No. 819,390. PATENTED MAY 1, 1906.

T. J. WARREN.

PLOW.

APPLICATION FILED JUNE 16, 1904.

Fig. 1.

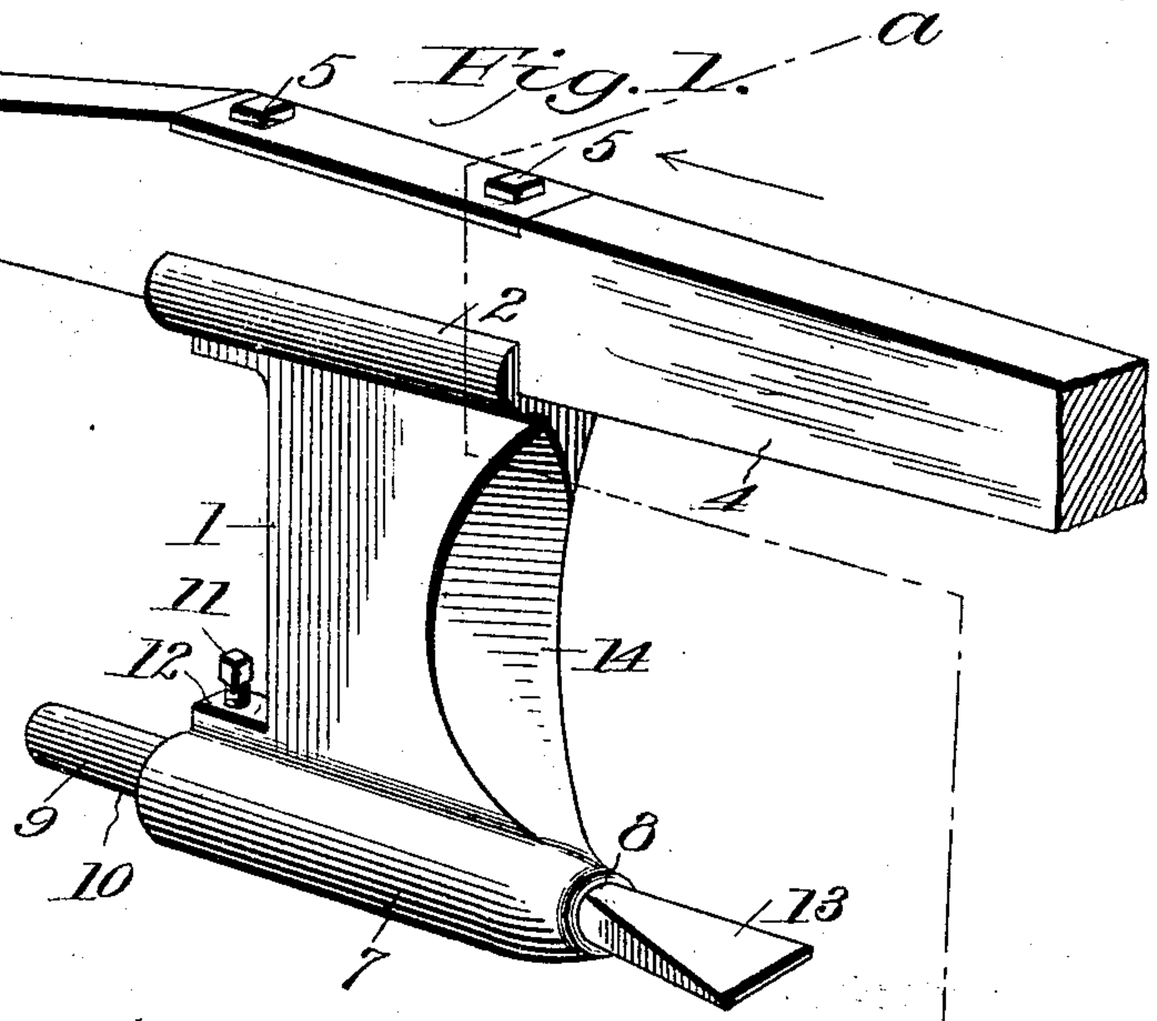


Fig. 2.

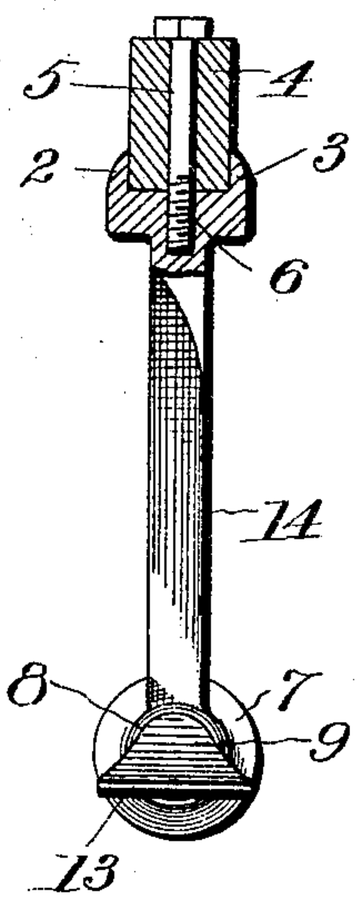
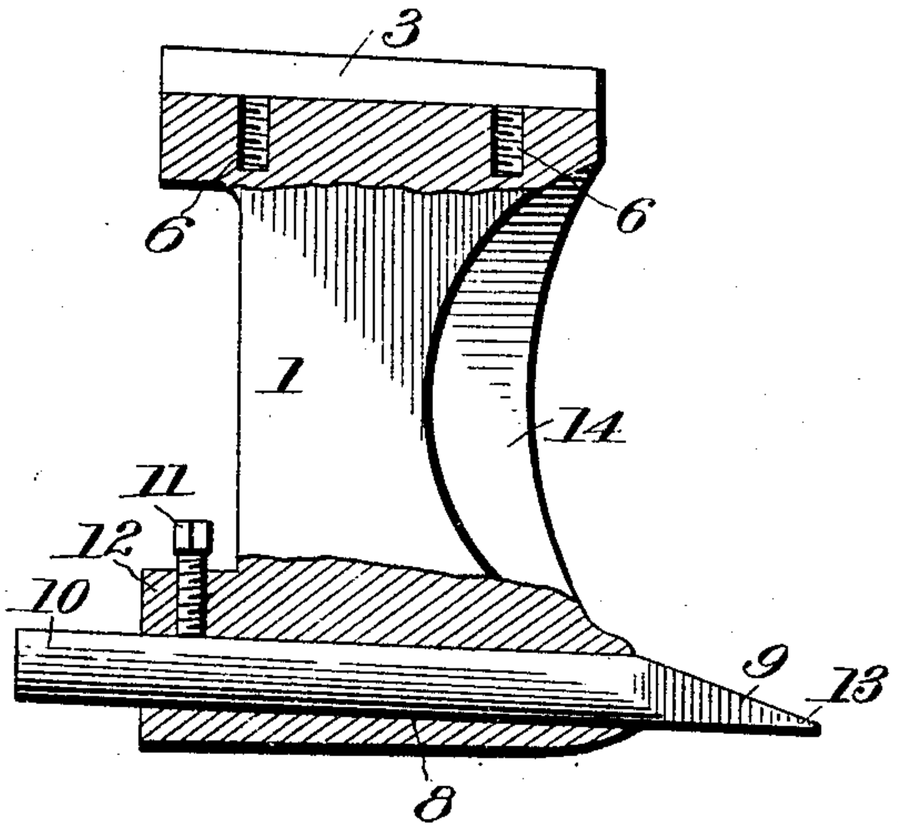


Fig. 3.



WITNESSES:

C. H. Walker.

H. M. Baldwin.

INVENTOR

Thomas J. Warren.

BY

Attorney

UNITED STATES PATENT OFFICE.

THOMAS J. WARREN, OF STANLEY, NORTH CAROLINA.

PLOW.

No. 819,390. Specification of Letters Patent. Patented May 1, 1906.

Application filed June 16, 1904. Serial No 212,868.

To all whom it may concern:

Be it known that I, THOMAS J. WARREN, a citizen of the United States, residing at Stanley, in the county of Gaston and State of North Carolina, have invented certain new and useful Improvements in Plows, of which the following is a specification.

My invention relates to plows, and more particularly to the standard and plow-point features, one object of the invention being to provide an exceedingly simple, inexpensive, durable, and efficient means for the substitution of the ordinary form of elements of similar character.

Another object of the invention resides in the formation or construction of a combined plow-point and standard, whereby the plow-point may be adjustably arranged with relation to the standard and a new point readily substituted for a worn or broken point.

It is still further contemplated to provide an arrangement wherein the standard coöperates with the plow-point in the furrowing operation.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claim, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claim without departing from the spirit or sacrificing any of the advantages of the present invention.

In the drawings, Figure 1 is a detail perspective form of the invention embodying my improvements. Fig. 2 is a sectional view on the line *a a* of Fig. 1, and Fig. 3 is a side elevation partly in section.

Referring now more particularly to the accompanying drawings, the reference character 1 represents my improved standard provided at its upper portion with upwardly-directed flanges 2 and 3, forming a channel or way for the reception of the beam 4, there being suitable bolts 5 piercing the beam from the top to the bottom thereof and entering screw-threaded openings 6 in the channel or way mentioned. It is to be understood, however, that the standard may be secured to the beam in any suitable manner.

As clearly shown in the drawings, it will be seen that the lower portion of the standard is enlarged, as at 7, forming a land slide, and preferably rounded exteriorly, so that forward movement of the device may not be hindered. The enlargement 7 is provided with a central bore 8, arranged longitudinally and upon an incline therein to direct the plow-point 9 downwardly with respect to the position of the standard for obvious reasons. Reference to the drawings will disclose that the central bore 8 of the part 7 is preferably cylindrical in cross-section for the reception of the preferably cylindrical shaped stem of the plow-point 10; but it is to be understood that the said bore and the said stem may be of other configurations, if desired. In any event the point is designed to be adjusted backwardly and forwardly within its bore or seat, the set-screw 11 being disposed upon the shoulder 12 and designed to firmly hold the point in its adjusted positions. It is obvious that the pointed end 13 of the plow-point will readily perform its customary function; but the present invention differs from the ordinary arrangement of moldboard and other elements in that it is now designed to obviate the use of the moldboard common to the ordinary plow and also depart from the usual construction by so forming the forward face of the standard as to provide a cutting-blade 14, as clearly shown in the drawings. It should be noted that the cutting-blade is not formed by beveling or otherwise forming the sharp edge from both sides of the standard, but that the edge is formed directly from one side of the standard and concaved in its formation.

The result of my peculiar arrangement of means for furrowing the ground resides not only in the fact that the standard coöperates with the plow-point element and that the point element is detachable with respect to its standard, but I am enabled to furrow the ground without necessarily turning up clay, leaving all the subsoil in a well-pulverized state and in a more efficient manner than that heretofore accomplished in the use of the ordinary means for like purposes.

I claim—

A subsoiling-plow including a single casting having flat opposite upright faces and a

concaved front cutting edge beveled on one side, the top of the casting terminating in a laterally-enlarged head projecting in front and rear thereof with its projecting portions pierced by bolt-openings, integral flanges rising at opposite sides of the head, an integral open-ended tubular socket at the base of the casting and extending longitudinally thereof, and a subsoiling-share having a shank removably received in the socket.

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

THOMAS J. WARREN.

Witnesses:
W. S. LINEBARGER,
E. L. PEGRAM.