

(No Model.)

J. T. & C. T. JONES.

ROLLER FOR SKATES.

No. 322,611.

Patented July 21, 1885.

Fig. 3.

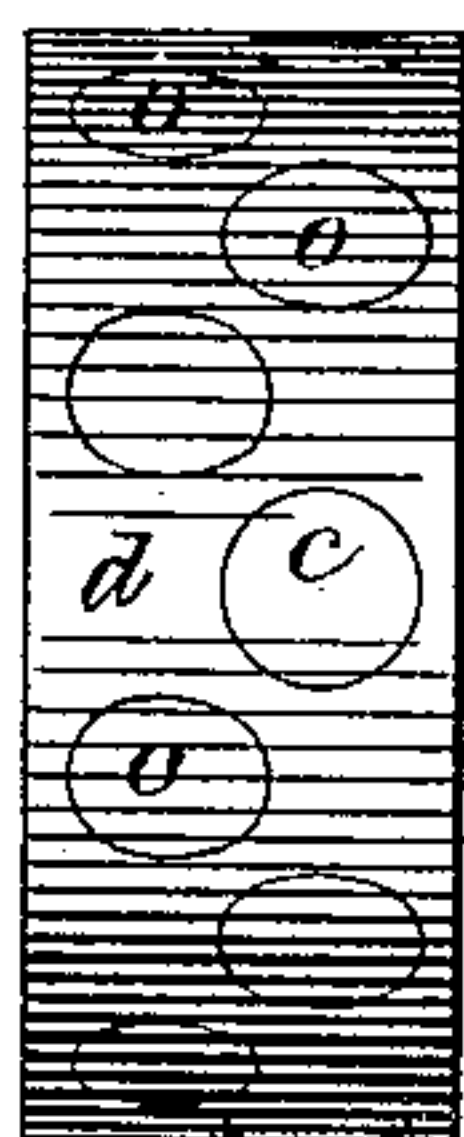


Fig. 2.

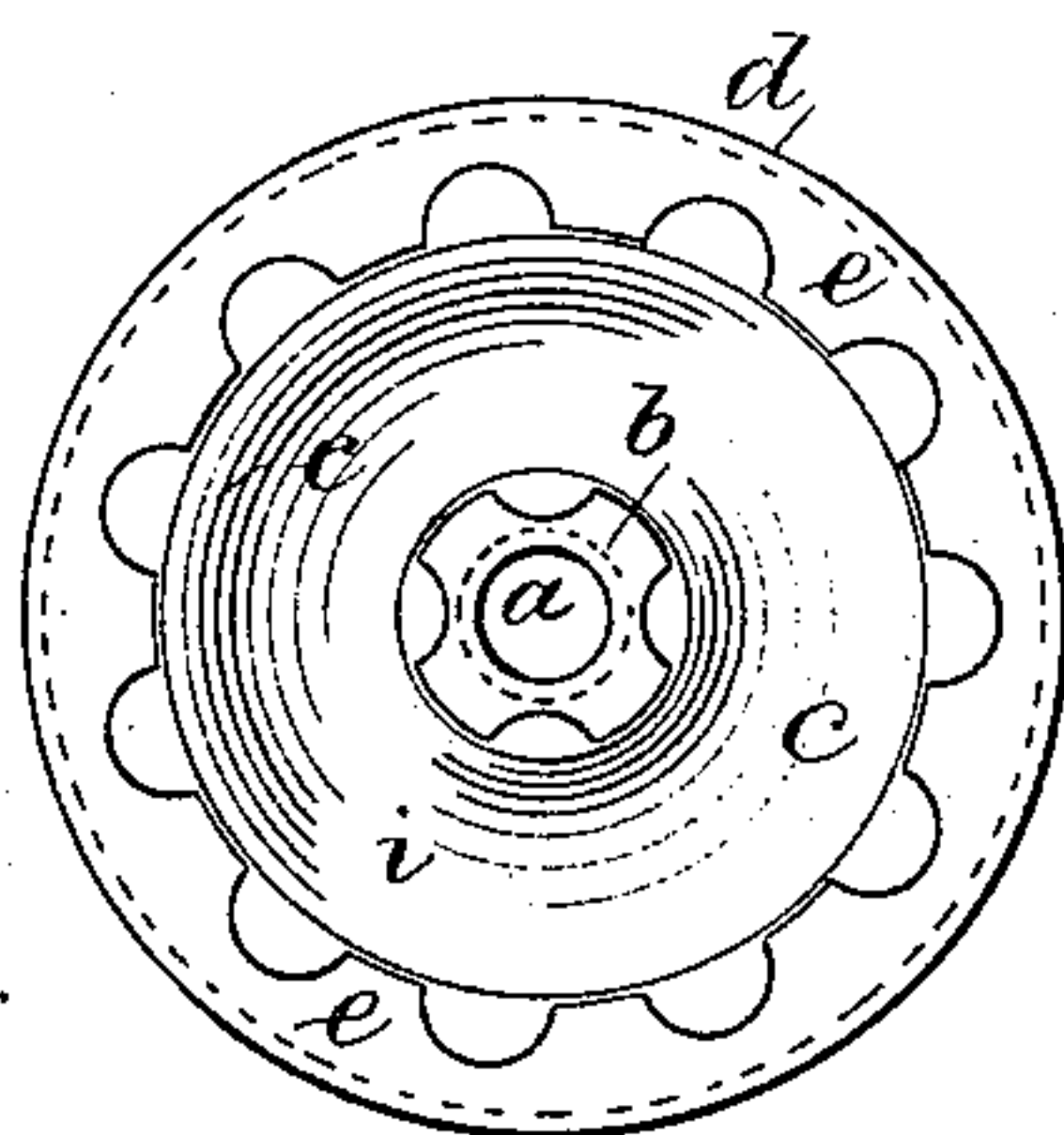
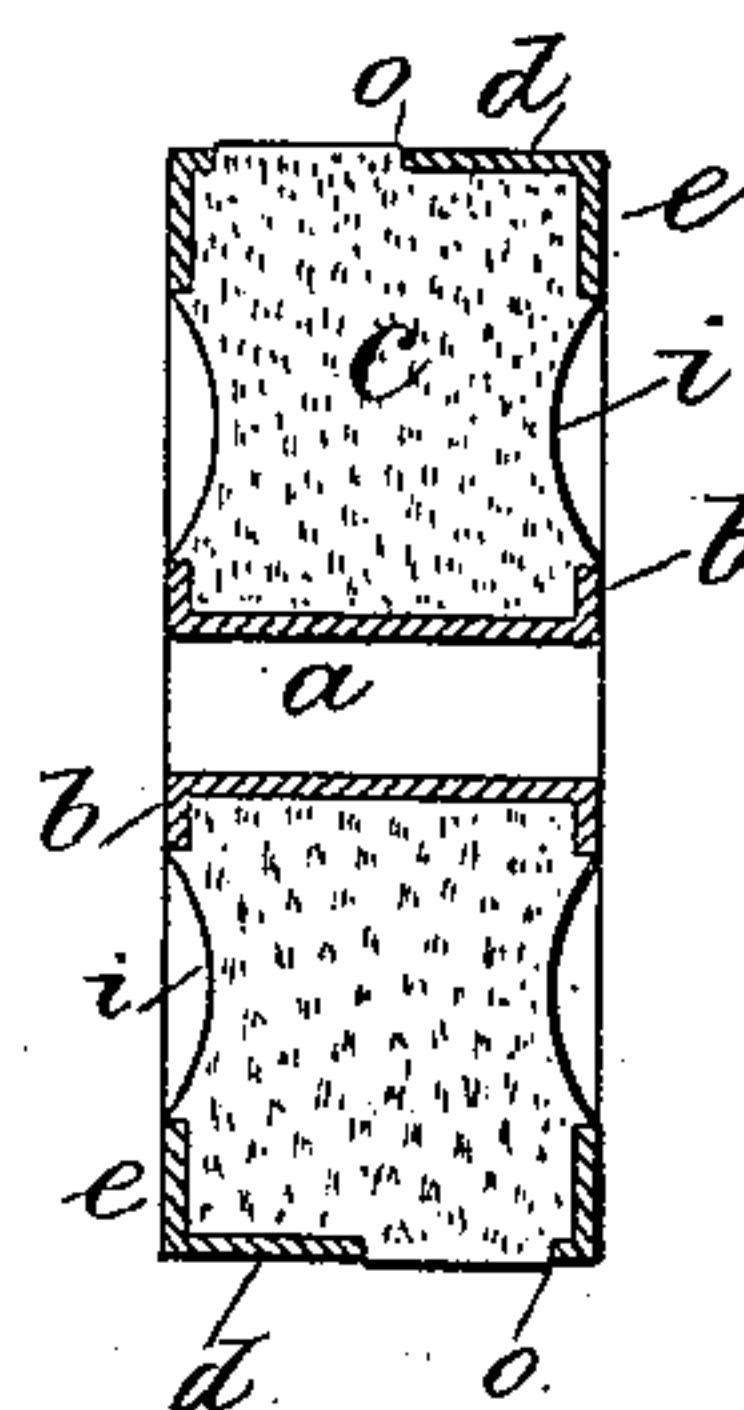


Fig. 1.



Witnesses

Charles H. Smith
J. Stair

Inventors

John T. Jones.
Charles T. Jones.
per Lemuel W. Perrell atty

UNITED STATES PATENT OFFICE.

JOHN T. JONES AND CHARLES T. JONES, OF UTICA, NEW YORK.

ROLLER FOR SKATES.

SPECIFICATION forming part of Letters Patent No. 322,611, dated July 21, 1885.

Application filed January 20, 1885. (No model.)

To all whom it may concern:

Be it known that we, JOHN THOMAS JONES and CHARLES T. JONES, of Utica, in the county of Oneida and State of New York, have invented Improvements in Rollers for Skates, Casters, and other articles, of which the following is a specification.

Skate and caster rollers have been made of elastic materials—such as leather or rawhide—and in some instances wheels for casters have been provided with a metallic rim, and they have also been made of a metallic case filled in.

The object of this invention is to render the roller elastic or yielding, to lessen concussion upon the foot in rolling over inequalities in the surface skated upon, to prevent concussion or jar when the skate is brought down upon the floor, to give elasticity as the skate is raised, to prevent the roller spreading at the surface, and to prevent the surface of the roller flattening by contact with the floor, thereby causing the roller to move without unnecessary resistance, and to insure sufficient frictional contact with the floor to avoid any lateral sliding of the roller under ordinary circumstances of use.

In the drawings, Figure 1 is a section of the roller. Fig. 2 is a side elevation, and Fig. 3 is a plan view.

The roller is composed of the metallic tube *a*, having end bearing-flanges, *b*, the body *c*, of vulcanized rubber, leather, paper, or similar yielding material, and the rim *d*, of metal, having flanges *e* extending inwardly. The flanges *b* and *e* are preferably notched so that the india-rubber, when pressed in a crude state into its place, will fill into the notches and prevent the metal and rubber becoming separated. The elastic material is recessed around the sides, as at *i*, in order that it may not bulge out beyond the rim when subjected to pressure when in use, and also that the rim of the roller may be free to rest upon the floor, and the axis to occupy a slightly inclined position in the motions usual in skating. The rim *d* is recessed or perforated at intervals, preferably with round holes placed alternately, as shown at *o*, so that the rubber or yielding material will fill the holes or recesses, and by preference project slightly to come in contact with the floor and produce a

slight friction that lessens the risk of the roller slipping laterally.

The openings or recesses for the yielding material may be round, square, or oblong, and they may occupy any desired positions in the surface of the roller.

The metallic tube *a* forms an opening for the axis of the roller, and the flanges hold it in position and prevent the lubricating-oil coming in contact with the rubber.

We are aware that skate-rollers have been made of india-rubber and of rubber with metal end flanges, the rubber forming the periphery of the roller; also, that a metal case with a filling has been used, and that metal pipes have been placed in the roller for the axle or pin to pass through. In our roller the metal rim is rigid, so as to roll easily, but the rubber gives an elasticity between the axle-tube and the metal rim, which is not the case with the rollers heretofore made.

We claim as our invention—

1. The roller for skates or casters made of a body of india-rubber or other yielding material, a metal tube passing through the same for the axis, and a flat metal rim surrounding and of the same width as the rubber, and having inward flanges at the edges of the rubber, substantially as set forth.

2. The roller for skates and other articles, having a body of india-rubber or other yielding material; a metal rim with inward flanges, a metal tube for the axis and flanges at the ends of the tube, the flanges of the tube and rim not touching each other, so that the roller is elastic, substantially as set forth.

3. The roller for skates and other articles, having a body of india-rubber or other yielding material, a metal tube for the axis, and a metal rim around the rubber and having holes or recesses, into which holes or recesses the yielding material is received, so that the bearing-surface of the roller is partly of rubber and partly of metal, substantially as set forth.

Signed by us this 14th day of January, 1885.

JOHN T. JONES.
CHARLES T. JONES.

Witnesses:

MORTIMER G. THOMSON,
W. E. RICHARDS.