

(No Model.)

T. H. McQUOWN.

SKATE.

No. 396,413.

Patented Jan. 22, 1889.

Fig: 1.

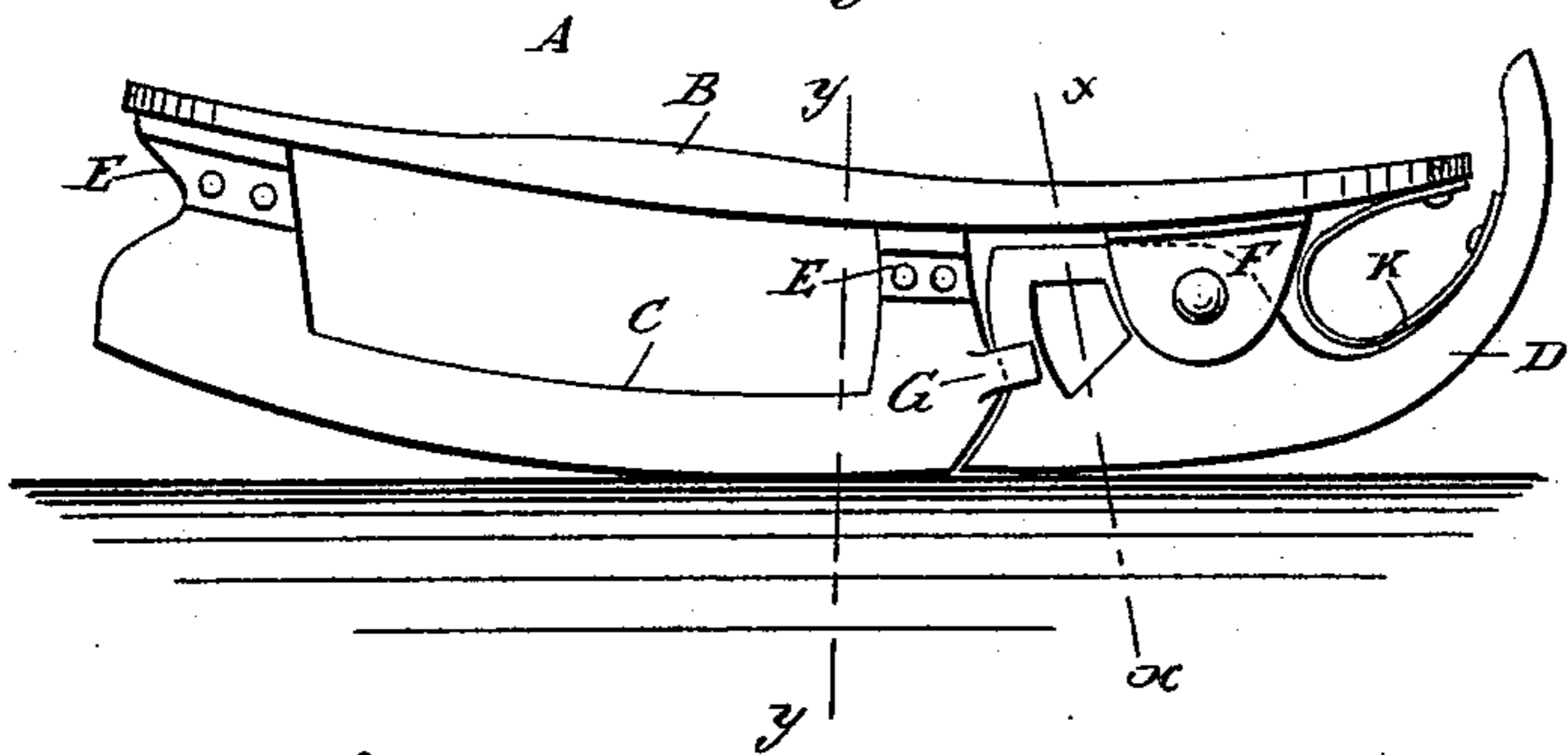


Fig: 2.

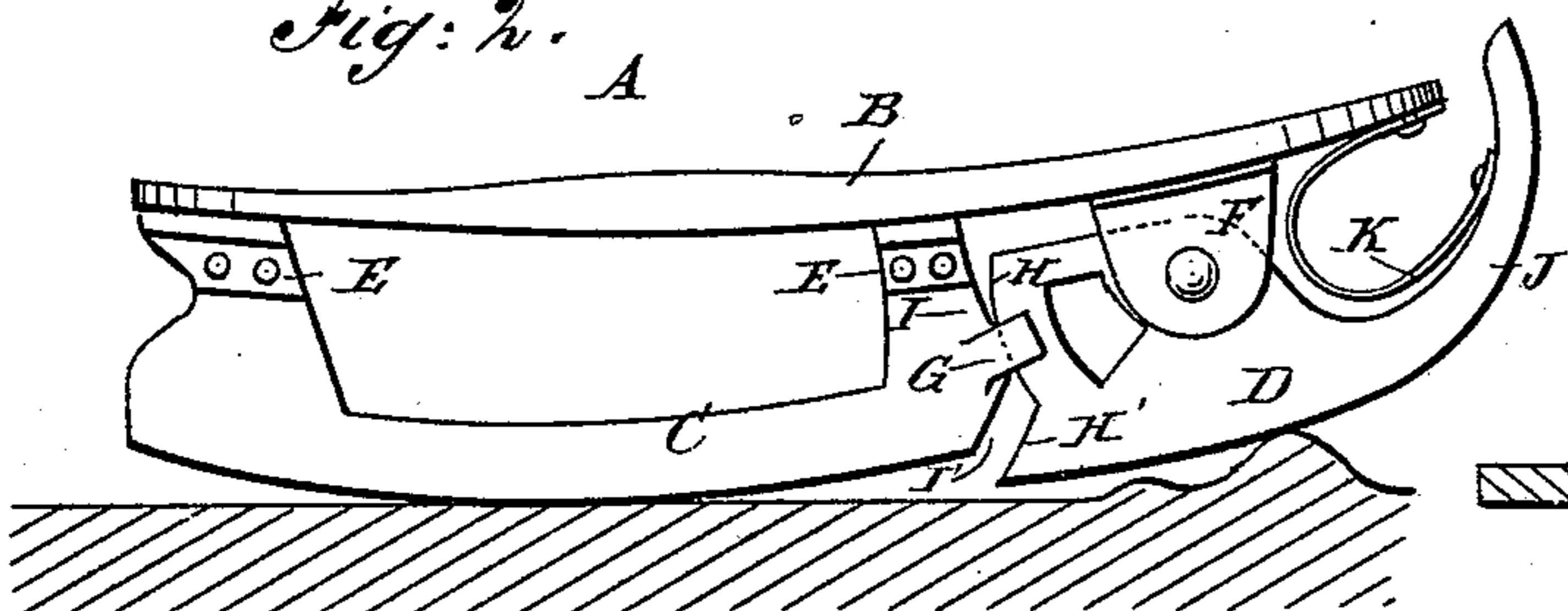


Fig: 3.

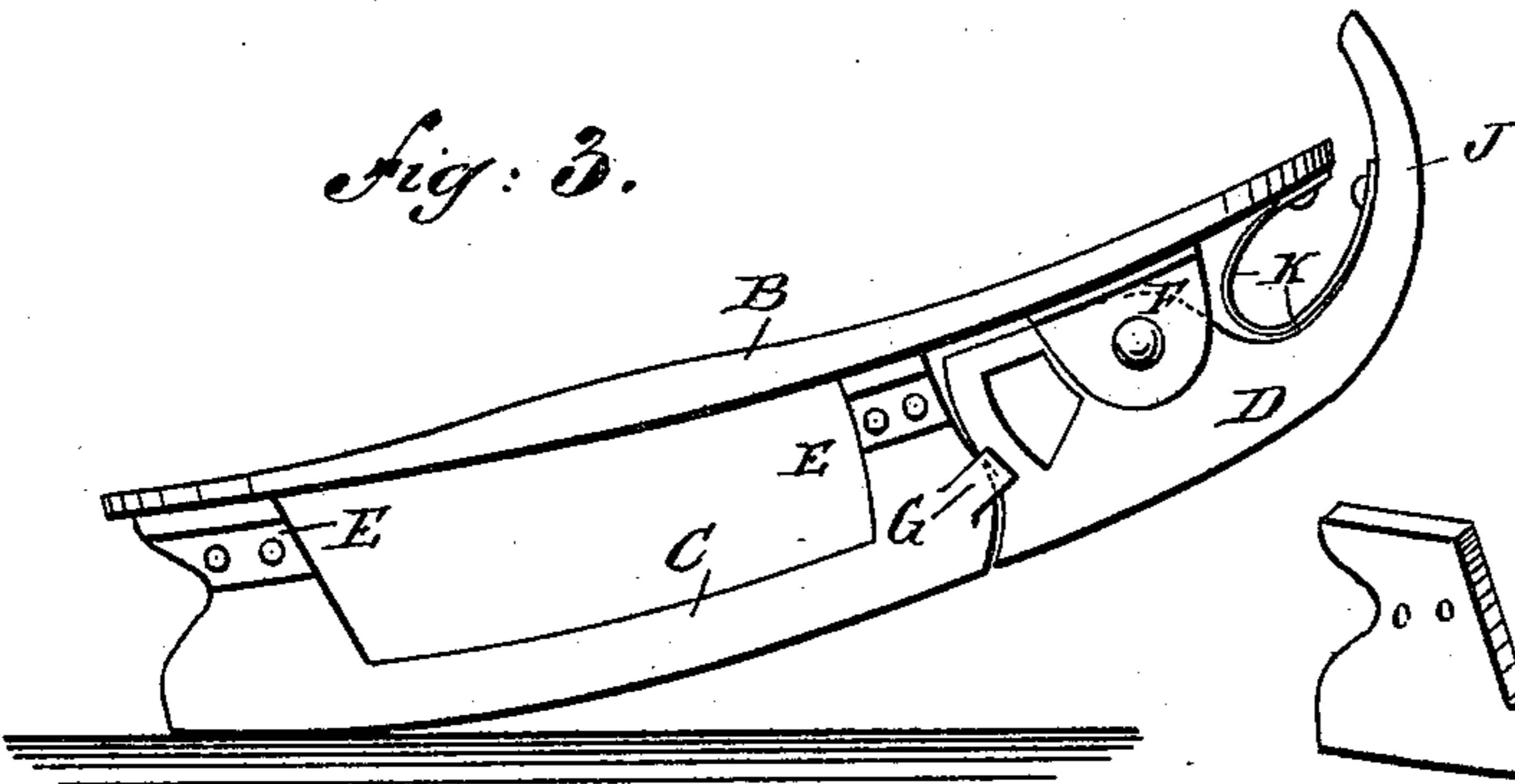


Fig: 4.

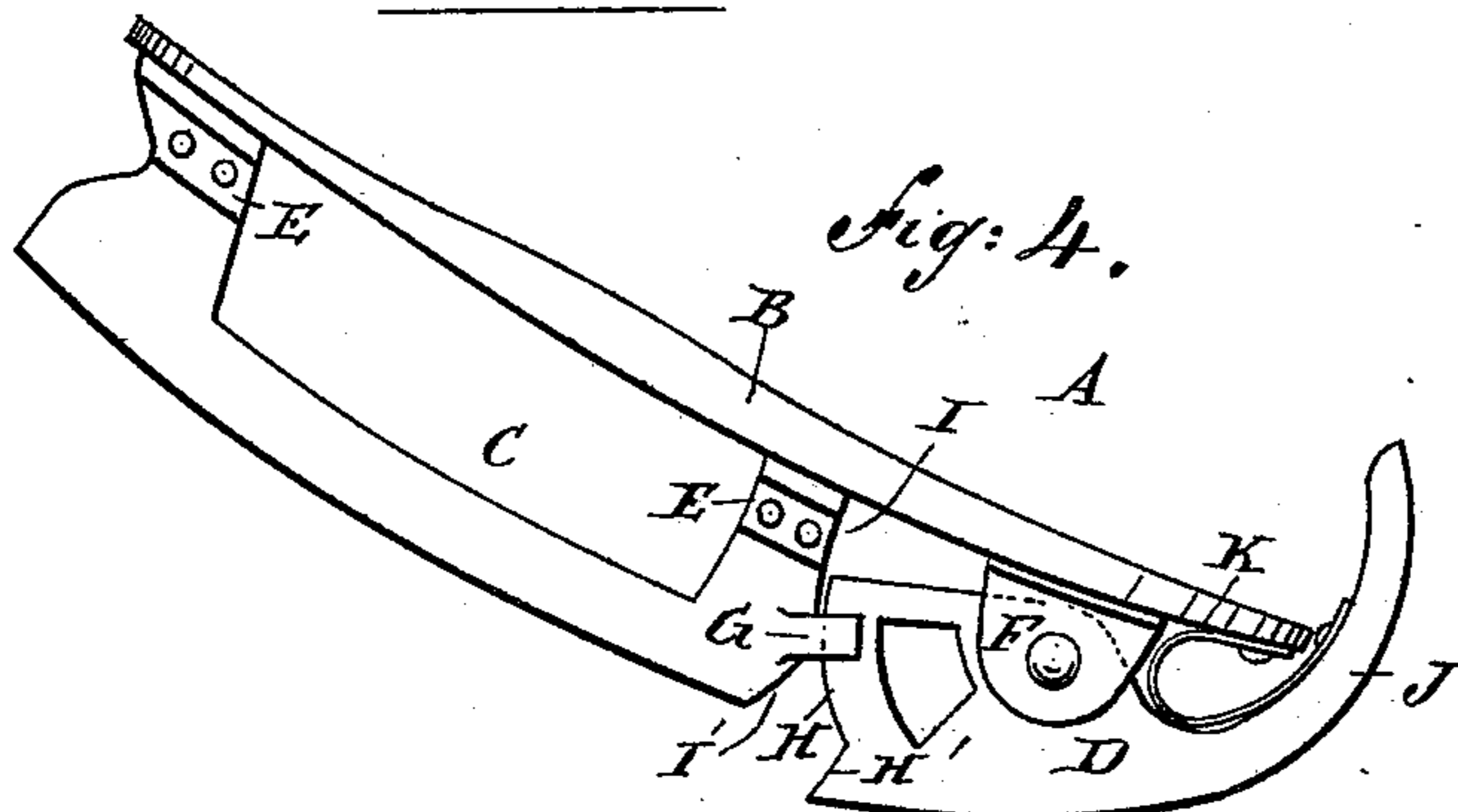


Fig: 5.

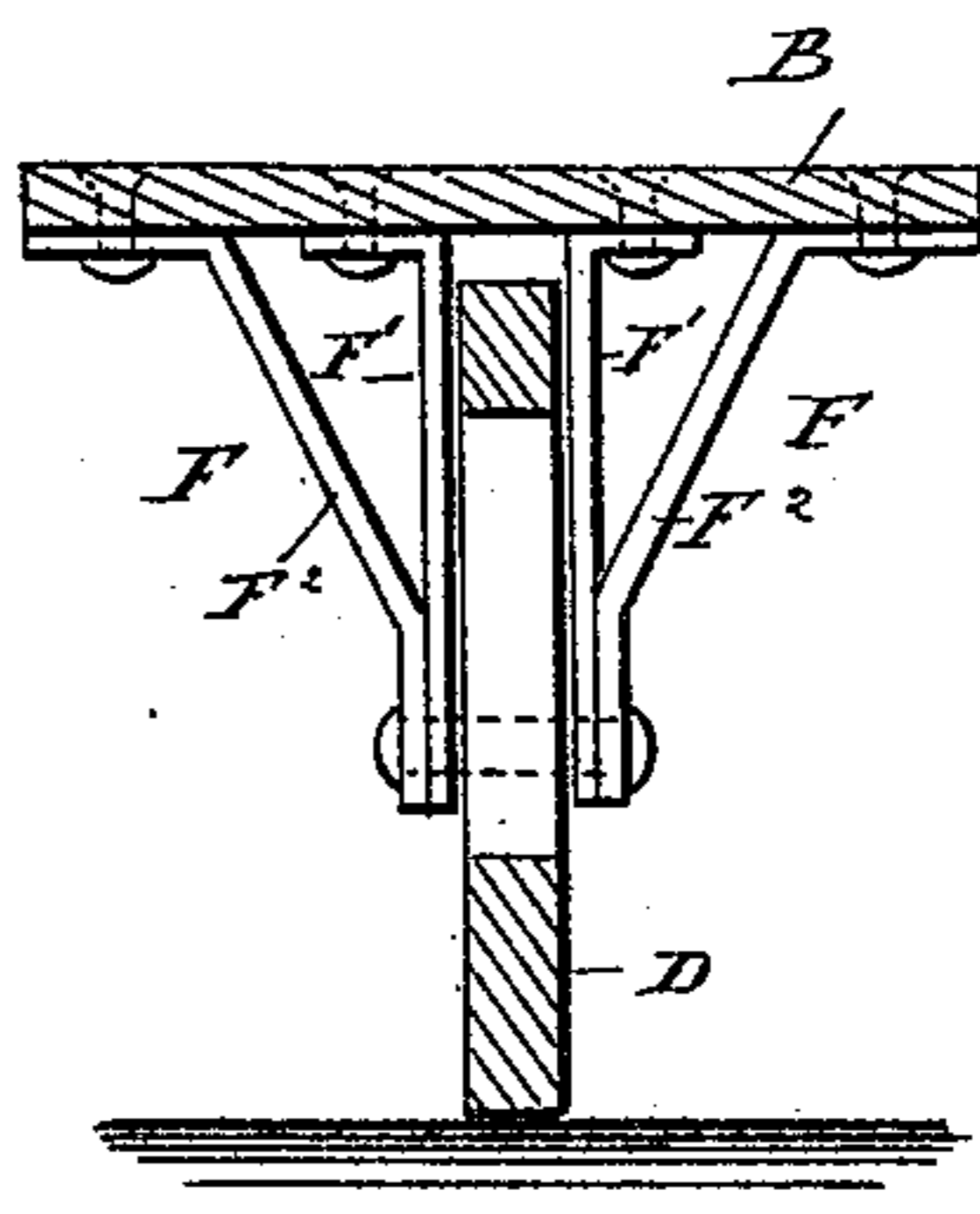


Fig: 6.

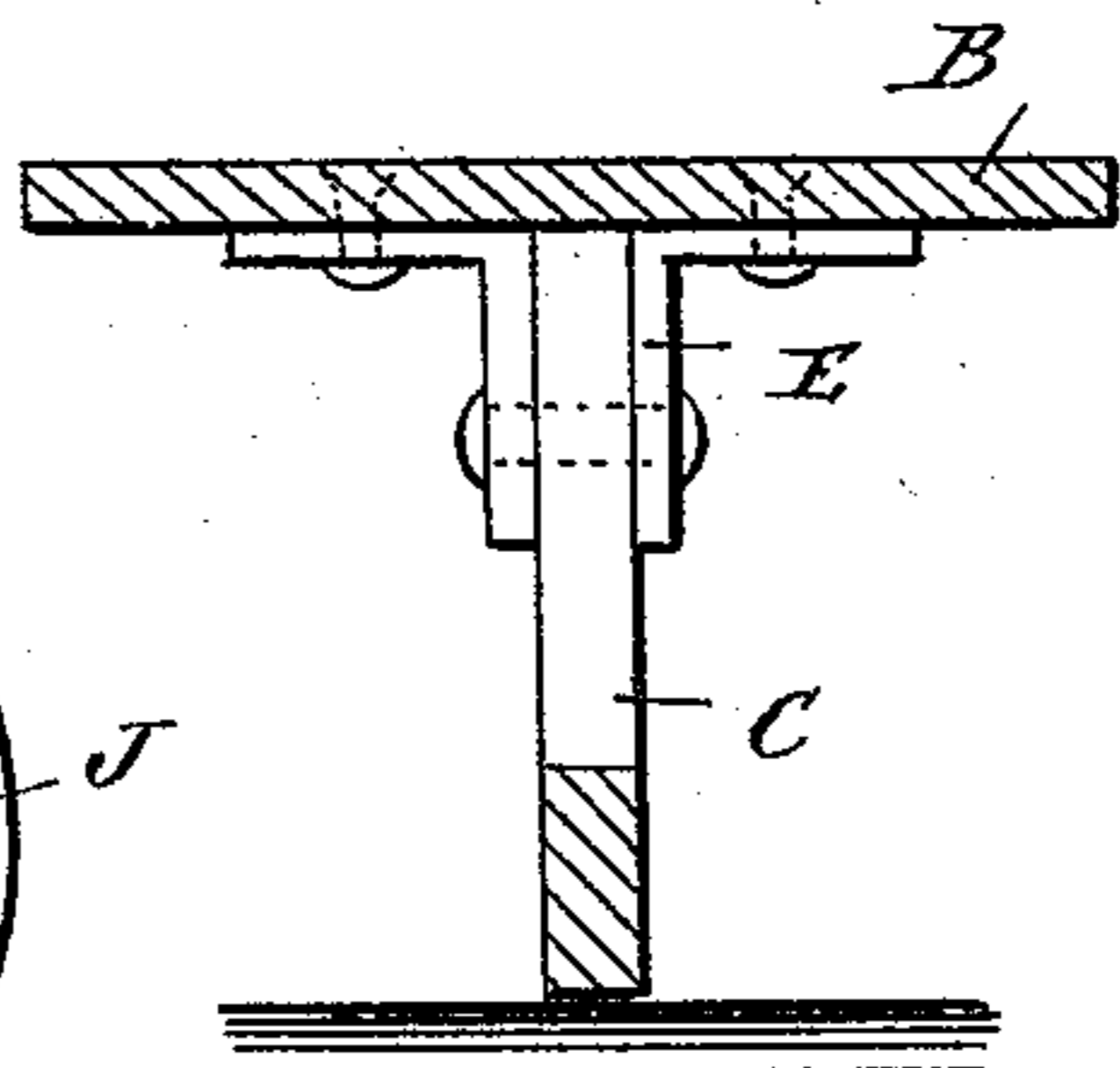


Fig: 7.

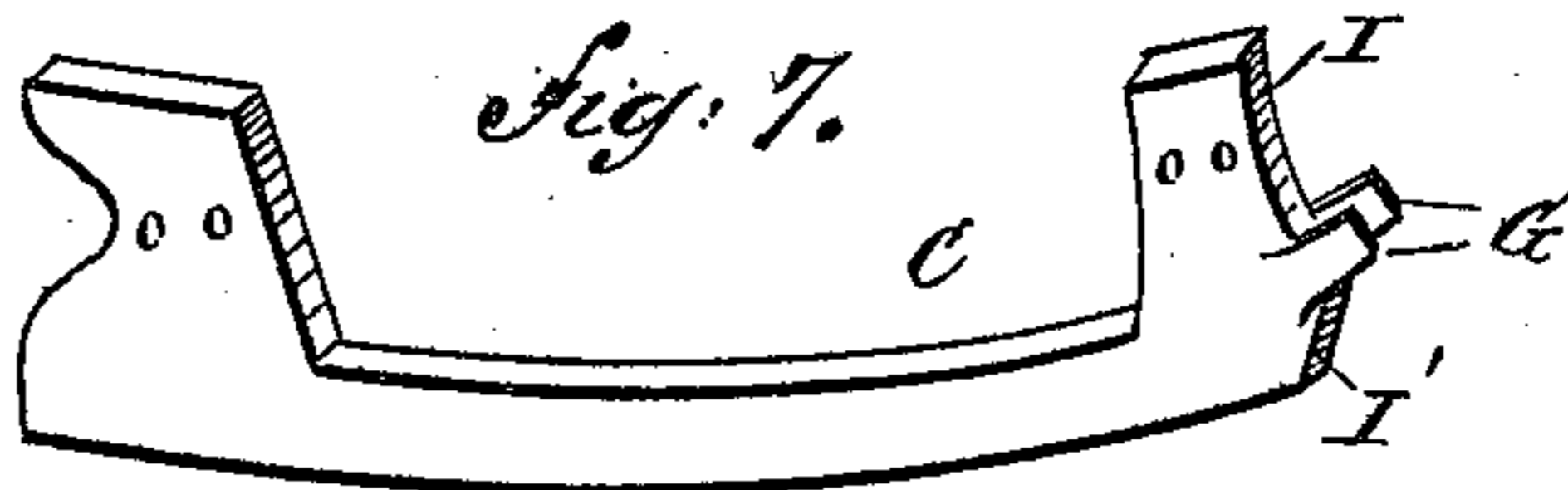
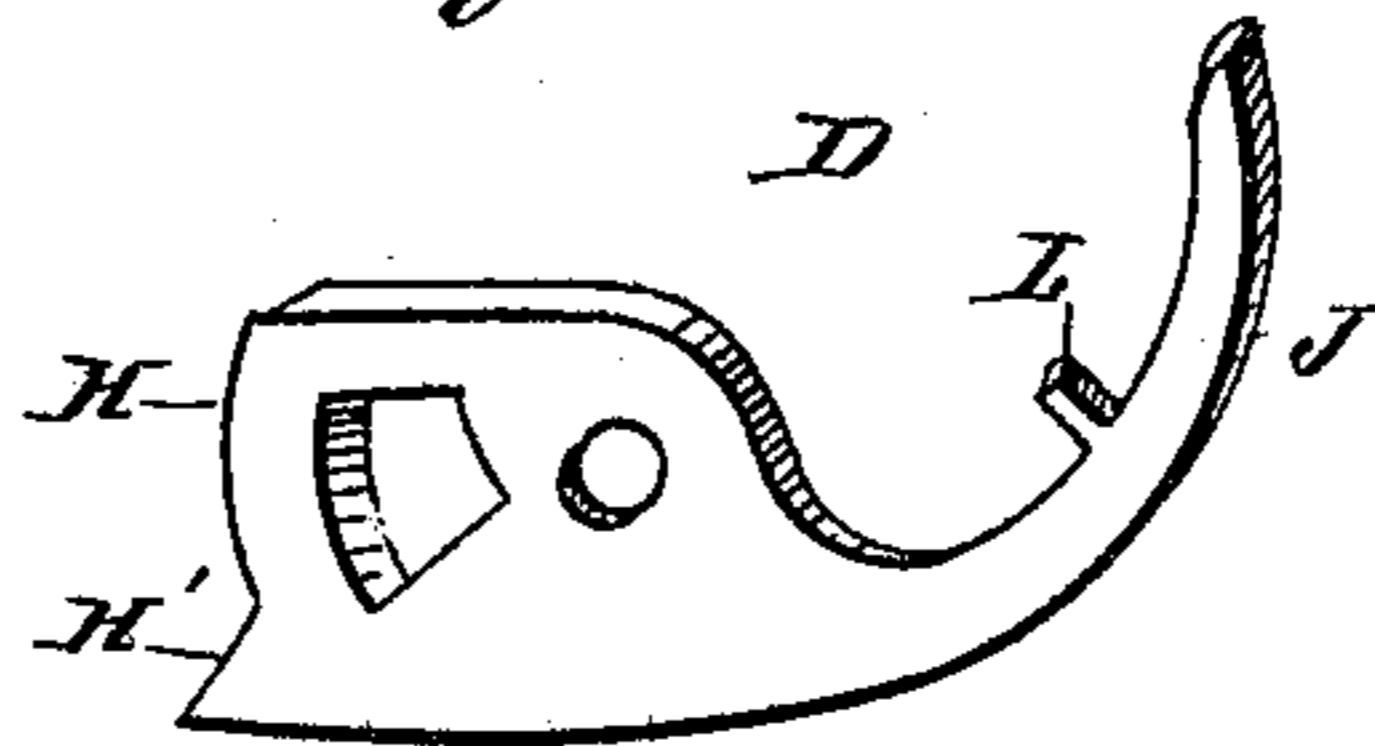


Fig: 8.



WITNESSES:

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SKATE.

SPECIFICATION forming part of Letters Patent No. 396,413, dated January 22, 1889.

Application filed May 7, 1888. Serial No. 273,026. (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 object of the invention is to provide a new and improved skate which permits the skater to skate on his heel or toe, or on both, if desired, thus enabling him to pass easily over uneven ice or obstructions; and it also permits the skater to make any fancy maneuvers without much exertion.

The invention consists of a sole-plate and of a runner made in two parts, of which the rear part is rigidly secured to the sole-plate and the front part is pivotally connected to the sole-plate.

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 of the same with the front runner passing over uneven ice. Fig. 3 is a like view showing the skate resting on the rear runner. Fig. 4 is a like view showing the skate supported on the front runner. Fig. 5 is an enlarged transverse section of the improvement on the line *xx* of Fig. 1. Fig. 6 is a similar view of the same on the line *yy* of Fig. 1. Fig. 7 is a perspective view of the rear runner, and Fig. 8 is a like view of the front runner.

The improved skate A is provided with the sole-plate B, to the under side of which is secured a runner made of two parts, C and D, of which the part C forms the rear runner, and is rigidly secured by suitable brackets, E, to the under side of the sole-plate B. The other part, D, is the front runner, and extends in line with the rear runner, C, being pivotally secured on the double brackets F F, fastened to the under side of the sole-plate B near its front end. Each double bracket F consists of the L-shaped inner bracket, F',

and of the second bracket, F², which acts as a brace, being slightly inclined, as shown in Fig. 5, and the inner brackets, F', forming a guide for the front runner, D.

On the front end of the rear runner, C, are formed the forwardly-projecting lugs G, between which fits the rear end of the front runner, D, so as to guide the latter between the said lugs G in line with the rear runner, C. The upper part of the rear edge of the front runner, D, forms part of a circle, H, and fits into a corresponding part of a circle, I, formed on the front edge of the rear runner, C. The lower part, H', of the rear edge of the front runner, D, stands at an angle to the circular part H, and fits on a corresponding part, I', formed on the front edge of the rear runner, C, as plainly shown in the drawings. Thus when the skate A is in its normal position, as shown in Figs. 1 and 3, the said circular parts H and I and H' and I' are in contact with each other, and when the front runner, D, passes over an obstruction, as shown in Figs. 1 and 2, then the circular part H slides on the circular part I of the rear runner, C.

The front part of the front runner, D, is curved upward, and between it and the front end of the sole-plate B is held a spring, K, preferably secured by a rivet by one end to the said sole-plate B, and by its other end to a projection, L, formed on the upper edge of the front end, J, of the front runner, D. The spring K is for the purpose of holding the front runner, D, in its normal position, as shown in Figs. 1 and 3.

It will be seen that the skater can use the skate A in the usual manner, as the runner of the skate is continuous as long as the front and rear runners, D and C, remain in their normal position. When the skater passes over uneven ice or other obstructions, the front runner, D, turning on its pivot on the brackets F, follows the unevenness of the ice or the obstructions without disturbing the position of the rear runner, C, so that the weight of the skater rests on the rear part of the sole-plate B and the position of his foot on the sole-plate is not disturbed. When the rear runner, C, passes over the unevenness, the skater is supported on the front runner, D,

which is now supposed to pass over even ice. The skater then lifts the rear part of his foot, so that the sole-plate B assumes an inclined position, and the rear runner, C, is lifted completely off of the ice, as is plainly shown in Figs. 1 and 4.

If the skater desires to skate only on the rear runner, C, he raises the toe of his foot, so that the sole-plate B assumes an inclined position, as shown in Fig. 3, whereby the front runner, D, is completely lifted off of the ice.

For making short curves, the skater uses only the front runner, D, as shown in Fig. 4, whereby the entire weight is thrown on the toe part of the foot, and the rear runner, C, is lifted off of the ice.

It will be seen that the front runner, D, is perfectly guided between the double brackets F F and the lugs G, so as always to remain in line with the rear runner, C.

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 sole-plate, of a rear runner rigidly secured thereto, having an inwardly-curved front edge and guide-lugs projecting beyond said edge, and a front runner pivoted to said plate and having an outward curve on its rear edge conforming to the curvature of said forward edge of the rear runner, substantially as described.

2. In a skate, the combination, with a sole-plate, of a runner rigidly secured thereto, having an inclined lower front edge, as I', and an upper curved front edge, as I, a runner

pivoted to said plate in front of said other runner, and having a curved upper rear edge, as H, and an inclined lower rear edge, as H', which are adapted to fit against the said edge of the rear runner, substantially as described.

3. In a skate, the combination, with the plate and a rigidly-secured runner, of a pivoted runner having a curved spring, as K, secured thereto and to the plates between the forward ends thereof, substantially as described.

4. In a skate, the combination, with the plate, of a rigid runner secured thereto, having lugs permanently secured thereon projecting obliquely from its forward sides, a runner pivoted to said plate and working between said lugs, and a spring, as K, between the forward ends of said plate and pivoted runner, said spring being rigidly secured to the plate and runner, substantially as described.

5. In a skate, the combination, with the plate, of a rigidly-secured runner, C, having lugs G on its forward end and a curved and inclined edge, as I and I', a forward pivoted runner in alignment with said other runner, brackets, as F', secured to said plate, in which said runner is pivoted, and a spring, as K, secured between the pivoted runner and the forward end of the plate, substantially as described.

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Witnesses:

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