

Corser & Bundy,

Skate,

N^o 32,821.

Patented July 16, 1861.

Fig. 1.

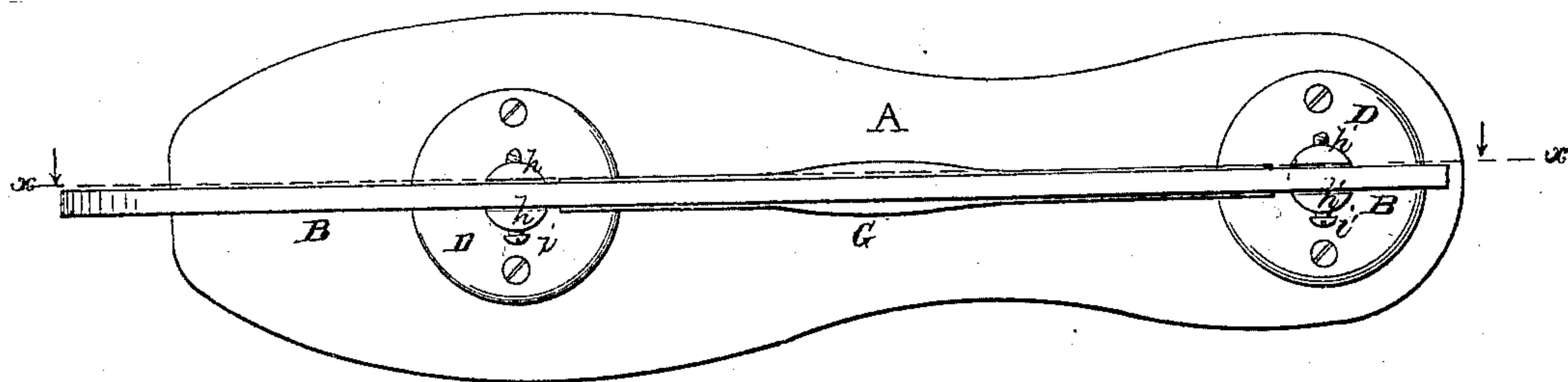


Fig. 2.

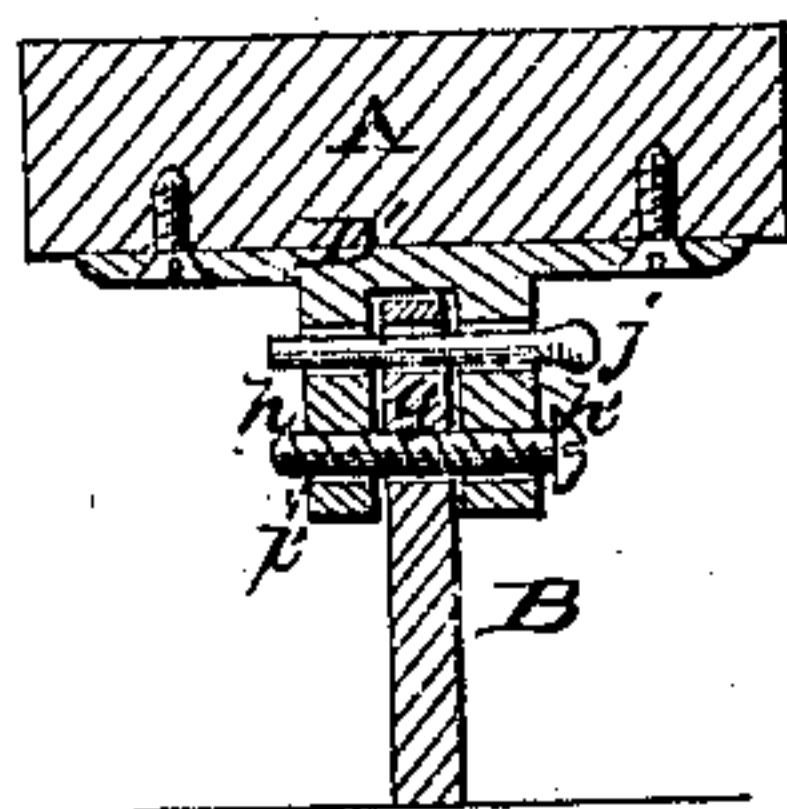
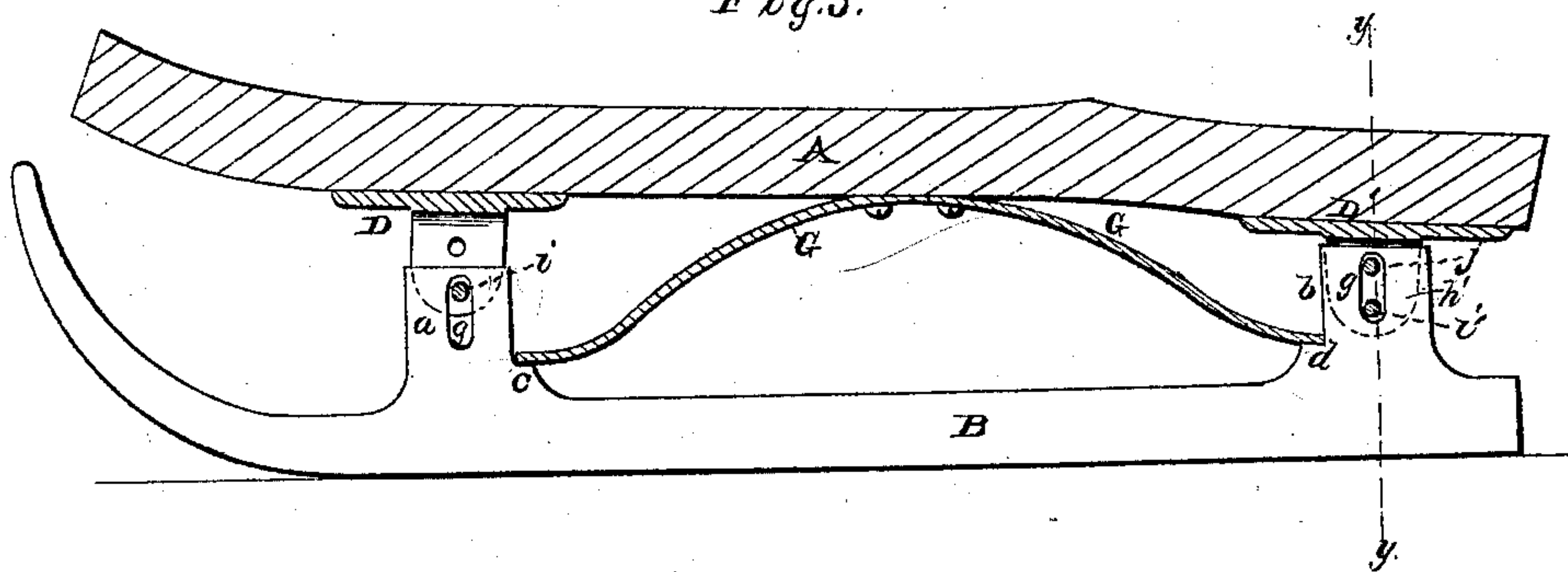


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

G. A. CORSER AND A. O. BUNDY, OF CLAPPVILLE, MASSACHUSETTS.

SKATE.

Specification of Letters Patent No. 32,821, dated July 16, 1861.

To all whom it may concern:

Be it known that we, G. A. CORSER and A. O. BUNDY, of Clappville, in the county of Worcester and State of Massachusetts, have invented a new and Improved Skate; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1, is a bottom view of the improved skate; Fig. 2, is a transverse section through the heel part of the improved skate, in the vertical plane indicated by red line *y, y*, in Fig. 3. Fig. 3, is a longitudinal section through Fig. 1 in the vertical plane indicated by red line *x, x*, thereon.

Similar letters of reference indicate corresponding parts in the three figures.

To enable those skilled in the art to make and use our invention we will proceed to describe its construction and operation.

A, is the foot stand which may be made of wood or metal, and which is made quite thin in either case and shaped so that it will fit nicely the bottom of a boot.

B, is the skate iron or runner which has two flat studs *a*, and *b*, formed on its upper edge, one at a point under the sole of the foot, and the other at the heel part of the skate. These studs *a*, and *b*, may be welded or otherwise attached to the skate iron, or they may be made in forming the skate iron. Two shoulders *c*, *d*, are formed on the inside edges, and at the bases of the studs *a*, and *b*, for the purpose hereinafter to be described; and a vertical slot *g*, is punched through each stud, as shown in Fig. 3, of the drawings. The skate irons thus described are easily made as the work on them can all be done by machinery suitably adapted to the purpose.

D, D', are flat circular plates and *h*, *h'*, are slotted projections which are cast on the bottoms of the plates D, D'. These plates D, D', are screwed to the bottom of the foot stand A, at suitable points and when thus secured the flat studs *a*, and *b*, are inserted into the slots in their respective portions *h*, *h'*. The pins *i*, *i'*, are now passed transversely through holes in portions *h*, *h'*, and through the vertical slots *g*, *g*, in the studs

a, and *b*, so as to unite the runner with the foot stand, and allows pins *i*, *i'*, to have a free play in the slots *g*, *g*.

A strong semi-elliptic spring G, is suitably secured at the middle of its length to the foot stand A, directly over the runner B, the ends of which spring rest on the shoulder portions *c*, *d*, of the runner B, and force this runner downward so that the upper ends of slots *g*, *g*, will bear on the pins *i*, *i'*, when there is no pressure on the foot stand, but when a pressure is put upon the foot stand it will be received and supported by the spring G. The ends of the spring G, which bear on shoulders *c*, *d*, may be hooded to prevent them from slipping out of place.

Above the pin holes in the slotted portion *h'*, another hole is made for receiving a pin *j*, which pin, when inserted through the slot *g*, in stud *b*, will secure the skate iron B, rigidly to the portion *h'*. The front part only of the foot-stand A, will now possess the elastic yielding action above described—and if it is desired this front part may also be secured in the same manner as described for the heel part.

For very smooth ice the spring may not, by some persons, be required, and by simply introducing the pin *j*, as above described, the full elastic action of spring G, on the foot stand will be obviated: by removing the pin *j*, again the spring G, will operate as before.

It will be noticed that the only connection between our spring and the foot stand, is at the center of the spring, and nearly at the center of the stand. This is a peculiar feature of our invention, as the weight of the body is thus made to act in two directions, from the center of the spring, and from the center of gravity of the weight. The weight is thus centrally sustained upon an elastic pivot and the wearer of the skate is enabled to execute rocking, and other movements upon the ice, with superior freedom and grace. Our spring, by being attached at its center to the stand, is rendered a double armed spring.

We are aware that springs have been interposed between the foot stands and runners of skates in a variety of ways, and

we do not claim a spring skate, broadly,
but

What we do claim as new and desire to
secure by Letters Patent, is,

5 1. The arrangement of the double armed,
and centrally attached spring G, with the
foot stand A, and runner B, in the manner
herein shown and described.

10 2. The locking of the ends of the foot
stand, or either of them, in the manner here-

in shown and described, so as to throw the
entire elasticity of the spring upon either
end of the runner, or relieve both ends from
the spring at pleasure, as set forth.

GEORGE A. CORSER.
AUGUSTUS O. BUNDY.

Witnesses:

WM. E. TAYLOR,
F. S. TAYLOR.