

(No Model.)

N. C. BARNES.

SULKY ATTACHMENT FOR PLOWS.

No. 376,176.

Patented Jan. 10, 1888.

Fig. 1.

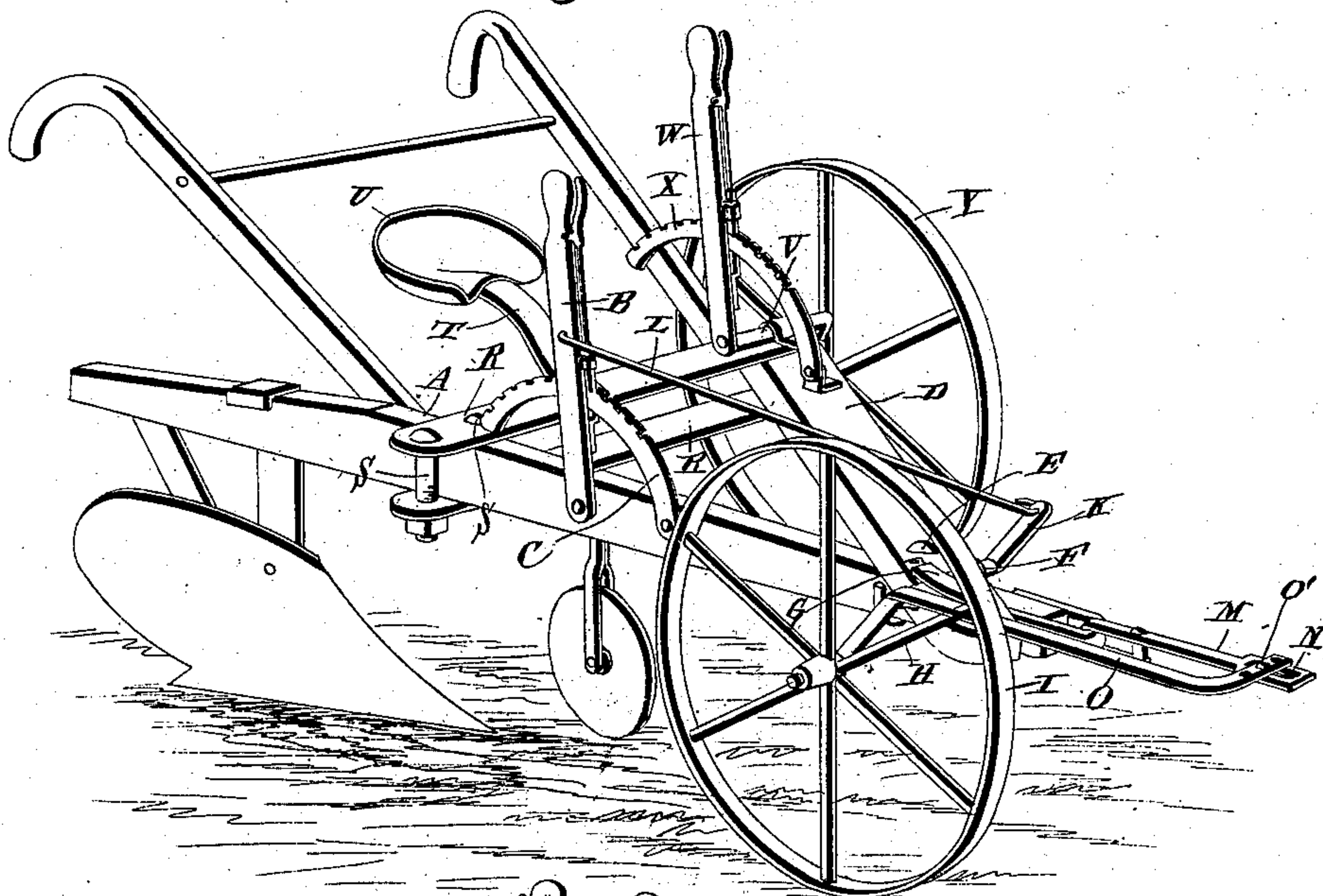


Fig. 2.

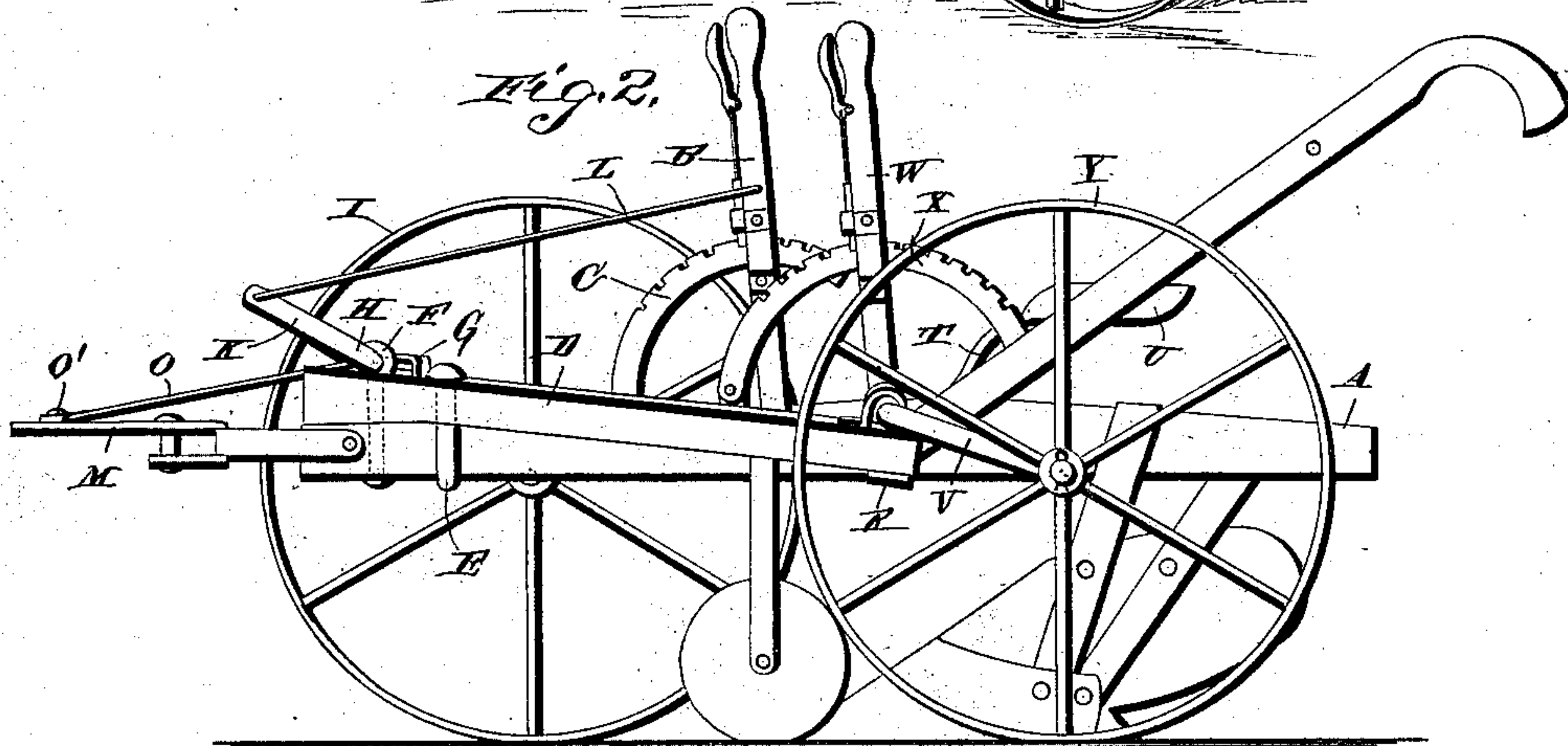
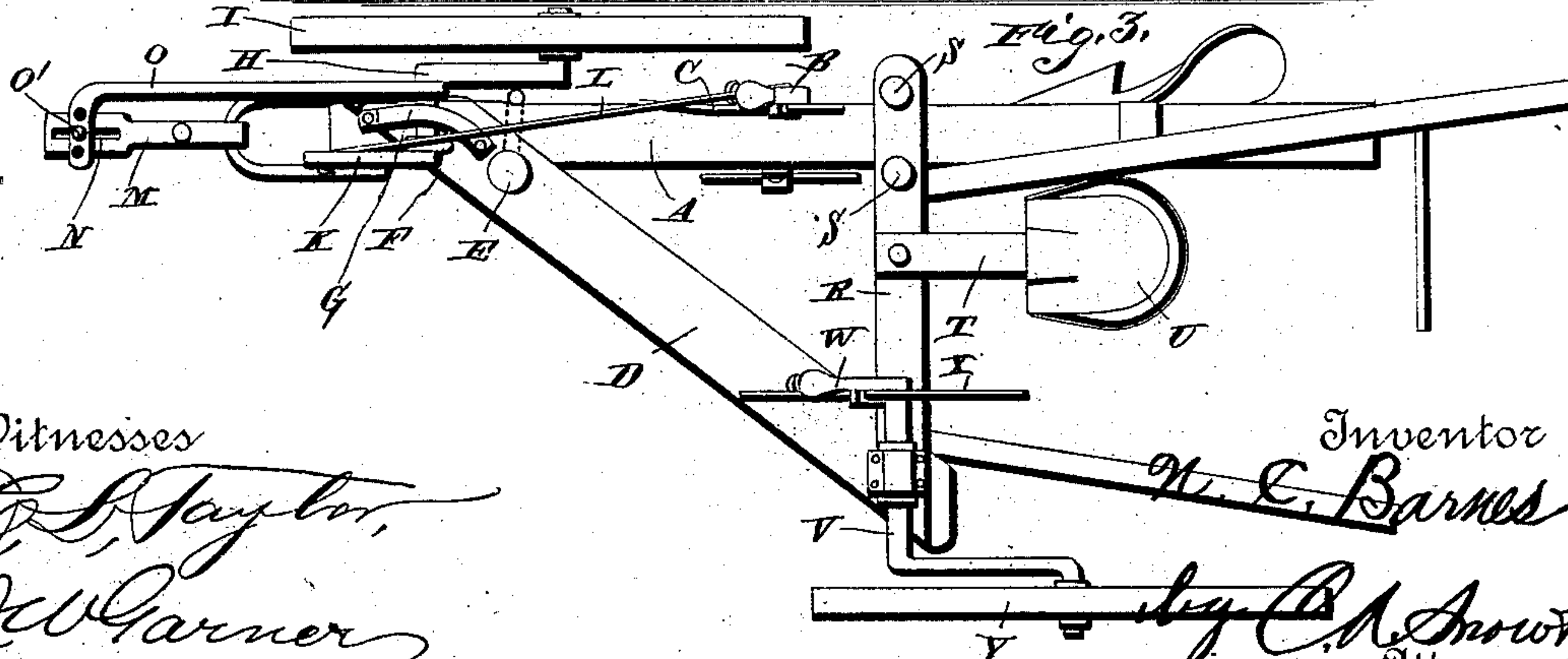


Fig. 3.



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UNITED STATES PATENT OFFICE.

NELSON CHARLES BARNES, OF MULLINVILLE, KANSAS.

SULKY ATTACHMENT FOR PLOWS.

SPECIFICATION forming part of Letters Patent No. 376,176, dated January 10, 1888.

Application filed October 21, 1887. Serial No. 253,007. (No model.)

To all whom it may concern:

Be it known that I, NELSON CHARLES BARNES, a citizen of the United States, residing at Mullinville, in the county of Kiowa and State of Kansas, have invented a new and useful Improvement in Sulky Attachments for Plows, of which the following is a specification.

My invention relates to an improvement in sulky attachments for plows; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a plow provided with a sulky attachment embodying my improvements. Fig. 2 is an elevation of the opposite side of the same. Fig. 3 is a top plan view of the same.

A represents the plow-beam, which is of the usual construction.

B represents a lever which is pivoted at its lower end to one side of the plow-beam, at a suitable distance from the rear end thereof, and C represents a curve detent-arm having its front end pivoted to the plow-beam, and provided on its under edge with a series of notches adapted to engage a stud or projection on one side of the lever, and thereby secure the latter at any desired angle.

D represents an obliquely arranged beam, the front end of which passes over the plow-beam near the front end thereof, and is connected thereto by means of a clip-bolt, E, which passes around the under side of the plow-beam, and an eyebolt, F, which passes through vertical aligned openings in the front ends of the beam D and the plow-beam. The front end of the oblique beam D is curved or rounded, as shown, projects slightly beyond the outer side of the plow-beam, and on the upperside thereof is secured a curved loop or keeper, G.

H represents a crank-axle which has its horizontal portion at its inner end journaled in the eye at the upper end of bolt F, the said horizontal portion of the said crank-axle bearing on the upper side of the outer end of the beam D and extending through the guide loop or keeper G. To the spindle which is formed at the lower end of the outer crank-arm of this axle is journaled a supporting-wheel, I. At the inner end of the horizontal portion of the

crank H is an arm, K, which arm is connected to the lever B by means of a rod, L. By arranging the said lever at any desired angle the crank-axle H may be turned in its bearing, so as to raise or lower the wheel I, as will be readily understood.

M represents a strap or yoke which is attached to the clevis at the front end of the plow-beam, and is provided at its outer end with a slot, N.

O represents a link-arm which is attached at its rear end to the outer end of the horizontal portion of crank-axle H, and has its front end bent at right angles and connected to the outer end of yoke M by means of a bolt, O', which passes through one of a series of openings at the front end of arm O and through the slot at the front end of the yoke. The latter is provided with a bolt which serves to attach the whiffletree thereto.

R represents a pair of arms which are bolted to the upper and lower sides of the rear portion of the oblique beam D, and extend outward therefrom to the plow-beam, and are arranged on the upper and lower sides of the latter, and have their outer ends connected by a pair of vertical bolts, S, which bolts are ranged on the outer and inner sides of the plow-beam, and thereby connect the same rigidly to the arms R. To the upper arm R is secured the front end of a spring, T, on the rear end of which is supported a seat, U, for the driver.

V represents a crank-axle which has its horizontal portion journaled on the upper side of the rear end of the oblique beam D. At the inner end of the horizontal portion of this axle V is formed a hand-lever, W, which is arranged at any desired position by means of a pivoted detent-arm, X, which is similar to the arm C, before described. The crank-arm, at the outer end of the axle D, is provided with a spindle, on which is mounted a supporting-wheel, Y.

The operation of my invention is as follows: By means of the crank-axes, to which the supporting-wheels are attached, and by means of the hand-levers which control the said axles, the supporting-wheels may be raised or lowered, so as to either entirely support the plowshare above the ground when the machine is being drawn along without operating or caused to lower the plowshare when at work at any desired depth. The front crank-axle,

H, being journaled in the eye at the upper end of bolt F, is adapted to be swung to any desired angle with relation to the line of draft, and thereby the plow is readily turned when it reaches the end of the furrow.

Having thus described my invention, I claim—

1. The combination, in a sulky attachment for plows, of the axle H, secured in a pivoted bearing and adapted to be turned to any desired angle with relation to the line of draft, the yoke connected to the clevis at the front end of the plow-beam and adapted for the attachment of the whiffletree, and having slot N, and the link-arm connected to the axle and having its front end secured by a bolt-engaging slot N to the said yoke, for the purpose set forth, substantially as described.

2. The combination of the oblique beam D, the pivotal bearing F on said beam, the cranked axle H, journaled in said bearing and having the wheel I, and the arm K, the guide or loop G, in which the cranked axle swings, the draft-yoke, the link-arm connecting the same to the cranked axle, for the purpose set forth, and the lever connected to the arm K of crank-axle to turn the latter in its bearings, and thereby raise or lower wheel I, substantially as described.

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

NELSON CHARLES BARNES.

Witnesses:

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