No. 670,743.

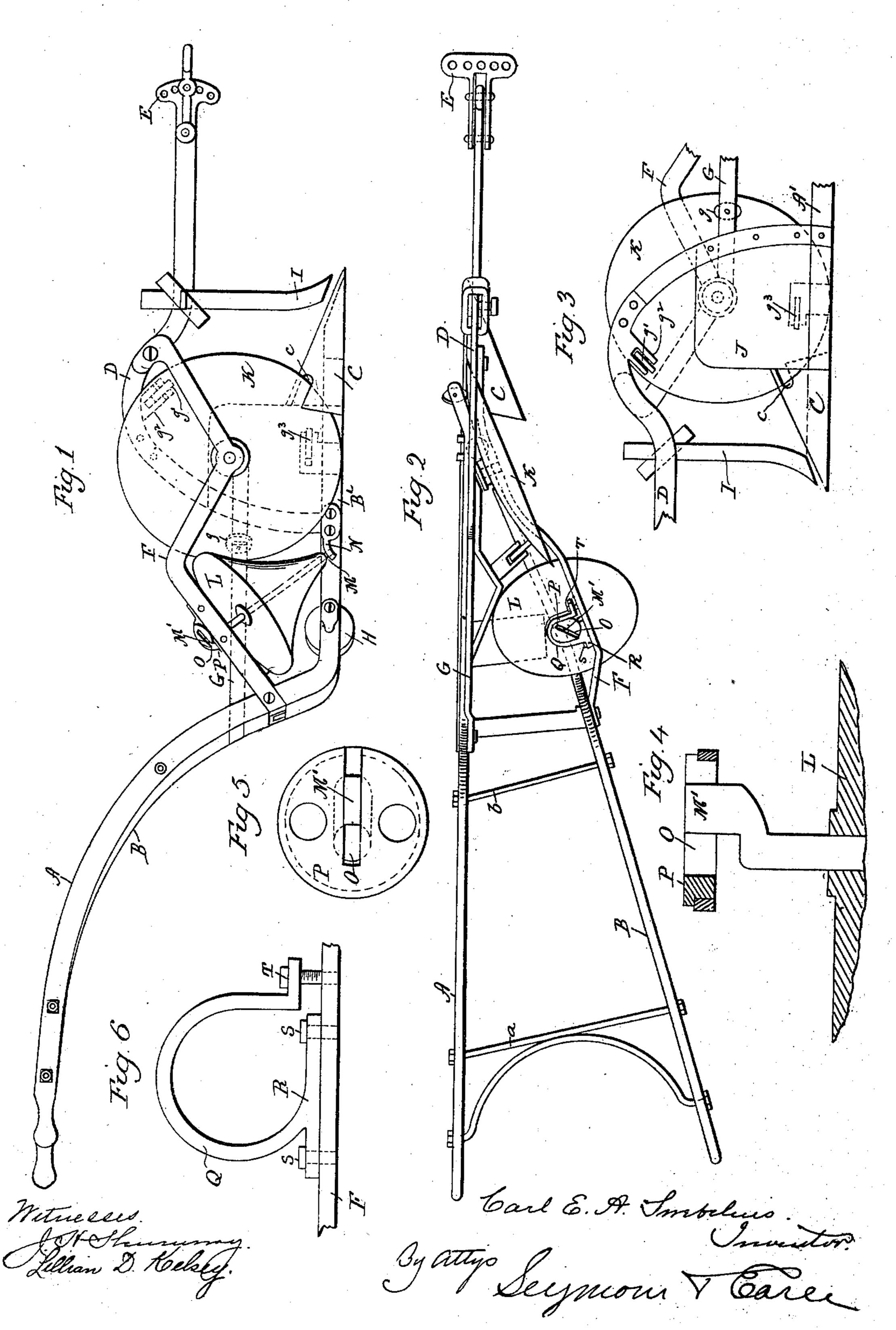
 $e^{i\theta_{i+1}^{(k)}}v$ 

Patented Mar. 26, 1901.

## C. E. A. SWEBILIUS. PLOW.

(Application filed Jan. 7, 1901.)

(No Model.)



## United States Patent Office.

CARL E. A. SWEBILIUS, OF WINGÅKEN, SWEDEN.

## PLOW.

SPECIFICATION forming part of Letters Patent No. 670,743, dated March 26, 1901.

Application filed January 7, 1901. Serial No. 42,328. (No model.)

To all whom it may concern:

Be it known that I, CARL E. A. SWEBILIUS, a Swedish subject and a resident of Wingåken, in the Läu of Södermannland and King5 dom of Sweden, have invented a new Improvement in Plows; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view of a plow constructed in accordance with my invention; Fig. 2, a top view of the same; Fig. 3, a broken side view of the forward portion of the plow, the reverse of that shown in Fig. 1; Fig. 4, a broken sectional view of the upper end of the axle upon which the mold-roll is mounted; Fig. 5, a top or plan view of the disk in which the axle for the mold-roll is mounted; Fig. 6, a top or plan view of the clamp in which the axle-supporting disk of the mold-roll is se-

cured.

This invention relates to an improvement in plows, the object being to construct a plow capable of cutting a deep furrow and turning the furrow over with but comparatively little friction; and it consists in the construction as hereinafter described, and particularly recited in the claims.

The handle-bars A B extend downward and converge to the share C, the straight portion of the handle-bars forming the sole of the 35 plow. These handle-bars are connected by suitable braces ab in the usual manner. Secured to the right-hand member A' of the sole is a beam D, which curves upward and forward and projects outward to receive a clevis 40 E, in the usual manner of plows. The beam is also connected with the handles by draftbars F G, and between the members of the sole is a roller H. Adjustably secured to the beam is a knife-colter I, which projects down 45 over the point of the share, also in the usual manner. Directly in rear of the share and secured to the member A' of the sole and the lower curved portion of the beam is a landside J. Between the draft-bars F G is a mold-50 board K, which is circular in form and con-

cavo-convex, and is pivotally mounted on the draft-bar F, which is bowed inward, as shown in Fig. 2, so that the moldboard K will extend downward into the plane of the lower face of the sole and share, the share being 55 notched, as at c, to permit the moldboard to extend into it. This moldboard is allowed to rotate and is supported by an anti-frictionroller g on the draft-bar G, which is set inward, as shown in Fig. 2. A roller g', which 60 is mounted in a bracket  $g^2$ , secured to the beam D, and a roller  $g^3$ , mounted on the sole A'. In rear of the moldboard K is a conical mold-roll L, arranged point downward upon an axle M, the lower end of which is 65 mounted in a socket N, secured to the sole member B', and its upper end offset, forming an eccentric M', which extends into a slot O, formed in a disk P, which is adapted to be held by a clamp Q, secured to the draft-bar 70 F, and so that the axle will stand in an inclined position. The clamp consists of a base R, adapted to be secured to the said draftbar F by bolts S, and is nearly circular in form, its free end being adjustably secured 75 to the said draft-bar F by a clamping-screw T. Upon turning this clamping-screw to loosen the clamp the disk P may be turned, and so as to adjust the position of the axle M, and when in the desired position upon 80 turning the screw T will bind the clamp upon the disk P, so as to close the walls of the slot O together and clamp the end M' of the axle. in position.

The operation of the plow is substantially 85 the same as plows of ordinary construction—that is, when moved forward the knife-colter I cuts the turf or earth in advance of the share, the landside J riding against the side of the furrow. The earth lifted by the share 90 is pressed outward by the moldboard K, which by reason of its adaptability to revolve causes but little friction, and as the plow continues the earth is turned over by the mold-roll L, while the roller H rides in the bottom of the 95

furrow.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a plow, the combination with a han- roo

dle, share and draft-beam and draft-bars thereof, of a rotatable concave moldboard mounted in rear of the said share, and a conical rotating mold-roll arranged in rear of the moldboard, substantially as described.

2. In a plow, the combination with a handle, share and draft-beam and draft-bars thereof, of a rotatable concave moldboard mounted in rear of the said share, a conical rotating mold-roll arranged in rear of the moldboard, and mounted upon a bearing provided with an eccentric at its upper end, and means for holding the said eccentric, substantially as described.

3. In a plow, the combination with the handles which extend downward and forward forming the sole, a share secured to the forward ends thereof, a draft-beam secured to one member of the sole and extending upward and forward therefrom, a draft-bar connecting the said beam and handles, a concave circular moldboard pivotally mounted on the said draft-beam, and a conical mold-roll ar-

ranged point downward in rear of said moldboard, substantially as described.

4. In a plow, the combination with the handles which extend downward and forward forming the sole, a share secured to the forward ends thereof, a draft-beam secured to one member of the sole and extending up- 30 ward and forward therefrom, a draft-bar connecting the said beam and handles, a concave circular moldboard pivotally mounted on said draft-beam, and a conical mold-roll arranged point downward in rear of said moldboard, a 35 second draft-beam arranged on the opposite side of the said moldboard and antifriction-rollers in rear of said moldboard, substantially as described.

In testimony whereof I have signed this 40 specification in the presence of two subscribing witnesses.

CARL E. A. SWEBILIUS.

Witnesses:

HJ. PERSSON, GUST. PERSSON.