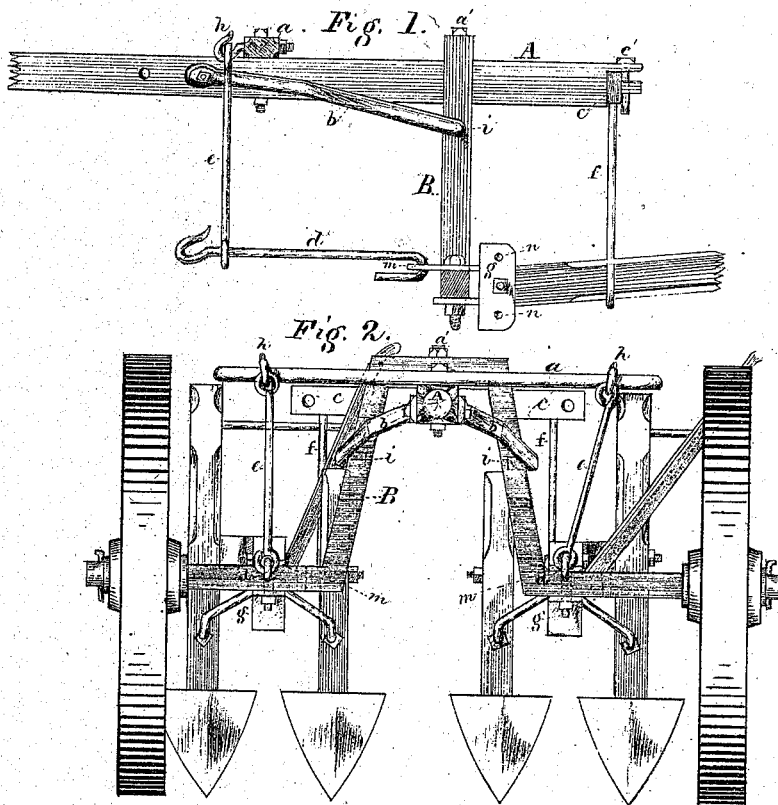


H. C. OSBORN.

Corn Planter.

No. 107,709.

Patented Sept 27, 1870.



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William A. Peazel,
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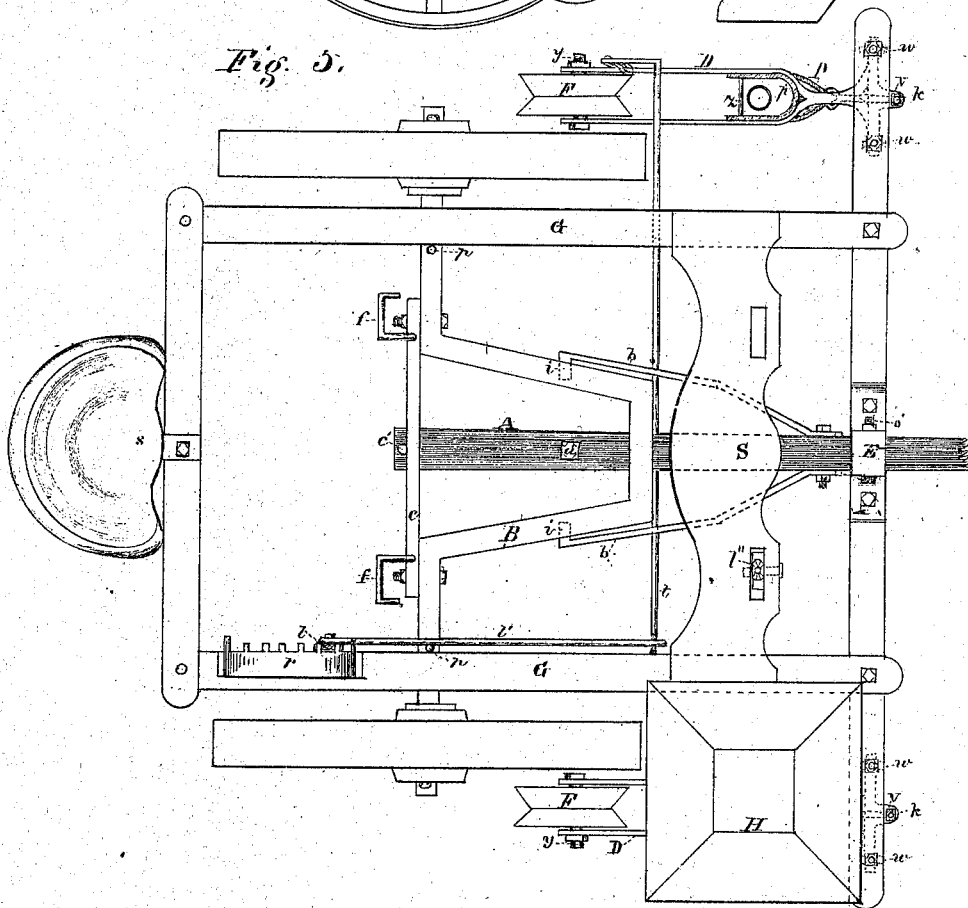
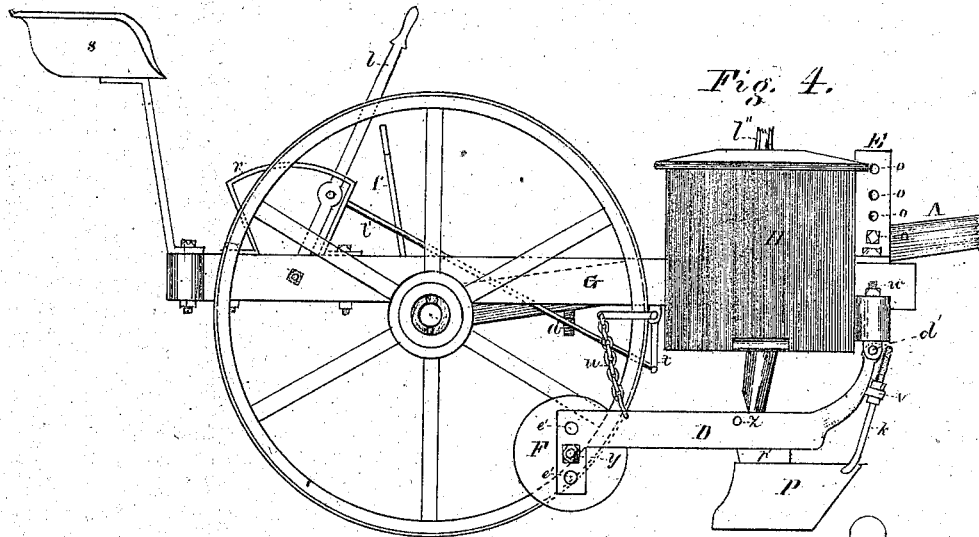
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UNITED STATES PATENT OFFICE.

HENRY CLAY OSBORN, OF CLARKE COUNTY, OHIO.

IMPROVEMENT IN CORN PLOWS AND PLANTERS.

Specification forming part of Letters Patent No. 107,709, dated September 27, 1870.

To all whom it may concern:

Be it known that I, HENRY CLAY OSBORN, of the county of Clarke and State of Ohio, have invented certain new and useful Improvements in Corn Plows and Planters, of which the following is a specification.

My invention relates to certain improvements in the construction of the tongue, axle, and attachments connected to the same in a two-wheeled corn plow and planter, having a separate frame for the latter with the droppers and planting-plows attached thereto, the whole of which can be easily removed and plows attached to the axle, which is constructed with a large bow in the center to allow the machine to pass over the corn. The rear end of the tongue is attached to a cross-bar extending across the space made by the bow in the axle, connecting the latter in line and bolted to the straight or outer parts of the same when the machine is used as a planter. The forward part of the tongue passes through a guideway on the front of the machine, which has a series of holes and a bolt passing through the tongue at this point for adjusting the height of the same. When the planting-frame is placed upon the axle the bow part lies nearly parallel upon the tongue, a pair of metal hounds connecting the tongue and axle together. The rear ends of the hounds turn inward, and are inserted into holes in the sides of the axle-bow, so that when the frame, with the planting attachments, is taken off and the bow thrown up perpendicularly the ends of the hounds act as journals, on which the bow partially revolves. On converting the machine from a planter to a plow the bolts are taken out of the ends of the cross-bar attaching it to the axle, the bow thrown up (backward) perpendicularly, the tongue raised up and attached to the top of the bow by a bolt. The hounds now act as braces to strengthen and support the tongue. The cross-bar, being permanently attached to the rear of the tongue, is raised up with it. Rods depend from this cross-bar, upon which the plows are swung up for transportation from one field to another. The plows are attached to the axle by an adjustable plate-clevis, a lug of which extends forward of the axle for attaching the draft-rods. These are held up by rods which depend from hooks on the ends of the double-tree, having a loop or eye in their lower ends, through

which the draft-rods pass for holding up the single-trees. When the machine is used as a planter these rods are taken off and laid aside with the cultivating-plows.

Figure 1 is a side elevation of the tongue and attachments as used in the machine when converted into a plow or cultivator, showing also clevis *g* with holes *n*. Fig. 2 is a front elevation of my machine as a cultivator. Fig. 4 is a side elevation of the machine as a planter. Fig. 5 is a plan of the same with the dropper-box on the left removed to show a plan of plow-frame D and its attachments.

A is the tongue; *b*, hounds flexibly connected with bow of axle B; *c*, cross-bar attached to rear of tongue; *f*, rods depending from cross-piece with hooks for swinging up plows upon. The rods *f* can be taken out or reversed in changing machine from a planter to a plow. *a* is the double-tree. From hooks *h* hang rods *e*. *d* are draft-rods hooking into lug *m* of plate-clevis *g*, and passing through loops in lower ends of rods *e*, as shown in Figs. 1 and 2. *i i* are journals on rear ends of hounds *b*, on which bow B partially revolves (seen in dotted lines, Fig. 2) when thrown up from position seen in plan of planter, Fig. 5, to that shown in Figs. 1 and 2.

The object of suspending draft-rods *d* in the manner shown is to relieve the horses' necks from weight of tongue A and at the same time give the line of draft directly from the plows.

It will be seen by reference to the drawings that when the bow B is thrown down forward from position shown in Figs. 1 and 2 to that seen in Fig. 5 the cross-bar *c* comes directly upon the back of the axle opposite the bow, the same bolts used in the clevises attaching the cross-bar to the axle at the inner holes. (Seen in dotted lines on the axle, Fig. 2)

G is the planter-frame; E, guideway for tongue, with holes *o* and bolt *o'* for adjusting height of tongue. Pins *p p* (seen inserted in the axle on the inside of frame G) prevent any lateral motion of the frame, which simply sets on the axle, and is only held in position by these pins and bolt *o'*, securing the tongue in the guideway E.

In changing my machine from a planter to a plow, bolt *o'* is taken out, the frame and its appendages raised up, and the tongue withdrawn by backing the truck. The bolts secur-

ing cross-bar *c* to the axle are taken out, bow B of the axle thrown up, bringing tongue A with it, which is then fastened by bolt *a'* to the top of the bow, as shown in Figs. 1 and 2. The weight of the frame and accessories used in planting are thus entirely dispensed with, and the machine rendered light and easily operated as a cultivator-plow.

I claim as my invention—

1. The arrangement of, in a convertible frame for a sulky corn plow and planter, tongue A, hounds *b*, axle-bow B, bolt *a'*, cross-piece *c*,

rods *f e d*, and plate-clevis *g*, substantially as described, for the purpose hereinbefore set forth:

2. The arrangement of, in a convertible frame for a sulky corn plow and planter, tongue A, hounds *b*, axle-bow B, cross-piece *c*, pins *p*, planting-frame G, guideway E, and bolt *o'*, substantially as described, for the purpose hereinbefore set forth.

H. C. OSBORN.

Witnesses:

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