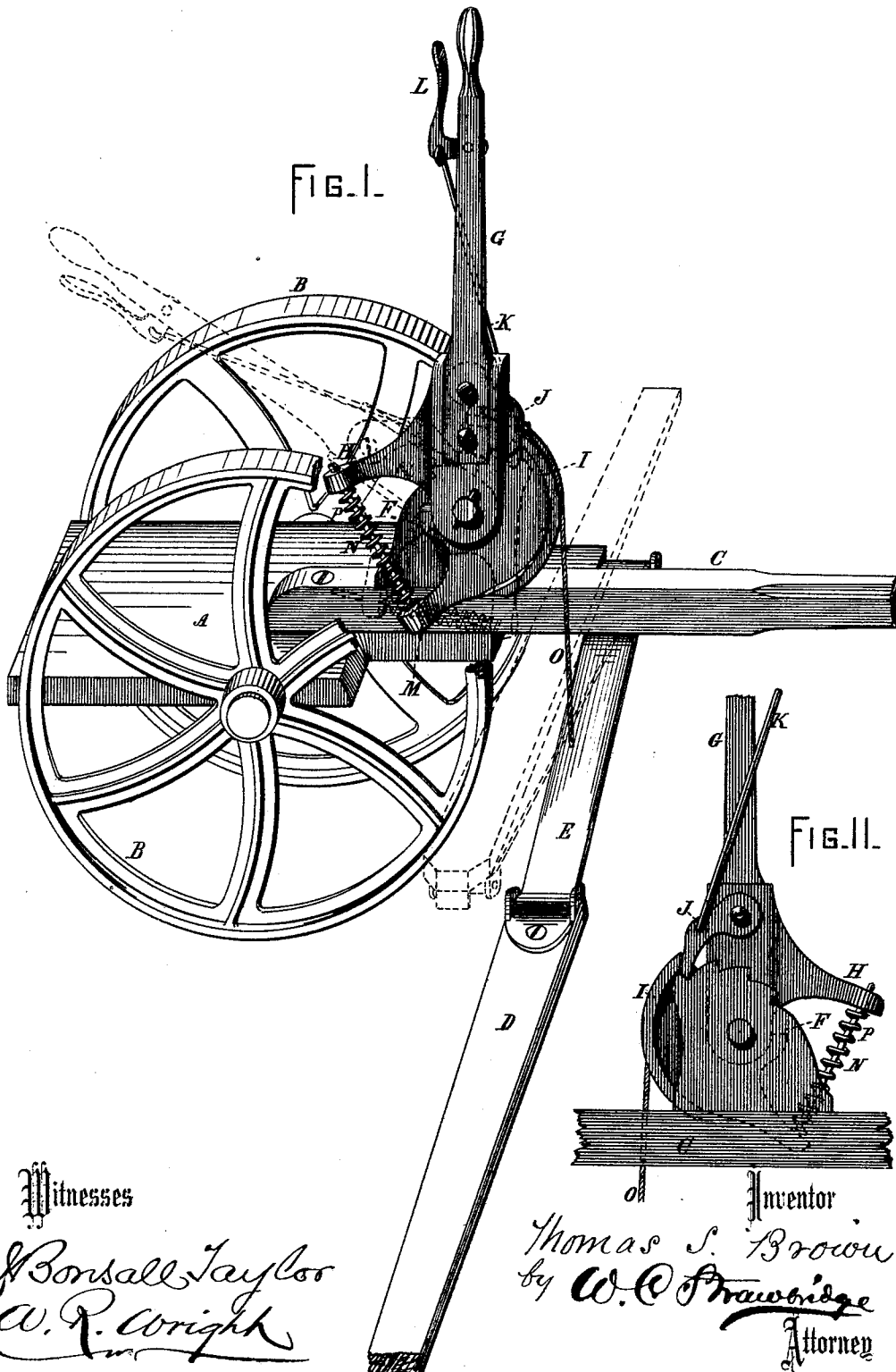


T. S. BROWN.
 SPRING LEVER FOR HARVESTERS.

No. 180,988.

Patented Aug. 15, 1876.



Witnesses
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Inventor
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UNITED STATES PATENT OFFICE.

THOMAS S. BROWN, OF POUGHKEEPSIE, NEW YORK, ASSIGNOR OF ONE-HALF HIS RIGHT TO JOHN P. ADRIANCE, OF SAME PLACE.

IMPROVEMENT IN SPRING-LEVERS FOR HARVESTERS.

Specification forming part of Letters Patent No. **180,988**, dated August 15, 1876; application filed May 13, 1876.

To all whom it may concern:

Be it known that I, THOMAS S. BROWN, of Poughkeepsie, in the State of New York, have invented a new and useful Spring-Lever for Harvesting-Machines, of which the following is a specification:

The objects of my invention are, first, to carry the inner end of the finger-bar lightly over the ground while allowing it to rise and fall with the inequalities of surface over which it passes, and thereby lighten the draft of the machine; second, to lift the back of the shoe, and thereby prevent the sagging of the shoe and bar, at that point especially where a leading-wheel in front of the shoe is used. To these ends my invention, therefore, consists of the spring-lever hereinafter described and claimed.

The drawing represents my device in perspective when the finger-bar is down; in dotted lines when raised up.

A represents the draft-frame; B B, the road-wheels; C, the tongue; D, the finger-bar, and E its extension or coupling-piece. F is a narrow upright supporting-piece set upon the frame, its curved top portion being cut with ratchet-notches or provided with detents. G is a hand-lever pivoted to the supporting-piece F, provided at its base with a laterally-projecting bracket, H, and so forked as to embrace a quadrant-piece, I, which is pivoted concentrically with the lever. J is a spring-pawl secured to the side of the lever, connected by a link, K, to a thumb-latch, L, on top of the lever, and set over the detents on the supporting-piece so as to engage with them. The quadrant-piece I is provided with a reversed bracket, M, corresponding with that upon the lever and set in the same vertical plane. Both brackets are connected by a rod, N, rigidly jointed to one of them, and playing freely through the other, and a strong spiral spring, P, is coiled upon the rod, and acts by its expansion to keep the brackets ordinarily apart. A cord or chain, O, fixed to the quadrant-piece passes through a groove in its

curved front surface, and is attached to the finger-bar or its connection. A forward-projecting lever-arm may be substituted for that part of the quadrant which carries the chain or cord.

Such being the construction of my lever, it will be readily comprehended that the weight of the finger-bar and connection constantly drags down on the quadrant-piece, turning it around its pivot, and forcing its bracket back against the spring P, compressing the same, and thereby throwing its strain upon the bracket of the lever, and keeping the lever and its pawl pressed forward against the detents on the supporting-piece, whereby the lever is prevented from falling back by reason of any slack of cord or chain, or from shaking about by the motion of the machine over rough ground; and whereby, also, the two principal objects hereinbefore recited are completely attained.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a harvester, a lever having a spring interposed as one of its parts, to transmit force between the handle of the lever and the working part of the same.

2. In a harvester, the lever G, spring P, and quadrant-piece I, so combined and arranged that any force applied to the lever is transmitted through the spring to the quadrant-piece, to lift the finger-bar.

3. A spring-lever device for harvesters, consisting of a ratchet-cut supporting-piece, a hand-lever provided with a spring thumb-pawl, a quadrant-piece or lever carrying a cord or chain, and a spring, combined and operating substantially in the manner and for the purposes hereinbefore recited.

THOS. S. BROWN.

Witnesses:

ALLISON BUTTS,
JOHN H. BUSH.