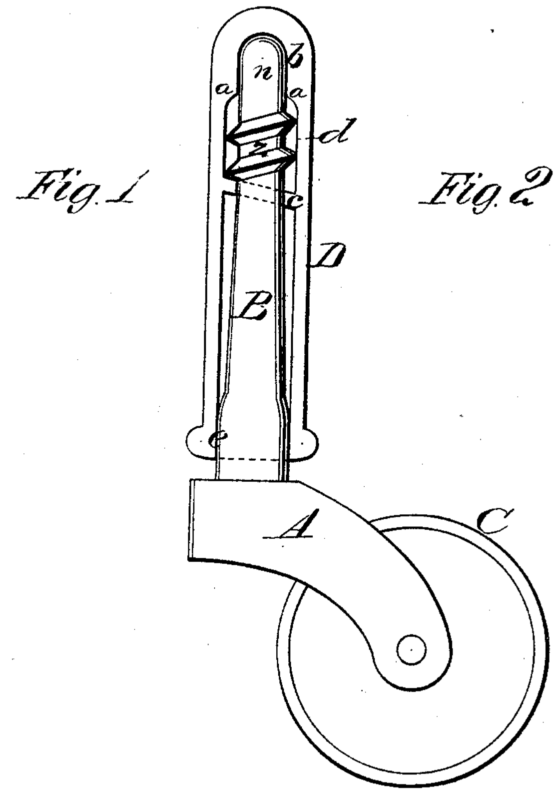
W. GOULD.

Furniture-Caster.

No. 168,479. Patented Oct. 5, 1875.



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WILLIAM GOULD, OF MINNEAPOLIS, MINNESOTA.

IMPROVEMENT IN FURNITURE-CASTERS.

Specification forming part of Letters Patent No. **168,479**, dated October 5, 1875; application filed November 7, 1874.

To all whom it may concern:

Be it known that I, WILLIAM GOULD, of Minneapolis, in the county of Hennepin and State of Minnesota, have invented a new and valuable Improvement in Bedstead, Chair, or Table Casters; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a side view of my caster; and Fig. 2 is an inside view of one of the socket-plates.

This invention has relation to furniture-casters; and it consists in the construction and novel arrangement of the raised spiral threads on the interior of the socket-plates, the contracted bearing-recesses formed at the upper ends of these plates having their lower edges somewhat tapered, the raised spiral thread around the horn of the caster, and the enlargement of the horn or shank at the base thereof, all as hereinafter shown and described.

The object of this invention is to facilitate the application and removal of casters, and to cheapen their manufacture, and dispense with the use of fastening-screws and screw-plates required by many of the ordinary forms of casters found in the market.

In the accompanying drawings, the letter C designates the caster-wheel journaled to the forked arm A of the caster shank or horn B. D D′ indicate the socket-plates, which, when placed together, form the socket for the reception of the shank. This socket is designed to be introduced into a mortise of cylindrical form, bored into the leg or base of the article to which the caster is to be applied. The diameter of the interior of the socket is designed to be equal at all points, except at its upper portion, where it is somewhat contracted to form a bearing, *b*, for the upper end of the shank. The metal of the socket-plates is therefore somewhat thickened at this portion to form the recesses *b′*, the lower edges or shoulders of which are beveled a little, as shown at *a*, to facilitate the entrance of the upper end of the horn or shank into the recess-bearing. At a certain distance below the shoulder *a*, in each socket-plate, a raised spiral thread is formed on the inner wall, as shown at *c c′*. When these plates are in apposition the thread of one is a continuation of that of the other, and hence the general position of one of these sectional threads is higher than that of the other. Above the thread there is a space or chamber, *d*, which is a portion of the interior of the socket. The general diameter of the shank or horn B is less than that of the interior of the socket, and its upper end *n* is of the proper size to enter the bearing-recess *b* at the upper end of the socket, fitting the same neatly, and thereby preventing oscillation of this portion of the horn. For a similar purpose the lower part or base of the shank is enlarged at *e* to fit the bore of the socket, giving strength to the shank where most needed. Near the upper bearing *n* of the shank a raised spiral thread, *z*, is formed, being carried, preferably, once and one-half around it, the entire vertical length of this thread being less than that of the chamber *d*, measured from the highest end of the socket-thread at its base.

It will be apparent that the horn of the caster can be readily introduced into the socket as far as the thread thereof. Then a turn or two of the horn will carry its thread entirely beyond that of the socket into the chamber *d*, and the bearing end into the bearing-recess *b*. The horn will now be in position and free to turn in any direction. There will be no engagement of the screw-threads unless the piece of furniture is raised, and the horn rotated purposely to effect a disengagement.

The advantages of such a caster are readily appreciable: It will not fall out when the piece of furniture is raised; is easily attached and detached; saves fastening-screws, and the time and labor necessary to adjust them; saves drilling and riveting in the manufacture, and, finally, is thought to be very strong and durable.

I am aware that a caster-shank, having an enlarged base and spiral thread engaging with the screw-threads of a socket, made in one piece, in which it is inserted, has heretofore been employed, and I therefore lay no claim to such invention; and I am also aware that a two-part socket or bisected shell is not

new, and therefore lay no claim to such two-part socket *per se*.

What I claim as new, and desire to secure by Letters Patent, is—

1. The sectional socket-plates D D′, having the internal raised spiral threads *c c′*, forming a single continuous thread, substantially as and for the purpose set forth.

2. The sectional socket-plates D D′, having the internal raised spiral threads *c c′*, forming a single continuous thread, the chamber *d*, and the contracted bearing-recess *b*, substantially as described.

3. The sectional socket-plates D D′, having the single raised spiral threads *c c′*, a smooth chamber, *d*, and contracted recess *b*, in combination with the tapering shank B, having a raised spiral thread, *z*, not in engagement with the spiral thread of the socket when inserted home, substantially as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM GOULD.

Witnesses:

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