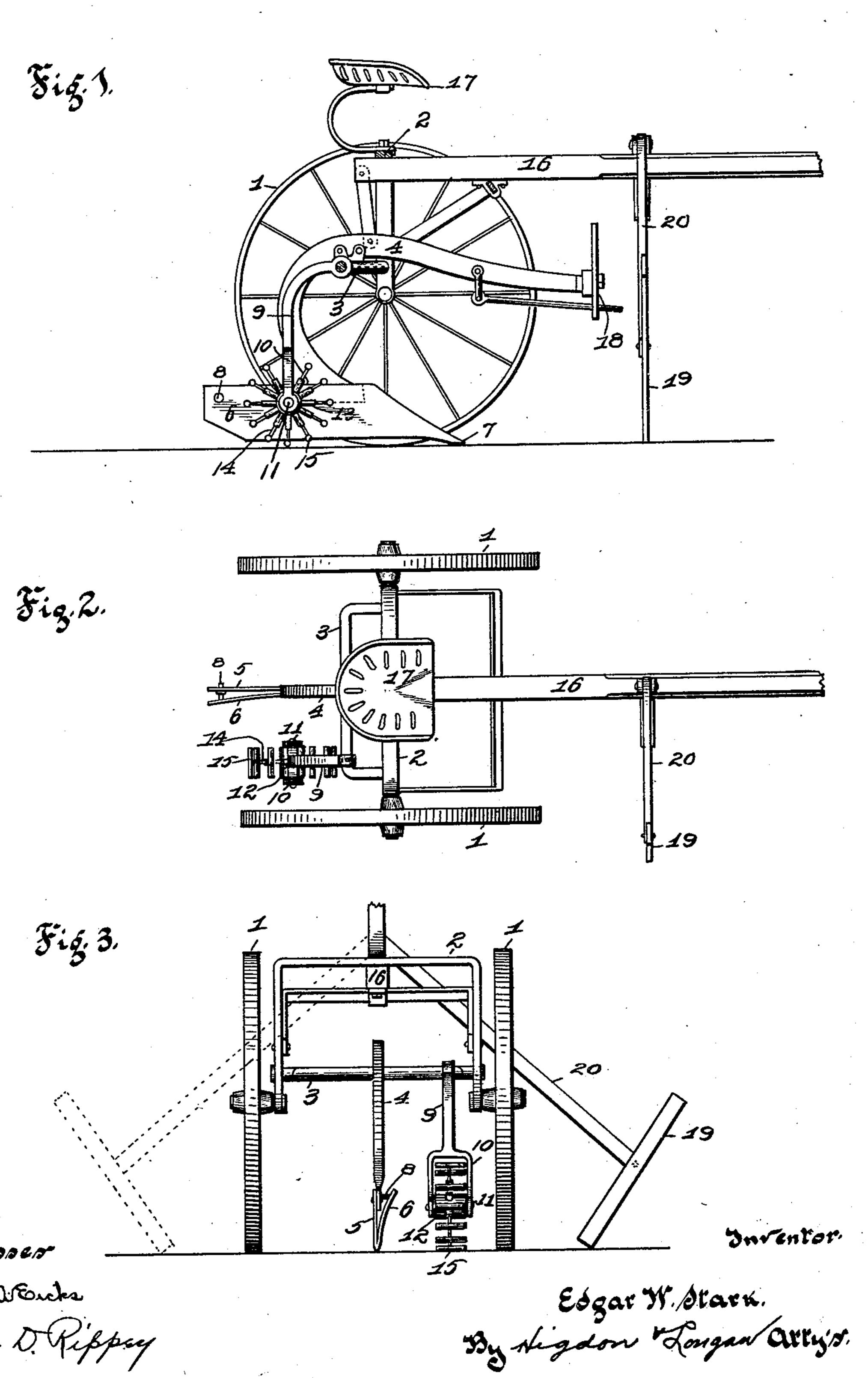
## E. W. STARK. PLOW.

(Application filed July 9, 1900.)

(No Model.)

2 Sheets-Sheet 1.



No. 669,329.

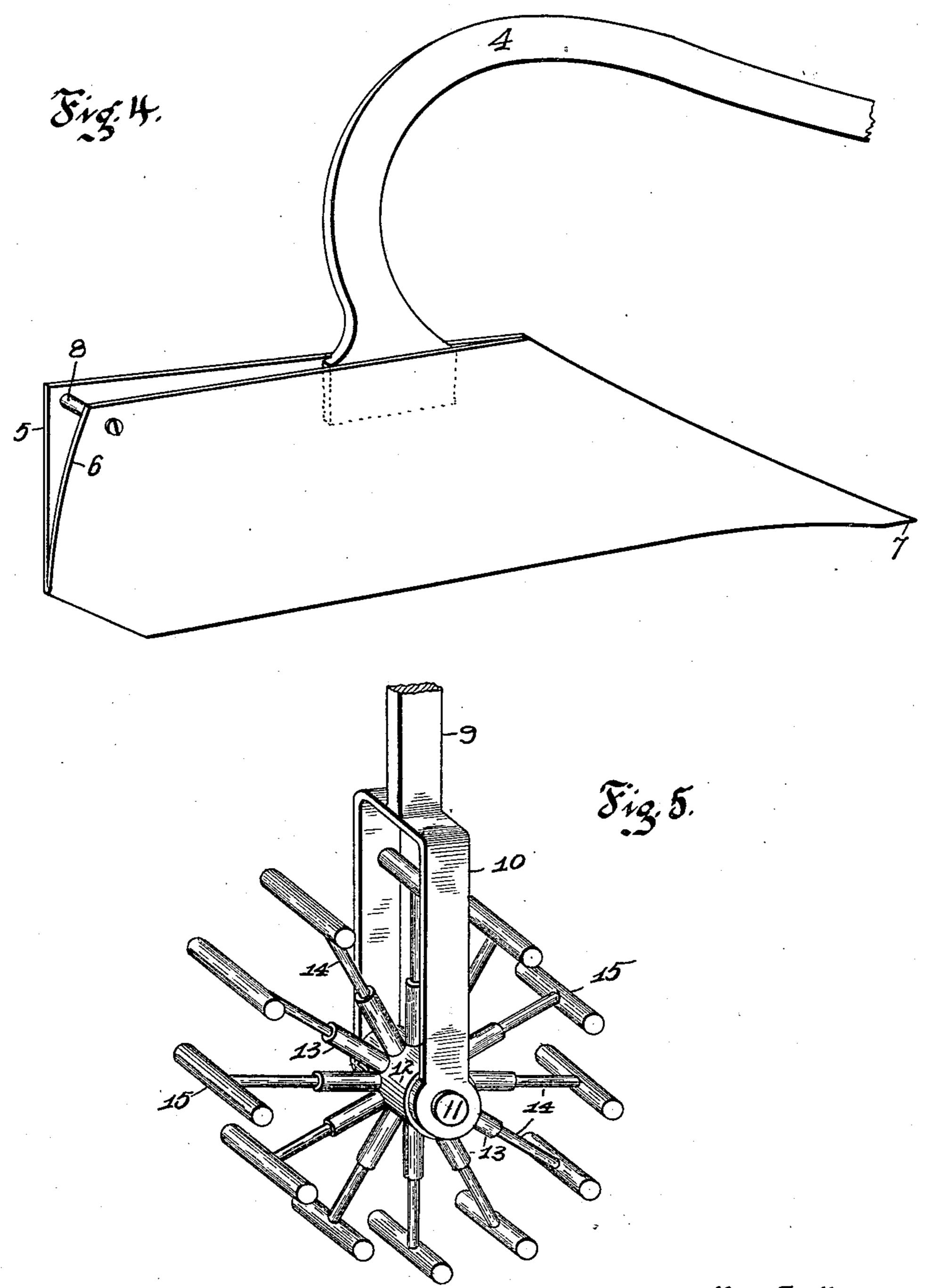
Patented Mar. 5, 1901.

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2 Sheets-Sheet 2.



Vitnesses

Inventor.

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## United States Patent Office.

EDGAR W. STARK, OF LOUISIANA, MISSOURI.

## PLOW.

SPECIFICATION forming part of Letters Patent No. 669,329, dated March 5, 1901.

Application filed July 9, 1900. Serial No. 23,024. (No model.)

To all whom it may concern:

Be it known that I, EDGAR W. STARK, of the city of Louisiana, Pike county, State of Missouri, have invented certain new and useful Improvements in Plows, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

This invention relates to combined plows and markers; and it consists of the novel construction, combination, and arrangement of parts hereinafter shown, described, and claimed.

The object of this invention is to provide a plow to be carried by suitable mechanism provided for that purpose, and a marker supported by the same mechanism which carries the plow and operating in proximity thereto, the said marker being adapted to mark off regular distances upon the surface, whereby the plants may be located at uniform distances from each other.

Figure 1 is a side elevation showing the manner in which the plow and marker are carried, one of the supporting-wheels being omitted. Fig. 2 is a plan view showing the relative position of the different parts. Fig. 3 is a view from the rear showing a side marker carried by the tongue of the supporting mechanism. Fig. 4 is an enlarged perspective view showing the plow. Fig. 5 is a perspective view of the marker.

In the drawings, 1 indicates the tractionwheels, supported by which is a suitable 35 framework 2, and carried by the framework 2 a suitable distance above the hubs of the wheels 1 is a shaft 3, the said shaft being bent rearwardly between different bearings, in the manner shown in Fig. 2. A plow-beam 40 4 of ordinary construction is supported by the rear horizontal portion of the shaft 3, and carried upon the lower end of the said beam is the plow, the construction of which is an essential feature of my invention. The said 45 plow consists of the vertical side 5, integral with the lower edge of which is an upwardlybent landside portion 6, the upper edge of which is bent to the right away from the landside 5. The forward ends of the sides 5 and 50 6 are joined together, thereby forming a cutting edge and allowing the plow to be drawn

more easily. The cutting edge, as shown in

Figs. 1 and 4, is formed at a suitable incline, and integral with the lower corners of the said sides is a downwardly-projecting point 7. 55 The rear ends of the sides 5 and 6 are pressed and held at the required distance from each other by means of a bolt or rod 8. Thus it is seen that the member 9 serves as a combined plowshare and moldboard.

A plow constructed as described is adapted for use in transplanting plants of any kind and forms a furrow having a vertical side and presses the soil to the left, allowing a portion thereof to fall back into the bottom 65 of the furrow, thereby providing a soft bed upon which the plant rests. The vertical side of the furrow serves as a brace and a guide and assists in retaining the plant in an upright position.

The marker, by means of which the plants may be placed at uniform distances from each other, consists, essentially, of certain features, which will now be described. Carried by the shaft 3, at one side of the beam 4, is an arm 75 9, provided on its lower end with forks 10, the said forks carrying an axial bolt 11, upon which is supported a sleeve or hub 12. Carried by the said sleeve 12 is a series of projecting tubes 13, and adjustably carried by 80 the said tubes is a plurality of rods 14. Suitable rods or markers 15 are carried on the outer ends of the rods 14 and serve to indicate upon the surface adjacent to the furrow made by the plow the points at which the 85 plants are to be placed. The rods 14, as stated, are adjustable in the tubes 13 and may be made to project a greater or less distance therefrom, thereby serving the same purpose at whatever elevation the plow may be held go by means of the shaft 3. The shaft 3 is rotatably carried by the supporting-framework, and by elevating or lowering the horizontal portion thereof the plow and the marker will be correspondingly raised or lowered, thereby, 95 enabling the user to make a deep or shallow furrow, as desired. The rods 14, being adjustable, may be drawn outwardly from the tubes 13, thereby performing the same function as when the shaft 3 is turned downwardly. 100 Carried by the upper portion of the framework 2 is an ordinary tongue 16, and supported above the rear end thereof is a seat 17. Suitable connections 18 are provided on the

forward end of the plow-beam 4, to which the usual doubletrees may be secured.

19 indicates a side marker carried by the arm 20, the same being pivoted to the tongue 5 16, as shown in Fig. 2.

I claim—

1. A plow, comprising a vertical side, an inclined side connected to the said vertical side at its lower edge, the upper edges of said sides being separated from each other, and a cutting edge formed at the forward ends of the said sides, substantially as specified.

2. A plow, comprising a vertical landside and an inclined side or moldboard having its forward end and lower edge secured to the said vertical landside, substantially as speci-

fied.

3. In a plow, a vertical landside, and a moldboard having its lower edge secured to the said landside and its upper edge separated therefrom, the rear portion of its upper edge being at a greater remove than the front portion, substantially as specified.

4. In a plow, a vertical landside, and a moldboard, the lower edge and forward end 25 of which are connected to the said landside and the upper side of which is separated therefrom, substantially as specified.

5. In a plow, a landside, a moldboard having its lower edge and forward end connected 30 to the said landside, and means for retaining the upper side of the said moldboard away from the landside, substantially as specified.

6. A plow, comprising a vertical landside, a combined moldboard and plowshare, the 35 lower edge of which is connected to the said landside and the upper side of which is removed therefrom and means whereby the said landside and moldboard are retained in the required positions, substantially as specified. 40

In testimony whereof I affix my signature

in presence of two witnesses.

EDGAR W. STARK.

Witnesses:

ALFRED A. EICKS, JOHN D. RIPPEY.