

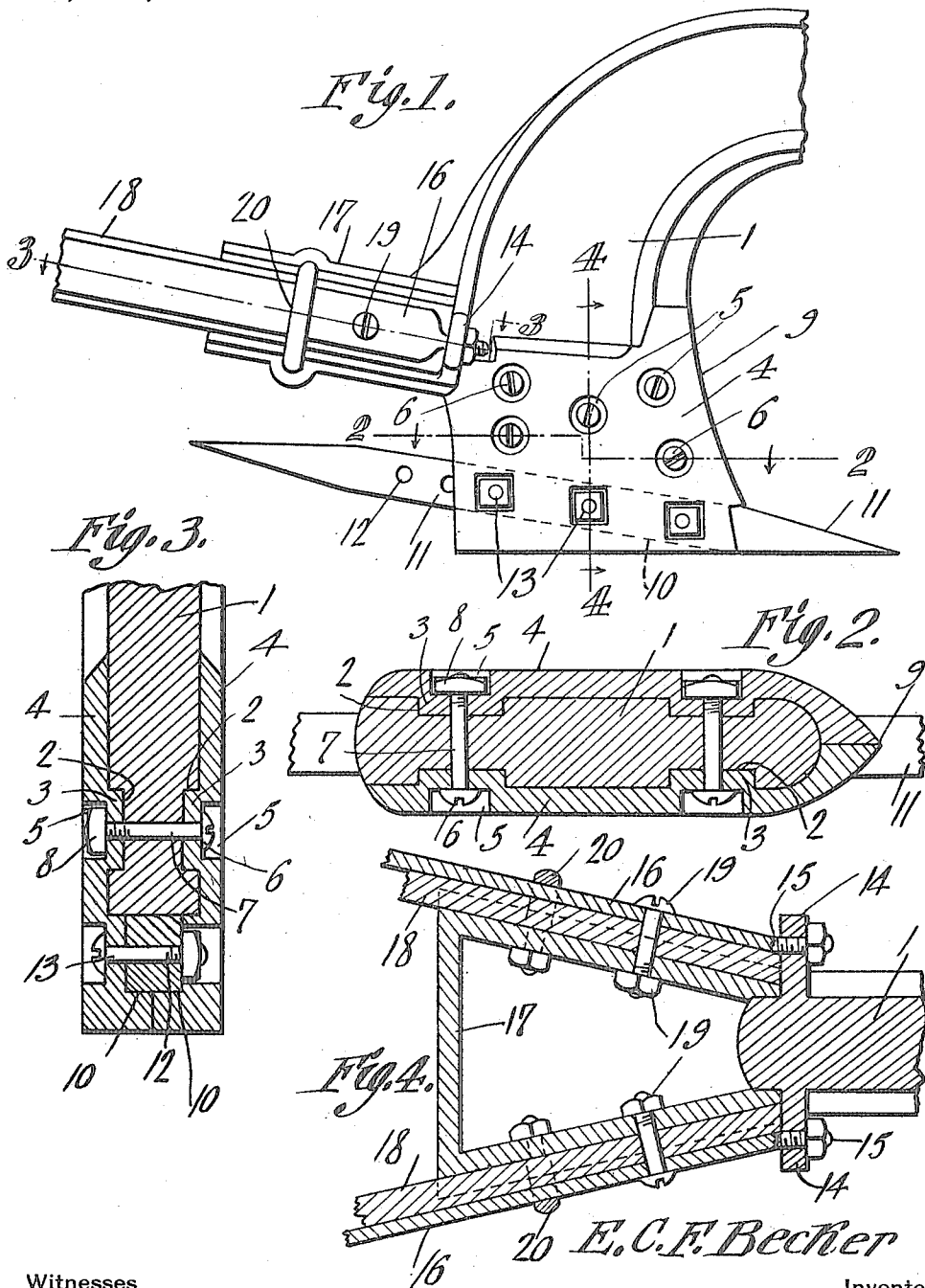
E. C. F. BECKER.

PLOW.

APPLICATION FILED JULY 7, 1916.

1,208,267.

Patented Dec. 12, 1916.



Witnesses

J. R. Imolin
R. L. Parker

Inventor

by

C. A. Snow & Co.
Attorneys

UNITED STATES PATENT OFFICE.

EMILIUS C. F. BECKER, OF MILLEDGEVILLE, GEORGIA.

PLOW.

1,208,267.

Specification of Letters Patent.

Patented Dec. 12, 1916.

Application filed July 7, 1916. Serial No. 107,993.

To all whom it may concern:

Be it known that I, EMILIUS C. F. BECKER, a citizen of the United States, residing at Milledgeville, in the county of Baldwin and State of Georgia, have invented a new and useful Plow, of which the following is a specification.

This invention relates to plows particularly designed for use in repairing and building roads, in loosening clay, shale, phosphate rock, etc., one of the objects of the invention being to provide a durable and efficient tool utilizing a reversible bit which can be adjusted longitudinally a desired distance beyond its holding means, said holding means being so constructed as to cut through the soil engaged thereby and thus prevent the soil from being thrown up in large chunks by the plow.

A further object is to provide bit holding means which, when applied to the stock of the plow will hold the bit securely thereto, the means employed for fastening the holder in place being relieved of all strains due to the resistance encountered from the soil.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, can be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a side elevation of a portion of a plow embodying the present improvements. Fig. 2 is an enlarged section on line 2—2 Fig. 1. Fig. 3 is an enlarged section on line 3—3 Fig. 1. Fig. 4 is an enlarged section on line 4—4 Fig. 1.

Referring to the figures by characters of reference 1 designates a plow stock and is provided in opposed faces at its lower end with recesses 2. These recesses are adapted to receive bosses 3 formed upon the inner sides of side plates 4. Recesses 5 are formed in the outer faces of the plates and extend into the bosses, certain of these recesses being adapted to receive the heads 6 of bolts 7 while other recesses are designed to receive nuts 8 which engage the threaded ends of the bolts. These bolts are extended trans-

versely through the stock 1 and when they are tightened they will clamp the plates tightly on the stock. The front portions of the plates are so shaped as to contact with each other in front of the stock, the outer faces of said front ends of the plates converging to an edge indicated at 9 and which is designed to cut through the soil.

Formed within the inner faces of the plates 4 and below the stock are registering grooves 10 cooperating to provide a downwardly and forwardly inclined passage for the reception of a bit 11. This bit has a longitudinal series of apertures 12 and certain of the apertures are adapted to receive bolts 13 which extend transversely through the passage and through the plates 4 and serve to hold the bit against displacement relative to the plates. The main portion of the bit is preferably formed of Bessemer steel or the like while the points of the bit are preferably made of crucible cast steel so that after the points have worn away, new points can be applied to the bit by any blacksmith.

Outstanding from the sides of the stock 1 near the rear ends of the plates 4 are ears 14 through which extend threaded studs 15 projecting from metal strips 16. The stock has a substantially triangular spacing extension 17 projecting rearwardly therefrom and inclined upwardly and rearwardly from the ears 14. Handle members 18 are adapted to be inserted between the sides of this spacing member and the strips 16 and to be fastened thereto by bolts 19 and clips 20.

In using the plow herein described the bit 11 is adjusted until its front end projects a desired distance beyond the cutting edge 9. The plow is then drawn forward and this front end of the bit will dig into the soil and loosen it, the edge 9 cutting through the loosened soil and through any roots or the like which may be in the path of the plow. Because of the peculiar construction of the soil engaging portion of the plow, it will be apparent that said plow will be especially useful in plowing up roads, clay, shale and various other hard surfaces, the edge 9 preventing the material from being lifted in hard cakes or chunks. As the bit becomes worn it can be adjusted farther forward or, if desired, can be reversed to bring the other point into action. As has heretofore been stated, new points can be welded onto the bit when desired.

By providing the bosses 3 which fit snugly within the recesses 2, the bolts 7 are relieved of all transverse strain and there is no danger of said bolts being bent back because of the resistance offered by the soil to the movement of the plates 4.

What is claimed is:—

1. A plow including a stock, separate holding plates clamped upon opposite faces of the stock and meeting at their front edges to form a cutting edge, and a bit detachably mounted between the side plates and below the stock.

2. A plow including a stock, separate holding plates clamped upon opposite faces of the stock and meeting at their front edges to form a cutting edge, a reversible bit detachably mounted between and projecting forwardly beyond the plates, and fastening means extending through the plates and bit for holding them clamped together.

3. The combination with a stock having recesses in its side faces, of separate side plates having bosses projecting into the recesses, said side plates having their outer faces converging to an edge in front of the stock, said plates having oppositely dis-

posed registering channels forming a bit receiving passage, means extending through the bosses and stock for binding the plates upon the stock, a bit detachably and reversibly mounted within the registering channels, and means extending through the side plates and bit for detachably securing the bit between the side plates.

4. The combination with a stock having a substantially triangular rear extension, and ears outstanding from the stock, of handles extending along the outer sides of the spacing extension, strips secured upon the outer faces of the handles and secured to the ears, side plates secured upon the stock and meeting at their front ends to form a cutting edge, and a bit extending beyond and between the front and rear edges of said plates.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

EMILIUS C. F. BECKER.

Witnesses:

G. C. McKINLEY,
JULIEN A. HORNE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."