E. SANNER.

AUTOMATIC VEHICLE BRAKE.

APPLICATION FILED JUNE 6, 1908.

924,691. Patented June 15, 1909.

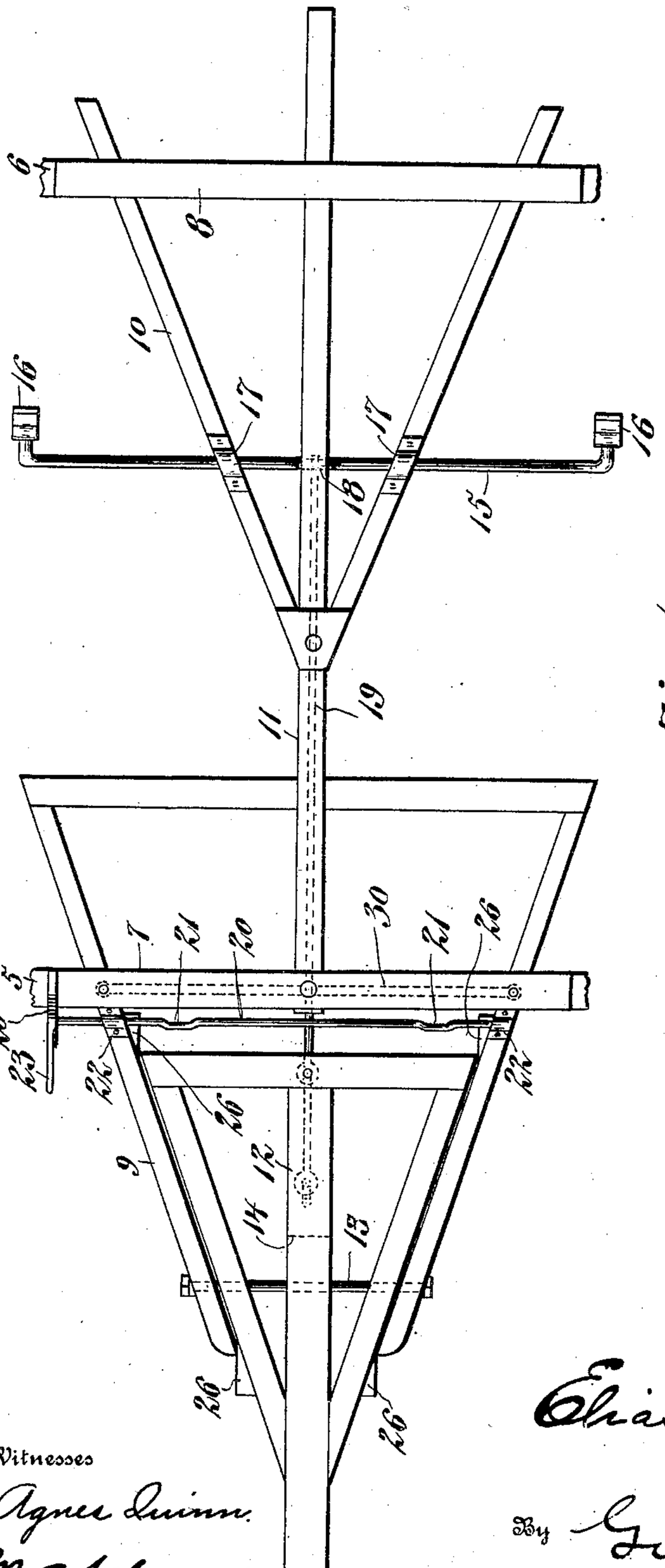

Fig. 1.

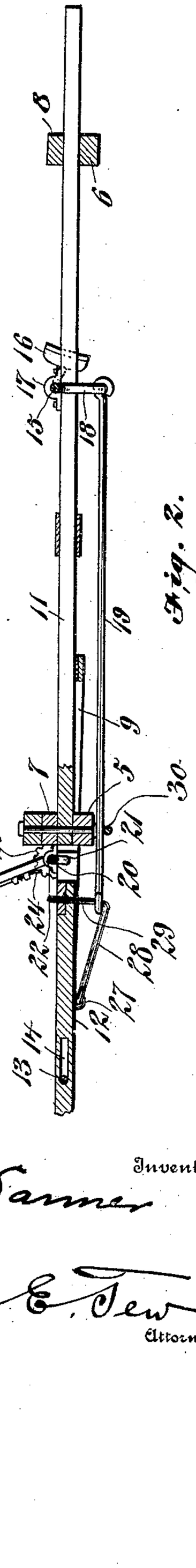

Fig. 2.

Witnesses

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ELIAS SANNER, OF COLLEGE MOUND, MISSOURI.

AUTOMATIC VEHICLE-BRAKE.

No. 924,691. Specification of Letters Patent. Patented June 15, 1909.

Application filed June 6, 1908. Serial No. 437,129.

To all whom it may concern:

Be it known that I, ELIAS SANNER, a citizen of the United States, residing at College Mound, in the county of Macon and State of Missouri, have invented certain new and useful Improvements in Automatic Vehicle-Brakes, of which the following is a specification.

This invention relates to that class of automatic wagon brakes which are put into action by the back pressure in descending a hill, and which are automatically released when a level grade is reached. The tongue or pole has a lengthwise movement and is connected to the brakes in such a manner that they will be applied by the holding back of the team. Means are also provided for rendering the brake-operating mechanism inoperative so that the wagon may be backed without setting the brakes.

The object of the present invention is to provide a brake apparatus of this kind which is simple in construction, reliable in operation, and which can be readily applied to any ordinary running gear without modifying or changing the structure thereof.

In the accompanying drawing, Figure 1 is a plan view of a vehicle running gear showing the application of the invention. Fig. 2 is an elevation partly in section.

Referring specifically to the drawing, 5 denotes the front axle, and 6 the rear axle. The front sand-board is indicated at 7, the rear sand-board at 8, the front hounds at 9, the rear hounds at 10, the reach at 11 and the tongue or pole at 12. The tongue 12 is pivoted as usual to the front hounds by means of a transverse bolt 13. The hole 14 in the tongue through which the bolt passes is elongated so that the tongue may have longitudinal movement for a purpose to be presently described.

On the rear hounds 10 is mounted a brake-beam 15 which is fitted at its ends with brake-shoes 16. The brake-beam is in the form of a rock-shaft which is mounted in bearings 17 on the rear hounds. The rock-shaft has a bend 18 extending under the reach and forming a crank which is connected by a rod 19 to the bottom of the tongue near the rear end thereof, whereby the longitudinal movement of the tongue heretofore referred to may be utilized to operate the brake.

The device for preventing application of the brake when the wagon is being backed is a rock-shaft 20 having offsets 21 which are adapted to be swung so as to abut against the rear end of the tongue whereby the latter is prevented from sliding rearwardly to apply the brake. The rock-shaft 20 is mounted in bearings 22 on the front hounds, and is fitted with a hand-lever 23 for operating it to bring the offsets against the rear end of the tongue or to swing them out of the way. For locking the hand-lever 23, it is provided with a latch 24 which is engageable with a segment-rack 25 mounted on the front sand-board 7.

To the inner sides of the front hounds adjacent the front axle, and to the outer sides of the tongue hounds near the front ends thereof are secured guide-blocks 26 which are for the purpose of guiding the tongue so that it will slide back and forth between the hounds in a straight line without lateral movement. The rear ends of the tongue hounds move in contact with the inner sides of the guide blocks on the front hounds 9, and the blocks at the front ends of the tongue hounds move in contact with the front ends of the hounds 9.

In order that the tongue may swing on its pivot 13 without disturbing the rod 19, the latter is connected to the tongue in the following manner: To the rear end of the tongue, on the bottom thereof is secured by means of a staple 27 a rod 28 which is bent upwardly at its free end as indicated at 29 to extend loosely through a vertical opening in the tongue. The end of the rod 19 has an eye through which the portion 29 passes at a fit sufficiently tight to hold the rod 28 and prevent drop thereof. The rod 19 also rests on a strap 30 secured to the bottom of the axle 5.

The brake is applied when going down hill by the back pressure of the team on the tongue which slides the same rearwardly, whereupon by reason of the connection between the tongue and the brake-beam, the brake is set. It is to be understood of course that the offsets will normally be in the position shown in the drawing, out of the way of the rear end of the tongue so that it may slide rearwardly as stated. Upon reaching a level grade, the pull of the team on the tongue slides the same forwardly and the brake is released. To lock the tongue against rearward movement, in order that the wagon may be backed without applying the brake, the rock-shaft 20 is swung in a direction

to bring the offsets 21 against the rear end of the tongue. By the guide-blocks 26 the tongue is made to move in a straight line so that there is no danger of the connection between the tongue and the brake-beam binding or getting stuck.

I claim:

In a vehicle brake, the combination of a brake beam, a pivoted longitudinally-movable tongue having a vertical opening therein, an angular rod flexibly connected at its front end to the under side of the tongue near the rear end thereof and having an upwardly-projecting branch normally extending loosely through the vertical opening in the tongue, and a rod connecting the said rod and the brake beam and supporting the angular rod in position with its branches in the said opening when the front end of the tongue is raised.

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

ELIAS SANNER.

Witnesses:

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