

No. 879,805.

PATENTED FEB. 18, 1908.

G. ALEXANDER.
DUPLEX ROAD GRADER DRAG.
APPLICATION FILED SEPT. 3, 1907.

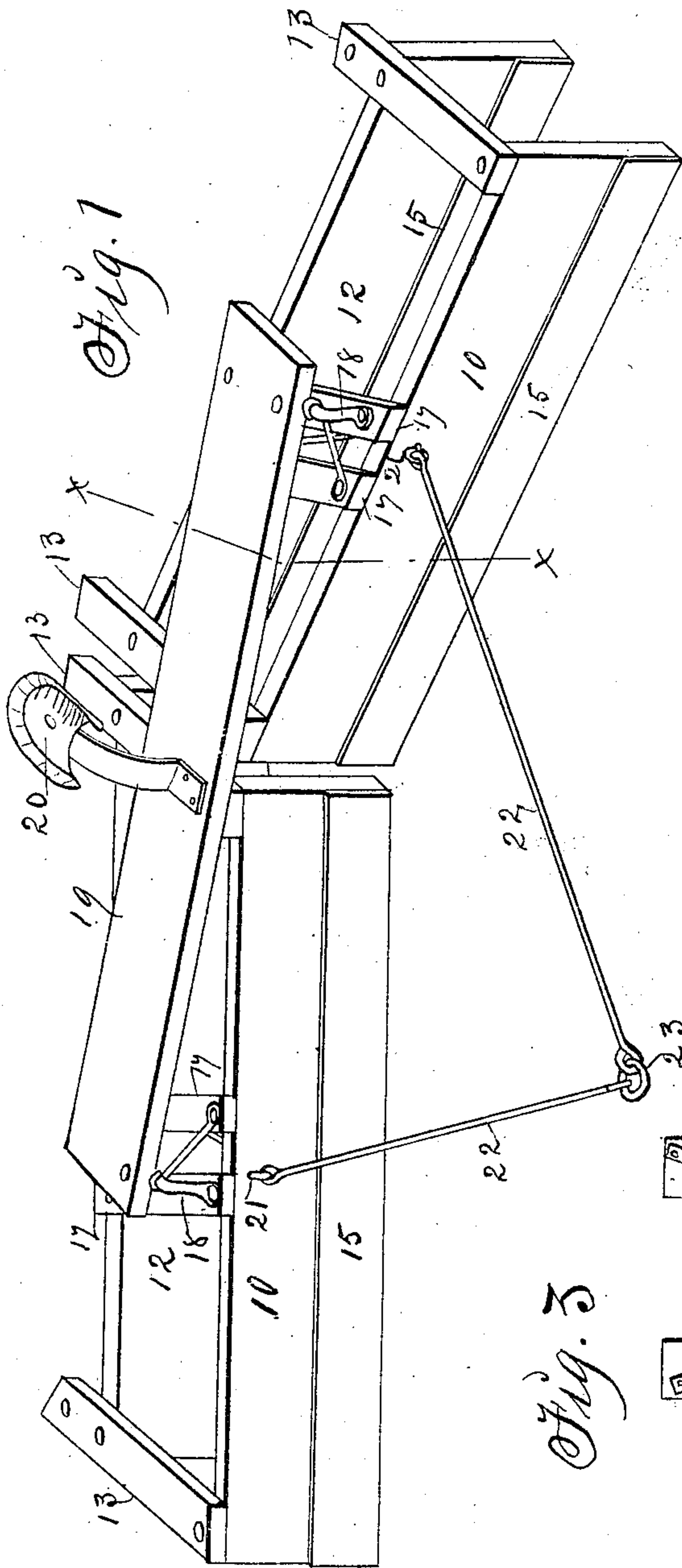


Fig. 1

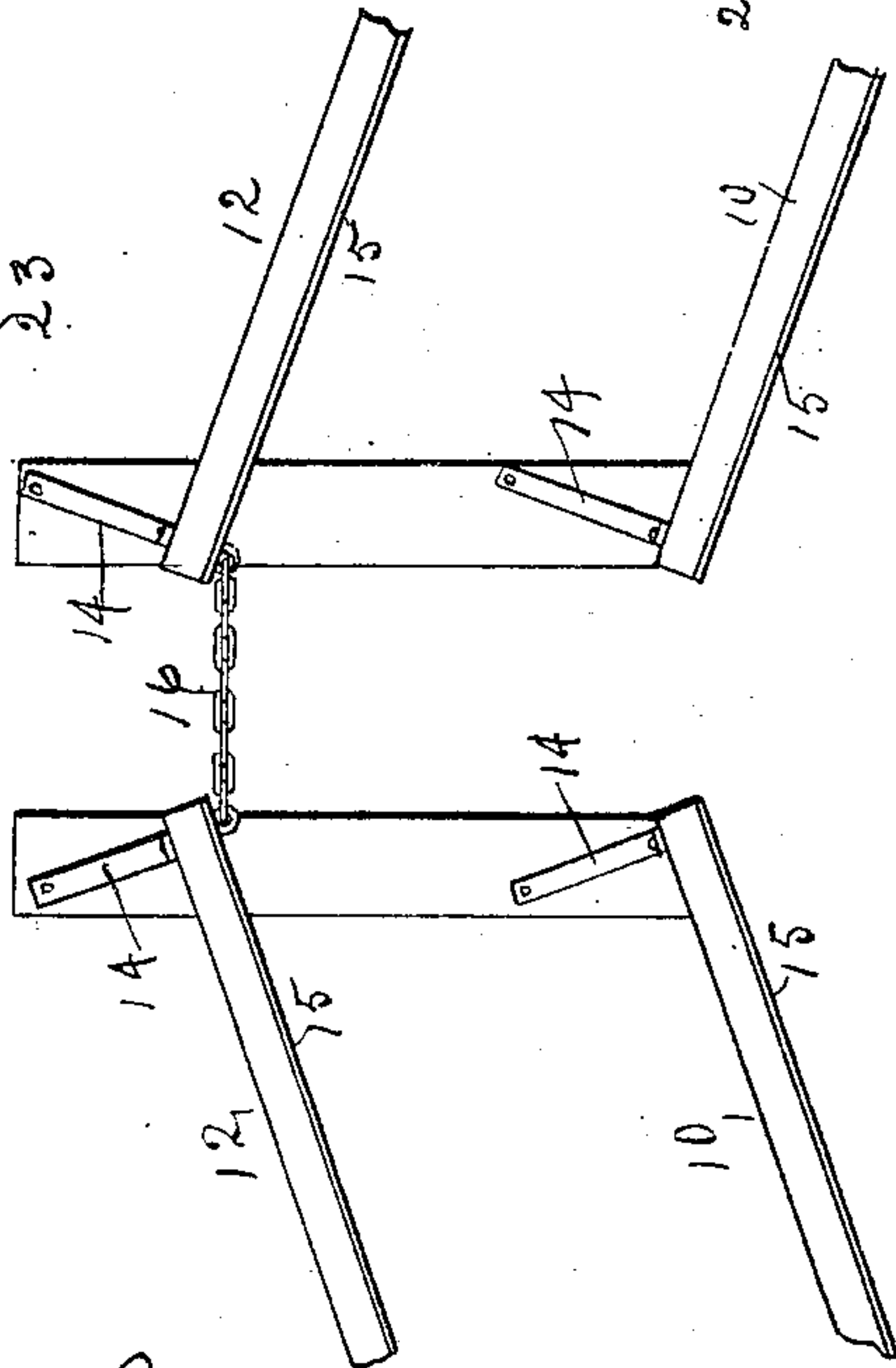
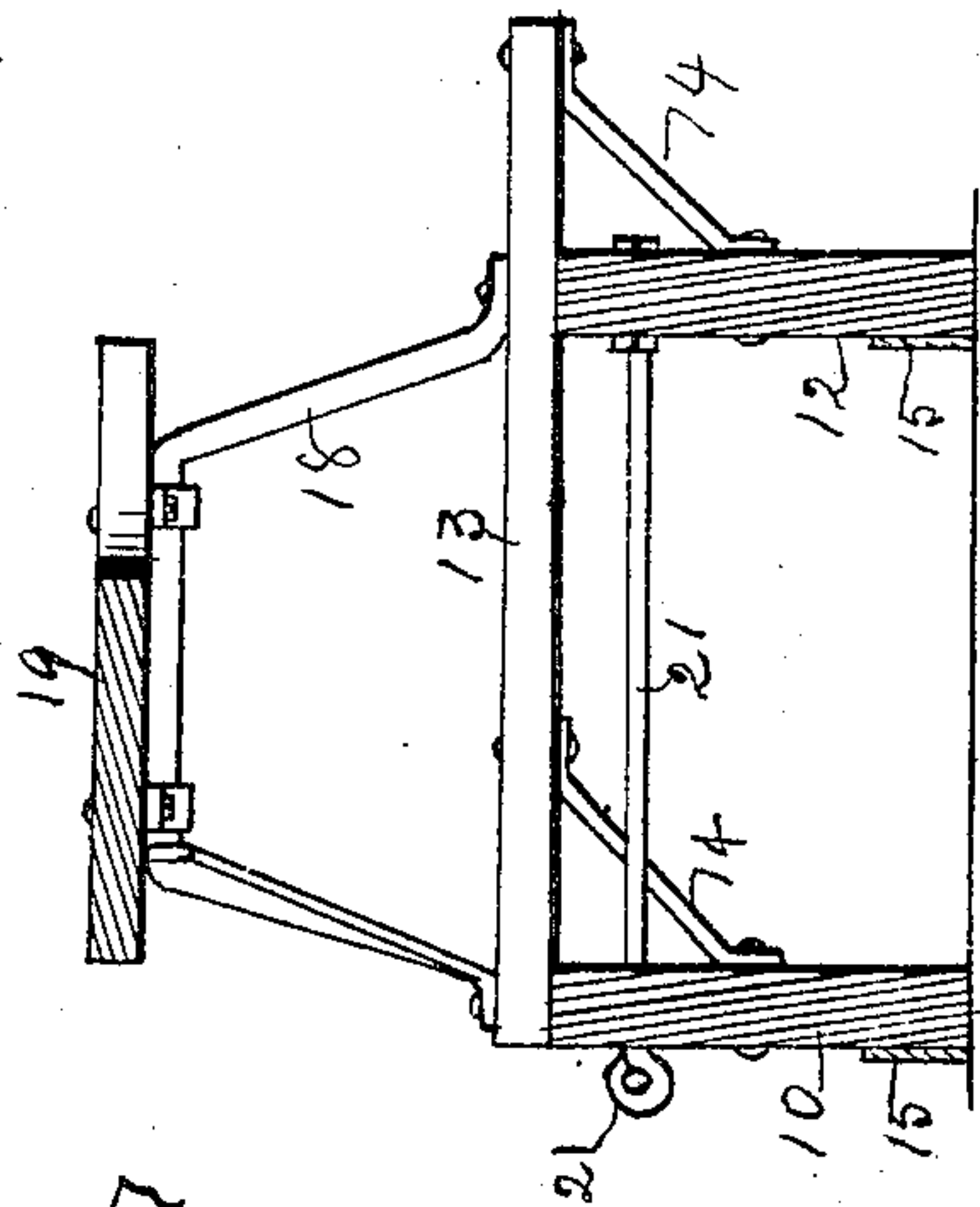


Fig. 2

Witnesses:
H. H. Leickbrock.
A. H. Orwig.

Inventor: George Alexander,
By Thomas G. Orwig, Attorneys.

UNITED STATES PATENT OFFICE.

GEORGE ALEXANDER, OF STATE CENTER, IOWA.

DUPLEX ROAD-GRADER DRAG.

No. 879,805.

Specification of Letters Patent.

Patented Feb. 18, 1908.

Application filed September 3, 1907. Serial No. 391,727.

To all whom it may concern:

Be it known that I, GEORGE ALEXANDER, a citizen of the United States, residing at State Center, in the county of Marshall and State of Iowa, have invented a new and useful Duplex Road-Grader Drag, of which the following is a specification.

My object is to provide an oscillating duplex road scraper drag specially adapted for simultaneously scraping ground from each side of a road towards the center as the machine is advanced and as required for making the road higher in the middle than at the sides and to incline downward in opposite directions from the center.

My invention consists in the construction, arrangement and combination of two mating and reversely inclined frames and scrapers as hereinafter set forth, pointed out in my claims and illustrated in the accompanying drawings, in which:—

Figure 1 is a perspective view that shows the complete structure as required for practical use. Fig. 2 is a transverse sectional view on the line $x\ x$ of Fig. 1. Fig. 3 shows the inner and rear ends of the two frames inverted and flexibly connected by a chain.

The numerals 10 designate straight wooden front bars of the frames that may vary in length and width as desired, and 12 are the corresponding rear bars of the two uniform frames shown in Fig. 1. Each pair of bars 10 and 12 are in parallel position and rigidly connected by short cross bars 13 fixed on their tops in inclined positions at their ends and reinforced by braces 14 as shown. To the lower parts of the front faces and lower edge portions of the front bars 10 are fixed metal plates or scrapers 15.

The inner and rear end portions of the frames are flexibly connected by a chain 16, as shown in Fig. 3, and as required to allow them longitudinal and also up-and-down motion when in practical operation. On the tops and central portions of the two frames are fixed cross bars 17, and on the said cross bars are fixed bearers 18 and to said bearers is hinged a reach 19, as shown in Figs. 1 and 2, or in any suitable way as required to allow the frames independent longitudinal motion and also vertical and oscillating motion when the machine is advanced on a roadway.

A driver's seat is fixed on the top and center of the reach 19. Long eyebolts 21 are fixed in the front and rear bars 10 and 12

of the two uniform and coupled frames to reinforce the frames and also for pivotally connecting rods 22 to the frames. The rods are connected at their front ends by a ring 23 and thus adapted for connecting a double-tree thereto as required for hitching horses to the front and center of the machine.

Having thus set forth the purpose of my invention and its construction the manner of its use and practical operation and utility will be obvious.

What I claim as new and desire to secure by Letters-Patent, is:

1. A duplex road scraper drag comprising two mating and reversely inclined frames composed of parallel straight bars rigidly connected by short cross bars fixed thereto, metal scrapers fixed to the front faces and lower edge portions of the parallel bars, a chain fixed to the inner ends of the frames, reach bearers fixed on the tops of the two frames and a reach pivotally connected with the reach bearers, to operate as set forth.

2. A duplex road scraper drag comprising two mating and reversely inclined frames composed of parallel straight bars rigidly connected by short cross bars fixed thereto, metal scrapers fixed to the front faces and lower edge portions of the parallel bars, a chain fixed to the inner ends of the frames, reach bearers fixed on the tops of the two frames and a reach pivotally connected with the reach bearers, and means for hitching horses to the flexibly connected frames, to operate as set forth.

3. A duplex road scraper drag comprising two mating and reversely inclined frames composed of parallel straight bars rigidly connected by short cross bars fixed thereto, metal scrapers fixed to the front faces and lower edge portions of the parallel bars, a chain fixed to the inner ends of the frames, reach bearers fixed on the tops of the two frames and a reach pivotally connected with the reach bearers, a seat on the reach, bolts fixed in the parallel bars of the frames, rods pivotally connected with said bolts and the front ends of the rods connected for hitching horses thereto, arranged and combined to operate as set forth.

GEORGE ALEXANDER.

Witnesses:

JOANNA ALEXANDER,
MARGARETTA A. E. ALEXANDER.