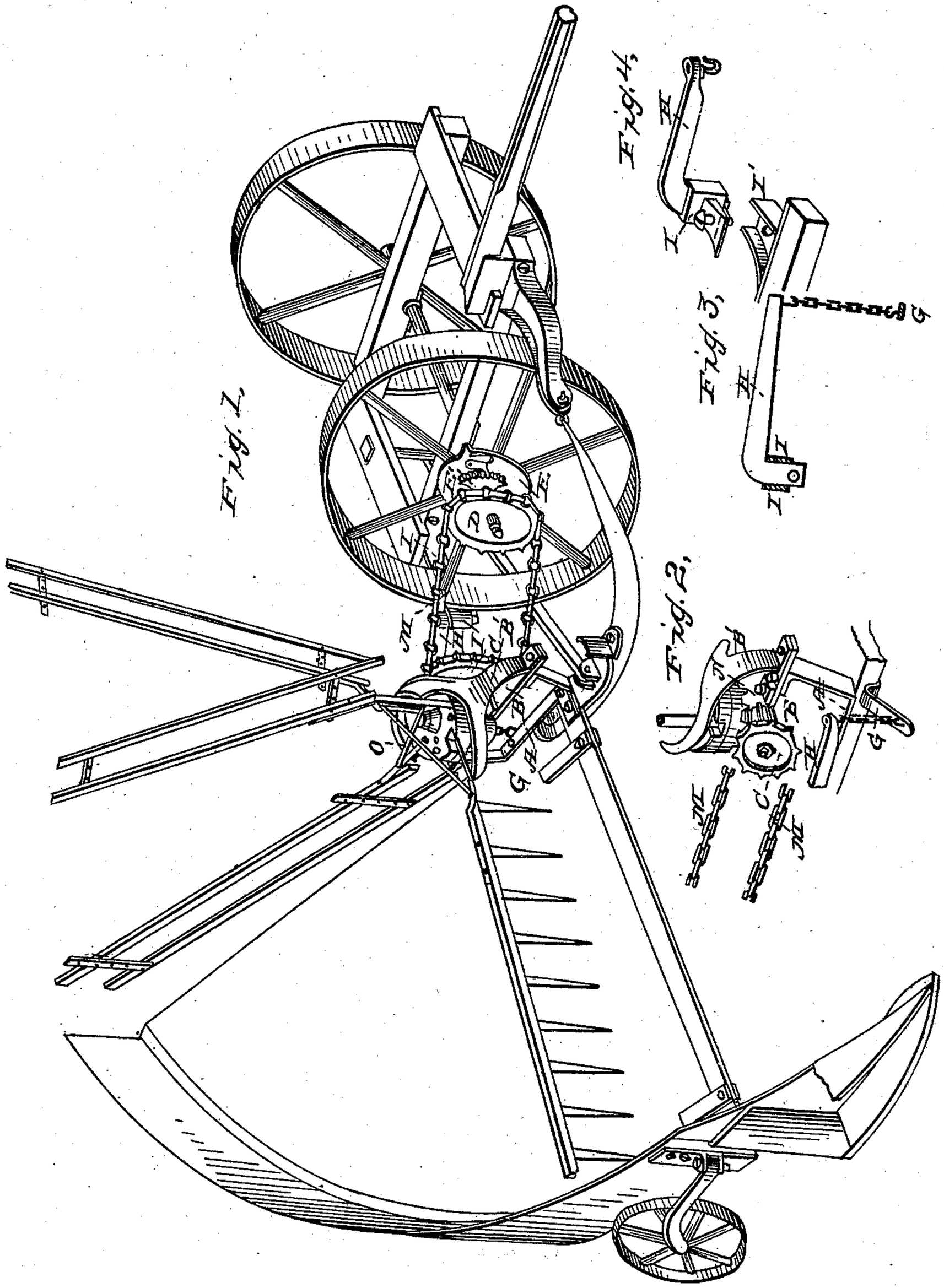
J. A. DODGE.

Harvester.

No. 55,837. Patented June 26, 1866.



UNITED STATES PATENT OFFICE.

JOHN A. DODGE, OF AUBURN, NEW YORK.

IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. **55,837**, dated June 26, 1866.

To all whom it may concern:

Be it known that I, JOHN A. DODGE, of Auburn, in the county of Cayuga and State of New York, have invented new and useful Improvements in Harvesters; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, made part of this specification, in which—

Figure 1 is a perspective of the entire machine. Fig. 2 is a detached view of part of the mechanism. Fig. 3 is an elevation of the arm supporting the platform; and Fig. 4 is a detached view, showing the bracket by which said arm is attached to the frame.

In the different figures the same letters refer to identical parts.

I shall only particularly describe those parts of a reaping-machine to which my improvements particularly relate, viz: the mechanism necessary for giving motion to and supporting a sweep-rake.

The frame A is bolted to the inner front corner on the corner of the platform. It has the upper ends of its vertical sides bent so as to form a base, to which can be secured the bed-piece B, or it may be formed quadrilateral. The bed-piece B is a straight piece of iron, upon the upper face of which is bolted the rake guide or cam B′, which is an arch resting upon the extremities of the bed-piece. The rakes are hinged to the wheel O, the hinges working in notches cut in the upper side of the periphery of the wheel. The shape of the guide B′ determines the motion of the sweep-rake after traversing the platform. The rakes being coupled by ties meeting the opposite rakes, as one rises the other falls, one being nearly vertical while the opposite one is sweeping the platform.

On the under face of the wheel to which the rakes are hinged is a bevel-wheel geared into another, N, on a shaft perpendicular to that of the upper one. Both these shafts supporting the bevel-wheels work on journals in an elbow formed box bolted to the bed-piece B.

On the end of the shaft supporting the bevel-wheel N is a pulley, C, having on its rim projecting points, to receive the horizontal links of a chain, M, by which it is driven from a similarly-formed wheel on the projecting extremity of the main axle of the machine.

The outer side of the platform is carried by a caster-wheel adjustably connected with the platform, so as to regulate the height of the cut at that side, while the other or inner side is adjustably suspended by a chain from the arm H, attached to the arm G, projecting from the platform. The length of this chain determines the height of the cut at the inner end of the cutter-bar.

The arm H is bent at its forward end, and set in a socket, I. The socket I is bolted to the bracket I′, as shown in Fig. 4. This bracket has projecting flanges at its base, bolted to the main frame, and a projecting arm fitted to receive the end of the socket I, which is retained in place by a bolt passing through it and the arm of the bracket.

A plate, E, is securely attached to the spokes of the driving-wheel, to which is attached a detent working on the face of a ratchet-wheel, E′, which is attached to the pulley D, so that when the machine is backed there shall be no motion communicated to the rake, but as soon as the machine is started forward the rake will resume its revolutions.

The other portions of the machine are of any usual construction.

Having fully set forth the nature of my improvements, what I claim as my invention, and seek to secure by Letters Patent, is—

1. The combination of the cam B′, bed-piece B, and frame A, resting upon the platform, the said several parts being respectively constructed and arranged for use substantially in the manner and for the purpose set forth.

2. The plate E and ratchet E′ upon the outside of the driving-wheel, and pulley D upon the projecting extension of the axle, in combination with the belt M, pulley C, and bevel-gearing for actuating the rake with the forward motion of the machine, substantially as set forth.

3. The device for supporting the arm H by means of the bracket I′, attached to the socket I, secured to the frame, substantially as set forth.

4. The arrangement, as herein set forth, for supporting adjustably the inner end of the cutter-bar and platform by means of the arm G, attached to the platform, and connecting chain and projecting arm H, secured to the main frame by the bracket I′ and socket I.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN A. DODGE.

Witnesses:

HORACE T. COOK,

A. C. MUNGER.