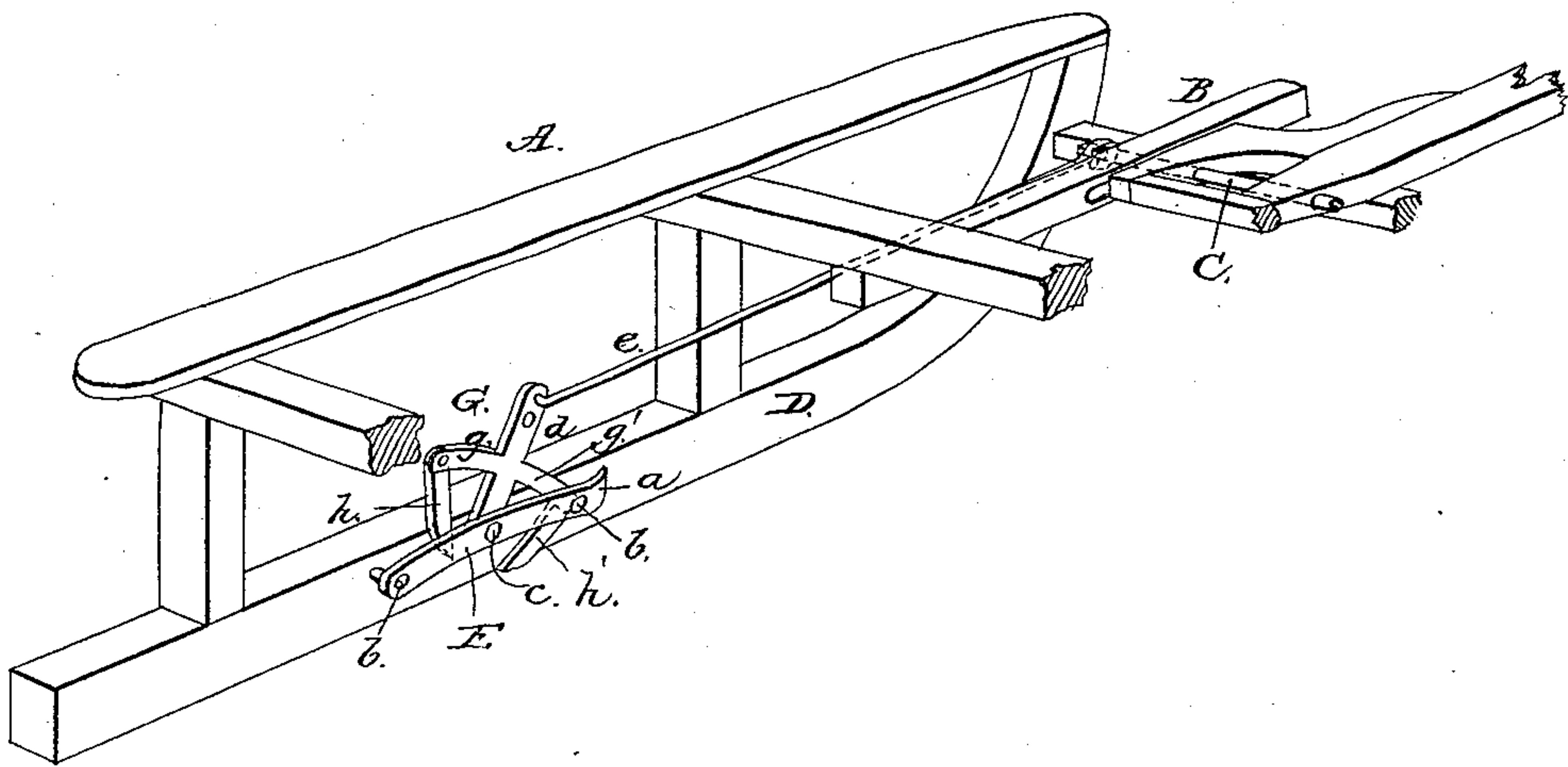


(Model.)

H. HUNT.  
SLEIGH BRAKE.

No. 246,779.

Patented Sept. 6, 1881.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

HOWARD HUNT, OF TWIN GROVE, WISCONSIN.

## SLEIGH-BRAKE.

SPECIFICATION forming part of Letters Patent No. 246,779, dated September 6, 1881.

Application filed May 19, 1881. (Model.)

*To all whom it may concern:*

Be it known that I, HOWARD HUNT, a citizen of the United States, resident of Twin Grove, in the county of Green and State of Wisconsin, have invented a new and valuable Improvement in Sleigh-Brakes; 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 drawing, making a part of this specification, and to the letters and figures of reference marked thereon.

The figure of the drawing is a representation of a perspective section of my device.

This invention has relation to brakes for sleighs and sleds; and it consists in the construction and novel arrangement of the cross-lever and its pivoted brake-points, and in connection therewith the runner guide-bearing and the rods extending to a sliding pole or shaft coupling rod constituting an automatic double acting brake, substantially as herein-after set forth.

In the accompanying drawing, the letter A designates a sleigh or sled, and B B are slotted bearings, provided for the coupling-rod C of the pole or shafts, and arranged to allow said pole or shafts a sliding movement backward or forward, according to the relation of the weight of the sled at the time to the draft.

D D indicate the runners, and E E are guide-bearings, located on the inside thereof, these guide-bearings consisting usually of metallic bars somewhat curved upward at their middle portions, and having bent or inclined front ends, *a*, extending to the runner-surface in a shelving manner, and enabling the guide-bearing to move easily through the snow. At the same time these ends *a* protect the guide-bearings and keep them clear. The bearings or bars E are set off from the runners and connected thereto by the end bolts, *b*, which form stop-bearings to engage with the brake-points, and by the central pivot-bolts, *c*.

G G designate the cross-levers. Each of these is made in the form of a cross, having four arms or projections, whereof the vertical arms *d d* are designed to be connected respectively with the rod *e*, extending to the coupling-rod C in front, and with the pivot-bolt *c* in the guide-bearing. The transverse arms *g g'* are

designed respectively to carry at their ends the pivoted dogs or points *h h'*, which depend therefrom through the guide-bearing and between its central and end bolts, as shown in the drawing.

The operation of the device is as follows: As the brake-points are beveled on their ends and swing free in the direction opposite the bevels they are designed respectively to act only in one direction, backward or forward, as the case may be. When the sled is advancing the rear brake-point will be raised and the forward brake-point will swing to the rear free; but should the sled advance on the draft, as it is liable to do in going down hill, the forward brake-point will be raised, and the rear brake-point being at the same time depressed, the latter will take against the rear stop-bolt, *b*, and enter the snow or ice, serving to hold the sled back. So if the sled should be moved backward by the draft, as in backing purposely, the front brake-point will be raised and the rear brake-point will move freely forward on its pivot; but if the backing be accidental, as might happen from broken connections in ascending a hill, the sled moving away from the draft will throw down the forward brake-point, which, engaging with the front stop-bolt, will take in the snow or ice to stop the backward movement of the sled.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. The cross-lever G and its pivoted front and rear brake-points, *h h'*, designed to act in connection with a guide-bearing, E, on the runner, having stops *b* in front and rear, substantially as specified.

2. The combination, with the draft coupling-rod C and its connecting-rods *e*, of the guide-bearings E on the runners, the cross-levers G, and the front and rear pivoted brake-points, *h h'*, substantially as specified.

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

HOWARD HUNT.

Witnesses:

GRIFFITH M. WALKER,  
JOHN H. WILLIAMS.