

(No Model.)

T. H. McQUOWN.
SKATE.

No. 414,915.

Patented Nov. 12, 1889.

Fig: 1.

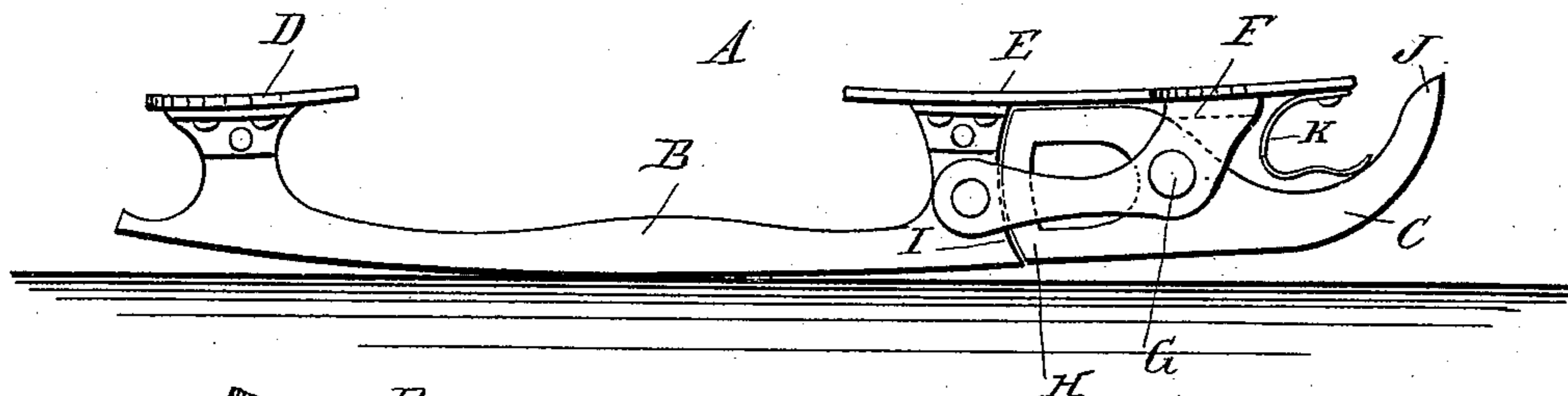


Fig: 2.

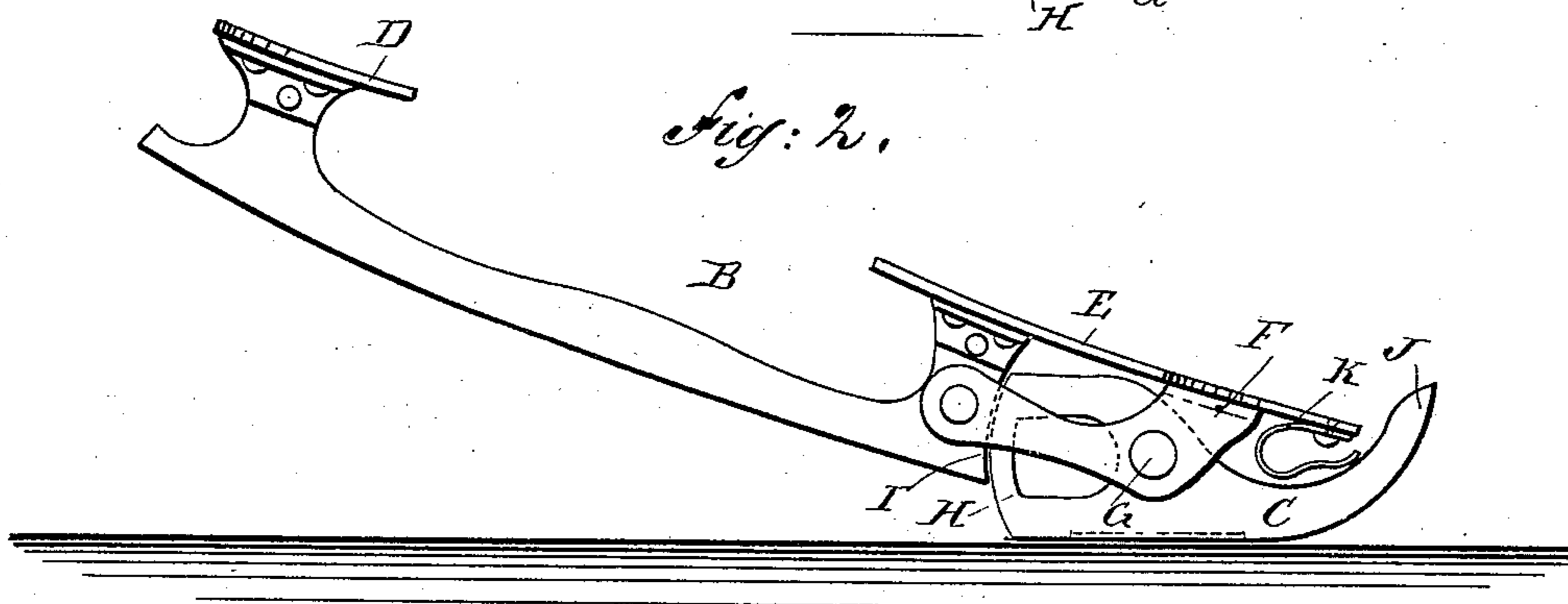


Fig: 3.

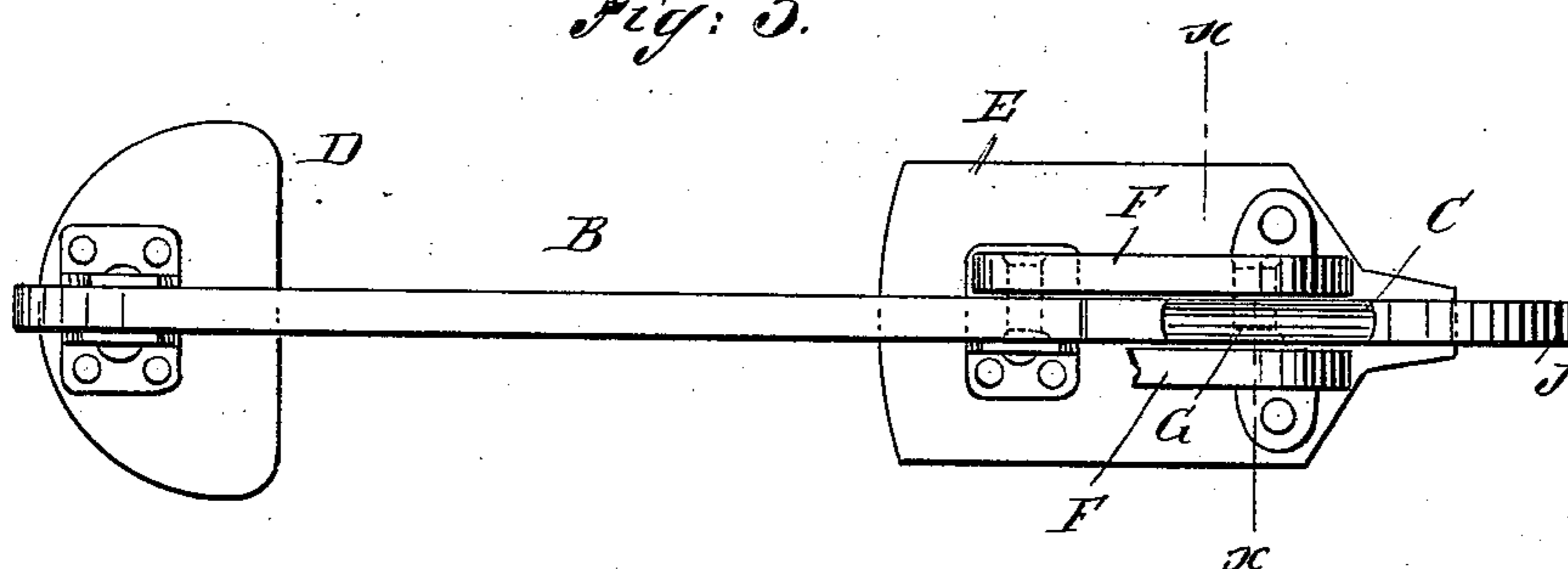
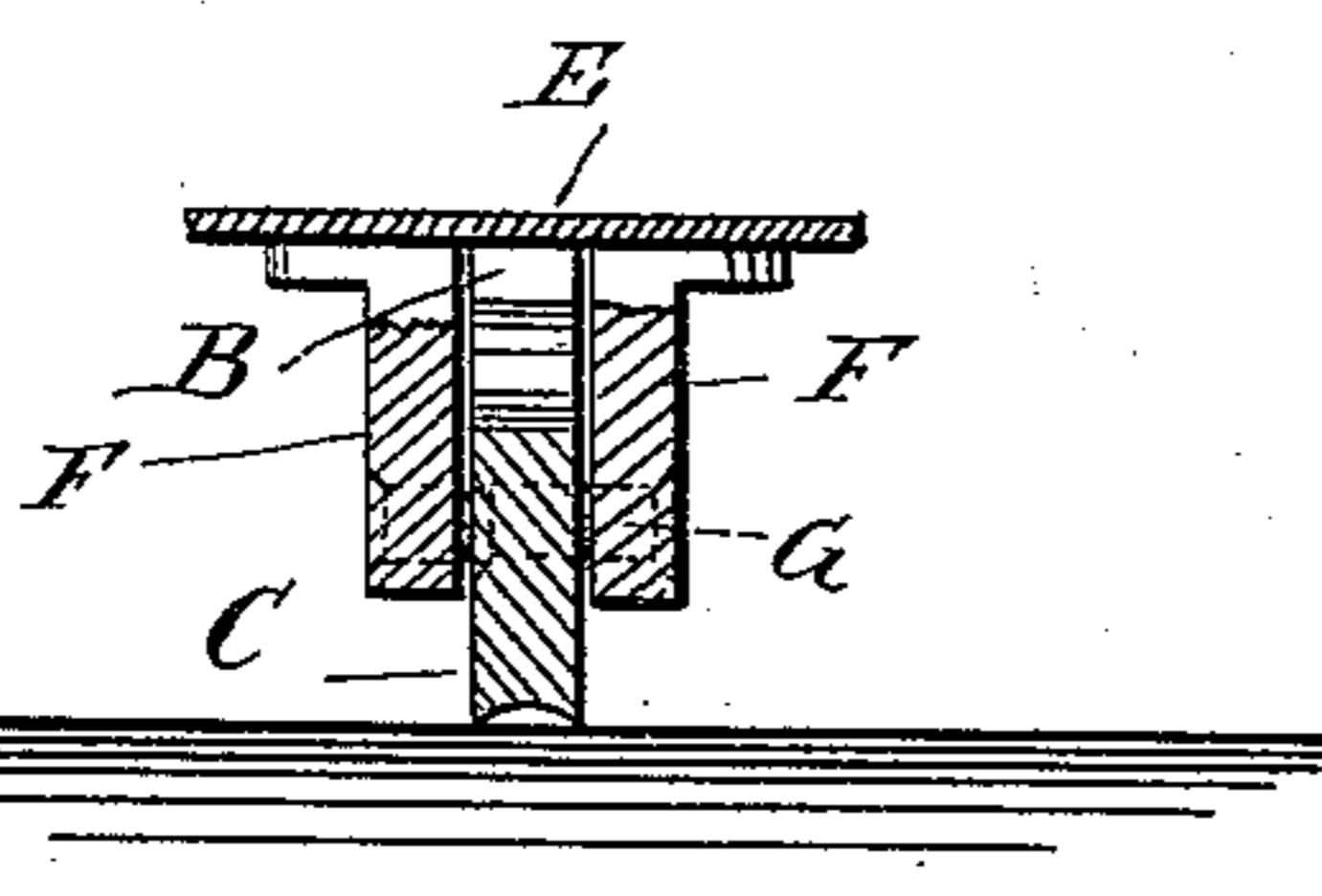


Fig: 4.



WITNESSES:

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Chas. Nield.
C. Sedgwick

INVENTOR:

J. H. McDougal
BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

THOMAS H. McQUOWN, OF BIGGSVILLE, ILLINOIS.

SKATE.

SPECIFICATION forming part of Letters Patent No. 414,915, dated November 12, 1889.

Application filed April 16, 1889. Serial No. 307,412. (No model.)

To all whom it may concern:

Be it known that I, THOMAS H. McQUOWN, of Biggsville, in the county of Henderson and State of Illinois, have invented a new and improved Skate, of which the following is a full, clear, and exact description.

The invention relates to skates, such as shown and described in the United States Letters Patent No. 296,413, granted to me January 22, 1889.

The object of the present invention is to provide a new and improved skate which is more simple and durable in construction and combines more strength with less weight than the skate above referred to and shown in my former patent.

The invention consists of a runner made in two parts, of which the rear one carries a sole-plate made in two sections, and the other (the front runner) is pivoted on a bracket fastened to the front end of the rear runner and its front sole-plate section.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improvement in a normal position. Fig. 2 is a like view showing the skate supported on the front runner. Fig. 3 is an inverted plan view of the improvement, and Fig. 4 is a transverse section of the same on the line xx of Fig. 3.

The improved skate A is provided with a runner made in two parts B and C, of which the part B forms the rear runner and the other part C is the front runner and extends in line with the rear runner. On the rear end of the rear runner B is secured a heel-plate D, and on the front end of the said runner is secured a sole-plate E, extending a suitable distance above the front runner C. On the under side of the sole-plate E are secured brackets F, extending rearward and fastened at their rear ends to the front end of the rear runner B. In the brackets F is held a pivot G, on which is mounted to turn the front runner C. The bracket F not only forms the

pivot for the front runner C, but, as it also extends across the rear end of the front runner C, it forms a guide and brace for the same. The rear end H of the runner C is formed in the shape of a segment, the center of which is in the pivot G. The front end of the rear runner B is shaped correspondingly and fits close up to the segment H. The front part J of the front runner C is curved upward, and between it and the front end of the sole-plate E is held a spring K, preferably secured by a rivet by one end to the said sole-plate E, as is plainly shown in the drawings. The front end of the said spring K rests on the top of the front part J of the runner C. Part of the under side of the front runner C is curved, as illustrated in dotted lines in Fig. 2 and in full lines in Figs. 3 and 4.

It will be seen that the skater can use the skate A in the usual manner, as the runner of the skate is continuous so long as the front and rear runners C and B remain in their normal position, as illustrated in Fig. 1. When the skater passes over uneven ice or other obstructions, the front runner C, turning on its pivot G on the bracket F, follows the unevenness of the ice or obstruction without disturbing the position of the rear runner B, so that the weight of the skater rests upon the rear runner, as the latter supports the sole and heel plates. Thus the position of the foot is not disturbed. When the rear runner C passes over the unevenness, the skater is supported on the front runner C, which is now supposed to pass over even ice, as shown in Fig. 2. The skater then lifts the rear part with the rear runner B upward, so that the sole-plate E and the heel-plate D assume an inclined position, and thereby the rear runner is lifted completely off of the ice, as shown in Fig. 2.

When the skater desires to skate only on the rear runner B, he raises the toe of his foot, so that the front runner C is lifted off of the ice, as illustrated in Fig. 1. For making short curves the skater uses only the front runner C, as illustrated in Fig. 2, whereby the entire weight is thrown on the sole-plate E and the front runner C, and the rear runner B is lifted off of the ice. It will be further seen that the front runner C is perfectly

guided between the brackets F, so as to be always in line with the rear runner B. The spring K always returns the front runner C to its normal position.

5 Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In a skate, the combination, with a rear runner supporting a sole-plate and a heel-plate, of a bracket secured to the sole-plate and the front end of the said rear runner, and a front runner pivoted on the said bracket and extending in line with the said rear runner, substantially as shown and described.

15 2. In a skate, the combination, with a rear runner supporting a sole-plate and a heel-plate, of a bracket secured to the sole-plate and the front end of the said rear runner, a front runner pivoted on the said bracket and extending in line with the said rear runner, and a spring placed between the front end of the front runner and the said sole-plate, substantially as shown and described.

25 3. In a skate, the combination, with a rear runner curved at its front end to the shape of a segment, of a heel-plate secured on the said rear runner, a sole-plate secured to the

front end of the said runner, a bracket fastened to the said front end of the rear runner and to the under side of the said sole-plate, and a front runner pivoted on the said bracket and having its rear end formed in the shape of a segment fitting onto the curved end of the rear runner, substantially as shown and described.

35 4. In a skate, the combination, with a rear runner curved at its front end to the shape of a segment, of a heel-plate secured on the said rear runner, a sole-plate secured to the front end of the said runner, a bracket fastened to the said front end of the rear runner and to the under side of the said sole-plate, a grooved front runner pivoted on the said bracket and having its rear end formed in the shape of a segment fitting onto the curved end of the rear runner, and a spring interposed between the front end of the said front runner and the said sole-plate, substantially as shown and described.

THOS. H. McQUOWN.

Witnesses:

J. E. BARNES,

JNO. Y. WHITEMON.