(Model.)

F. A. COMBES.

ROLLER SKATE.

No. 260,455. Patented July 4, 1882.

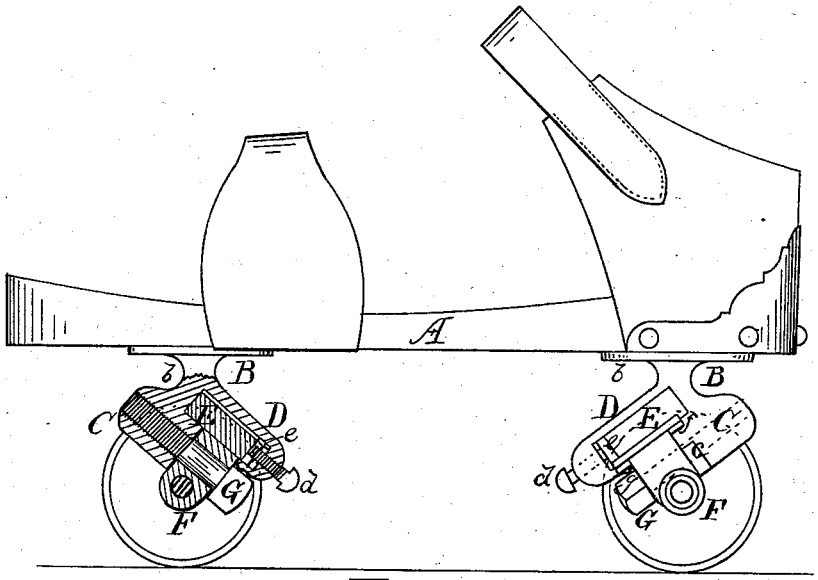

Fig. 1.

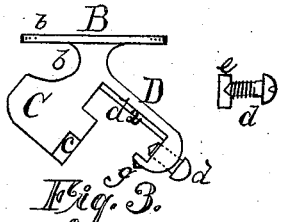

Fig. 3.

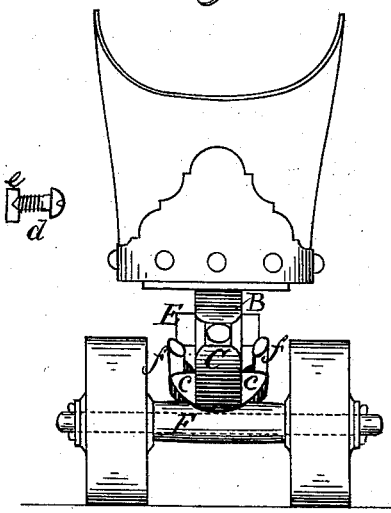

Fig. 2.

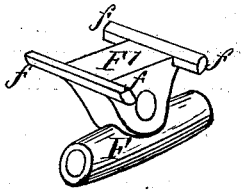

Fig. 4.

Witness,
C. E. Shattuck
M. G. Norton

Inventor,
Frank A. Combes
by Geo. W. Gibbitt. Atty

UNITED STATES PATENT OFFICE.

FRANK A. COMBES, OF CLEVELAND, OHIO, ASSIGNOR TO CHARLES EUGENE SHATTUCK, OF SAME PLACE.

ROLLER-SKATE.

SPECIFICATION forming part of Letters Patent No. 260,455, dated July 4, 1882.

Application filed February 10, 1882. (Model.)

To all whom it may concern:

Be it known that I, FRANK A. COMBES, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Roller-Skates, of which the following is a specification.

The nature and objects of these improvements will fully appear from the subjoined description, when considered in connection with the accompanying drawings, in which—

Figure 1 is a side elevation. Fig. 2 is an end elevation. Fig. 3 is a detached view of the roller-bracket. Fig. 4 is a detached view of the axle and its connecting part to the said bracket.

A is the foot-rest, to which the roller-brackets B are secured. The brackets consist of plates *b* for securing same to the foot-piece, a diagonal arm, C, forming a support for the axle, and an arm, D, containing a mortise or slot for holding a rubber spring or cushion, E, said arm having a set-screw, *d*, for holding and regulating the tension of the spring, the screw *d* pressing against a bearing-plate, *e*, located between it and the rubber.

F is a hollow axle, having a socket, F′, through which the bolt G passes for securing the axle to the arm C. The said bolt forms the journal upon which the axle and socket turn in their lateral or tilting motion. The said socket is provided on its upper side with flanges extending above the surface, and also extending beyond or over the front and rear sides, forming arms *f f*, which serve as stops in the tilting movements of the foot-rest over the axle, the aforesaid arm C having projections *c c* on each side, against which the arms strike, thus limiting the tilting movement.

A central rib, d^2, is made on the under side of the arm D for holding and preventing the slipping of the rubber when pressed upon by the tilting of the socket. The under side of the arm D also has a slight projection, *g*, which serves as a lock to the bolt G to prevent its becoming loose. In turning up the bolt the angles of the head of the bolt bear against the said projection *g*, the arm D springing sufficiently to allow the bolt to be turned. The set-screw *d* may be located at *b* at the other side of the spring E, if desired. Making the bracket B with one arm only for the bolt G admits of the turning up of the bolt in case of wear and the socket becoming loose. Casting the axle F hollow saves the labor of drilling for the journals of the roller, the journals consisting of a steel wire secured in the casting, or allowed to turn therein, if desired.

One of the advantages of this construction is that the axle may be reversed, changing the rollers from one side to the other. In rink-skating the course is around to the right. Consequently the rollers become worn on the side toward the center of movement, or the left side, by constant use, and may be reversed by this method.

Having described my invention, I claim as follows:

1. The bracket B, having the diagonal arm C, having the stop-projections *c c*, and the arm D, adapted to hold the axle and spring, as shown and described.

2. The combination, with the arm D, of the set-screw *d* and plate *e* for regulating the tension of the spring E, substantially as described.

3. In combination with the bolt G, the projection *e* on the arm D, whereby the bolt is locked, as and for the purpose set forth.

4. The combination, substantially as described, of the bracket B, having the diagonal arm C, with its stop-projections *c c*, the arm D, having the set-screw *d* and the rib d^2 and projection *e*, the rubber spring E, the axle F, having the socket F′, provided with the flanges and arms *f f*, and the bolt G, constructed to operate as and for the purpose set forth.

FRANK A. COMBES.

Witnesses:
C. E. SHATTUCK,
M. G. NORTON.