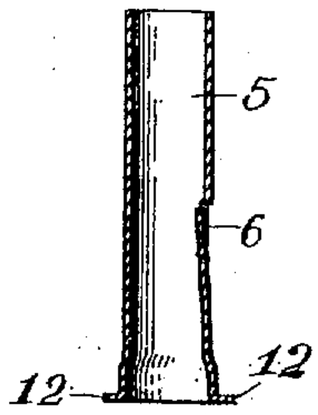

Fig. 2.

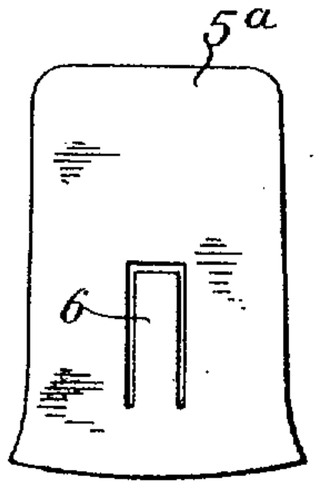

Fig. 3.

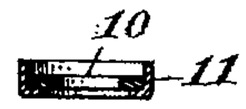

Fig. 4.

Fig. 5.

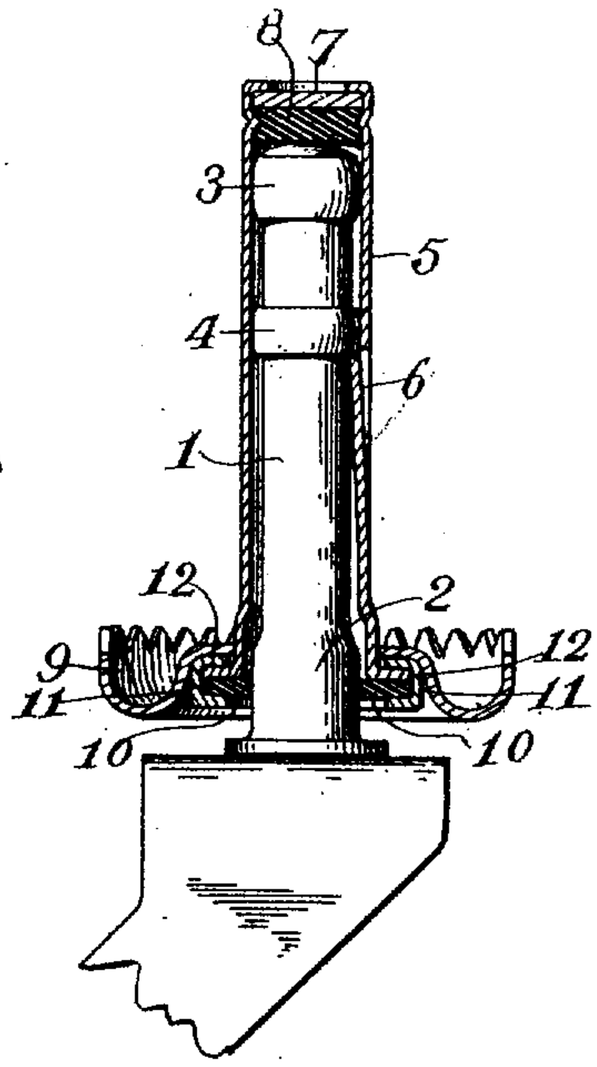

Fig. 6.

Witnesses
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UNITED STATES PATENT OFFICE.

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CASTER-SOCKET.

973,514. Specification of Letters Patent. **Patented Oct. 25, 1910.**

Application filed January 15, 1910. Serial No. 538,196.

To all whom it may concern:

Be it known that I, BERTRAND P. KENYON, a citizen of the United States of America, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Caster-Sockets; 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 improvements in caster sockets, and more particularly to such sockets provided with a pintle retainer and anti-friction bearings for the pintle, and its object is to provide a strong and durable structure at moderate expense, and to provide the same with various new and useful features, hereinafter more fully described and particularly pointed out in the claims, reference being had to the accompanying drawings in which:

Figure 1 is a side elevation of a caster provided with my improved socket; Fig. 2 a vertical section of the tubular portion of the socket detached; Fig. 3 a plan view of the blank from which the tubular portion is formed; Fig. 4 a detail in vertical section of the retaining cup and lower bearing for the pintle; Fig. 5 a vertical section of the track plate; and Fig. 6 an enlarged detail showing my improved socket in vertical section.

Like numbers refer to like parts in all of the figures.

1 represents the pintle of the caster having a lower enlargement 2 for the lower journal of the same, and an enlargement 3 at the upper end forming the upper journal or thrust bearing end of the same.

4 represents a circumferential enlargement intermediate the ends to engage the retaining spring 6; 5 the tubular body of the socket; 6 a retaining spring struck out of the lower portion of the socket, and having its detached upper end substantially at the middle of the socket, and sprung inward to yieldingly engage the enlargement 4 and retain the pintle in the socket. The upper end of the tube 5 is provided with a closure 7 in the form of a metallic disk. Beneath the same, and held in place thereby, is a disk 8 of anti-friction material (preferably of fiber) secured in place by indenting the tube as shown in Figs. 1 and 6, and made concave to fit the convex end of the pintle.

The load and lateral stress is carried upon the upper end of the pintle in engagement with this material 8 and the lateral pressure of the lower bearing 2 is taken upon a ring or washer 10 of anti-friction material (preferably of fiber) surrounding the enlargement 2, and held between an outwardly turned flange 12 on the lower end of the tube 5 and a cup shaped retainer 11 below the washer 10 and having its upper edge turned inward upon the upper side of the flange 12. The track plate 9 rests upon this inwardly turned edge and closely surrounds an enlargement of the tube 5, when it forms a bearing for the journal 2, and is recessed at its under side to surround the retainer 11 and bearing 10. The leg in which this socket is inserted engages and rests upon this said track plate in the usual way.

By this construction, I provide a socket that is substantially solid at the ends opposite the bearings of the pintle and has a spring member 6 struck out at the middle portion where there is but little strain upon the socket and practically no lateral movement of the pintle. I also provide an anti-friction bearing engaged by the upper end of the pintle to take the lateral pressure and carry the load, and a like bearing engaged by the lower journal of the pintle to take the lateral strain of the same, whereby the pintle turns easily about its axis, and the pintle contacts material more suitable for a bearing than the material of the socket proper.

What I claim is:

1. A furniture caster socket, comprising a tubular portion closed at the top and provided with a thrust bearing, a lateral bearing at the lower end of the tube, an annular cup to hold the last named bearing in place, and a track plate surrounding said cup and bearing.

2. A furniture caster socket, comprising a sheet metal tube having an inwardly bent tongue near the middle, a closure in the upper end of the tube, an anti-friction thrust bearing engaging the closure, a track plate surrounding the lower end of the tube and recessed at the under side, and an anti-fric-

tion washer and retaining cup within the recess of the track plate and attached to the end of the tube.

3. In a furniture caster, the combination of a tubular socket of sheet metal having a spring tongue near the middle and an outwardly turned flange at the lower end, a closure in the upper end of the socket, a thrust bearing engaging the closure, a bearing washer below the end of the tube, a retainer beneath the washer surrounding the washer and the flange and turned inward above the flange, a track plate resting on the inwardly turned edge of the retainer and recessed at the under side to surround the retainer and washer, and a pintle engaging the thrust bearing at the upper end and also having journals at the respective ends and a middle enlargement engaged by the spring.

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

BERTRAND P. KENYON.

Witnesses:
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