No. 822,847. PATENTED JUNE 5, 1906.

E. KRAAI.

SUBSOIL PLOW.

APPLICATION FILED JULY 18, 1905.

2 SHEETS—SHEET 1

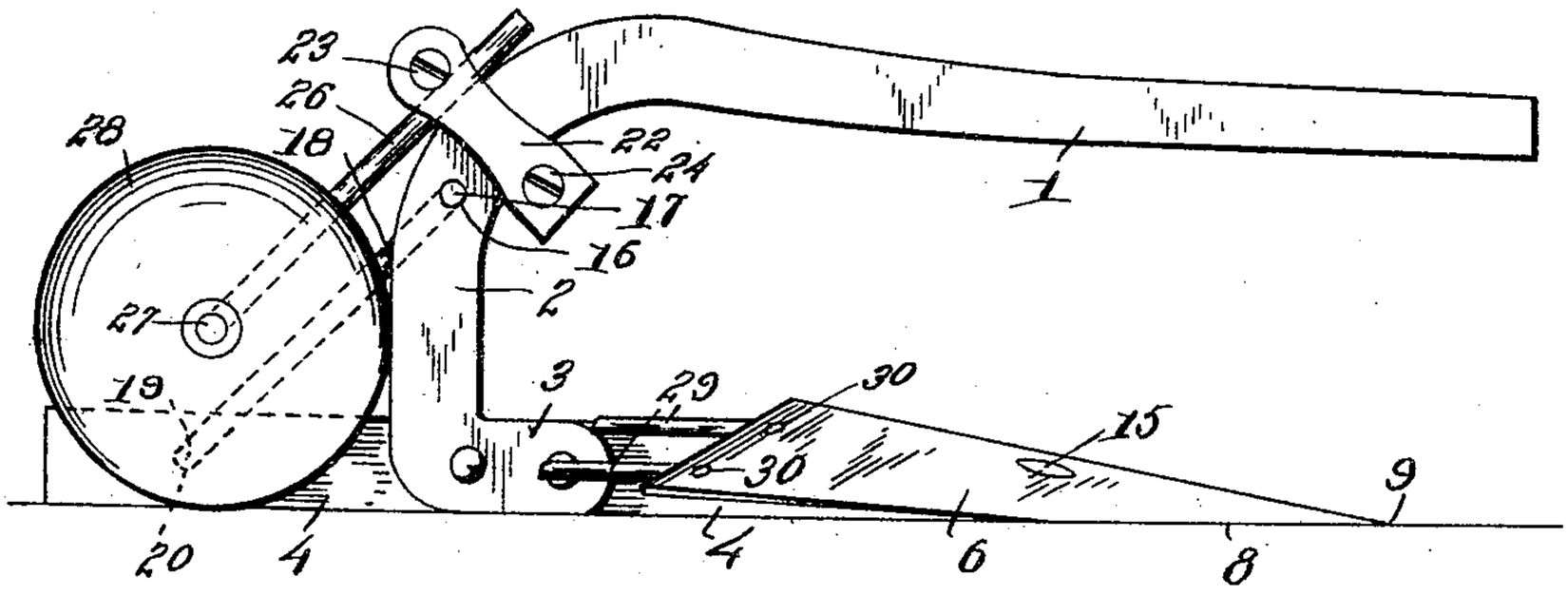

Fig. 1.

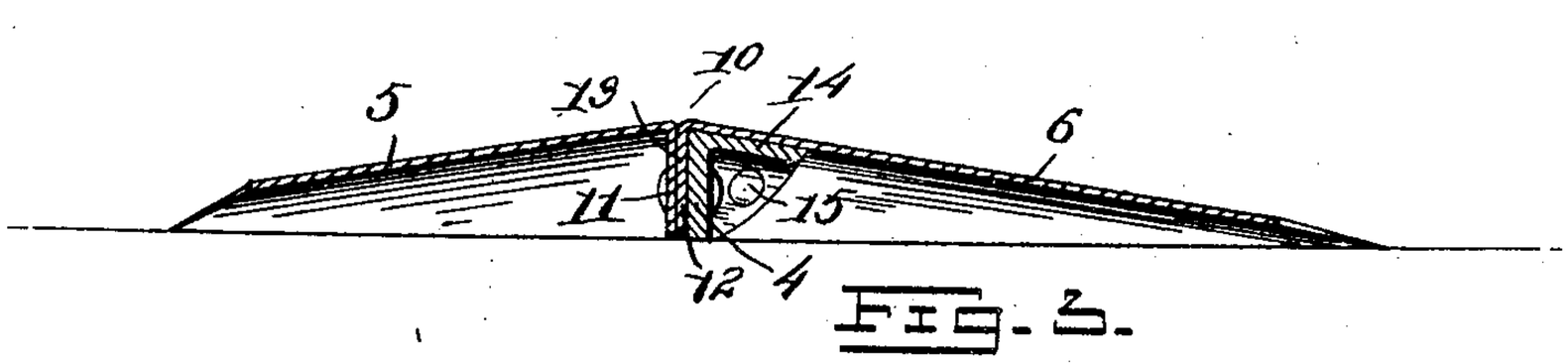

Fig. 2.

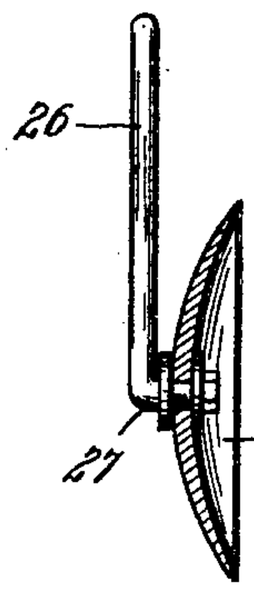

Fig. 3.

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2 SHEETS—SHEET 2.

Fig. 2.

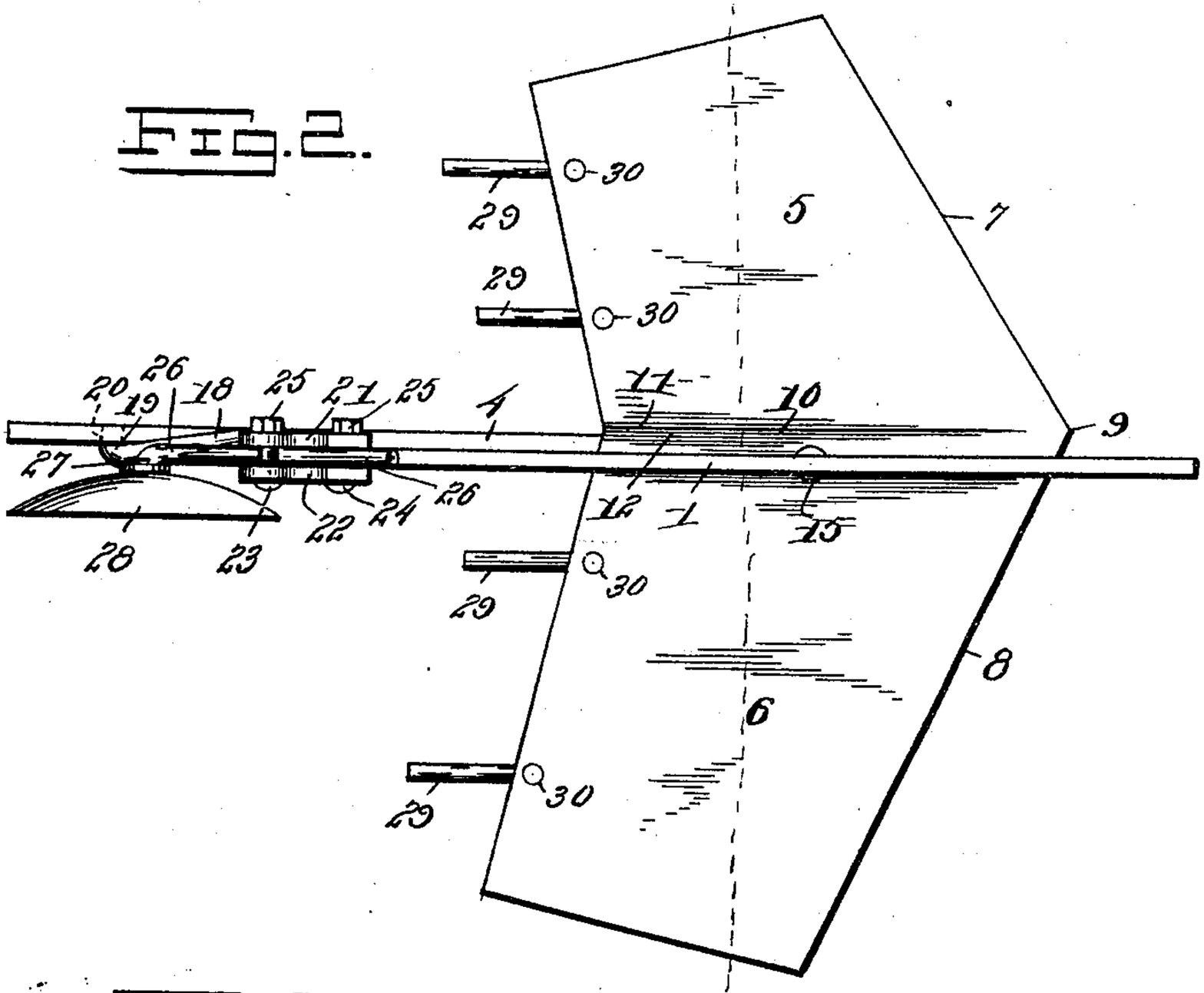
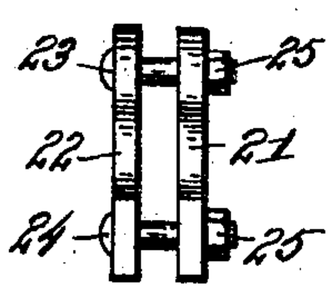


Fig. 4.



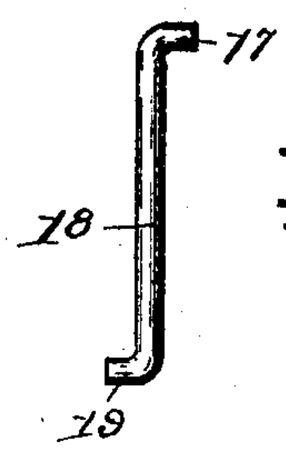


Fig. 6.

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UNITED STATES PATENT OFFICE.

EVERT KRAAI, OF HOLLY, COLORADO.

SUBSOIL-PLOW.

No. 822,847. Specification of Letters Patent. Patented June 5, 1906.

Application filed July 18, 1905. Serial No. 270,263.

To all whom it may concern:

Be it known that I, EVERT KRAAI, a citizen of the United States, residing at Holly, in the county of Prowers, State of Colorado, have invented certain new and useful Improvements in Subsoil-Plows; and I do hereby 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.

This invention relates to plows

The object of the invention is to provide an exceedingly simple, inexpensive, durable, and efficient device of the character stated.

In the drawings, Figure 1 is a side elevation of my invention, the landside being broken away to illustrate the foot at the bottom of the standard of the beam. Fig. 2 is a top plan view. Fig. 3 is a sectional view through the plowshare and landside, illustrating the depending lug of the latter. Fig. 4 is a detail view of the clamping elements detached from the plow. Fig. 5 is a sectional view through the marker, illustrating its concavo-convex formation and also showing its supporting-arm; and Fig. 6 is a detail view of the brace.

Referring now more particularly to the accompanying drawings, the reference character 1 designates a beam whose rear end is bent downwardly to form a standard 2 and then bent inwardly to form the foot 3, to which foot is connected intermediate its ends the landside 4.

The plowshare employed with my invention consists of two blade parts, the part 5 being narrower than the part 6, the forward edges 7 and 8, respectively, of the blade parts diverging rearwardly from each other, the said plowshare being slotted from rear toward the point 9 and in direct alinement with the latter, as indicated by the reference character 10. The parallel longitudinal edges 11 and 12, respectively, of the parts 5 and 6 are then bent downwardly into engagement with each other to form an elongated lug 13, to which is connected the forward end of the landside 4, the latter at its forward end having an upper flange 14, through which and the portion 6 of the plowshare is passed a suitable fastening 15. It will now be understood that the landside is secured to the plowshare and also to the aforesaid lug 13 of the latter, it being observed that the lug 13 tapers with its lower edge in alinement with the lower ends of the landside 4.

The standard 2 of the beam is provided with a perforation 16, in which is inserted the bent end 17 of the brace 18, having its opposite lower end bent in the opposite plane of the bent end 17 for insertion in the perforation 20 of the landside 4.

Clamping-plates 21 and 22 are secured to opposite sides of the beam 1 at the beginning of the downward bend 2 thereof and held thereon by means of the upper and lower bolts 23 and 24, arranged, respectively, above and below the corresponding edges of the beam, there being suitable nuts 25 secured to said bolts for clamping purposes. It will be observed that the bolt 24 fits directly against the beam or its standard with the upper bolt 23 in spaced relation therewith for the reception therebetween of the downwardly-inclined arm 26, whose lower end is bent, as at 27, to form an axle for the reception of the disk marker 28, it being understood that the arm 26 is clamped between the clamping-plates 21 and 22 and the beam and the upper bolt 23.

I might state at this time that my improved plow is of such character that the root of the products will be cut off, permitting the crowns thereof to remain up, so that they may dry before they are turned under the ground, for the crowns of certain products will reproduce if they be turned under before drying, the drying of the crowns resulting in the dying thereof. It is for this purpose that I arrange the plowshare in substantially a horizontal plane with respect to the plow-beam. In order to loosen the earth around the roots, I provide a series of fingers 29 at the rear of the plowshare, connecting the inner ends of the fingers with the perforations 30 at the rear edge of the plowshare. By loosening the dirt around the roots the latter may be readily extracted from the ground.

From the foregoing it will be readily understood that the marker 27 may be readily adjusted between the clamping-plates 21 and 22, and I might state that this marker being in the form of a disk of the concavo-convex type will not only serve as a marker, but may also serve in the capacity of a surface instrument for a second plowing to move the crowns toward the previous furrows, so that they will be positively covered.

What is claimed is—

1. A plow including a beam, a landside connected to the beam and having a flange on its forward end, a plowshare consisting of

two blade parts having longitudinal edges bent downwardly and connected to the forward end of the landside, one of the said blade parts being secured to and resting upon the flange of the said landside, a brace between the landside and the beam, and a disk marker adjustably connected to the beam.

2. A plow including a beam, a landside associated with the beam, a plowshare having a depending lug secured to the landside, fingers secured to the plowshare, a brace between the landside and the beam, and a disk marker adjustably connected to the beam.

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

EVERT KRAAI.

Witnesses:
H. R. MALTBY,
J. B. HARDEN.