

D. W. HUGHES.  
Sulky-Plows.

No. 140,505.

Patented July 1, 1873.

Fig. 1.

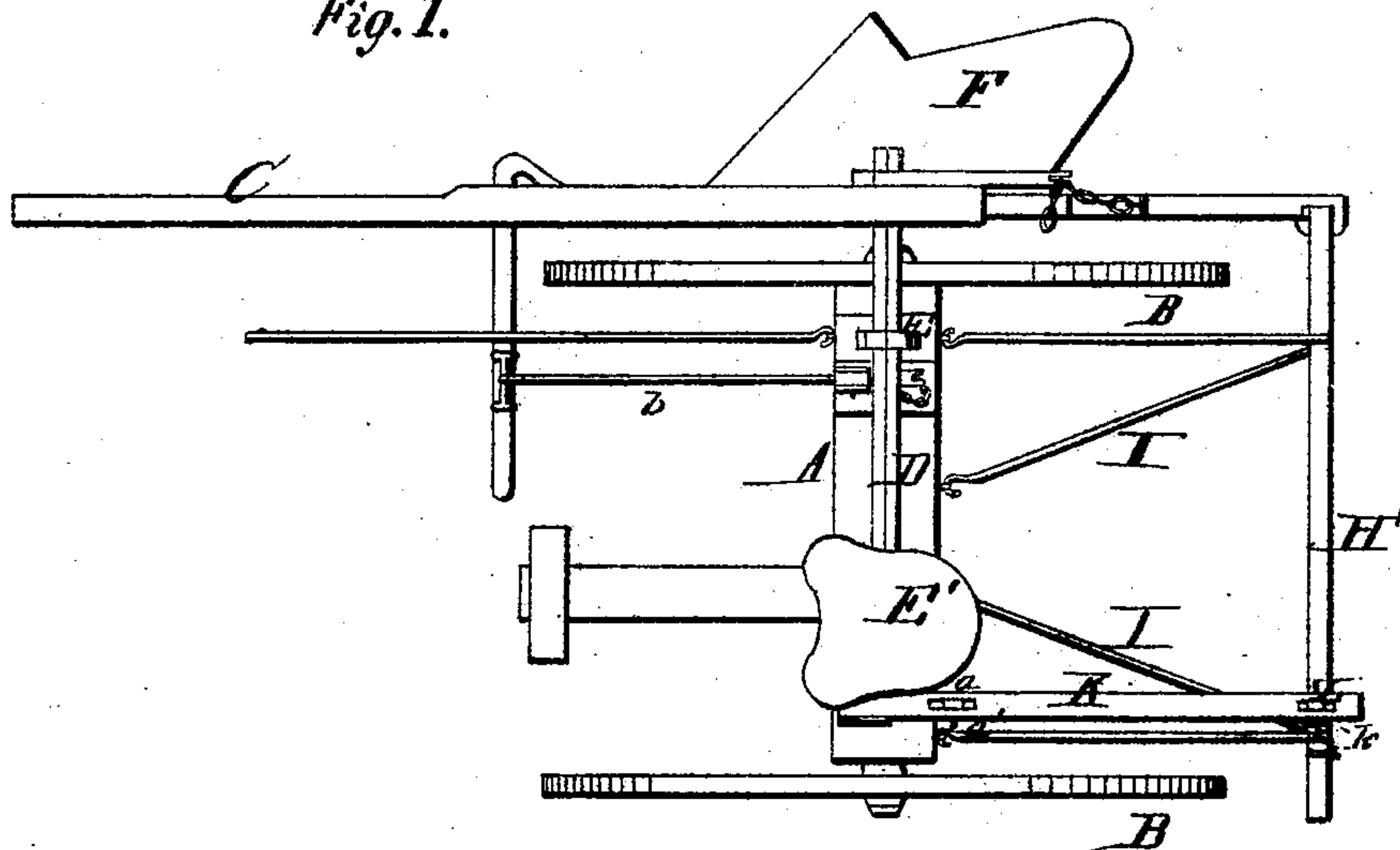
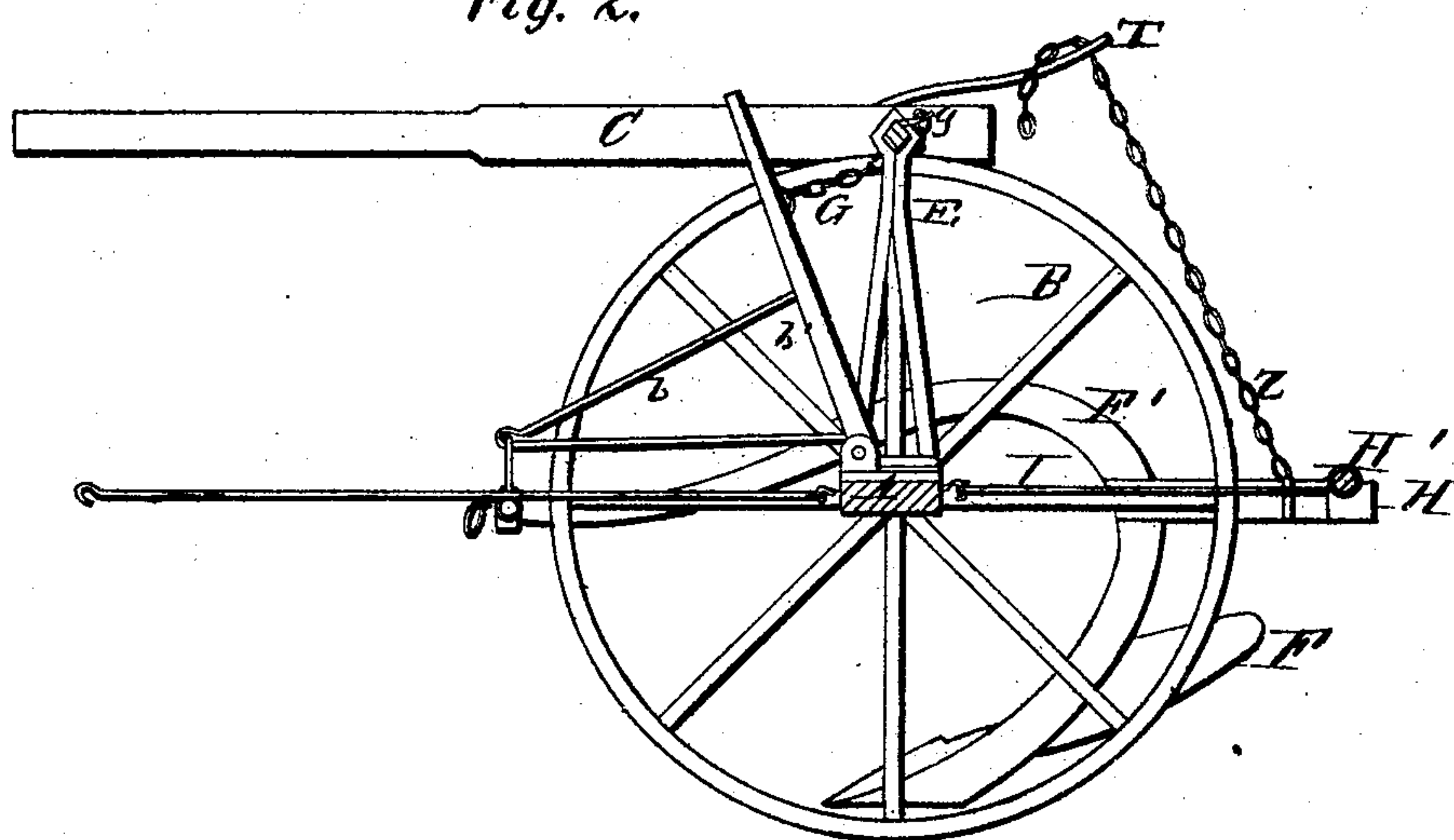


Fig. 2.



Witnesses.

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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN SULKY-PLOWS.

Specification forming part of Letters Patent No. **140,505**, dated July 1, 1873; application filed October 12, 1872.

*To all whom it may concern:*

Be it known that I, DAVID W. HUGHES, of Mexico, in the county of Audrian and State of Missouri, have invented a new and valuable Improvement in Sulky-Plows; 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 top view of my invention. Fig. 2 is a sectional view of the same.

My invention has relation to sulky-plows; and it consists in the construction and novel arrangement of devices for raising, lowering, and relieving the plow of friction, all substantially as hereinafter more fully described.

Referring to the drawings, A designates the frame or axle beam; and B B, the wheels of my improved sulky-plow. C designates the tongue, secured to a transverse bar, D, one end of which is bent down and secured to the frame A, while the other end is supported by a standard, E. Upon the bar D rests the driver's seat E'. F designates the plow, arranged outside the wheels B B, and secured in the ordinary manner to the beam F'. The forward end of said beam is bent over in front of one of the wheels B, and is coupled, by means of the connecting devices *b* to a lever, *b'*, which is hinged to the beam A, and is designed to raise or lower the point of the plow at the will of the driver, and to keep the plow at any desired depth. The plow is retained in whatever position it is adjusted to by means of a chain, G, which may be attached to a hook, *g*, secured to the bar D, as shown. The rear end of the plow-beam extends back, as shown at H, and is attached to a transverse bar, H', which is held by hinged braces I at-

tached to the frame A. The end of said bar furthest from the plow is suspended from a lever, K, by means of a rod, L, and is prevented from moving lengthwise by means of a collar, *k*. The plow is kept level by means of this lever, which is hinged to the top of the beam A, and held in any position to which it may be adjusted by means of a perforated standard, *a*, passing through a slot in the lever, pivoted to the beam A, and secured to the lever by means of a pin, *a'*. The rear end of the plow-beam is suspended by means of a chain, Z, which is attached to the end of a spring, T, secured either to the tongue or to the bar D. By means of said chain and spring the plow is relieved from friction on the bottom of the furrow, and permitted to overcome or adapt itself to inequalities of ground, &c.

In this implement, the wheels being at one side of the plow, they run on unplowed ground, and are set so as to crowd the plow from the land, thereby relieving all friction on the land-side of the plow, and thus materially saving power; and also admitting of square corners being turned without raising the plow out of the ground.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a wheel-plow, the transverse bar D, constructed and arranged and used to support the driver's seat E' and tongue C, in the manner substantially as described.

2. The bar H', braces I, beam A, plow-beam F', lever K, and chain Z, combined substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

DAVID W. HUGHES.

Witnesses:

D. H. MCINTYRE,  
GEO. E. UPHAM.