

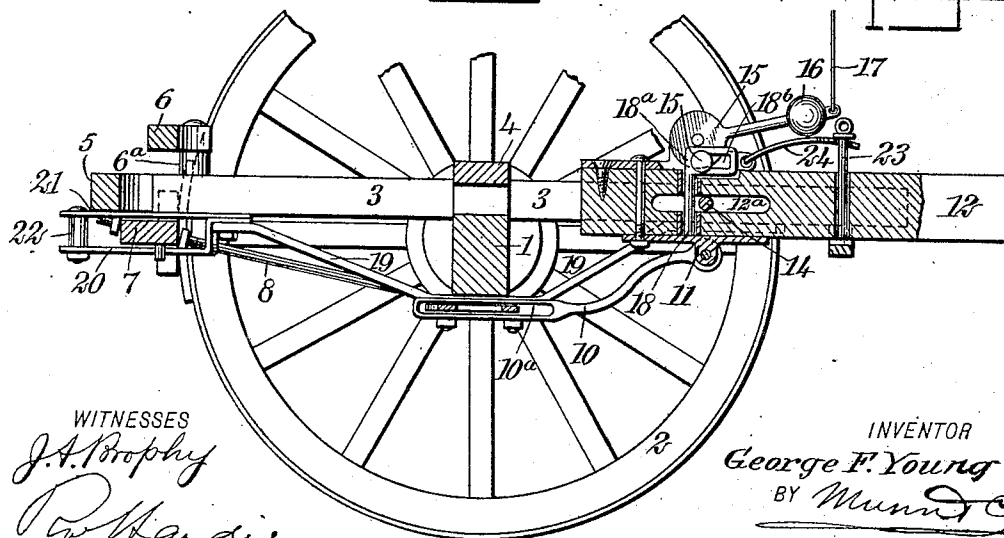
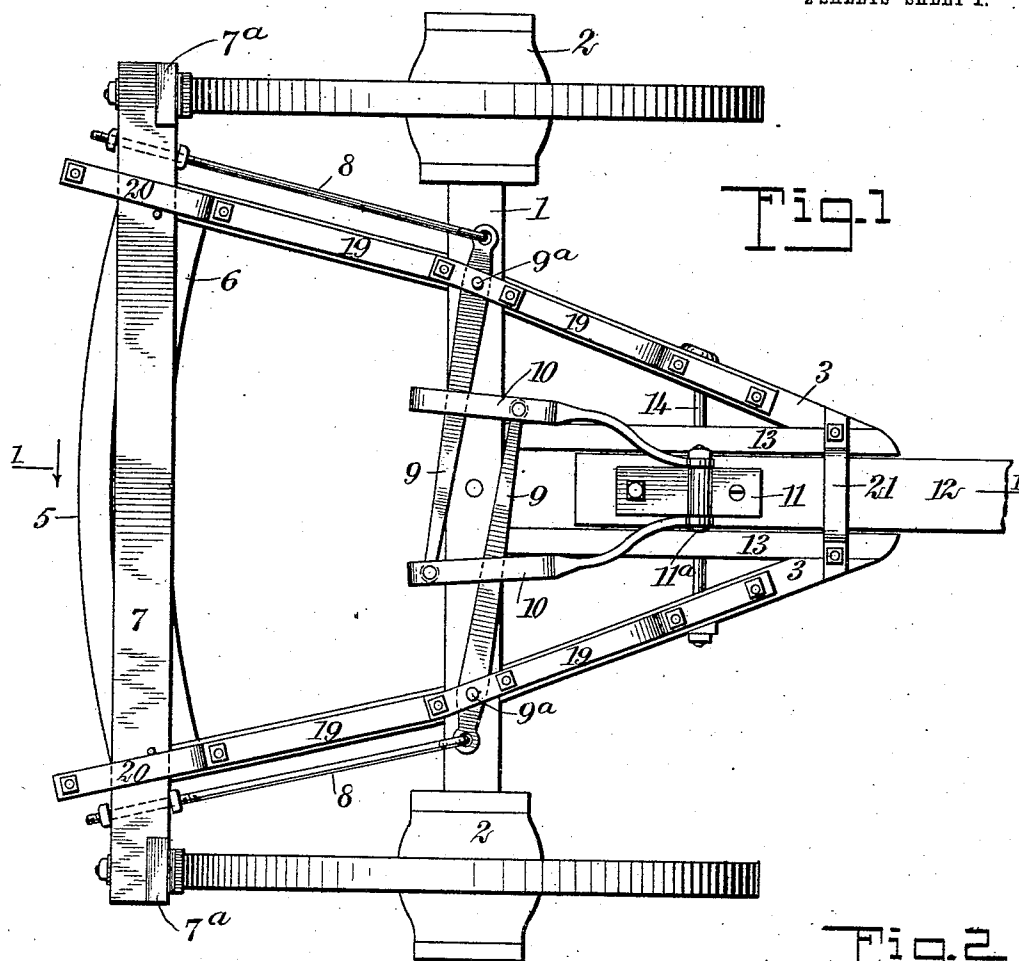
No. 849,307.

PATENTED APR. 2, 1907.

G. F. YOUNG.
WAGON BRAKE.

APPLICATION FILED AUG. 7, 1908.

2 SHEETS—SHEET 1.



WITNESSES
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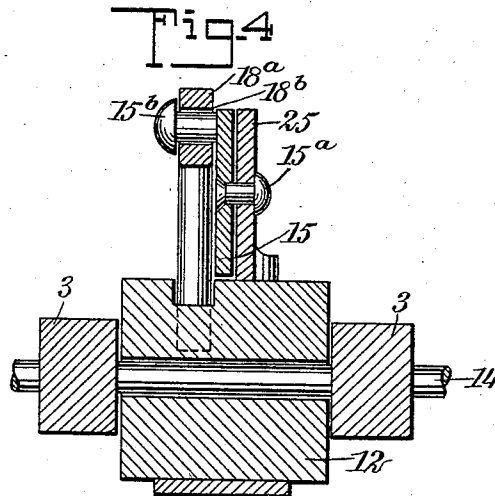
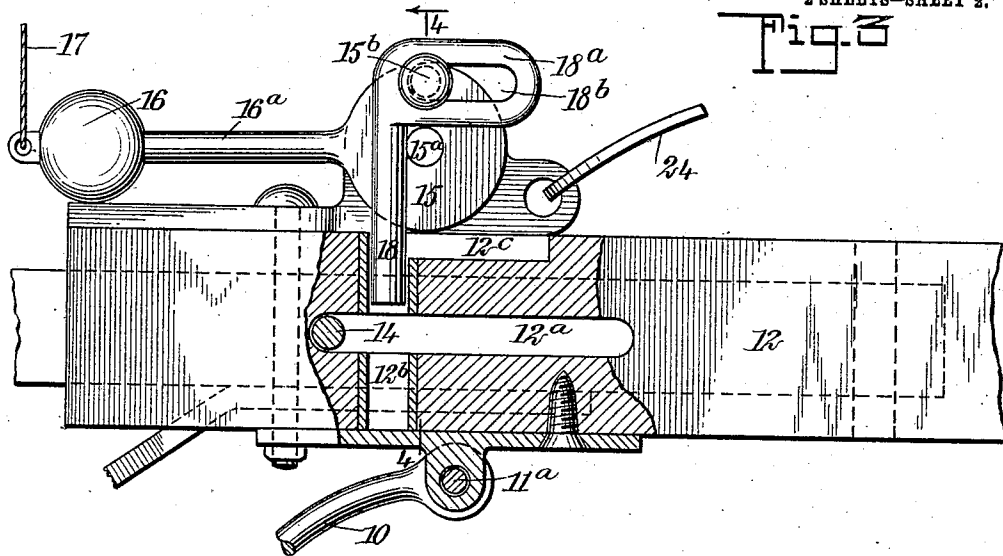
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UNITED STATES PATENT OFFICE.

GEORGE F. YOUNG, OF SOUTH KORTRIGHT, NEW YORK.

WAGON-BRAKE.

No. 849,307.

Specification of Letters Patent.

Patented April 2^d 1907.

Application filed August 7, 1906. Serial No. 329,534.

To all whom it may concern:

Be it known that I, GEORGE F. YOUNG, a citizen of the United States, and a resident of South Kortright, in the county of Delaware and State of New York, have invented a new and Improved Wagon-Brake, of which the following is a full, clear, and exact description.

My invention relates to brakes adapted to be used on wagons carrying heavy loads, and has for its object to provide a brake which is simple in construction, durable in use, and readily operated under all conditions. This I accomplish by the means illustrated in the accompanying drawings, in which drawings like characters of reference indicate like parts throughout the views, and in which—

Figure 1 is a plan view of the under side of a forward running-gear of a wagon embodying my invention. Fig. 2 is a vertical longitudinal section taken on the line 1 1 of Fig. 1, showing the parts reversed. Fig. 3 is a side elevation, partly in section, of means for locking the pole in position; and Fig. 4 is a transverse vertical section taken on the line 4 4 of Fig. 3.

As illustrated in the drawings, an axle 1 is mounted upon carrying-wheels 2. Hounds 3 are supported in said axle and braced at their rear ends by means of a cross-bar 5. An auxiliary cross-bar 6, supported on spools 6^a, is also secured to the rear ends of the hounds. Parallel guide-bars 13 are connected to the forward ends of the hounds 3 and extend backward and are secured at their rear ends to the axle 1. A brake-beam 7 extends transversely of the rear end of the hounds and is provided with brake-shoes 7^a, adapted to bear against the tires of the carrying-wheels 2. The ends of the brake-beams 7 are supported in loops formed on the ends of the hounds, consisting of upper and lower bars 20 and 21, having a spacing-spool 22 arranged between them. The ends of the brake-beam 7 are connected, by means of rods 8, with levers 9, pivoted upon the axle 1 by means of pivot-pins 9^a. The inner ends of the levers 9 are pivotally attached to hounds 10, which are connected at their forward ends by means of a pin 11^a to a bracket 11, which is secured to a pole 12. The opposite ends of the hounds 10 are formed into loops provided with longitudinal slots 10^a, adapted to receive the levers 9, which extend through such slots. The pole 12 is provided with a longitudinal slot 12^a, which extends

horizontally through the sides of the pole, adapted to receive a cross-bar 14, secured to the forward ends of the hounds 3, and the guide-bars 13, connected therewith. A vertical slot 12^b is also formed in the pole and is adapted to receive a brake-bolt 18, having a laterally-extending head 18^a, which is provided with an elongated slot 18^b. The slot 18^b receives an eccentric-pin 15^b, secured to a disk 15, which disk is mounted upon the pole 12 in any suitable manner, preferably by means of a pin 15^a, secured to a bracket 25. A shank 16^a extends outward from the disk 15, and its outer end is provided with a weight 16, having a cord 17 connected therewith. A link 24 may be secured to the bracket 25, so as to connect with a king-bolt 23, adapted to secure a draft-tree to the pole. Auxiliary hounds 19, preferably made of bar-iron, are secured at their forward and rear ends to the hounds 3, with their central portion secured to the under side of the axle 1.

The construction and arrangement of the parts are such that when the brake-bolt 18 is raised so as to clear the transverse bar 14 the pole 12 is free to be moved backward, longitudinally sliding over the cross-bar 14 by means of the slot 12^a, formed in the pole. The backward movement of the pole carries with it the hounds 10 and the inner ends of the levers 9, pivoted to such hounds. Such backward movement of the inner ends of the levers 9 draws the connecting-rods 8 forward, carrying also the brake-beam, so as to bring the brake-shoes 7^a in contact with the tires of the wagon. When, therefore, a loaded wagon having this device applied is going down an inclined grade and the team is held back, the pole 12 is thereby moved backward, with the result already described. The bolt 18 is raised in the vertical slot 12^b by means of the cord 17, attached to the weighted end 16 of the lever 16^a, connected with the disk 15 and provided with the eccentric-pin 15^b, which engages the slot 18^b of the offset head 18^a of such bolt. By means of such cord connection the lever may be reversed and the brake-bolt operated by the driver from the top of a load of hay or other high load. The weighted end 16 of the lever 16^a holds the eccentric-pin 15^b and the brake-bolt 18 in any position in which it is set. The brake may be rendered inoperative by raising the bolt 18 in its socket, drawing the pole forward, and then depressing the bolt 18 so as to extend in front of the cross-bar 14.

When so depressed, the lower portion of the offset head 18^a of the bolt 18 preferably rests in a groove 12^c, formed in the upper portion of the pole 12. When the bolt 18 extends
 5 downward into the slot 12^b in front of the cross-bar 14, a backward movement of the pole is prevented by the bolt 18 coming in contact with the cross-bar 14, thereby rendering the brakes inoperative. In such case
 10 the draft of the pole 12 is applied directly onto the cross-bar 14. The brake will operate when the bolt 18 is removed from in front of the cross-bar 14, whether this is accomplished by raising the bolt above the horizontal plane of the cross-bar 14, as shown in
 15 Fig. 3, or depressed into the slot 12^b behind said cross-bar, as shown in Fig. 2. By means of such construction a device is produced which is positive in its operation under
 20 all conditions and in all places and is not liable to get out of order. The levers 9 by being mounted upon the under side of the axle 1 on a plane below that of the brake-beam are especially effective in that by
 25 means of such construction and arrangement a downward pull is exerted on the rods 8, connecting the brake-beam 7 with such lever.

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

1. The combination with a forward running-gear, of a longitudinally-movable pole, a brake-beam connected therewith, brake-
 35 shoes mounted on said beam, a weighted pivoted lever provided with an eccentric-pin, and a bolt movable transversely of said pole, so as to prevent longitudinal movement thereof, substantially as shown and described.

40 2. The combination with a forward running-gear having hounds connected on their forward ends by a transverse bar, and parallel guide-bars, of a pole provided with a longitudinal slot adapted to engage said bar, hounds mounted on said pole, levers con-
 45 nected at their inner ends to said hounds, connecting-rods pivoted to the outer ends of said levers, a brake-beam secured to the ends of said connecting-rods, brake-shoes mounted on said beam, an eccentric lever, and a

bolt operated by said lever and movable transversely in said pole, substantially as shown and described.

3. The combination with a forward running-gear having hounds mounted upon an
 55 axle and connected at their forward ends by means of a transverse bar, of parallel guide-bars connected with the forward ends of the hounds and with the axle, auxiliary hounds secured at their central portion to the lower
 60 edge of the axle, and at their outer ends to the main hounds, a brake-beam, brake-shoes mounted on said beam, connecting-rods secured at their rear ends to said brake-beams, and pivoted at their forward ends to
 65 transverse levers mounted on the lower edge of the axle in a plane below that of the brake-beam, hounds connected with said levers, a longitudinally-movable pole connected with said hounds, a bolt movable transversely in
 70 said pole, and a lever adapted to operate said bolt, substantially as shown and described.

4. The combination with a forward running-gear, of a longitudinally-movable pole, a brake-beam connected therewith, brake-
 75 shoes mounted on said beam, a bolt movable transversely of said pole adapted to prevent longitudinal movement thereof, and a reversible weighted lever connected with said bolt, substantially as shown and described. 80

5. The combination with a forward running-gear having hounds connected at its forward end by a transverse bar and parallel guide-bars, of a pole provided with a longitudinal slot adapted to engage said bars and
 85 with a vertical aperture communicating with said slot, a brake-beam mounted on said hounds and connected with said pole, brake-shoes mounted on said beam, a bolt movable in the vertical aperture of said pole, and a reversible weighted lever connected with said
 90 bolt, substantially as shown and described.

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

GEORGE F. YOUNG.

Witnesses:

JOHN E. DAVIDSON,
 HORACE S. KERR.