

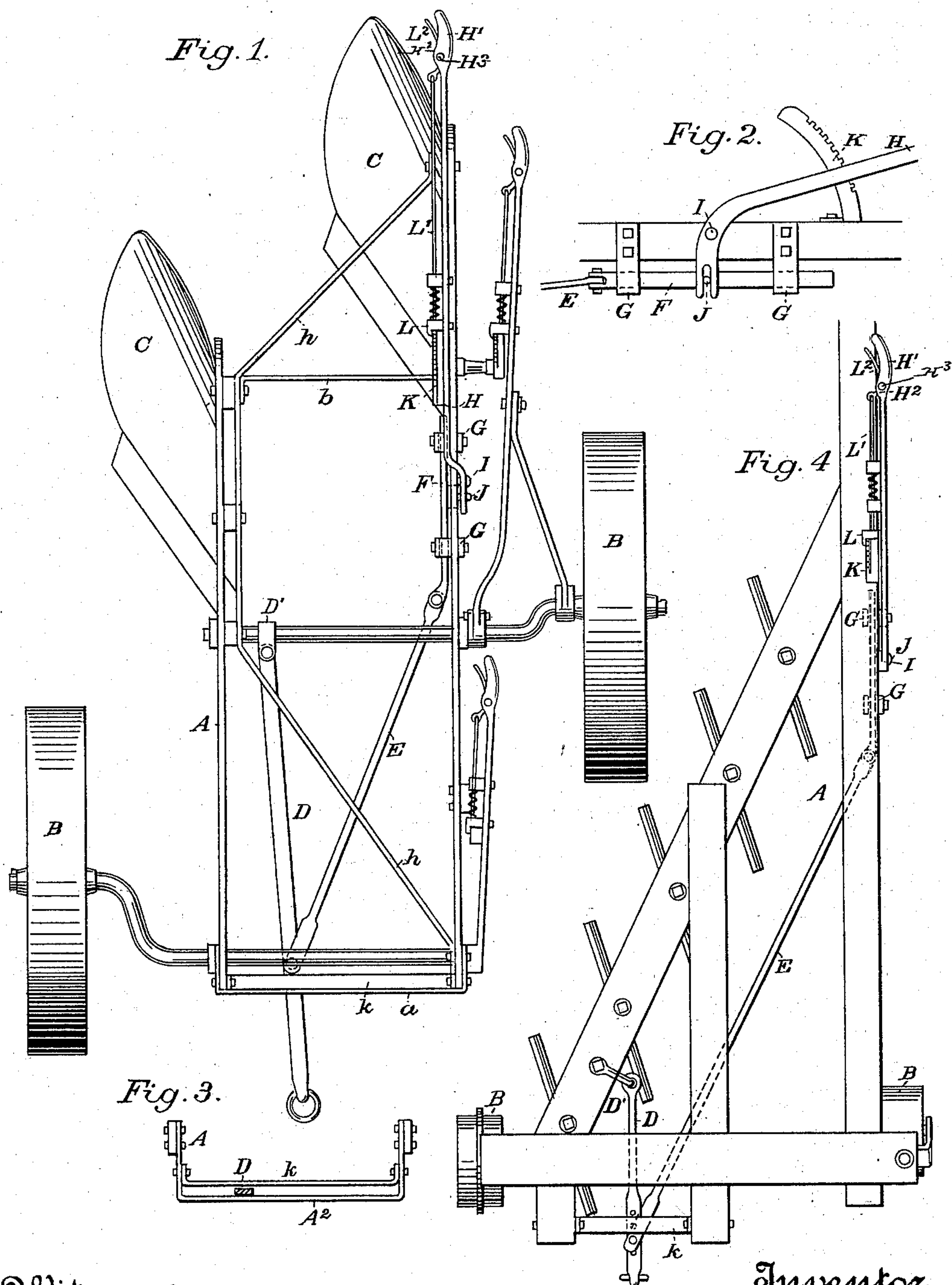
No. 609,187.

Patented Aug. 16, 1898.

C. G. HAMPTON.
DRAFT REGULATOR FOR PLOWS.

(Application filed Jan. 10, 1898.)

(No Model.)



Witnesses,
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UNITED STATES PATENT OFFICE.

CALVIN G. HAMPTON, OF RYDE, CALIFORNIA.

DRAFT-REGULATOR FOR PLOWS.

SPECIFICATION forming part of Letters Patent No. 609,187, dated August 16, 1898.

Application filed January 10, 1898. Serial No. 666,164. (No model.)

To all whom it may concern:

Be it known that I, CALVIN G. HAMPTON, a citizen of the United States, residing at Ryde, county of Sacramento, State of California, have invented an Improvement in Draft-Regulators for Plows; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to improvements in the construction of plow-frames and a device for regulating the draft of the plows, so as to throw it more to one side or the other.

It consists, essentially, in a novel construction of the frame to make it light and strong and in bars or arms connected together approximately at the point at which the draft is applied, diverging rearwardly from this point, the rear end of one of said bars being fixed and the other movable, so that the united front ends may be drawn to one side or the other with relation to the line of draft.

It also consists in details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a plan view. Fig. 2 is a detail view of the slide. Fig. 3 is a detail view of the front of the plow. Fig. 4 shows the attachment to what is known as the "Stockton" gang-plow.

Various devices have been applied to plows for the purpose of readily changing the draft to suit the character of the soil, the inclination of the surface, and the other characteristics which alter the running of the plows and make it necessary to change the draft to throw them more or less to or from the land.

In my invention, A is the frame of a plow, and B are the bearing-wheels.

In order to make the frame light and strong, I employ flat bar-iron of considerable width and but little thickness. This iron is bolted together with the greatest width in a vertical direction and the thickness in a transverse direction. This insures the greatest possible rigidity up and down in the direction of the principal strain and without any braces by reason of the depth of the bars. The front ends of the longitudinal side bars of the frame are united by a short transverse bar *a*, and a transverse brace *b* unites the rear ends.

h h are diagonal braces extending between the side bars from front to rear, these braces consisting of a plate or bar extending parallel with one of the side bars for a portion of its length and having its opposite ends bent at an angle toward the opposite side bar to form the diagonal braces. Filling-pieces *k* between the main bars and the braces form open channels in which the operating-levers are fulcrumed. A channel-iron bar *A*² across the front serves to support the draft rod or bar D.

C are plows attached to the frame according to its construction and the work to be done thereby.

The draft mechanism consists of two rods or bars D and E. The bar D is here shown as connected by a yoke D' with the axle of one of the wheels B or with some fixed part of the frame, as in Fig. 1, and the bar E is pivoted to the bar D at a point near the front or where the draft is applied. The draft may be applied, as here shown, directly to the end of the draft-bar D. The rear end of the bar E extends backwardly and connects with a slide F, which is movable in guides G.

H is a lever fulcrumed conveniently to the frame, as shown at I, and having the lower end slotted or otherwise contrived to engage with the pin J upon a slide F.

K is a toothed rack with which the lever H is adapted to engage, so as to hold it at any desired point.

The operation of this device will then be as follows: The bar D having its rear end permanently pivoted or connected, any movement of the front end of the bar from side to side may be effected by moving the slide F, with which the rear end of the bar E is connected, either forward or backwardly. When moved forwardly, it will throw the front end of the draft-bar D to the right, and when moved backwardly it will draw it over to the left.

The vertical arrangement of the lever H brings the handle within easy reach of a riding or walking driver, and by moving it up or down the draft is easily changed to suit the conditions.

The handle of the lever H is made, as here shown, of flat iron or steel of sufficient width so that the end which is to be grasped by the

hand is turned over upon each side to form a hollow rounded handle H' , having lugs or ears at H^2 , made with openings to receive a pin H^3 , and the latch L , which engages the rack K , has a rod or shank L' , extending up to the handle H' and connecting with a short lever-arm L^2 , which is fulcrumed on the pin H^3 , passing through the lugs or ears H^2 of the handle. This enables the operator to grasp the handle H' conveniently and by simple pressure upon the lever-arm L^2 to depress it into the concavity of the handle, thus disengaging the latch L and allowing the lever to be moved to any desired point, when it can be released and the latch again engaged with the rack K .

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

1. A draft attachment for gang-plows consisting of the draft-bar having the rear end flexibly connected with the plow-frame, the front end adapted to receive the draft connection, a second bar having a front end connected with the draft-bar diverging rearwardly therefrom and a connection whereby the rear end of the second bar may be moved backward or forward upon the line of the frame whereby the draft-bar is moved from one side to the other.

2. A draft-regulator attachment for plows consisting of a bar having the rear end flexibly connected with the plow-frame, the front end adapted to receive the draft attachment, a second bar intersecting and having the front end connected with the draft-bar near the point of draft attachment, a slide movable in guides upon the line of the plow-frame, a fulcrumed lever, one arm of which engages the slide and the other is provided

with a handle by which it may be moved to move the slide and change the position of the draft-bar.

3. In a draft-regulator for plows, two bars having the front ends united, and diverging rearwardly, one of said bars having the rear end flexibly connected with the plow-frame, the other bar having its rear end connected with a slide movable in guides and on the line of the plow-frame, a fulcrumed lever the short arm of which engages the slide, a vertical rack over which the lever is movable, a handle formed upon the lever by turning the sides to form a concavo-convex end with lugs between which a short lever is fulcrumed, and a connection between said lever and the latch which is adapted to engage the holding-rack.

4. The fulcrumed lever by which the draft-regulating mechanism is actuated consisting of a flat bar having the handle bent into a concavo-convex form and provided with ears or lugs, and a lever fulcrumed between said lugs and adapted to tilt within the concavity of the handle.

5. In a gang-plow, a frame consisting of side bars formed of thin metal plates disposed with the greatest depth vertical, similar plates, one forming a transverse bar at the front and the other forming a transverse brace connecting the rear portions of said sides, and braces consisting of a plate or bar extending parallel with one of the side bars for a portion of its length and having its opposite ends bent diagonally toward the opposite side bar.

In witness whereof I have hereunto set my hand.

CALVIN G. HAMPTON.

Witnesses:

W. M. HUTTON,

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