

(No Model.)

2 Sheets—Sheet 1.

T. G. MANDT.  
SLEIGH.

No. 605,676.

Patented June 14, 1898.

Fig. 1.

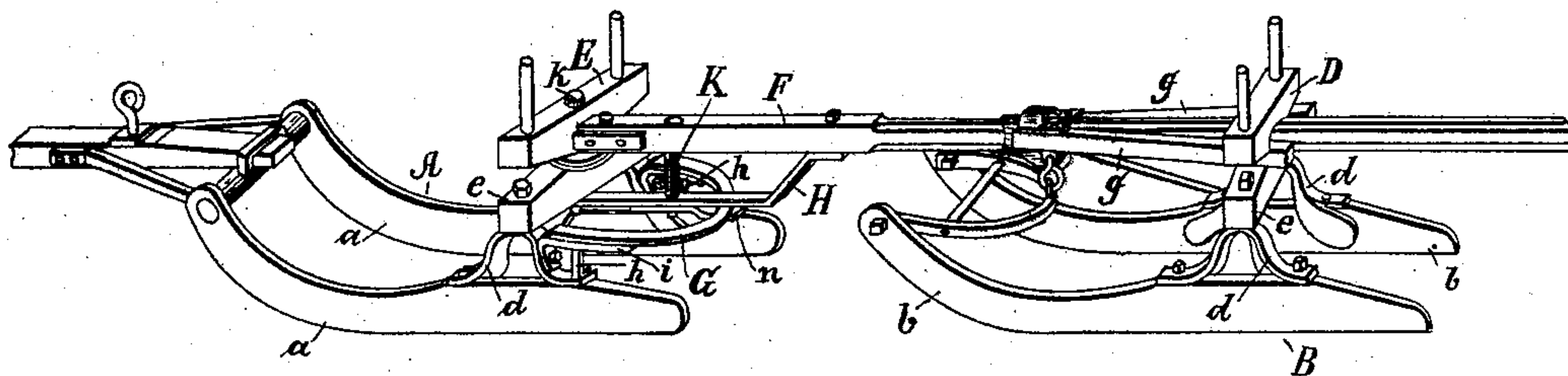


Fig. 2.

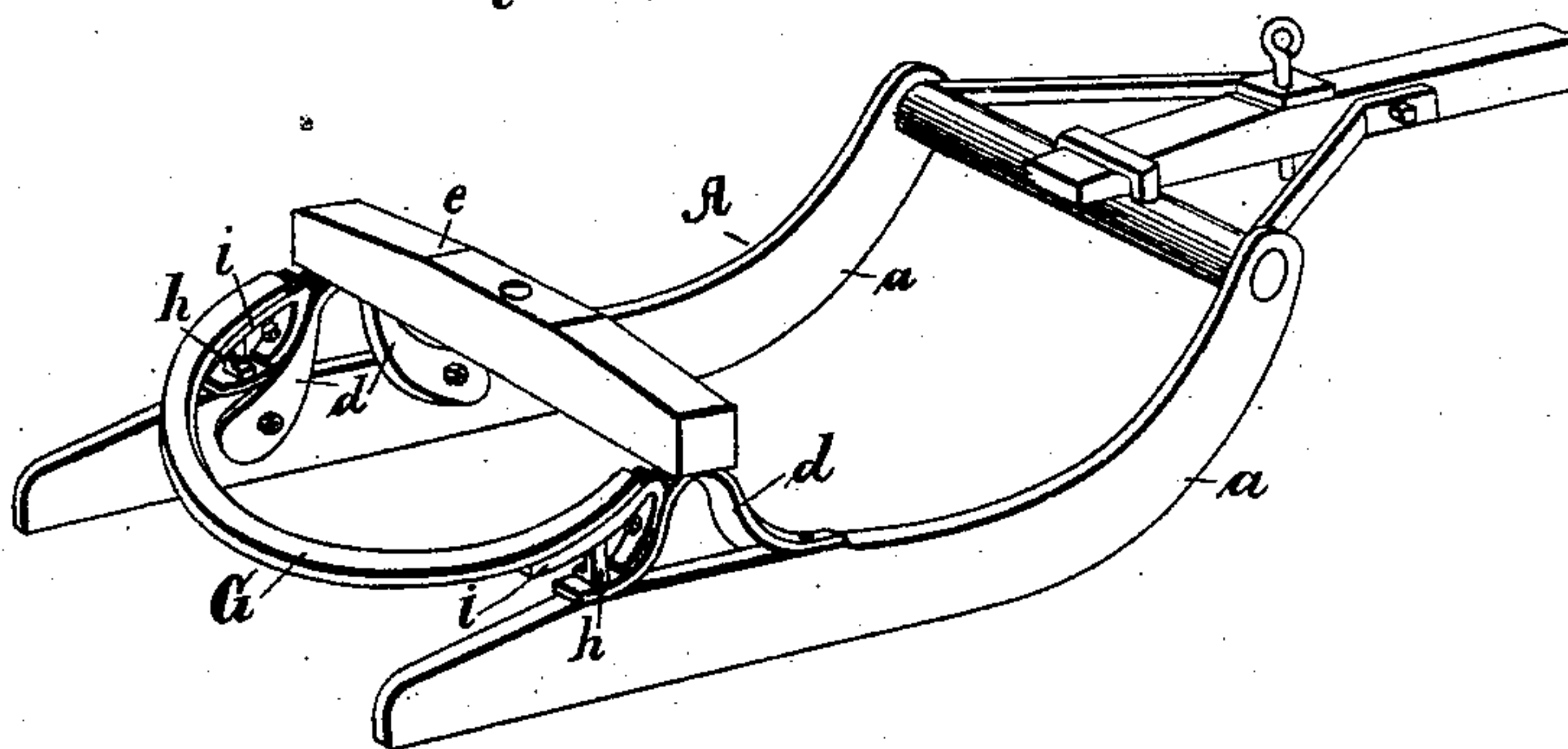
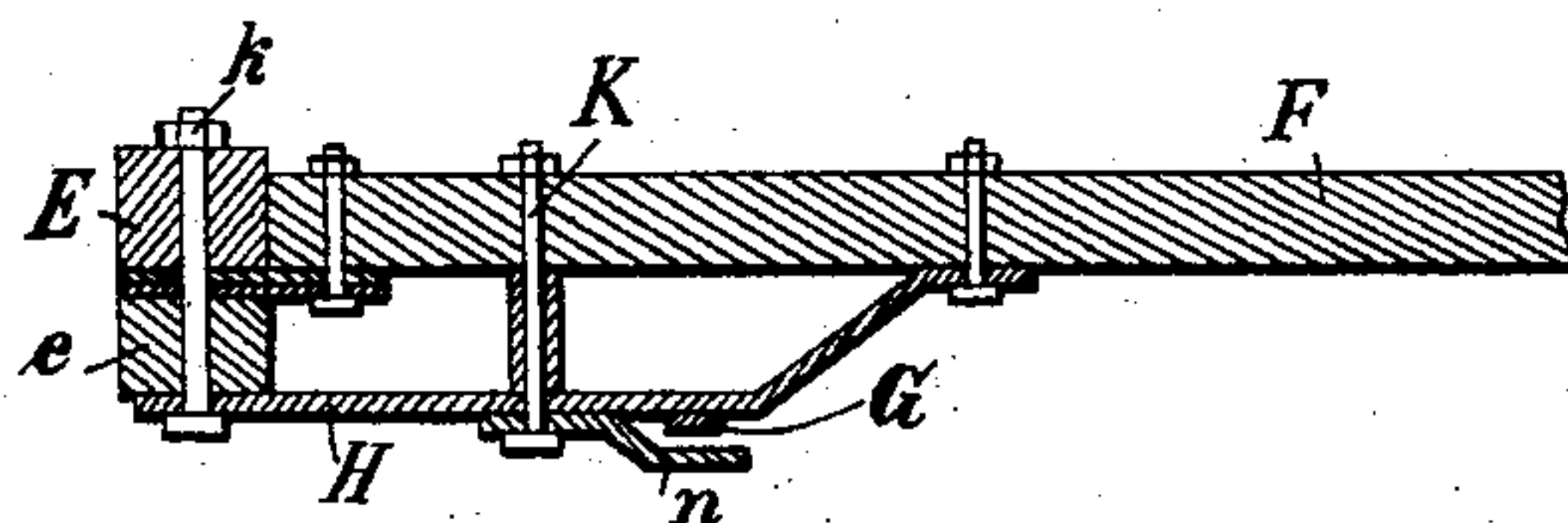


Fig. 5.



Witnesses

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2 Sheets—Sheet 2.

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Fig. 3.

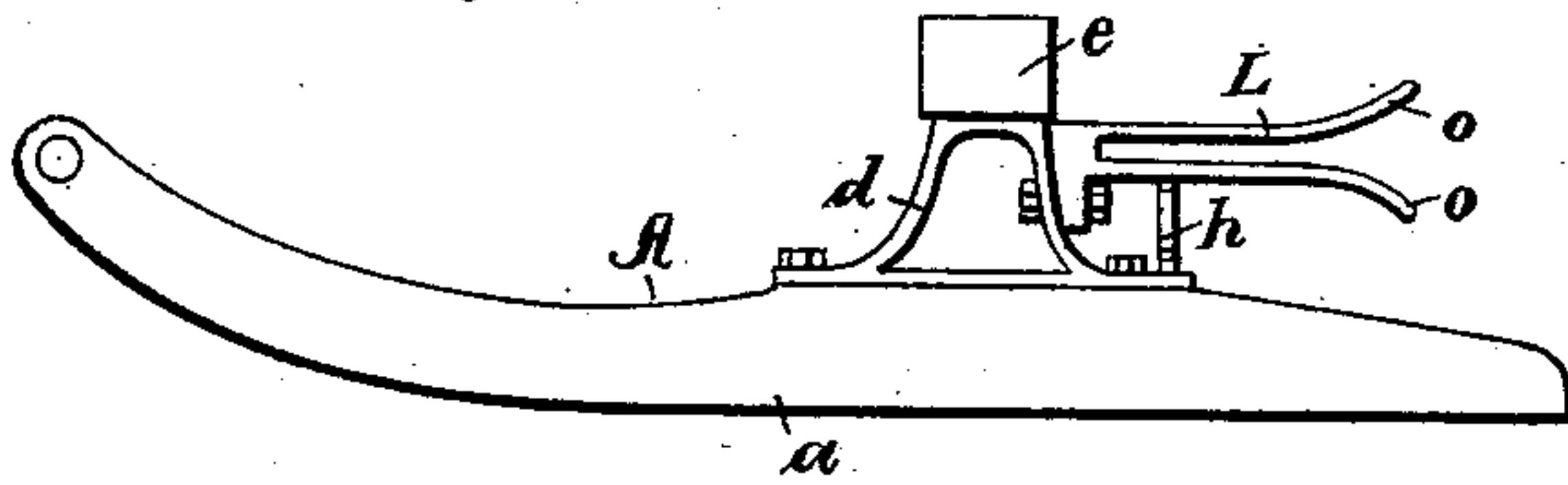


Fig. 4.

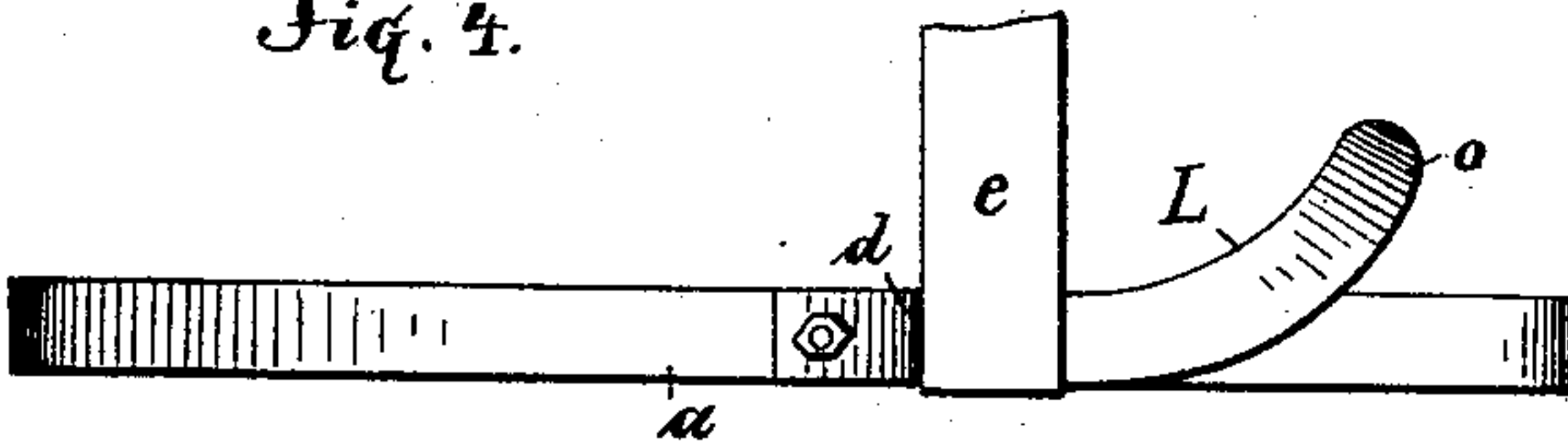


Fig. 6.

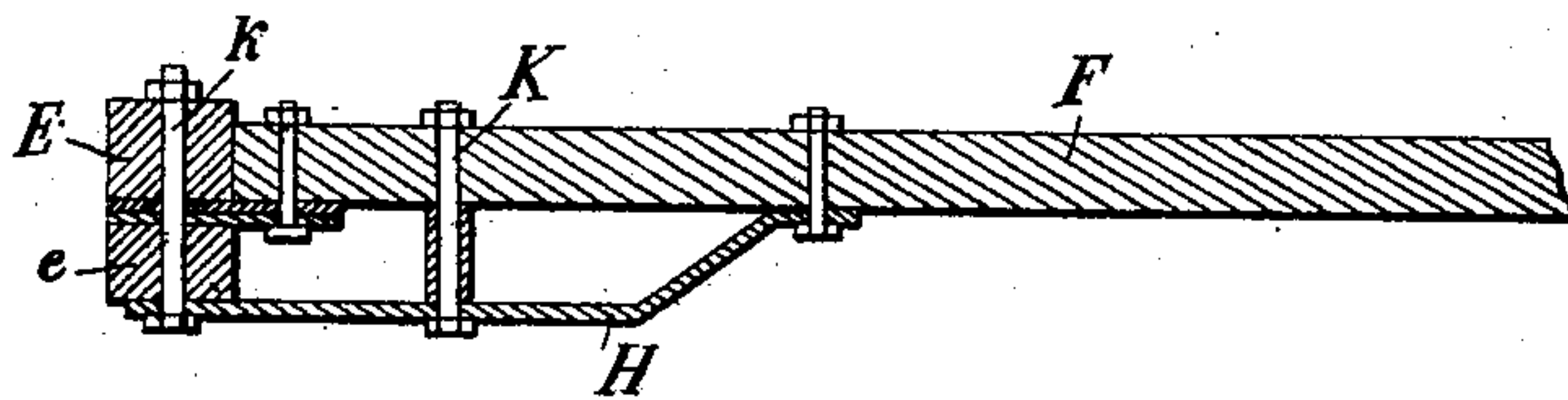
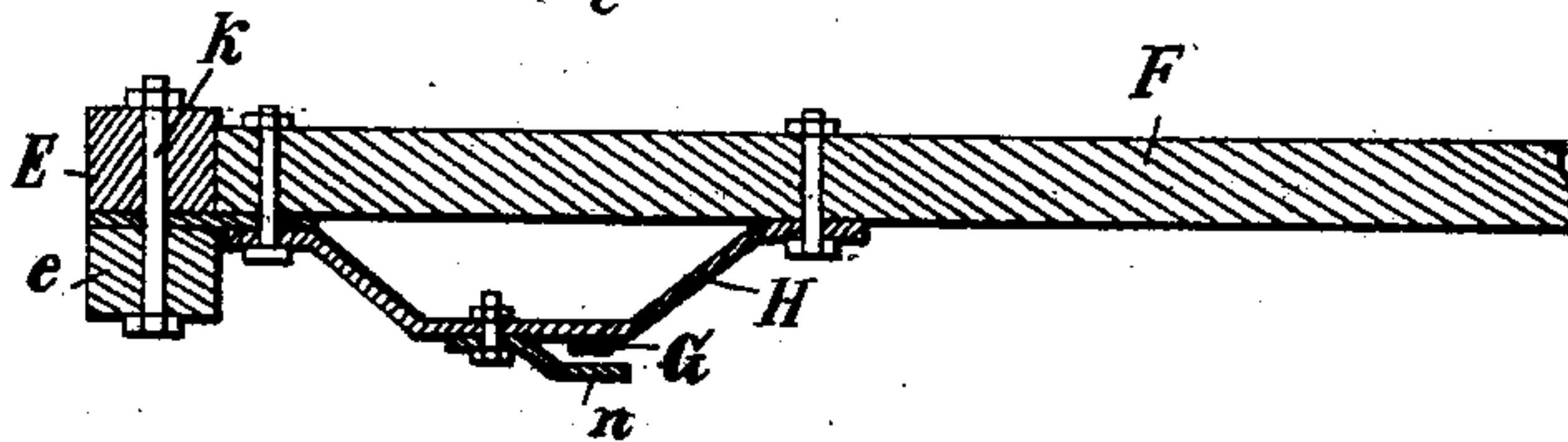


Fig. 7.



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# UNITED STATES PATENT OFFICE.

TARGE G. MANDT, OF STOUGHTON, WISCONSIN, ASSIGNOR TO THE T. G. MANDT VEHICLE COMPANY, OF SAME PLACE.

## SLEIGH.

SPECIFICATION forming part of Letters Patent No. 605,676, dated June 14, 1898.

Application filed September 11, 1897. Serial No. 651,393. (No model.)

*To all whom it may concern:*

Be it known that I, TARGE G. MANDT, a citizen of the United States, residing at Stoughton, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in Oscillating Sleighs; and I 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.

In the use of bob or oscillating sleighs in which the beams are pivoted or hinged to knees secured to runners great difficulty is experienced in the tipping of the beam and bolster and overturning the load whenever the front bob is turned partly around, and especially when turned at nearly right angles to the bolster. To obviate this difficulty and to keep the upper surface of the bolster, when turning, in substantially a horizontal plane is the leading object of my invention. To accomplish this object, with others of less importance, there is secured upon the runners one or more plates, and to the reach and beam a lock, with which the plate engages and by which the bolster and beam are locked whenever the front bob is turned, whereby the bolster is always held substantially level in whatever direction the front bob may be turned.

For a better understanding of my invention and its mode of operation attention is invited to the following detailed specification and accompanying drawings, which form a part hereof, and in which—

Figure 1 is a perspective of the sleigh with my invention secured in position. Fig. 2 is a perspective of the front bob with the plate in position. Fig. 3 is a side view of a modified form of the lock. Fig. 4 is a top view of Fig. 3. Fig. 5 shows the lock as attached to the reach and king-bolt. Fig. 6 shows a side view of the lock when used with Fig. 3. Fig. 7 is another mode of attaching the locking-plate to the reach.

Like letters of reference indicate corresponding parts in all of the drawings.

Referring to the drawings, A designates the front bob of the sleigh; B, the rear; *a*, the front runners, and *b* the rear runners. To each runner is secured the knee *d*, and

upon the top of the knees are hinged or pivoted the beams *e*, and upon the rear beam is secured in the usual way the bolster D. Upon the front beam is pivoted a bolster E. To the inner side of the bolster E is rigidly secured the reach F, which extends backwardly and between the rear beam *e* and the bolster D. There are also fastened to the reach F the usual hounds *g*, which are secured between the rear bolster and beam, one on each side of the reach, in any well-known manner. A semicircular plate G is secured at its ends to the rear side of the front knees *d* and further stayed by posts *h*, fastened to the upper side of the runners *a*. This plate G is thickened near its ends at *i* for the purposes presently to appear. An angular plate H (shown in Figs. 1, 6, and 7) is bolted at one end to the under side of the reach F, and extends forward and is loosely secured to the lower end of the king-bolt *k* beneath the beam *e*. It is also further sustained by a hanger K, extending through the reach and through the plate H. On the under side of the plate H is a lock or catch *n*, (shown in Fig. 7,) which extends downward and backward from the plate H and engages with the plate G for locking the bolster and beam and preventing them from tipping when the front bob is turned.

It is manifest that instead of the semicircular plate G and the lock *n* there may be attached in any convenient manner to each front runner or knee a plate L, having two forks *o*, as shown in Figs. 3 and 4. By this manner of construction the lock *n* may be dispensed with, and whenever the front bob is turned partly around, approaching a right angle, the plate H alone will engage the plate L beneath the forks *o* and securely lock the bolster the same as when the lock *n* is in engagement with the semicircular plate G. It will also be readily understood that as the semicircular plate G is thinner for a space on each side of its center and does not occupy all of the space between the plate H and the lock *n* it will permit a free oscillation of the front bob when it is running in a line parallel with the rear bob or when partly turned; but when the turn approaches a right angle the thickened part *i* of the plate G will fill the entire space between the plate H and the lock

*n* and rigidly lock the parts and will always hold the upper surface of the bolster and beam in substantially a horizontal plane. The plate II may also be suspended wholly  
5 from the underside of the reach, as shown in Fig. 7, but I prefer that it be loosely attached to the lower end of the king-bolt *k* beneath the beam, as it then acts as a stay to the bolster and beam.

10 Various modifications in the form and construction may be made without departing from the spirit of my invention.

Having now described my invention and its mode of operation, what I claim is—

15 In an oscillating sleigh, the runners and knees secured thereto, the beams *e* secured to the knees, and the bolster pivoted upon the

beam, combined with the reach, the angular plate pivoted at its front end to the under side of the front beam and having its rear  
20 end rigidly secured to the reach; the semicircular plate *G* secured at its front end to the knees, the hanger *K* which passes through the reach and the plate II, and the lock upon the plate; the front ends of the semicircular  
25 plate being thickened, substantially as shown and described.

In testimony whereof I affix my signature in the presence of two witnesses.

TARGE G. MANDT.

Witnesses:

JAMES M. CLANCEY,  
ERLING K. LOVERUD.