

(No Model.)

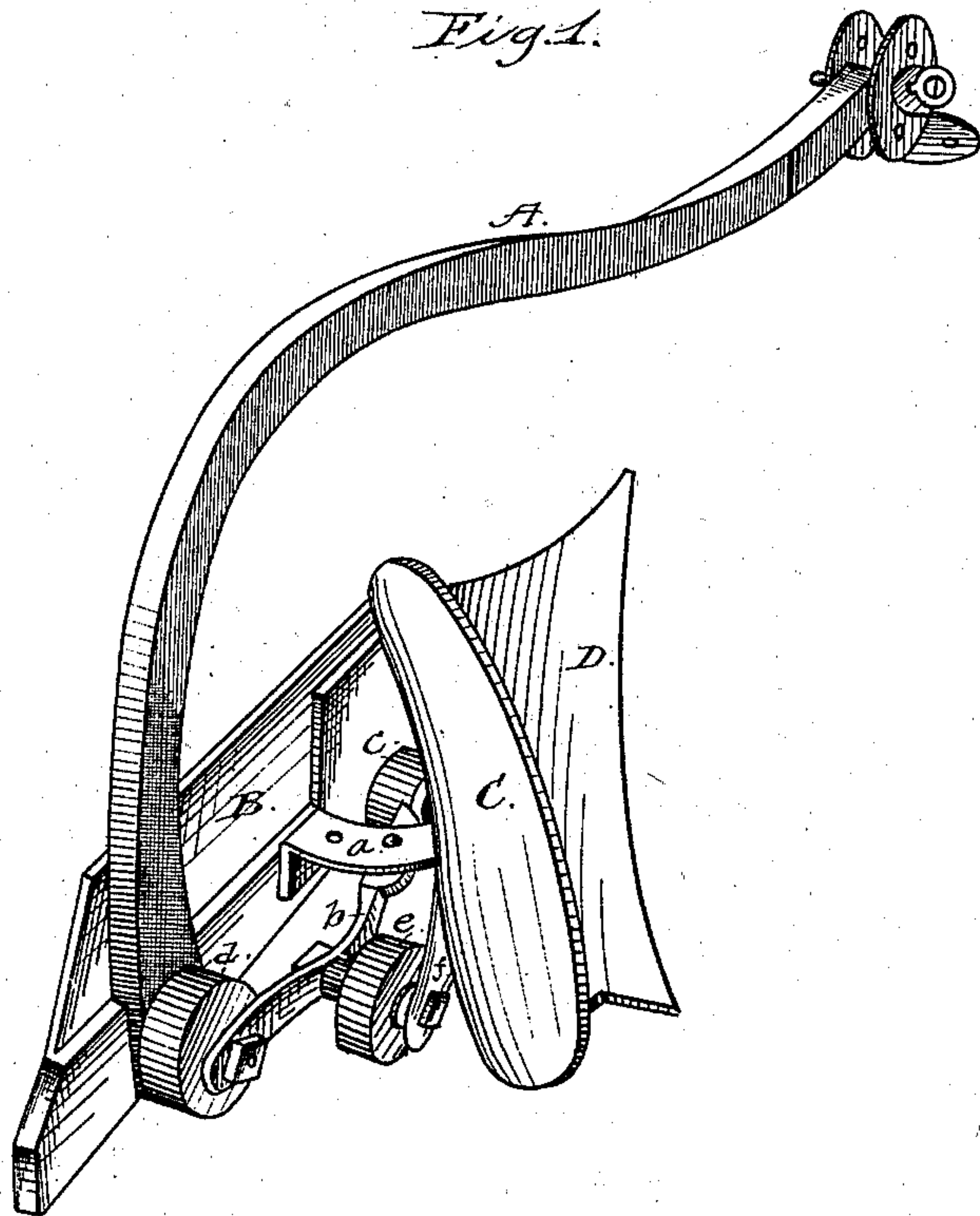
J. VANDEGRIFT.

PLOW.

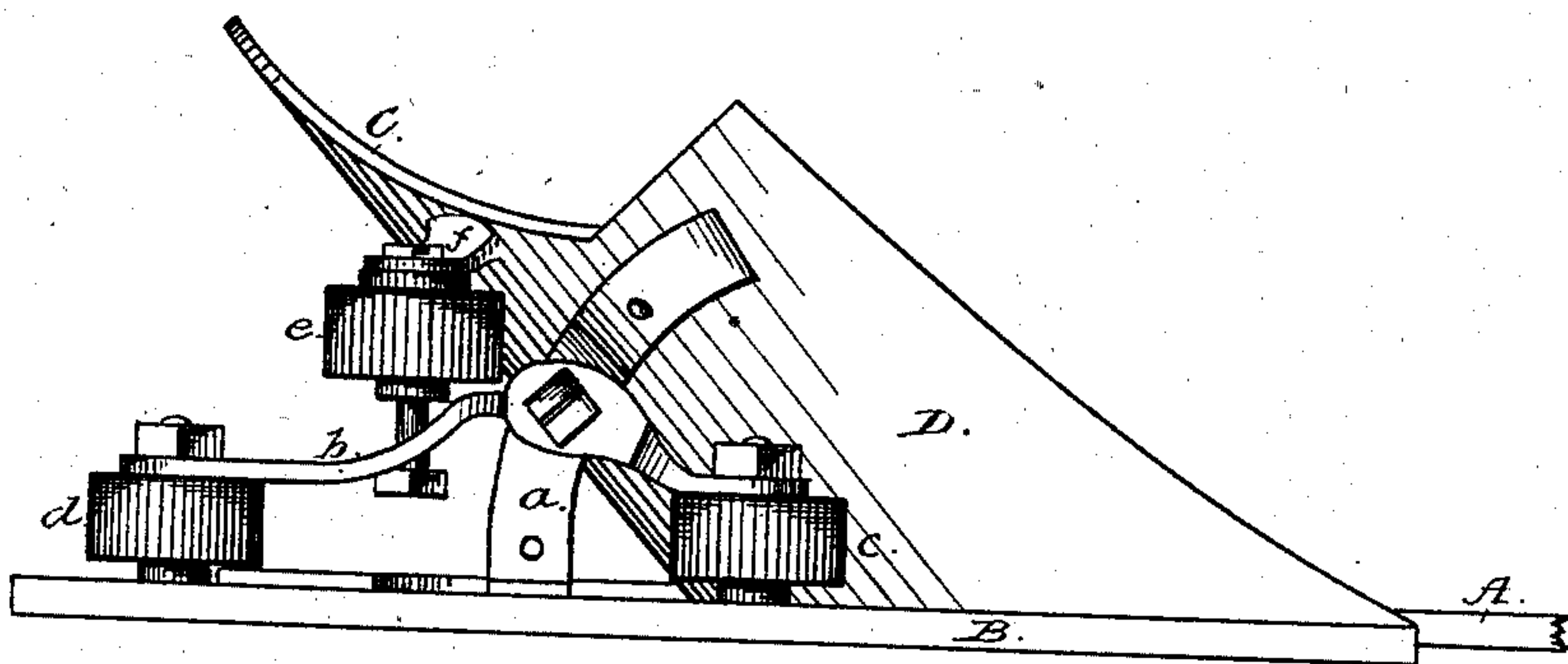
No. 254,734.

Patented Mar. 7, 1882.

*Fig. 1.*



*Fig. 2.*



Attest;  
J. W. Howard  
John C. Schroeder

Inventor;  
James Vandegrift  
by A. J. W. Miller  
Attys

# UNITED STATES PATENT OFFICE.

JAMES VANDEGRIFT, OF PRINCETON, ILLINOIS.

## PLOW.

SPECIFICATION forming part of Letters Patent No. 254,734, dated March 7, 1882.

Application filed December 24, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES VANDEGRIFT, of Princeton, in the county of Bureau and State of Illinois, have invented a new and useful Improvement in Plows; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

In that class of plows heretofore provided with one and two bearing-wheels in the bottom thereof, between the landside and the mold-board, it has been proved upon practical test that the tread of such wheel or wheels is uneven, as is also the balance of the plow, necessarily requiring as much labor and skill on the part of the plowman to conduct the plow as is requisite with the use of the common or ordinary plow. As the means sought is essentially to lessen the labor of the plowman and diminish the draft, I have provided a plow with three or more bearing-wheels, as may be desired, instead of one or two, whereby their arrangement in the bottom of the plow, between the landside and the mold-board, will obviate any excess of labor or draft, and, further, so effectively accomplish the means sought as to make the plowman merely a guide to the plow, devoid of all other incident work, all as more fully hereinafter described and claimed.

For the better understanding of my invention, and to enable those skilled in the art to which it relates to know how to construct and use the same, I will proceed to describe it, having reference to the accompanying drawings, in which—

Figure 1 is a rear perspective of a plow, showing the wheels in their respective positions; and Fig. 2 a bottom plan view, showing more clearly their arrangement and bearings.

Like letters refer to corresponding parts in each figure.

A represents the plow-beam; B, the landside; C, the mold-board; and D the plow-share, all of ordinary construction.

At or about the center of the landside, as shown in Fig. 1, is rigidly secured one end of

a metal strip, *a*, whose other end extends across therefrom to a point almost directly opposite on the mold-board, to which and the plowshare it is rigidly secured. This strip *a* thus forms a substantial brace for the connection of the landside and mold-board, and further serves as a suitable and convenient means for the attachment and support of the arm *b*, upon which are mounted the bearing-wheels *c* and *d*, respectively. This arm *b*, just alluded to, is secured near its center to the brace *a*, as shown, and runs parallel with the line of the landside. Upon the forward end of this arm *b*, in the recess formed by the junction of the landside and mold-board, is mounted the wheel *c*, by means of a shaft connecting said end with the landside.

The wheel *d* is mounted in a like manner next to the landside upon the rear end of the arm, and consequently travels directly in the track of the forward wheel. Although these two wheels come in close proximity to the landside, they must not be so close as to clog or be prevented a free revolution.

Depending from near the edge of the mold-board, and at a point about midway the wheels *c* and *d*, is an arm, *f*, between which and the arm *b* is a space equal to that between said arm *b* and the landside. Upon the end of this depending arm (in said space) is mounted, by means of a shaft connecting it with the arm *b*, the bearing-wheel *e*, as shown. The tread of these wheels must necessarily (to work with effect) be below that of the landside and plowshare such a distance as may be desired.

Having thus described my invention and set forth its accomplishments, what I claim, and desire to secure by Letters Patent, is—

In a plow, the combination of the bearing-frame *a b f*, substantially as described, with the wheels *c*, *d*, and *e*, mounted and arranged substantially as described, and for the purpose set forth.

This specification signed and witnessed this 19th day of December, 1881.

JAMES VANDEGRIFT.

Witnesses:

H. M. TRIMBLE,  
P. S. CARTER.