

J. M. Huie and E. Card.

Gang Plow.

No. 120,384.

Fig. 1. Patented Oct. 31, 1871.

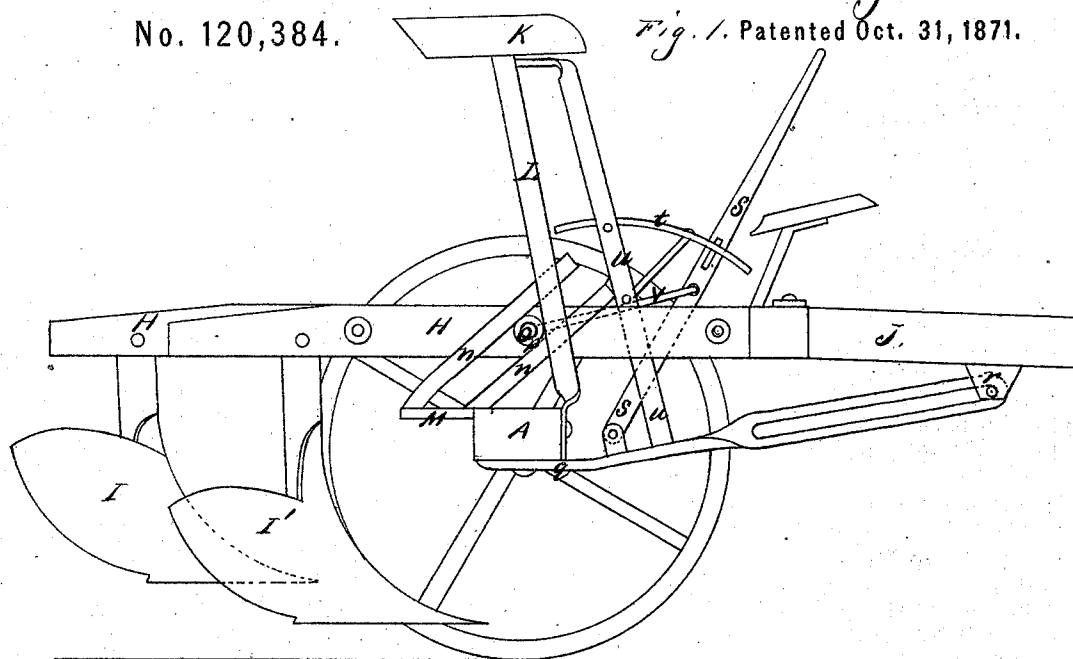


Fig. 2.

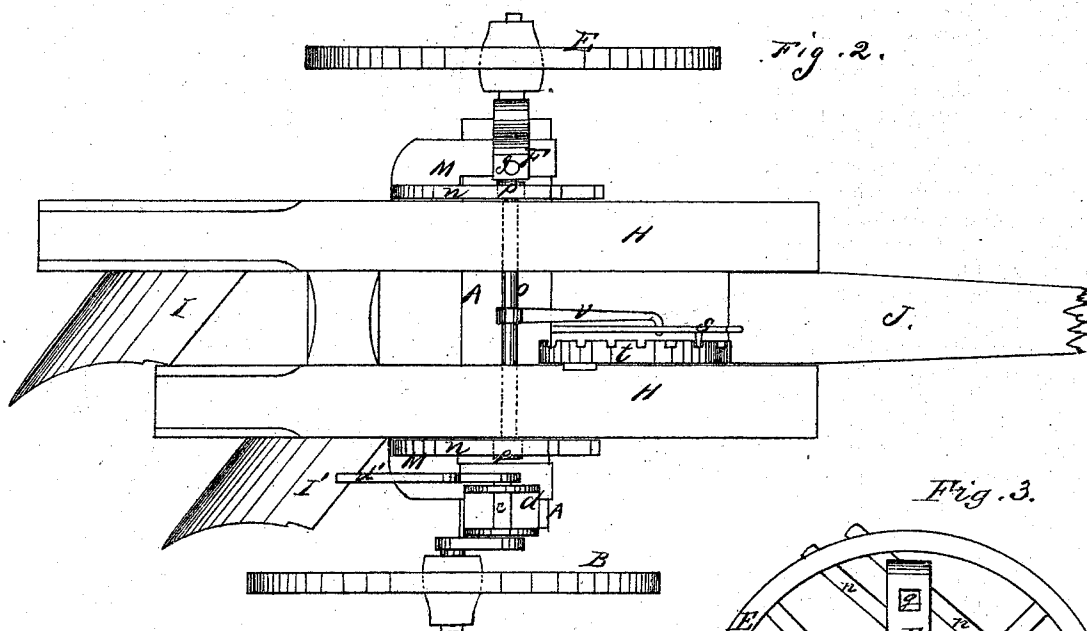
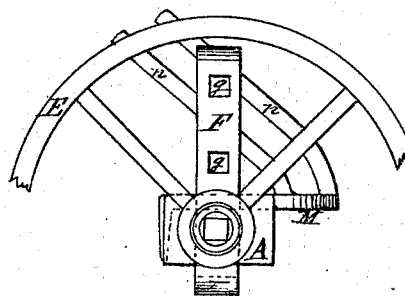


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

JAMES M. HUIE AND ELISHA CARD, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN GANG-PLOWS.

Specification forming part of Letters Patent No. 120,384, dated October 31, 1871.

To all whom it may concern:

Be it known that we, JAMES M. HUIE and ELISHA CARD, of the city and county of San Francisco and State of California, have invented an Improved Gang-Plow; and we do hereby declare the following description and accompanying drawing are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use our said invention or improvements without further invention or experiment.

Our improvements have for their object the construction of such a gang-plow that the labor of lifting the plow-frame and plows so as to take the plows out of the ground when desired will be done by the draft of the horses without exertion on the part of the driver. It also consists in arranging the plows so that they can be employed for subsoiling or deep tilling.

In order to fully describe our gang-plow reference is had to the accompanying drawing forming a part of this specification, in which—

A represents the cross-timber or carrying-axle of the plow. One of the bearing-wheels B is operated by a crank-lever, *c*, which bears in a box, *d*, on the bearing-timber A, and which can be revolved so as to raise or lower the wheel B to any desired position in the circle, which it describes by a short lever, *d'*. The opposite bearing-wheel E can also be raised or lowered by changing its position in the vertical bar F, which can be provided with holes *g*, as shown, or may be slotted, as preferred. (See Fig. 3.) The timbers H H of the plow-frame extend across above the cross-timber A and carry at their rear ends the plows I I'. The pole J is fixed between their forward ends. The seat K is supported directly upon the cross-timber A by the standard L, which passes down upon each side of the plow-frame. Secured to the cross-timber A, upon each side of the plow-frame, is a metal plate, M, which has one end formed into two parallel prongs, *n n*. These prongs are so arranged as to stand at an angle to the plow-frame, one above the other, their inclination being toward the front of the plows. Passing transversely through the timbers H of the frame is a shaft, *o*, extending to the outside of the frame-timbers, upon each side. Upon these extremities are placed friction-rollers *p*, which travel upon the inclined planes between the parallel inclined prongs *n*, which serve as a guide; thus everything being free, when the draft comes upon the pole the frame with the plows

are elevated as far as the rollers can move upon the inclined prongs. Secured to the under side of the cross-timber A is a bar, *q*, which extends forward under the pole. The front end of this bar is slotted, as shown, and a pin or bolt in the grooved metallic plate *r*, which is secured to the under side of the pole, passes through the slot. A lever, *s*, is secured to the bar *q* in such a position that it will stand directly in front of the seat K in such a position as to engage with the circular rack *t*. This rack is fixed to a standard, *u*, which connects the bar *q* with the front part of the rider's seat. A link, *v*, connects the lever *s* with the transverse shaft *o*, so that by throwing the lever forward the frame is caused to be elevated, the rollers traveling upon the inclined guiding-prongs *n*, and the bolt in the grooved plate *r* traversing the slot in the bar *q* to the forward end. It is not intended, however, that the lever *s* will be used for elevating the plows and frame, but when the plows are in the ground and the lever is fixed in the rack *t* it will hold the frame firmly and keep the plows in the ground; but by relieving the lever from the rack the draft, coming directly upon the pole, will lift the frame until the plows leave the ground, when, by securing the lever in the rack, the frame will be held in its position. The plow I' is provided with a longer standard than the plow I, and is employed in plowing the bottom of the furrow which the plow I traveled in the previous round, thus plowing one furrow of the usual depth with the plow I and turning the bottom of the already turned furrow to the surface with the plow I', in this manner giving the benefit of a subsoil plow.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

The combination, in a wheel gang-plow, of the frame H H, cross-timber A, pole J, wheels B E, plate M, with their guiding-prongs *n n*, shaft *o*, bar *q*, plate *r*, lever *s*, and link *v*, arranged and operating as described.

In witness that the above-described invention is claimed by us we have hereunto set our hands and seals.

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Witnesses:

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(114)