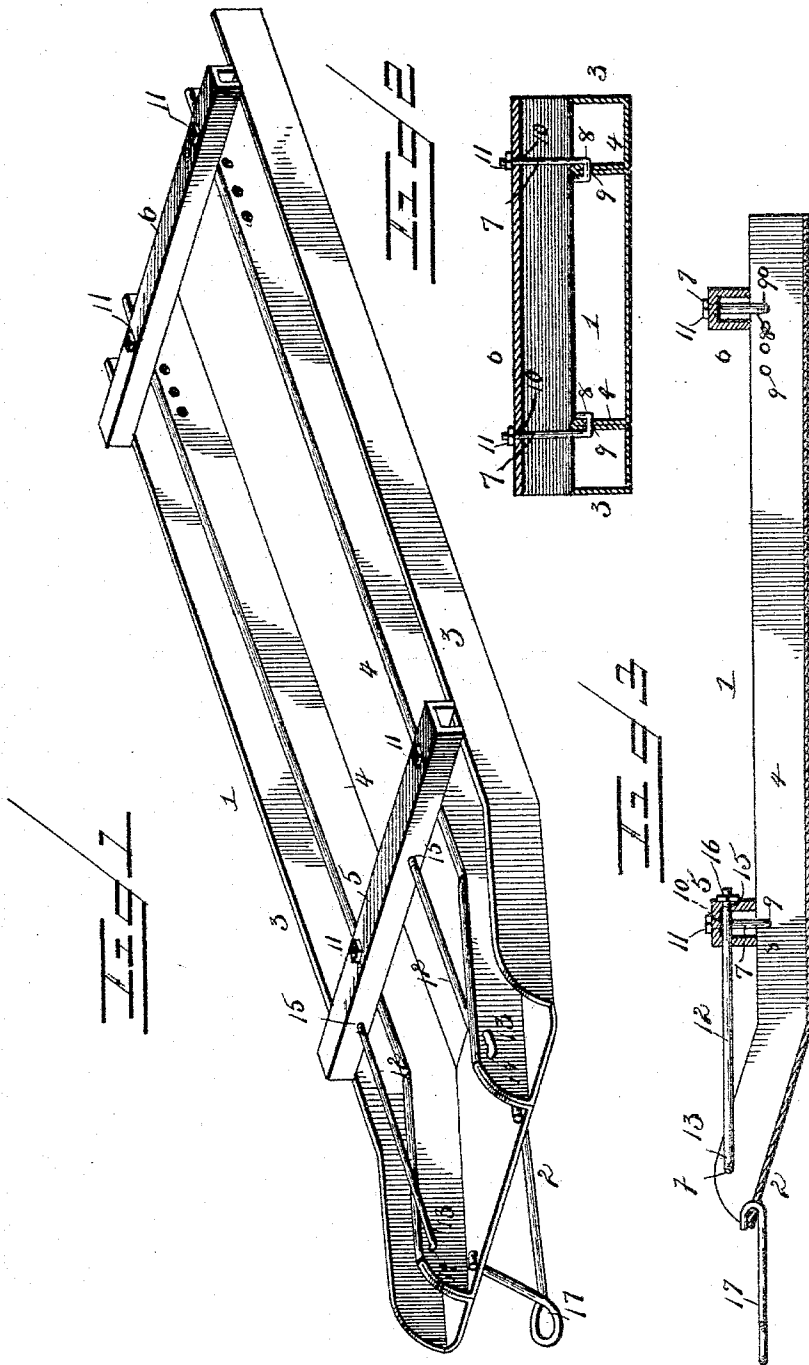


(No Model.)

P. HERMAN.
STONE BOAT.

No. 531,937.

Patented Jan. 1, 1895.



Witnesses

W. E. Schneider
E. J. Oyle

By *h z s* Attorneys.

Peter Herman

Chas. Snow & Co.

Inventor

UNITED STATES PATENT OFFICE.

PETER HERMAN, OF NORWALK, OHIO.

STONE-BOAT.

SPECIFICATION forming part of Letters Patent No. 531,937, dated January 1, 1895.

Application filed June 22, 1893. Renewed November 30, 1894. Serial No. 530,483. (No model.)

To all whom it may concern:

Be it known that I, PETER HERMAN, a citizen of the United States, residing at Norwalk, in the county of Huron and State of Ohio, have invented a new and useful Sled or Boat for Hauling Stone, Logs, &c., of which the following is a specification.

My invention relates to improvements in sleds or boats which are employed for hauling stone, logs, &c., and are employed particularly in conveying logs from a logging camp to a stream or body of water on the way to the mill; and it has for its object to provide a simple and strong construction to enable the device to withstand the rough usage to which it is necessarily subjected, and to provide means whereby the space is economized to enable the sled to carry the maximum load.

Further objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings: Figure 1 is a perspective view of a sled embodying my invention. Fig. 2 is a transverse sectional view of the same. Fig. 3 is a longitudinal section thereof.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

I preferably construct the sled entirely of steel, the body-portion 1 being provided with a flat bottom which is turned up at the front or prow, as shown at 2. This body-portion is provided at its side edges with the vertically-disposed strengthening flanges 3, which also serve as sides to prevent dirt, snow, or other material from working in over the edges of the bottom, such flanges extending from front to rear of the body-portion. Parallel with and spaced from these side flanges are integral ribs 4, which also extend from the front to the rear of the body-portion, and are at their upper edges in the same plane with the upper edges of the flanges.

5 and 6 represent, respectively, the front and rear bolsters or cross-beams, which rest upon the upper edges of the ribs 4, and are secured in place by means of the retaining bolts 7. Such bolts are provided at their lower ends with hooks 8, which engage perforations 9, in the ribs 4, and they are extended vertically through perforations 10, in the bolsters and

are engaged by nuts 11. A series of perforations 9 is formed in each rib near its rear end to permit of the adjustment of the rear bolster or cross-beam to suit the length of the logs which are to be conveyed. The bolsters or cross-beams are preferably hollowed, having channeled under sides as shown in the drawings. I also employ stay-rods 12, to strengthen the front end or prow of the sled, such rods being provided at their front ends with hooks 13, which engage perforations 14 in the front ends of the ribs 4, extend rearwardly through perforations 15, in the front bolster and are engaged in rear of the latter by nut 16. The draft-link 17 is connected to the front of the prow, and it will be seen that the draft, and strain applied at this point will be sustained and distributed by means of the stay-rods.

The arrangement of the bolsters or cross-beams as described upon the upper edges of the strengthening ribs enables the logs to be elevated above the bottom of the sled; and furthermore, permits of the placement of stone in the bottom of the sled beneath the lumber.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having described the invention, what is claimed as new is—

1. A metallic flat-bottomed sled or boat having upturned lateral edges to form sides, substantially as specified.

2. A sled or boat having a flat bottom and provided with upturned side flanges, and intermediate longitudinally-disposed strengthening ribs, substantially as specified.

3. A sled or boat having upturned integral lateral flanges, integral longitudinally-disposed ribs, bolsters or cross-beams supported on the upper edges of said ribs, and means for detachably securing the bolsters in place, substantially as specified.

4. A sled or boat provided with longitudinally-disposed ribs, bolsters supported upon said ribs, and retaining bolts provided at their lower ends with hooks to engage perforations in the said ribs, extending at their upper ends through perforations in the bolsters and having nuts threaded thereupon, substantially as specified.

5. A sled or boat provided with longitudinally-disposed ribs having a series of perforations formed therein at their rear ends, front and rear bolsters supported upon said
5 ribs, and detachable retaining devices carried by the rear bolster to engage the said perforations, whereby the bolster may be adjusted longitudinally of the sled, substantially as specified.

10 6. A sled or boat provided with longitudinally-disposed ribs, front and rear bolsters supported upon and secured to said ribs, and stay-rods provided at their front ends with
15 hooks to engage perforations in the front ends of the ribs, extending at their rear ends through perforations in the front bolster and

engaged by nuts bearing against the rear surface of said bolster, substantially as specified.

7. A metallic sled or boat having a flat bottom and formed with flanges 3 and ribs 4, and
20 the transverse bolsters formed of channeled iron and removably secured upon the tops of the flanges and ribs with their channeled sides facing the same, as set forth.

In testimony that I claim the foregoing as
25 my own I have hereto affixed my signature in the presence of two witnesses.

PETER HERMAN.

Witnesses:

F. J. HERMAN,

A. E. SMITH.