

(No Model.)

O. N. LLOYD.

ROLLER SKATE.

No. 301,376.

Patented July 1, 1884.

Fig:1.

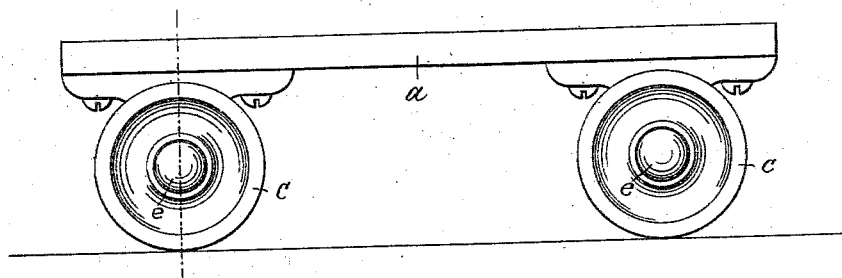


Fig:2.

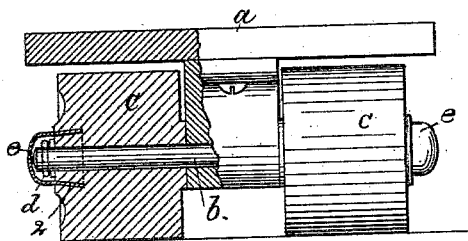


Fig:3.

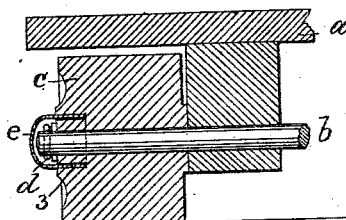


Fig:4.

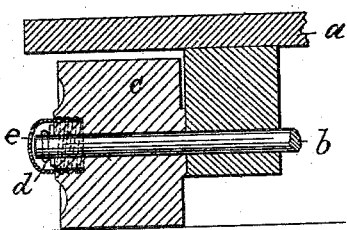
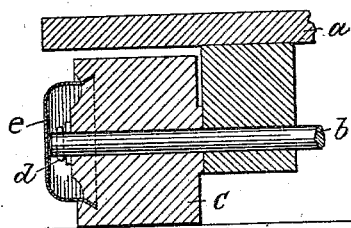


Fig:5



Witnesses.

*Arthur E. Soper.*  
*John F. C. Prindle.*

Inventor.

*Oliver N. Lloyd.*  
*by Crosby & Gregory attys.*

# UNITED STATES PATENT OFFICE.

OLIVER N. LLOYD, OF CHELSEA, MASSACHUSETTS, ASSIGNOR OF ONE-HALF  
TO FRANKLIN P. BAKER, OF SAME PLACE.

## ROLLER-SKATE.

SPECIFICATION forming part of Letters Patent No. 301,376, dated July 1, 1884.

Application filed October 8, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, OLIVER N. LLOYD, of Chelsea, county of Suffolk, State of Massachusetts, have invented an Improvement in Roller-Skates, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

The rollers of roller-skates as commonly made are mounted on the ends of spindles passing wholly through the rollers, and provided with cross-pins at their outer ends, to prevent the rollers from coming off. The oil used to lubricate the rollers thus has an opportunity to escape at the ends of the spindles, and is thrown off by the centrifugal force and spattered by the shocks and jars of the rollers, thus soiling the clothing of the wearer.

The present invention has for its object to relieve the skates of this objection; and it consists in the combination of a roller of a roller-skate with a protecting cap connected with the roller and inclosing the end of the spindle, so as to prevent the escape of oil, thus protecting the clothing, and also producing a better finish at the hub portion of the roller, it covering the projecting end of the spindle, and also constituting a receptacle to contain a sufficient amount of oil to lubricate the roller for a considerable length of time. The cap may be constructed and connected with the roller in a variety of ways, several of which are hereinafter described.

Figure 1 is a side elevation of a roller-skate embodying this invention; and Figs. 2 to 5, inclusive, vertical sections of a roller and portion of the skate, showing various modifications in the construction and manner of applying the protecting-cap.

The foot-board *a*, spindle *b*, and rollers *c* thereon may be of any suitable or usual construction, the said spindles passing wholly through the rollers, and being provided with washers and pins, as shown at *d*, to secure the rollers thereon, in the usual manner.

In order to prevent oil from escaping around the spindles *b* at their outer ends and passing onto the outer surface of the rollers, and thence to the clothing of the wearer, the rollers are provided with protecting-caps *e*, which inclose

the ends of the spindles or axles *b*, and are preferably made detachable, to enable the rollers to be lubricated at their outer ends. The said caps *e* may be connected with the rollers *c* in various ways. As shown in Fig. 2, the roller *c* is provided with a deep groove, 2, concentric with the spindle, the said groove being somewhat conical or inclined with relation to the axle of the roller, so that when the cap *e* is inserted its end will be caused to flare out somewhat, binding tightly upon the material of the roller, so as to be held firmly in place and prevent the escape of oil between it and the said roller, the cap being preferably made of ductile metal, such as malleable brass.

As shown in Fig. 3, the groove 3 in the roller is cylindrical or parallel with the axle, and the cap *e* merely fits tightly therein. As shown in Fig. 4, the groove in the roller and the edge of the cap are correspondingly screw-threaded, so that the cap may be screwed into place. In the modification shown in Fig. 5 the construction is substantially the same as shown in Fig. 2; but the cap is much larger, its holding-groove in the roller being at a greater distance from the axle, so that the cap forms a receptacle of considerable size for lubricating material.

As I am not the first to provide a covering for the end of the axle of a roller-skate, I do not broadly claim such a covering.

I claim—

1. The roller provided with a groove in its outer face, combined with a cap, fitted and thereby held in said groove to cover the end of the axle or spindle of the roller, substantially as described.

2. The combination of the roller, provided in its outer face around the axle-hole with a flaring groove, and a cap frictionally held in said groove, substantially as and for the purpose described.

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

OLIVER N. LLOYD.

Witnesses:

JOS. P. LIVERMORE,  
W. H. SIGSTON.