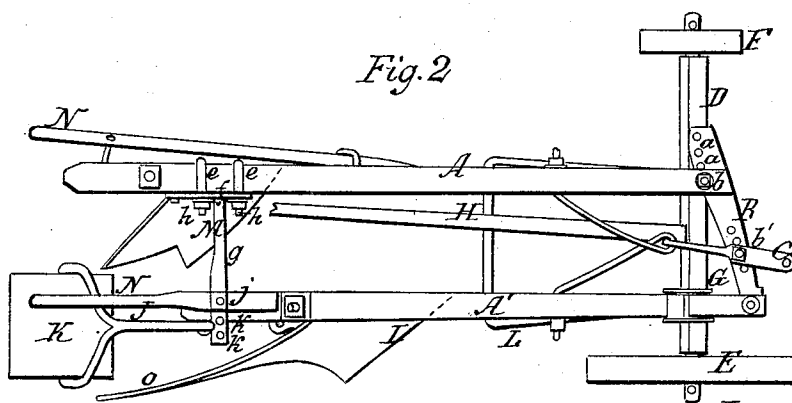
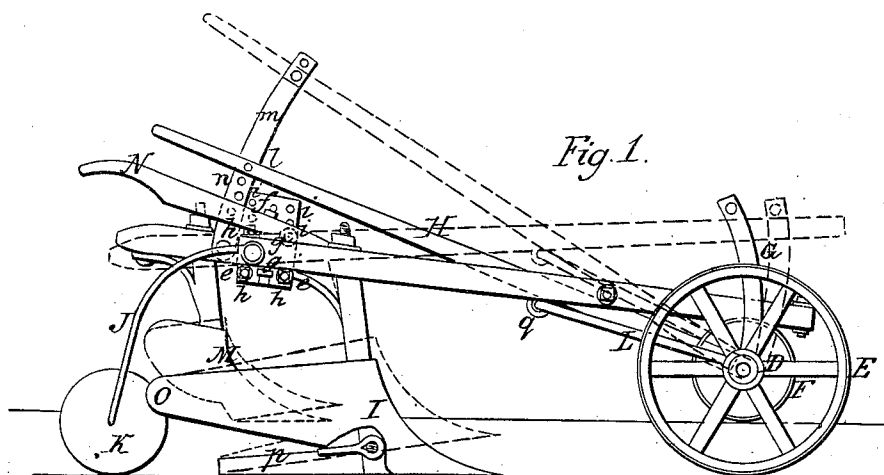


N. F. BURTON.

Wheel-Plow.

Patented Oct. 29, 1861.

No { 2,564, }
33,568. }



Witnesses.
J. W. Coombs.
M. M. Compton

Inventor.
N. F. Burton
by Munn & Co
Attys.

UNITED STATES PATENT OFFICE.

N. F. BURTON, OF PLYMOUTH, ILLINOIS.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 33,568, dated October 29, 1861.

To all whom it may concern:

Be it known that I, N. F. BURTON, of Plymouth, in the county of Hancock and State of Illinois, have invented a new and Improved Plow; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a side view of my invention, and Fig. 2 a plan or top view of the same.

Similar letters of reference indicate corresponding parts in the two figures.

This invention relates to a gang-plow designed for surface and subsoil plowing; and it consists in a novel and improved arrangement of parts, substantially as hereinafter shown and described, whereby the depth of the furrows may be regulated as desired, and the soil thoroughly plowed or broken up and left in a favorable state for the cultivation of crops.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A A' represent two plow-beams, the front ends of which are connected by a metal plate, B, perforated with holes *a*, through any one of which and the beam A a screw-bolt, *b*, passes.

b' is a bolt, which secures a draft-bar, C, to the plate B at varying points, according to the direction of the line of draft desired. The back parts of the beams A A' are connected by clamps *e e*, a plate, *f*, and two bars, *g g*, the latter being secured at one end to the plate *f*, one over the other. The clamps *e e* are simply staples, which embrace the beam A, and are secured in the plate *f* by nuts *h*. The staples pass through any of a series of holes, *i*, in the plate *f*, arranged in vertical rows. (See Fig. 1.) The beam A' is secured between the bars *g g* by a screw-bolt, *j*, which passes through any of a series of holes, *k*, in the bars *g*, and admits of the back parts of the beams A A' being secured at a greater or less distance apart, as may be desired. The front ends of the beams A A' may be secured at a greater or less distance apart by adjusting the bolt *b* in any one of the holes *a* of plate B.

D is an axle, having at one end a large wheel, E, and a small wheel, F, at the opposite end. This axle D has a curved or seg-

mental guide, G, attached, through which the beam A' passes and is allowed to slide freely therein. The axle D has an arm, H, attached, which extends back between the beams A A', and has a loop or staple, *l*, connected to it, said loop being fitted on a curved bar, *m*, attached to beam A, the arm H being secured at any desired height by means of a pin, *n*, passing through bar *m*.

To the beam A' there is secured a subsoil-plow, I. This plow has a long or extended wing, *o*, and is provided with a landside, *p*.

To the back end of the beam A' there is attached a frame, J, having a roller, K, fitted in it. The frame J is allowed to swing or work freely on the beam A'. The axle D is connected to the beams A A' by means of a bail-shaped rod, L, the back end of which is attached to the under sides of the beams A A' by staples or eyes *q*, and the arm H is fitted on the back part of the rod L by means of an eye or staple. The beam A has a plow, M, attached to its back part. The plow M is a surface-plow and does not penetrate as deep as the subsoil-plow I. The latter plow, I, is also in advance of the surface-plow M. The depth of both plows may be graduated as desired by adjusting the arm H, and the surface-plow M may have the depth of its penetration graduated independently or separately by securing the clamps or staples *e e* higher or lower in the plate *f*. The plow I throws up the subsoil to the surface, while the surface-plow M throws the surface-soil into the furrow made by the plow L. The roller K smooths or presses down the slices turned over by the subsoil-plow I, forming under-drains. The large wheel E runs in the furrow made by the subsoil-plow I, while the small wheel F runs on the unplowed surface. By shifting the draft-bar C laterally, more or less "land" may be given the plows, as desired. A handle N is attached to the back end of each beam A A'.

I do not claim any of the parts, separately considered; but

I do claim as new and desire to secure by Letters Patent—

1. The combination of the subsoil-plow I with the surface-plow M, when said plows are attached to adjustable beams A A', arranged substantially as and for the purpose set forth.

2. In combination with the subsoil and fur-

row plows I M, the roller K, attached to the frame J, and arranged to operate conjointly with the plows, as set forth.

3. The attaching of the axle D to the beams A A' through the medium of the bail-shaped rod L, in combination with the arm H, attached to the axle D, and having its bearing

or fulcrum on the rod L, as herein described, whereby the depth of the penetration of both shares may be regulated as desired.

N. F. BURTON.

Witnesses:

WM. M. KING,
J. H. COWTON.