

F. L. S. MEANS.
 PROTECTIVE CASTER.
 APPLICATION FILED JULY 29, 1911.

1,012,404.

Patented Dec. 19, 1911.

Fig. 1.

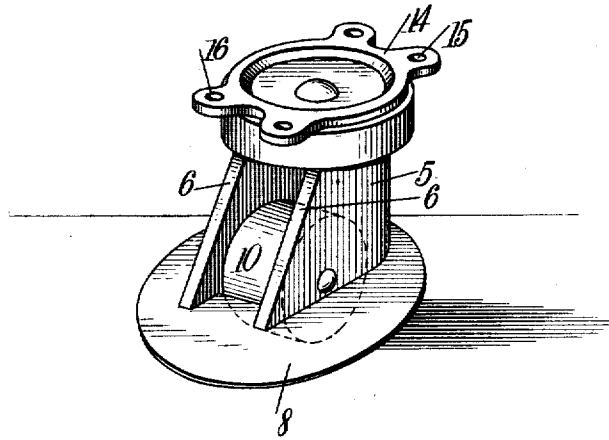


Fig. 2.

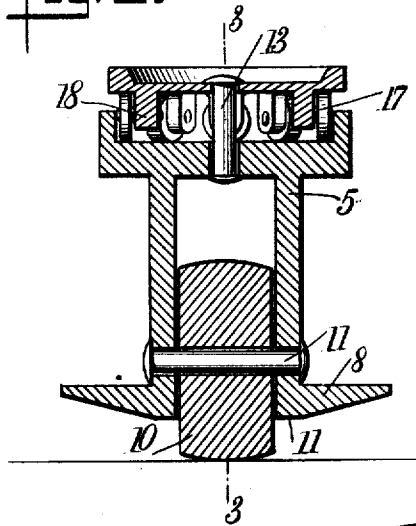


Fig. 3.

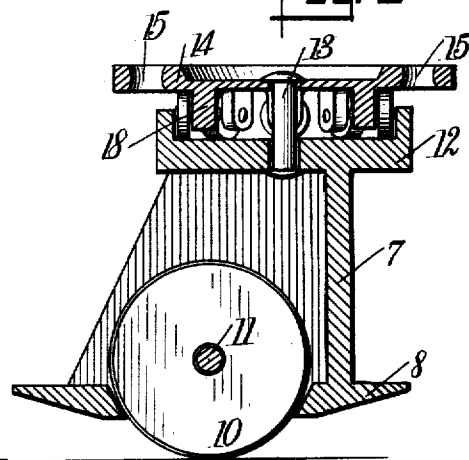
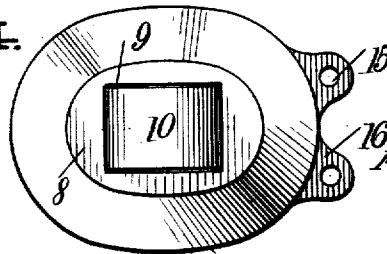


Fig. 4.



WITNESSES

W. S. Orton
W. S. Orton

INVENTOR

Frederick L. S. Means

BY *Munn & Co*
 ATTORNEYS

UNITED STATES PATENT OFFICE.

FREDERICK L. S. MEANS, OF BOSTON, MASSACHUSETTS.

PROTECTIVE CASTER.

1,012,404.

Specification of Letters Patent.

Patented Dec. 19, 1911.

Application filed July 29, 1911. Serial No. 641,194.

To all whom it may concern:

Be it known that I, FREDERICK L. S. MEANS, a citizen of the United States, and a resident of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and Improved Protective Caster, of which the following is a full, clear, and exact description.

The invention relates to casters, and is particularly adapted for use on trucks used in factories.

In factory work where the floor is littered with loose ends of cords and threads, it has been found impossible to use new trucks for any length of time, due to the fact that the loose threads are caught up by the casters on the trucks, which threads prevent the rollers in the casters from working, and it has been found cheaper to throw the entire truck away than to go to the trouble of picking the threads out of the bearings of the casters or to replacing new casters on the trucks.

An object of my invention is to overcome the above-cited objection by providing a caster which will not pick up the loose threads on the floor, and at the same time, will possess all of the advantages adherent to a new caster.

I attain the above-outlined object by positioning the roller of a caster within a casing, which casing is so constructed that it will entirely box the roller.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures, and in which—

Figure 1 is a perspective view showing a preferred embodiment of my invention. Fig. 2 is a vertical transverse sectional view taken through the axle of the caster shown in Fig. 1; Fig. 3 is a vertical transverse view taken on the line 3—3 of Fig. 2, and Fig. 4 is a plan view of the under side of the caster.

As shown in the drawing, the caster comprises a casing 5, formed of two oppositely disposed vertical walls 6 connected by a front wall 7, to form a general horizontal U construction. Integral with said walls is a horizontal shield 8, preferably of the broad elliptical shape shown in the several figures and extending some material distance to the outside of the several walls. Mounted within the parallel walls 6 and extending through

an aperture 9 in the shield 8, is a solid roller 10 journaled on a pinion 11, as shown in the drawings in the form of a bolt passing through the side walls 6 just above the plane of the shield 8. The lower part of the roller 10 extends a short distance below the bottom 11 of the shield 8. The opening 9, shown more clearly in Fig. 4, conforms in shape and size to the cross section of the roller 10 in a plane with the lower edge 11 of the shield 8. It will be seen that by this construction, it is practically impossible for the loose material on the floor to work up through the rectangular opening 9, to interfere with the movement of the roller on its bearing 11. As the shield 8 extends some distance away from the roller, this will keep any hanging threads away from the roller, and, at the same time, will protect the roller from direct contact with any object on the floor.

The casing 5 may be directly connected to the truck, but preferably is so mounted that it may rotate about its own vertical axis, and preferably has anti-friction devices interposed between the casing and the truck or body upon which it is mounted. This is obtained by forming the top of the casing into a dished receptacle 12, centrally disposed in which dished receptacle is a pivot pin 13, mounted upon which is a bracket 14, which bracket is fastened directly to the truck by means of bolts or screws passing through apertures 15 on lugs 16. This bracket is mounted upon the casing, to rotate about the dished receptacle by means of anti-friction rollers 17 journaled in lugs 18 depending from the under side of the bracket 14.

While a preferred embodiment of the invention has been described, it is to be understood that many changes could in the above construction and many apparently widely different embodiments of this invention could be made without departing from the scope thereof. It is intended that all matters contained herein in the above description or shown in the accompanying drawings, shall be interpreted as illustrative and not in a limiting sense. It is also to be understood that the language used in the following claims is intended to cover the full scope of the invention and is not to be given any narrower construction than the prior art demands, and that materials, sizes and relativities of parts are non-essential, except as called for in the claims.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. In a caster comprising two vertically disposed parallel spaced-apart walls, a horizontally disposed shield integral with said walls and extending outwardly some material distance therefrom, and a roller mounted between said walls journaled in the same above said shield and projecting slightly below the same.

2. A caster comprising a horizontally disposed shield having a vertically extending opening therein, a roller mounted to rotate

within said opening and extending slightly below the lower face of said shield, said opening corresponding in shape and size to the cross section of the roller in the plane of the lower face of said shield, and attaching means fastened to said shield.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FREDERICK L. S. MEANS.

Witnesses:

HOWARD J. CHANDLER,
GEO. W. YUNKER.

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