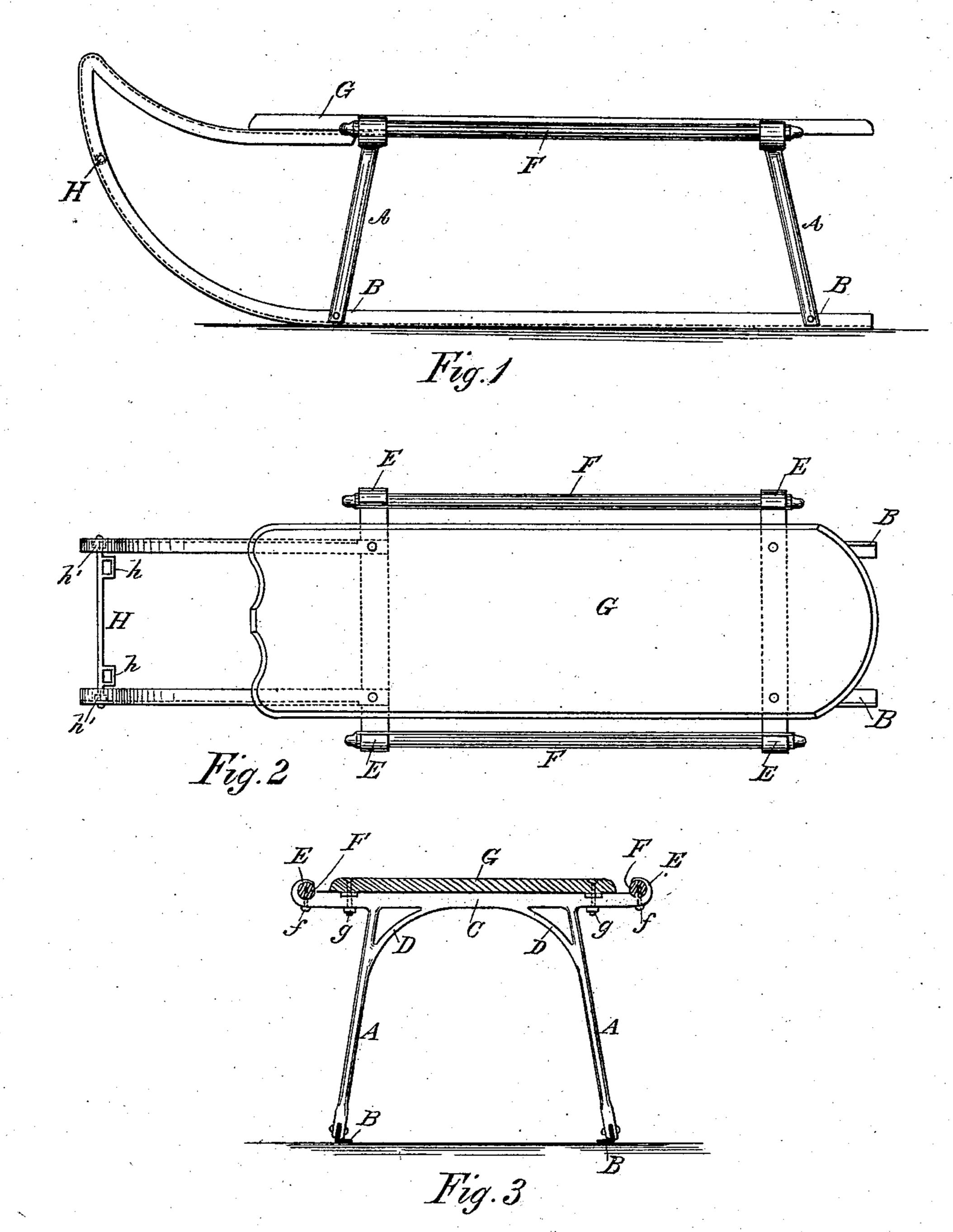
## H. H. MILLER.

SLED.

No. 287,700.

Patented Oct. 30, 1883.



John Hosponseller Freed Wobsered Witnesses

Narvey N, Miller Inventor Foevler & Board Attorneys

# United States Patent Office.

### HARVEY H. MILLER, OF CANTON, OHIO.

#### SLED.

SPECIFICATION forming part of Letters Patent No. 287,700, dated October 30, 1883.

Application filed May 5, 1883. (No model.)

To all whom it may concern:

Be it known that I, HARVEY H. MILLER, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Sleds; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon, in which—

Figure 1 is a side elevation, Fig. 2 is a top view, and Fig. 3 is a transverse section, of the sled.

Similar letters of reference represent corresponding parts in all the figures.

This invention relates to that class of sleds in which the cross-bars, braces, and posts are

formed in one piece. In the drawings, A A represent the posts or standards, which are formed of malleable iron, and are of the form shown in Figs. 1 and 3. The bottom or lower ends of said posts or standards are provided with a recess, to receive and 25 hold the top or upper part of the angle-iron B. To the upper ends of these posts or standards is formed a cross-bar, C, as shown in Fig. 3. This cross-bar C and the posts or standards, with the braces D, are cast in one piece, 30 thereby forming said parts at a single casting. Upon the outer ends of the cross-bar C are formed curved or bent projections E, which are of the form shown in Fig. 3. These curved or bent projections are for the purpose of holding in proper position the hand-rails F. Said hand-rails are of the form shown in Fig. 2, the ends of which are provided with heads. These hand-rails are attached to the sled by the screws f, as shown in Fig. 3. The runners of the sled 40 are formed of angle-iron, or may be of any other desired form. Said runners are bent or curved as shown in Fig. 1, the upper portion extending back to the forward cross-bar. The downward projecting portion of the runner, 45 directly over the notch or recess in the upper

part of the cross-bar, is cut away, so as to per-

mit said runner to fit in said recess, and the said runner and the seat-board G are held in proper position by clamping-bolts g. To the forward portion of the runners is attached the 50 rope-bar H. This rope-bar H is provided with enlarged portions h' at or near its ends, and also with the eyes h. These enlarged portions h' are for the purpose of forming shoulders, so that the part of said rope-bar 55 extending through the runners may be riveted, thereby forming a secure fastening for said rope-bar. The eyes h are for the purpose of passing the rope through, and thereby holding the rope in proper position.

The angle-iron runners may be used on sleighs as well as on hand-sleds. I do not limit

myself in that respect.

The sled constructed as described is light and strong, and, being made of only a few pieces, 65 is easily constructed, and at the same time is much more handsome than the ordinary wooden sled.

It will be seen that by providing the handrails F a very convenient means of holding on 7c the sled is provided.

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

1. The rope-bar H, provided with heads h' 75 and eyes h, in combination with the angle-iron runners B, substantially as and for the purpose specified.

2. The sled, substantially as shown, consisting of the standards A, cast with braces D, and 8c cross-bars C, having bent projections E, the hand-rails F, angle-iron runners B, the ropebar H, having eyes h, and seat-board G, substantially as and for the purpose specified.

In testimony that I claim the above I have 8; hereunto subscribed my name in the presence of two witnesses.

### HARVEY H. MILLER.

Witnesses:

EDWIN H. SMITH, FRED. W. BOND.