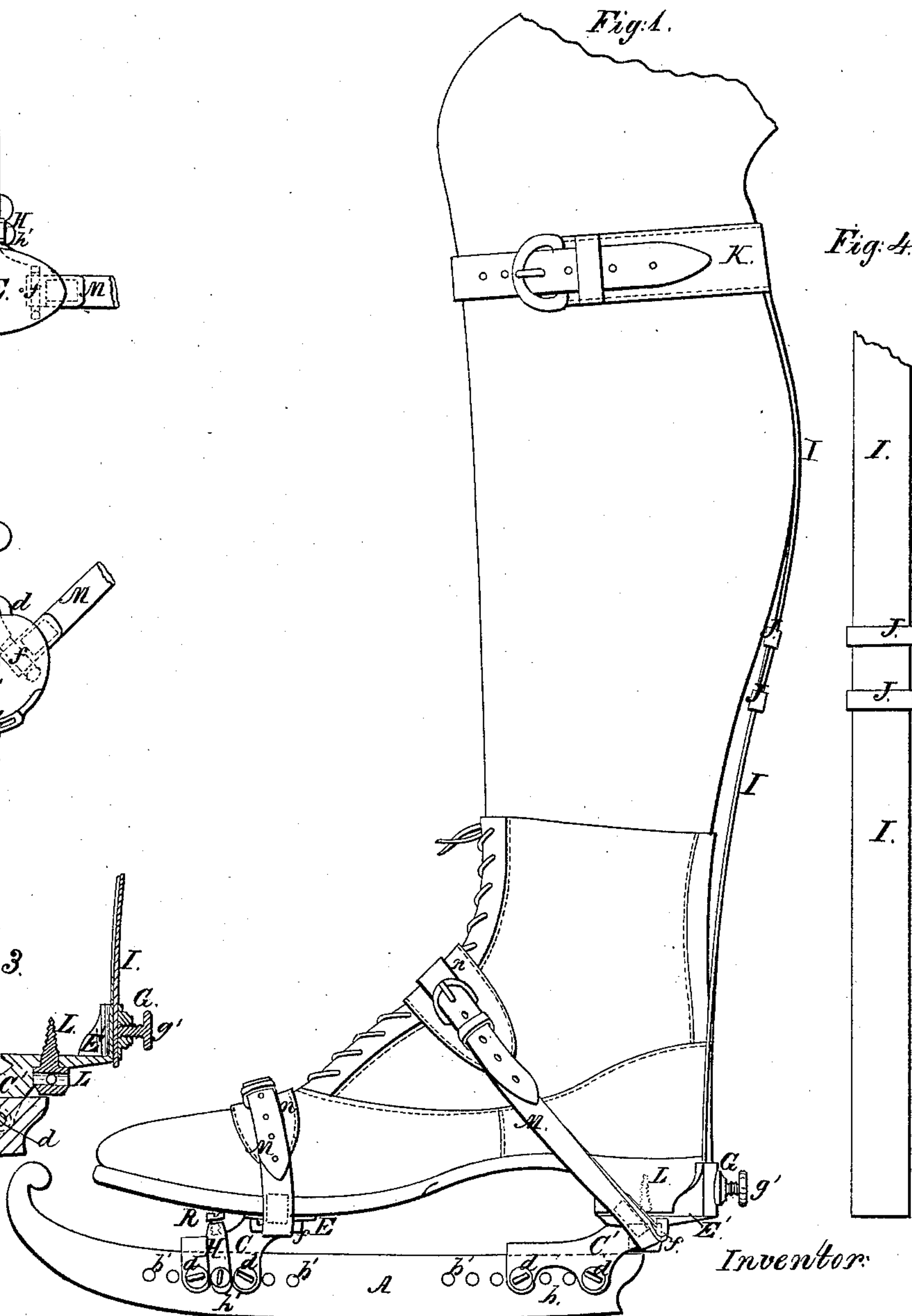
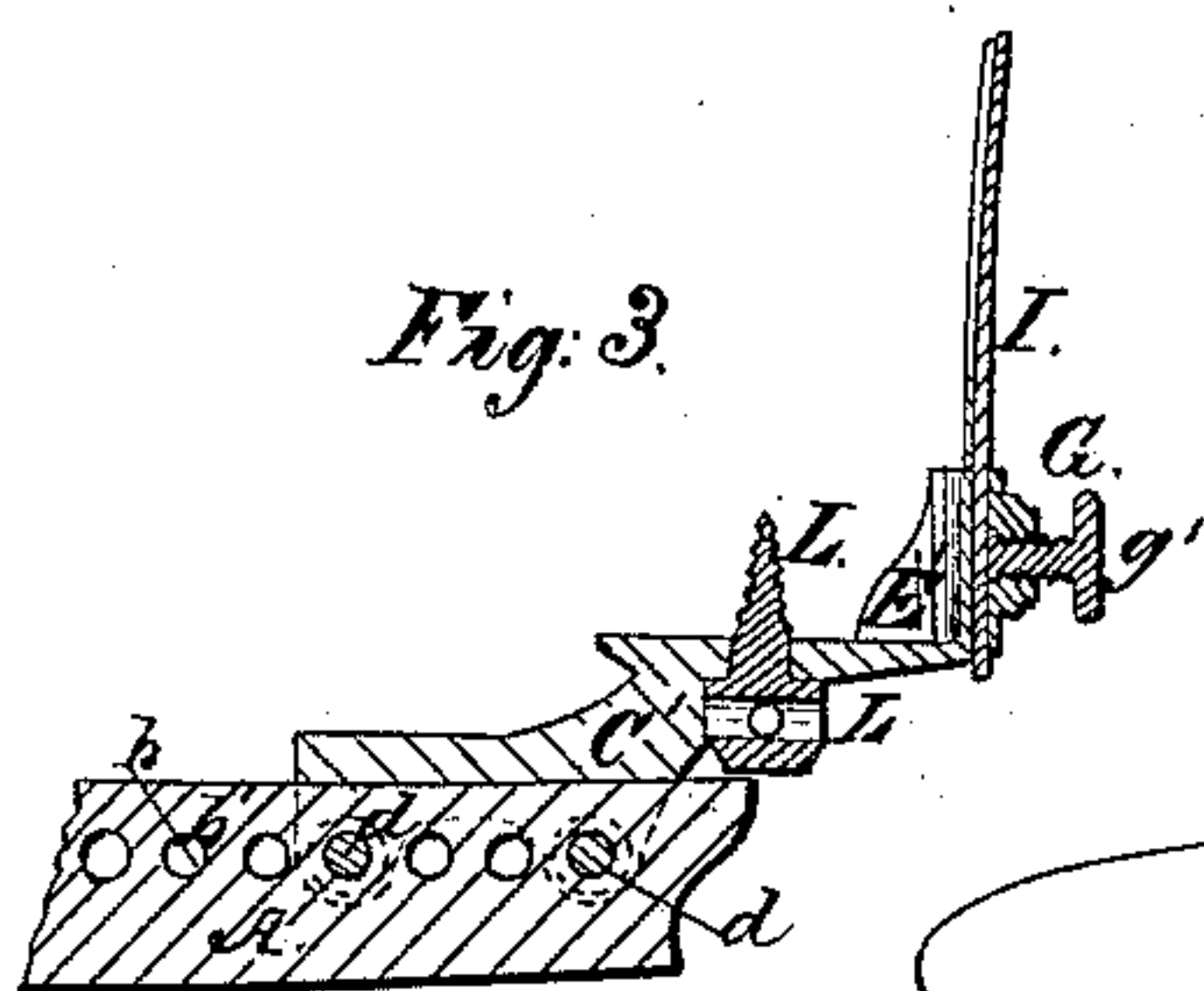
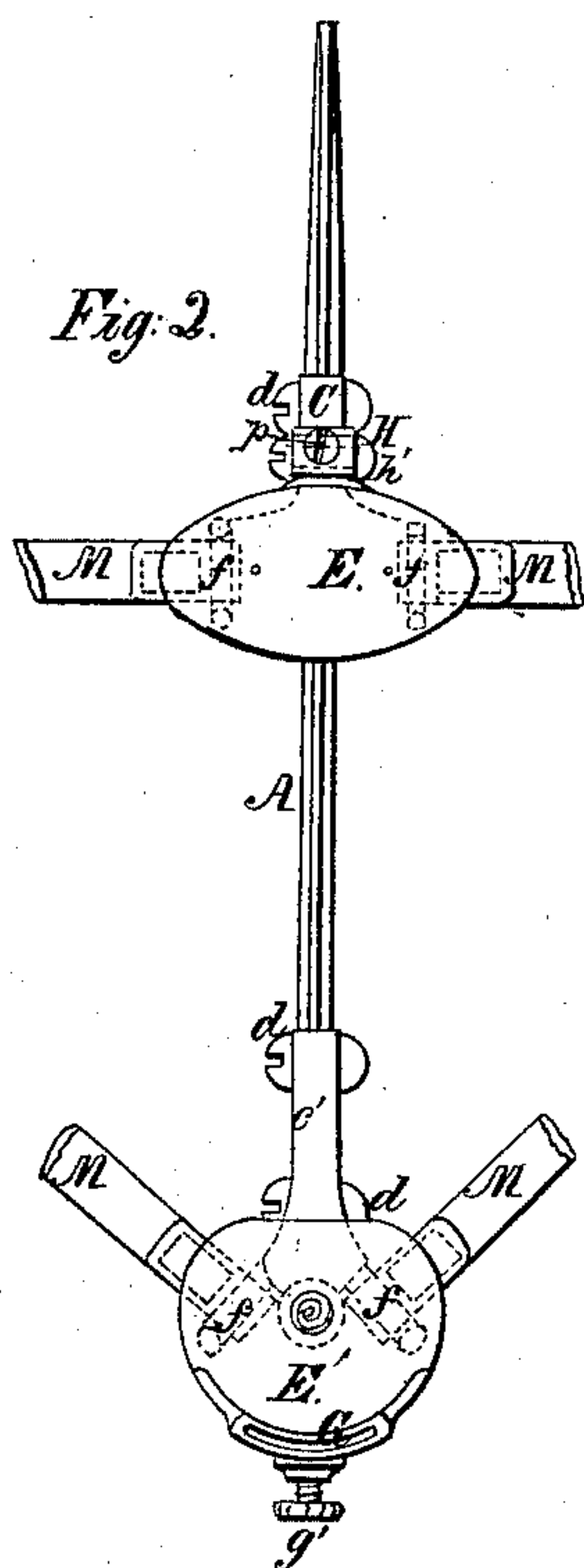


Skate,

Skate,

N^o 32,696,

Patented July 2, 1861.



Witnesses:

Walter H. Fish

Daniel D Small

Inventor:

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UNITED STATES PATENT OFFICE.

T. A. JEBB AND ABNER CUTLER, OF BUFFALO, NEW YORK.

SKATE.

Specification of Letters Patent No. 32,696, dated July 2, 1861.

To all whom it may concern:

Be it known that we, THOMAS A. JEBB and ABNER CUTLER, of the city of Buffalo and State of New York, have invented certain new and useful Improvements in Skates; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and the letters of reference marked thereon, in which—

Figure I is a side elevation of our improved skate. Fig. II is a plan of the same. Fig. III is a section. Fig. IV is a plan of a flat spring for supporting the leg.

Letters of like name and kind refer to like parts in each of the figures.

A. represents the skate runner which is forged of iron, and the face thereof laid with steel—the same being wrought and finished, in a common manner. A series of bolt holes are made through the runner as shown at *b'*, for the purpose of fastening the foot supports thereto, and for making the same adjustable on the skate runner.

c. represents a support for the ball of the foot. It is made of malleable iron or brass. The part thereof which is fastened to the runner has a deep groove so that it will set astride the runner, and made to fit nicely thereon, so that the support can be moved back and forth on the runner, and thereby made adjustable to different lengths of feet and different kinds of skating. The bolts *d*, pass through the support and runner to hold the same firmly where placed. A broad bearing is made for the ball of the foot as shown at E. with spurs thereon to catch in the sole of the boot. This bearing is made slightly concave so as to insure a full bearing of the sole of the boot thereon. Loops *f*, are made on the under side for holding the straps M. The support *c'*, for the heel is made and attached to the runner in a like manner, the form of the bearing being adapted to the heel as shown at E'. A slit or socket G. is made in this part, to receive and hold a spring for the support of the leg as herein described, with a set screw, *g'*, to hold the spring from slipping in the socket. This heel bearing is also made slightly concave, so that the boot heel will fit closely and have a full bearing thereon.

H. represents a metallic stirrup which may be used instead of the bolts (*d*) for holding the supports of the runner. A bolt (*h'*) passes through this stirrup and through the

runner, upon which bolt the stirrup swings,— sufficient space being left between the top of the stirrup and support, therefor. When the support is placed where desired on the runner, the set screw, R. is turned down closely and the support thereby held firmly in its place. This mode of fastening the skate to the runner is preferred to the other mode of fastening by bolts. Either mode will admit of the adjustability of the supports *c*, *c'*, upon the runner. These supports are made adjustable upon the runner for the further purpose of adapting the skate to rapid forward skating and to “fancy skating.”

I represents a flat spring which is intended as a support to the leg and ankle in the forward and backward movements. This spring is made in two parts and the parts connected by loops or slides as shown at J. (or otherwise) so that the parts may slide upon each other and thereby be made adjustable to any desired length. The upper part is made fast to a small spring band by rivets or otherwise which band is inclosed in the leather strap K, which strap buckles around the leg. This spring may be buckled around the leg before going upon the ice and worn under the pantaloons. When the skate is fastened to the foot the spring is extended so as to bring the lower end into the socket G of the heel plate, and made fast by the set screw, *g'*. When the skate is removed from the foot, the lower part of the spring will be moved back upon the other, and the whole left upon the leg, until it is convenient to unbuckle the strap and take it therefrom. When the spring is used for ladies' skates, it may be made in one piece, and shorter, so as to buckle around the leg just above the ankle. It is designed as a support to the leg and ankle, in the forward and backward movement, as distinguished from the outward and inward movement, although it supports and strengthens in both movements. The spring being made wide and flat, will not yield edgewise when the strain is brought upon it in that direction, and will therefore support the leg and ankle in those movements, while the full power of the spring operates to strengthen and steady the forward and backward movement. We thus accomplish more by the spring than is done by a non-elastic support placed at the side of the leg and jointed at the skate.

L, represents a heel screw which passes loosely through the heel plate and is free to turn therein so that it may be screwed into the boot heel by means of a pin or lever used in holes through the head. The head of the screw will rest upon the runner which will keep it in its place and prevent it from dropping out. This is more convenient of operation than where the screw is made fast to and immovable in the skate wood or heel plate and allows the boot heel to be drawn down closely to the plate. When this screw is made fast as in ordinary cases, the skate with all its tackling must be turned around and around, in order to turn the screw into the boot heel, and hence it is necessary to give the screw a full turn each time in order to bring the skate parallel with the foot, and hence it often happens, that the screw is drawn its full length into the heel on a half turn, and in all such cases it is necessary to unscrew sufficient to bring the skate parallel with the foot, and hence too the boot heel is left to rest entirely upon the screw, without

setting firmly upon the plate. Our improvement remedies this difficulty and insures at all times a perfect fit of the boot heel upon the plate.

M represents a leather strap with pads (n) for buckling over the foot as represented in the drawings.

We claim—

1. The combination of the spring, I, with the skate, the said spring and skate, being so constructed and used, that the said spring shall be placed back of the leg, and be connected to the leg and heel of the skate for the purposes, and substantially as set forth.

2. A heel support (c') made longitudinally adjustable on the skate runner, in combination with the metallic stirrup H. for the purposes and substantially as described.

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Witnesses:

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