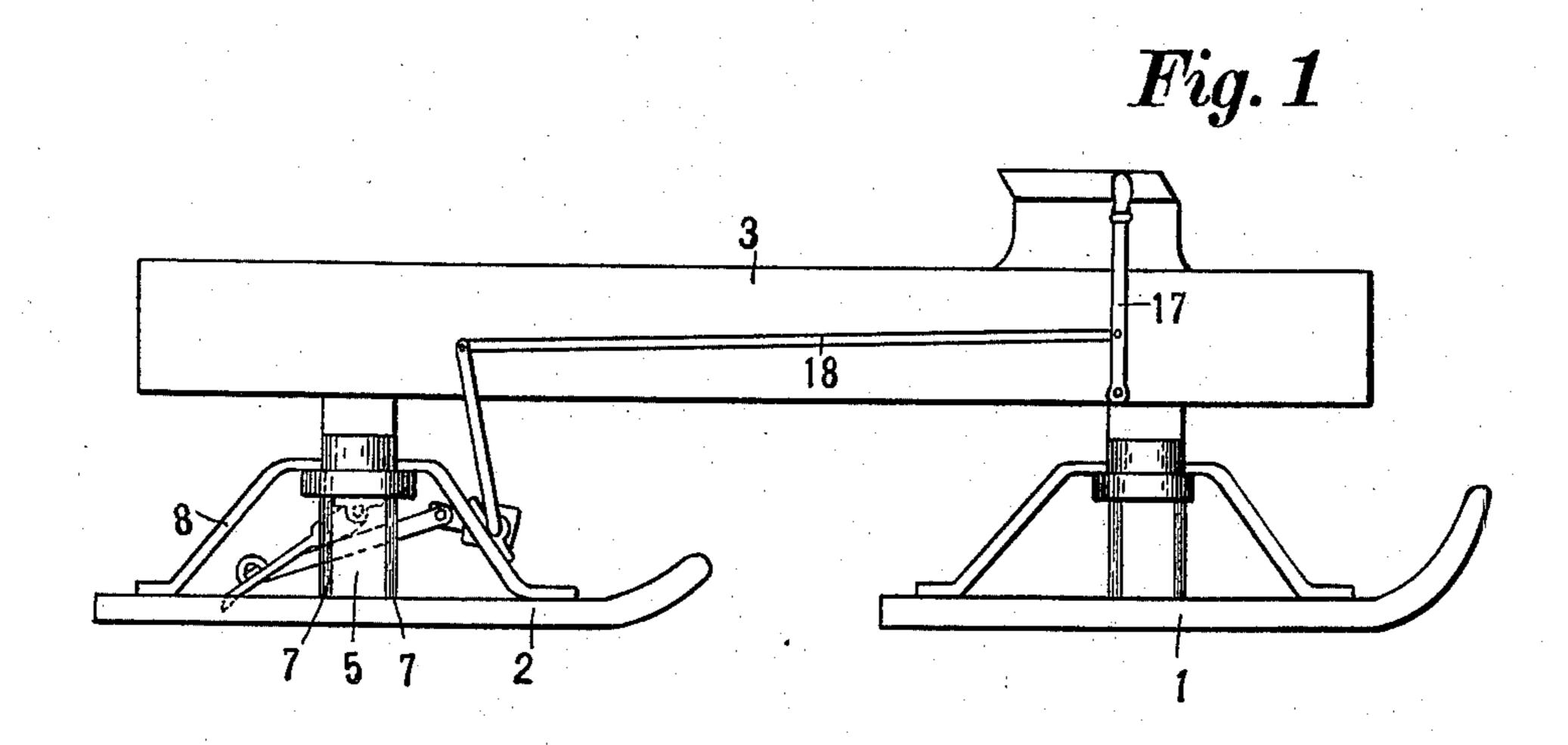
No. 608,165.

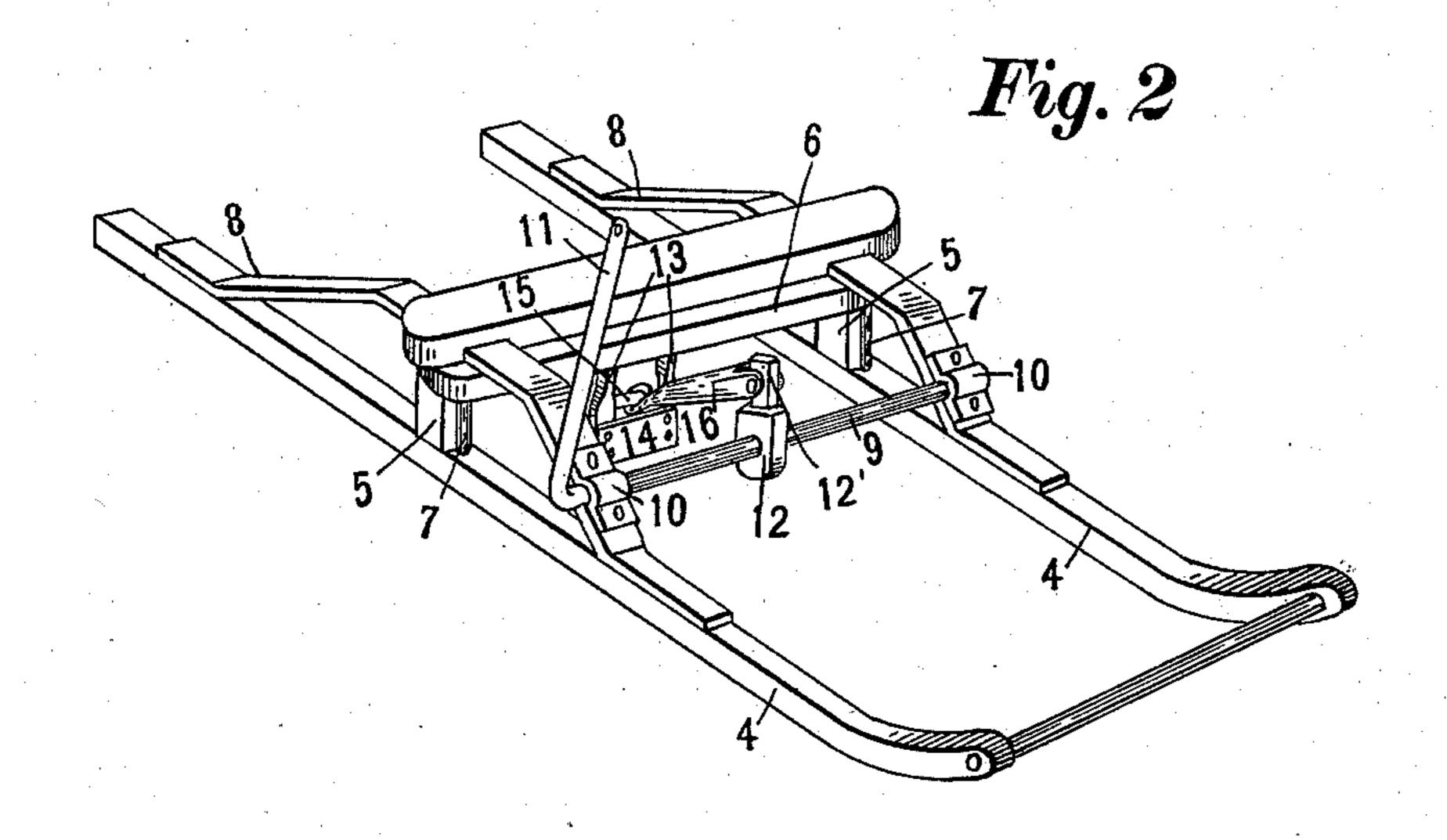
Patented July 26, 1898.

G. C. HOPKINS & H. M. SINES. SLED BRAKE.

(Application filed July 1, 1897.)

(No Model.)





OF S. Otheelers. A. Berguiaum

LNVENTORS

United States Patent Office.

GEORGE C. HOPKINS AND HENRY M. SINES, OF GALLOP, MONTANA.

SLED-BRAKE.

SPECIFICATION forming part of Letters Patent No. 608,165, dated July 26, 1898.

Application filed July 1, 1897. Serial No. 643,095. (No model.)

To all whom it may concern:

Be it known that we, George C. Hopkins and Henry M. Sines, citizens of the United States, residing at Gallop, in the county of Gallatin and State of Montana, have invented certain new and useful Improvements in Sled-Brakes; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to new and useful improvements in sled-brakes; and it consists in the construction and association of parts, as hereinafter set forth, and pointed out par-

ticularly in the claims.

The object of the invention is to provide a brake for sleighs that shall be cheap and simple of construction and one which shall be positive and effective in its operation, which object is attained by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a sleigh provided with our improved brake attached to the rear bob thereof. Fig. 2 is an enlarged perspective view of the rear bob of Fig. 1, showing more clearly the formation and loca-

tion of the brake.

55 shown in Fig. 2.

Referring to the numerals of reference, 1 and 2 designate the bobs, and 3 the body or box. The bobs may be of ordinary and in the drawings are shown as composed of runners 4, bearing-posts 5, bolsters 6, tie-bolts 7, and braces 8.

9 represents a shaft journaled upon the forward portion of braces 8 and held in position 40 by means of clips or boxes 10. One end of said shaft is bent upward, forming an operatinglever 11. Rigidly secured to the central portion of shaft 9 is a block 12, having a tongue 12' formed integral therewith and projecting 45 upward therefrom. Pivoted to the under side of bolster 6 and depending therefrom is a pair of arms 13, said arms having a plate or scraper 14 rigidly secured at their lower ends. Extending from one of said arms 13 is a rand 15. 50 16 indicates a link which is pivotally connected at one end to said rand 15, its opposite end being notched or provided with ears, by means of which said link is pivoted to

tongue 12', the arrangement being clearly

As scraper 14 is adapted to bear upon the ground or road-bed centrally between runners 4, it will not interfere with the turning of the bob, and for this reason may be attached either to the forward or rear bob, suit- 60 able means for operating it being employed.

In Fig. 1, where the brake is shown as applied to the rear bob, 17 designates a handlever which is pivoted to box 3 or which lever may be pivoted to the running-gear, if de- 65 sired, and in either case so as to be within easy reach of the seat. 18 indicates a rod which connects lever 17 with portion 11 of shaft 9. It will now be seen that by throwing hand-lever 17 forward rod 18 will be drawn 70 upon and operate shaft 9 from said angled portion 11. As shaft 9 rotates block 12 and tongue 12' are thrown forward, drawing upon link 16, which in turn draws upon link 15 to swing scraper 14 forward and downward, so as 75 to bear upon the road-bed, as will be readily understood.

By the particular location of the parts great leverage force is to be had over scraper or brake 14, which may be made to effectually 80 brake a loaded sleigh when traveling down an incline.

Having thus fully set forth our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A sled-brake consisting of a bob, a shaft journaled to the braces thereof, a scraper consisting of arms pivoted to the bolster of said bob and depending therefrom, said arms having a common plate at their lower ends, and 90 the link for lowering said scraper as said shaft is operated, substantially as described.

2. A sled-brake and bob consisting of runners, posts, bolsters, &c., the shaft journaled upon said braces, said shaft having an operating angled portion, the block and tongue secured to said shaft, the arms depending from a pivotal connection with said bolster, the plate and rand secured to said arms, the link connecting said rand with the aforesaid tongue, not and means for operating said angled portion of the shaft, all substantially as and for the purpose set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

GEORGE C. HOPKINS. HENRY M. SINES.

Witnesses:
PHILIP DODSON,
W. H. Cox.