

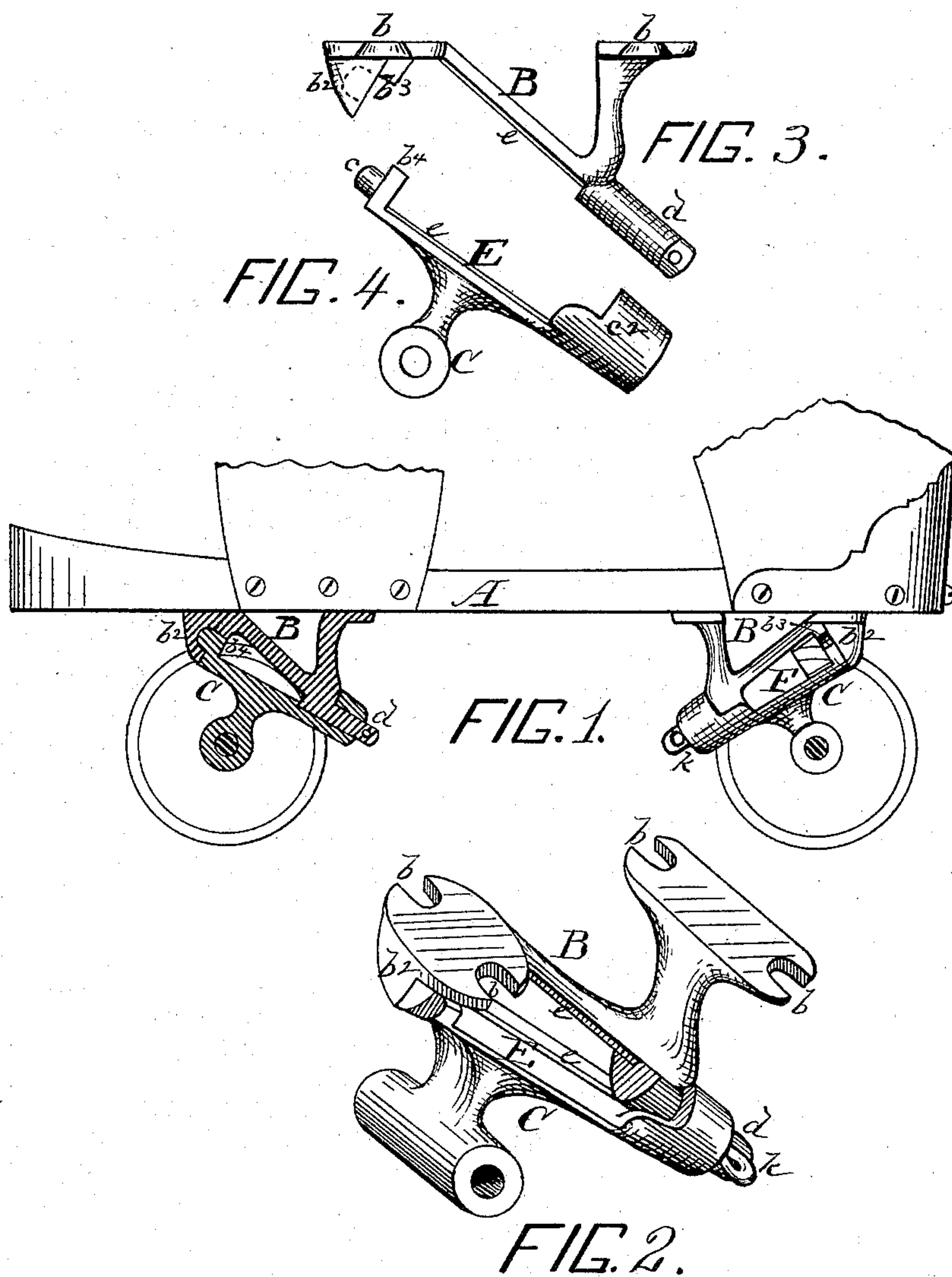
(No Model.)

F. A. COMBES.

ROLLER SKATE.

No. 330,096.

Patented Nov. 10, 1885.



WITNESS,
E. W. Laird.

INVENTOR,
Frank A. Combes
per Geo. W. Tibbitts atty

UNITED STATES PATENT OFFICE.

FRANK A. COMBES, OF CLEVELAND, OHIO.

ROLLER-SKATE.

SPECIFICATION forming part of Letters Patent No. 330,096, dated November 10, 1885.

Application filed February 24, 1885. Serial No. 156,947. (No 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
5 useful Improvements in Roller-Skates, of which the following is a specification.

The object of this invention is the production of a roller-skate having few parts of simple construction, whereby the cost of production is reduced to the minimum.
10

My improvement consists in the peculiar construction of the bracket and axle, which support the rollers.

In the accompanying drawings, Figure 1 is
15 a side elevation of a skate having my improved brackets attached. Fig. 2 is a detached view (full size) of my improved bracket. Figs. 3 and 4 are the two parts constituting my bracket.

A is the foot-piece of the skate, to the under
20 side of which are secured the aforesaid brackets.

B is a hanger in triangular form, which is provided with slots b , through which the screws pass for securing it to the foot-piece. It also
25 has a projection, b^2 , having a hole in its inner face forming a socket to receive a lug on the other part of the bracket. At the lower point of the triangle is provided a journal, d , having an eye in the end for a pin or key.

30 C is an axle having a bearing-plate, E, provided at the upper end with a lug, e , and at its lower end with bearing for the journal d . Said plate E stands in a diagonal line with the foot-piece A, and nearly parallel with the
35 slanting arm of the hanger B.

When the two parts B and C are put together, the space between them is made a little wider at the upper part, and in this space is

placed a piece of rubber, F, to provide a spring. To keep the rubber in place, the parts B C
40 have a rib, e , each on their inside surfaces, which embed themselves into the rubber and prevent its slipping. The object of the aforesaid rubber space, tapering as stated, is to provide for increasing or diminishing the tension
45 of the rubber by either forcing down into the narrower part of the spaces or forcing it up into the wider part, as required. These two parts B C when cast are ready for use, and require no fitting. The places for the screws in the
50 part B being slots, enables the piece to be molded and drawn from the molds, thus saving the drilling. The piece C is also cast in the same manner, the axle being cored as well as the bearing for the journal d . A pin or
55 key, k , secures the two parts together.

A bearing projection, b^3 , on the bracket B, rests on the cross-piece b^4 of plate E and upon which said bracket rocks, the side corners of said cross-bar b^4 limiting the rock of said
60 bracket.

Having described my invention, I claim—

The combination, with the foot-piece A and the rollers of a roller-skate, of the bracket and axle, consisting of the hanger B, having
65 the slotted ears b , for securing it to the foot-piece, and also provided with the socket projection b^2 and the journal d , and the axle C, having plate E, provided with the lug e on upper end and the journal-bearing e^2 , and
70 the rubber spring F, all constructed and operating as described.

FRANK A. COMBES.

Witnesses:

E. W. LAIRD,

GEO. W. TIBBITTS.