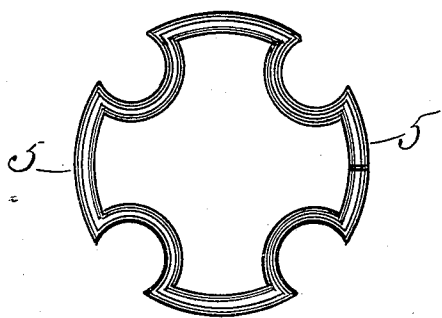


(No Model.)

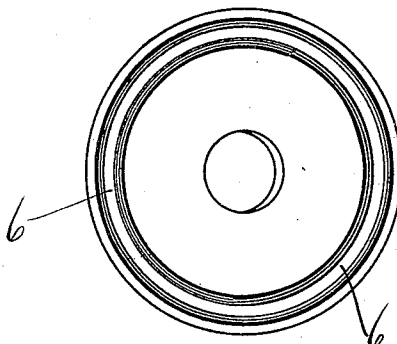
R. W. TANNER.  
CASTER.

No. 470,266.

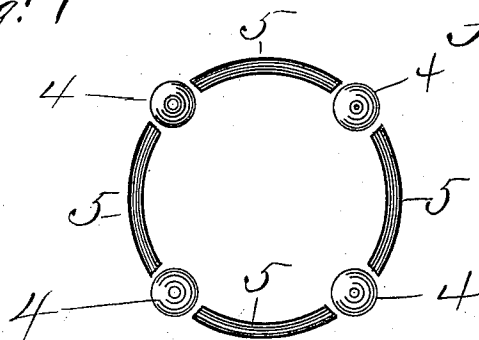
Patented Mar. 8, 1892.



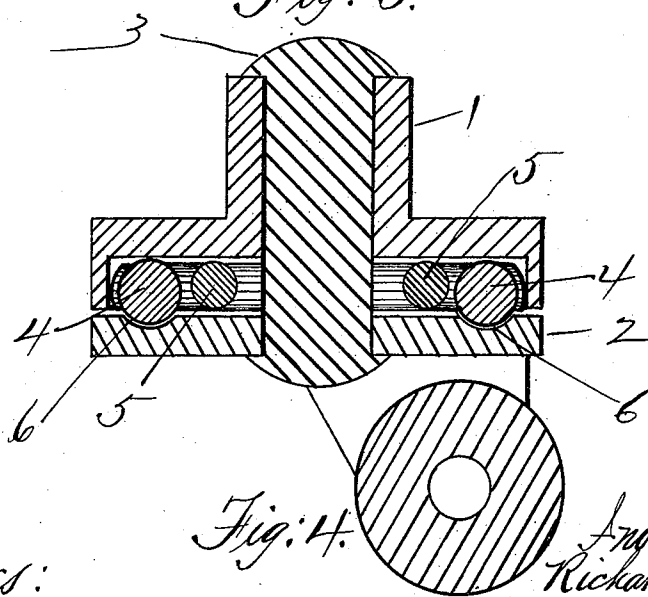
*Fig: 1*



*Fig: 2.*



*Fig: 3.*



*Fig: 4.*

*Witnesses:*  
*J. F. Harris.*  
*Jas. M. Brown Jr.*

*Inventor:*  
*Richard W. Tanner*  
*By W. M. Brown*  
*his atty.*

# UNITED STATES PATENT OFFICE.

RICHARD W. TANNER, OF ALBANY, NEW YORK.

## CASTER.

SPECIFICATION forming part of Letters Patent No. 470,266, dated March 8, 1892.

Application filed November 11, 1891. Serial No. 411,617. (No model.)

*To all whom it may concern:*

Be it known that I, RICHARD W. TANNER, a citizen of the United States, residing at Albany, in the county of Albany and State of New York, have invented certain new and useful Improvements in Casters; and I do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

The object of my invention is to provide a new and improved caster for furniture, pianos, &c.

In the drawings, Figure 1 shows a plan view of my resilient device for separating the balls of the caster; Fig. 2, a plan view of the upper side of the lower plate of the caster; Fig. 3, a plan view of another form of my resilient separating device for separating the balls of the caster, and Fig. 4 a vertical sectional view of my caster ready for use.

The numeral 1 shows the top plate, and 2 the bottom plate of the caster, and 3 the bolt holding these parts together.

4 shows the balls of the caster, which are to be located between the plates 1 and 2, substantially as shown in Fig. 4.

5 shows my resilient separating device, which is the principal feature of my device, and consists, preferably, of a wire having more or less temper, bent into the form of a ring having indentations, as shown in Fig. 1, in which the balls 4 rest and revolve and are kept separated. It is not necessary that the separating device be in form of a ring, as resilient wires 5, as shown in Fig. 3, may be used; but I do not claim such detached pieces that are not resilient, as stiff,

unyielding segments of a circle are and have been in use heretofore.

The operation is as follows: The caster being set up and ready for use, as shown in Fig. 4, the balls 4 lie between the plates 1 and 2 in grooves 6 and rest in the indentations in the separating device 5, or between the ends of the resilient wires 5, as shown in Fig. 3, if that form of my device is used. When the caster is in use, the bottom plate revolves about the bolt 3 and on the balls 4, the separating device 5 revolving with the balls. If the pressure on the caster is such that it is tipped to one side, then the liability is that the balls 4, receiving the entire weight of the object carried, will attempt to jam fast or clog; but as the separating device 5 is resilient it gives and allows of great freedom of action to the balls, and thus prevents all clogging.

I do not confine myself to the precise form of a resilient device shown; but any form or configuration may be used, as I claim, broadly, any resilient separating device used with a caster.

Having fully described my invention, what I claim is—

A caster having a resilient separating device located between the upper and lower plates thereof, said resilient separating device having indentations or openings therein in which revoluble balls or rollers are located and kept separate thereby from each other and arranged to revolve therein when the upper or lower plates are revolved, for the purposes described.

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

RICHARD W. TANNER.

Witnesses:

W. M. BROWN,  
J. F. HARRIS.