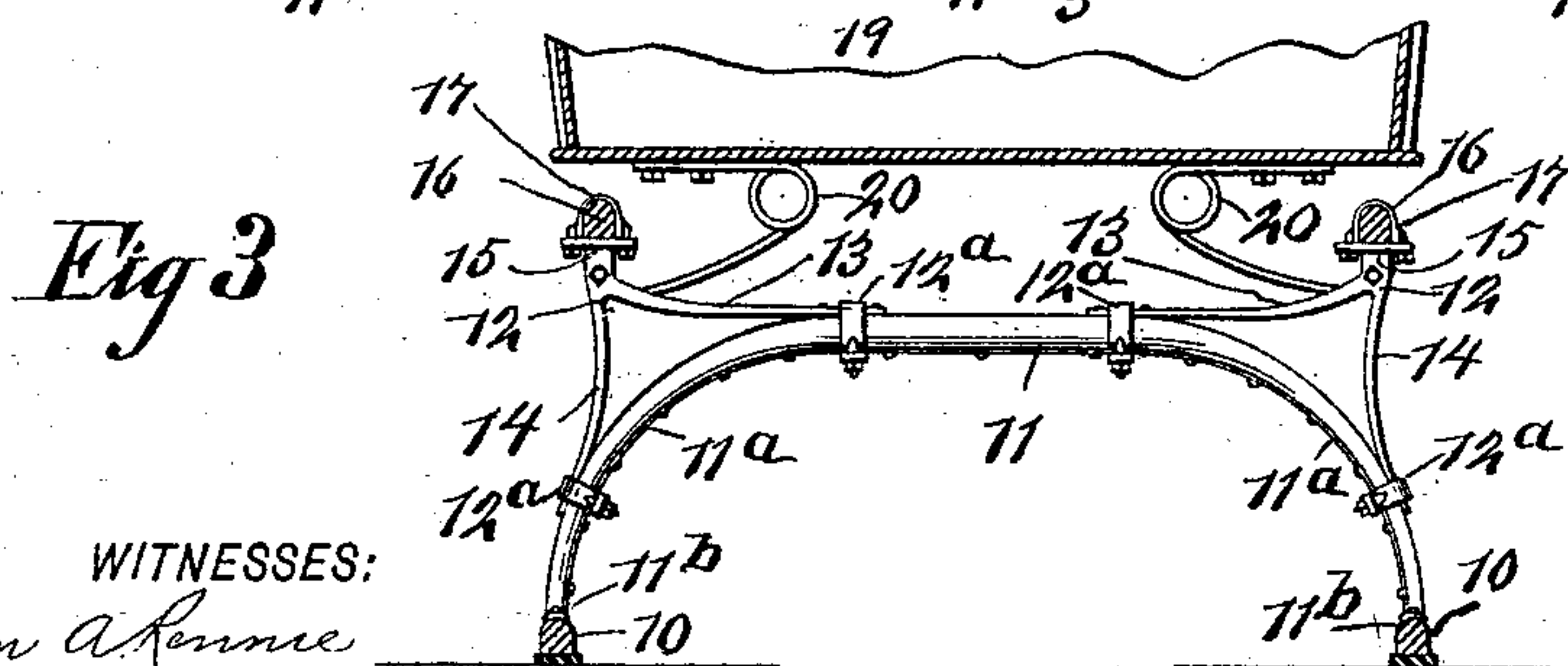
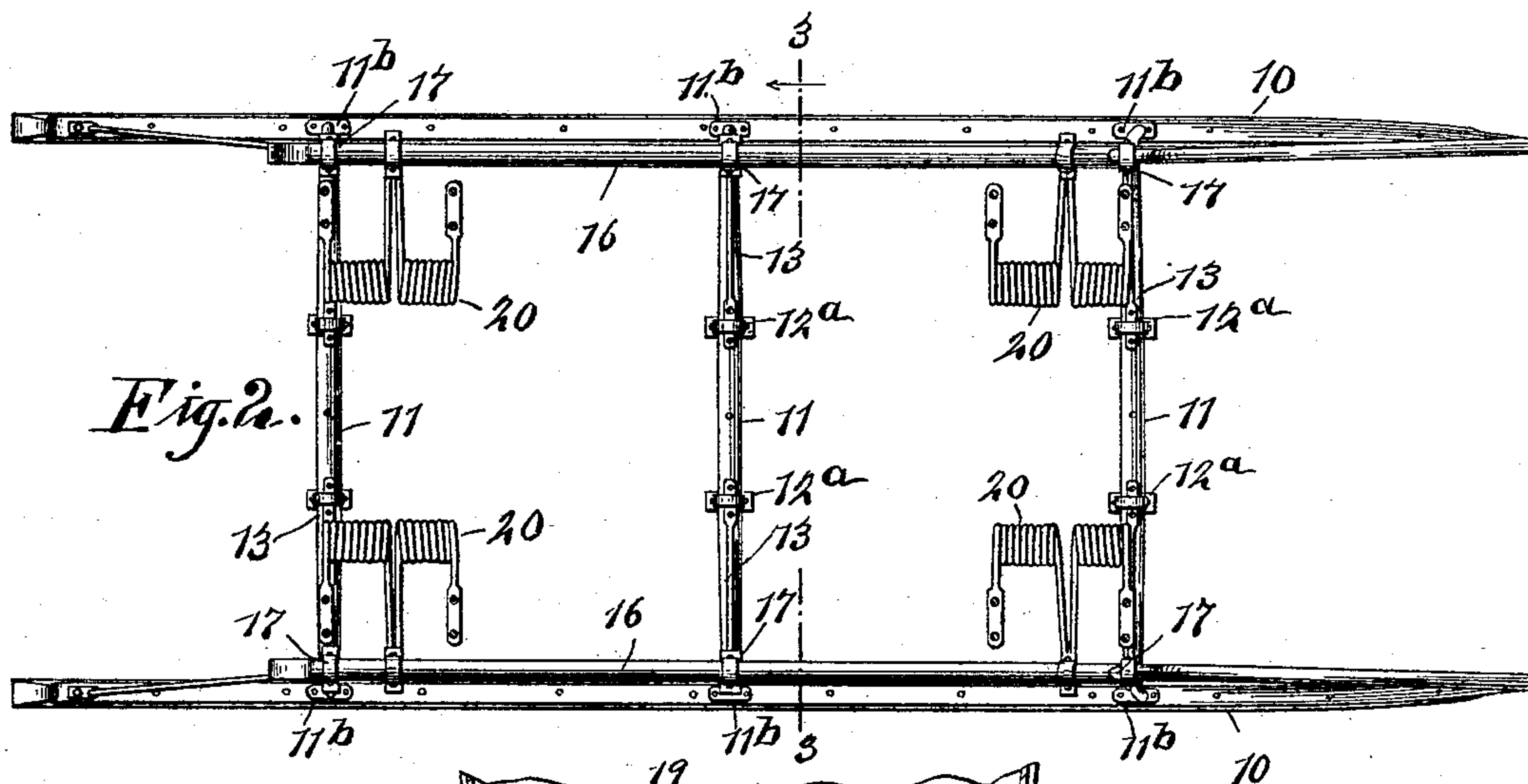
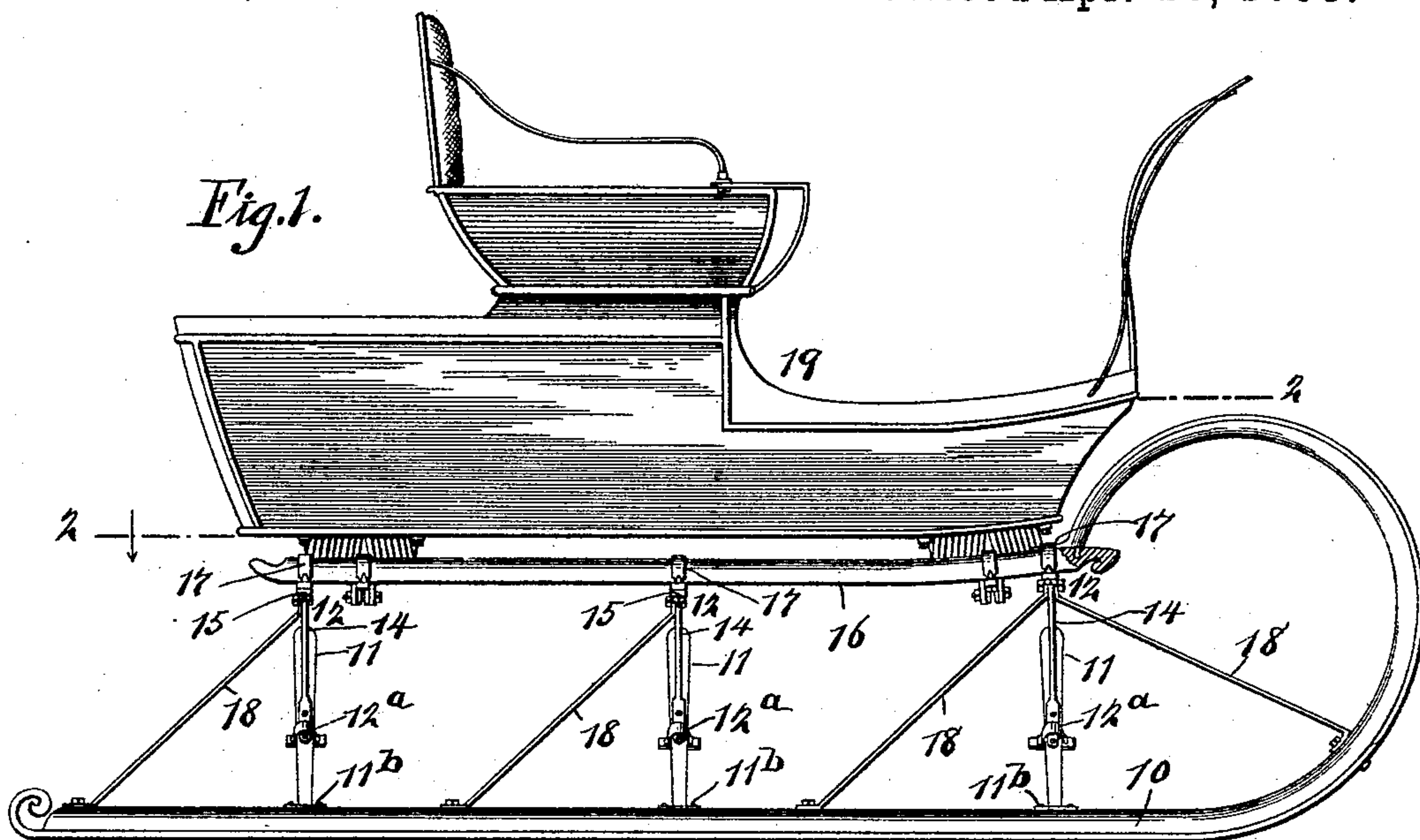


(No Model.)

W. N. SNOW.
SLEIGH.

No. 495,845.

Patented Apr. 18, 1893.



WITNESSES:

John A. Kenne
L. Sedgwick

INVENTOR

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BY Munn & Co.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIE N. SNOW, OF SNOWVILLE, NEW HAMPSHIRE.

SLEIGH.

SPECIFICATION forming part of Letters Patent No. 495,845, dated April 18, 1893.

Application filed November 11, 1892. Serial No. 451,655. (No model.)

To all whom it may concern:

Be it known that I, WILLIE N. SNOW, of Snowville, in the county of Carroll and State of New Hampshire, have invented a new and
5 Improved Sleigh, of which the following is a full, clear, and exact description.

My invention relates to improvements in sleighs, meaning by the term "sleighs," all ordinary vehicles which move on runners,
10 and the object of my invention is to improve the running gear of side-bar spring sleighs, to the end that said running gear may be cheaply made, may be exceedingly strong, and will carry the body of the sleigh in a
15 safe and correct manner.

My invention consists in certain features of construction and combinations of parts, which will be hereinafter described and claimed.

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

Figure 1 is a broken side elevation of a
25 sleigh embodying my invention. Fig. 2 is a plan of the running gear, on the line 2—2 in Fig. 1; and Fig. 3 is a broken cross section on the line 3—3 in Fig. 2.

The sleigh is provided with the usual parallel runners 10, which may of any kind desired, and these runners are connected by cross-knees 11, which are of arch shape and which are preferably made of wood, the knees being supported and held in place by the metallic straps or braces 11^a on their undersides,
30 and these straps terminate at their ends in feet 11^b, which are fastened firmly to the runners. The arches and straps are riveted or bolted firmly together. Each knee 11 is provided on opposite sides with a bracket 12,
40 which bracket has inwardly and nearly horizontally extending arms 13 and downwardly-extending arms 14, the arms being flattened at the ends and bolted firmly to the knees, and they are further fastened by clips 12^a,
45 which embrace the ends of the arms and the knees. This makes a very strong joint, and the brackets may in this way be easily attached to the knees. The outer portions of
50 the brackets 12 project upward above the

knees and terminate in horizontal plates 15, on which the side bars 16 rest, and the side bars are fastened securely to the brackets by clips 17 of the usual kind. The brackets are
55 braced by the braces 18, which extend diagonally from the brackets to the runners, and the brackets, knees, runners and side bars may if desired, be further braced in any usual way. It will be noticed that the brackets 12
60 serve to fasten the side bars rigidly to the knees, and they carry the side bars the correct distance above the knees.

The body 19, of the sleigh may be of any kind desired, and as shown in the drawings, it is secured to the side bars by coil springs
65 20, these being of the well known "Thomas" type, and they are secured to the side bars by clips and also bolted to the body 19. Any suitable spring may, however, be employed.

The running gear described above is ex-
70 ceedingly strong, and as it is composed of comparatively few parts, it is cheap and can be easily made.

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

1. The combination with the runners and the transverse arched knees, of the angular brackets 12 secured at the lower ends of
80 their vertical members and inner ends of their horizontal members to the knees as shown at 12^a and formed on their upper sides at their angles with bearings 15 and clips 16 to secure the side bars in place, substantially
85 as set forth.

2. The combination with the runners and arched knees of the arched braces 11^a secured at their ends 11^b to the runners and secured
90 throughout their length to the under sides of the knees, the angular brackets 12 secured at their ends as at 12^a to the knees forming angular upper corners therefor and formed on their upper sides at their angles with side bar bearings 15 having clips 16, substantially as set forth.

WILLIE N. SNOW.

Witnesses:

HENRI P. WILDER,
C. W. WILDER.