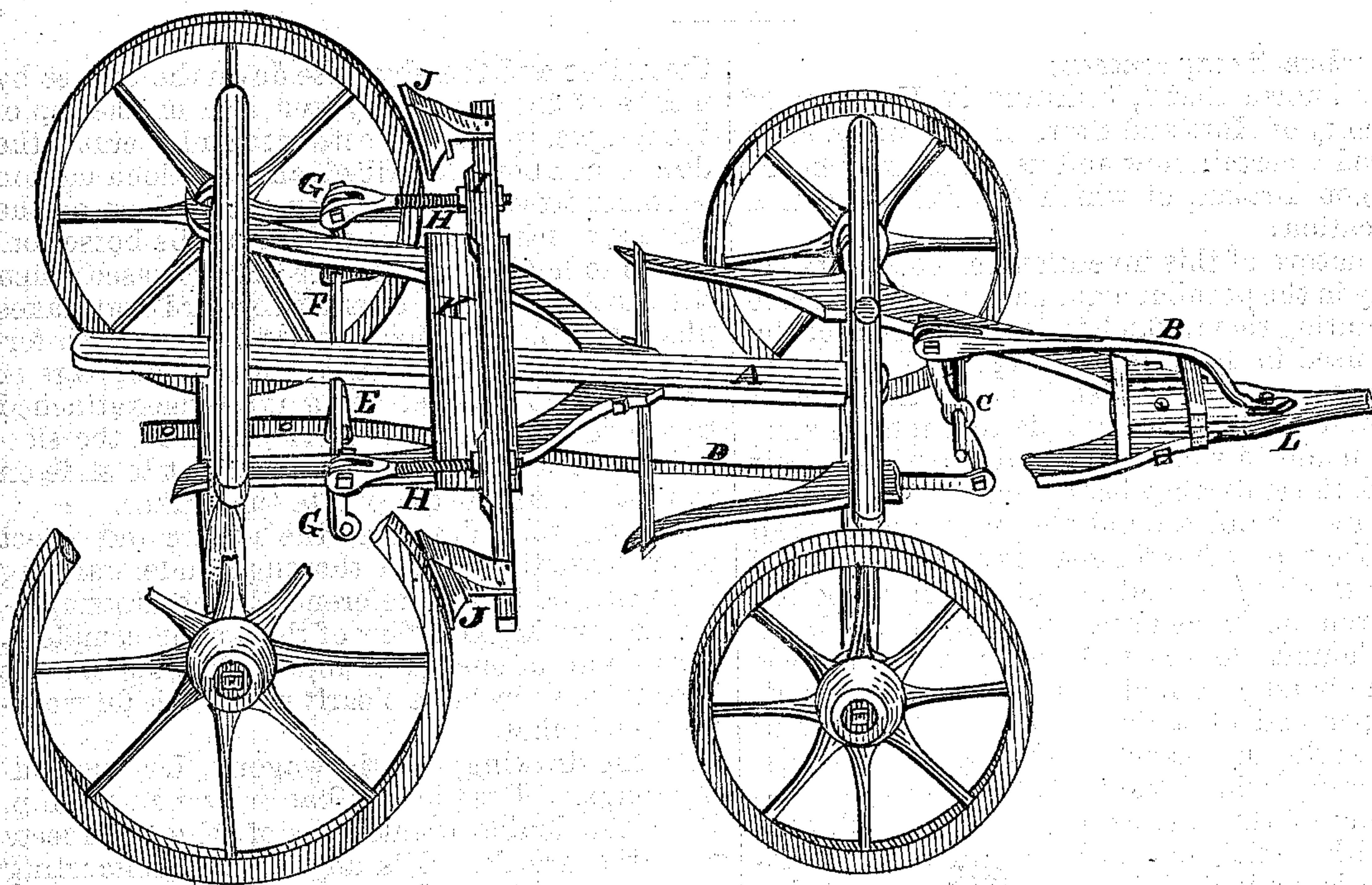


[22.]

*Francis M. Kelley's Improvement In-
Wagon Brakes.*

119,033.

Patented Sep. 19, 1871.



Witnesses;

E. F. Huyck,

R. Mason

Inventor.

Francis M. Kelley

UNITED STATES PATENT OFFICE.

FRANCIS M. KELLEY, OF HART COUNTY, KENTUCKY.

IMPROVEMENT IN BRAKES FOR WAGONS.

Specification forming part of Letters Patent No. 119,033, dated September 19, 1871.

To all whom it may concern:

Be it known that I, FRANCIS M. KELLEY, of the county of Hart and State of Kentucky, have invented a certain new and useful Improvement in Wagon-Brakes, of which the following is a specification:

The nature of this invention consists more especially in the peculiar arrangement of the device for operating them, which is done by means of the horses used in drawing the wagon. The tongue of this wagon works loose between the ends of the hounds and has a slot-hole through the side, and is made to work back and forth on a bolt through the ends, they being further held in their places by a band around the ends and a strap across the top. This tongue has a curved piece of iron on the top, one end of which is firmly bolted to the tongue immediately in front of the band on the hounds, and is sufficiently raised to pass over the band and double-tree and connect with the upper end of a double crank the shaft of which works in bearings between the hounds, immediately behind the end of the tongue. The lower end of this last-named double crank connects with a stiff iron rod below the axles. This iron rod is made flat at the back end, with holes through it, in order to adjust the length when the wagon is extended. This rod connects with the lower crank of another small shaft, secured by bearing to the under side of the hind hounds. This shaft has also a crank on each end outside of the hounds, which stands perpendicular and connects with two adjustable screws in the rubber bar. These screws have each two nuts, in order to adjust the length as the rubbers wear away. This rubber-bar is made to rest on a plain flat piece of wood fastened across the hounds, and is kept in its place by the screws that operate it.

The principal advantages I claim for my invention are the convenience and ease with which it is operated—requiring no delay or stoppage to adjust it—when necessary to be used, as the momentum of the wagon, as soon as it begins to descend the plane, will force itself forward against

the horses and thereby close down the brakes by means of the stationary iron arm on the top of the tongue, which connects with and operates the device, as above described, and by which motion is transmitted to close down the rubbers on the wheels, which remain so as long as the horse continues to hold back, and are only released when the descent terminates and a forward draft takes place again, by which the tongue is drawn forward, which releases them without stoppage or delay, the double-tree being at all times attached to the tongue and not to the hounds, the slot-hole in the tongue only permitting it to slide on the bolt sufficient to operate the brakes.

Having thus described the nature and object of my invention, a more thorough understanding of it may be had by reference to the drawing.

The drawing is a view of the wagon complete, with a part of one wheel and the hounds left out in order to show more clearly the device for working the brakes.

In the drawing, A is the wagon. L is the sliding tongue. B is the iron bar or arm on the top. C are the double cranks, one of which connects with the arm B. D is an iron rod connecting with the lower arm C and with another crank, E, at the other end, on shaft F. G G are the cranks on the ends of this last-named shaft. H H are the adjusting-screws which connect them with the rubber-bar I. J J are the rubbers. K is the slide on which it rests.

Having thus fully described the drawing, therefore I do not claim anything as new in the wagon; but

What I do claim as new, and desire to secure by Letters Patent, is—

In combination with a slotted sliding draft-tongue, L, the rigid arm B, cranks C, adjustable rod D, crank E, shaft F, cranks G G, adjustable screw-rods H H, and brake-bar I, arranged in the manner and for the purpose set forth.

FRANCIS M. KELLEY.

Witnesses:

E. F. HAUCK,
R. MASON.