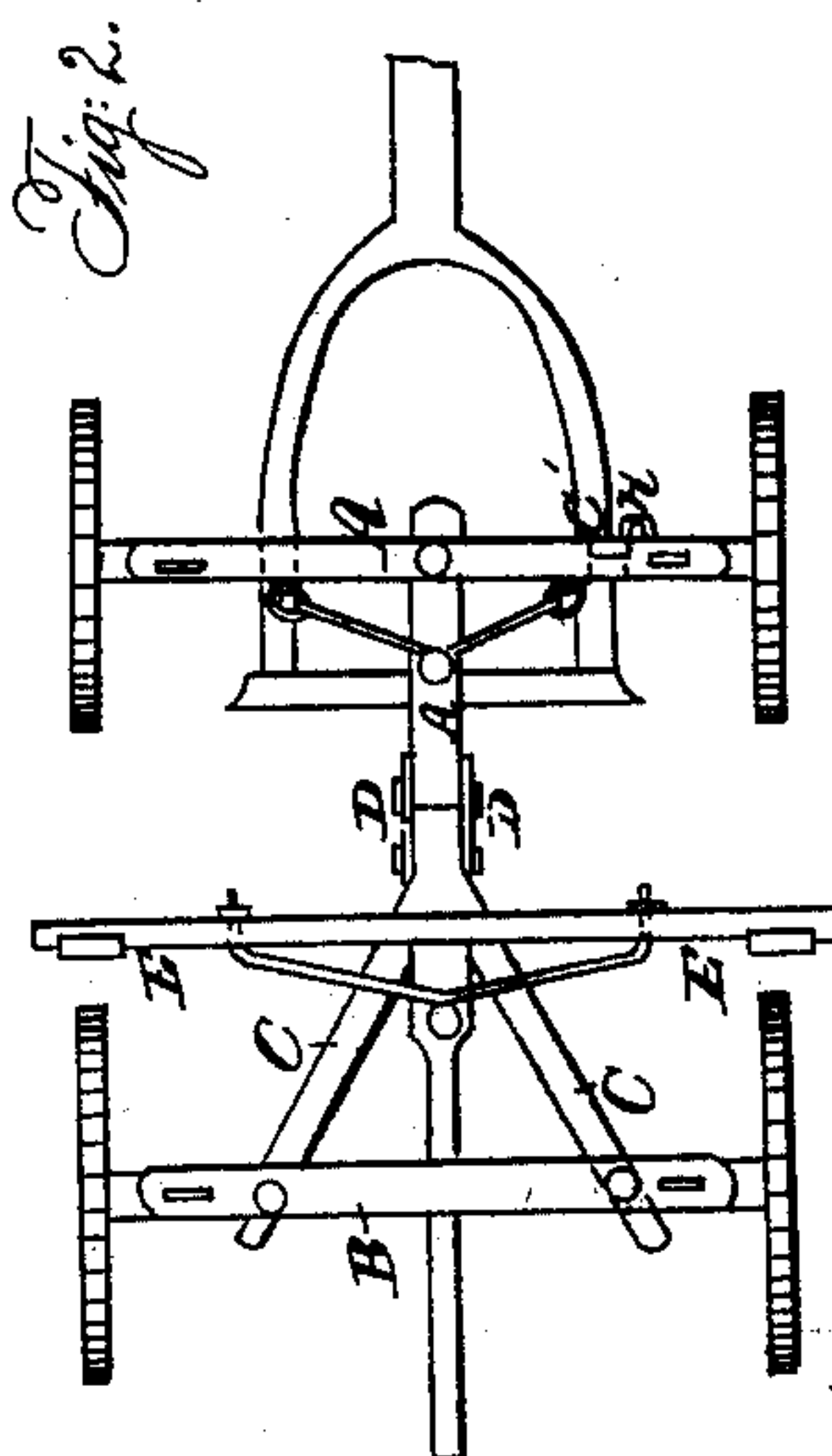
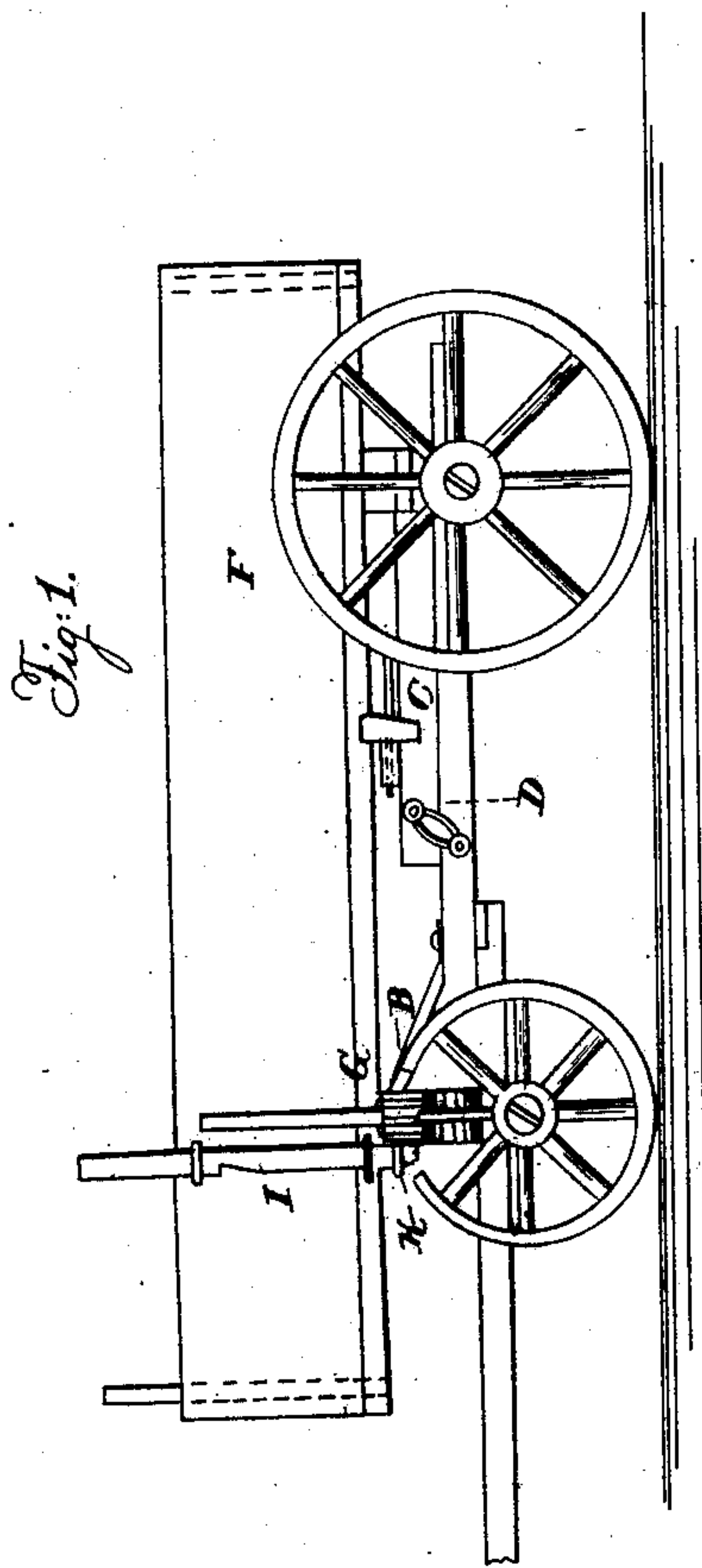


ALLEY & WILLIAMSON.

Brake.

Patented Oct. 8 1867.

No. 69,604



Witnesses
L. A. Murphy
Chas. Plummer

S. Alley
S. D. Williamson
Inventors
by
D. P. Hollway & Co.
attys.

United States Patent Office.

STEPHEN ALLEY AND SAMUEL D. WILLIAMSON, OF CLIFTY, INDIANA.

Letters Patent No. 69,604, dated October 8, 1867.

IMPROVEMENT IN AUTOMATIC WAGON-BRAKE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, STEPHEN ALLEY and SAMUEL D. WILLIAMSON, of Clifty, in the county of Decatur, and State of Indiana, have invented a new and useful Improvement in Wagons and Automatic Wagon-Brakes; and we do declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, in which—

Figure 1 is a side elevation, partly in section.

Figure 2 is a plan.

The same letters are employed in both figures in the indication of the same parts.

The running gears are of the ordinary construction, except as follows: The reach A passes through a mortise in the hind axle B. It is not fastened rigidly to the braces C of the hind axle, but is connected therewith by links D passing over pins in the braces and the reach, upon which the reach has a reciprocating motion, longitudinally, sufficient to allow the brakes E to be pressed against the wheels when the horses hold back upon the tongue in going down hill, thus relieving the pressure of the load by the friction of the brakes upon the hind wheels. At other times the longitudinal play of reach is sufficient to carry the brakes away from the wheel, the strain of the draught coming upon the links D. F is the wagon-bed. In order that the friction of the forward bolster H may not, acting against the bottom of the wagon-bed, hinder the action of the brakes, there are placed on each end of the bolster H rollers G, fastened to suitable plates to furnish their bearings. On these rollers the bolster will pass freely under the bed. Plates should be placed under the wagon-bed, at the points where it rests upon the rollers.

As many automatic wagon-brakes are objectionable because the brakes are applied in backing the team, thereby making it more difficult, it is necessary to provide some means of preventing the action of the brakes at such times. This is accomplished as follows: The bed F is rigidly bolted to the hind axle B. The bar I, passing through staples in the wagon-bed, is ordinarily held up by a notch and spring, as shown, or in other convenient manner. When it is desired to back the wagon, this bar is pressed down into the staple K on the front of the forward bolster H. The two axles are thus rigidly united by the bed, and the wagon may be backed without the brakes being brought into action on the hind wheels.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The combination of the hind axle B, braces C, reach A, and links D, arranged to operate substantially in the manner and for the purpose set forth.
2. In combination with an automatic wagon-brake, the bed F and bar I, with or without the rollers G, substantially as and for the purpose set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

STEPHEN ALLEY,
SAMUEL D. WILLIAMSON.

Witnesses:

W. A. MANDLOVE,
HENRY R. CRITSER.