3 Sheets—Sheet 1.

H. L. HEWITT.

Sulky Plow.

No. 201,670. Patented March 26, 1878.

FIG. 1.

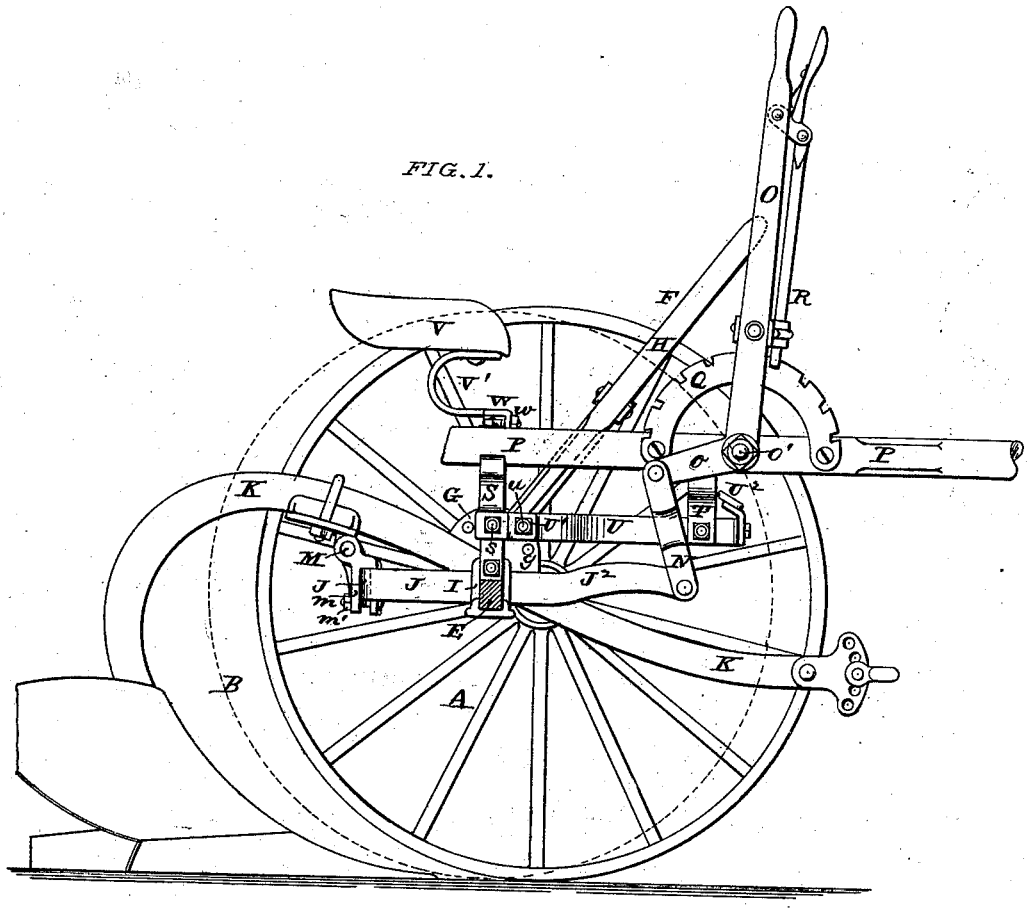


FIG. 4.

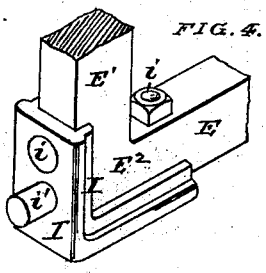
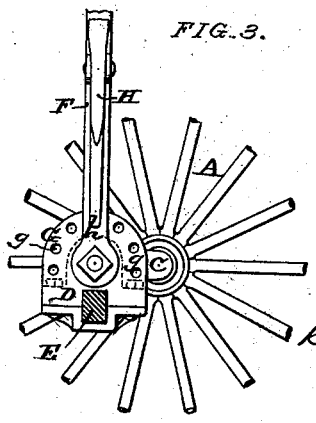


FIG. 3.



ATTEST:
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Sam'l Knight

INVENTOR:
Horace L. Hewitt

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H. L. HEWITT.

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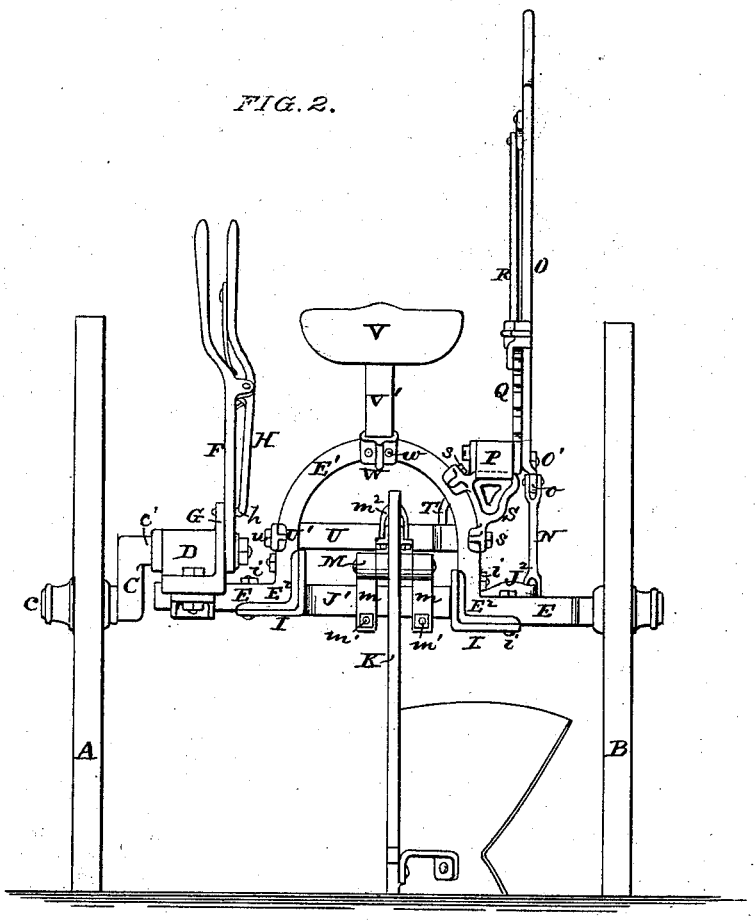
No. 201,670. Patented March 26, 1878.

FIG. 2.



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3 Sheets—Sheet 3.

H. L. HEWITT
Sulky Plow.

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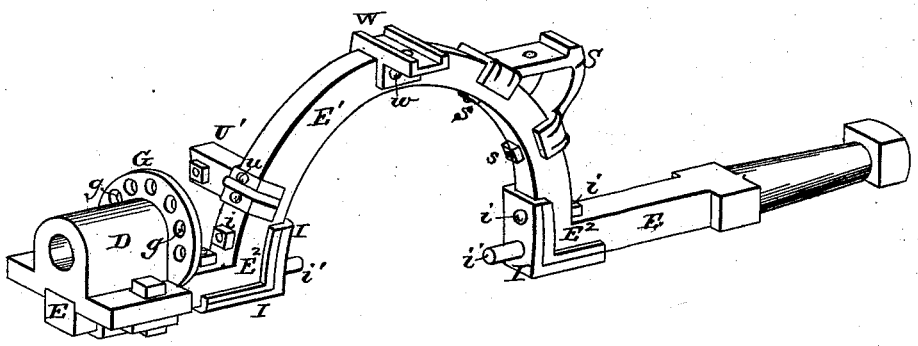
FIG. 5.



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UNITED STATES PATENT OFFICE.

HORACE L. HEWITT, OF ALTON, ILL., ASSIGNOR OF ONE-HALF HIS RIGHT TO LEWIS M. RUMSEY AND MOSES RUMSEY, OF ST. LOUIS, MO.

IMPROVEMENT IN SULKY-PLOWS.

Specification forming part of Letters Patent No. **201,670**, dated March 26, 1878; application filed January 14, 1878.

To all whom it may concern:

Be it known that I, HORACE L. HEWITT, of Alton, Madison county, in the State of Illinois, have invented certain new and useful Improvements in Sulky-Plows, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

The invention consists in certain improvements in sulky-plows, which will first be described, and afterward pointed out in the claims.

In the drawings, Figure 1 is an off-side elevation, with the wheel on that side removed and the axle shown in section. Fig. 2 is a rear view. Fig. 3 is a detail in elevation, showing the crank-formed axle of the near-side wheel. Fig. 4 is a detail in perspective, showing the attachment to the arched axle of the pivot-bracket of the plow-frame. Fig. 5 is an enlarged perspective view of the arched axle-bar, with the malleable cast-iron brackets or clips for connection of the crank-axle, tongue, plow-bail, and front foot-bail, and seat.

A is the near or "land" wheel, and B is the "off" or "furrow" wheel. The land-wheel turns on the spindle *c* of the axle-crank C, and the bearing-pin *c'* of said crank turns in a bearing-bracket, D, made of malleable cast-iron, and formed to fit the end of the wrought-iron axle-bar E, to which it is connected by bolts or rivets.

Upon the bearing-pin *c'* is fixed a lever, F, which works on the side of a semicircular plate, G. The plate G has a series of perforations, *g*, concentric with the pin *c'*.

H is a spring-catch lever, at whose lower end is a pin, *h*, passing through the lever F, and through any one of the holes *g* formed in plate G, according to the position of the lever. The position of the lever governs the position of the spindle *c* of axle-crank, and consequently the height of that end of the axle-bar E from the ground.

I claim no novelty in this axle-crank C, as it has been in use for a number of years and is well known, and therefore will not further describe its construction or purpose; but I claim novelty in the manner of its connection to the axle-bar E by means of the malleable casting D.

The axle-bar E is arched upward at E^1 to give space for the plow-beams.

I I are corner-brackets of malleable cast-iron, which embrace the knees of the axle-bar E at those parts where it is bent at right angles between the arch and the horizontal ends. Said castings are connected to the axle-bar by bolts or rivets *i*. These corner-brackets have pivot-pins *i'*, which enter holes in the side bars of the bow-frame J, to whose rear bar J^1 the plow-beam K is connected. The pins *i'* form the fulcrums on which the frame J works, the said frame forming a lever, by which the plow or plows are raised and lowered. The corner-brackets I I are secured to the axle-bar by bolts or rivets, and serve not only for the connection of the frame or bail J, but also serve to strengthen the axle at the knees E^2.

The plow-beam K is connected to the lever-frame J by the following device: M is a hinge, having one plate secured to the straight rear bar J^1 of the frame J by clips *m*, the clip-bolts m^1 holding the clips firmly in place upon the bar J^1 of the frame J. The clips may be transversely adjusted on the bar J^1 by slackening the nuts m^1. Another plow can be attached to the bar J^1 beside the one shown.

The rear plate of hinge M is secured to the plow-beam K by a strap or clip, m^2, which passes over the beam, the construction being such that the beam can be adjusted backward and forward when the clip is loosened.

The lever-frame J has an arm, J^2, extending in front of the fulcrum-pivots *i'*, and connected by rigid link N to the shorter arm *o* of the angle-lever O. The construction is such that the backward movement of the lever lifts the plow-beam. The lever O is fulcrumed at O' upon the side of the tongue P, and is moved beside a semicircular bar, Q, concentric with the fulcrum O', and notched at the upper edge for the engagement of the sliding spring-catch R, by which the lever is held in any position in which it may be placed.

The rear end of the tongue is secured to the arched part E^1 of the axle-bar by a malleable cast-iron bracket-piece, S, made to fit the arch and the tongue, and secured thereto by its flanges and by bolts or rivets *s*. The front support of the tongue is a standard, T, whose lower

end is secured to the foot bow or bar U. The rear ends of the foot-bar U are secured to the arch E^1 by means of the malleable cast-iron brackets or clips U^1, made to fit the arch E^1 and bar U, and secured thereto by bolts or rivets *u*. At the front end of the bow is a foot-rest, U^2, made of cast metal, and attached to the wrought-iron bar or bow U. The seat is secured to the axle by a bracket-casting, W, of malleable cast-iron. The bracket W is made to fit the top of the arch E^1, and is fastened by bolts or rivets *w*. Between the seat and bracket is the usual spring V′.

I do not confine myself to malleable cast-iron as a material for the brackets or clips upon the wrought-iron axle E, as other cast metal might be used; but I prefer malleable cast-iron, owing to its cheapness and perfect adaptability to the purpose.

With the described construction I am enabled to build a riding-plow which is light, strong, and cheap.

I claim as my invention—

1. The arched axle E, in combination with the casting D, perforated plate G, axle-crank C, lever F, and spring-catch lever H, all constructed and arranged to operate substantially as described.

2. The arched axle E, having knees E^2, in combination with the corner-brackets I, having pivot-pins *i′*, the said corner-brackets constructed to embrace and strengthen the axle at the knees E^2, and serve as a pivotal connection for the frame J, all substantially as and for the purpose set forth.

HORACE L. HEWITT.

In presence of—
SAML. KNIGHT,
GEORGE H. KNIGHT.