(No Model.)

L. L. JAMES.

WAGON BRAKE.

No. 307,656. Patented Nov. 4, 1884.

Fig. 1.

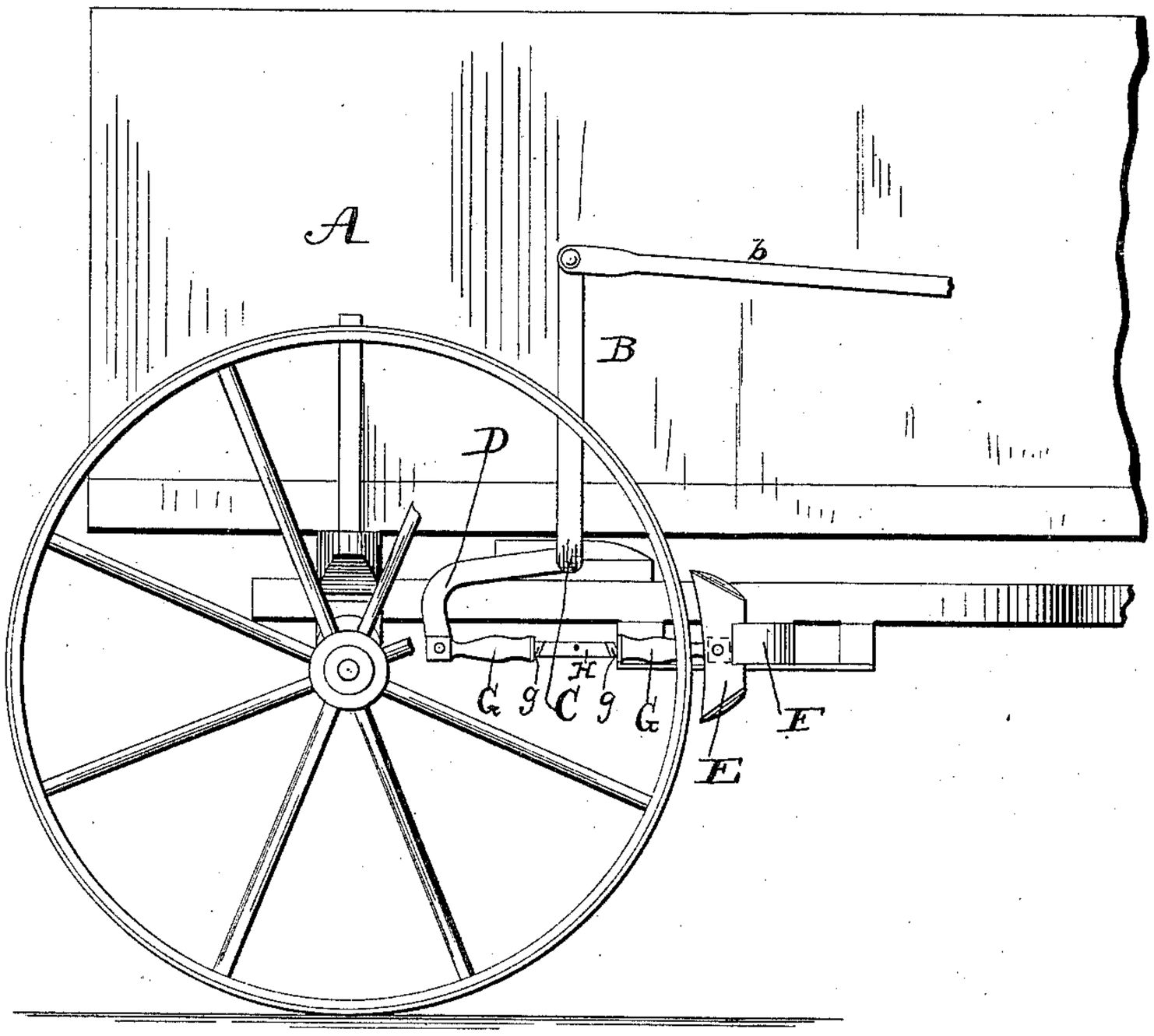
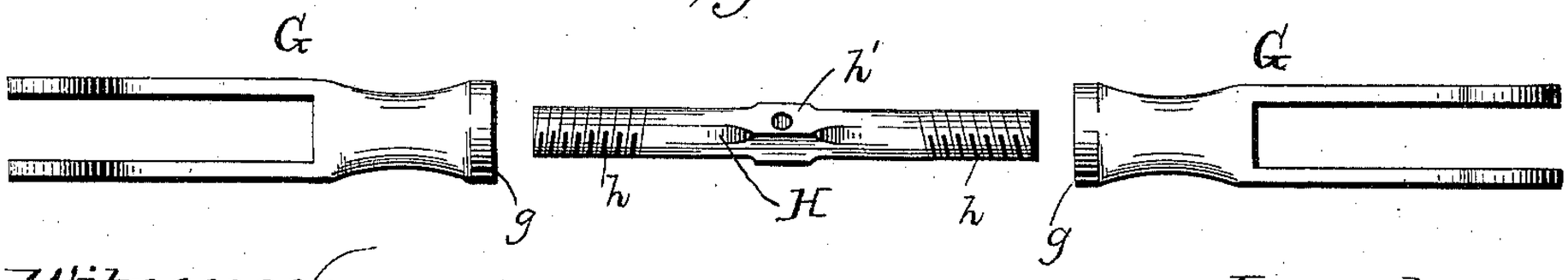


Fig. 2.



Witnesses:

D. Burnham.

Chas. F. Benjamin

Inventor:

L. L. James,

By Wm. Conard

Atty.

UNITED STATES PATENT OFFICE.

LYCURGUS L. JAMES, OF MEDORA, INDIANA.

WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 307,656, dated November 4, 1884.

Application filed January 30, 1884. (No model.)

To all whom it may concern:

Be it known that I, LYCURGUS L. JAMES, a citizen of the United States, residing at Medora, in the county of Jackson and State of Indiana, have invented certain new and useful Improvements in Wagon-Brakes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in the mechanism described and claimed in the Letters Patent granted to me under date of February 6, 1883, and numbered 271,855; and its object is to increase the power available for the application and release of the brakes in the manner hereinafter stated.

The invention consists, first, in the substitution of an outwardly-bent knee for the short arms f' in the Letters Patent referred to; and, secondly, in the replacement of the long lever-hooks f^2 by an adjustable coupler, to take up the excess or "slack" of the connection as the brake-shoe wears thinner.

In the accompanying drawings, wherein like letters refer to like parts, Figure 1 is a side view of the brake mechanism with my improvements embodied therein, and Fig. 2 is a detached view of the couplers with their connecting screw-bolt.

A represents the hinder part of the side of an ordinary wagon. B is the brake-lever with connecting-rod *b* proceeding toward the front of the wagon to be joined to the hand-lever. C is the roller-bar, which may be formed by bending and prolonging the lever B.

Attached to or formed upon the roller C are knees D D, set at right angle to the lever B, and projecting to the rear until bent and carried downward in the manner shown. The brake-shoe E is attached to and carried upon the brake-bar F, and this bar is connected with the knees D D by the couplers G G. Threaded sockets *g g* are formed in the heads of these couplers. The screw-bolt H, which connects each pair of sockets, has its screw-threads *h h* run contrariwise, so that when the bolt is turned in the one direction the couplers will be drawn closer together or pushed farther apart, as the case may be. The couplers, being attached to the knees and brake-bar, do not revolve; but the bolt is revolved either by applying a wrench to the rectangular bite h' or by inserting a nail or other implement in the orifice of the bite and turning it as by a lever. The bolt will be adjusted from time to time, so as to insure a strong pressure of the brake-shoe against the wheels whenever the brakes are put on, and hence the wearing away of the surfaces of the brake-shoes will not affect their efficiency until they are completely worn out, when new shoes may be adjusted upon the brake-bar.

It is apparent that the shape and direction of the knees D D insure a good "throw-off" to the brakes when released, even if the spring shown in my patented device be omitted, and when the brakes are applied, the straight pull of the knees upon the couplers G G, instead of the oblique pull of my patented device, insures a stronger pressure upon the wheel-tires.

Having thus fully described my invention, what I claim to be new and useful, and desire to secure by Letters Patent, is the following.

In wagon-brakes, the combination consisting of the lever B, the roller-bar C, the knees D D, the brake-bar F, the couplers G G, with screw-sockets *g g*, and the bolt H, with screw-threads *h h* and the bite h', as herein described, and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

LYCURGUS L. JAMES.

Witnesses:
J. E. DAVIS,
DAVID WRIGHT.