J.M. Riley,

Furniture Coster.

№ 37,008.

Pallented Nov. 25, 1862.



Mitnesses: Januard

AM. PHOTO-LITHO, CO. N.Y. (OSBORNE'S PROCESS.)

Inventor:

UNITED STATES PATENT OFFICE.

JOHN MATHEW RILEY, OF NEWARK, NEW JERSEY.

IMPROVED FURNITURE-CASTER.

Specification forming part of Letters Patent No. 37,008, dated November 25, 1862.

To all whom it may concern:

Be it known that I, JOHN M. RILEY, of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Casters; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a vertical central section of my invention, taken in the line x x, Fig. 2; Fig. 2, a horizontal section of the same, taken in the line y y, Fig. 1; Fig. 3, a horizontal section of the same, taken in the line z z, Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in the employment or use of an anti-friction band or collar placed on the arbor of the caster and fitted within the tube of the same at a point between the top of the fork in which the roller is placed and the spring or fastening which secures the arbor in the tube, all being arranged in such a manner that a very strong and durable caster is obtained, one well calculated to resist any lateral strain to which it may be subjected in moving about the piece of furniture to which it may be attached, and still be capable of turning easily in its tube, so that the roller may readily conform to or be brought in line with the direction in which the piece of furniture is to be moved. To enable those skilled in the art to make and use my invention, I will proceed to describe it with reference to the drawings. A represents a tube, the lower part of which has a flange, a, all around it, with an upright rim, b, at its edge to form a socket to receive the lower end of the leg of the piece of furniture. The tube A is fitted in a hole made vertically in the leg. The tube A may be of cast-iron, and also the flange a. The upright rim b, being exposed, may be of brass or white-metal. B represents an arbor, which is fitted in the tube A, and is provided with a pointed or conical upper end, a', which bears against the upper surface of the interior of the tube A, which surface is of concave form, as shown at c in Fig. 1. The lower end of the arbor B is fitted in the upper end of a fork, C, by a screw-thread, d, or otherwise, and on the arbor, just above this fastening and adjoining the fork C, there is a shoulder, e, on which a

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band or collar, D, rests. This band or collar D is allowed to turn freely on the arbor B, and a recess, f, is made in the tube A to receive the band or collar, as shown in Fig. 1. This recess f is sufficiently large to admit of the band or collar turning freely within it. In the arbor B, near its upper end, there is made circumferentially a recess, g, in which a spring, E, is fitted. This spring is simply a piece of metal (steel) bent or curved so as to form a portion of a circle greater in diameter than the arbor, and by its elasticity serves to secure the arbor in the tube A, the spring being compressed when the arbor is forced into the tube, so as to prevent the former slipping out from the latter when the leg of the piece of furniture is raised. This will be fully understood by referring to Figs. 1 and 2.

In the fork C, which is attached to the lower end of the arbor B, there is fitted a roller, F, on a pivot or axis, h, the latter being rather out of line with the arbor B, as shown in Fig. 1. This position of the roller F relatively with the arbor B admits of the latter being readily turned when the piece of furniture is moved laterally, to admit of the roller assuming a position in line with the direction in which the table is moved. The band or collar D diminishes friction, admitting of the arbor B turning freely in the tube A, and in consequence of the band or collar being placed in the position relatively with the spring E and roller F as shown and described a very strong and durable caster is obtained, there being no appliance of any kind at the lower part of the arbor which requires the latter to have recesses or grooves cut in it, as is the case with most, if not all, of the casters in use, in order either to secure the arbor in its tube or to serve as an anti-friction device. Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is— The band or collar D, when applied to the arbor B at the junction of the fork C and used in combination with a spring, E, or other fastening placed between the band or collar D and the upper end bearing or center, a', of the arbor, as herein set forth. JOHN MATHEW RILEY. Witnesses: JAMES LAIRD, R. GAWLEY.