F. A. BARLOW.
Wagon-Brake.

No. 199,176. Patented Jan. 15, 1878.

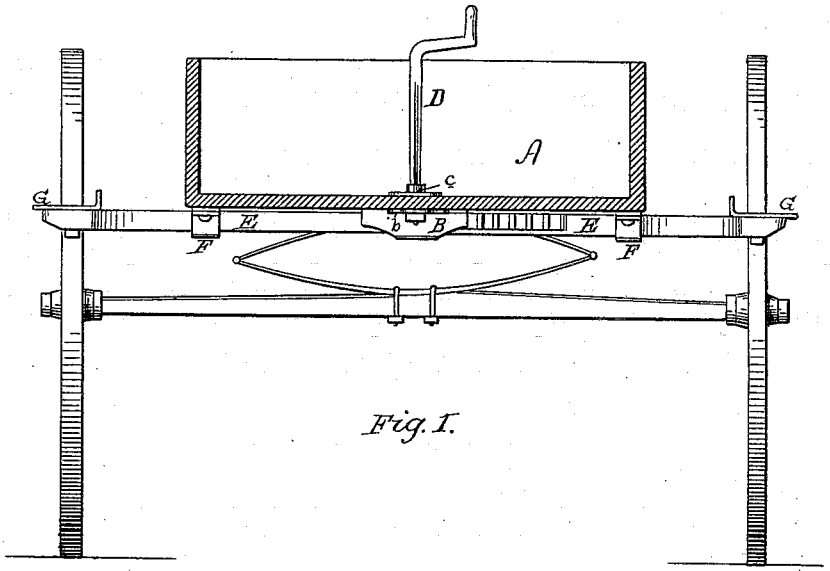


Fig. 1.

Fig. 2.

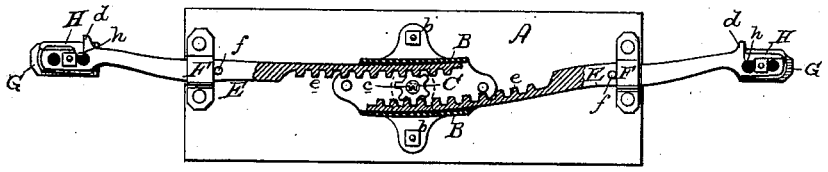
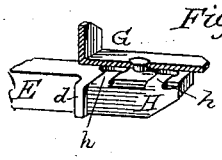


Fig. 3.



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UNITED STATES PATENT OFFICE.

FREDERICK A. BARLOW, OF LADORA, IOWA.

IMPROVEMENT IN WAGON-BRAKES.

Specification forming part of Letters Patent No. **199,176**, dated January 15, 1878; application filed December 13, 1877.

To all whom it may concern:

Be it known that I, FREDERICK A. BARLOW, of Ladora, in the county and State of Iowa, have invented certain new and useful Improvements in Invisible Locks or Brakes for Spring-Wagons, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a transverse section of a wagon with my improvement attached. Fig. 2 is a bottom view of same. Fig. 3 is a detail referred to.

This invention relates to improvements in invisible locks or brakes for spring-wagons, whereby said locks or brakes, when not in use, are adapted to form steps to enable persons to get in and out of wagons more easily and readily; and the invention consists in the combination of parts, all as hereinafter more fully described.

To enable others skilled in the art to make and use my invention, I will proceed to describe the exact manner in which I have carried it out.

In the drawings, A represents a transverse section of a wagon-box bottom, to the under side of which my improvements are applied. B represents a metallic case, provided with projections *b*, by which said case is centrally secured to the bottom A. C represents a cog-wheel, journaled between the case B and bottom A by a hollow axle, *c*, said axle passing up through the bottom A, and in which a wrench or key, D, is adapted to fit for turning the cog-wheel.

E E represent two bars, secured to the bottom A by the case B and bearings F F, near the edges of the bottom. The inner ends of the bars E pass through the case on opposite sides of the cog-wheel C, and their sides facing the cog-wheel are provided with teeth *e e*, within which the teeth of the cog-wheel mesh, and by which the bars are forced outwardly and inwardly, as desired. To the outer ends of each of the bars E, and on the top side thereof, is secured a right-angled metallic plate, G, which forms a step when the bars are drawn in, and which also forms a stop to prevent the bars from being drawn in too far.

f f represent stops on the under side of said bars, which engage with the bearings F, for limiting the outward movement of the bars. The bars E, on their rear side facing the wheels of the wagon, and at their outer ends and under the metallic plates, are provided with bearing-blocks H, secured thereto by clinching the projections *h* to the bars, two on the upper and one on the lower side of said bearing-blocks. Said blocks can, therefore, be readily removed when it is desired to replace them by new ones. The bars E are also curved and enlarged on their front sides at the points where they pass through the bearings F, so that when said bars are forced out they will at the same time press the bearing-blocks against the wheels of the wagon, thus securely locking said wheels, so as to prevent their turning. The projections *d d* on the bars E also prevent the bearing from being forced outward beyond the wheels, as they come in contact with the inner rim of the wheels when the bars are forced out.

The wrench or key extends upward and in the rear of the seat of the wagon, so as to be easily accessible to the driver when it is desired to lock the wheels.

One and one-fourth revolution of the wrench or key forces the bars outward to lock the wheels, or forces them inwardly, by which they are adapted for steps to get in and out of the wagon.

By the above-described devices the wheels can be securely locked, and the force is sufficient to slide the wheels in the driest sand.

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

1. The combination, with a vehicle-bottom, of the transversely-adjustable lock-bars E E, curved at the outer ends, whereby the outer adjustment causes the locking of the wheel, substantially as set forth.

2. The combination of the transversely-adjustable bars E E, curved at their outer ends, and provided with teeth *e e* on their inner ends, with the cog-wheel C, provided with a key for turning the same, substantially as herein set forth.

FREDERICK A. BARLOW.

Witnesses:

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