J. YORK.

Sled-Brakes.

No. 158,879. Patented Jan. 19, 1875.

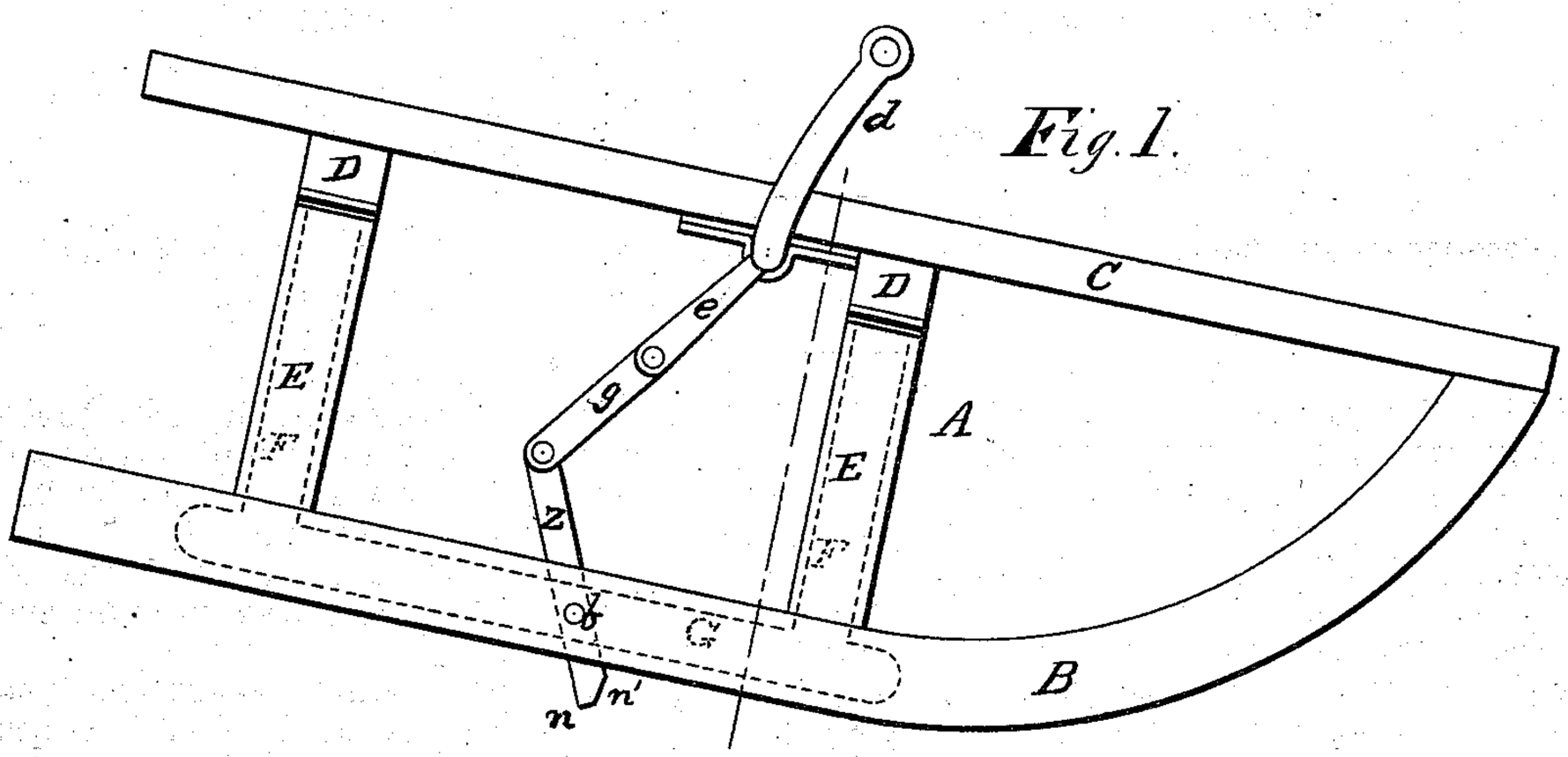


Fig. 1.

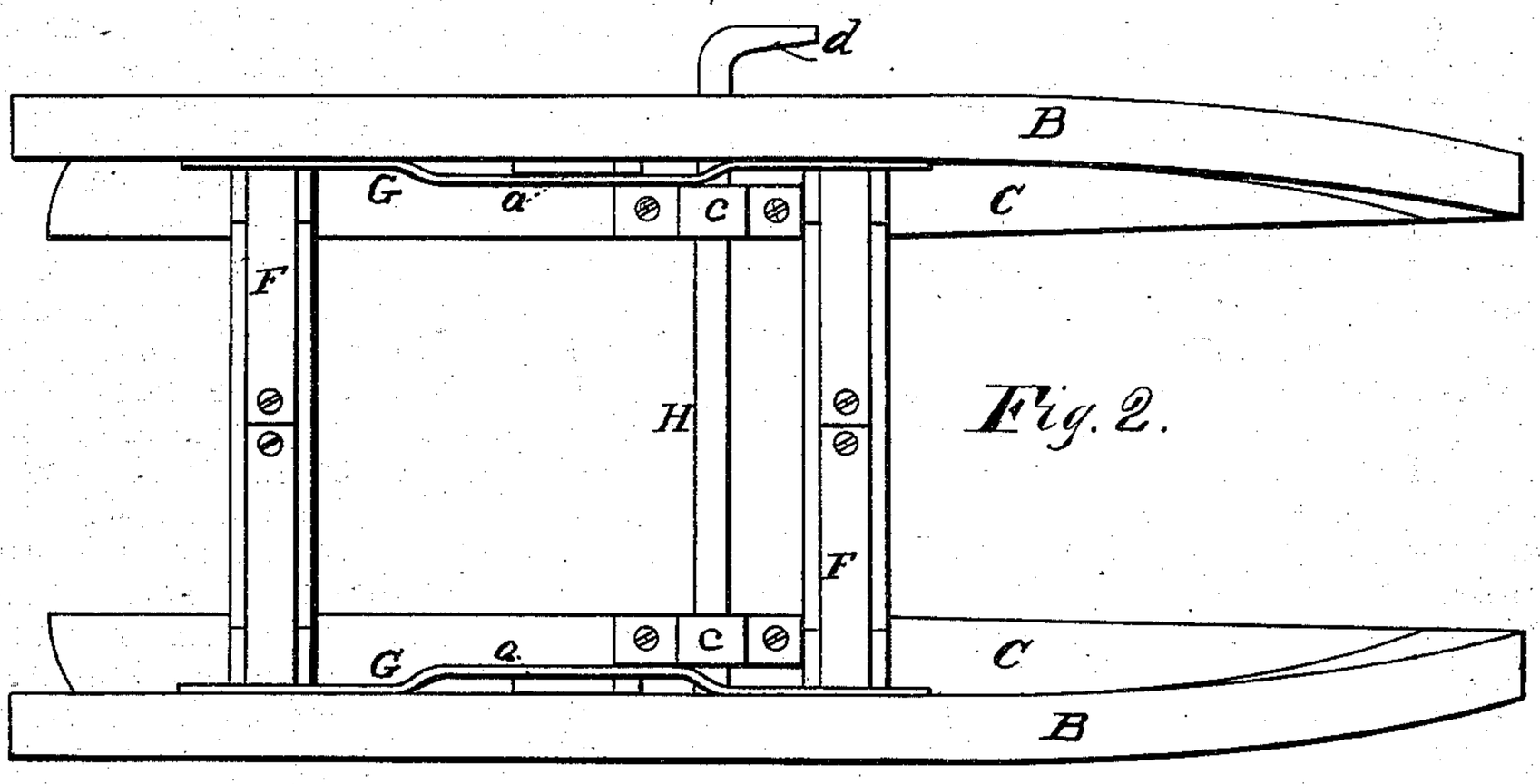
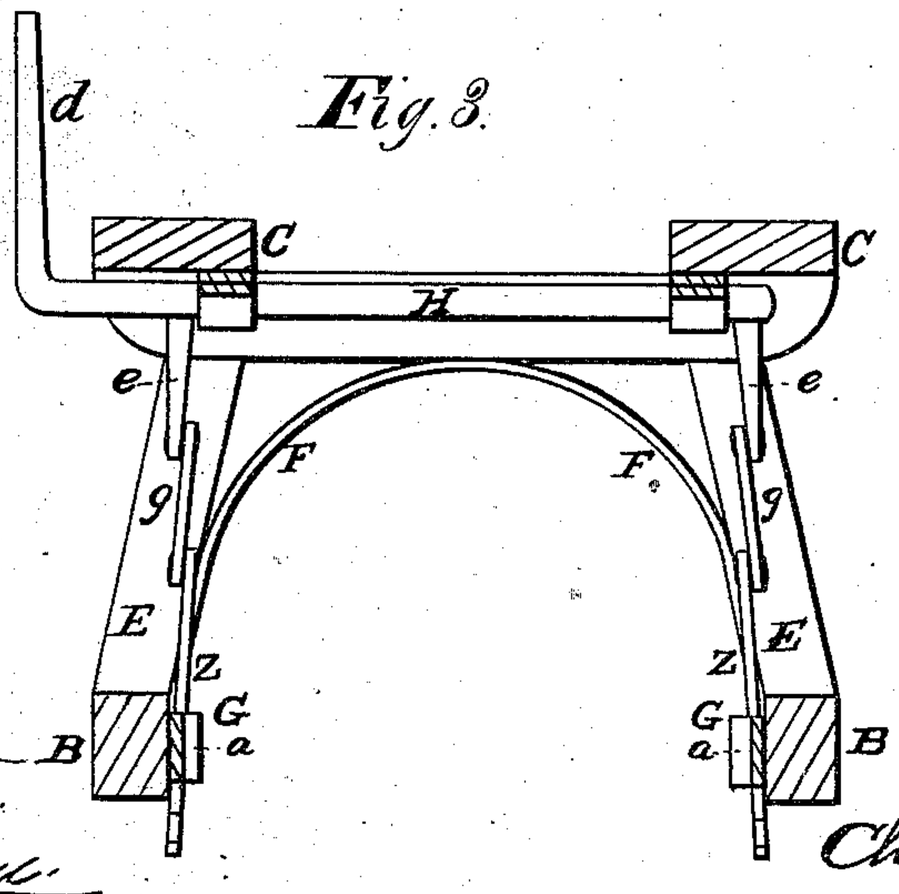


Fig. 2.

Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN YORK, OF LAONA, NEW YORK.

IMPROVEMENT IN SLED-BRAKES.

Specification forming part of Letters Patent No. **158,879**, dated January 19, 1875; application filed November 14, 1874.

To all whom it may concern:

Be it known that I, JOHN YORK, of Laona, in the county of Chautauqua and State of New York, have invented a new and valuable Improvement in Brakes for Sleds; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a side view of a sled having my brake attached. Fig. 2 is a plan view of the same, and Fig. 3 is a transverse sectional view.

This invention has relation to brakes for sleighs and sleds; and it consists in the construction and novel arrangement of the rock-shaft, brake-levers, and intermediate connecting-links, whereby a very useful attachment of the kind referred to is produced, as hereinafter more fully shown and described.

In the accompanying drawings, the letter A designates the body of a bob-sled, having the usual runners B, rails C, bolsters D, and standards E. / F designates curved braces, secured to the standards, and extending upward and inward, meeting at the middle of the under surface of the bolster. The lower ends of these braces are joined to an inside strip, G, which extends horizontally along the runner, being at its middle portion separated from the surface of the runner for a certain distance, forming a slot, as at *a*, for the reception of the brake-bars, which are pivoted thereto, as indicated at *b*.

The strip G and its bracing-arms F are preferably made of metal, and serve materially to strengthen the attachment of the brake-levers to the runners.

The importance of this construction will be appreciated, when it is considered that upon the strength of this connection the personal safety of the occupants of the vehicle will often depend.

In rear of the front standards, and under the rails C, are attached the boxes *c*, or bearings for the journal portions of the rock-shaft H, which extends transversely across the body, and terminates on the right side thereof in an upwardly-turned lever-arm, *d*, by which it may be operated. Extending downward from this rock-shaft toward each runner is a crank-arm, *e*, which is pivoted at its lower end to a link, *g*, which is in turn pivoted by its other end to the upper and forward end of the brake-levers.

The brake-levers Z extend rearward from the links *g*, are pivoted in the slots between the guard-strips G and the runners, and terminate in ends having squared rear corners, *n*, and beveled front edges, *n'*, this bevel being so constructed that when the links and crank-arms are vertical, or in line with each other, said front edges *n'* will be flush with the lower edges of the runners, or nearly so. In this position the brake-bars will be inclined downward and rearward from their connection with the links, and no obstruction will be offered by them to the running of the sled.

Should, however, the horses be stopped for rest when going up hill, the toes of the brake-levers can be depressed by carrying forward the lever-arm of the rock-shaft, and the sled will be securely stayed in position as long as may be desired, without the necessity of holding the lever-arm in position, for when the obliquity of the lever-brake is reversed its square rear corner does not and cannot rise until it is even with the runner-tread, because the pivot of the brake is in rear of the vertical plane of the rock-shaft.

When going down hill, the brake-points are designed to be held up to their work by the lever-arm, which is pushed forward, throwing the beveled corners of the brake ends down below the runners.

These brakes are also designed, by their breadth, to serve an admirable purpose, in preventing a sleigh from sliding laterally—an important consideration when the road is narrow and laterally shelving.

When the brake is required no longer, it is taken off automatically, the driver simply letting go his hold of the lever-arm of the rock-shaft.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the lever-brakes Z, pivoted to the runners, of the rock-shaft H,

having crank-arms *e* and the connecting-links *g*, substantially as specified.

2. The metallic brake guard-strip G, secured to the inside of the runner, and having the brace-arms F extending upward and inward, and secured to the standard and bolsters, all combined substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN YORK.

Witnesses:

JAMES M. BEEBE,

WM. J. WEAVER.