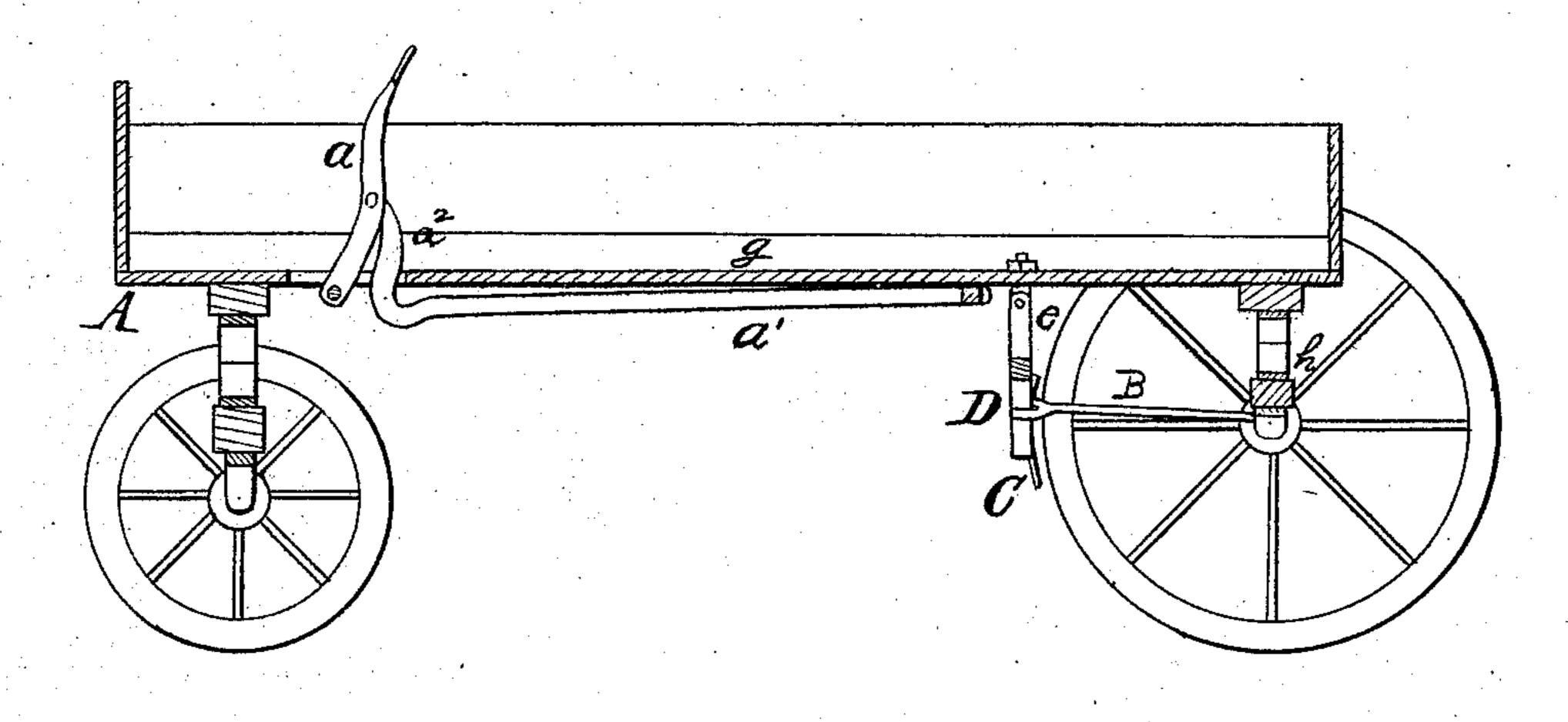
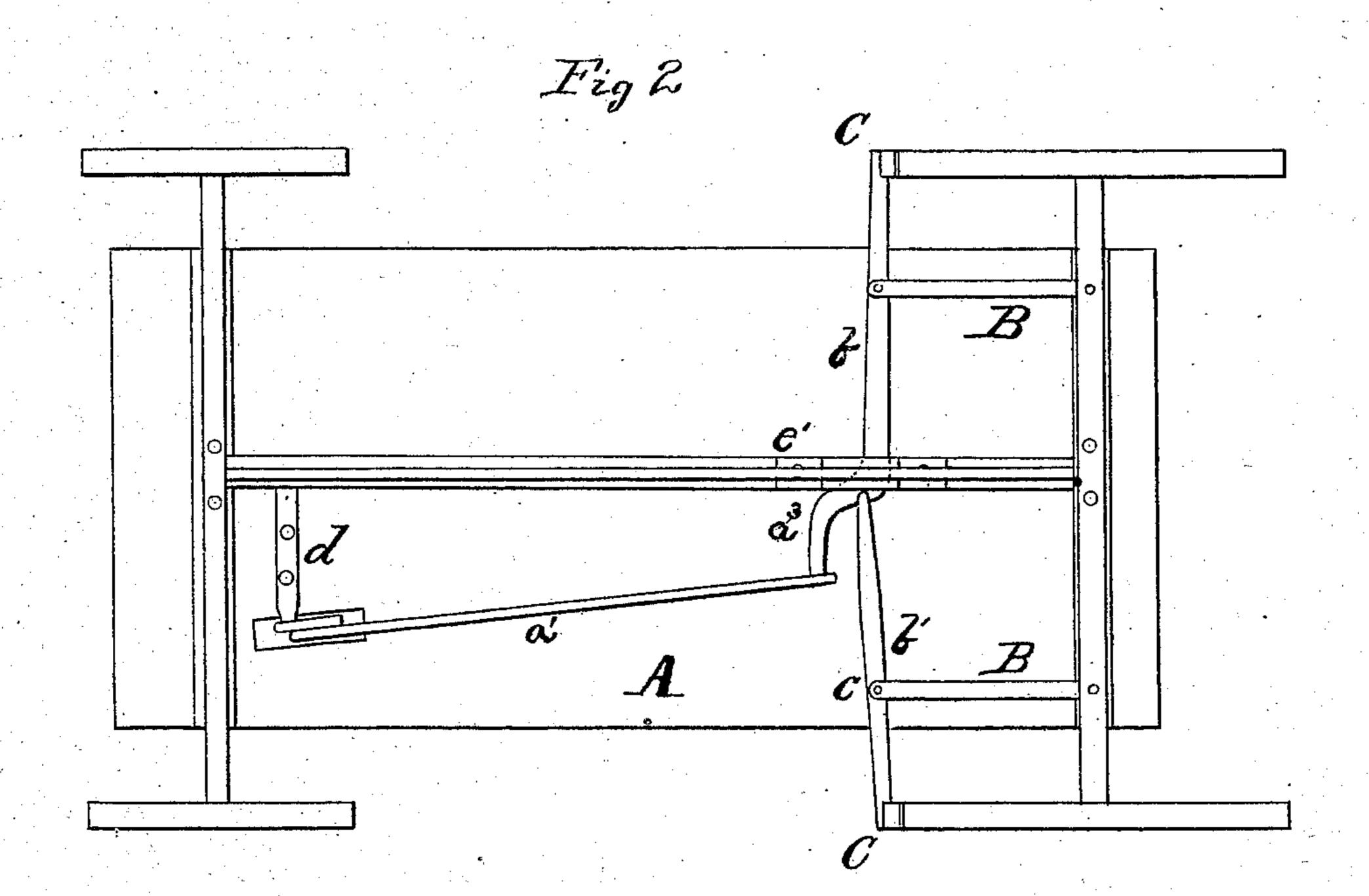
## A. HOGUE. Wagon-Brakes.

No.154,605.
Zig.L.

Patented Sept. 1, 1874.





Witnesses. ENBates Chas. B. Steele Inventon. Alexander Hogue, Chipmanfosuur + Co, attys,

## United States Patent Office.

ALEXANDER HOGUE, OF RUTLAND, OHIO.

## IMPROVEMENT IN WAGON-BRAKES.

Specification forming part of Letters Patent No. 154,605, dated September 1, 1874; application filed May 24, 1873.

To all whom it may concern:

Be it known that I, ALEXANDER HOGUE, of Rutland, in the county of Meigs and State of Ohio, have invented a new and valuable Improvement in Carriage-Brakes; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a sectional view of my carriage-brake. Fig.

2 is a plan view of the same.

This invention has relation to wagon and carriage brakes; and it consists in the construction and novel arrangement of the pivoted brake-levers, the metallic springs connecting the same with the axle, the connecting-rod, the jointed brake-bar supporters, and the thin metallic friction-rubbers, as hereinafter more

fully described.

A of the drawings designates the wagonbed, slotted in its forward portion for the passage of the pivoted lever a, and the bent portion  $a^2$  of the pivoted rod  $a^1$  attached to the bent arm  $a^3$  of the brake-bar b, which is pivoted to the brake-bar b'. The brake-bar b' is bent upward, where it is connected with the brake-bar b, the bent portion serving as a pivot connecting the two levers together. These levers are pivoted to the supporters D at c, as shown in Fig. 2 of the drawings, and are held in position by the connecting-bars B and bracket e'. The pivoted lever a is situated a little to one side of the wagon-bed, and comes between the feet of the driver, therefore not interfering in its operation with any occupant of the wagon who may be seated near him. It can be operated by the foot or hand at will. This lever is attached to the wagon-bed by means of a pivot-bar, d, secured to the wagon-bed by screws or other suitable devices. B indicates the connecting-bar, bifurcated at one end to receive the brake-bar b b', which is secured to it by means of a vertical pin pivoted to the lower end of the supporting-link D, which is pivoted to a stud, e, secured to the wagon-bed by a bolt and nut, or other suitable means. Said link passes down through the upper branch of the fork of the connecting-bars, thence through the brakebar and the lower branch of said fork. The other end of the bar is secured to the rear l

axle by a bolt or rivet. This arrangement gives a yielding action and play to the brakelevers and rubbers, corresponding with the movements of the rear axle-spring. C designates a thin metallic rubber or brake, attached to the brake-bar by suitable means, and constructed of such a thinness that it will cut off the mud or other substances which may adhere to the wheels. This rubber, on account of its elasticity, is not so liable to clog as other devices for similar purposes, and, upon trial, it has been found that it does not wear away the tire of the wheel as fast as wood, leather, or heavy rigid metallic blocks. D indicates the supporting-links, passing down from the wagon-bed, their lower extremities being connected with the pivots, upon which the brakebars operate, and to which the bifurcated connecting-bars are secured, as before described.

By this arrangement, the springs are designed to be relieved of forward strain, the bearing being principally upon the supporting-links D, and the connecting-bars B being placed at such an angle to the axle, and so connected to the brake-levers that, when the lever a is operated by the driver, there is a tendency to contract the axle-spring instead

of drawing it forward.

In connection with my brake, the bracing-

beam g may sometimes be used.

I am well aware that a brake-bar suspended from a wagon-body by means of standards and connected to an operating-lever, as shown in the patent of A. Bothe, dated August 15, 1871, by means of connecting-rods, is not new; therefore I do not make a broad claim to such invention.

What I claim as new, and desire to secure

by Letters Patent, is—

In a wagon-brake, the combination of the pendent supporting-links D, provided with a thin metallic shoe, c, their upper ends pivoted to the wagon-body and their lower ends connected by bars b, b', and B, the rod  $a^1$  pivoted to the extension  $a^3$  of bar b, and the pivoted lever a connected to the extension  $a^2$  of the bar  $a^1$ , all constructed to operate substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence

of two witnesses.

Witnesses: ALEXANDER HOGUE.

G. W. BENEDICT,

O. A. HOGUE.