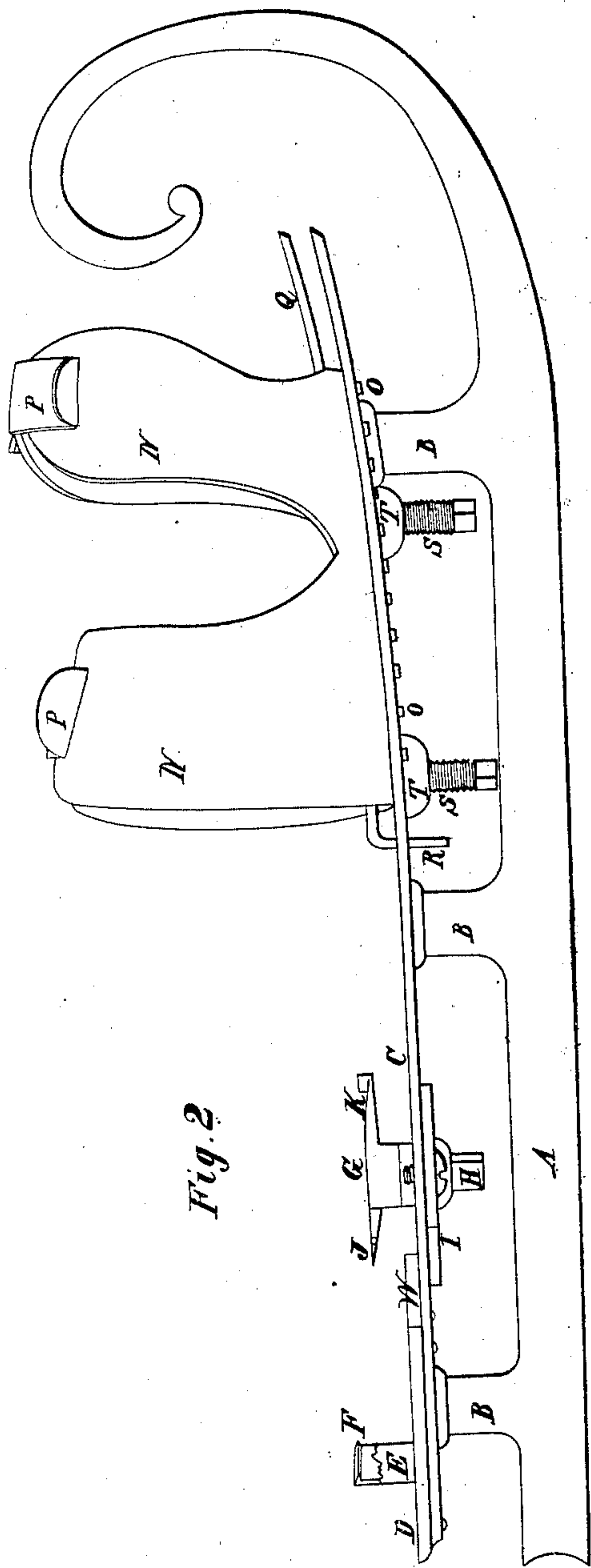
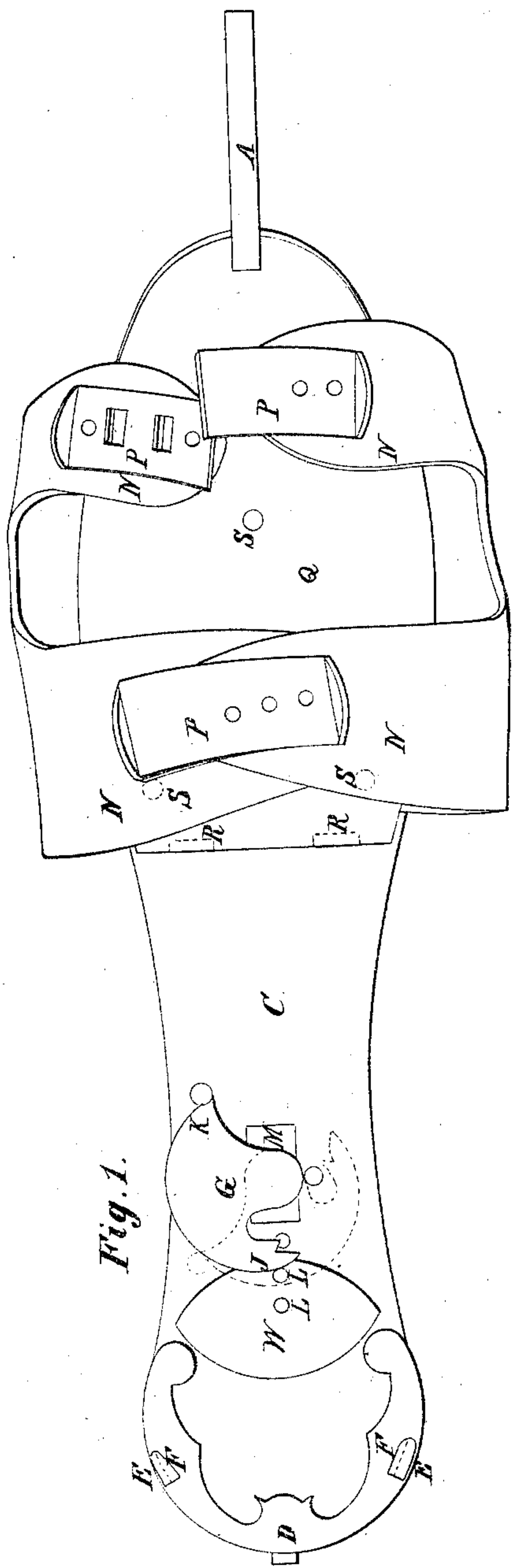


Evans & Gentsch,
Skate,

No 18,685,

Patented Nov. 24, 1857.



UNITED STATES PATENT OFFICE.

STOCKTON H. EVANS AND L. GENTSCH, OF PHILADELPHIA, PENNSYLVANIA.

SKATE.

Specification forming part of Letters Patent No. 18,685, dated November 24, 1857; Reissued January 25, 1870, No. 3,806.

To all whom it may concern:

Be it known that we, STOCKTON H. EVANS and LUDWIG GENTSCH, both of the city and county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Skates; and we do hereby declare that the same are described and represented in the following specifications and drawings.

10 To enable others skilled in the art to make and use our improvements we will proceed to describe their construction and use, referring to the drawings in which the same letters indicate like parts in each of the 15 figures.

Figure 1 is a plan or top view of a skate with our improvements. Fig. 2 is an elevation of the same.

The nature of our invention and improvement in skates, consists in arranging some 20 spurs upon the skate to enter the rear or outside of the heel of the boot or shoe in combination with an inclined rotating spur or cam made to press against the 25 front of the heel, and push it against the spurs and lock it down to the skate. Also in placing an adjustable plate over the fore part of the skate which is provided with set screws, so as to raise and lower said plate to 30 tighten or adjust the straps which cross the top of the foot to secure the skate upon it.

In the accompanying drawings A, is the runner of the skate provided with standards B, B, to support the foot plate C, which 35 may be fastened to them by riveting or otherwise so as to hold it firmly in a proper position over the runner. The heel plate D, is fastened to the foot plate C, and provided with two standards E, E, having sharp 40 spurs F, F, projecting inward or toward each other to stick into the heel of the boot or shoe to be fastened to the skate. The clamping cam G, is provided with a stud or shaft H, fitted to the plate I, so as to turn 45 freely in it. This cam G is made gradually larger from J, to K, and it also inclines gradually in the same direction toward the foot plate C, so that when the heel of the

boot or shoe is put in against the spurs F, F, and a wrench put on the lower end of the 50 cam shaft, which is made square for that purpose, and the cam turned toward the heel it will press the heel against the spurs, and cut a slight score in the front of the heel, and as it inclines toward the foot plate, 55 it draws the heel down and clamps it firmly against the plate and spurs, so as to fasten it firmly to the skate. There is a knob at K, on the extreme end of the cam G, to come against the front of the heel, and stop 60 the cam, so as to prevent it from being turned too far. The plate I, is provided with slots for the screws which fasten it to the plate C; it also has a stud in it which may be put into either of the holes L, L, so 65 as to adapt the cam to the size of the heel to be fastened; the foot plate C, having a slot M, in it which allows the cam-shaft H, to be moved when required.

To fasten the fore part of the foot to the 70 skate the straps N, N, are riveted to the foot plate C, as shown at O, O; and provided with clasps P, P, to connect them over the foot. To tighten the straps N, N, the top plate Q, is made in the shape of the fore 75 part of the plate C, and placed right over it (the plate C,) and provided with two lugs R, R, which pass freely through holes made for them in the plate C, as the plate Q, is raised or lowered by the screws S, S, S, 80 which turn in the female screws in the bushings T, T, fastened in the plate C. There is a small pivot on the end of the screws S, S, fitted to holes in the plate Q, so as to aid in holding it right over the plate C, when the 85 screws are turned, to tighten or loosen the straps, and adjust the skate upon the foot.

To prevent the cam G, from injuring the front of the heel a piece of leather W, is fastened to the plate C, between the ends of 90 the heel-plate D, for the front part of the bottom of the heel to rest upon, and be clamped against.

We believe we have described the improvements in skates which we have invented, so 95 as to enable any person skilled in the art to

make and use them. We will now state what we desire to secure by Letters Patent, to wit:

We claim—

- 5 1. The spurs F, F, or their equivalents in combination with the inclined rotating spur or cam G, which presses the heel against the spurs F, F, and locks it down to the skate substantially as described.
- 10 2. We also claim the adjustable plate Q

over the fore part of the skate constructed and arranged substantially as described, for the purpose of adjusting and tightening the straps, over the top of the foot.

STOCKTON H. EVANS.
LUDWIG GENTSCH.

Witnesses:

C. BRAZER,
JAMES ALEXANDER.

[FIRST PRINTED 1911.]