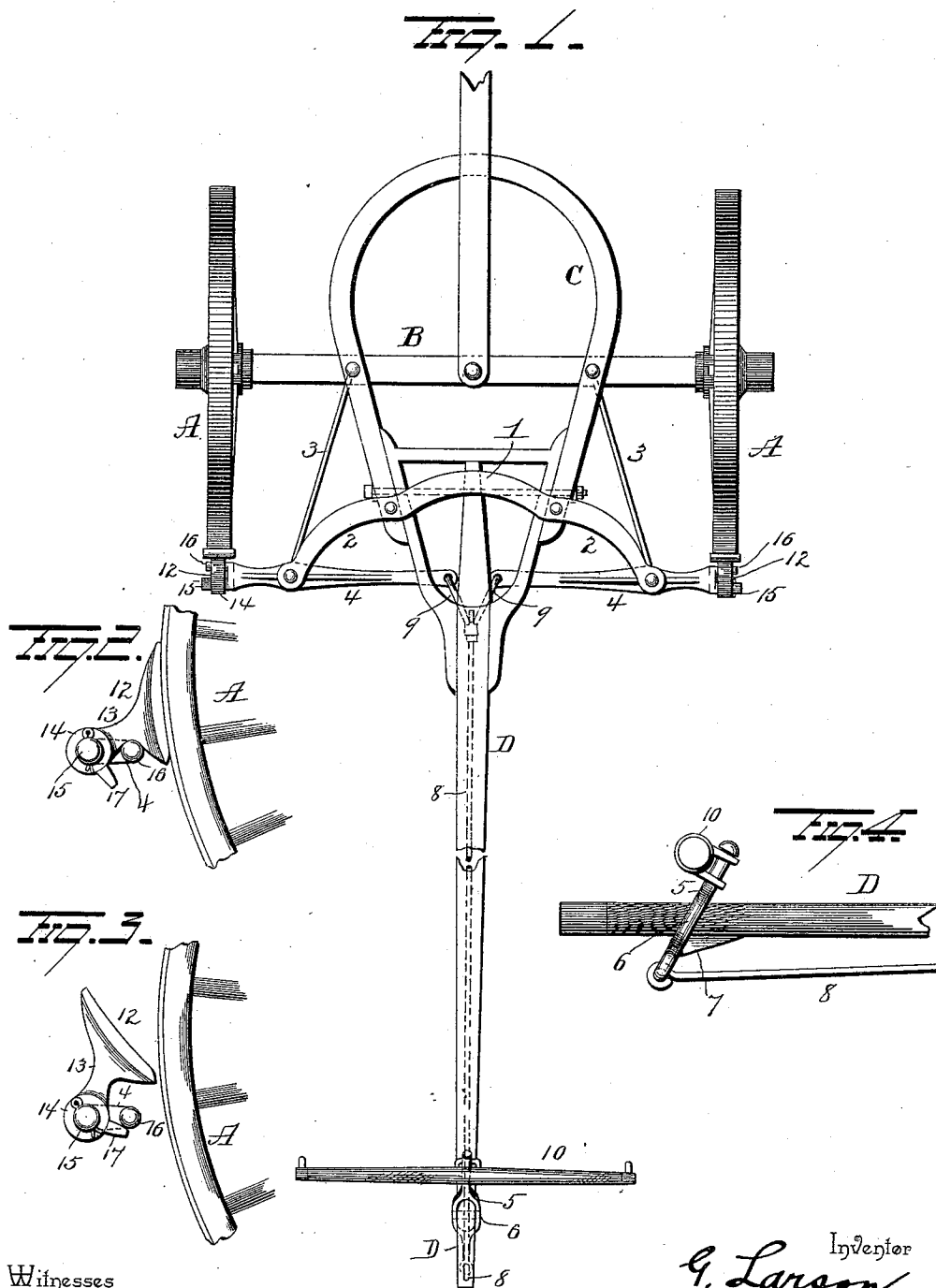


(No Model.)

G. LARSON.
AUTOMATIC WAGON BRAKE.

No. 565,469.

Patented Aug. 11, 1896.



Witnesses
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UNITED STATES PATENT OFFICE.

GILBERT LARSON, OF WAUKON, IOWA.

AUTOMATIC WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 565,469, dated August 11, 1896.

Application filed April 2, 1896. Serial No. 585,973. (No model.)

To all whom it may concern:

Be it known that I, GILBERT LARSON, a resident of Waukon, in the county of Allamakee and State of Iowa, have invented certain new and useful Improvements in Automatic Wagon-Brakes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in automatic wagon-brakes; and it consists in certain novel features of construction and combinations and arrangements of parts, as hereinafter set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view illustrating my improvements. Figs. 2, 3, and 4 are views illustrating certain details.

A represent the front wheels of a wagon; B, the axle mounted therein; C, the hounds, and D the tongue of a wagon. A transverse beam 1 is secured to the forward portion of the hounds and made with laterally-projecting arms 2 2, the latter being braced by means of brace-rods 3 3, said brace-rods extending from the outer ends of said laterally-projecting arms to the axle. Brake-levers 4 4 are pivotally connected between their ends to the free ends of the laterally-projecting arms 2, the outer ends of said levers terminating in line with the wheels and the inner ends of said levers approximating each other under the tongue. A lever 5 is located at or near the forward end of the tongue, and made with a loop or yoke portion 6 between its ends, for the reception of said tongue, the hold-back 7 on the tongue serving as a fulcrum for said lever. To the lower end of the lever 5 a rod 8 is attached, and at its rear end two rods or links 9 9 are pivotally connected, the other ends of said rods or links being pivoted, respectively, to the inner ends of the brake-levers. A flexible connection is thus formed between the lever 5 and the brake-levers. The neck-yoke 10 is provided with perforated lugs, whereby to connect it to the upwardly-projecting portion of the lever 5. From this construction and arrangement of parts it will be seen that when the team tends to hold back the lever 5 will be turned on its fulcrum, thus

causing a pull on the rods 8 9, which motion is transmitted to the brake-levers, causing the latter to turn on their fulcrums and bring the brake-shoes 12 on the ends of said levers against the wheels.

Each brake-shoe 12 is made with a downwardly and forward projecting arm 13, having a perforated boss or enlargement 14 at its free end for the reception of a pintle 15, projecting from the brake-lever. The brake-lever is also made with an arm 16, with which a projection 17 on the boss or enlargement 14 is adapted to engage, said arm 16 thus constituting a stop for the brake-shoe. From this construction and arrangement of parts it will be seen that the brake-shoe is mounted eccentrically with respect to the wheel, so that when the shoe is brought against the wheel, as above explained, it will bind tightly against the same. When the wagon is backed, however, and the wheel consequently made to turn in the reverse direction, the brake-shoe will turn on the pintle 15 and move away from the wheel, as shown in Fig. 3, being limited in its backward movement by the engagement of the projection 17 with the arm or stop 16.

My improvements are exceedingly simple in construction, not liable to get out of order, are accurate in operation, cheap to manufacture, easy to apply to any wagon, and are effectual in every respect in the performance of their functions.

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

1. In a wagon-brake, the combination with arms projecting laterally from the running-gear of the wagon, of braces extending from said arms to the axle of the wagon, brake-levers pivoted between their ends to said laterally-projecting arms, brake-shoes on the outer ends of said levers, a lever pivoted between its ends to the forward end of the wagon-tongue and adapted to have a neck-yoke attached to one arm thereof, and flexible connections between the other arm of said lever and the brake-levers, substantially as set forth.

2. In a wagon-brake, the combination with a brake-lever having two arms at one end, of a brake-shoe mounted on one of said arms

and adapted to normally rest on the other arm, and a projection on the shoe adapted to engage the arm on which the shoe rests when the shoe is turned backwardly.

- 5 3. In a wagon-brake, the combination with a brake-lever having two arms at its free end, of a brake-shoe eccentrically mounted on one of said arms, and normally resting on the other arm, and a projection on the shoe adapt-

ed to engage the arm on which the shoe rests, 10 when the latter is turned backwardly.

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

GILBERT LARSON.

Witnesses:

WM. HENNESSY,
JERRY SULLIVAN.