

(No Model.)

A. V. RYDER & H. G. CHAMBERLIN.
SULKY PLOW.

No. 453,509.

Patented June 2, 1891.

Fig. 1.

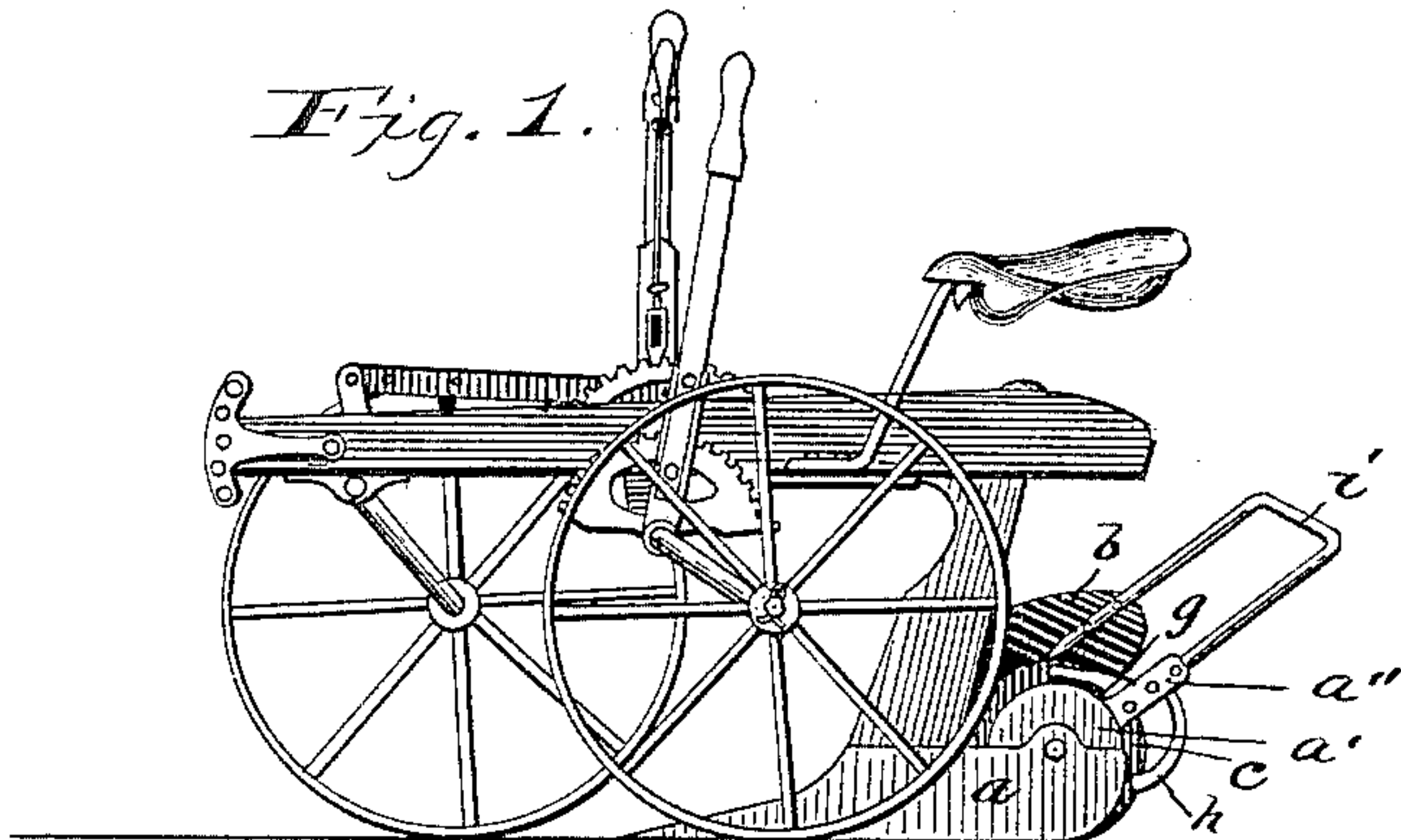


Fig. 2.

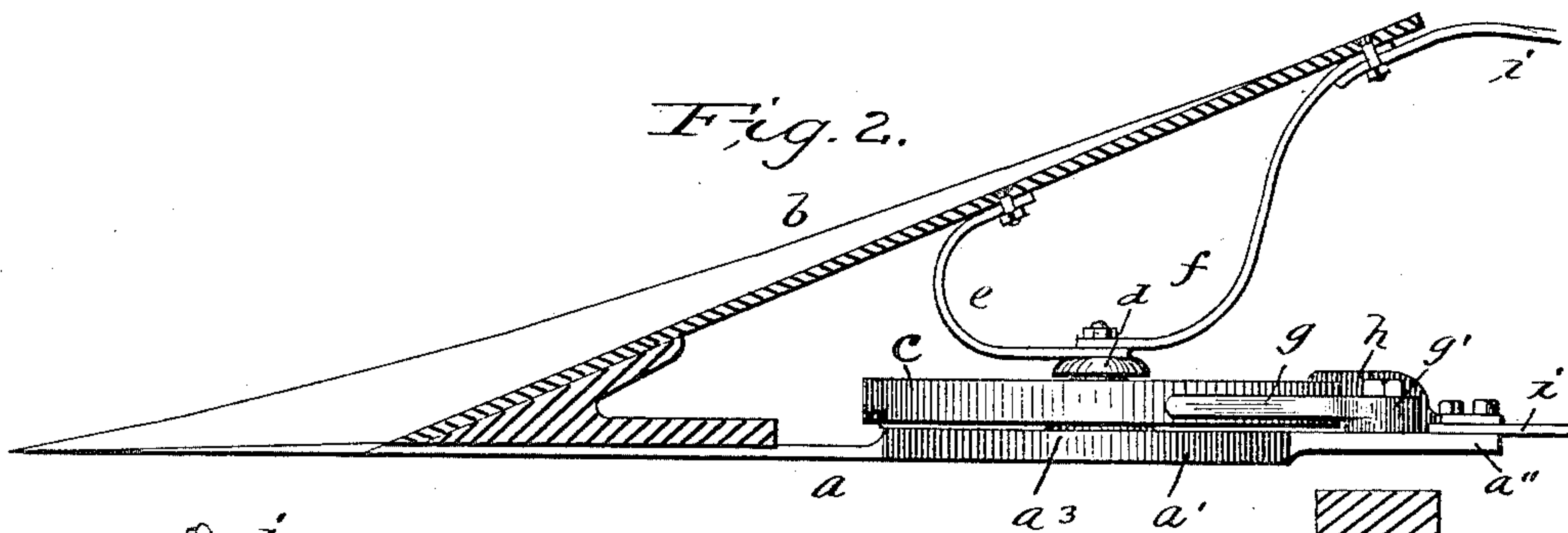


Fig. 3.

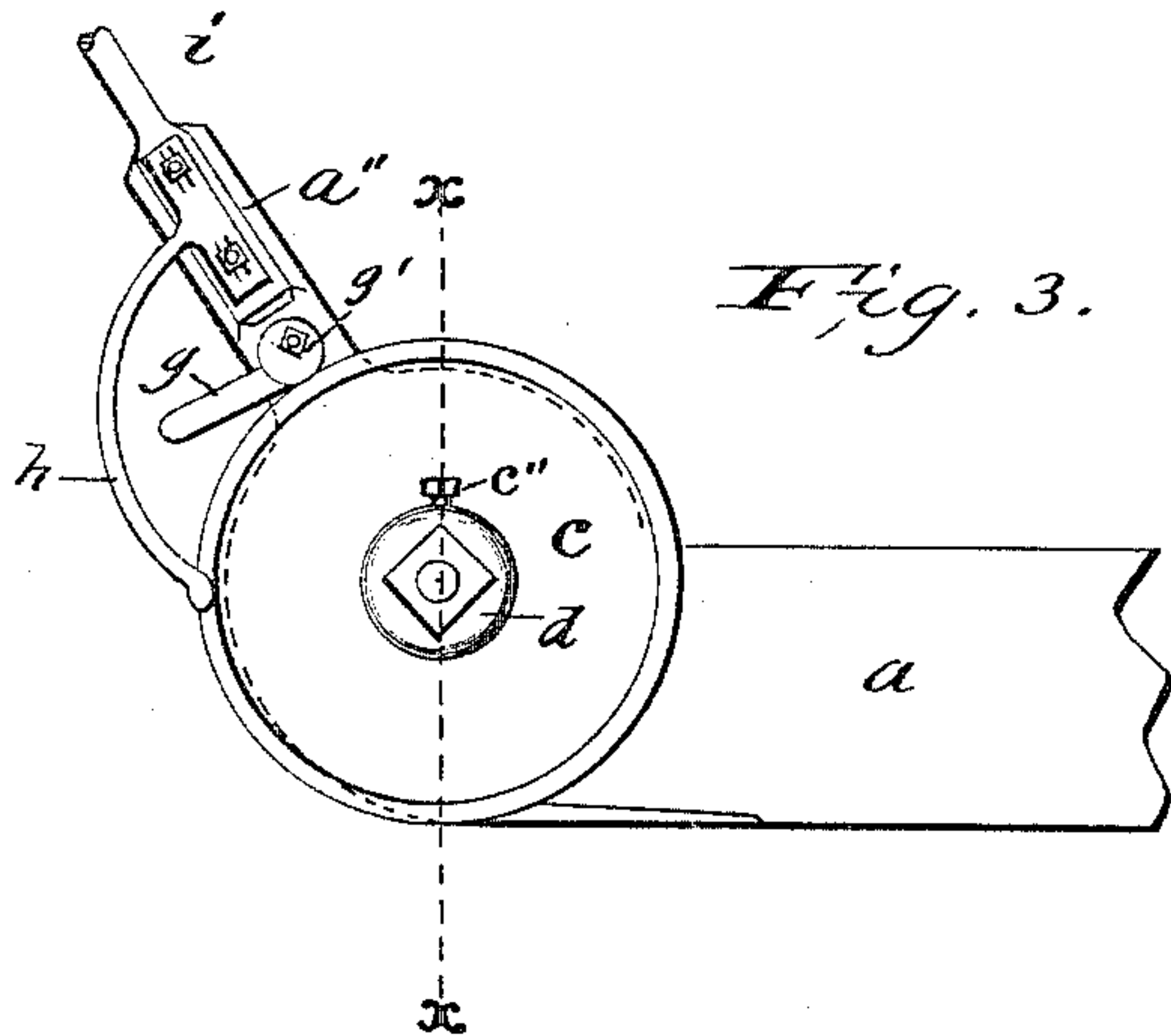
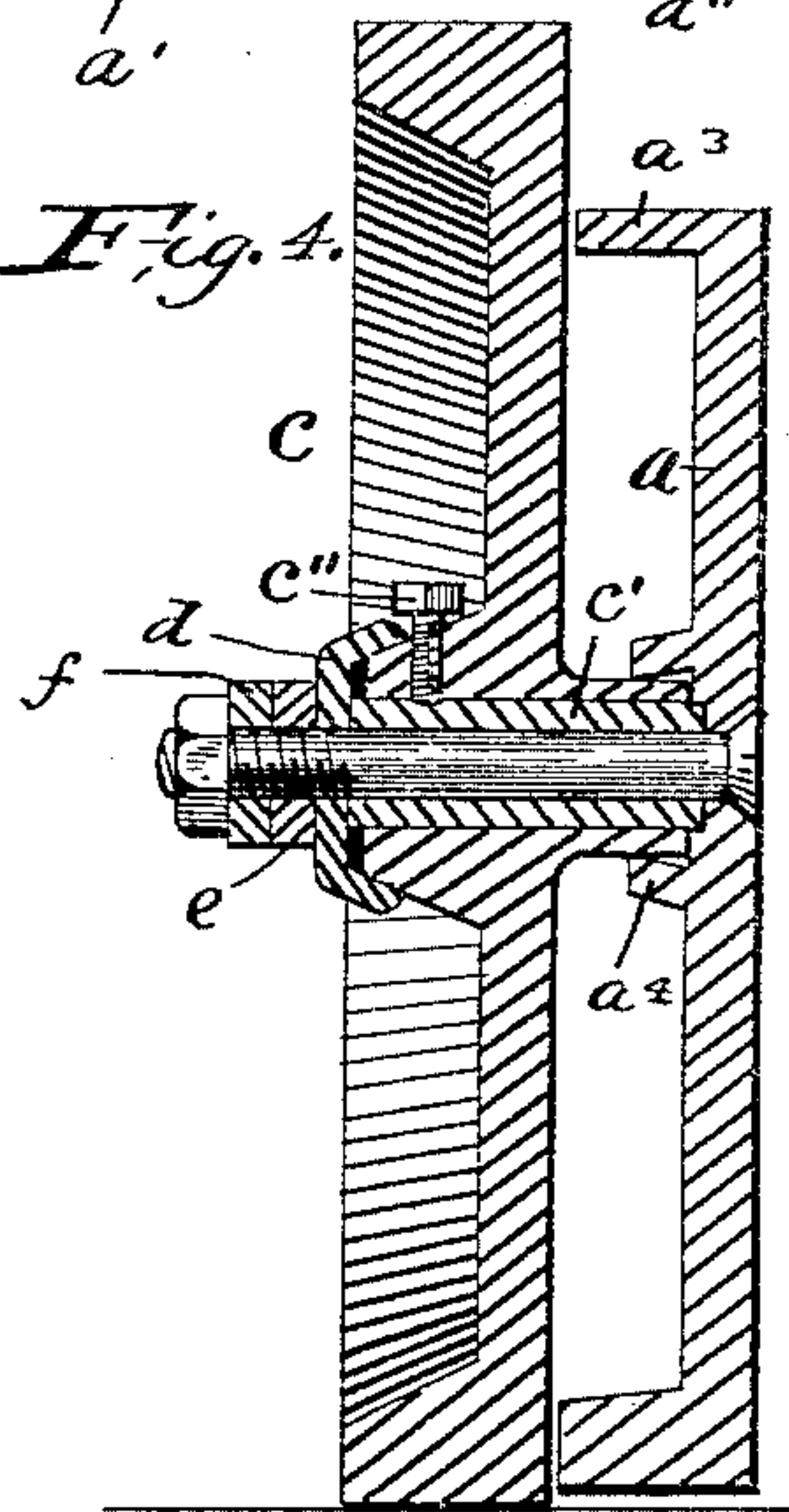


Fig. 4.



Witnesses

F. C. Gibson

J. M. Walsh

Inventors:

A. V. Ryder & H. G. Chamberlin

By their Attorneys

Alexander & Davis

UNITED STATES PATENT OFFICE.

ANDREW V. RYDER, OF UNIONPORT, OHIO, AND HENRY G. CHAMBERLIN,
OF HUDSON, MICHIGAN.

SULKY-PLOW.

SPECIFICATION forming part of Letters Patent No. 453,509, dated June 2, 1891.

Application filed February 25, 1891. Serial No. 382,779. (No model.)

To all whom it may concern:

Be it known that we, ANDREW V. RYDER, of Unionport, in the county of Jefferson and State of Ohio, and HENRY G. CHAMBERLIN, of Hudson, in the county of Lenawee and State of Michigan, citizens of the United States, have invented certain new and useful Improvements in Sulky-Plows, of which the following is a specification, reference being had therein to the accompanying drawings.

Figure 1 represents a perspective view of a sulky-plow provided with our improvements; Fig. 2, a partial horizontal sectional and plan view of the mold-board and landside with attachments thereto; Fig. 3, a view of a portion of the inside of the landside, and Fig. 4 a vertical sectional view on the line $x x$ of Fig. 3.

The improvements relate to the plow proper, and are essentially designed to provide means whereby the same may, together with the driver, be more effectually and better supported than heretofore, and also whereby the mold-board and landside may be braced with respect to each other, as will hereinafter appear.

In the accompanying drawings, a designates the landside, and b the mold-board, which are bolted in the usual manner to the plow-standard and project rearwardly therefrom, the standard being bolted to a plow-beam supported upon adjustable wheels in any approved manner. Formed on the rear upper edge of the landside is a semicircular enlargement a' , and projecting rearwardly and upwardly from this enlargement is an integral arm a'' . Formed on the upper curved edge of the enlargement a is an inwardly-turned curved guard-flange a^3 , that terminates close to the outer side of a wheel c , journaled loosely on a horizontal bolt supported in an aperture in the landside. Between the hub of the wheel and the bolt is interposed a removable loose sleeve c , which is secured adjustably in the eye of the hub by a set-screw c'' , and has its outer end resting or abutting against the inner side of the landside. By means of this adjustable sleeve the wheel may be adjusted and held at the proper distance from the landside, as is evident. Formed on the inner side of the landside, so

as to embrace or encircle the outer end of the hub and sleeve, is a circular flange a^4 , which serves to keep sand and dirt out of the journal of the wheel.

Secured on the inner end of the journal-bolt is a flanged cap d , which abuts against the inner end of the sleeve and embraces the inner end of the hub, thereby serving to keep out the sand and dirt from the inner end of the journal. Clamped on the inner end of the bolt between its nut and the cap d are the two overlapped ends of the braces e and f , the former of which is bent forward and bolted to the inner side of the mold-board, and the latter of which is bent rearwardly and also bolted to the mold-board. These braces serve to brace the landside and the mold-board with respect to each other and assist in supporting and steadying the inner end of the journal-bolt.

The letter g designates a brake-lever pivoted on the inside of the arm a'' and provided with an eccentric or cam g' at its pivotal point, whereby by simply turning the lever backward the cam may be brought to bear upon the periphery of the wheel and lock the same against rotation during transportation of the plow from place to place. To keep the wheel constantly clear of clay and trash, we adjustably attach a scraper h to the arm a'' and curve the same downwardly and forwardly, so as to rest lightly against the periphery of the wheel. The scraper is attached to the arms by means of a slotted plate and bolts, so that it may be readily adjusted with respect to the periphery of the wheel.

A bent bail or handle i connects the arm a'' to the inner side of the mold-board, the end that is connected to the latter overlapping the rear end of the brace f and secured by the same bolt as this brace.

The object of journaling a wheel upon the rear end of the landside is to reduce the draft of the plow by causing said wheel to materially assist in supporting the weight of the plow and driver.

Having thus fully described our invention, what we claim is—

1. The combination of a sulky-plow, a horizontal bolt projecting inwardly from its landside, a supporting-wheel journaled upon this

bolt and provided with oppositely-projecting hubs, sand-caps embracing the respective ends of the hubs, and curved braces *e f*, connected rigidly to the inner end of the bolt and
5 extended, respectively, forwardly and backwardly and bolted rigidly to the inner side of the mold-board, substantially as described.

2. The combination of a sulky-plow having formed on the upper rear edge of its landside
10 a curved flanged enlargement *a*³ and an upwardly and rearwardly extending arm *a''*, a bail *i*, connecting this arm to the mold-board of the plow, a journal-bolt carried by the landside, a loose sleeve on this bolt, a supporting-wheel secured on this sleeve, sand caps
15 or flanges formed, respectively, on the land-

side and secured on the bolt and adapted to embrace the respective ends of the hub of the wheel, and braces connecting the inner end of the bolt to the mold-board, substantially 20 as and for the purpose described.

In testimony whereof we affix our signatures in presence of two witnesses.

ANDREW V. RYDER.
HENRY G. CHAMBERLIN.

Witnesses to Ryder:

J. H. WEBER,
AUGUST ENDLE.

Witnesses to Chamberlin:

G. I. THOMPSON,
CHAS. C. WHITNEY.