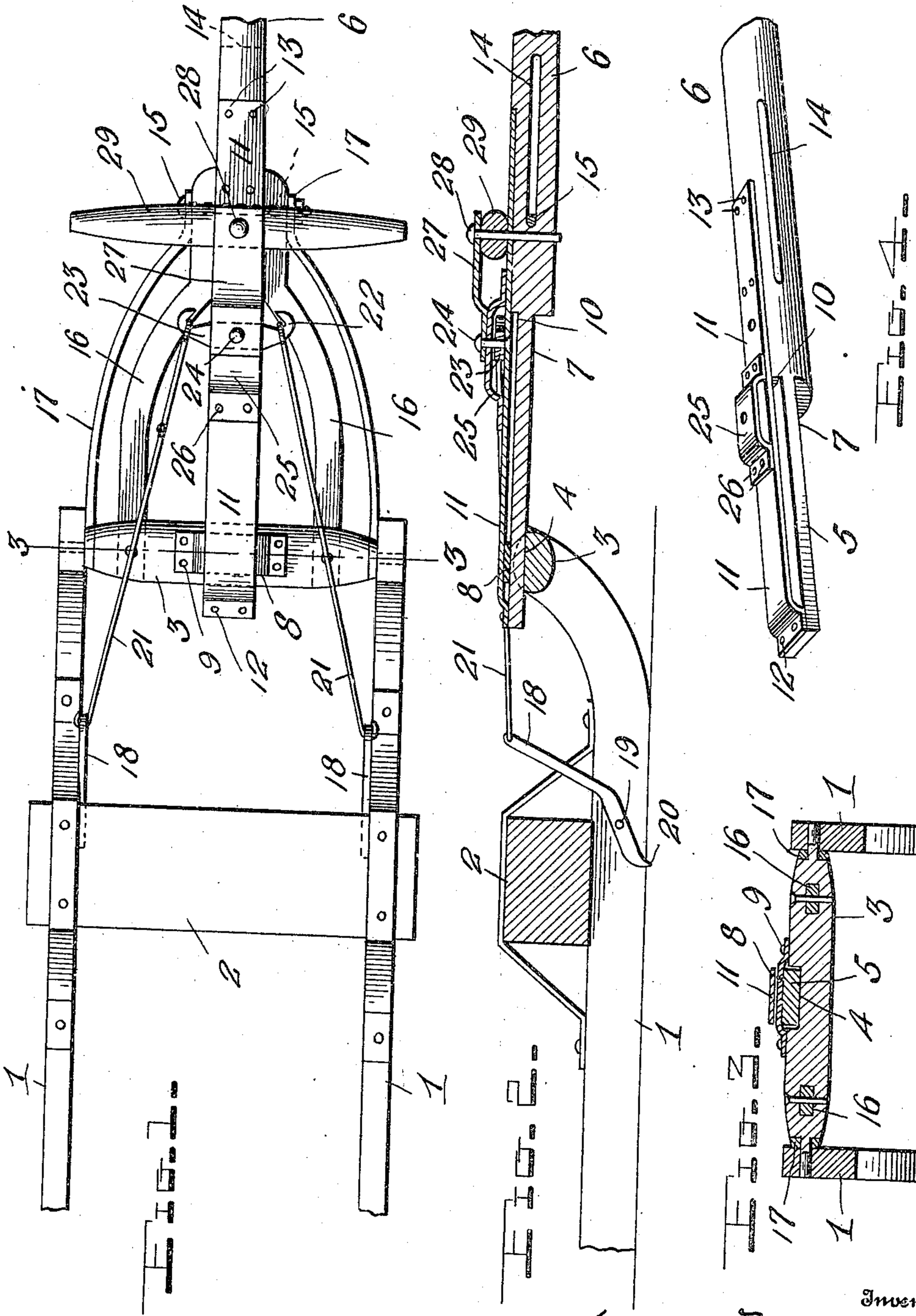
W. NICHOLS.

SLED BRAKE.

APPLICATION FILED MAY 11, 1909.

948,651.

Patented Feb. 8, 1910.



Witnesses

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WARREN NICHOLS, OF DEERHEAD, NEW YORK.

SLED-BRAKE.

948,651. Specification of Letters Patent. Patented Feb. 8, 1910.

Application filed May 11, 1909. Serial No. 495,323.

To all whom it may concern:

Be it known that I, WARREN NICHOLS, a citizen of the United States, residing at Deerhead, in the county of Essex and State of New York, have invented certain new and useful Improvements in Sled-Brakes, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in sled brakes, and consists of the novel features of construction and the combination and arrangement of parts hereinafter fully described and claimed.

The object of the invention is to provide a simple and practical device of this character which may be produced at a small cost and will be strong and durable in use and which will throw the draft lower down and thereby allow the animals to pull a heavier load.

The above and other objects of the invention are attained in its preferred embodiment illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of a portion of a sled showing the improved brake applied thereto; Fig. 2 is a vertical longitudinal section; Fig. 3 is a transverse section taken on the plane indicated by the line 3—3 in Fig. 1; and Fig. 4 is a detail perspective view of the rear portion of the tongue and the parts attached thereto.

Referring more particularly to the drawings, 1 denotes the sled runners which are connected by a knee 2 and by a roller 3. The latter has its ends pivotally mounted in the forward upturned ends of the runners and in the center of its upper face is a transverse recess 4 to receive the reduced rear end 5 of the draft tongue 6. Said rear end 5 of the tongue has its bottom face recessed, as shown at 7, to enter and slide in the recess 4 and it is retained in the latter by a U-shaped strap 8 which extends over said recess and has its ends attached at 9 to the top of the roller, as more clearly shown in Fig. 3 of the drawings. The upper face of the rear end 5 of the tongue is recessed or cut away, as shown at 10, to receive the strap or plate 8 and extending over said recessed end is a longitudinal strap or plate 11, the rear end of which is offset and secured, as at 12, to the end 5 of the tongue and the forward end of which extends beyond the recess 10 and is secured as at 13. Formed in the tongue 6 is a transverse slot 14 to slidably receive a pin 15 which unites the forward ends of two hounds 16 and two braces 17. Said hounds 16 have their diverging rear ends secured to the roller 3 on opposite sides of its center and their forward ends slidably receive the tongue 6 between them. The braces 17 are adapted to strengthen the hounds 16 and they have their diverging rear ends secured to the roller 3 adjacent its ends. It will be seen that by means of the constructions just described, the tongue will be connected to and supported by the roller 3 but will have a limited longitudinal sliding movement thereon for the purpose of operating the brake mechanism.

The brake mechanism comprises two levers 18 pivoted intermediate their ends at 19 upon the inner faces of the runners 1 and having their rear ends shaped to provide down-turned hook portions 20 and their forward ends projecting upwardly and connected to links 21. Said links converge forwardly and have at their front ends eyes to loosely engage hooks or eyes 22 on a transverse lever 23. The latter is pivoted at its center on a vertical pivot 24 which passes through the strap or plate 11 and a longitudinally extending U-shaped strap 25 beneath which said lever 23 is disposed and the ends of which are secured at 26 to the strap 11. The pivot 24 also serves to connect to the tongue a longitudinal strap or plate 27 for reinforcing the upper end of a draw bolt 28 which carries the doubletree 29. Said draw bolt passes through the strap or plate 27, the doubletree 29, the forward end of the strap 11 and the tongue 6 to pivotally mount the doubletree so that said strap 11 serves as a wear plate for the same.

Having thus described the invention what is claimed is:

A sled brake comprising connected runners, a roller arranged between the runners and having the center of its upper face formed with a transverse recess, a strap covering said recess, a tongue having its rear end recessed upon its top and bottom faces and slidable beneath said strap in the recess of the roller, a longitudinal strap secured to the top of the tongue and extending over the recess in the top of the rear portion thereof and over said strap upon the roller, said tongue being also formed with a transverse slot, a U-shaped strap arranged longitudinally upon the top of the strap on said

tongue, a pivot in the last mentioned strap, a transverse lever arranged on said pivot, brake levers, links connecting the latter to said transverse lever, hounds secured at their rear ends to the roller and having their front ends spaced apart to receive said tongue between them, braces for said hounds and a transverse fastening passed through said braces, said hounds and the slot in the tongue.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

WARREN NICHOLS.

Witnesses:

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