

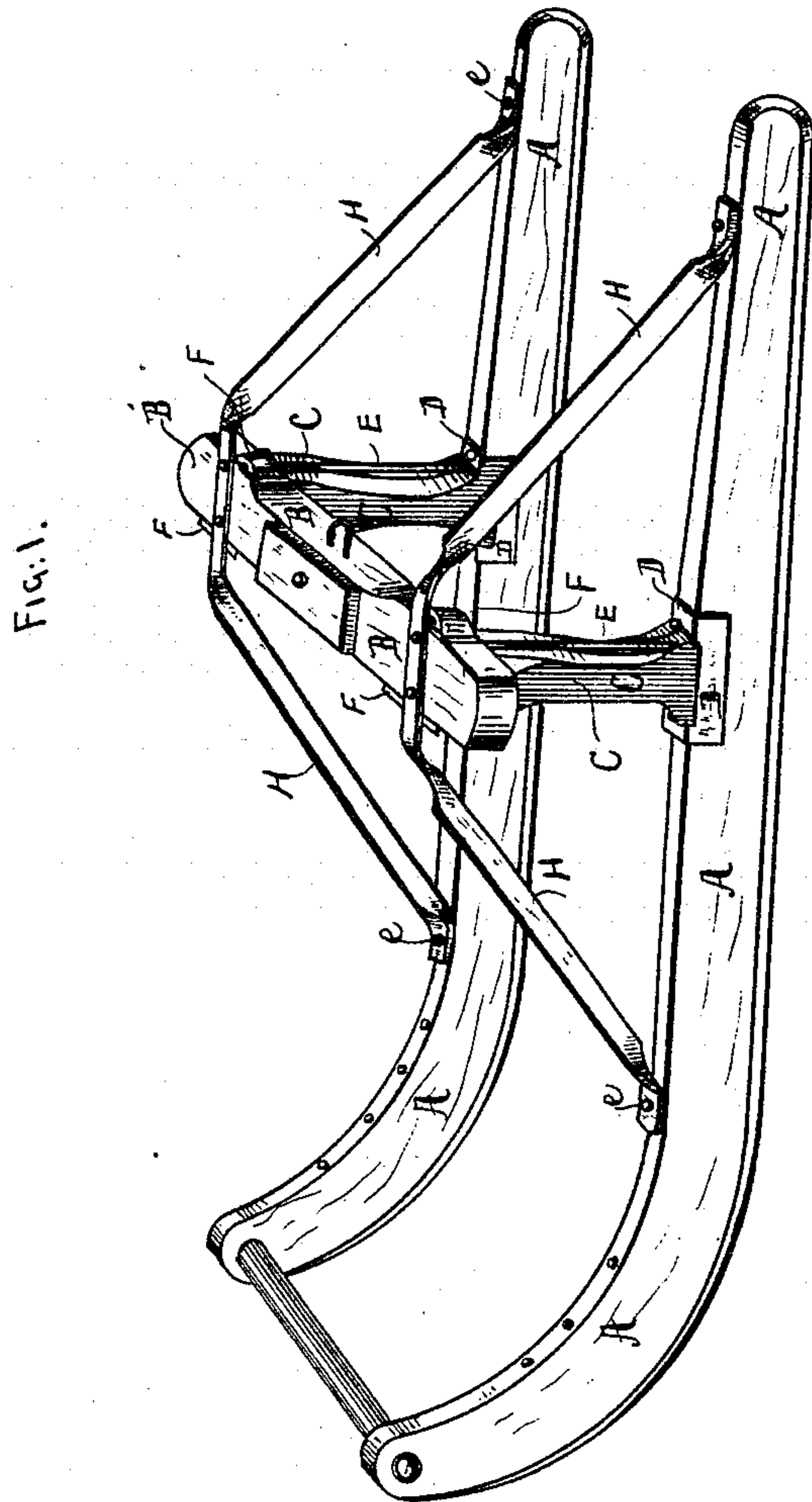
(No Model.)

L. R. DEXTER.
SLEIGH.

2 Sheets—Sheet 1.

No. 428,593.

Patented May 27, 1890.



WITNESSES:

Franklin Barrett.

Edw. C. Burgess.

INVENTOR:—

Lymain R. Dexter.

BY

James H. Lancaster
ATTORNEY

(No Model.)

2 Sheets—Sheet 2.

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FIG. 2.

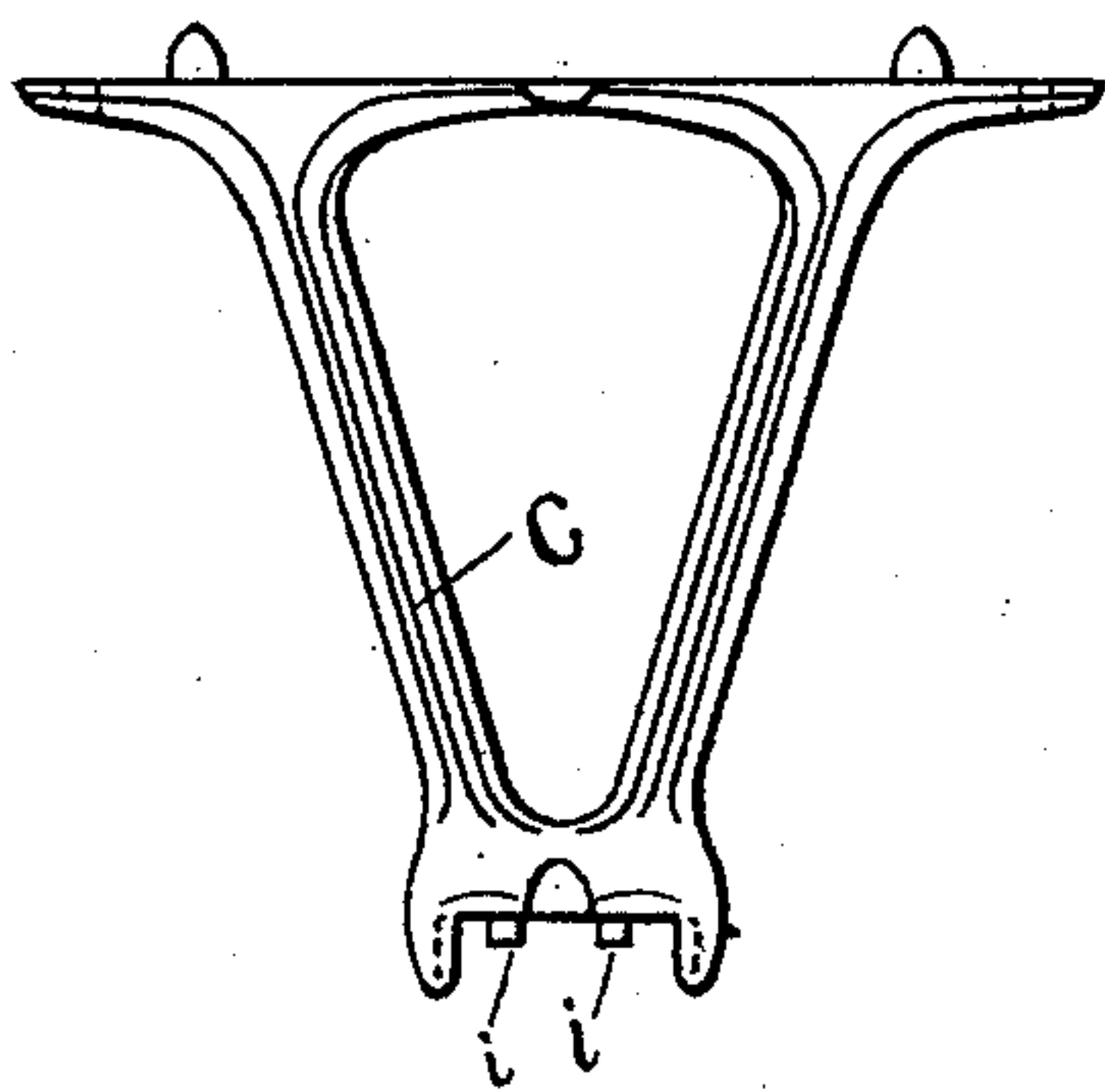


FIG. 3.

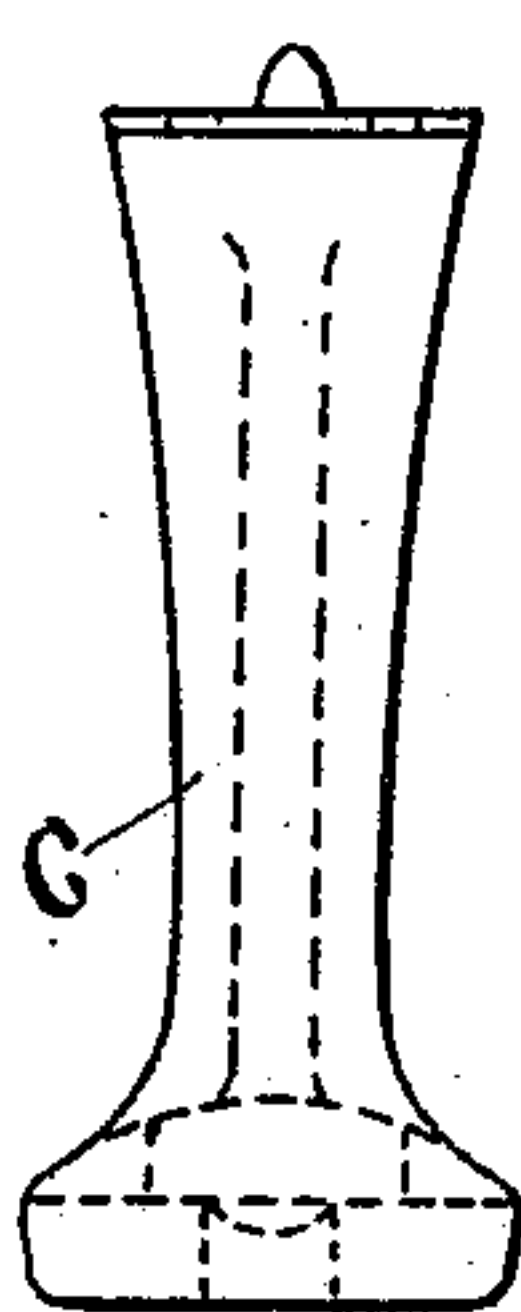


FIG. 4.

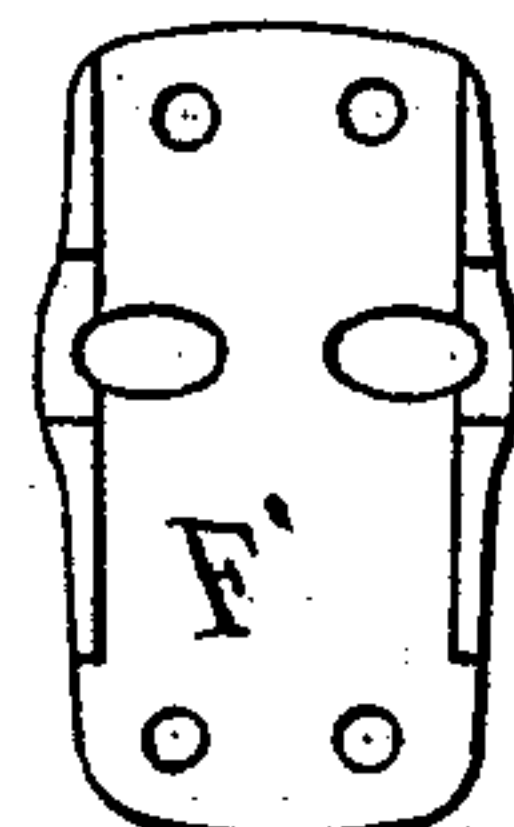


FIG. 5.

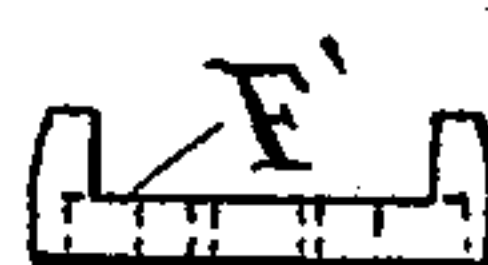


FIG. 6.



FIG. 7.

FIG. 8.

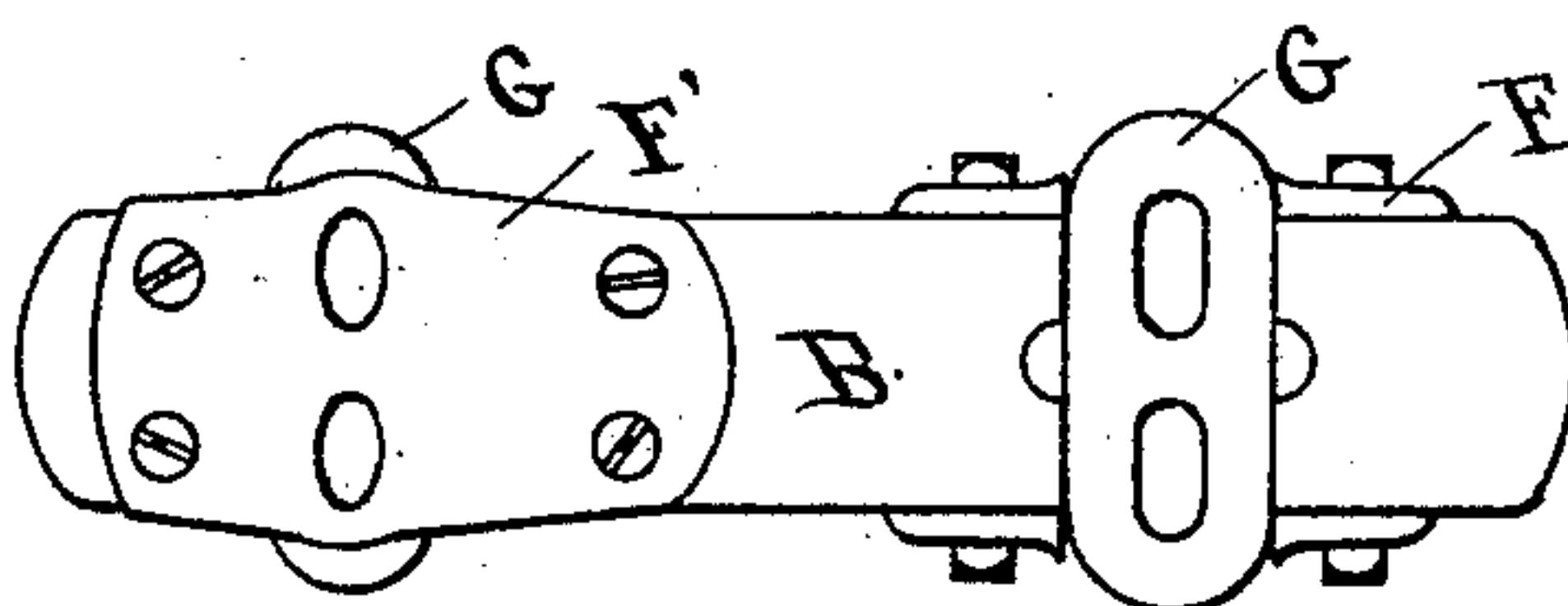
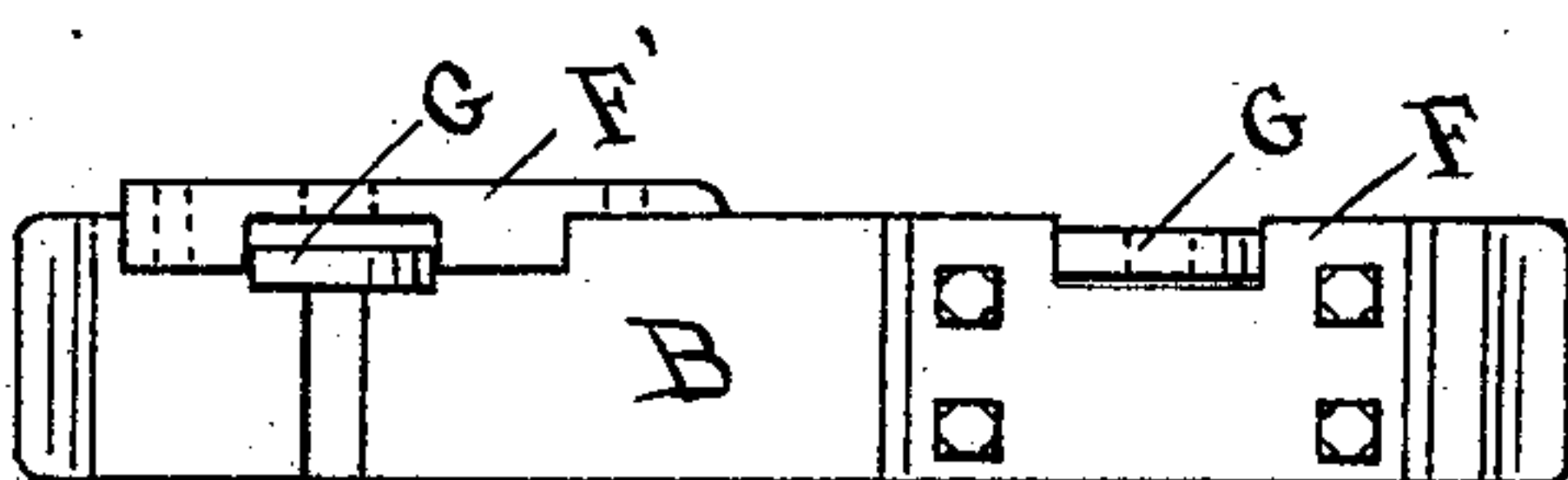


FIG. 9.



WITNESSES

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INVENTOR

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UNITED STATES PATENT OFFICE.

LYMAN R. DEXTER, OF JEFFERSON, NEW HAMPSHIRE.

SLEIGH.

SPECIFICATION forming part of Letters Patent No. 428,593, dated May 27, 1890.

Application filed March 17, 1890. Serial No. 344,274. (No model.)

To all whom it may concern:

Be it known that I, LYMAN R. DEXTER, a citizen of the United States of America, and a resident of Jefferson, in the county of Coos, New Hampshire, have invented certain new and useful Improvements in Lumbering and Business Sleighs, of which the following is a full, clear, and exact specification.

My invention relates to sleighs for lumbering and business purposes, and refers particularly to the "bob" or sled portion of such vehicles.

My present invention is an advance over my prior invention, for which patent was granted me March 18, 1879, and represents the advance in the art gained by experience therewith.

The general object of this class of inventions is to produce a strong but not a rigid sleigh, one which will bear heavy loads on rough roads, and by reason of the special construction, hereinafter described, will conform to and rest evenly on uneven ground.

The objects of my improvements are to distribute the weight of the load along the sled-runner and to stiffen the bracing of the cross-beam without any addition of weight in the bracing.

The accompanying drawings fully display my improvements in practical detail, wherefrom any builder of sleighs might correctly build the same for service.

In the drawings, Figure 1 shows a complete sleigh-bob with my improvements. Figs. 2 and 3 are detail views of the knees used for my sled. Figs. 4 and 5 show a form of clamp for the sled-beam. Figs. 6 and 7 show in detail my clamp for the sled-runner. Figs. 8 and 9 are plan and elevation, showing two modes of fitting the sled-beam.

A A are the runners.

C C are the knees.

The runners are made of wood and the knees are made of metal and shaped as shown in Figs. 2 and 3. The knees are rigidly bolted to the under side of the beam B. The lower ends of the knees loosely rest over and upon the upper edges of the runners, and to prevent any lateral movement thereof flanges are formed on both sides of the said knees, thereby forming a cavity for the edges of the runners to rest in. (See Fig. 2.) At the point where the knees rest upon the runners, and

between them and the said runners, are placed the clamps D, made of metal and of the shape shown in Fig. 6. Each clamp has formed upon its sides lugs, and in the curved top surface of said clamps are formed recesses or cavities. (See Figs. 6 and 7.) When the knees are placed over the said clamp, the slot in the same (see dotted line, Fig. 3) permits the knees to pass down and over same and in position. (See Fig. 1.) To further strengthen the knees and prevent them accidentally displacing themselves on the clamps, pins *v'* are formed on the under side of the knees, (see Fig. 2,) which enter the recesses in the curved top surface of the clamp.

The beam B, with the knees secured thereto, is placed in position, as shown in Fig. 1, and is held in place by the stay-rods E, (two for each knee,) passing through holes in the clamp-block, through elongated slots in the lower part of the knees, (that part resting upon the clamps on runners,) through slots in the upper part of the knees, through elongated openings in the beam, through elongated slots in the plates G, and lastly through the holes in the braces H, where each rod is provided with a suitable nut.

The object of the plates G is to strengthen the beam at that point where the holes for the rods pass through. The beam is further strengthened by the beam-clamps F. The braces are secured to the runners at *e* in the usual manner. (See Fig. 1.)

When in use, my improved sleigh conforms readily to uneven ground. The beam and knees being secured to the runners in the manner described permits of their rocking backward and forward when the runners pass over uneven surfaces or objects, such as logs, stones, &c. The rigidity by which the cross-piece is held in position by the braces H prevents any displacement of the knees upon the runners while in the act of rocking. Therefore by constructing the supporting parts of a lumber-sleigh after the plan hereinbefore described I am able to build the said knees with greater strength, and at the same time give them a yielding or rocking action, thereby overcoming the tendency of the said knees to break off at their point of connection with the runner, which invariably happens when the knees are rigidly secured to the runners.

In some cases, as shown at the left-hand end of Figs. 8 and 9, I use a different form of beam-clamp F', having slotted holes registering with the slotted holes in plate G. This style answers well for the heaviest sleighs.

What I claim is—

1. In a lumber-sleigh, the metallic knees C, rigidly secured to the beam B and provided with flanged sides at the lower end, and pins *i*, and the recesses for receiving the projection on the clamp D, in combination with the said arched clamp D, made of metal and shaped as shown, and provided with recesses *i'* *i* and side projections, as described, substantially as and for the purpose set forth.

2. In a lumber-sleigh, the combination of

the knees C, with flanged sides, the pins and recesses, the clamp D, with recesses, lugs, and arched top surface, the beam B, the plates F and G, as described, the rods E, two for each knee, and extending upward, as described, and the braces H, secured to runners at *e* and passing over beam B, all arranged substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 30th day of November, 1889.

LYMAN R. DEXTER.

Witnesses:

HIRAM SAVAGE,
JAMES I. MCINTIRE.