No. 822,963. PATENTED JUNE 12, 1906.

O. C. LITTLE.

SLIDING SHOE FOR FURNITURE.

APPLICATION FILED JUNE 9, 1905.

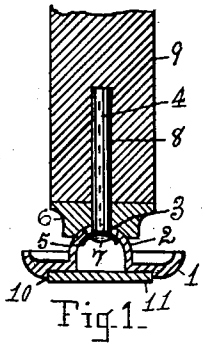

Fig. 1.

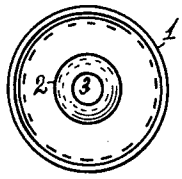

Fig. 2.

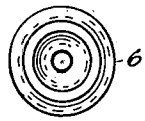

Fig. 3.

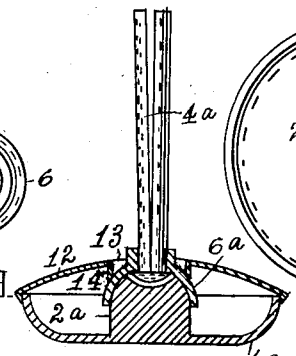

Fig. 4.

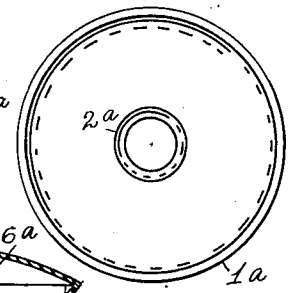

Fig. 5.

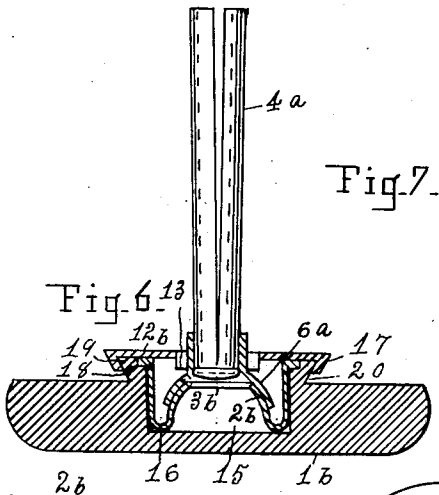

Fig. 6.

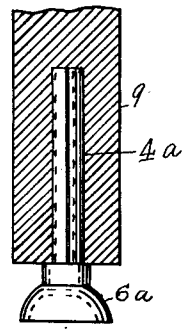

Fig. 7.

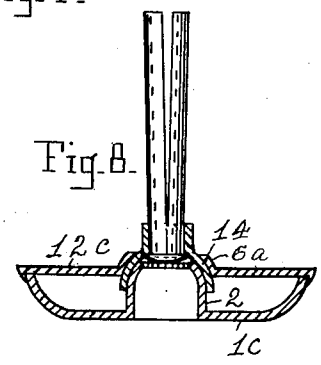

Fig. 8.

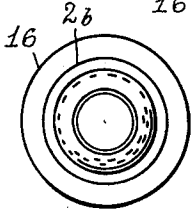

Fig. 9.

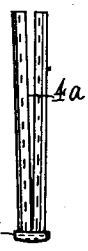

Fig. 10.

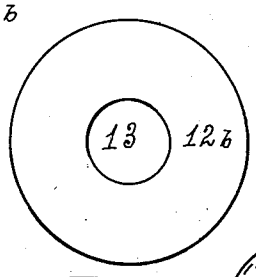

Fig. 11.

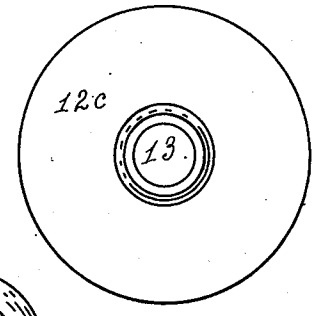

Fig. 12.

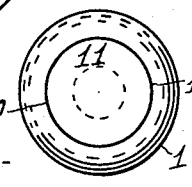

Fig. 13.

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INVENTOR

Orton C. Little.

BY

G. H. Albee.

ATTORNEY

UNITED STATES PATENT OFFICE.

ORTON C. LITTLE, OF MENASHA, WISCONSIN.

SLIDING SHOE FOR FURNITURE.

No. 822,963. Specification of Letters Patent. Patented June 12, 1906.

Application filed June 9, 1905. Serial No. 264,700.

To all whom it may concern:

Be it known that I, ORTON C. LITTLE, a citizen of the United States, residing at Menasha, in the county of Winnebago and State of Wisconsin, have invented a new and useful Improvement in Sliding Shoes for Furniture, of which the following is a specification.

My invention relates to a device for use upon furniture-legs or upon other articles which it is desired to move a short distance instead of the common wheel-casters, and it is designed also for application to the rear legs of chairs, particularly office-chairs in hotels, club-rooms, professional men's offices, &c., for the purpose of allowing the tipping backward of the chairs without the floor or the floor-covering being in any way injured or defaced by the legs of the chairs, and it also relates to the application of a pad of fabric to the shoe for use upon hard-wood or other glassy floors, it comprising a circular shoe to be applied to the furniture for supporting it upon the floor, it having a flat bottom with upwardly-curved outer edge, and those intended for chairs sometimes being provided with a cavity on its under side into which a pad of fabric is to be secured by means of cement or otherwise, said pad projecting below the outer edge of the shoe. Rising centrally from the upper side of the shoe a curved top support for a socket is arranged, the socket being arranged to oscillate upon said support and being adapted to be detachably connected by means of a round pin to the article to be supported by the shoe, said pin being for most purposes preferably of the kind known as a "split" pin.

Among the advantages of this shoe over the usual wheel-caster, are the large surface which it presents for the support of the article to be moved in comparison with the surface of a wheel of narrow face and small diameter, and it being of circular form it can slide in any direction, which a small caster-wheel will not do, and, furthermore, when sliding it will not be liable to mar the floor or tear the carpet, which faults are of common occurrence in the use of the usual casters. By means of the support with its curved top a universal joint is provided, which, although confined in its movement within prescribed limits, is ample for all occasions likely to occur,—such as lubricating the joint, tilting a chair backward, or moving the various articles for which the shoe is adapted.

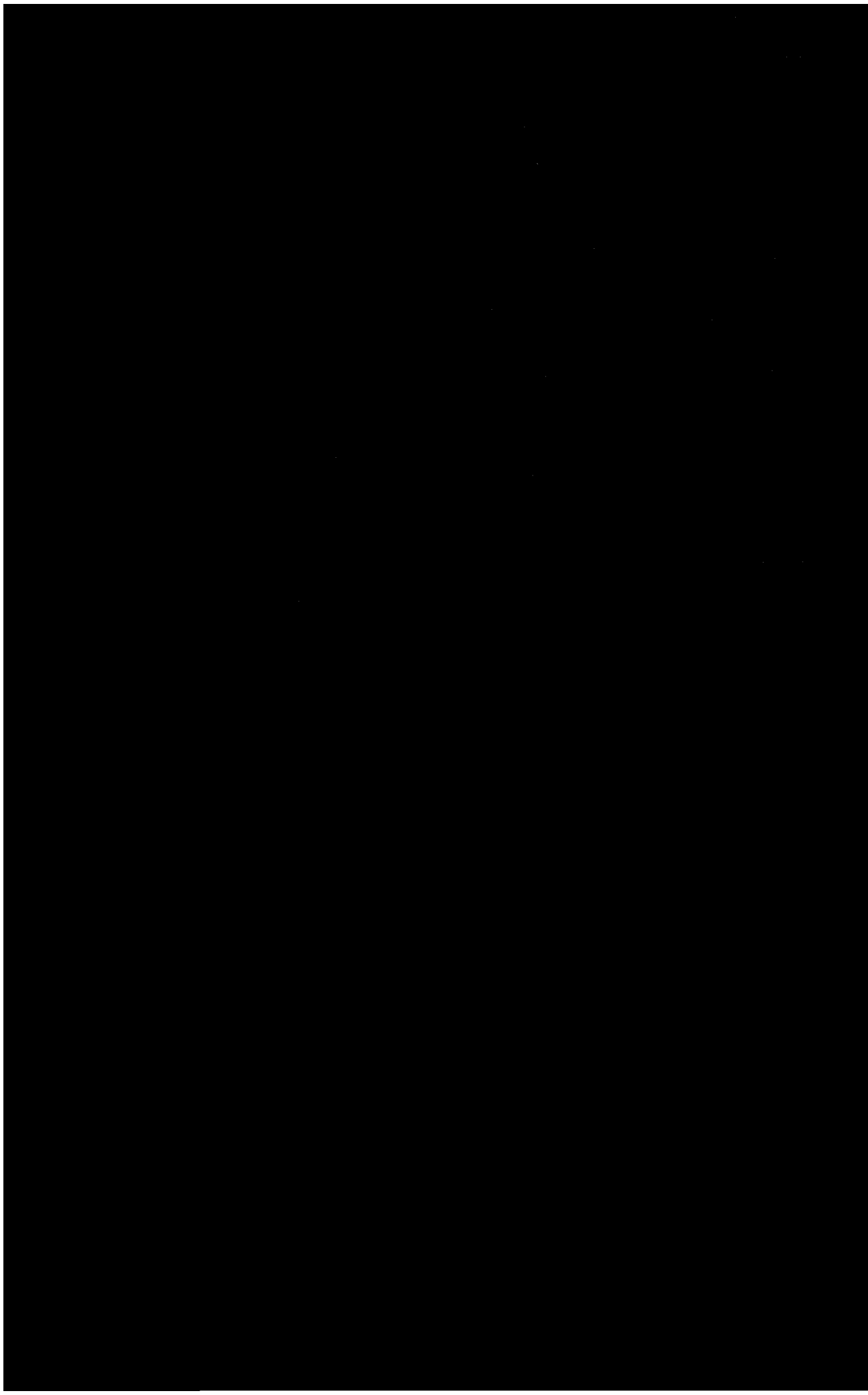
My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section of one form of the shoe as applied to chairs and also showing a pad of fabric attached to the shoe. Fig. 2 is a plan showing the upper side of the shoe. Fig. 3 is a plan showing the under side of the socket which is carried upon the curved top of the centrally-arranged support of the shoe. Fig. 4 is a vertical section showing a modified construction of a shoe intended to be cast from a suitable metal and designed for heavier furniture than the one shown in Fig. 1. Fig. 5 is a plan showing the upper side of the shoe that is shown in Fig. 4. Fig. 6 is a vertical section showing a shoe intended to be formed of a suitable earthenware material and may be used on pianos, book-cases, and other heavy articles. Fig. 7 is a vertical section of a piece of furniture and showing a split pin, in elevation, inserted in said furniture, the pin having the socket which is shown in Figs. 4 and 6 upon its lower or closed end. Fig. 8 shows a form of shoe similar to that shown in Fig. 1, but having a different method by which it is connected with the pin. Fig. 9 is a plan of the support for the socket which is shown in Fig. 6. Fig. 10 is a side elevation of a split pin. Fig. 11 is a plan of the housing used in Fig. 6. Fig. 12 is a plan of the housing shown in Fig. 8. Fig. 13 is a plan of the lower side of the shoe, as shown in Fig. 1.

Similar numerals indicate like parts in the several views.

In Fig. 1, 1 indicates the sliding shoe formed by stamping it from a suitable sheet metal, the concentrically-arranged support 2 having the central perforation 3, said perforation being of sufficient diameter for allowing the shoe to oscillate upon the pin 4 the necessary amount, a washer 5 being placed between the socket-piece 6 and head 7 of the pin, so that the shoe can oscillate easily. The pin can be a solid round pin, as in Fig. 1, or a split pin, as in Figs. 4, 6, 7, 8, and 10.

Split pins are not a new device, but as far as I am aware they have never been applied in the manner herein shown, but have been inserted entirely through a bore in a part upon which it was desired to retain another part instead of detachably connecting two parts, as herein shown. This pin is formed by bending a bar of half-round spring metal until the flat sides of its two ends nearly meet



porting-piece mounted concentrically within said socket having a central aperture and a portion of its upper surface between its vertical sides and said aperture curved outwardly, in combination with a split pin having a head or enlargement upon its closed end and a socket secured to said pin, it being adapted to oscillate within prescribed limits upon the aforesaid supporting-piece, said pin being adapted to enter a bore in a suitable piece having a diameter corresponding with the diameter of said pin when compressed to its smallest dimension, and a depth equal to the length of pin required to be used in said bore, and means of preventing the separation of said last-named socket and the shoe by the application of a housing, substantially as shown.

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Witnesses:
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Heman Miller.