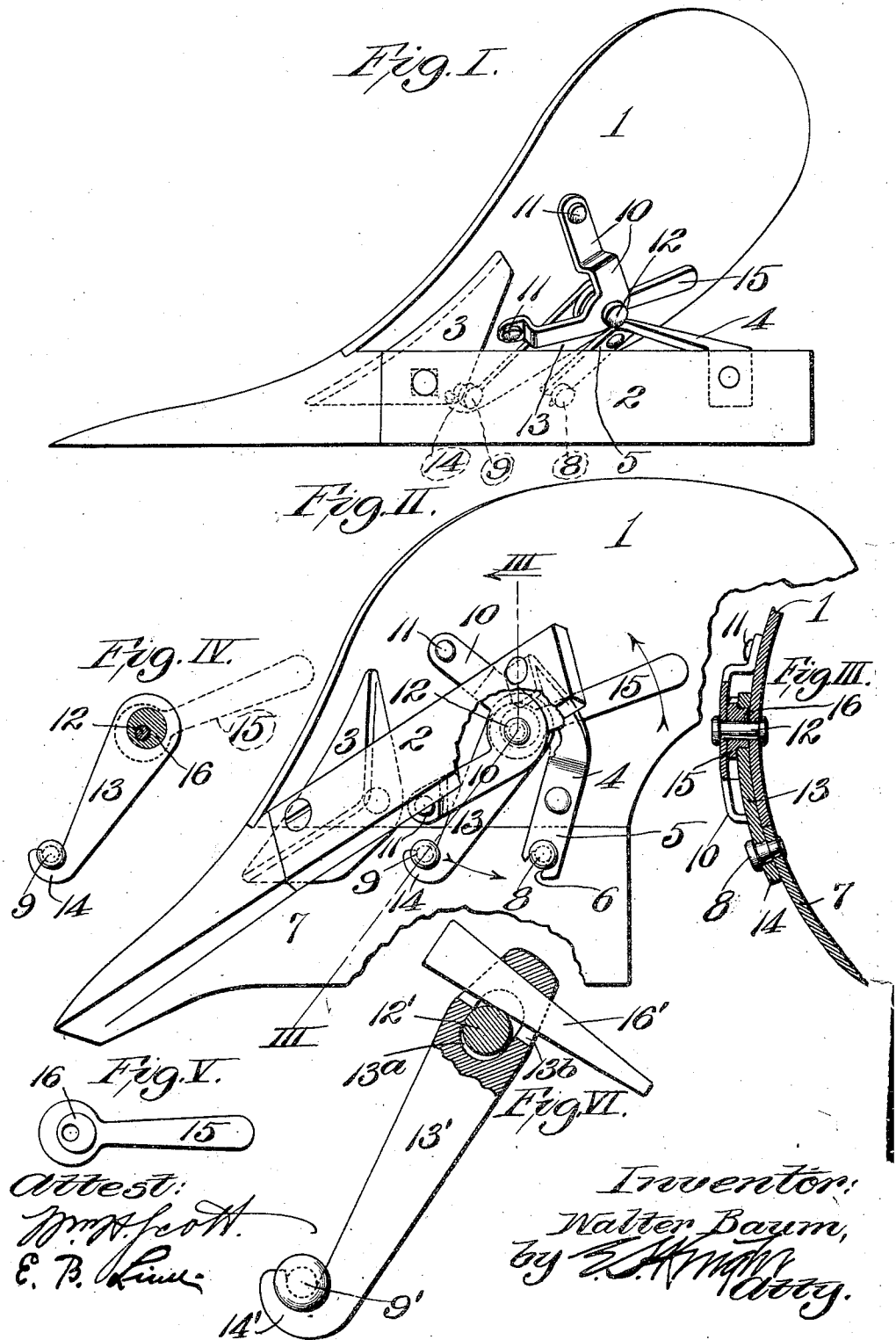


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 PLOW.

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1,005,501.

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To all whom it may concern:

Be it known that I, WALTER BAUM, a citizen of the United States of America, residing in Lebanon, in the county of St. Clair and State of Illinois, 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 part of this specification.

My invention relates to land plows, and it has for its object the production of a simple and efficient means whereby the shares of plows may be detachably connected to the mold boards and landsides in order that the shares may be quickly and readily separated from said mold boards and landsides to sharpen or otherwise repair them.

Figure I is a side elevation of my plow looking at the landsides. Fig. II is a view of the plow in a tilted position and with portions broken away. Fig. III is a section taken on line III—III, Fig. II. Fig. IV is a view of the hook arm in elevation, and the eccentric by which this arm is operated in cross section. Fig. V is a side view of the eccentric lever. Fig. VI is a view partly in elevation and partly in section of a modification.

In the accompanying drawings: 1 designates the mold board, and 2 the rear land side section of my plow, these parts being united at their forward ends by a connecting piece 3, and at a point back of said connecting piece by a rear tie bar 4 riveted to the landside and mold board. This connecting piece extends upwardly and rearwardly, and forms an abutment for the inner face of the share. The rear tie bar just referred to has a slightly inclined leg 5 that extends downwardly beyond the lower edge of the moldboard and is provided with a notch 6 at its extremity that extends upwardly and rearwardly in the leg.

7 designates the plow share to which is fixed a short landside section. The inner face of this short landside section engages the abutment 3 and the rear face of said section abuts against the front face of the rear landside section 2. The lower edge of the mold board 1 is seated on the upper edge of the share 7. The side of the share located beneath the mold board has mounted upon it at its inner face a headed rear stud 8 that enters into the notch 6 in the leg of the rear

tie bar 4, and in front of said rear stud 8 is a second headed forward stud 9 that receives a member to be hereinafter more particularly mentioned.

10 designates a shouldered double arm bracket, the arms of which are secured to the mold board at its rear side by rivets 11. The rear portion of this bracket is spaced apart from the mold board, and has mounted in it a pivot pin 12 that extends through the mold board, as seen in Fig. III. It should be here noted that the pivot pin 12 is located back of a vertical line passing through the headed stud 9 upon the plow share 7 for a reason that will be hereinafter apparent.

13 designates a hook arm that is located back of the mold board 1 which extends toward the point of the share and is provided at its lower end with a hook 14 adapted to engage the forward stud 9 upon the plow share. The hook arm 13 is apertured near its upper end, and the pivot pin 12 extends through said aperture.

15 is a lever provided with an eccentric 16 that is operable upon the pivot pin 12 and within the aperture in the hook arm 13. The eccentric 16 upon the lever 15 is so arranged within the hook arm 13 that upon the movement of said lever in the proper direction, the distance between the bearing edge of the eccentric and the forward stud will be increased and the eccentric will cause said hook arm to be moved upwardly and rearwardly to exert a pull upon the headed forward stud 9 to which it is fitted, whereas, if the eccentric lever is moved in an opposite direction, the distance between the bearing edge of the eccentric and the forward stud will be decreased and the hook arm will be lowered in order that it may become disengaged from the forward stud and permit the separation of the plow share from the mold board and land side. It will be readily appreciated that due to the forward stud 9 upon the plow share being located in advance of the eccentric that operates in the upper end of the hook arm 13 to impart movement thereto, the said hook arm is caused to be so moved in connecting the plowshare to the moldboard as to draw said plow share not only upwardly to the mold board, but also rearwardly; and laterally whereby the front landside section is caused to abut firmly against the forward end of the rear land side section and the side face

of the abutment 3, and the rear stud 8 upon the share is firmly seated in the notch 6 in the extremity of the leg 5 of the rear tie bar 4 to prevent movement of the rear end of the share. As the arm 13 is free to swing on the eccentric, it is free to move upwardly, rearwardly, or laterally until all of the abutting faces just referred to are firmly engaged with each other.

10 In Fig. VI, I have shown a modification, whereby the plowshare may be drawn tightly to the mold board and land side with upward and rearward movements similar to those previously mentioned. In this 15 modification, 13' designates a hook arm that is provided at its lower end with a hook 14' that engages the forward stud 9'. The hook arm is provided with a slot 13^a through which a pin pivot 12', corresponding in location 20 to the pin 12, extends. Instead of utilizing an eccentric to impart upward and rearward movement to the hook arm, I utilize in this modification a wedge, or tapered key, 16' which is inserted through a key-way 13^b in 25 the hook arm, and by bearing against the pin 12' acts to impart the desired movement to said hook arm.

It is evident that by the use of an eccentric or cam headed lever, the wear of the different parts is automatically taken up, by 30 the action of tightening. If the pins 9 on the share should not happen to be exactly placed, the drawing up and tightening of the share would take place just the same

owing to the allowance for variation which 35 the use of an eccentric permits. Tests have demonstrated that the hook arm alone is practically responsible for drawing the share both upwardly and rearwardly, the extension of the bracket 5 being principally 40 to stiffen the share.

I claim:

In a plow, the combination of a share, a sectional landside comprising a front section which is fixed to the share and a rear 45 section which abuts against said front section, a mold board fixed to the rear landside section, an abutment 3 fixed to the mold board, a swinging arm attached to the mold board and detachably connected to the share, 50 and means for pulling said swinging arm to impart a triple movement to the share and front landside section, thereby moving said parts upwardly, rearwardly, and laterally 55 so as to force the share into engagement with the mold board and positively pull the front landside section to its seat against the front face of the rear landside section and the side face of the abutment 3, said swinging arm being inclined and connected to the 60 mold board so as to be free to move upwardly, rearwardly or laterally until all of said engaging faces are firmly engaged with each other.

WALTER BAUM.

In the presence of—
JOHN WIECHERT,
JOHN SCHMIDT.