

(No Model.)

2 Sheets—Sheet 1.

S. F. HEWITT.

SLEIGH.

No. 336,411.

Patented Feb. 16, 1886.

Fig. 1.

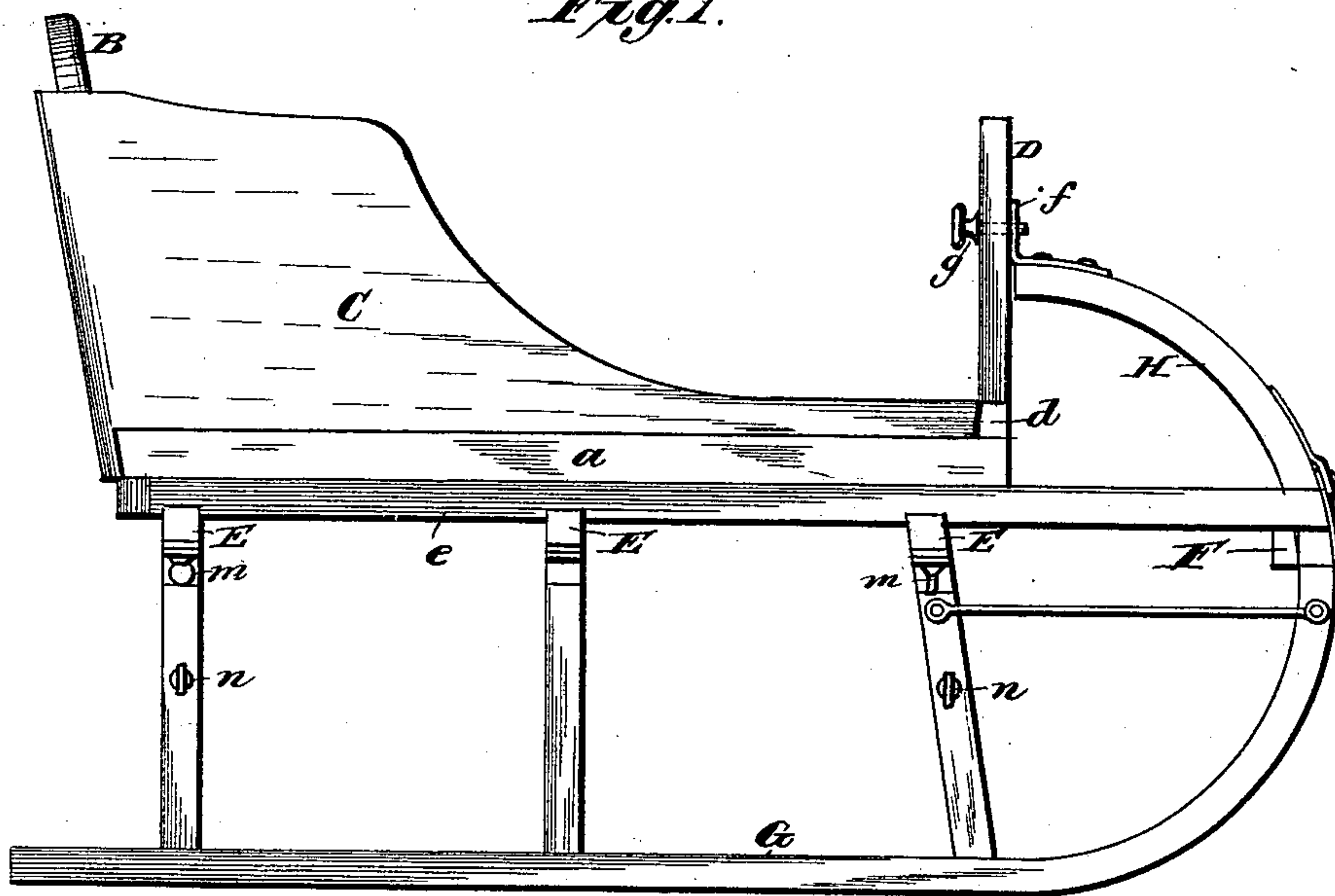
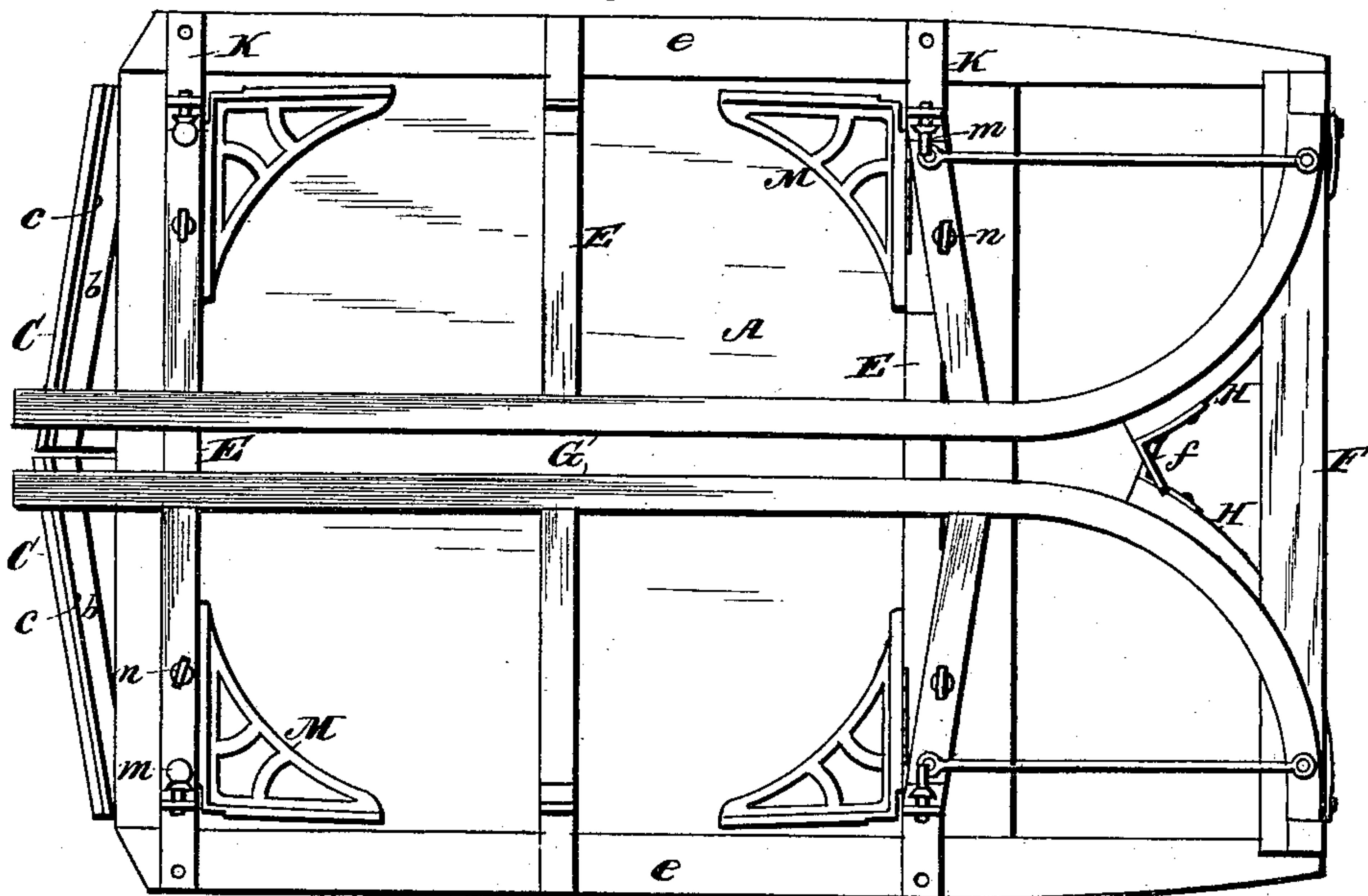


Fig. 2.



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Fig. 3.

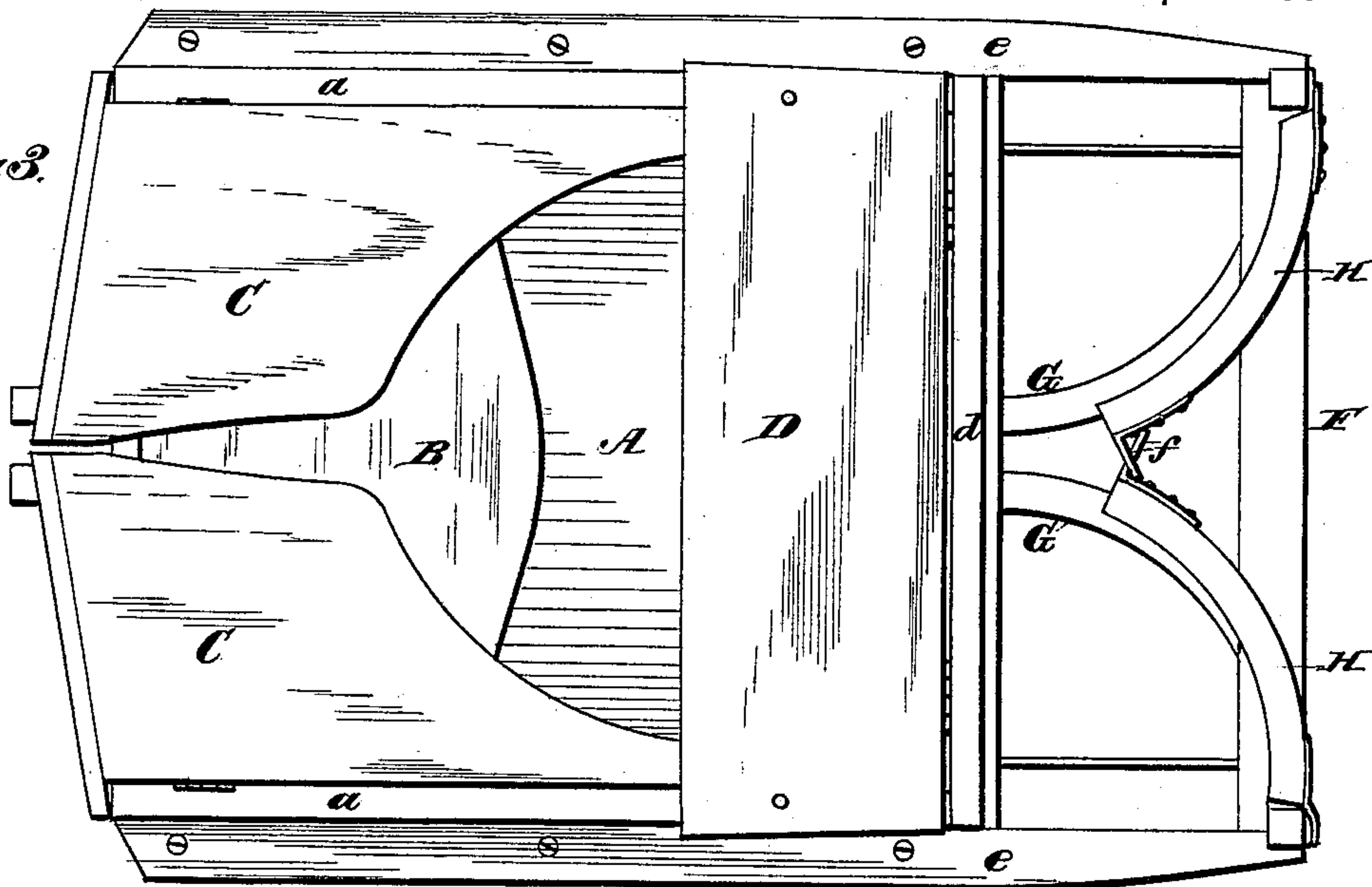


Fig. 4.

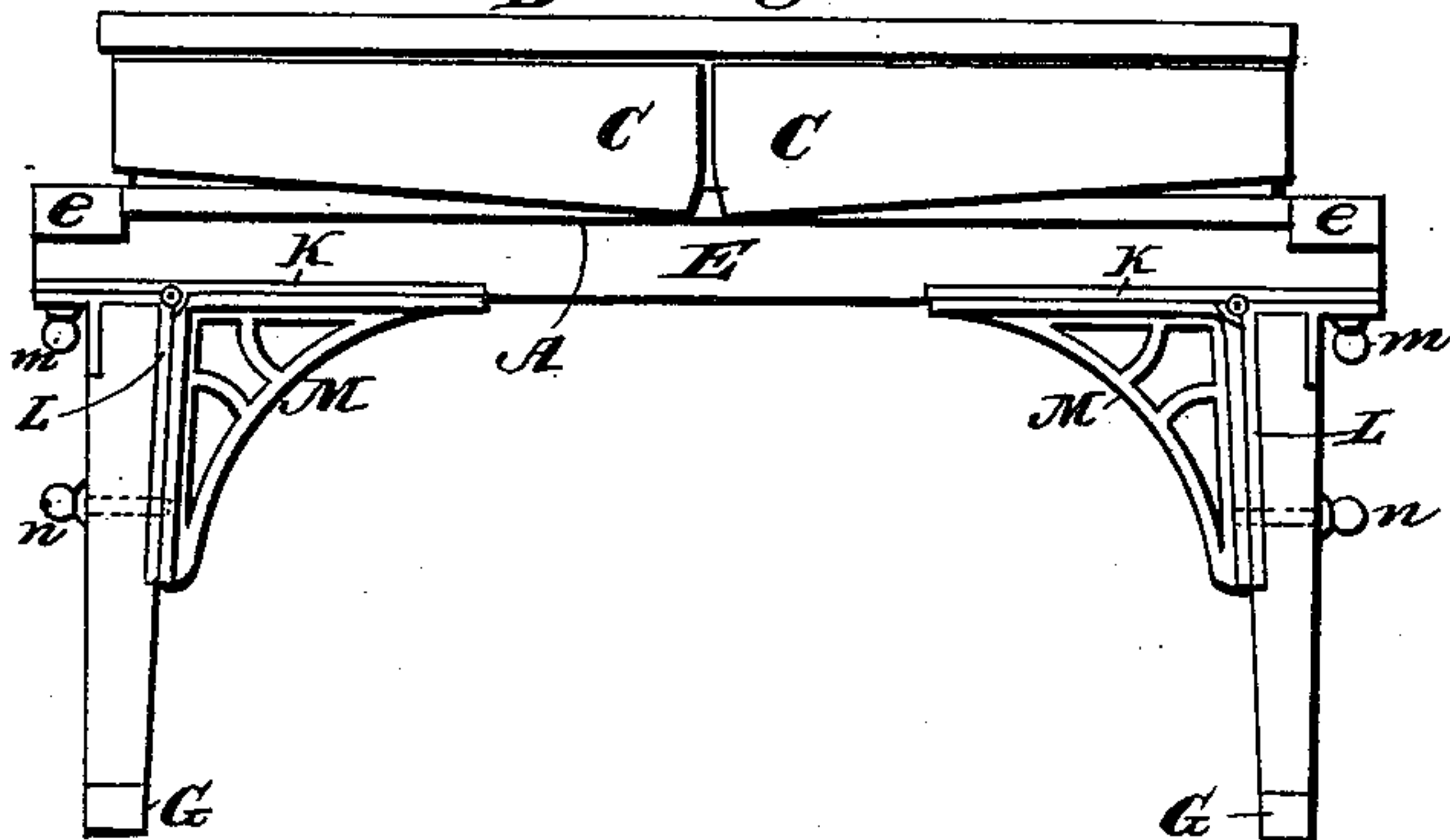


Fig. 5.

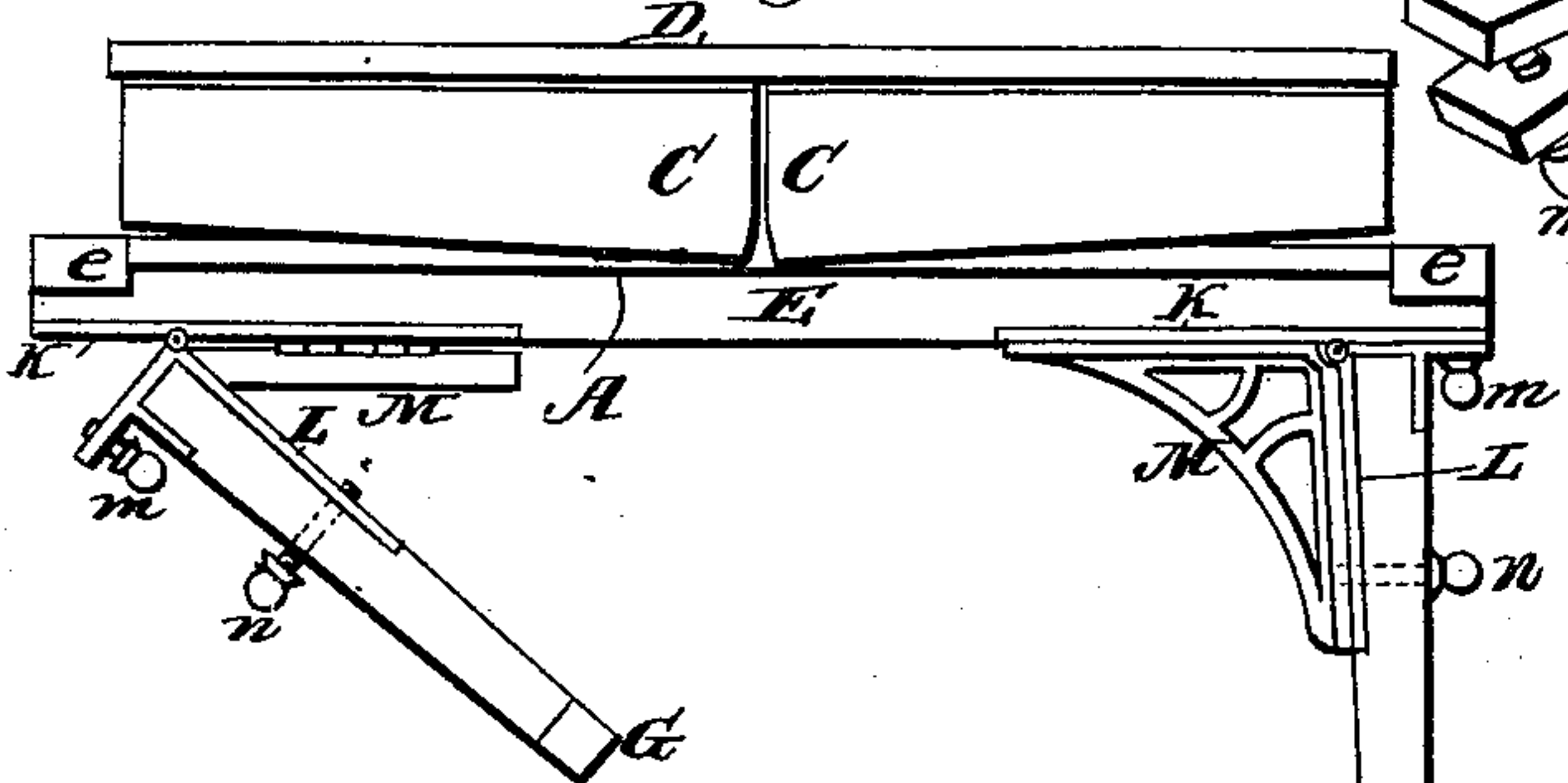
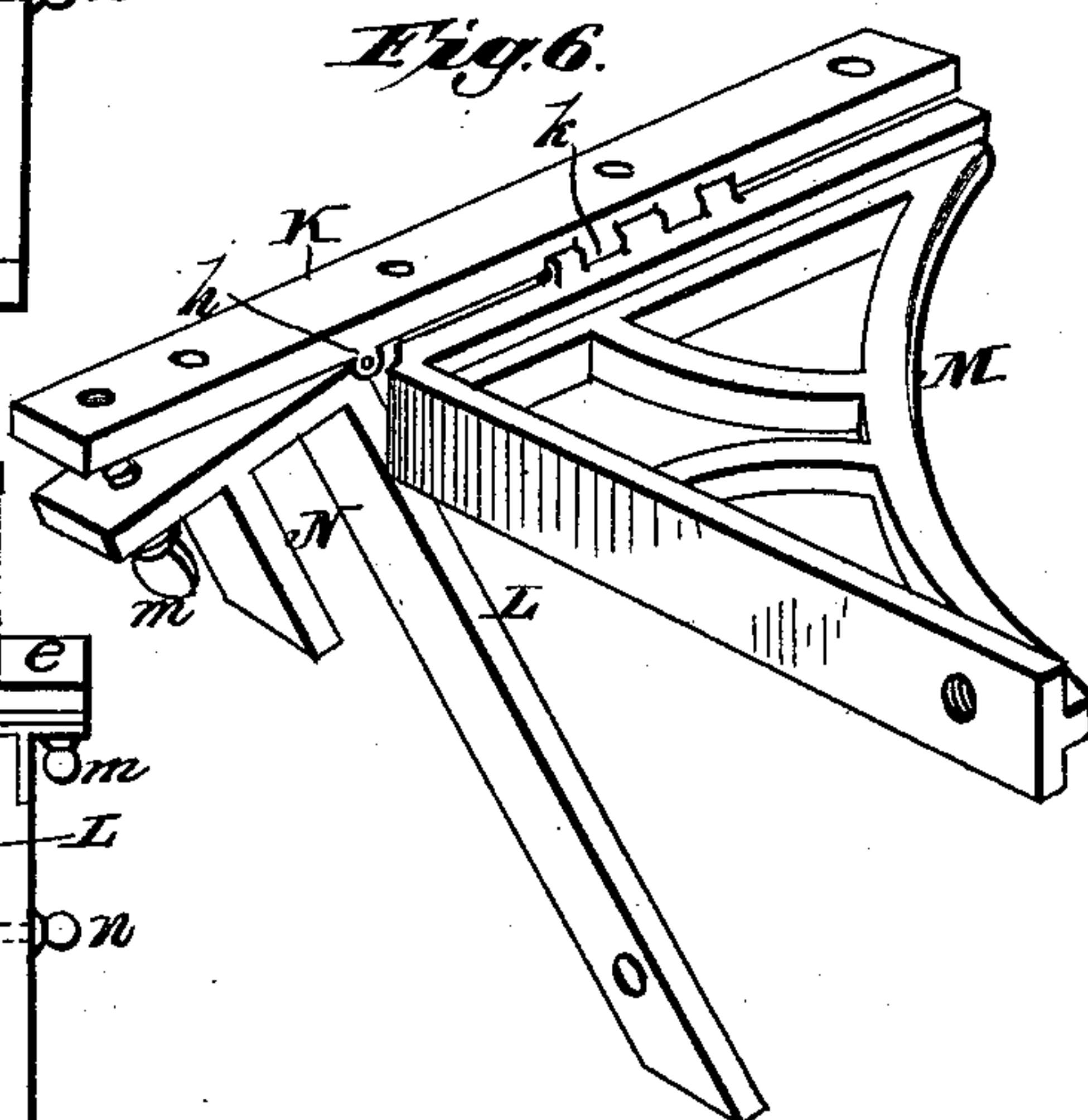


Fig. 6.



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UNITED STATES PATENT OFFICE.

SILAS F. HEWITT, OF NEW YORK, N. Y.

SLEIGH.

SPECIFICATION forming part of Letters Patent No. 336,411, dated February 16, 1886.

Application filed December 28, 1885. Serial No. 186,898. (No model.)

To all whom it may concern:

Be it known that I, SILAS F. HEWITT, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented new and useful Improvements in Sleighs, of which the following is a specification.

My invention relates to a sleigh so constructed and arranged that it can be folded into a compact form, and thereby occupy but a small space, for storage during the summer and when it is not required for use on the road.

The invention consists in certain novel features of construction, whereby the sleigh body and runners can be readily and quickly folded, and by which the several parts are securely braced when the sleigh is unfolded, in position for use.

The invention also consists in a peculiar form of hinged knee and bracket-brace, by which the sleigh-runners are firmly sustained in an unfolded position.

In the annexed drawings, illustrating the invention, Figure 1 represents a folding sleigh made according to my invention, the body, runners, and braces being shown unfolded and secured in position. Fig. 2 is a bottom plan view showing the running-gear folded under the sleigh. Fig. 3 is a top plan view showing the back folded down onto the floor, the sides folded over the back, and the dash-board folded on the forward ends of the sides. Fig. 4 is a rear end view of the sleigh with the runners unfolded. Fig. 5 is a similar view showing a runner with knees and braces folded on one side and partly folded on the other side. Fig. 6 is a perspective view of the hinged knee and brace partly unfolded.

Referring to these drawings, the letter A designates the sleigh-floor, to which is hinged a folding back, B, that may be turned down upon the floor. To the surface of the floor, on each side of the sleigh, is secured a longitudinal strip, *a*, to each of which is hinged one of the folding side pieces, C. These hinged sides are adapted to fold down on the lowered back B, and at the rear end of each side C is a shoulder, *b*, that fits against the vertical edges of the back when the parts are unfolded, said shoulder being provided with a flange, *c*, that serves to brace and support the unfolded back.

At the forward ends of the longitudinal strips *a* is a cross-piece, *d*, to which is hinged a folding dash-board, D, which may be turned down onto the forward ends of the folded side pieces.

The sleigh-body is supported on cross-beams E E, which project beyond the floor and carry the rails *e* at their ends. The forward ends of the rails are connected by a cross-bar, F, to which the forward ends of the runners G are hinged.

In line with the upward-curved ends of the runners, and hinged to the forward ends of the rails, or to the front of the cross-bar F, are curved braces H H, for supporting the dash-board. These curved braces H H carry at their ends lugs *f*, having apertures for receiving thumb-screws *g*, by which the dash-board and its braces are detachably connected. By loosening the thumb-screws *g* the braces H H can be disconnected from the dash-board and folded inward, while the dash-board is allowed to fold back.

To the under side of each cross-beam E is secured a strip, K, to which are hinged the knee L and its brace M, said strip, knee, and brace being preferably made of cast metal, or of malleable iron or wrought metal, having the hinges *h* and *h* formed integral therewith. The knee L is formed with a box portion, N, to receive the runner-standards. When the runners are unfolded, the hinged knees L are secured in a vertical position by means of thumb-screws *m*, that engage apertures in the under sides of the strips K, and the hinged braces M are secured to the knees by thumb-screws *n*, passed through the knees and runner-standards.

Instead of the thumb-screws *g*, *m*, and *n*, some other suitable fastening may be employed.

It will be seen that by the construction above described it is only necessary to loosen the fastenings between the runner-standards, knees, and braces M, and between the knees and strips K, to enable the runners to be folded inward beneath the sleigh-body. When thus folded inward, the knees can be secured horizontally beneath the strips K by means of the thumb-screws *n*, or other fastenings. It will also be seen that the body of the sleigh can be folded by first turning down the back B, then folding the sides C C inward, and then discon-

necting the dash D and its braces H, after which the dash will be turned down on the forward ends of the sides and the braces H will be turned in toward each other. The total height of the vehicle when thus closed or folded will be about seven inches, (more or less,) according to the style of sleigh.

In folding the sleigh-body the seat is pulled forward and down on the floor under the front ends of the sides and is covered by the folded dash.

When the sleigh is to be unfolded for use, the knees L are first dropped to a vertical position at right angles with the strips K, and are secured in that position by the thumb-screws *m*, or other fastenings. The hinged braces M are then allowed to drop vertically, and are secured to the knees by the thumb-screws *n*, or otherwise. The sleigh is now firmly supported by its runners, and the latter are securely braced, without liability of displacement. The dash-board will now be raised and secured to its braces H H, and the sides, back, and seat being raised into position the sleigh will be ready for use.

Having thus described my invention, what I claim is—

1. The combination, with a sleigh-body having the cross-beams E, the front cross-bar, F, and the raves *e*, connected with the beams and cross-bar, of the runners G, hinged at their front ends to said cross-bar, the knees L, having a hinged connection with the cross-beams, the braces M, also having a hinged connection with the cross-beams, and screws *m* and *n*, for locking the knees and braces, respectively, in their unfolded position, substantially as described.

2. The combination, with the raves *e*, cross-beams E, and front cross-bar, F, of a sleigh-body, of the runners G, hinged at their forward extremities to said front cross-bar, the knees L, having a hinged connection with the cross-beams, and the braces M, also having a hinged connection with the cross-beams, and fastening device for locking the knees and

braces, respectively, in their unfolded position, substantially as described.

3. The combination, with the raves *e* and cross-beams E of a sleigh-body, of the runners G, hinged at their forward ends, the knees L, having a hinged connection with the cross-beams, and each provided with the box N, outside its hinged point, to receive the upper ends of the runner standards, and the braces M, also having a hinged connection with the cross-beams, substantially as described.

4. The combination, with a sleigh-body having a folding back, B, and folding sides C, of a rearwardly-folding dash-board, D, adapted to fold down upon the forward ends of the sides, substantially as described.

5. The combination, with a sleigh body and runners, of a folding back, folding sides, a folding dash-board, and braces hinged to the raves on their connecting cross-bar and having a detachable connection with the folding dash-board, substantially as described.

6. The combination of the cross-beams E E, floor A, having side strips, *a a*, and cross-bar *d*, the folding back B, folding sides C C, folding dash-board D, raves *e e*, cross-bar F, hinged braces H H, and a fastening for connecting said dash-board and braces, substantially as described.

7. The combination of the strip K, hinged knee L, hinged brace M, and fastenings for securing said knee and brace in an unfolded position, substantially as described.

8. The combination of the cross-beams E E, folding knees L L, hinged braces M M, runners G G, and fastenings for securing the knees and braces, thereby securely supporting the runners in an unfolded position, substantially as described.

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

SILAS F. HEWITT.

Witnesses:

ANDREW WARD,
ROBERT HAYES.