

(No Model.)

2 Sheets—Sheet 1,

S. G. SEVIER.
PLOW.

No. 570,822.

Patented Nov. 3, 1896.

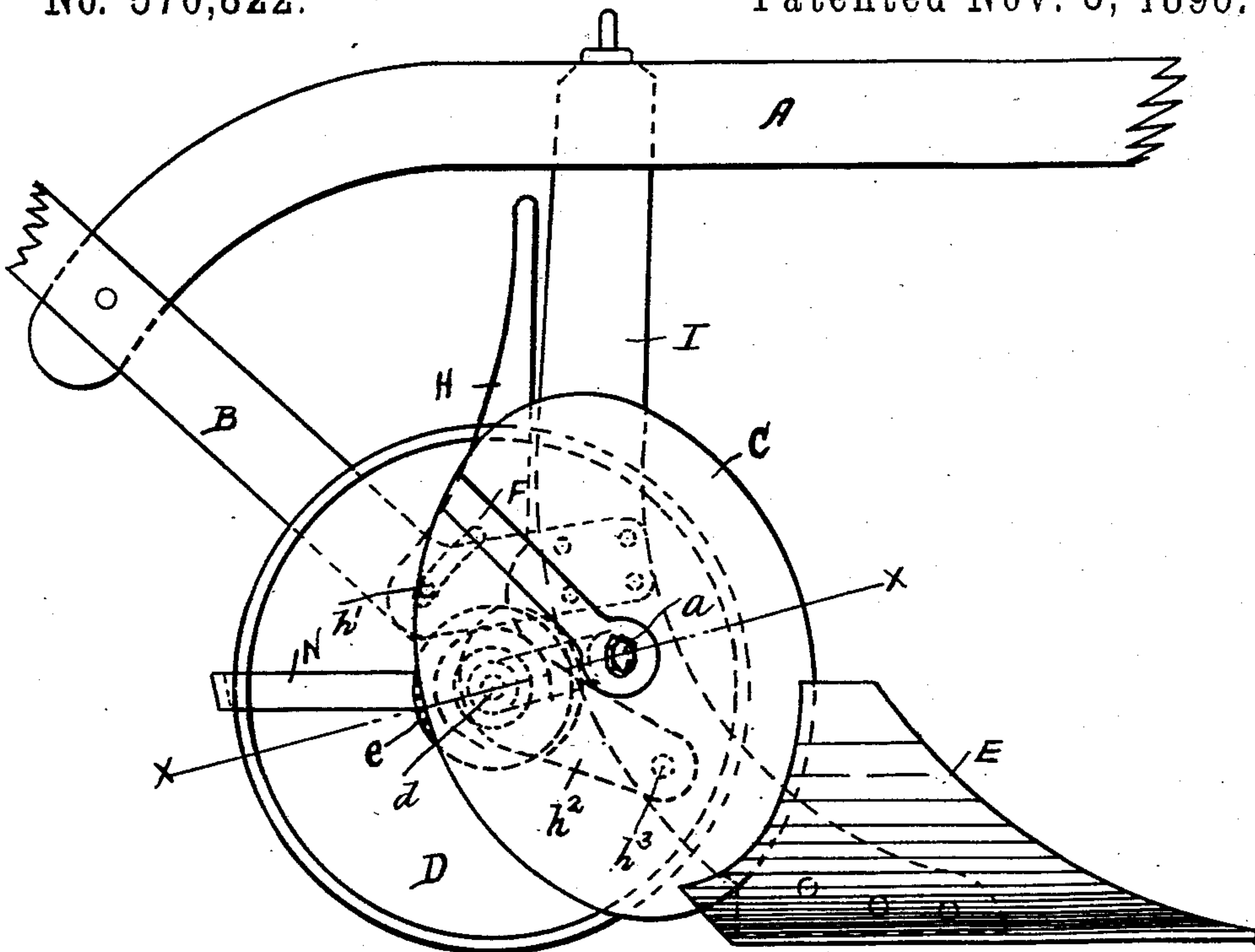


Fig 1.

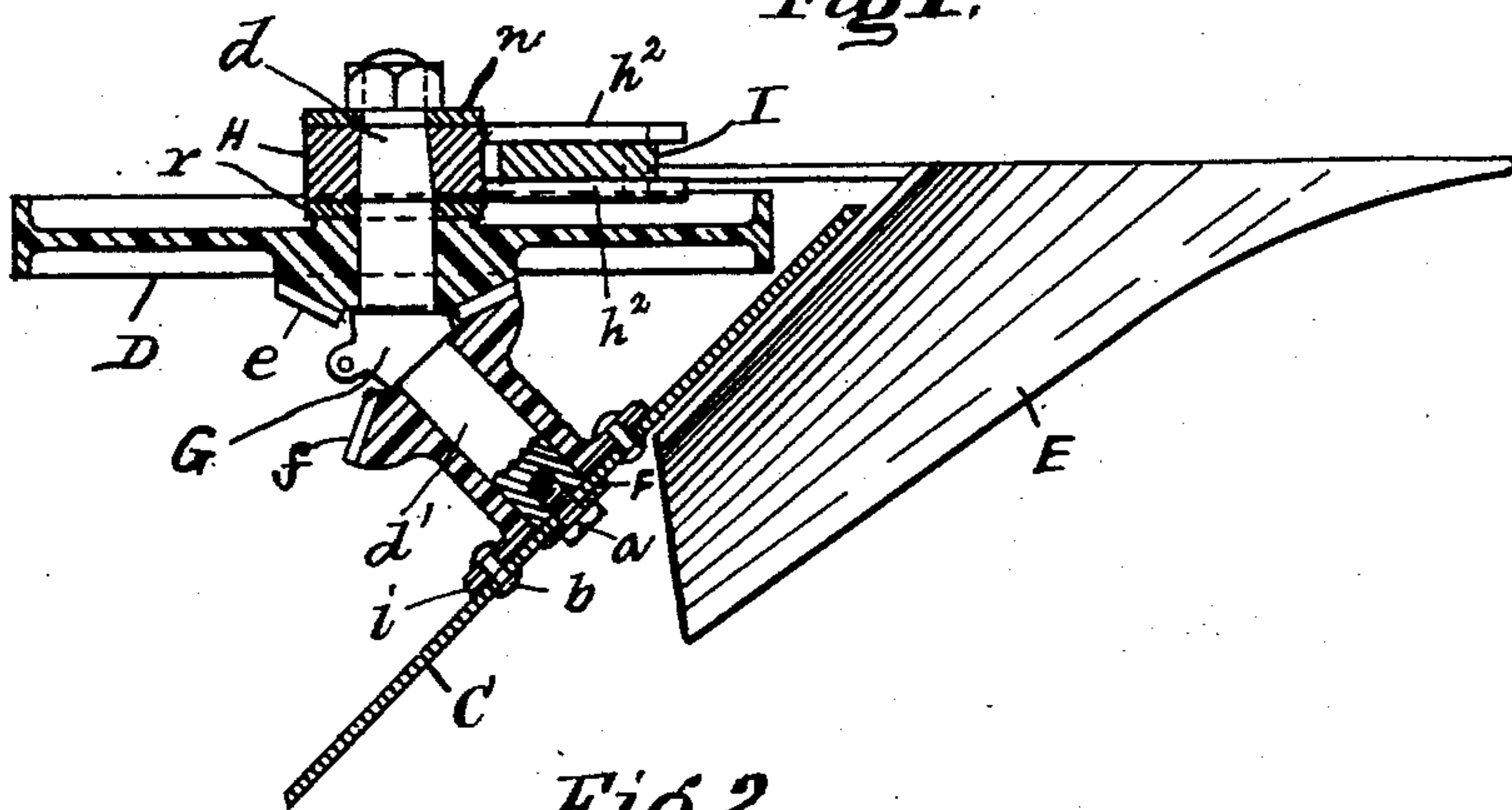


Fig 2.

Witnesses.
Charles Marion.
M. Mc Donald

Inventor:
S. G. Sevier.
By Thuman and Seivius,
Attorneys.

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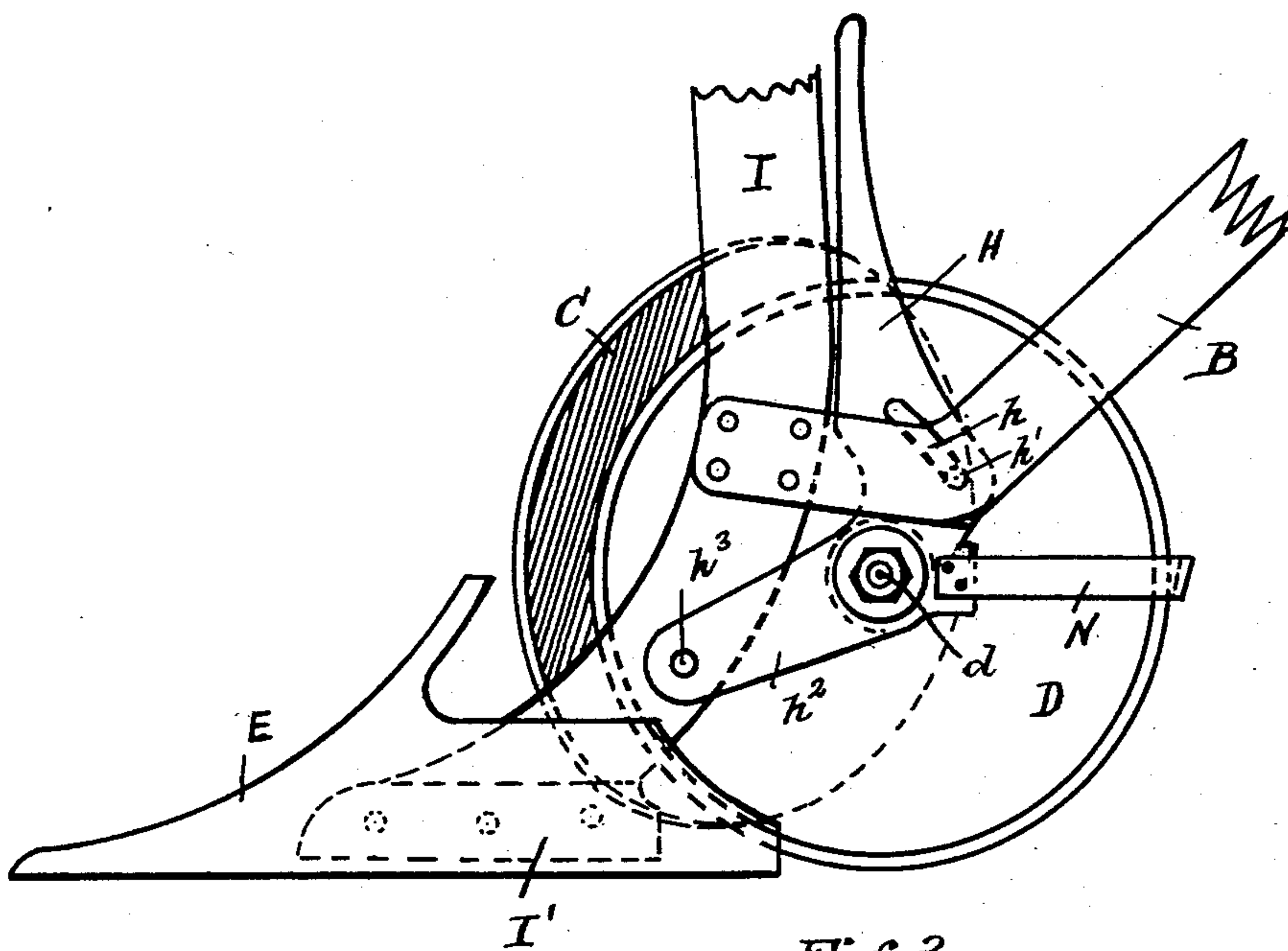


Fig 3.

Witnesses.
Charles Marin.
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Inventor:
S. G. Sevier.
By Thurman & Sibius,
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UNITED STATES PATENT OFFICE.

SAMUEL GILLINGTON SEVIER, OF OENAVILLE, TEXAS.

PLOW.

SPECIFICATION forming part of Letters Patent No. 570,822, dated November 3, 1896.

Application filed June 18, 1896. Serial No. 595,945. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL GILLINGTON SEVIER, a citizen of the United States, residing at Oenaville, in the county of Bell and State of Texas, have invented certain new and useful Improvements in Plows; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My present invention relates to that class of plows illustrated in Letters Patent No. 549,827, granted to me November 12, 1895, in which a revolving moldboard is used; and it consists of a combination of elements whereby a means is provided for adjusting the driving-wheel relative to both the plowshare and moldboard; and it further consists in a peculiar arrangement of the parts for supporting and operating the moldboard, as will be more fully described hereinafter.

Referring to the drawings, Figure 1 represents a side elevation of the plow, in which the handles and a portion of the beam are broken away. Fig. 2 represents a section made by the plane X X of Fig. 1, looking down; and Fig. 3 is an elevation of the plow from the opposite side from that shown in Fig. 1.

In the drawings, A designates the beam, which is connected at the rear end to the handle B, or it may be suitably curved downward and have the plowshare secured to it, but I preferably use the kind shown, in which the standard I is rigidly connected at its upper end to the beam and likewise to the lower ends of the handles B. The lower end of the standard has a foot I' to which is secured the plowshare E.

The wheel D revolves from contact with the ground and supports the plow, and by means of its adjustability the plow may be more advantageously employed in various kinds of land. At one side of the wheel the hub is enlarged and has a bevel gear-wheel *e* secured thereto or preferably cast integrally therewith. Through the center of the wheel is a bore suitable to receive an axle.

The axle G has a journal at each end smaller than the central part, the latter being the shouldered head for each journal, and the journal *d'* is bent forward at an angle to the journal *d* relative to their position in the plow. The journal *d* passes through the bore of the wheel D, through the washer *r*, and is seated in a suitable hole in the adjusting-lever H, in which it may be adjusted radially, outside of which is a washer *n* and a suitable retaining-nut. The lever H has a lower arm *h*², the end of which has a jaw embracing the standard I, to which it is pivoted at *h*³. Back of the axle the lever has a bearing-lug to which is secured the cleaning-scraper N for removing soil that may adhere to both sides and tread of the wheel D, and above this, where the lever passes between the handles, it has a curved slot *h*. The handles have bolt-holes registering with this slot, and through the whole a binding-bolt *h'* passes, securing the lever between the handles at any desired position.

The bevel gear-wheel *f* is mounted revolutely on the axle *d'* and meshes with the gear-wheel *e*. It has an elongated hub, at the end of which it has a flange *i* having suitable bolt-holes. The disk C or revolving moldboard may have a plane or concave face and is secured to the flange *i* by rivets *b* or suitable bolts. The disk and gear-wheel are retained on the axle by means of a shouldered screw-bolt *a*, screwed into a threaded hole in the end of the axle, the shoulder seating against the axle and permitting the disk to rotate. Under the head of the bolt its body is squared. The cleaning-scraper F has a circular plate end in which is a square hole fitting the bolt, so that when the bolt passes through the hole and is securely seated in the axle the scraper is securely held in position and prevented from turning, the plate end acting as a washer against the disk to retain it. The scraper extends across half of the face of the disk and may have a return-bend and extend over a portion of the back, if desired.

At the rear part of the axle G is a small lip having a suitable hole, to which may be attached a casing for protecting the gear-teeth from the soil.

It is obvious that by manipulating the lever

If the point of the plow may be raised or lowered relative to the ground-wheel, and adjustability of the disk or moldboard is accomplished by adjusting its axle rotatively.

5 Various slight modifications of the details might be made without departing from the spirit and intent of my invention. The various parts may be suitably made in an inexpensive manner of such metal as is commonly
10 used in the manufacture of such implements.

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

1. A plow comprising in combination a
15 beam, a standard connected therewith to the lower end of which are attached the plowshare and fixed moldboard, the handles secured at their lower end to said standard, the lever pivoted to said standard, and means whereby
20 said lever may be secured at its free end, the axle adjustably secured to said lever, the driving-wheel revolubly mounted on said axle, the bevel gear-wheel secured to said driving-wheel, the bevel gear-wheel revolubly
25 bly mounted on said axle and meshing with said first-mentioned gear-wheel and having the elongated hub provided with the flange having bolt-holes, the revolving moldboard secured to said flange, the scraper adapted to
30 cleanse said driving-wheel, the scraper adapted to cleanse said revolving moldboard, and means for securing said scraper, substantially as and for the purpose shown and described.

35 2. In a plow, the combination with a driving-wheel, of the adjustable lever having the axle G secured thereto on which is revolubly mounted said driving-wheel, said lever being pivoted at its lower end to the standard or
40 lower end of the plow-beam, the movable end of the lever being provided with means for adjustably securing it with relation to the plow-handles; the scraper for said driving-wheel secured to said lever; the bevel gear-wheel *e* driven by said driving-wheel; the
45 bevel gear-wheel *f* mounted on the opposite end of said axle and engaging said first gear-wheel, and having secured to it the circular revolving moldboard C, set by means of the bend in said axle at an angle to the axis of
50 said driving-wheel; a plowshare having a portion of a fixed moldboard adapted at its rear to the circular form of said revolving moldboard, and means for retaining said revolving moldboard and bevel gear-wheel, substantially as and for the purposes shown and described.

3. The combination with the beam and handles, of the standard I attached to the top
60 thereof to the beam; the plowshare attached to the lower end of said standard; the lever pivoted at its lower end to the standard; the

binding-bolt securing said lever adjustably to said handles; the bent angular axle G secured to said lever; the driving-wheel D having the bevel gear-wheel *e* revoluble on said
65 axle; the bevel gear-wheel *f* provided with the flange *i* having bolt-holes therein revoluble on the angular end of said axle; the disk C secured to said flange, and suitable means
70 whereby said bevel gear-wheel and disk may be retained revolubly, substantially as and for the purposes shown and described.

4. In a plow the combination with a beam and a fixed moldboard and plowshare connected thereto, of the standard I connected
75 to said beam; the plowshare E attached to the foot I' of said standard; the lever H having the slot *h* and lower arm *h*², the latter pivoted at *h*³ to said standard; the handles B
80 secured at their lower ends to said standard; the binding screw-bolt passing through said slot and through suitable holes in said handles; the scraper N attached to said lever; the axle G having the end *d* rigidly secured
85 to said lever; the driving-wheel D revoluble on said axle; the bevel gear-wheel *e* attached to said driving-wheel; the bevel gear-wheel *f* revoluble on the end *d'* of said axle and meshing with the wheel *e*; the flange *i* integral with said wheel *f*; the disk C secured to
90 said flange; the bolt *a* seated in the end of said axle *d'*; the scraper F secured by means of said bolt, said scraper having the plate end retaining said disk on said axle, all arranged
95 and operating substantially as and for the purposes shown and described.

5. In a plow of the character described, the combination with the beam and standard, of the pair of handles converging at the lower
100 ends and attached to said standard; the lever H of bell-crank form having two arms and a suitable hole to receive an axle through or near the intersection of said arms, a jaw at the end of the lower arm pivoted to said
105 standard, and a curved slot in the upper arm; the bent axle G having a journal at each end thereof, one of said ends being secured to said lever in the hole therein; the driving-wheel D having the bevel gear-wheel *e*
110 mounted on said journal adjacent to said lever; the bevel gear-wheel *f* having the flange *i* on the hub thereof; the revoluble moldboard C, secured to said flange, and the scraper F secured to said axle by means of the bolt
115 seated in the end of said axle, substantially as and for the purposes shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

SAMUEL GILLINGTON SEVIER.

Witnesses:

JOHN T. EZZELL,
JAMES W. BOLTON.