

No. 778,054.

PATENTED DEC. 20, 1904.

A. P. LINN.
SLEIGH.

APPLICATION FILED FEB. 24, 1904.

NO MODEL.

2 SHEETS—SHEET 1.

FIG. 1.

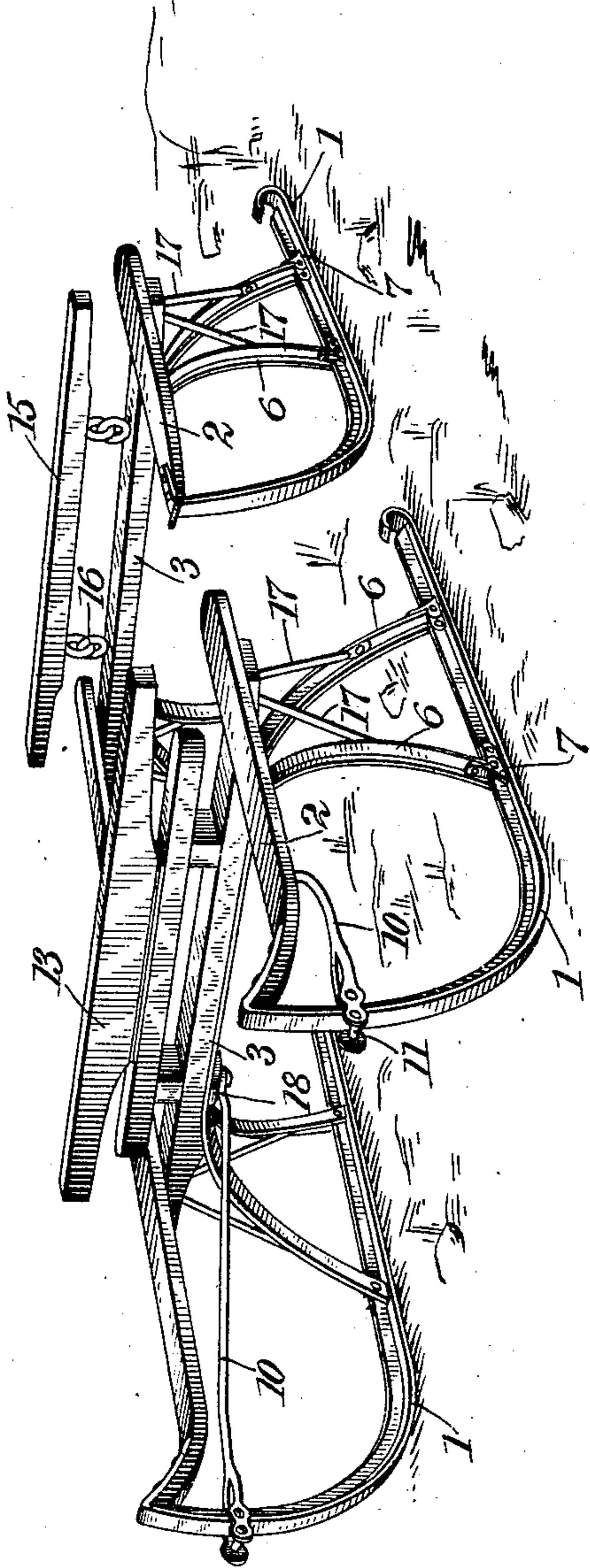
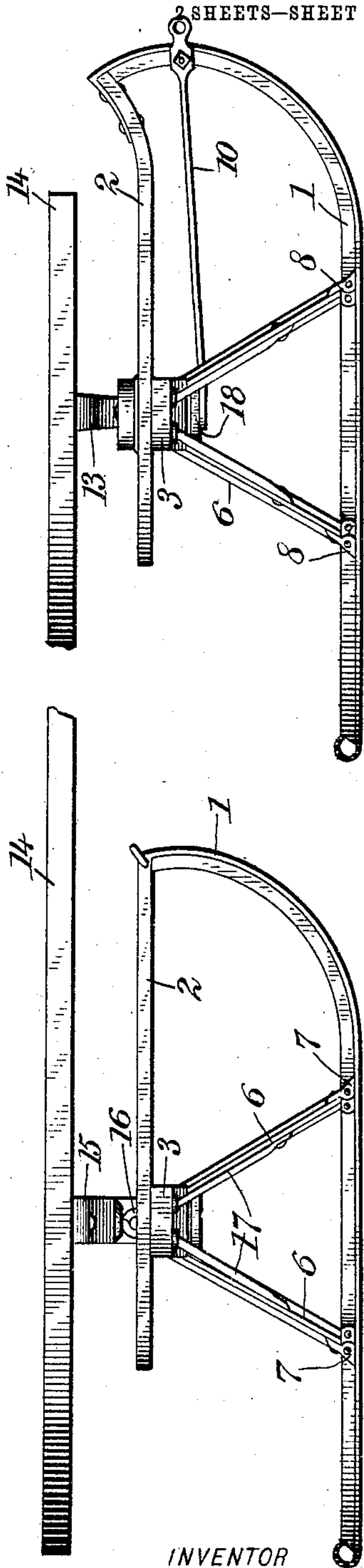


FIG. 2.



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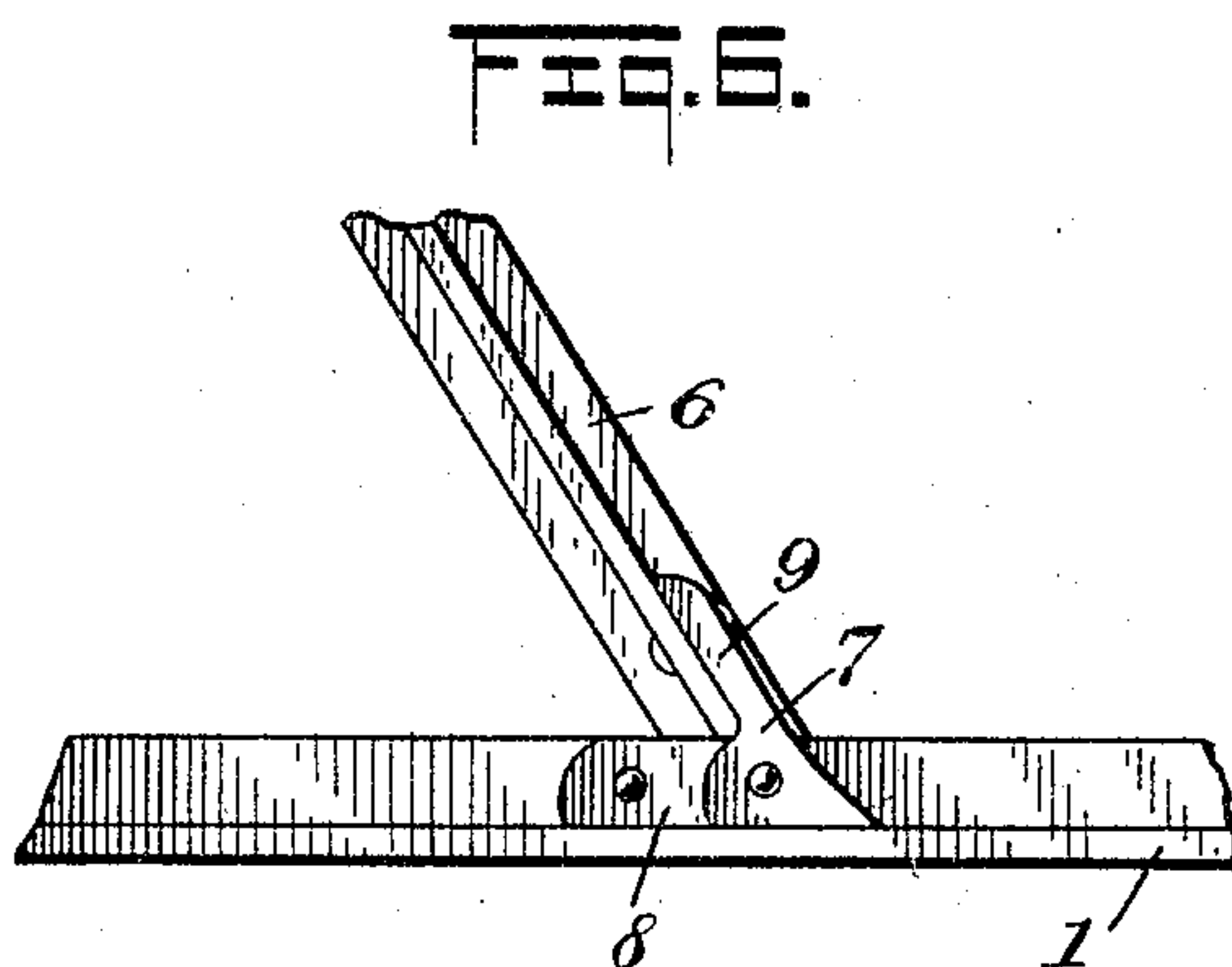
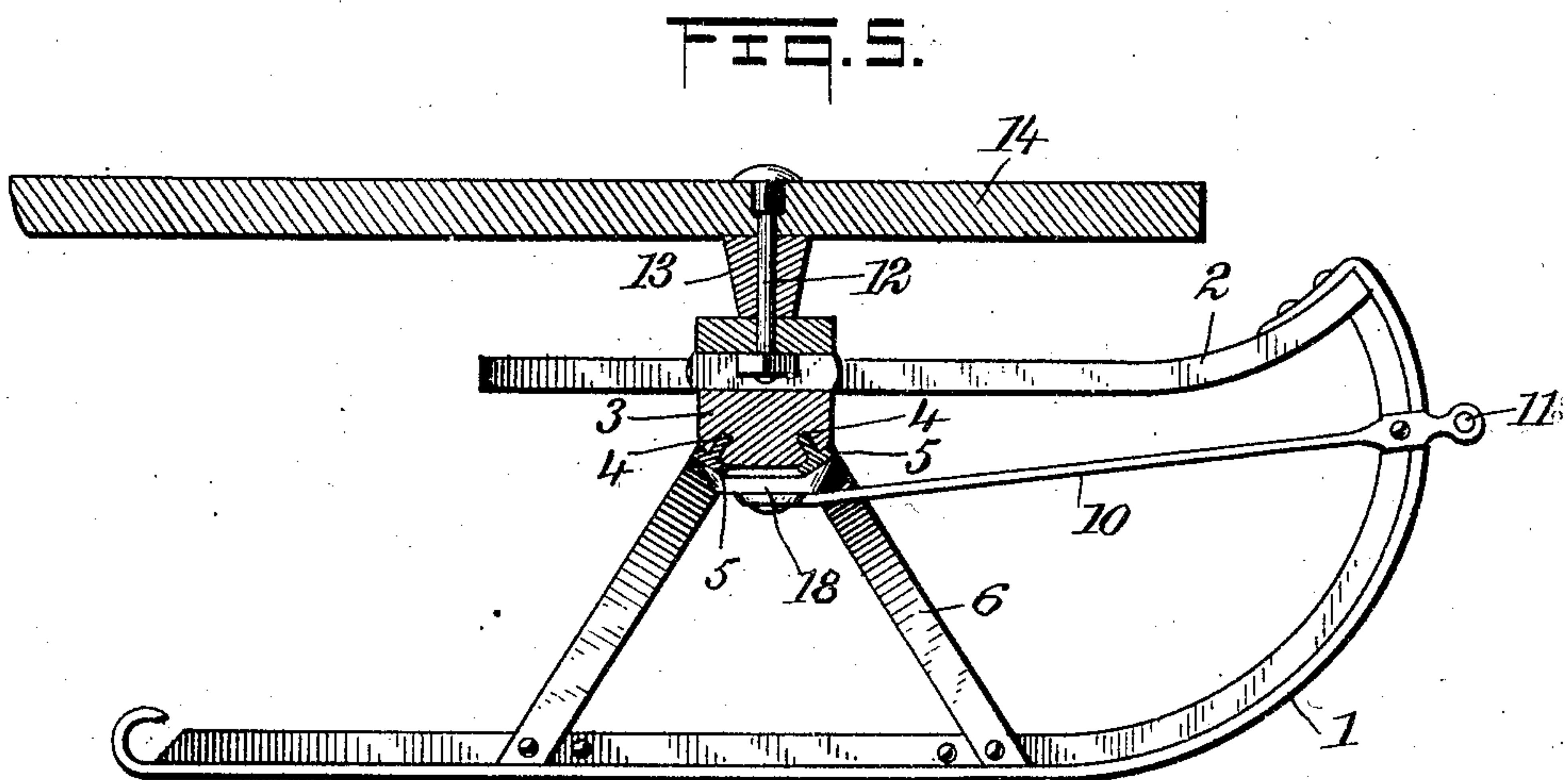
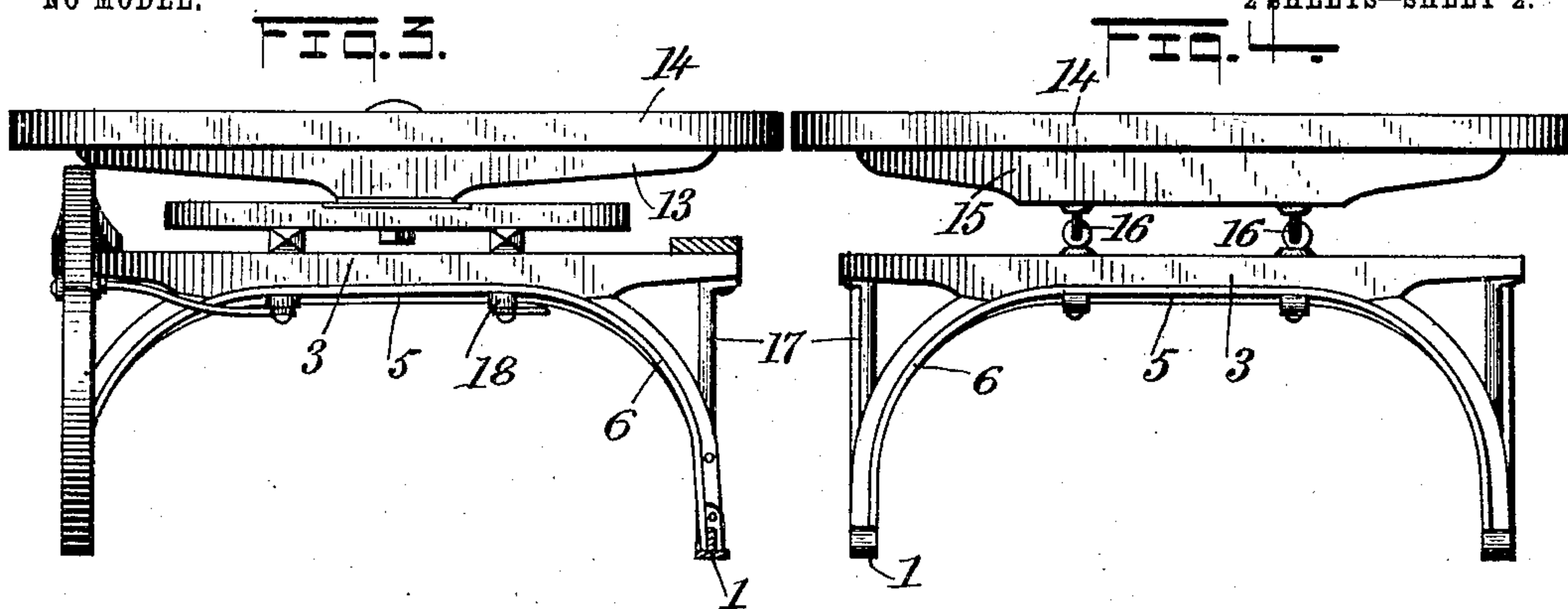
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UNITED STATES PATENT OFFICE.

ANDREW P. LINN, OF ESCANABA, MICHIGAN.

SLEIGH.

SPECIFICATION forming part of Letters Patent No. 778,054, dated December 20, 1904.

Application filed February 24, 1904. Serial No. 194,999.

To all whom it may concern:

Be it known that I, ANDREW P. LINN, a citizen of the United States, and a resident of Escanaba, in the county of Delta and State of Michigan, have invented a new and Improved Sleigh, of which the following is a full, clear, and exact description.

My invention relates to the running part of sleighs, sleds, and all devices adapted to run upon the snow and ice, and it is capable of general use upon articles of the class mentioned.

The objects of my invention are to secure greater rigidity, simplicity of construction, and cheapness in this class of articles of manufacture.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the running part of a sleigh embodying one form of my invention. Fig. 2 is a side view thereof. Figs. 3 and 4 are front and rear elevations of the same. Fig. 5 is a sectional view somewhat enlarged, and Fig. 6 is a fragmentary view showing a detail.

In the drawings, 1 represents runners, and 2 the upper part of the side pieces.

3 represents a cross-piece, which may be made of wood or metal and is designed to connect the side pieces together. The cross-piece is provided with longitudinal grooves, as shown in Fig. 5, which are designed to receive and retain projections 4 from knee-pieces 5. These knee-pieces 5 are preferably made of metal and are bent downward near their ends to form a curve 6, and they are attached to the runners by means of connections 7.

(Shown in Fig. 6.) These connections consist of a horizontal portion 8, adapted to be secured to the runner, and an inclined portion 9, extending upwardly along the part 6 and adapted to be secured thereto. The horizontal portion may be flat and parallel with the bottom of the runner, in which case it is secured to it by a vertical bolt or it may be vertical and secured to the upright part of the runner by a horizontal bolt, or a plurality

of them, and the inclined portion may be parallel to the whole side piece or may be perpendicular thereto, and in either case it will be secured to the corresponding part of the knee-piece by bolts or the like.

The parts so far described are alike on both sleds when two sleds are used and have been given the same reference-numerals on both sleds.

10 10 are rods secured to the front sled at any desired points—as, for instance, to the cross-piece, as shown—and supported by the forward parts of the runners. These rods are provided with studs or other devices 11 for the attachment of the shafts.

12 is a king-bolt, and it may conveniently pass through a body-piece 13 and the floor of the sleigh 14. The rear sled is preferably attached to the floor by means of a body-piece 15 and eyes 16. The parts may be braced, as shown, by the braces 17. In the form herein shown the knee-pieces 5 6 are securely attached to the cross-piece 3 and to the runners 1 in such a way as to make a very strong and rigid construction of the device. The rods 10 are secured to the frame by the clamps 18.

It will be obvious that the exact construction herein illustrated may be modified in many particulars without departing from the spirit of my invention as set forth in the appended claims.

Although I have shown a running portion consisting of two sleds, I do not wish to be limited thereto, as my invention is equally applicable to a sleigh having only one set of runners.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a sleigh, the combination of side pieces, a cross-piece having two grooves, a pair of knee-pieces fitting in said grooves, and means for clamping said knee-pieces to said cross-piece.

2. In a sleigh, the combination of side pieces, runners thereon, a cross-piece having a longitudinal groove, and a knee-piece having a projecting portion fitting in said groove.

3. In a sleigh, the combination of side pieces, runners thereon, a cross-piece having a longi-

tudinal groove, a knee-piece having a projecting portion fitting in said groove, and means for clamping said knee-piece to said cross-piece.

- 5 4. In a sleigh, the combination of side pieces, a cross-piece having two grooves, a pair of knee-pieces fitting in said grooves, and means for clamping said knee-pieces to said cross-piece, said means comprising a member bear-

ing upon both of said knee-pieces and means for securing said member to the cross-piece.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ANDREW P. LINN

Witnesses:

ADELBERT L. GILLETTE,
ED. R. LAUSCHER.