

George S. Curtis.

Roller Skates.

PATENTED JUL 4 1871

116690

Fig. 1.

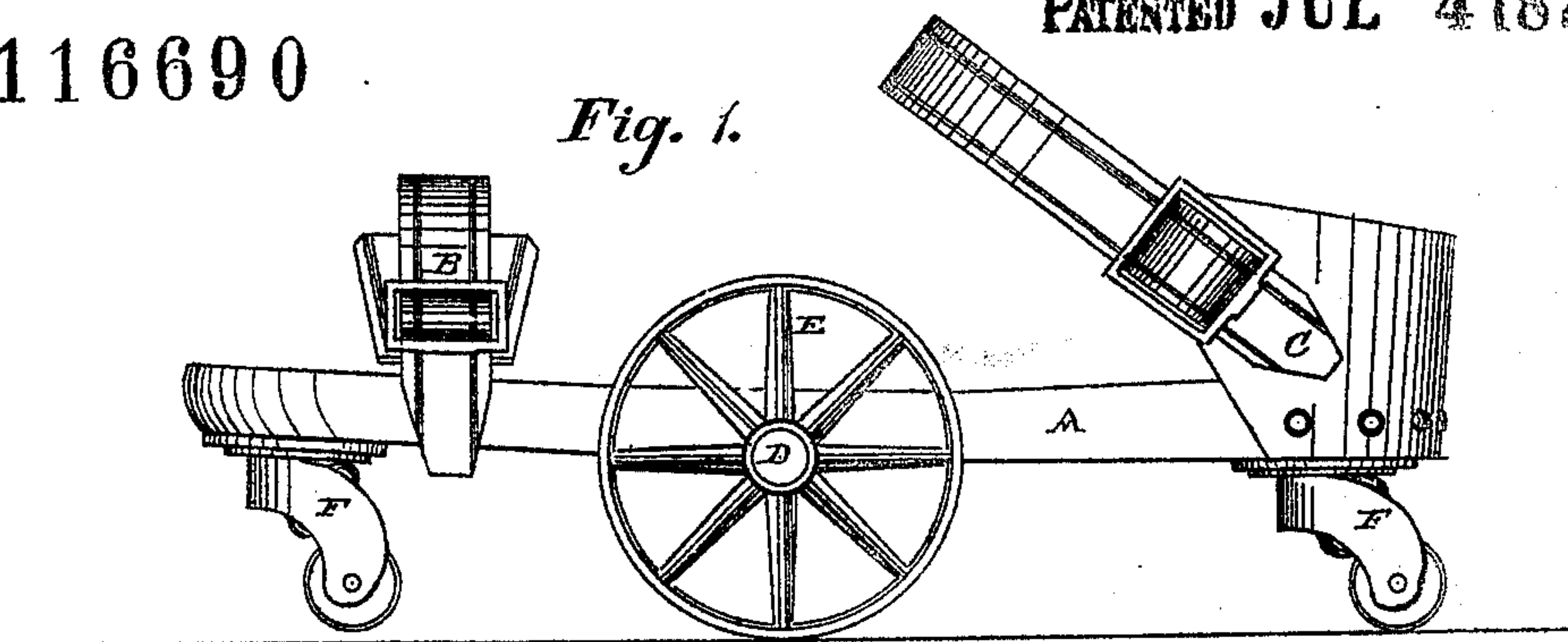


Fig. 2.

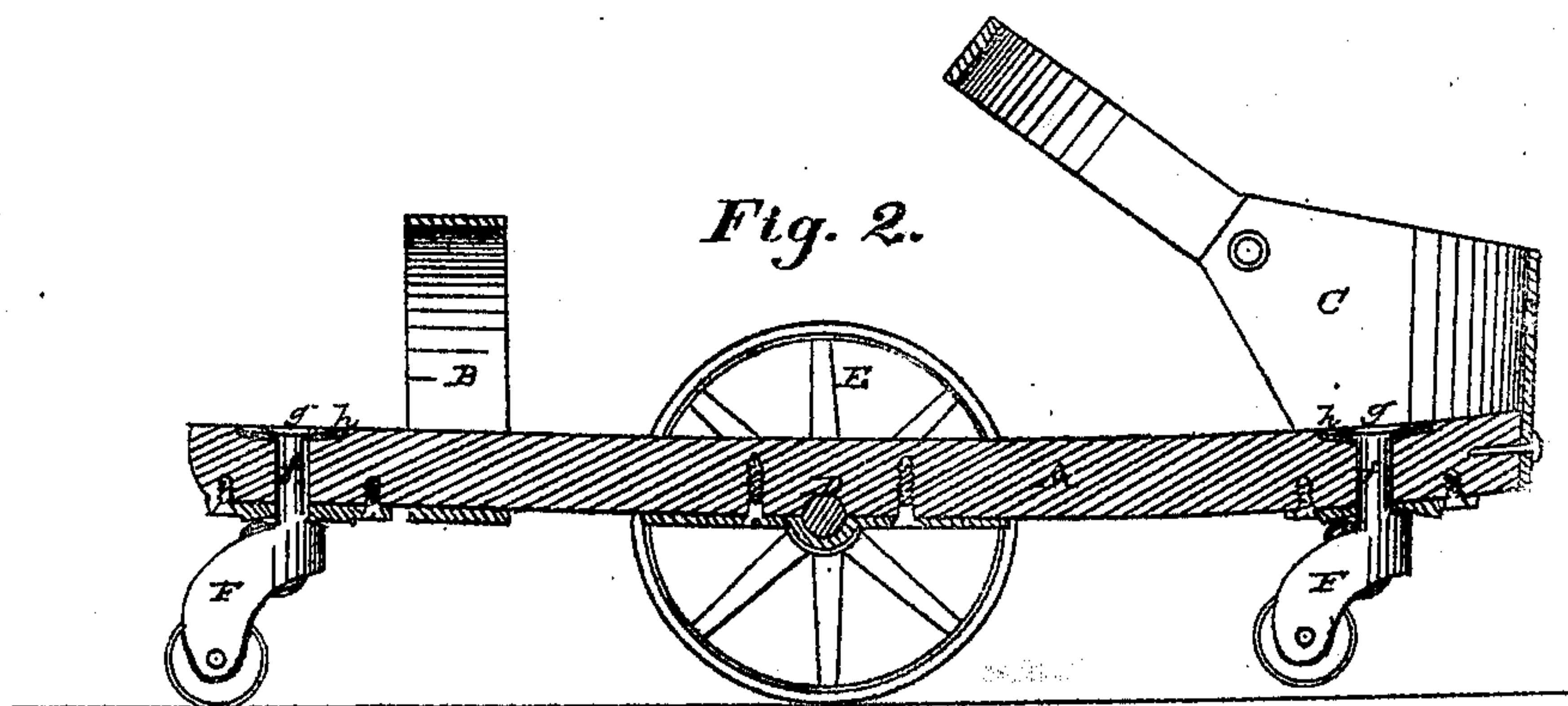
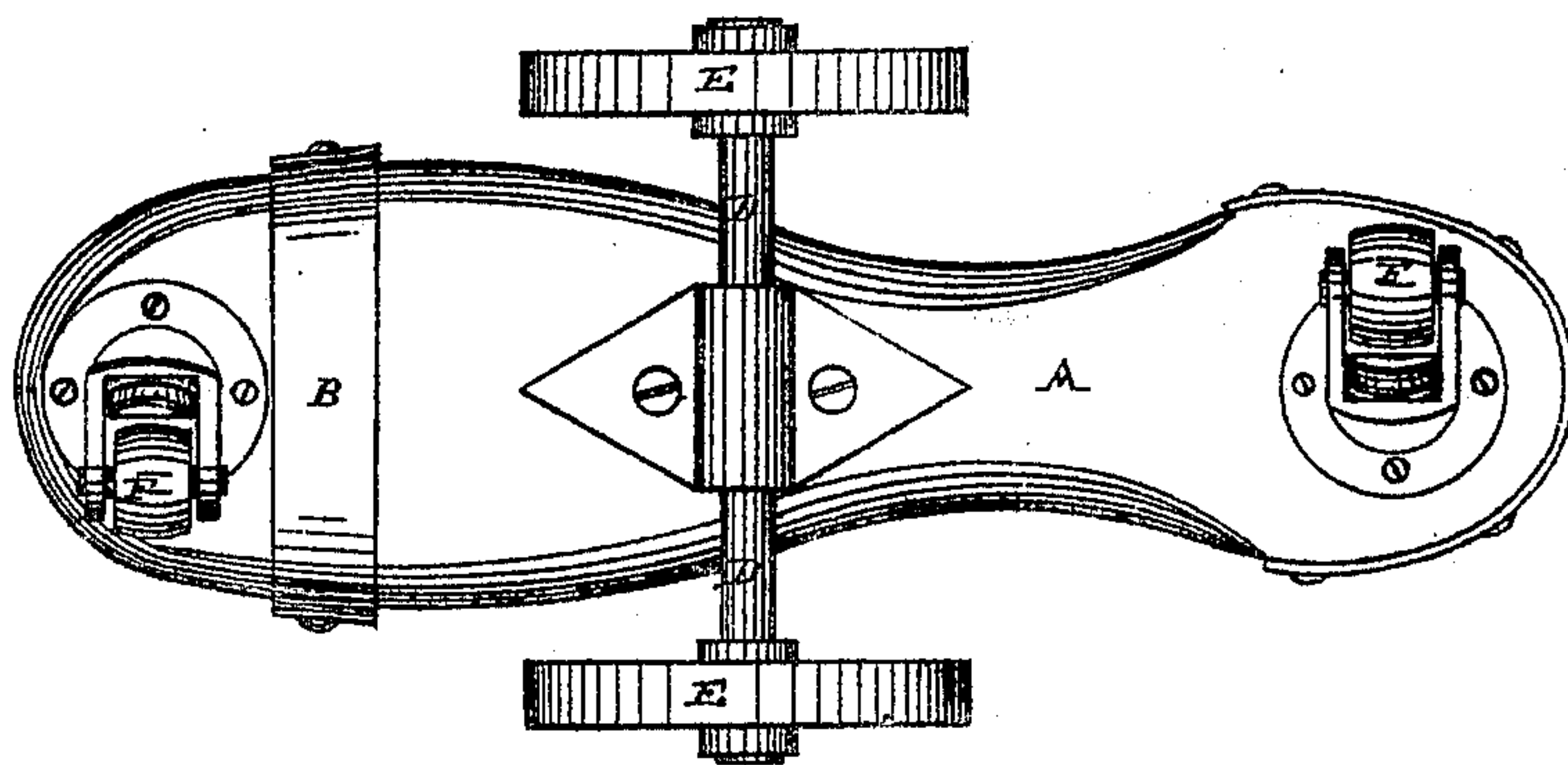


Fig. 3.



Witnesses:

Eugene C. Adams

J. West Wagner.

Inventor:

George S. Curtis.

by

Johnson, Klauke & Co.

his attorneys.

# UNITED STATES PATENT OFFICE.

GEORGE S. CURTIS, OF CHICAGO, ILLINOIS.

## IMPROVEMENT IN ROLLER-SKATES.

Specification forming part of Letters Patent No. 116,690, dated July 4, 1871.

*To all whom it may concern:*

Be it known that I, GEORGE S. CURTIS, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Roller-Skates, of which the following is a specification:

My invention relates to that class of skates known as parlor-skates—that is to say, skates provided with rollers instead of the usual iron; and it consists in providing such skates, when used with central driving-wheels, with two caster-wheels, one at the heel and one at the toe, or only one at the heel, which act independently of the center wheels and of each other, so as to have a free movement on any degree of the arc, independently of the others.

In the drawing, Figure 1 is a side elevation of my improved roller-skate. Fig. 2 is a central longitudinal section of the same, and Fig. 3 is a bottom view of the same.

A is the usual wooden or metal foot-piece of the skate, provided with a toe-strap, B, and heel-cap C. On the center of the inner side of this piece A is suitably secured a shaft, D, on which the center driving-wheels E revolve, one on each side of the skate. Through suitable openings in the toe and heel-part of this piece A, from the under side upwardly, extend the shanks or stems *f* of casters F, their upper ends being upset so as to form heads *g*, which have their bearing on a metal lining, *h*, of the opening. There is no especial kind of casters required for this purpose, as any casters having stems will answer the purpose, but I prefer using the anti-friction caster shown in the drawing.

In using this improvement short curves or turns can be made with perfect ease by the skater without great exertion and consequent cramping of the feet; for, while the casters do support the heel and toe, or either, in making curves, they also allow the turn of the same on a center formed by the point of contact of the drive-wheel on the side to which the turn is made with the floor, which would be impossible to do were wheels used in place of the casters, that could not turn on a swivel. This enables an expert skater to perform figures and feats on roller-skates with perfect ease and safety, which now are very difficult and dangerous to execute.

It will be understood that each of these casters, not being connected to the other or to the driving-wheels, has a free independent movement, so that when two casters are used they may extend both in the same or in opposite directions without in any way interfering with their full, free, and independent motion.

I do not confine myself to the number of casters used, as one under the heel will answer the purpose without one under the toe.

What I claim as new, and desire to secure by Letters Patent, is—

In a roller-skate having central driving-wheels, the combination therewith of one or more independent caster-wheels, operating substantially as described.

GEO. S. CURTIS.

Witnesses:

HENRY CURTIS,  
W. W. WATSON, Jr.