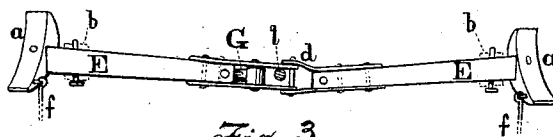
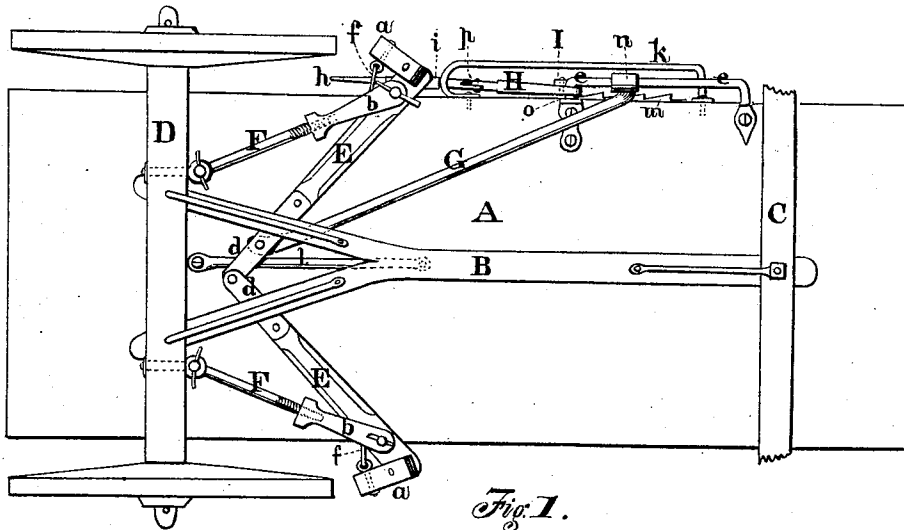
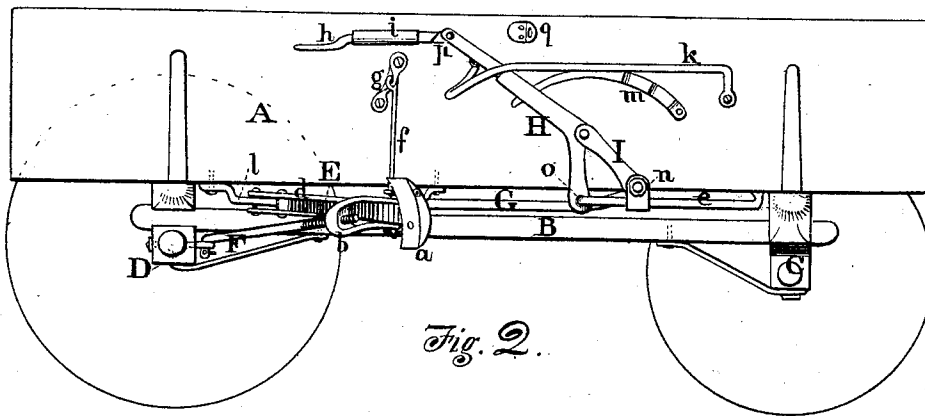


Wagon-Brakes.

No. 149,300.

Patented April 7, 1874.



Witnesses.
James Thurston
Charles Thurston.

William H. Gwilt,
by Edmund Thurlow,
his atty. in fact

UNITED STATES PATENT OFFICE.

WILLIAM H. GIWITS, OF WEST JERSEY, ILLINOIS.

IMPROVEMENT IN WAGON-BRAKES.

Specification forming part of Letters Patent No. **149,300**, dated April 7, 1874; application filed January 14, 1874.

To all whom it may concern:

Be it known that I, WILLIAM H. GIWITS, of West Jersey, in the county of Stark and in the State of Illinois, have invented an Improvement in Wagon-Brakes; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings making a part of this specification, in which like letters of reference refer to like parts, and in which—

Figure 1 represents a view of the brakes from the lower side, or as seen from the ground beneath the wagon; Fig. 2, an elevation of wagon and brake; Fig. 3, rear view of the brakes. (Seen from left end of Fig. 1; seen in vertical elevation—wagon reversed or upside down.)

This invention will be described in the specification, and then clearly pointed out in the claims.

In the drawings, which represent one of the simplest forms in which I construct this brake, A represents the wagon; B, the reach; C, the forward axle; D, the rear axle; E E, the brakes, which are jointed together at their inner ends, so as to embrace and slide at this point upon a horizontal guide, *l*, parallel to the reach and fastened to the wagon-bed. From this point the stems of the brake project forward and terminate, in advance of the hind wheels, in the usual recessed blocks or heads *a a*, each of which is suspended to either side of the wagon above by a rod or link, *f*, which is attached, by a staple or eye, *g*, to said wagon sides. These steady the brakes and prevent vibration by the wheel when the two are in contact. F F are adjustable braces (or fulcrums) of the brakes. Each are pivoted at a point half-way between the middle of the axle and the wheels of same, each extending to and screwed adjustably into the base of a jaw, *b b*, which clasps and is pivoted to the neck of the brace E near the head or block *a*. The jaws *b b* are made adjustable by a thread in the base of said jaws to reduce or increase the throw of the brakes, to regulate the pressure of same upon the wheel as the block *a* wears away. The stem of each brace forms an elbow before entering the staple in the axle or bolster, and is pierced with an eye to

receive a pin. G represents the rod which connects the joined ends *d* of the brakes E E with the link I of the operating-lever H. This rod G is pivoted at said joints *d* to one of the brakes E, and extends forward, and pivoted on a bolt which confines the lower end of the lever-link I, and the eye *n*, which confines this end of the link and said rod G jointly to the horizontal guide *e*, which is fastened at either end to the wagon-bed, but projects far enough beyond the face of same to give the lever H a fulcrum, *o*, upon the returned end of said guide *e*, which passes through an eye, *o*, in the end of the lever H. The latter extends from this point *o* straight to the point where it is pivoted to the link I before mentioned, this link being about the same length as that part of the lever between this pivot and the fulcrum *o* of the lever. From this point the lever forms an obtuse angle backward and midway before it terminates at the handle *h*. It is provided with a joint, *p*, so that the handle may be depressed below the top of the wagon-sides, whether the brakes are on or off, the joint being covered with a sliding tube, *i*, to stiffen the lever when operating the brakes, and the end of the handle *h* is slightly bent to retain the tube *i*. The usual detaining-ratchet *m* is attached to the wagon behind the lever, and also an eye, *q*, is similarly placed to be used to receive the point of the handle when the brakes are on, the tube *i* being then off the joint.

The operation of this brake is as follows: The lever H acts, by means of the link I, upon the connecting-rod G, which is pivoted to the joints *d* of the brakes E E, the latter being each held at the neck by a brace, F. The jointing of the inner ends of the brakes together on the slide *l* allows the heads *a a* to be withdrawn farther from the wheels than is common, placing them out of the way, giving more room to the wheels, and rendering the heads *a* less liable to obstruct the wheels by accumulation of dried mud, &c.

What I claim as my invention is—

1. The brakes E E, supported at their outer ends by rods *f f*, and jointed together at their inner ends and sliding upon the guide *l*, and connected, near the blocks *a a*, by the

braces F F, to the rear bolster of the wagon, substantially as and for the purpose described.

2. The brake-lever H, constructed with a fixed pivot, *o*, link I, and staple *n*, in combination with the slide *c* and brake-connecting rod G, substantially as and for the purposes described.

In testimony that I claim the foregoing wagon-brake, I have hereunto set my hand this 26th day of December, 1873.

WILLIAM H. GIWITS.

Witnesses:

JOHN M. HURD,
JACOB YOUNG.