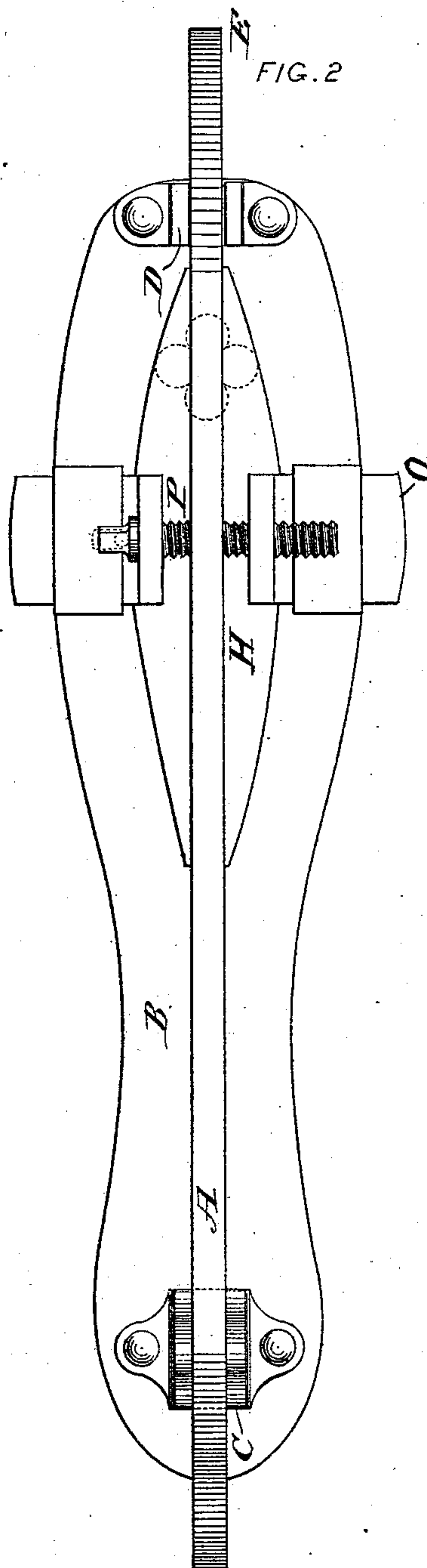
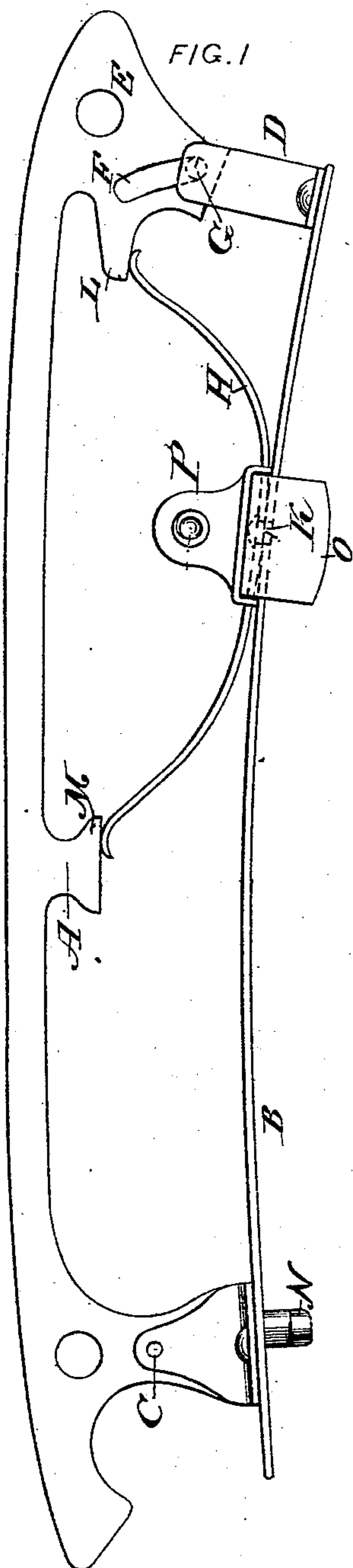


(No Model.)

J. M. CORNELL.
Skate.

No. 236,556.

Patented Jan. 11, 1881.



WITNESSES:

Geo. T. Powell,
Engineer N. Elston

INVENTOR:

John M. Cornell

UNITED STATES PATENT OFFICE.

JOHN M. CORNELL, OF NEW YORK, N. Y., ASSIGNOR TO GEORGE McCORD,
OF SAME PLACE.

SKATE.

SPECIFICATION forming part of Letters Patent No. 236,556, dated January 11, 1881.

Application filed April 19, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOHN MILTON CORNELL, of the city, county, and State of New York, have invented new and useful Improvements in Skates, of which the following is a specification.

This invention pertains to certain improvements in skates in which a spring or springs may be inserted between the runner and the sole-plate or foot-rest; and the invention consists in introducing an elliptic spring between the foot-rest and the runner in such a manner that the center of the spring is placed directly under the clasp that binds the front part of the foot upon the foot-rest, and having a guide depending from the front end of the foot-rest to the front end of the runner, as will hereinafter appear.

In the drawings, Figure 1 is a side elevation of the skate, and shows an edge view of the spring. Fig. 2 is a plan of the under side, and shows the spring in plan.

At A is represented the runner, which may be of any well-known or desired form, and at B is shown the stock or foot-rest or sole-plate, which may be made of any form and material adapted for such a purpose, and it is attached at the rear end to the runner by a pivotal connection, as at C, or it may be riveted firmly at such point, if the foot-rest or sole-plate is made of thin metal, as is now usually the case; but the front end of the stock or foot-rest or sole-plate, as the case may be, is provided with a guide or guides, as at D, which embrace a portion of the front end of the runner, as at E, in which there is a slot, as at F, in which a rivet or pin, as at G, works to permit the yielding action of the sole-plate or foot-rest by

the yielding action of the spring, as at H, which is of elliptical form, and may be made of one or more plates, in the ordinary method of making such springs. Said spring H is attached at its stiffest part to the under side of the foot-rest or sole-plate by a rivet, as at K, at a point directly underneath the ball of the foot, and the two ends of the said spring rest and work upon the upper edge of the runner, or upon suitable bearings thereon, as at L and M. Said spring may be fastened to the sole-plate or foot-rest by a clamping device instead of a rivet, as described, and it may also be reversed so that the ends may rest against the sole-plate and its center upon the runner, the object being to furnish an elastic and yielding action between the runner and the foot-rest or sole-plate when the skate is being used.

It is evident that any kind of fastening for the feet may be used, as a stud, as at N, for the heel, and sliding clips, as at O, to clasp the edges of the sole by a screw, as at P; but as these are no part of my invention I need not further refer to them.

I therefore claim—

In a runner-skate, an elliptic spring the center of which is interposed directly under the clasp that binds the front part of the foot upon the foot-rest, in combination with a guide to control the position of the foot-rest with the front end of the runner, as hereinbefore set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOHN M. CORNELL.

Witnesses:

GEO. T. POWELL,
EUGENE N. ELIOT.