

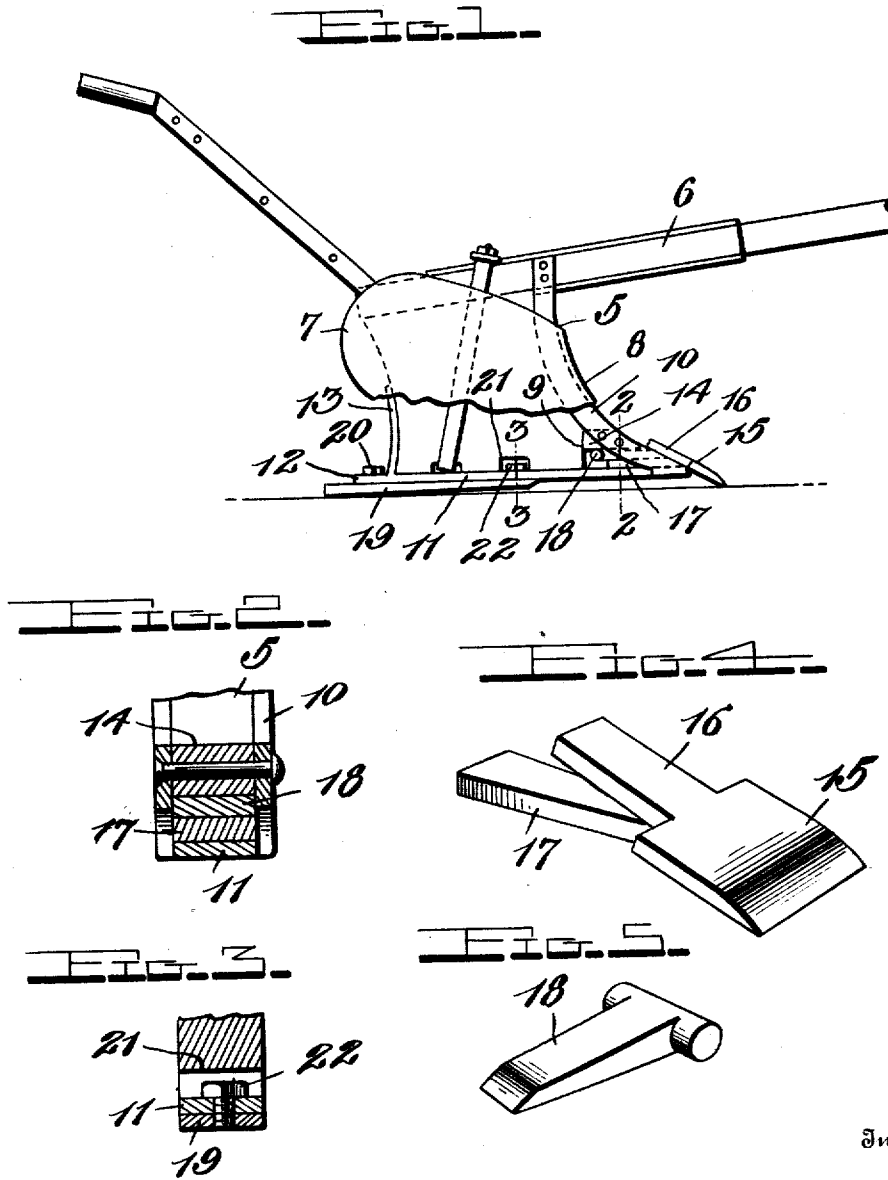
T. VAN EGEREN.

PLOW.

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1,012,032.



Inventor

Theodore van Egeren,

By *Watson E. Coleman.*
Attorney

Witnesses

Chas. L. Griesbauer.
L. H. Ellis.

UNITED STATES PATENT OFFICE.

THEODORE VAN EGEREN, OF GLENBURNIE, MARYLAND.

PLOW.

1,012,032.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, THEODORE VAN EGEREN, a citizen of the United States, residing at Glenburnie, in the county of Anne Arundel and State of Maryland, have invented certain new and useful Improvements in Plows, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to plows and more particularly to a removable or detachable plow point, the present application constituting a division of my prior application for patent Serial Number 617,613, filed March 29th, 1911.

The primary object of the invention is to provide means for easily and quickly detaching the plow point from the standard of the plow in the event that the same becomes broken, such means effectually retaining the point in its operative position and preventing its accidental detachment.

Another object of the invention is to provide means arranged upon the body of the plow for varying the angle of the plow point whereby a deep or shallow furrow is obtained.

A further object of the invention is to provide a plow of the above character which is simple in construction, very efficient in practical operation and extremely durable.

With the above and other objects in view, the invention consists of the novel features of construction, combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a plow embodying my improvements, a portion of the mold board being broken away; Fig. 2 is a section taken on the line 2—2 of Fig. 1; Fig. 3 is a section taken on the line 3—3 of Fig. 1. Fig. 4 is a detail perspective view of the plow point; and Fig. 5 is a similar view of the key.

Referring in detail to the drawing 5 designates the standard of my improved plow to which the beam 6 is rigidly secured at its upper end. Upon this standard the mold board 7 of any preferred form is arranged. The forward lower end of the standard 5 is forwardly extended and the front edge thereof is curved as indicated at 8. The lower end of this extended portion of the

standard is recessed as at 9, and the metal straps 10 are secured to opposite sides of said standard at its forward edge and at their lower ends are extended into spaced parallel relation upon opposite sides of said recess. A landside 11 is arranged upon the lower edge of the standard 5 and entirely covers the same, the forward end of said wear plate being disposed between the lower ends of the metal straps 10 and suitably fixed to the standard. Said plate at its rear end extends beyond the standard 5 as indicated at 12 and is also provided with an integral vertical arm 13 which is disposed upon the rear edge of the standard of the plow and rigidly fixed thereto. A metal block 14 is rigidly fixed between the straps 10 and is arranged in the upper end of the recess 9 in the forward end of the standard of the plow. The plow point 15 consists of the blade or point proper having a longitudinal extension 16 on its rear edge which engages upon the upper edges of the metal straps 10 at their lower ends. An arm 17 is also integrally formed with the plow point and extends in divergent relation to the extension 16 thereof, said arm being of greater length than said extension and gradually flared or widened to its free end. This arm 17 is adapted to be inserted into the recess 9 of the plow standard, the furrow opening blade of the plow point extending below the plane of the land side 11 so that the same enters the ground in the forward movement of the plow. A key 18 is adapted to be inserted into the recess 9 from one side thereof and disposed between the arm 17 of the plow point and the upper edge of said recess. This key is slightly wedge-shaped in form and is adapted to bind against the arm 17 to retain the plow point rigidly in its operative position. In the event, however, that said key should become loosened, the plow point will be, nevertheless, held upon the plow standard owing to the form of the arm 17 which renders impossible its outward or forward movement in the recess. When it becomes necessary to remove the plow point, this may be easily and quickly done by removing the longitudinally extending land side 11 from the lower edge of the standard. The plow point may then be readily removed from the recess 9 and another substituted therefor.

In order to vary the angle at which the plow point enters the soil and thereby regulate the depth of the furrow, I provide an adjustable runner 19 which is arranged upon the under side of the landside 11 and terminates at a point substantially midway between the ends thereof. The rear end of the runner 19 extends rearwardly of the landside and is of greater thickness than at its forward end. An adjusting screw 20 is disposed through the rear end 12 of the landside 11 and has threaded engagement in the runner 19. The lower edge of the standard 5 of the plow is centrally provided with a recess 21 in which the head of an adjusting screw 22 is disposed, said screw being also extended through the landside 11 and threaded in the forward end of the runner 19. By adjusting the screws 20 and 22, it will be readily seen that the standard of the plow can be disposed at various angles, thus also altering the angular disposition of the plow point with relation to the line of movement of the plow so as to cause the same to enter the soil to the desired depth.

From the foregoing it is thought that the construction and operation of my improved plow will be readily understood. The means for attaching the plow point to the standard is extremely simple, and the point may be very easily and quickly attached and rigidly held in its proper operative position on said standard. Thus various forms of points may be readily arranged on the plow standard as may be required owing to the peculiar character of various sections of ground. The means for angularly disposing the point is also a very important and desirable feature of my invention as it provides means for quickly varying the depth of the furrow, without in any way requiring the repositioning of the plow point itself. The invention also admits of the point being readily removed for purposes of sharpening so that it may be more readily manipulated.

The various parts of the device are all extremely durable in construction and may be manufactured at very small cost.

While I have shown and described the preferred construction and arrangement of the various parts, it will be understood that the invention is susceptible of considerable modification without departing from the essential feature or sacrificing any of the advantages thereof.

Having thus described the invention what is claimed is:—

1. In a device of the character described, the combination with a beam having a depending standard provided with a longitudinal recess in its lower forward end, the lower edge of said standard having a landside fixed thereto which forms the bottom of the recess, of a plow point, a flared arm integrally formed with the plow point and extending in divergent relation thereto, said arm being adapted to be disposed in said recess upon the landside, and a key adapted to be fitted into said recess and frictionally engage said arm to rigidly retain the plow point upon the standard.

2. In a device of the character described, the combination with a beam having a depending standard provided with a longitudinal recess in its lower forward end, metal straps secured to opposite sides of the standard and extending upon opposite sides of said recess, of a plow point, a flared arm integrally formed on the plow point extending in divergent relation thereto and adapted to be received in the recess of said body and between said metal straps, and a key adapted to be fitted into said recess and engage said arm to rigidly retain the plow point upon the standard.

3. In a device of the character described, the combination with a beam having a depending standard provided with a longitudinal recess in its lower forward end, metal straps secured to the front edge of said standard on opposite sides thereof and extending upon opposite sides of the recess, a landside arranged on the lower edge of said standard and forming the bottom of the recess, a block rigidly fixed in said recess in spaced relation to said landside, of a plow point having an extension integrally formed therewith adapted to be received in the recess of said standard, and a key adapted to be fitted into said recess between the extension of the plow point and said block to rigidly retain the plow point upon the standard.

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

THEODORE VAN EGEREN.

Witnesses:

EDWARD L. WARD,

STEPHEN W. LEITCH.