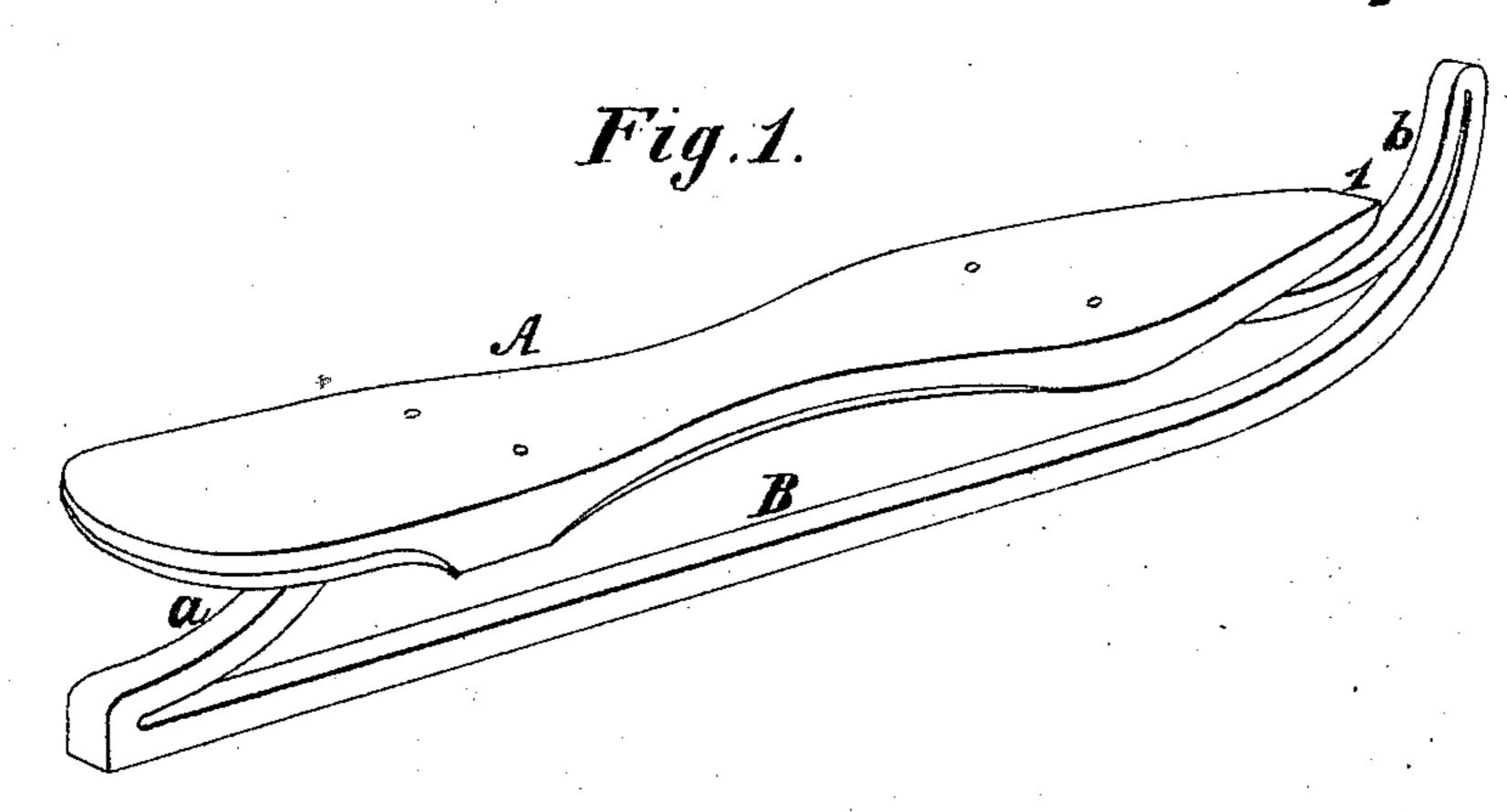
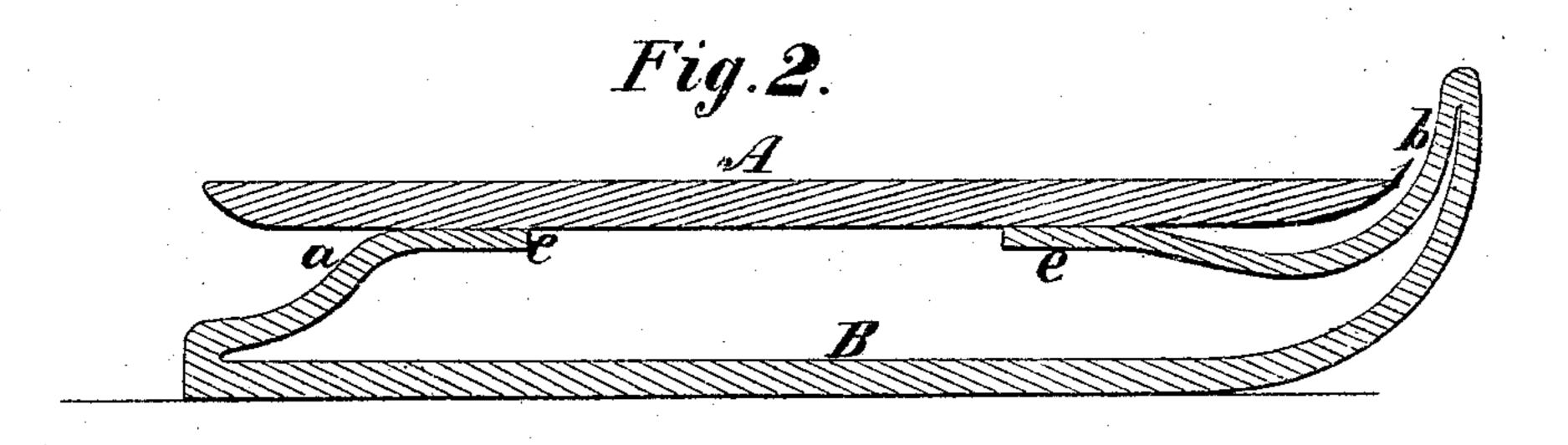
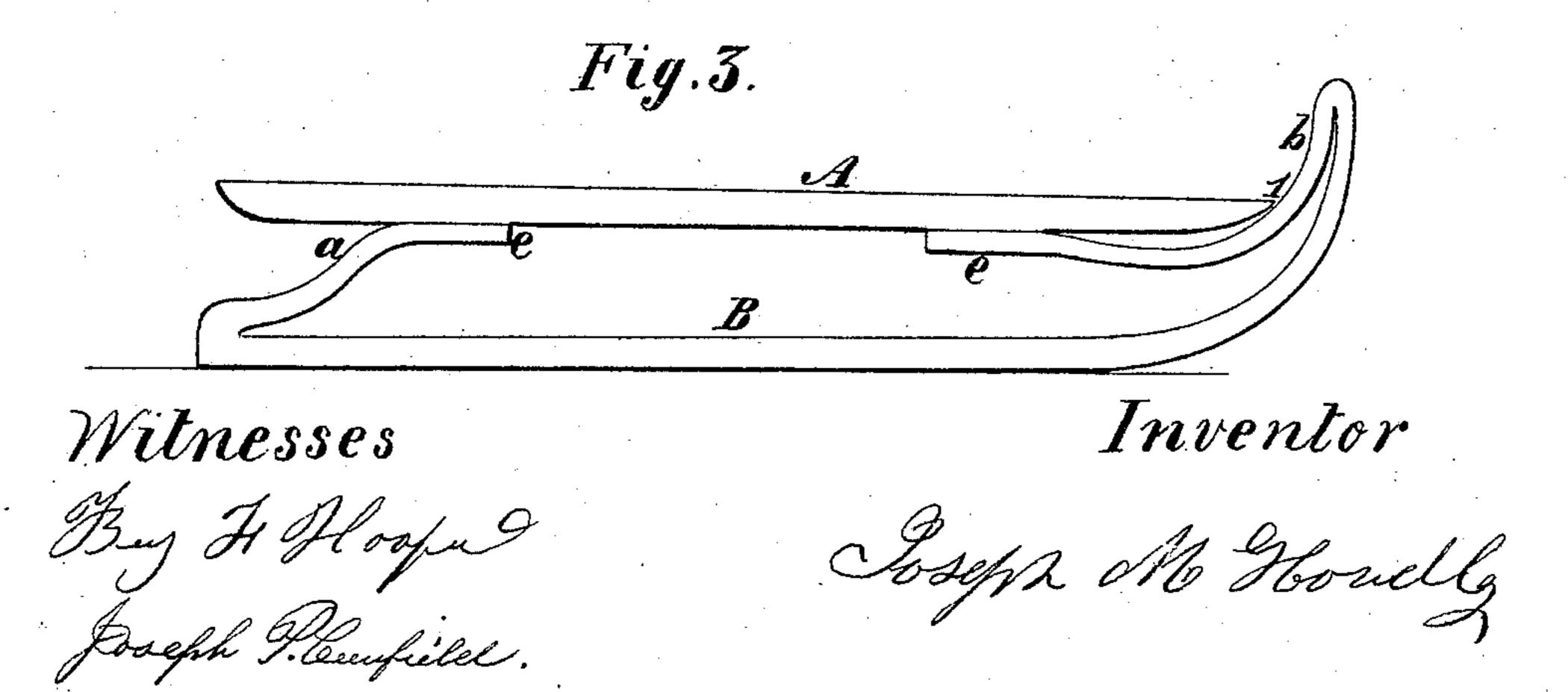
J. M. Hoadley, State,

17.32,944

Patented July 30 1861.



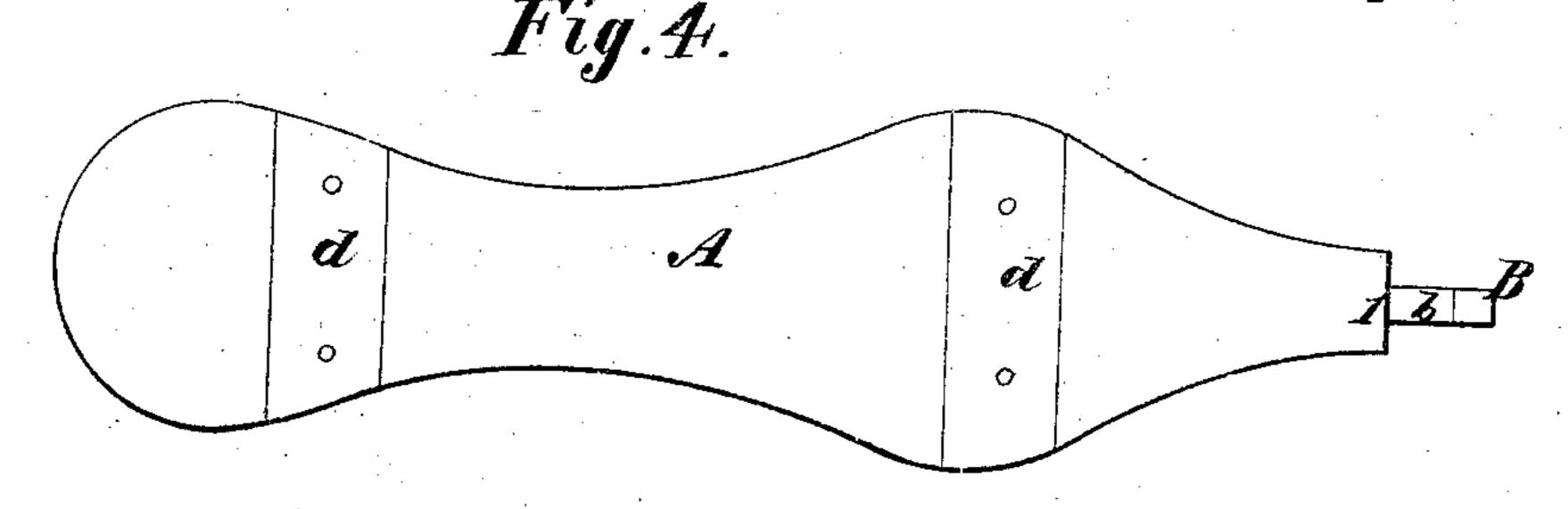


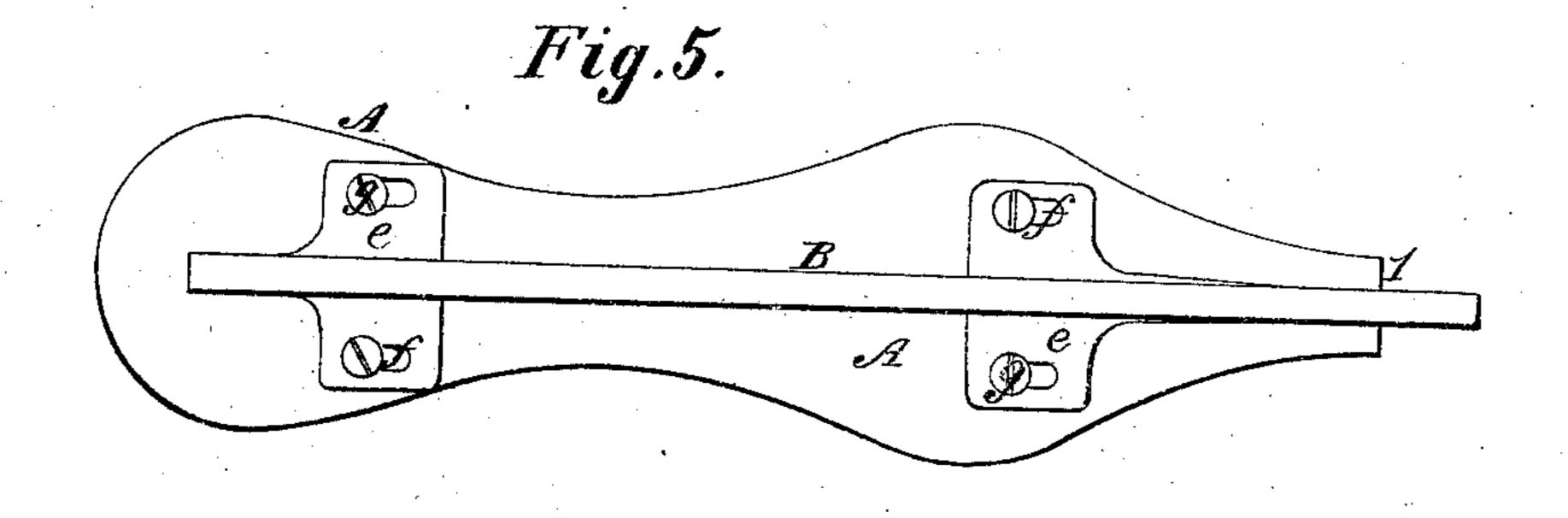


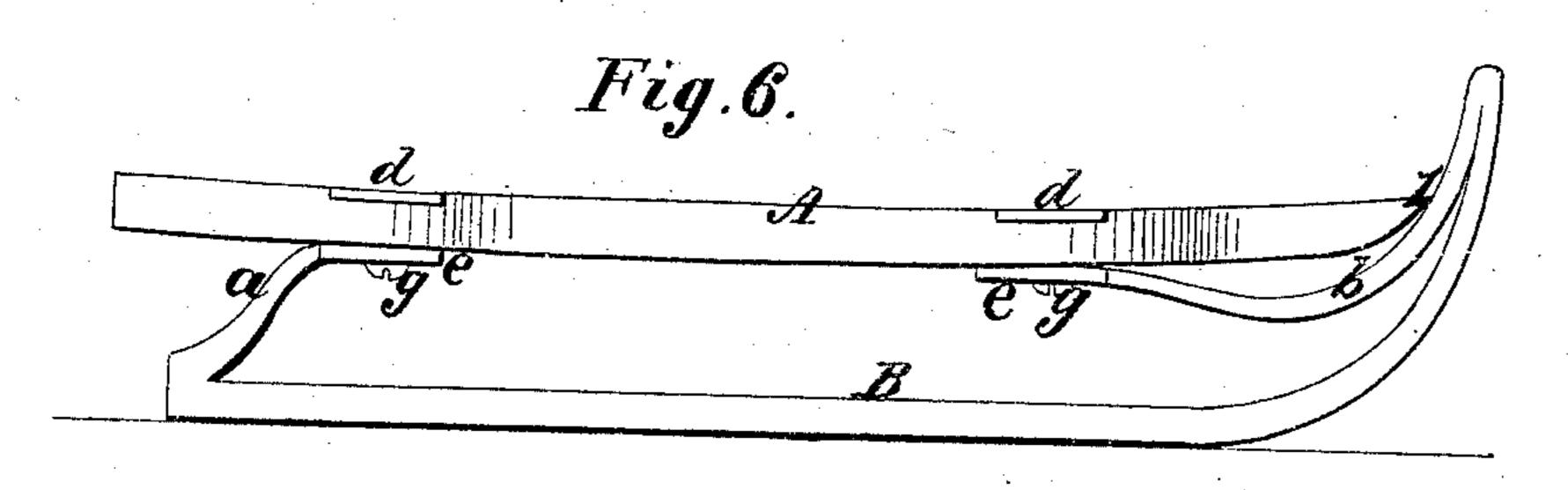
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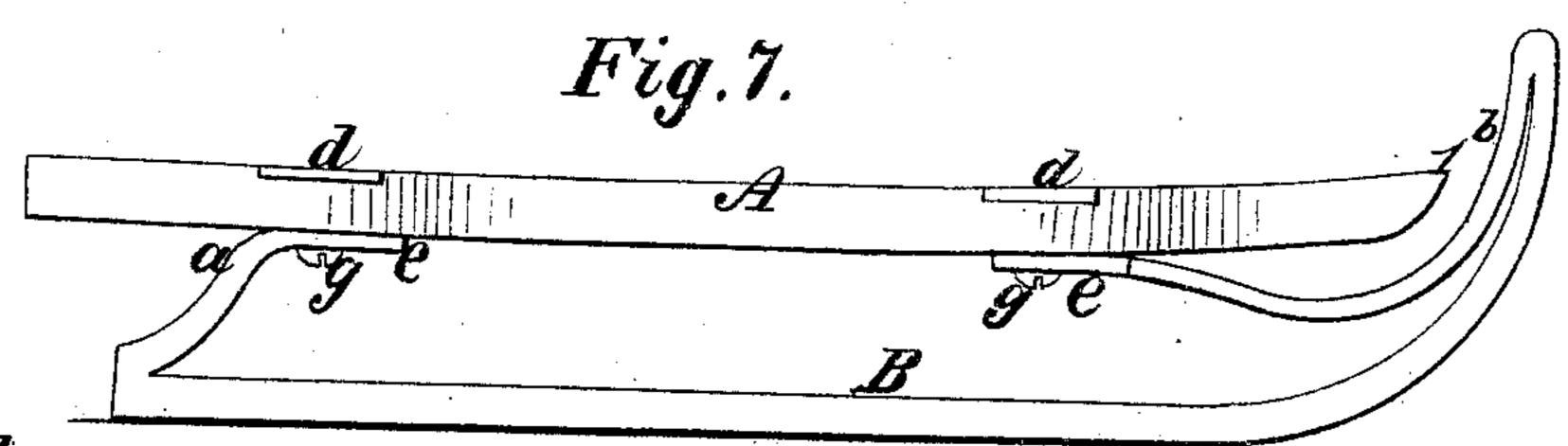
1 32,941

Patented July 30,1861.









Witnesses
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Jos P. Caufeelee

Inventor Postph all Housely

UNITED STATES PATENT OFFICE.

JOSEPH M. HOADLEY, OF DERBY, CONNECTICUT.

SKATE.

Specification of Letters Patent No. 32,944, dated July 30, 1861.

To all whom it may concern:

Be it known that I, Joseph M. Hoadley, of Derby, in the county of New Haven and State of Connecticut, have invented certain 5 new and useful Improvements in Skates; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this application.

My invention relates to certain improvements in the construction of skates, and has for its object such a form of skate as shall embrace the advantages of elasticity and comfort with a continuous runner, and sim-15 plicity and durability, while at the same time its degree of spring may be regulated at the option of the skater, and to these ends my said invention consists in the employment in combination with a rigid stock, of a 20 runner formed of one continuous piece and so constructed and combined with said stock, as that the forward portion of the runner can be pressed or sprung toward the stock to a given extent while the rear portion of the 25 runner remains rigid as will be hereinafter fully described. And my invention further consists in making the runner adjustable longitudinally on the stock as hereinafter fully explained for purposes to be described. 30 And my invention further consists in the arrangement of metallic cross trees in connection with the runner stands and bolts whereby the whole is locked together and the skate rendered very strong without being 35 heavy as will be fully explained hereinafter.

To enable those skilled in the art to make and use my invention I will proceed to describe the same referring by letters to the accompanying drawings forming part of 40 this specification, and in which—

Figure 1 is a perspective view and Figs. 2 and 3 vertical sections of a skate embracing part of my invention, and Figs. 4, 5, 6 and 7, are respectively, top, bottom and side 45 views of a skate embracing the other features of my said invention.

The several figures will be referred to particularly presently and in all of them the same part is indicated by the same letter.

A, is the stock which is made of a thin

piece of hard wood suitably shaped.

B, is the runner which is formed of one piece of steel of the proper width (its bottom being grooved or flat as may be desired) 55 and bent up at the rear and forward ends

in the manner shown in the drawings at aand b. The legs a, and b, terminate in two flat stands or plates e, e, (see Figs. 5, 6, and 7,) each of which has cut in it two slots f, to accommodate the securing screws g, which 60 pass through said slots and the threads of which take into the metallic cross ties or plates d. The leg a, which sustains the rear end of stock A, is made somewhat stouter than the forward leg b, and perfectly rigid, 65 while the leg b, is so shaped and tempered as to constitute a spring, on which the forward end of stock A, hangs as illustrated. Now it will be seen that by this method of hanging the forward end of the stock, it 70 can be depressed from its normal position seen at Figs. 1, 2, and 7, into the position shown at Figs. 3 and 6, where the point 1, of the stock A, is seen resting on the portion b, of the runner. In this manner the spring 75 b, which effects the elasticity of the forward portion of the runner, serves also as a stop to prevent the stock from approaching the runner too much. The runner as before mentioned is held fast to the stock by means 80 of the screws g, which pass through the slots f, in plates e, and into the stock A, and its cross ties d, d. Now, by loosening the screws g, slightly it will be seen that the plates e, will be relieved so that they can 85 be slid along longitudinally and then secured again to the stock A, by tightening up screws g. By thus sliding, or adjusting the runner the forward end l, of the stock A, has its relation to the spring leg b, so 90changed that it will come into contact with and be stopped by said portion b, at a different degree of depression—and thus the amount of spring or yielding of said stock relatively with said runner, is regulated, by 95 adjusting the runner, as just described.

It will be understood that by the employment of the cross ties d, in connection with the runner stands e, the whole constructed and arranged as described, the stock A, is 100 strengthened and retained so that it may be made exceedingly light, and the whole skate yet be very strong and durable, and I consider this a great desideratum. My improved skate possessing all the advantages 105 of elasticity, and a continuous bearing surface (to the runner) is probably much lighter than any other skate of equal strength ever made.

Having fully described the construction ¹¹⁰

and operation of my improved skate, what I claim therein as new and desire to secure by Letters Patent is—

1. The combination with a stock A, of an adjustable spring runner B, the whole arranged and operating as described for the purpose set forth.

2. The combined arrangement of the cross ties d, d, with stock A, stands e, e, and

screws g, the whole operating together in 10 the manner and for the purposes described.

In testimony whereof I have hereunto set my hand this ninth day of March 1861.

JOSEPH M. HOADLEY.

Witnesses:

Jos. P. Canfield, Benj. F. Hooper.