No. 681,156. Patented Aug. 20, 1901.

A. A. TOWNER.

HAND SLED.

(Application filed Apr. 18, 1901.)

(No Model.)

Fig. 1.

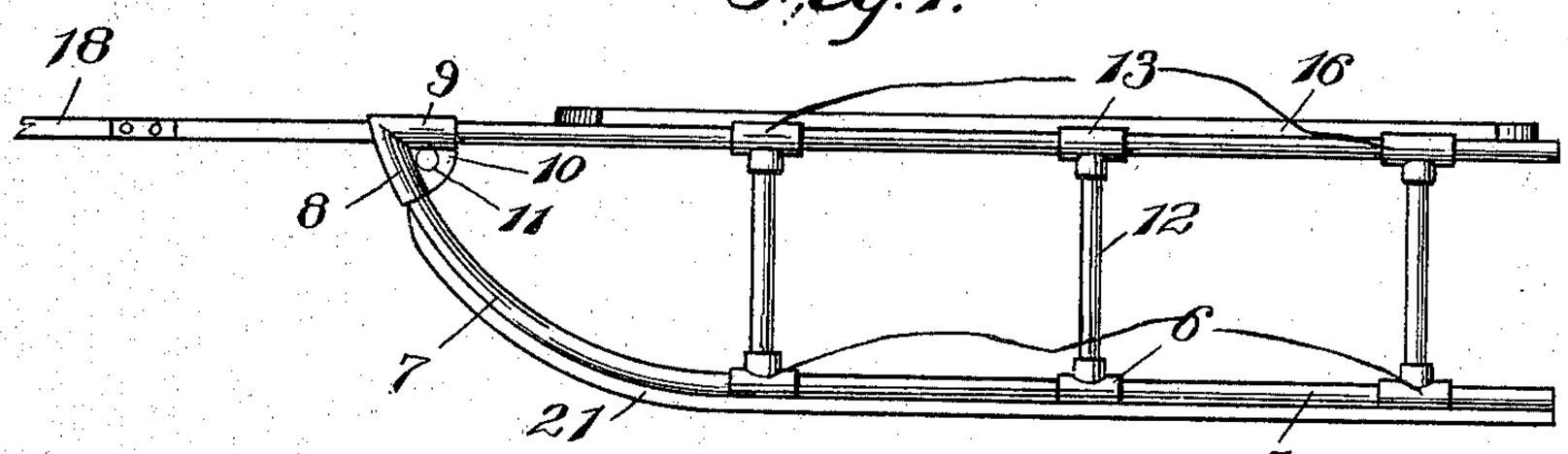


Fig. 2.

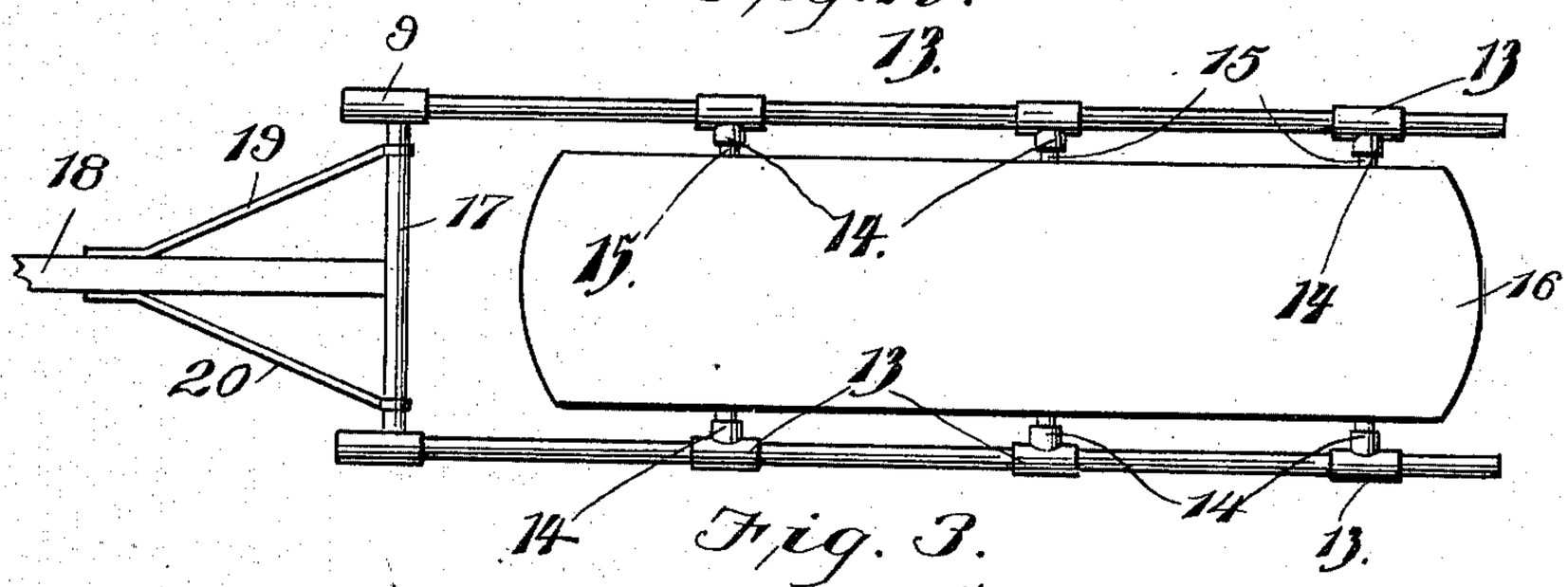


Fig. 3.

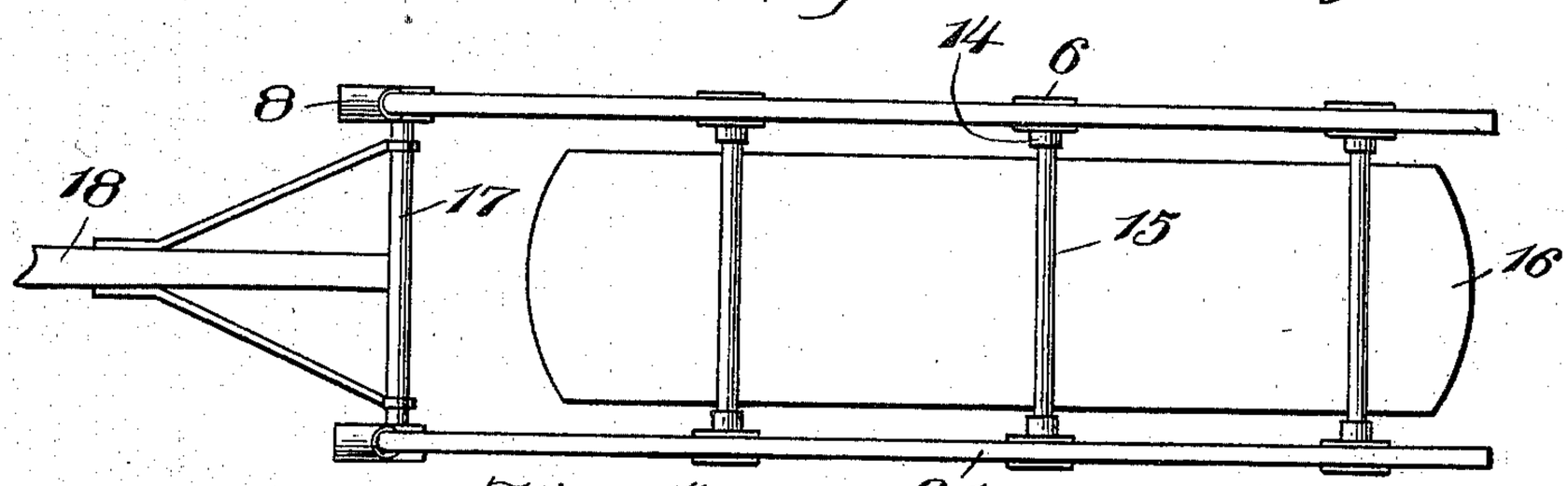
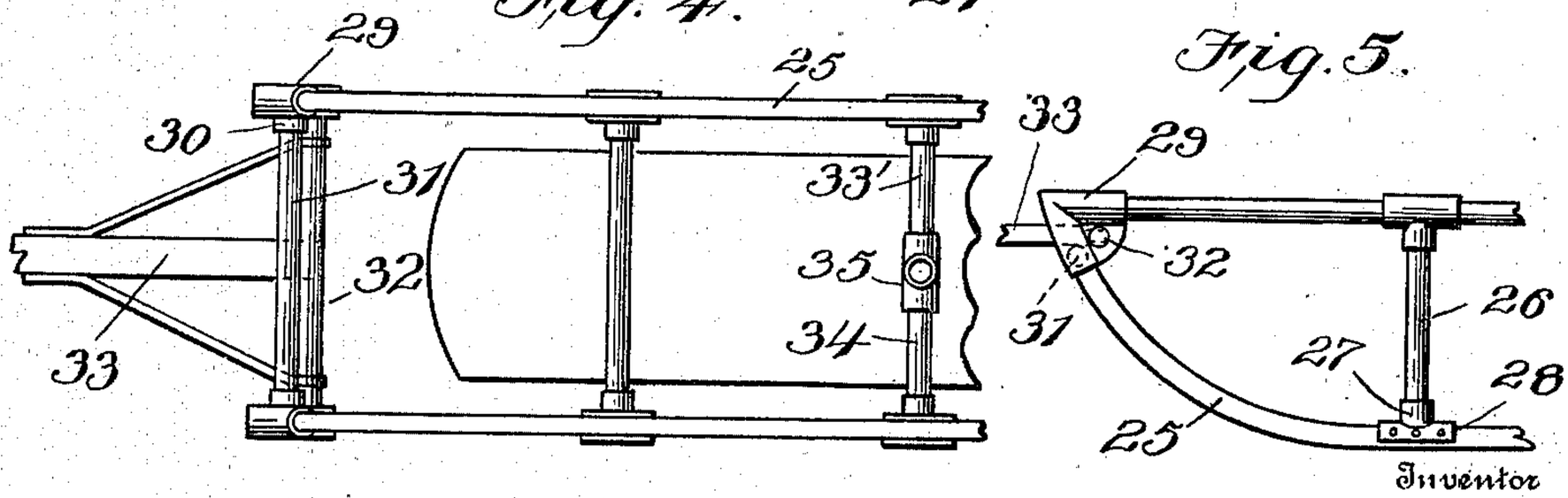


Fig. 4.

Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

ARTHUR A. TOWNER, OF SMYRNA, NEW YORK.

HAND-SLED.

SPECIFICATION forming part of Letters Patent No. 681,156, dated August 20, 1901.

Application filed April 18, 1901. Serial No. 56,440. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR A. TOWNER, a citizen of the United States, residing at Smyrna, in the county of Chenango, State of New York, have invented certain new and useful Improvements in Sleds; 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.

This invention relates to sleds; and it has for its object to provide a sled which will be most durable in construction and may be easily built, a further object of the invention being to provide a sled wherein the sides shall be firmly braced and in which a tongue will be provided and will be pivotally connected with the sides of the sled in such manner as to prevent or insure against breaking of the tongue or its mountings.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevation of a sled embodying the invention. Fig. 2 is a top plan view of the sled. Fig. 3 is a bottom plan view of the sled. Fig. 4 is a bottom plan view of a modification. Fig. 5 is a view of the forward portion of the sled.

Referring now to the drawings, and more particularly to Figs. 1, 2, and 3, in this embodiment of the invention the sled consists of two duplicate sides, each of which comprises runner-sections 5, formed of pipe and connected in alinement by means of T connections 6, and at the front one of these T connections is connected an arc-shaped pipe-section 7, which is curved forwardly and upwardly and is engaged at its upper end in a socket in a casting 8, said casting including also a socket 9, lying at an acute angle to the socket 8, and these sockets 8 and 9 are connected by a web portion 10, having a perforation 11 for a purpose to be presently explained. In the stems of the T connections 6 are engaged pipe-sections 12, which form the knees of the sides and which knees are engaged at the upper ends with other T connections 13, these connections 13 having laterally-extending socket portions 14, and the two sides are disposed parallel and with these portions 14 alining in pairs to receive pipe-sections 15, which tie the sides together, it being understood that the several pipe-sections are screwed into the sockets of the pipe connections. Upon the frame thus formed is secured a top board 16, and in the perforations 11 are disposed the ends of a cross-bar 17, having a slot in which is engaged the end of a tongue 18, said tongue being held against pivotal movement in the slot by tie-rods 19 and 20, which are connected to the tongue and to the rod adjacent to the ends thereof. The rod has rotatable movement in the perforations 11, and the tongue is thus pivotally connected with the sled for movement in the vertical plane. In this form of the invention a runner 21 is provided of cast metal and is bolted or otherwise secured to the pipe-sections 5.

In Fig. 4 of the drawings, instead of forming the runners of separate pieces bolted to the frame, each runner consists of a continuous piece of pipe 25, including a flat shoe and an upwardly-curved forward end, and the knees 26 are engaged in the sockets 27 of arcuate plates 28, which are disposed upon the upper faces of the runners and are riveted or otherwise secured thereto. In this construction also the castings 29 at the upper ends of the runners have inwardly-directed socket-pieces 30, in which is engaged a pipe-section 31, and the bar 32, to which the tongue 33 is connected, is pivoted in the rear of this pipe-section, so that the tongue may rest on the pipe-section and be thus limited in its downward movements to a point where it will be supported from contact with the ground and will not be in the way when the sled is to be used for coasting. Furthermore, in this construction the central transverse brace includes two nipples 33′ and 34, which are connected with a four-way connection 35, two of the sockets of which aline vertically, so that the sled may be pivotally connected with a truck-board to form a guiding-sled therefor when desired.

It will be understood that in practice other modifications of the specific construction may be made and that any suitable materials and proportions may be used for the various parts without departing from the spirit of the invention.

What is claimed is—

1. A sled formed of pipe-sections and con-

nections and including two sides comprising upper and lower members, socket-pieces having sockets disposed at acute angles to each other and in which the forward ends of the upper and lower members are received, the sockets of each side having a connecting web provided with a perforation, a bar pivotally engaged in the perforations of the webs, a tongue connected with the bar, braces connecting the sides and a top mounted upon and connected to the braces.

2. A sled formed of pipe-sections and connections and including two sides each comprising upper and lower members and socket-pieces in which the front ends of said upper and lower members are received, said socket-pieces having alining perforations and inwardly-directed sockets, a pipe-section engaged with the inwardly-directed sockets, a bar pivotally engaged with the alining perforations, and a tongue connected with the bar for pivotal movement and adapted to rest upon the adjacent pipe-sections.

3. A sled comprising sides including pipe-sections and connections, said sides having connecting cross-braces, one of said cross-braces including a four-way connection and nipples engaged therewith and with the sides, to form a bearing for a pivot or pin-bolt.

In testimony whereof I hereunto sign my name, in the presence of two subscribing witnesses, on the 4th day of March, 1901.

ARTHUR A. TOWNER.

Witnesses:

LEONARD TOWNER,

JOHN CONDON.