

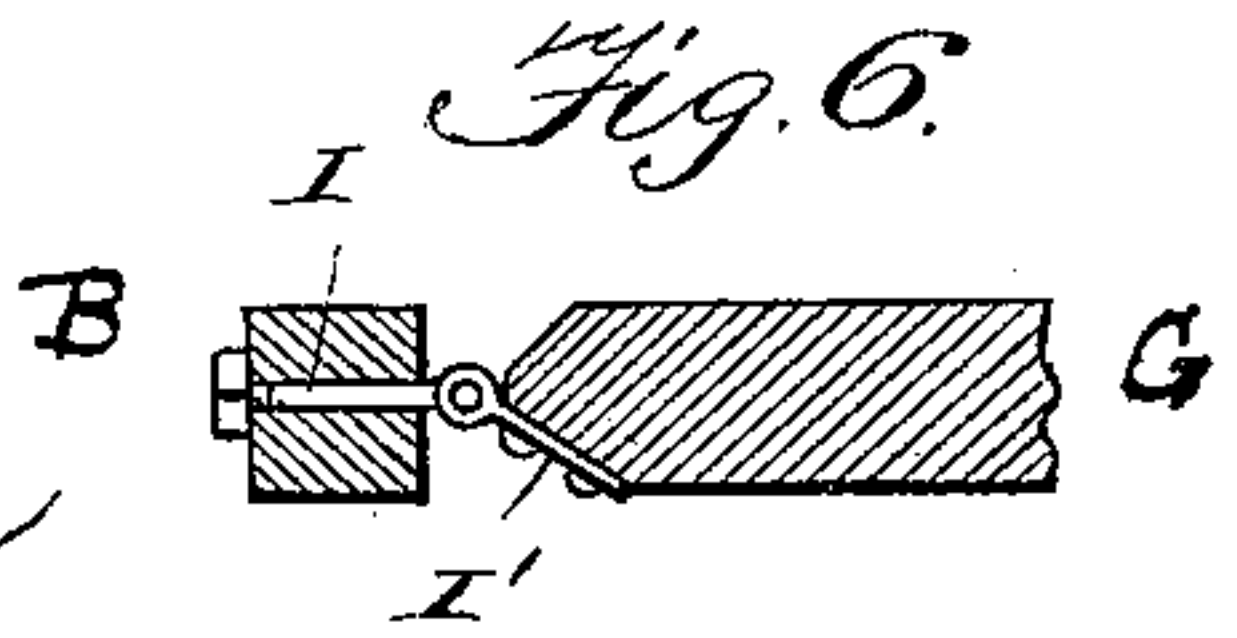
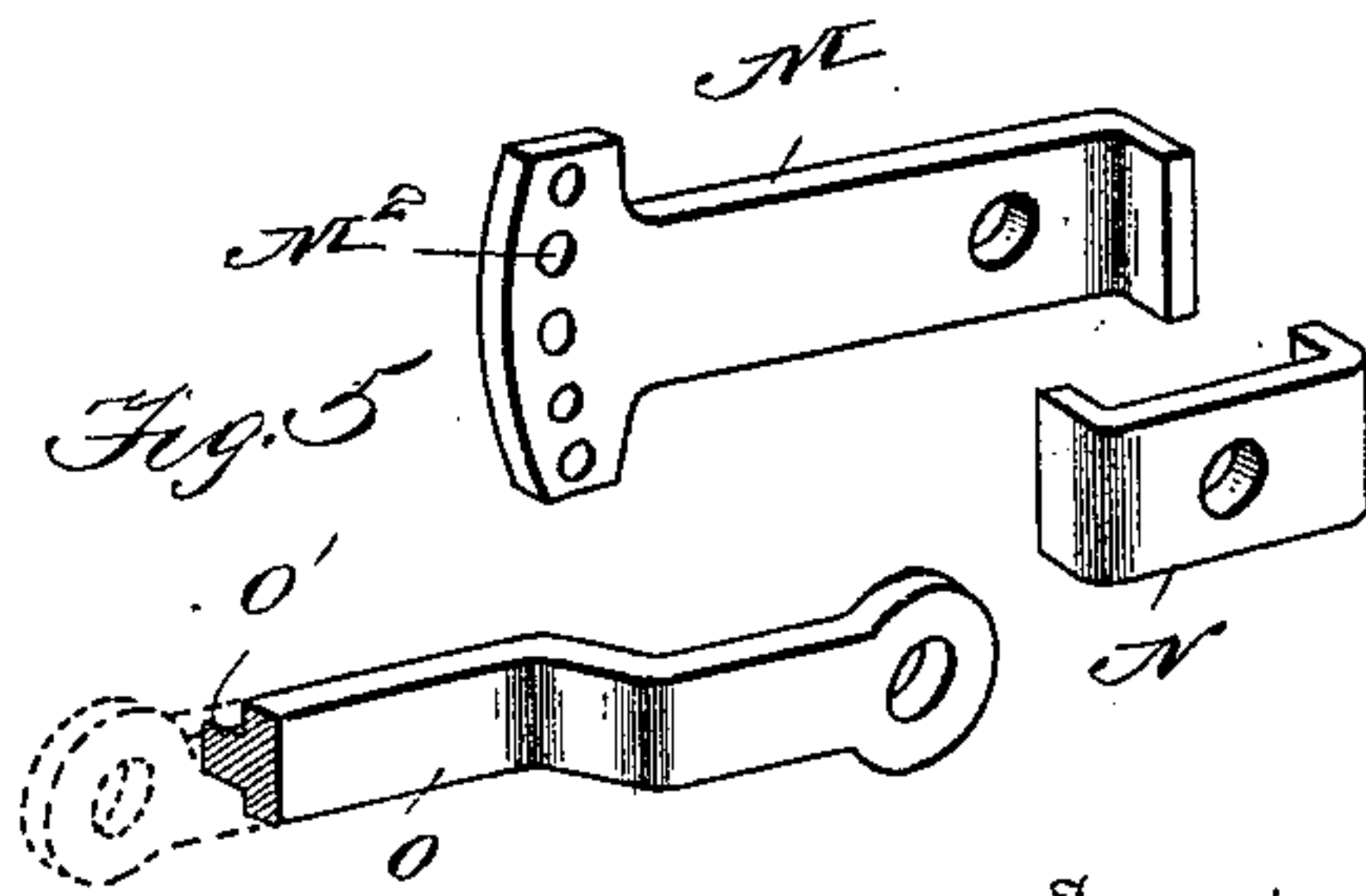
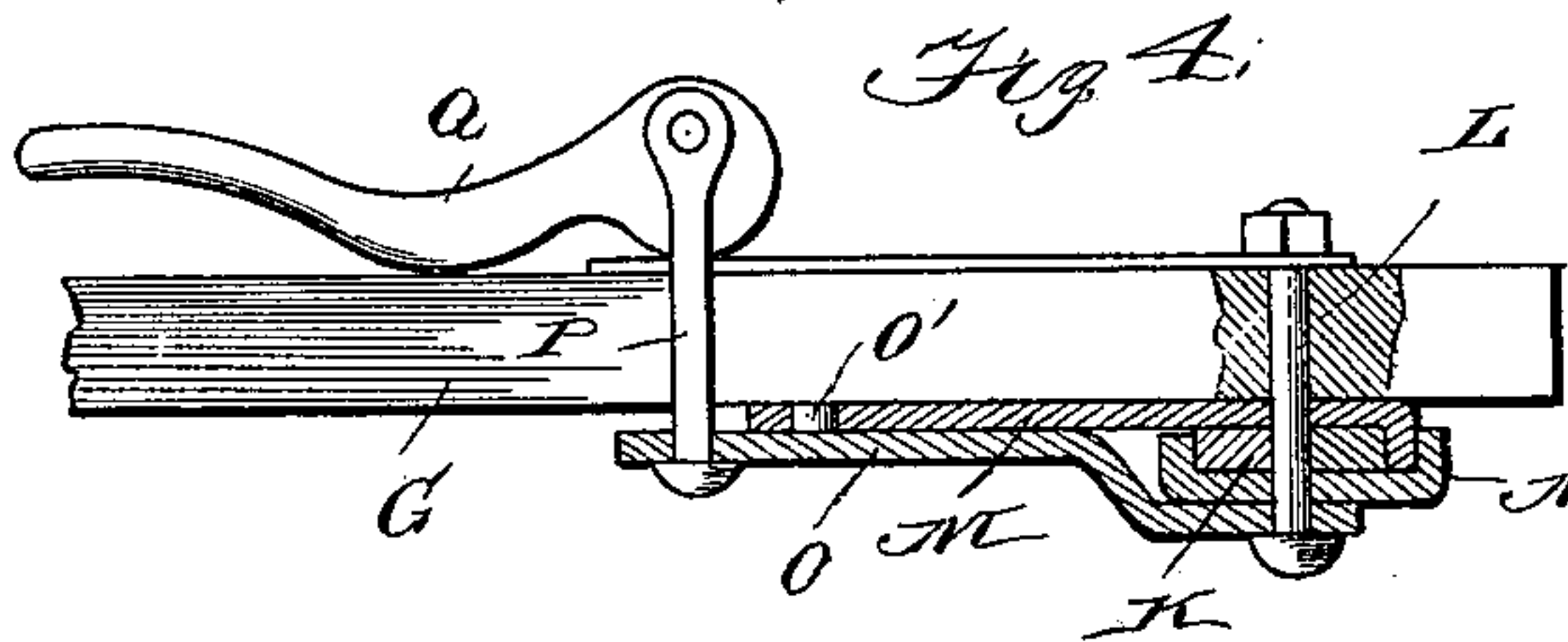
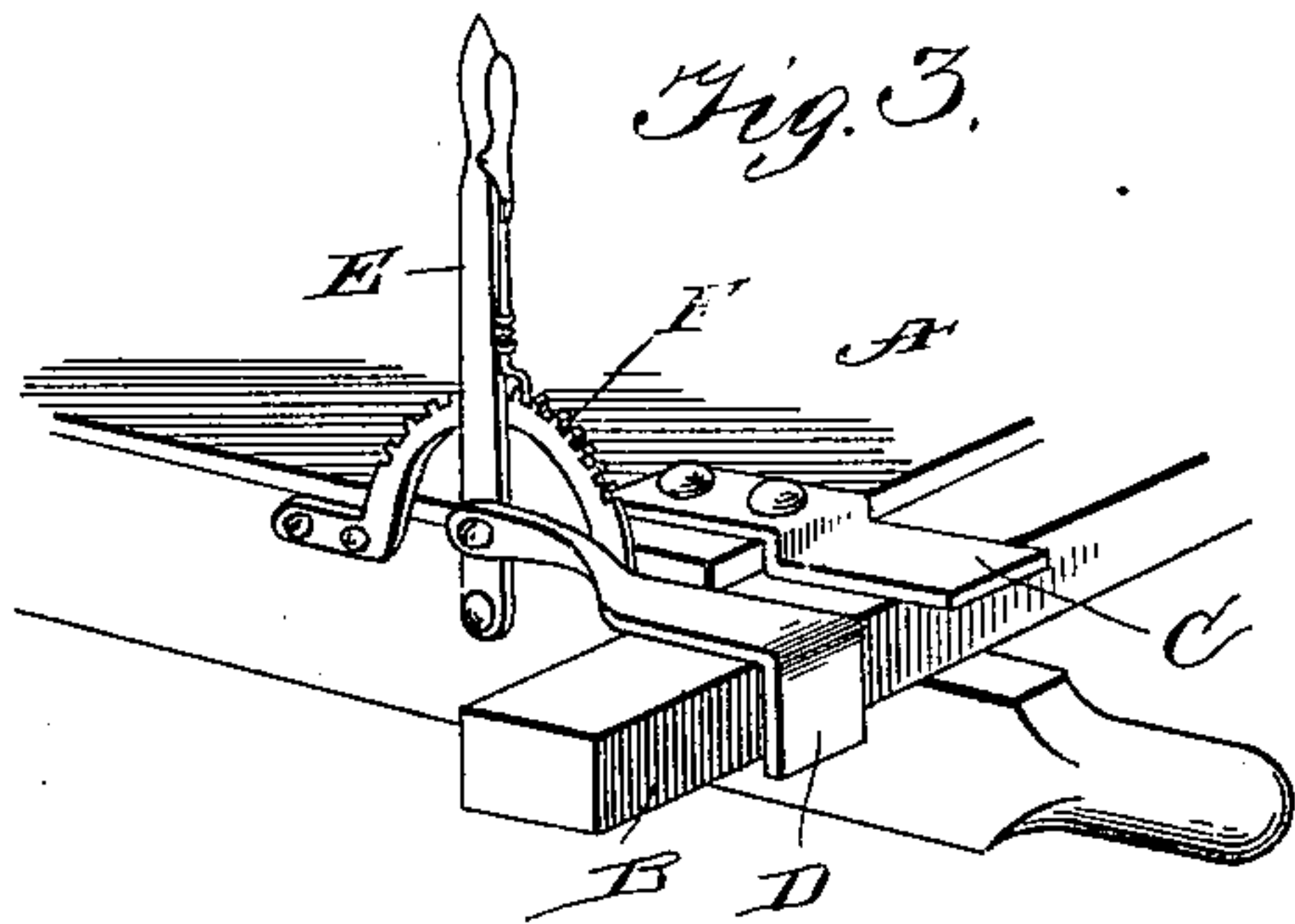
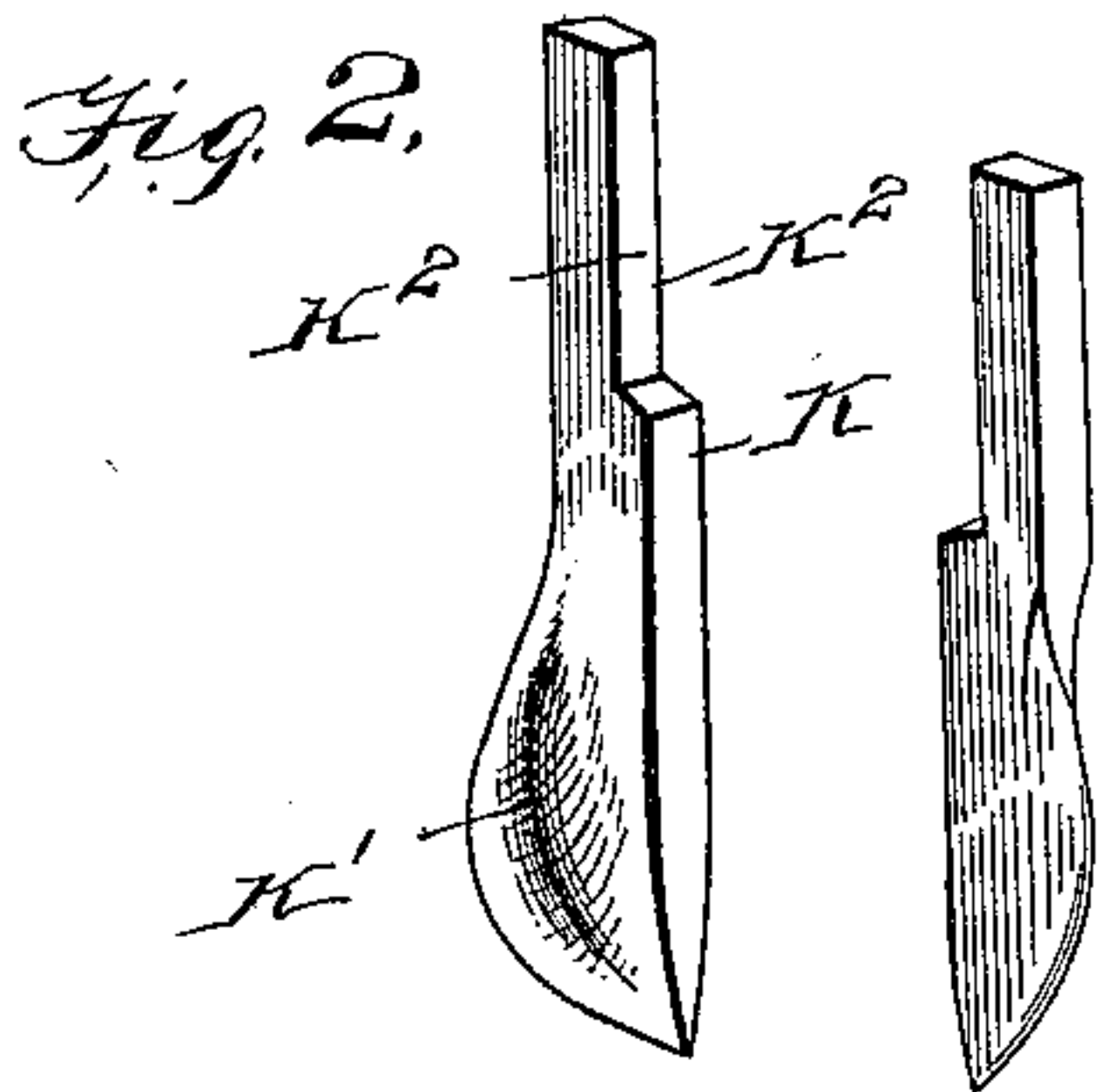
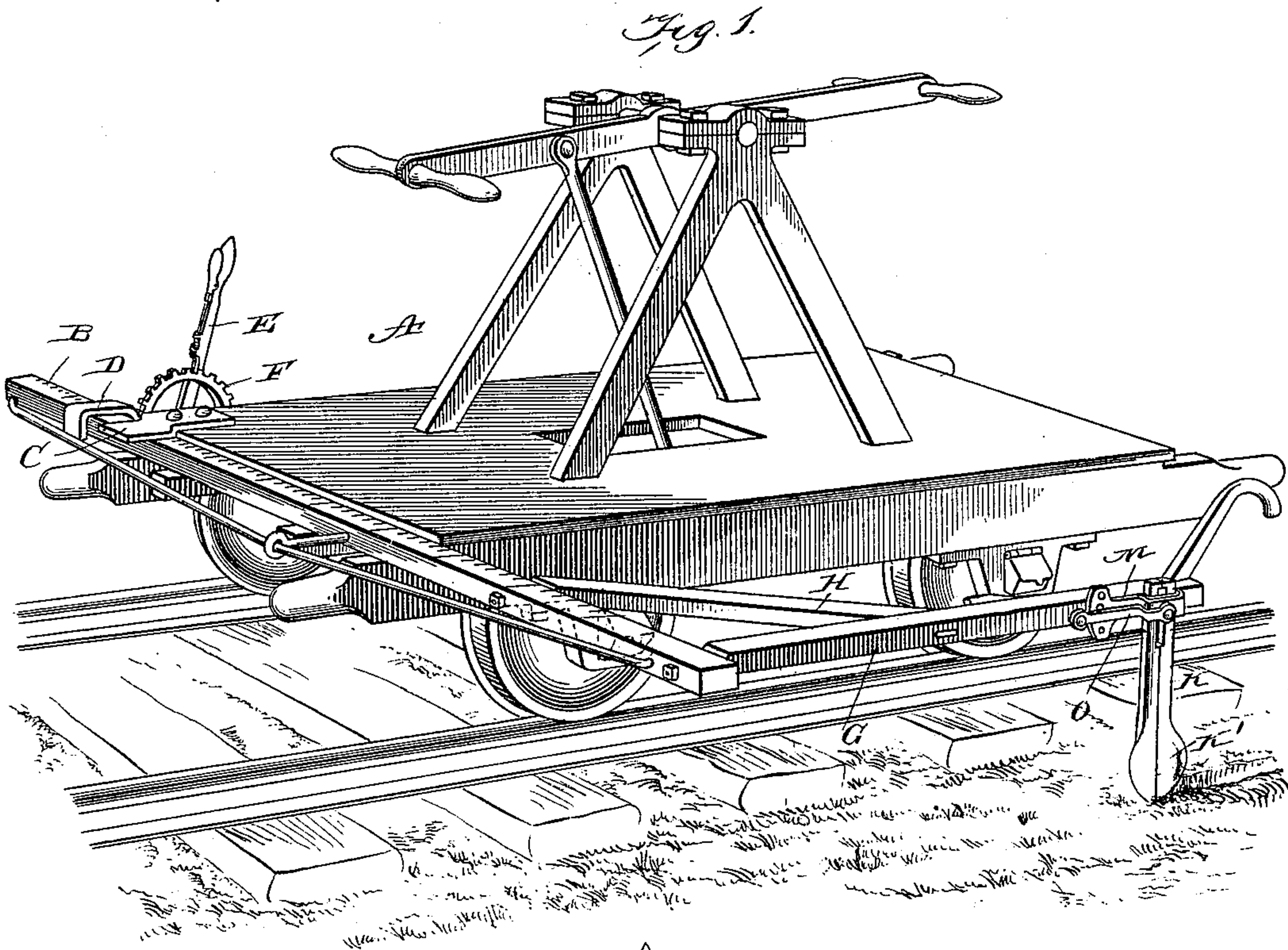
No. 627,550.

Patented June 27, 1899.

J. VANCE.
SOD BALLAST, AND DITCH LINE MARKER.

(Application filed Apr. 22, 1899.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN VANCE, OF FRANKLIN, TENNESSEE.

SOD, BALLAST, AND DITCH LINE MARKER.

SPECIFICATION forming part of Letters Patent No. 627,550, dated June 27, 1899.

Application filed April 22, 1899. Serial No. 714,125. (No model.)

To all whom it may concern:

Be it known that I, JOHN VANCE, a citizen of the United States, residing at Franklin, in the county of Williamson and State of Tennessee, have invented a new and useful Sod, Ballast, and Ditch Line Marker, of which the following is a specification.

This invention is a combined sod, ballast, and ditch line marker intended for use in the construction and maintenance of railroads to mark off the sod, ballast, or ditch line by cutting the furrow into the earth at the proper point.

The object of the invention is to provide a device which can be quickly and easily attached to any of the hand or push cars now in use, and another object is to provide a device which will readily adjust itself to the rise and fall of the surface to be marked; and a still further object is to provide for the quick and easy adjustment of the various parts, whereby varied conditions can be quickly and easily satisfied.

With these objects in view my invention consists in the peculiar construction of the various parts and in their novel combination and arrangement, all of which will be fully described hereinafter and pointed out in the claims.

In the drawings forming part of this specification, Figure 1 is a view showing the particular application of my invention. Fig. 2 is a detail perspective view of both halves of the marking-cutter. Fig. 3 is a perspective view showing the means for fastening the device to the hand-car. Fig. 4 is a detail sectional view, partly in elevation, showing the manner of securing the cutter to the beam. Fig. 5 shows the details of such fastening means, and Fig. 6 is a detail sectional view showing the hinged connections.

Referring to the drawings, A indicates an ordinary hand-car. A transverse beam B rests upon the forward ends of the hand-car beams and beneath a plate C, attached to the floor of said hand-car. The transverse beam B is further secured by means of a hook D, attached to a lever E, provided with a thumb-latch and working upon a pivot-segment F, fastened to the side of the hand-car, so that the hook can be thrown forward and the end of the beam released whenever desired. The

beam B extends transversely across the track and projects outwardly beyond the side of the car some distance, which distance can be regulated as desired. The beam is provided with a scale or measurer in order that the adjustment of the beam may be gaged or measured accurately. The beam is also strengthened by means of a truss-rod secured upon the front side. Pivotally connected to the outer end of said beam is a longitudinal beam G, which is intended to rest parallel with the side of the car and is braced by means of a diagonal beam H, both the brace-beam and the longitudinal beam being pivotally connected with the transverse beam B by means of a hinge-joint in order to permit the longitudinal beam to rise or fall, as necessary. In effecting this hinge connection I employ a bolt I, which passes through the beam B and has a hinge-plate I' connected thereto, which plate I' is secured upon the beveled or undercut end of the beams G and H, said ends being beveled to facilitate the rise and fall of the beam.

The marking-cutter, which is attached to the free end of the longitudinal beam, is preferably made in two sections, the rear section being shaped to turn the earth outwardly like the moldboard of a plow. Each section comprises a shank K and cutter-blade K', and each shank has a notch or recess K², so that when the two sections of the marking-cutter are placed together a shank of double width is provided having a central slot and the cutting-blade is essentially spoon-shaped. A fastening-bolt L passes through the slot of the marking-cutter and also through a plate M. The forward end of the plate M is somewhat enlarged and has a series of perforations M² produced therein in the arc of a circle in order to permit of the adjustment of this plate M, which in turn will adjust the position of the marking-cutter, inasmuch as the clip-plate securely fastens the said cutter of the plate M, and in order to provide for the adjustment and the locking of the plate M, I employ a lock or bar O, which is pivoted upon the locking-bolt L upon the exterior of the clip-plate N, said locking-bar having a stud or pin O' adjacent to its forward end, adapted to engage one of the perforations M² and the plate M, and in order to fasten the locking-bar I

employ a tie-bolt P, which passes through the forward end of the said locking-bar and through the beam G and carries an eccentric-headed lever Q, by means of which the locking-bar can be tightly bound against the plate M and the stud or pin held in engagement with the desired perforation, and inasmuch as the locking-bar is stationary so far as its horizontal position is concerned it will be readily seen that by loosening the locking-bar and by shifting the eccentric lever the plate M can be adjusted to any desired position and with it the marking-cutter, and after such adjustment the parts are all tightly locked into position by simply throwing the eccentric lever back to its normal position. The marking-cutter can be adjusted vertically by its central vertical slot.

It will thus be seen that I provide a line-marker which will cut an edge line in the surface of the earth irrespective of the condition of the surface, and it will also be noted that owing to the varied adjustment of the several parts all objections usually met with can be successfully overcome.

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

1. A marker of the kind described, comprising a transverse beam, a longitudinal beam pivotally connected to a marker attached to the rear end of the longitudinal beam, and adjustable vertically and obliquely thereon, substantially as shown and described.

2. In a marker of the kind described, the combination with the transverse beam, of the

plate attached to the hand-car and beneath which the beam fits, the hook and the lever to which the hook is attached, substantially as shown and described.

3. In a marker of the kind described, the combination with the longitudinal beam, of the marking-cutter attached thereto, adjustable plate and clip-plate, the locking-bar, tie-rod and eccentric lever, substantially as shown and described.

4. The combination with the transverse beam, of the longitudinal and brace beams having tapered ends, the bolts passing through the transverse beam and having the hinge-plate pivoted, said hinge-plate being secured to the lower beveled end of the longitudinal and brace beams, substantially as shown and described.

5. The combination with the plate having a shoulder at its rear end and perforations at its forward end, of the clip-plate and locking-bar, said locking-bar having a stud or pin adapted to engage the perforations in the plate, the tie-bolt and eccentric lever and the marking-cutter made in two sections having a central slot, said marking-cutter being arranged against the shoulder-plate and within the clip-plate, and the fastening-bolt passing through the locking-bar, clip-plate, shoulder-plate and slotted cutter, substantially as shown and described.

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Witnesses:

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