W. HENRY.

SULKY-PLOW.

No. 191,588. Patented June 5, 1877.

Fig. 1

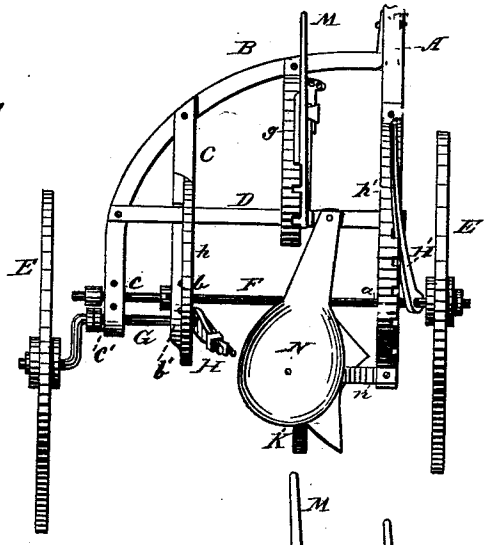


Fig. 2

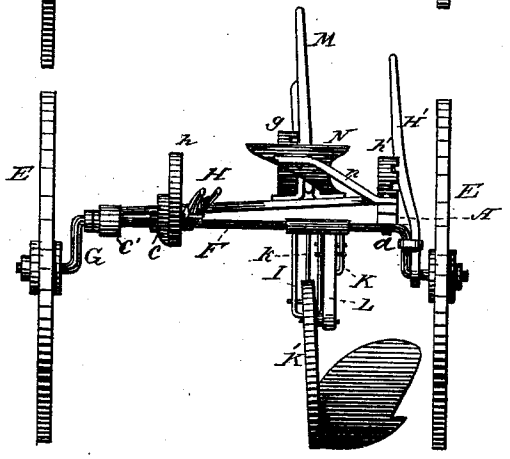
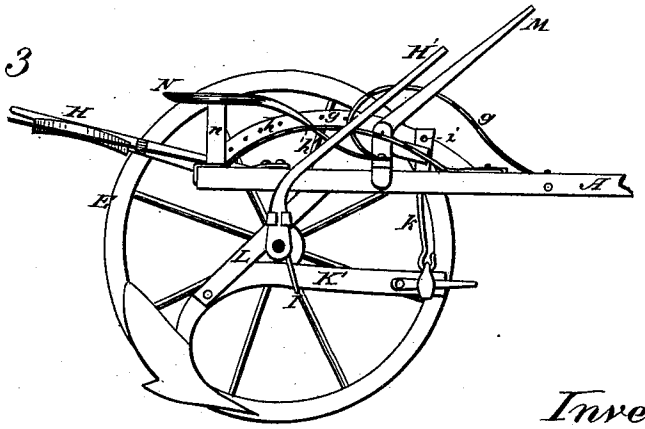


Fig 3



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UNITED STATES PATENT OFFICE.

WILLIAM HENRY, OF TRENTON, MISSOURI, ASSIGNOR OF ONE-HALF HIS RIGHT TO GEORGE W. MOBERLY, OF SAME PLACE.

IMPROVEMENT IN SULKY-PLOWS.

Specification forming part of Letters Patent No. **191,588**, dated June 5, 1877; application filed February 19, 1877.

To all whom it may concern:

Be it known that I, WILLIAM HENRY, of Trenton, in the county of Grundy and State of Missouri, have invented certain new and useful Improvements in Sulky-Plows; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figure 1 is a top plan. Fig. 2 is a rear elevation; and Fig. 3 is a side elevation, one of the wheels being removed.

Similar letters of reference indicate corresponding parts in all the drawings.

This invention relates to the construction of the frame for sulky-plows; and it consists in an improved construction and combination of parts whereby the plow may be readily set into or lifted from the ground, and the depth and pitch of furrow regulated, substantially as hereinafter more fully described, and pointed out in the claim.

In the drawing, A is the tongue, bolted to which is a curved piece of iron, B. C is another piece, bolted to said iron B, parallel to the tongue A, so that a frame, A B C, is formed, strengthened by the brace or cross-piece D. Each wheel, E, is hung upon a separate bent axle, one of the axles F being hinged to the tongue A at *a*, and passing through suitable bearings *b* and *c* in the pieces C and B, the entire width of the frame, while the other axle G is pivoted in bearings in the pieces B C only, and terminating in a lever, H. To the bent portion of axle F is rigidly secured another corresponding lever, H′, levers H H′ being so arranged relative to each other and to their respective axles, that when the axles are in the position represented in Fig. 2—that is, the centers of wheels E E in a line with each other—one of said levers (H in the drawing) shall be depressed, while the other, H′, will be in an almost vertical position. Levers H H′ may be secured in any given position by means of segmental racks *h h′*, suitably secured upon the frame in a manner well understood. Affixed upon the longer axle F are two downward-projecting bails or keepers, denoted by I and K, through the longer of which, I, is passed the plow-beam K′. To the rear end of this beam is pivoted a brace, L, the other end of which is pivoted adjustably in the slot or bail K next to bail I. To the front end of the plow-beam K′ is pivoted a rod, *k*, having a series of perforations, *i*. This rod is at its other end pivoted to an angle-lever, M, which has its fulcrum in a bearing on the cross-piece D, and may be secured in any given position by means of a segmental rack, *g*, in the same manner as levers H H′, already described. N is the driver's seat, which is secured upon a spring-bracket, *n*, projecting from the rear end of the tongue A, so that the three operating-levers H H′ M are within easy reach of the driver, and may by him be readily adjusted in any given position which circumstances may demand.

From the foregoing description the operation of my improved sulky-frame will be readily understood. By throwing the lever M forward the plow will be tilted in an upward and rearward direction, so as to be lifted out of the soil, the brace L steadying this motion so that the plow-beam K′ will move easily up or down within its bail or keeper I. Similarly, the "set" of the plow into the ground may be regulated and controlled by the position of lever M.

The pitch of the plow may readily be adjusted by changing the bearing-point of rod *k*, by means of its perforations, *i*, in the bent lever M, while a horizontal position of the axles and frame in plowing hill-sides may be secured by tilting either or both of the wheels by means of levers H H′. Lever H′ also serves, when thrown sufficiently far forward, to lift the plow out of the ground by the bail I catching up under beam K′ and raising it, and it will further be seen that the depth of the furrow may readily be regulated by lowering the axles, and with them the frame and its attachments, in their relation to the wheels by the adjustment of levers H and H′.

Having thus described my invention, I

claim and desire to secure by Letters Patent of the United States—

The combination of frame A B C, having bearings *a b c*, long axle F having lever H′, and bails or keepers I K rigidly attached thereto, swinging plow-beam K′, and pivoted brace L, substantially as and for the purpose herein shown and specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM HENRY.

Witnesses:
E. B. COOPER,
R. E. BOYCE.