F. L. ELLISON.

CASTER.

APPLICATION FILED AUG. 18, 1914.

1,275,882. Patented Aug. 13, 1918.

Fig. 1.

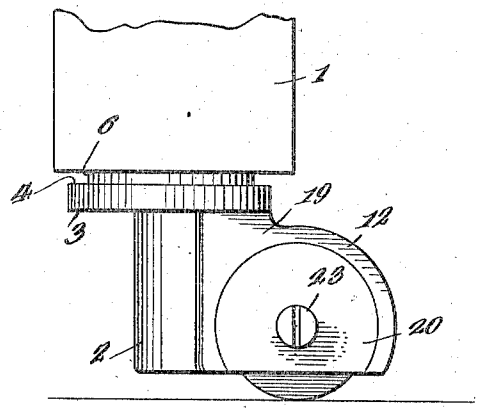


Fig. 2.

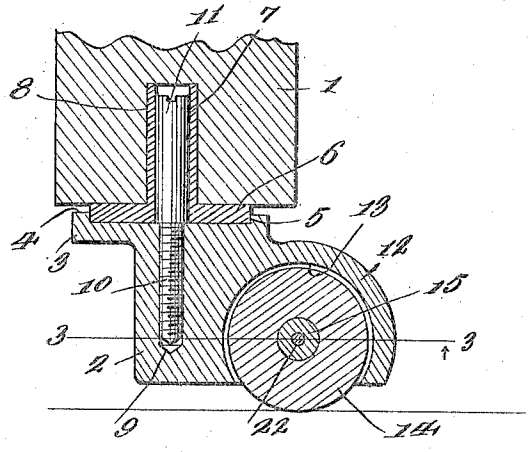
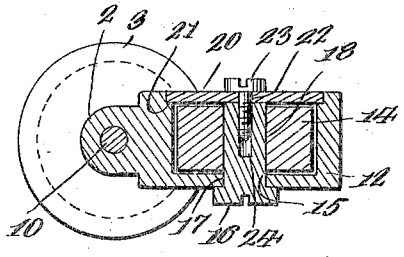


Fig. 3.



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CASTER.

1,275,882. Specification of Letters Patent. Patented Aug. 13, 1918.

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To all whom it may concern:

Be it known that I, FORREST L. ELLISON, citizen of the United States, residing at Exeter, in the county of Rockingham and State of New Hampshire, have invented certain new and useful Improvements in Casters, of which the following is a specification.

This invention relates to caster wheels, and more particularly to a caster wheel which is inclosed in a dust-proof casing.

The object of my invention is to provide a caster wheel which is inclosed in a casing, and is readily removable therefrom for the purpose of cleansing.

Another object of my invention is to provide a casing for a caster wheel which shall exclude as far as possible dust and other foreign matter from the bearing on which the wheels revolve.

A still further object is to provide an improved pintle, which is simple in construction and effective in operation.

Reference may be had to the specification and the accompanying drawings in which the preferred form of my invention is disclosed, and in which—

Figure 1 is a side elevation of a casting in which is embodied the preferred form of my invention.

Fig. 2 is a longitudinal sectional view of the same.

Fig. 3 is a sectional view taken on the line 3—3 of Fig. 2 and looking in the direction of the arrow.

Similar reference characters indicate similar parts throughout the various views of the drawings.

Referring more particularly to the drawings, in which the preferred form of my invention is shown, the numeral 1 indicates a leg or other support for any piece of furniture, and the numeral 2 indicates generally the body portion of a casting which contains the preferred embodiment of my invention.

The casting 2 is formed at its upper end with an annular flange 3, said flange 3 being substantially circular and forming a bearing face for the caster. The upper face 4 of the said flange portion 3 is countersunk, as shown at 5, and is preferably circular in shape, said countersunk portion 5 being adapted to receive the flange portion 6 of a tubular member 7 which is received within an opening 8 in the lower end of the leg 1.

The casting 2 is provided with a threaded central bore 9, said bore 9 being open at its upper end. The said bore 9 is adapted to receive the threaded portion 10 of a pintle 11, said portion 10 being slightly less in diameter than the pintle 11, as clearly shown in Fig. 2. The pintle 11 is adapted to be received within the tubular member 7, which member 7 acts as a bearing for the same.

It will thus be seen that I have provided a simple and effective pintle for supporting the caster, and it will be also seen that the portion 6 when in engagement in the countersunk portion 5 provides a bearing for supporting the said leg 1. It will be readily understood that the tubular member 7 is rigidly secured within the bore 8, whereby to prevent rotation of the same.

Projecting horizontally from the casting 2, and formed integrally therewith, is a roller receiving hood 12, said hood 12 being provided with a chamber 13, in which a roller 14 is journaled. As clearly shown in Fig. 2, the chamber 13 is substantially circular in contour and only slightly larger than the roller 14 which is received therein, thereby leaving as small a space as practical between the roller and the inner surface of the chamber 13. It will thus be seen that I have provided a roller receiving chamber, which will both protect the roller and prevent the admission of dust and other foreign matter into the bearing, said bearing being described hereinafter.

In the preferred form of bearing, which is shown in Figs. 2 and 3 of the drawings, I provide a stud 15 having an enlarged head 16, the said stud being adapted to pass through an opening 17 in one side of the roller receiving hood 12 and also through an opening 18 in the roller 14. The opposite side 19 of the roller receiving hood 12 is adapted to be removable, said side being preferably in the form of a plate 20. An annular recess 21 is provided upon the interior of the chamber 13, and adjacent the open end thereof, and the plate 20 is adapted to seat therein, the plate 20 being provided with an opening 22 through which a screw 23 is passed, said screw 23 being threaded into a central bore 24 of the stud 15.

From the above description it will be seen that I have provided a chamber for a caster

wheel which both protects the caster wheel from accidental blows due to knocking against projections when the furniture is being moved about, and prevents the admission of dust to the bearing. When it is wished to cleanse the roller, the screw 23 is removed from the stud 15. This allows the plate 20 to be removed and the stud 15 to be removed, whereupon the roller will readily drop out from the chamber 13, and the same may be readily cleansed and replaced. There are no projecting parts on this device which are susceptible of being displaced by accidental blows or knocks against other furniture, the same being light in construction, strong and cheap to manufacture.

A description of the operation of the pintle 11 is not thought to be necessary, as the drawings illustrate clearly the construction of the same.

Having thus described my invention what I claim and wish to secure by Letters Patent is:—

In a caster, the combination of a body having a roller receiving hood, said hood having a substantially circular chamber formed therein, said chamber having a reduced opening at the lower portion of the hood, said hood having one side portion thereof removed and being provided with an annular recess adjacent the open side thereof, an unthreaded cylindrical stud carried by said hood and terminating in a plane even with said annular recess, a roller carried upon said stud, said stud having central bore therein, a closure plate positioned upon said hood to fit within said recess and bear upon the end of said stud, and a retaining screw passed through said plate and into said bore for removably retaining said closure plate in a set position, whereby said hood will shield said roller by extending to a point adjacent the support of the roller and preventing foreign objects from engaging the roller.

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

FORREST L. ELLISON.

Witnesses:
CHAUNCEY G. BLAKE,
WILLIAM S. TROY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."