

(No Model.)

B. WILCOX.
AUTOMATIC WAGON BRAKE.

No. 488,644.

Patented Dec. 27, 1892.

FIG. 1.

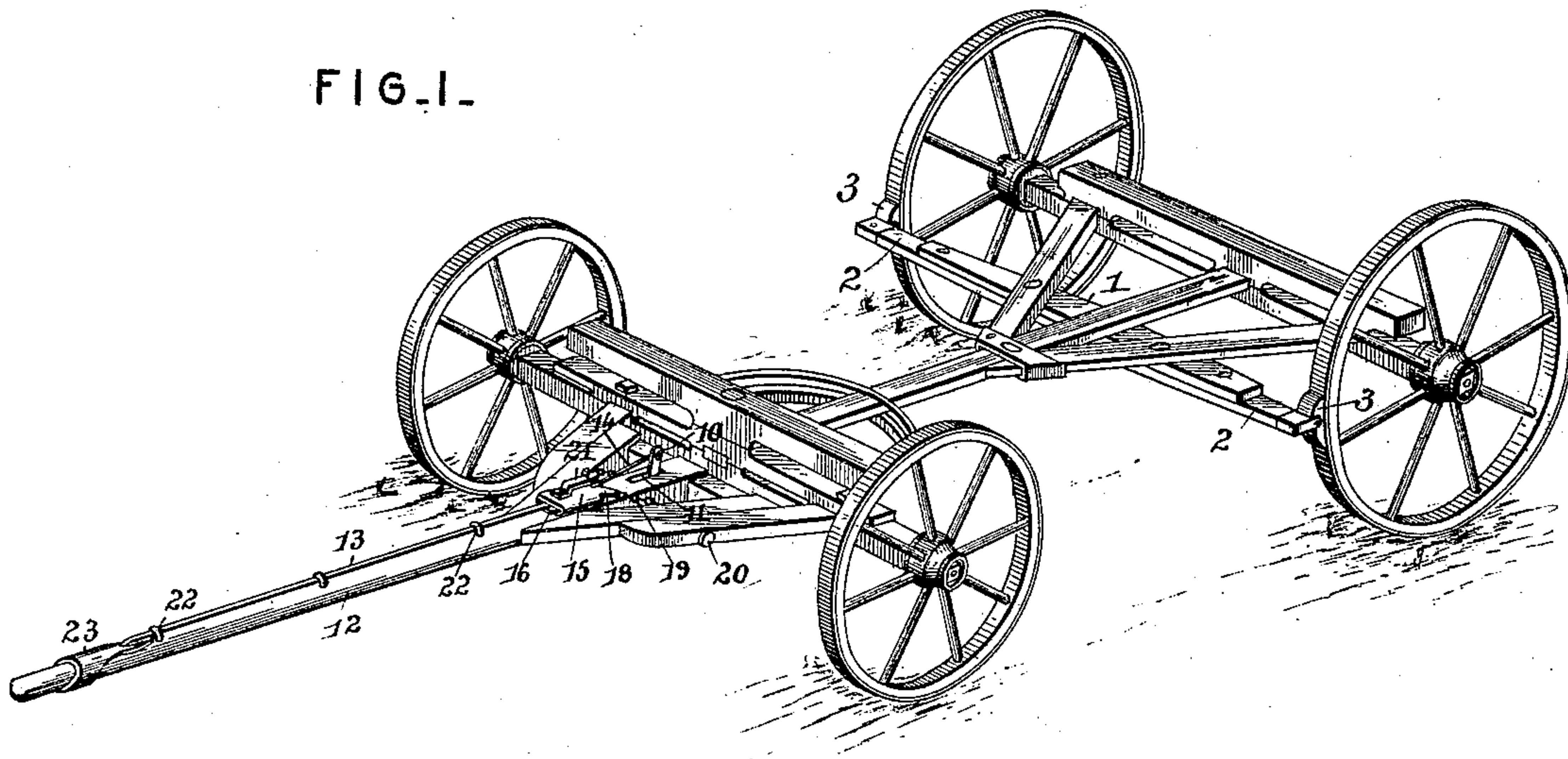


FIG. 2.

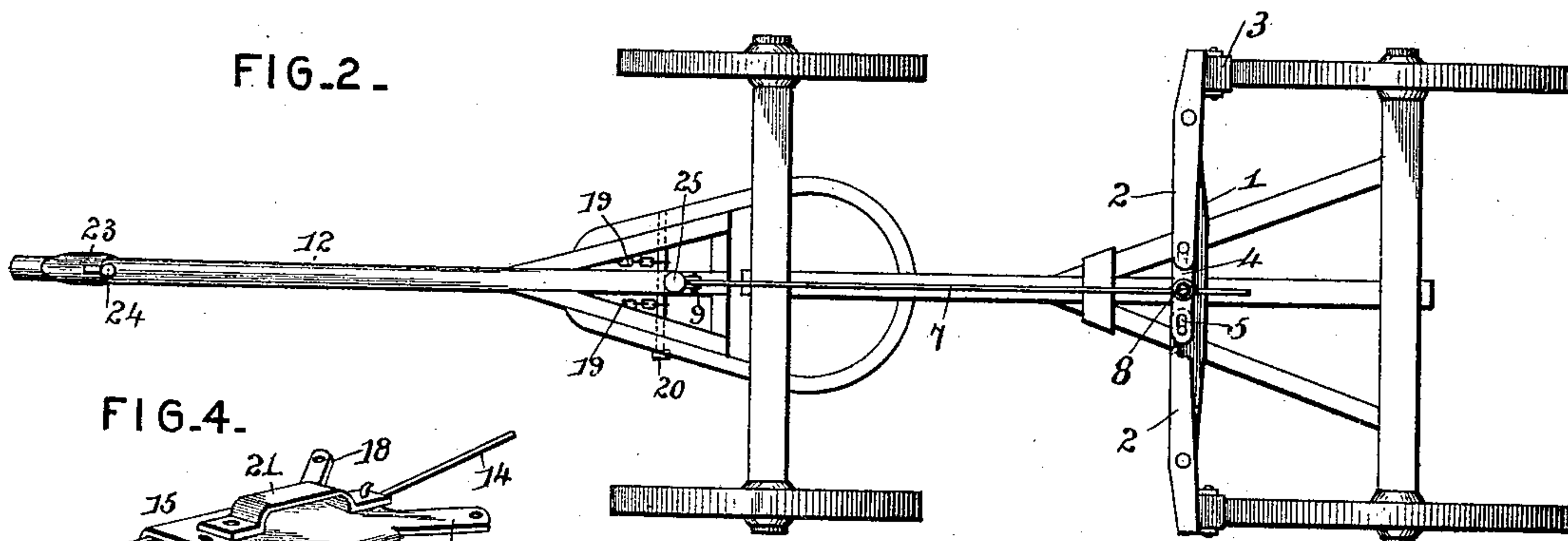


FIG. 4.

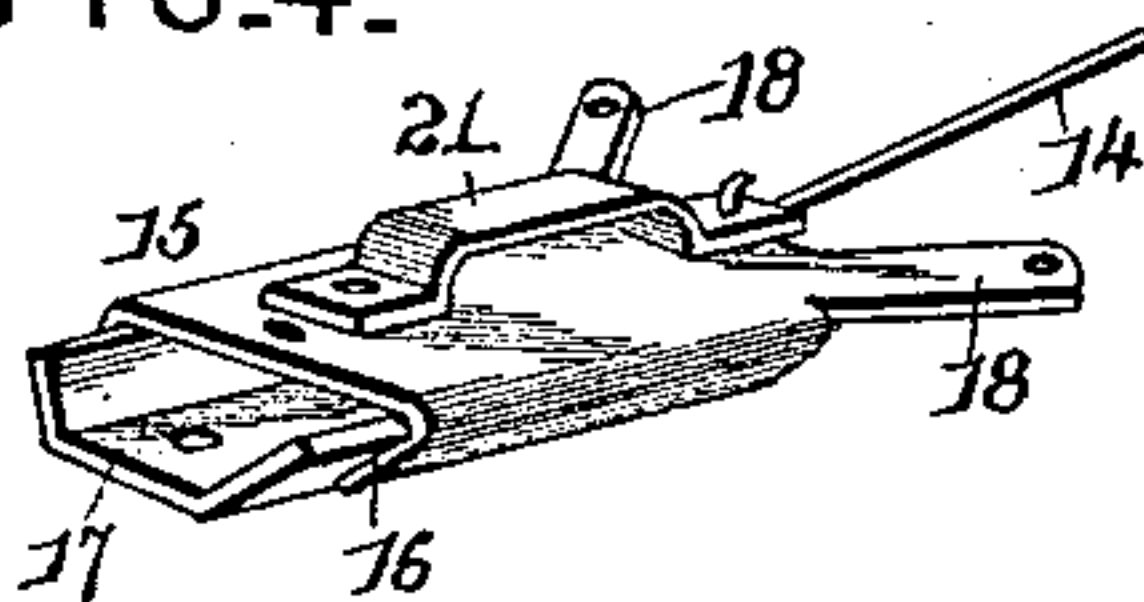


FIG. 3.

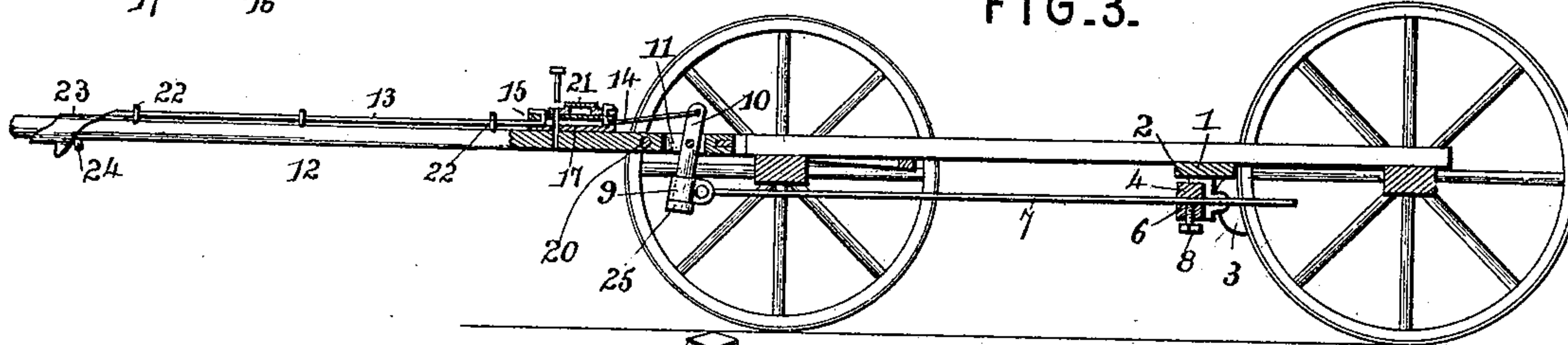
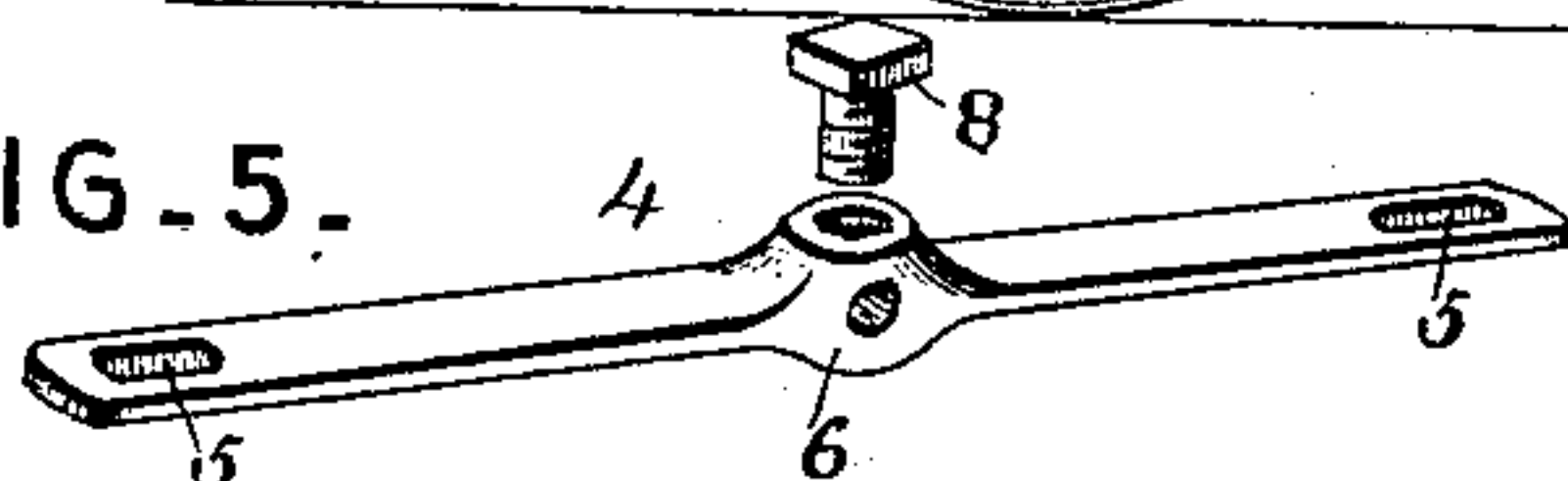


FIG. 5.



Witnesses

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BENAJAH WILCOX, OF GIBSON, NEW YORK.

AUTOMATIC WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 488,644, dated December 27, 1892.

Application filed September 22, 1892. Serial No. 446,612. (No model.)

To all whom it may concern:

Be it known that I, BENAJAH WILCOX, a citizen of the United States, residing at Gibson, in the county of Steuben and State of New York, have invented a new and useful Automatic Brake, of which the following is a specification.

The invention relates to improvements in automatic brakes.

The objects of the present invention are to improve the construction of automatic vehicle brakes, and to enable them to readily conform and yield to the cramping of the front axle.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings and pointed out in the claims hereto appended.

In the drawings—Figure 1 is a perspective view of the running gear provided with an automatic brake embodying the invention. Fig. 2 is a reverse plan view. Fig. 3 is a longitudinal sectional view. Fig. 4 is a detail view of the slide and the guide plate. Fig. 5 is a detail view of the transversely disposed connecting plate.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a transverse bar secured to the rear hound of a running gear and having fulcrumed on its lower face oppositely disposed brake levers 2 carrying brake shoes 3 at their outer ends and having their inner adjacent ends connected by a transversely disposed plate 4 provided at its ends with slots 5 to receive the pivot for securing it to the inner end of the brake lever, and having at its center a socket 6 in which is secured the rear end of a connecting rod 7 by means of a set screw 8. The set screw permits the connecting rod to be adjusted and increased and diminished in length to adjust the brake, and the slots 5 permit sufficient swinging of the brake levers to permit an application of the brake. The front end of the reach or connecting rod is provided with a horizontally disposed cylindrical collar 9 slidably mounted on the lower portion of a vertical lever 10 which is fulcrumed intermediate of its ends in a slot 11 at the rear end of the tongue 12, and which

has its upper end connected with a tongue rod 13. The lower portion of the lever is rounded so that the lever 10 and the collar 9 will readily turn on each other to permit a cramping of the wheels of the vehicle to which the running gear may be applied. The upper end of the lever 10 is connected by a link rod 14 with a slide 15 which has its front end connected to the rear end of the tongue rod, and which has its side edges bent inward on its lower face to provide ways 16 receiving upwardly extending side edges of a guide plate 17 secured to the upper face of the tongue. The rear end of the slide 15 is provided with laterally extending ears 18 to which are connected front ends of stay chains 19 which are arranged at opposite sides of the tongue and have their rear ends secured to the pivot or pin 20 which secures the rear end of the tongue between the front hounds. The slide 15 is provided with a metal supporting strap 21 having its front end perforated, and adapted to receive a pin for locking the slide rigid with the tongue to hold the brake shoes off the hind wheels during backing.

The tongue rod is arranged in suitable guides 22 and is provided at its front end with a sleeve 23 extended rearwardly at the top and forwardly at the bottom and provided with a depending lug 24 adapted to be engaged by a neck yoke center, whereby the brake is applied.

The collar at the front end of the connecting rod is limited in its sliding movement, and is prevented leaving the lever by a stop consisting of an enlargement at the lower end of the lever 10.

What I claim is—

1. The combination with a running gear, the oppositely disposed brake levers carrying brake-shoes at their outer ends, of a lever fulcrumed intermediate of its ends at the rear end of the tongue and arranged in the slot thereof and extending above and below the same, a reach rod having its rear end connected with the brake levers, and its front end provided with a collar loosely sliding on the lower portion of the lever at the rear end of the tongue, and a tongue rod connected with the upper end of the lever at the rear end of the tongue, substantially as described.

2. The combination with a running gear, the

oppositely disposed brake levers carrying
brake-shoes, of a lever 10 fulcrumed on the
rear end of the tongue and extending above
and below the same and having its lower por-
tion rounded, a tongue rod connected with
the upper end of the lever 10, and a reach rod
having its lower end connected with the brake
levers and provided at its front end with a
collar arranged loosely on the lower portion
of the lever 10 and adapted to turn on the le-
ver to permit a cramping of the running gear,
substantially as described.

3. The combination with a running gear, of
oppositely disposed brake levers carrying
brake-shoes, the plate provided at its ends
with slots and pivotally connected thereat to
the adjacent ends of the brake levers and pro-
vided with a central socket, a set screw mount-
ed on the socket, and a connecting rod having
its rear end arranged in the socket and ad-
justably secured to the plate by the set screw,
substantially as described.

4. The combination with a running gear, of
the oppositely disposed brake levers, the lever
10 fulcrumed on the tongue, a reach rod con-
nected with the lower end of the lever 10 and
to the inner ends of the brake levers, a guide
plate secured to the upper face of the tongue
and having upwardly turned edges, a slide
having its edges bent inward on its lower face
to form ways to receive the guide plate and
provided at its rear end with laterally extend-
ing ears and connected with the upper end
of the lever 10, the stay chains having their
front ends attached to said ears, and the
tongue rod connected with the front end of
the slide, substantially as described.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in
the presence of two witnesses.

BENAJAH WILCOX.

Witnesses:

GEO. PHENES,

WM. A. SPENCER.