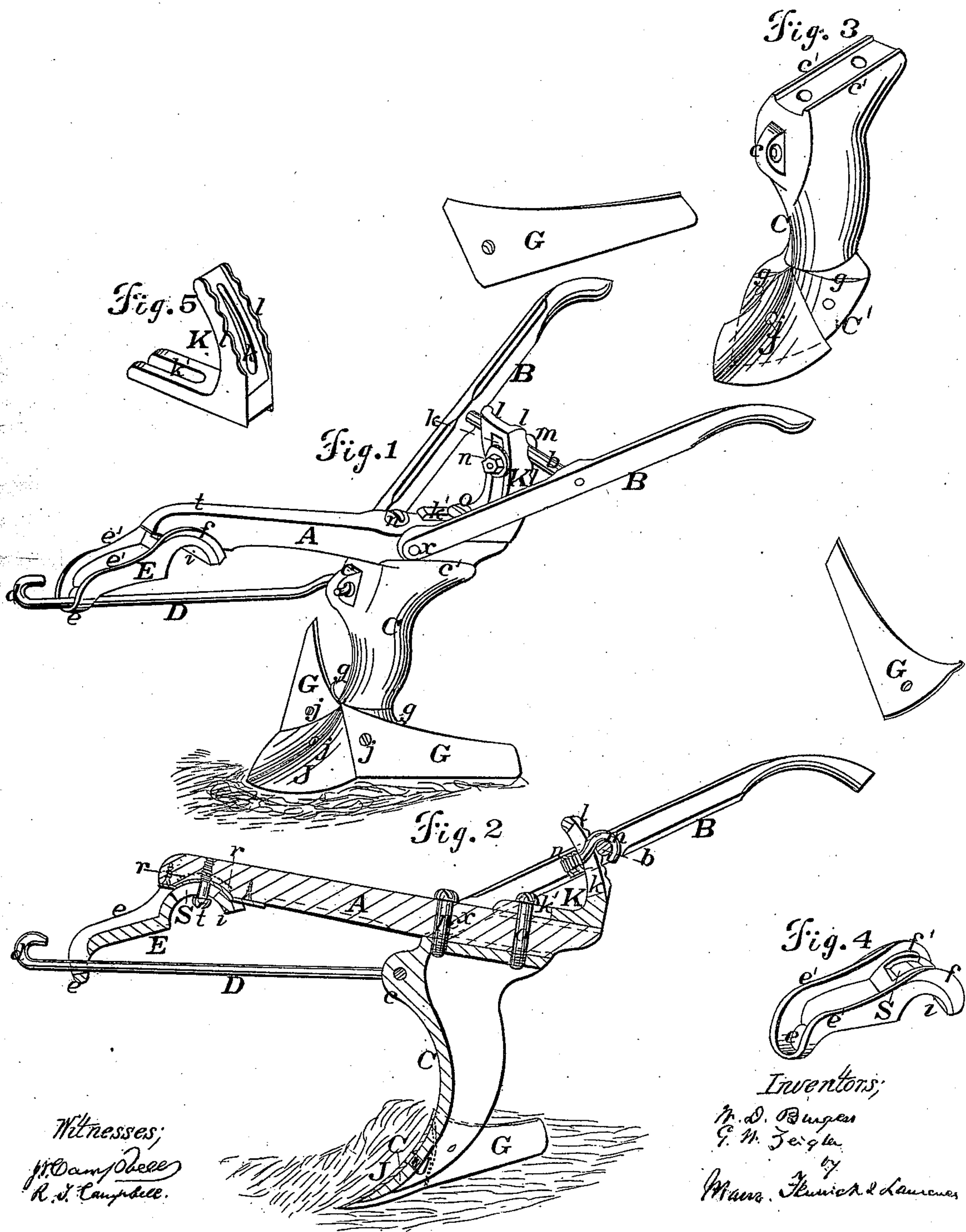


BURGESS & ZEIGLER.

Plow.

No. 79,547.

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Letters Patent No. 79,547, dated July 7, 1868.

IMPROVEMENT IN PLOWS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, WILLIAM D. BURGESS and GEORGE W. ZEIGLER, of Maumee, in the county of Lucas, and State of Ohio, have invented a new and improved Plow; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the improved plow complete.

Figure 2 is a longitudinal section, taken in a vertical plane through the centre of the improved plow.

Figure 3 is a perspective view of the plow-standard, with shovel-blade attached, showing also the two wings detached.

Figure 4 is a perspective view of the clevis.

Figure 5 is a perspective view of the stand for the handles.

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

This invention relates to certain novel improvements on the construction of plows, which are chiefly designed for hilling purposes.

The nature of our invention consists in a hollow cast standard, which is constructed with side flanges on top to receive the beam; also, with an eye in front for attaching the draught-rod to it; and also with a tapering point, which is adapted for receiving and having secured upon it a shovel-blade and two laterally-projecting wings, as will be hereinafter explained.

It also consists in a clevis, which is constructed with a flanged segmental and slotted portion upon one end of a perforated extension, through which latter the draught-rod passes; said segmental portion being adapted to fit into a recess formed in the lower edge of the plow-beam, and to serve as a means for adjusting and setting the front end of the draught-rod at different angles with respect to the plow-beam, according to the depth required to run the plow, as will be hereinafter explained.

It also consists in a slotted segmental stand, for receiving the round of the plow-handles, and supporting these handles; said stand being so constructed as to admit of a ready adjustment of the handles, and to secure them rigidly at any desired angle with respect to the beam, as will be hereinafter explained.

To enable others skilled in the art to understand our invention, we will describe its construction and operation.

In the accompanying drawings, A represents the plow-beam, which is constructed with a concave recess, *r*, in its lower edge, near its front end, for receiving the rear segmental portion of a clevis, E. BB are the plow-handles, which are secured at *x* by a transverse pivot, so that when these handles are not restrained they can be adjusted vertically about said pivot. *b* is the transverse round or brace bar of the handles, which is secured fast to a stand, K, that is bolted upon the plow-beam in rear of the standard C, as clearly shown in figs. 1 and 2. The standard C is constructed with a flat top portion, with longitudinal parallel flanges, *c' c'*, between which latter the plow-beam is held firmly, and the standard secured rigidly by means of two bolts, *o p*, shown in fig. 2. This standard C is suitably curved, and its lower end terminates in a wide shovel-like projection, C', having shoulder-elevations, *g g*, cast upon its upper surface, against which the upper edges of laterally-projecting wings G G abut. The front edge of the standard is also rounded horizontally, and the sides extend back, so as to afford great strength, and, at the same time, lightness.

The point C' of the standard C has a steel diamond-shaped plate, J, secured to it by means of one or more screws, *j*, which plate forms the shovel-point, and when worn out it can be removed, and another substituted in its stead. The upper edges of this shovel-plate J form shoulder-abutments, and serve, in conjunction with the shoulders *g g* and screw-fastenings *j j*, for rigidly securing the laterally-projecting wings G G to the standard-point C', as shown in fig. 1. When these wings are secured in their places, their upper surfaces, at the junctions of their edges with those of the plate J, are flush with the surfaces of this plate J, and the front lower edges of these wings form rear inclined continuations of the side edges of the plate J, so that in the operation of the

implement the earth will be thrown upward and outward from the centre of the shovel-point, thus leaving hills or ridges on both sides of the furrows.

Near the junction of the standard C with the beam A, and projecting from the front edge of this standard, is an eye-piece, *e*, to which the draught-rod D is attached, so that the draught will be upon the standard instead of upon its beam A.

The rod D extends forward, and passes through a depressed-eye portion, *e*, which is formed on the front end of the clevis E, and to the front hooked portion *d* of this draught-rod the animals are hitched for drawing the implement. The straight portion of the clevis E terminates at its rear end in a segmental or semicircular portion, *i*, having an oblong slot, *s*, through it, through which a bolt or screw, *t*, passes, which secures the clevis to the plow-beam. This segmental portion *i* is fitted into the recess *r* in the plow-beam, and constructed with side flanges *f f*, which will receive between them the plow-beam, and besides strengthening the clevis, they will also prevent lateral play of the clevis.

It will be seen that when the screw-fastening *t* is loosened, the front end of the clevis can be adjusted up or down in the arc of a circle concentric to the axis of the segment *i*, and by tightening the screw *t* the clevis will be rigidly held in the desired position.

One advantage of this mode of constructing and applying a clevis is, that the surfaces of contact are sufficiently large to prevent liability of slipping, hence a single screw-fastening will be found to answer the purpose of holding it in place under all ordinary circumstances.

Another advantage is that it is very light, and at the same time very strong, and the means used for strengthening it, viz, the flanges *f*, serve also to sustain it against lateral thrust.

The plow-handles B are held in any required position by means of the stand K, which consists of a foot-piece, having an oblong slot, *k'*, through it, through which the screw *o* passes that secures this stand in place upon the top of the plow-beam A, as shown in fig. 2. The rear portion of this stand extends upward and is curved in the form of the segment of a circle, and it is also slotted, as shown at *k* in figs. 1, 2, and 5, through which slot a hooked bolt, *m*, passes. The hooked portion of this bolt receives the round, *b*, of the handles, and the screw portion receives a nut, *n*, by means of which the round, *b*, is clamped fast to the back of the stand. The curved portion of this stand is constructed with flanges, *l l*, having corrugations or recesses formed in their edges, into which the round, *b*, is fitted for the purpose of rigidly holding the handles in the desired position. If the recesses in the flanges *l l* are made deep enough to fully receive into them the round, *b*, then it will not be necessary to employ the hooked clamp *m*, for it will be seen that so long as the stand is prevented from slipping forward, the handles will be rigidly confined in place.

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

1. The standard C, constructed with a draught-eye, *e*, parallel flanges *c'*, lugs *g g*, and a point C', adapted for receiving and having secured to it the shovel-plate J, and laterally-projecting hilling-wings G G, substantially as described.
2. The clevis E, constructed with an eye, *e*, upon its front end, and also with a flanged slotted segmental portion, *i*, upon its rear end, substantially as described.
3. The stand K, constructed with a slotted foot-piece, and a segmental elevation, the latter having recessed flanges formed upon it, substantially as described.
4. Securing the handle-support K to the beam A by means of the screw or bolt *o*, which is used for securing the standard to said beam, substantially as described.

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