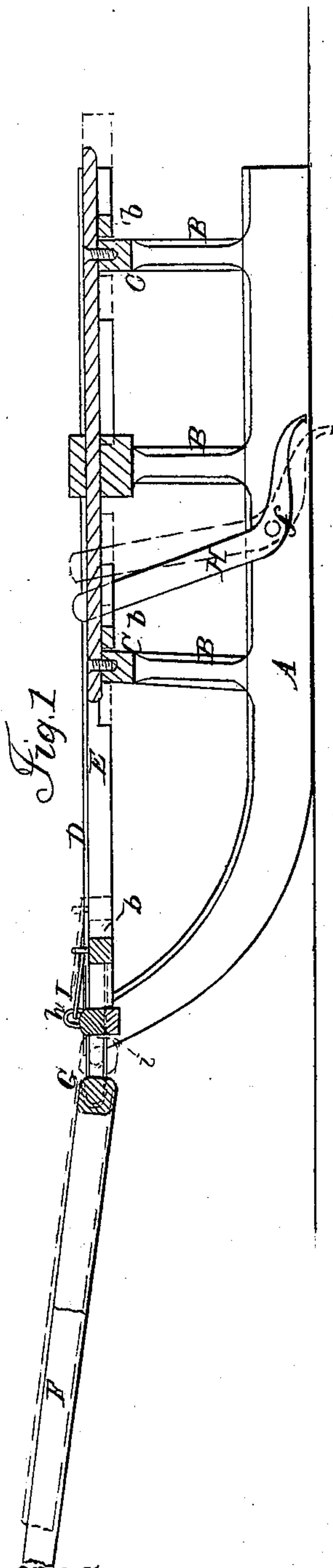
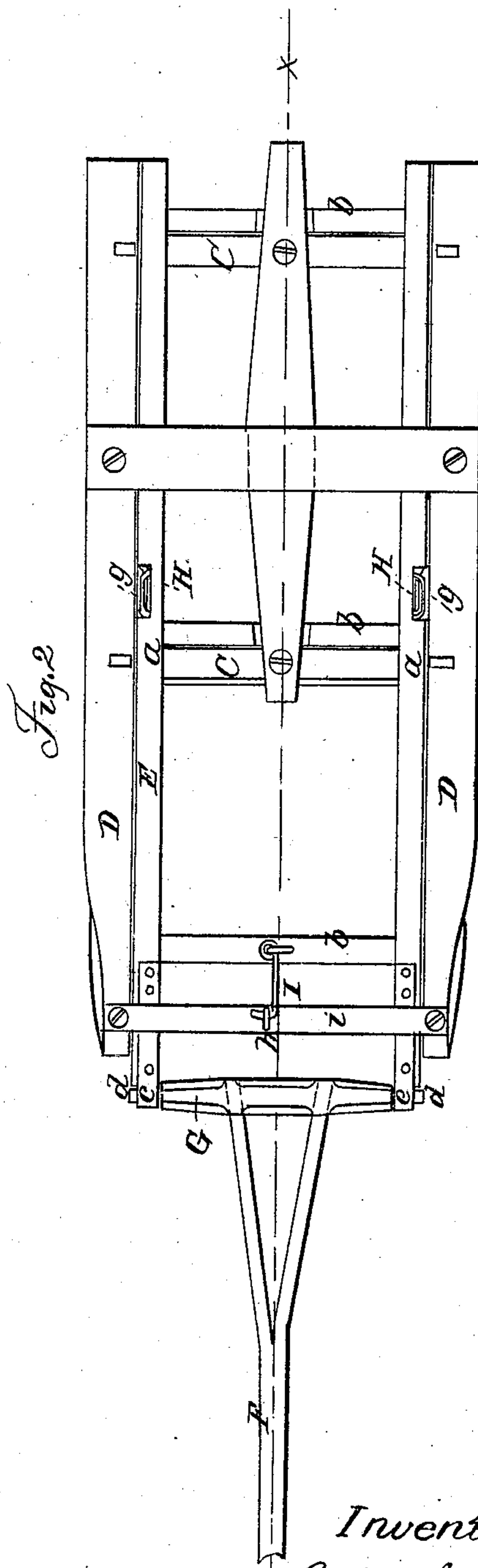


Sled-Brake.

Patented Feb. 23, 1864.



Witnesses;
Holcomb
Geo W Reed



Inventor;
Calvin E Myers
per Munn & Co
Attys.

UNITED STATES PATENT OFFICE.

CALVIN E. MYERS, OF BRISTOL, VERMONT.

IMPROVEMENT IN SELF-ACTING SLED-BRAKES.

Specification forming part of Letters Patent No. 41,714, dated February 23, 1864.

To all whom it may concern:

Be it known that I, CALVIN E. MYERS, of Bristol, in the county of Addison and State of Vermont, have invented a new and Improved Self-Acting Brake for Sleds; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side sectional view of my invention, taken in the line *x x*, Fig. 2. Fig. 2 is a plan or top view of the same.

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

The object of this invention is to obtain a simple brake for sleds, which will be self-acting and capable of being rendered inoperative, when desired, by a very simple manipulation.

To this end the invention consists in the employment or use of a sliding frame placed on the cross-bars which connect the upper ends of the knees, and having spurs or dogs connected to the sliding frame, and the latter connected to the draft-pole, all being arranged in such a manner that the spurs or dogs will be forced down into the snow-path by the momentum or forward movement of the sled when the team is checked, and raised upward when the draft-pole is drawn forward again under the pull of the team.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the runners, B the knees, and C the cross-bars, of a sled, all constructed in the usual way.

D D are two side strips, attached one at each end of the cross-bars C; and E is a sliding-frame formed of two parallel bars, *a a*, connected by cross-pieces *b*. This frame rests on the cross-bars C, and is allowed to slide freely on them, the strips D serving as guides for the frame. The length of the movement of the frame E is limited by notches *c*, cut in the under sides of the bars *a a*, the cross-bars C fitting in said notches, as shown in Fig. 1.

F is the draft-pole, the inner end of which is attached to a bar, G, having journals *d* at its ends, which are fitted in bearings *e* at

the front ends of the bar *a* of the frame E, as shown clearly in Fig. 2.

H H are two spurs or dogs, which are of curved form, as shown in Fig. 1, and are attached one to the inner side of each runner A by a pivot, *f*, as shown in Fig. 1. The upper ends of these spurs or dogs H H are fitted loosely in staples *g* in the sides of the bars *a* of the frame E.

To the front cross-piece, *b*, of the frame E there is attached a hook, I, and a staple, *h*, is driven in a cross-bar, *i*, which is secured to the front ends of the side strips, D D.

The operation is as follows: When the hook I is released from the staple *h*, the frame E is left free to move, and said frame, under the pull of the team, will be kept in a forward position as the sled is drawn along, the back edges of the notches *c* bearing against the cross-bars C, as shown in Fig. 1. When the sled descends an eminence, the frame E will be checked by the team as the latter is held in under the pull of the driver, and the tendency of the forward movement of the sled, which is due to its gravity and momentum, will cause the lower ends of the spurs or dogs to be forced down into the snow-path, thereby forming an efficient brake. When the sled is again subjected to the pull of the team, the frame E is drawn forward to its fullest extent, and the lower ends of the spurs or dogs are raised free from the snow-path.

In order to render the device inoperative at any time, all that is required is simply to adjust the hook I in the staple *h*, which prevents the frame E, and consequently the spurs and dogs, from moving.

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

1. The combination of the sliding frame E, draft-pole F, and dogs H H, all constructed, arranged, and operating in the manner and for the purpose set forth.

2. In combination with the above, the hook I and eye *h*, for preventing the movement of the frame E, as explained.

Witnesses: CALVIN E. MYERS.

ELIAS BOTTUM,
THOS. S. DRAKE.