Nov. 27, 1923 1,475,710

A. MÉSZÁROS

PLOW

Original Filed April 18, 1921 3 Sheets-Sheet 1

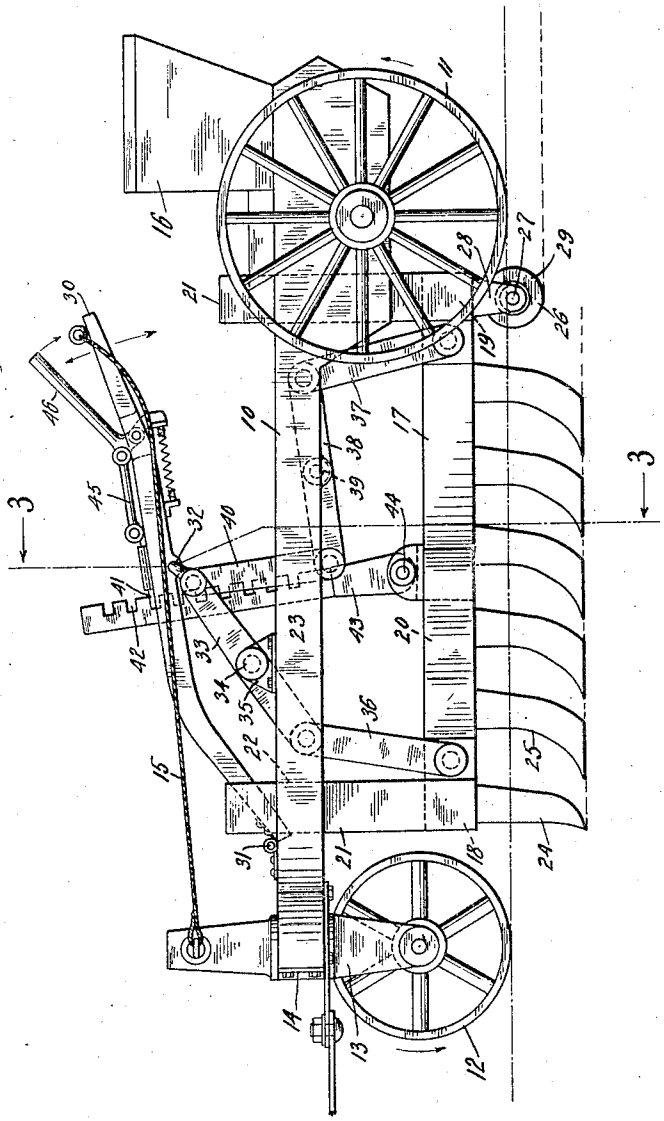


Fig. 1.

Inventor
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By his Attorney
Sigmund Herzog

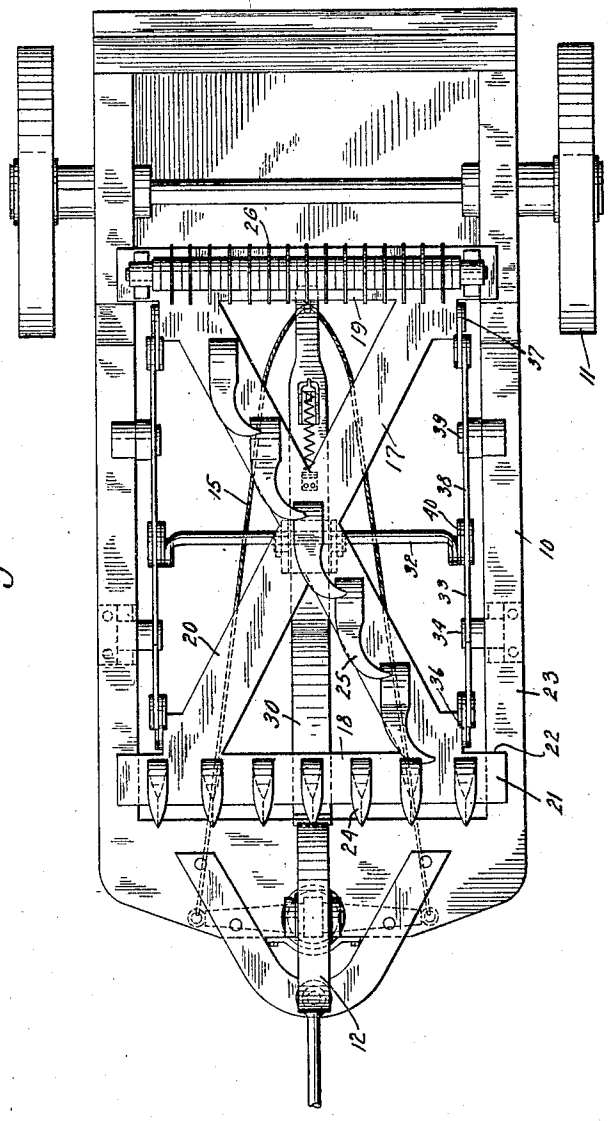
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Original Filed April 18, 1921 3 Sheets-Sheet 2.

Fig. 2.



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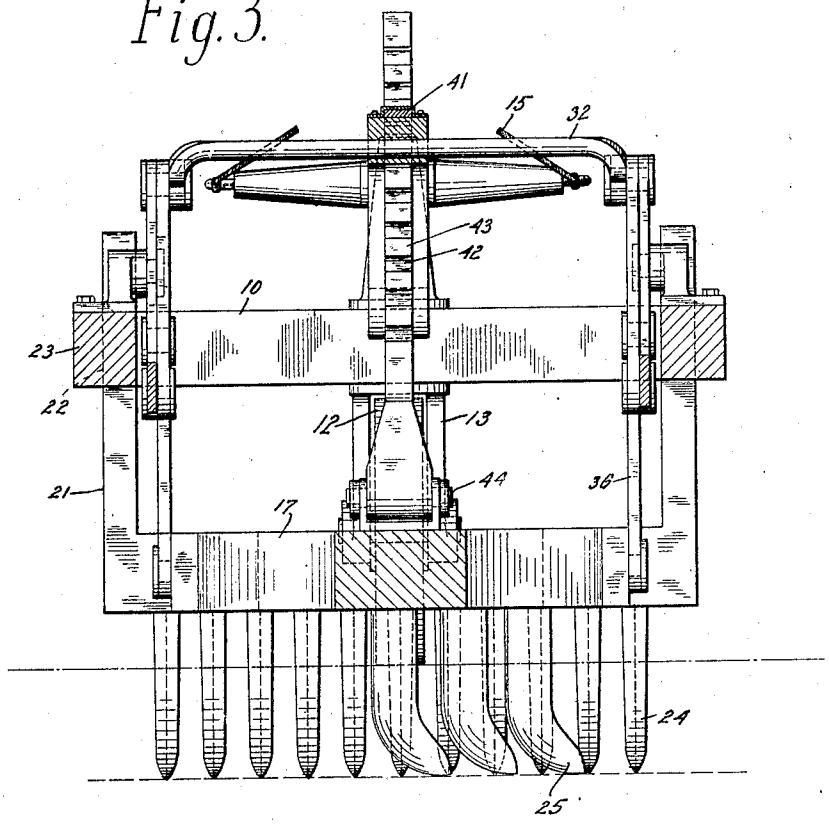
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Original Filed April 18, 1921 3 Sheets-Sheet 3

Fig. 3.



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Patented Nov. 27, 1923. 1,475,710

UNITED STATES PATENT OFFICE.

ALEXANDOR MÉSZÁROS, OF NEW YORK, N. Y.

PLOW.

Original application filed April 18, 1921, Serial No. 462,477. Divided and this application filed February 9, 1922. Serial No. 535,340.

To all whom it may concern:

Be it known that I, ALEXANDOR MÉSZÁROS, a citizen of the United States, and resident of the city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Plows, of which the following is a specification, the same being a division of application Ser. No. 462,477, filed Apr. 18, 1921.

The present invention relates to improvements in agricultural implements, and more particularly to plows.

One of the objects of the invention is to provide a plow, wherein all those implements which are necessary for breaking and pulverizing the ground are mounted on an auxiliary frame, which is adapted to be raised or lowered, at will, in relation to the main frame of the plow, whereby all ground breaking and pulverizing means are lowered or raised, as the case may be, simultaneously.

A further object of the invention is to provide an agricultural implement of the character described which is simple in construction, efficient in operation, durable in use, and capable of manufacture on a commercial scale.

With these and other objects in view, which will more fully appear as the nature of the invention is better understood, the same consists in the combination, arrangement and construction of parts hereinafter described, pointed out in the appended claim and illustrated in the accompanying drawings, it being understood that many changes may be made in the size and proportion of the several parts and details of construction within the scope of the appended claim, without departing from the spirit or sacrificing any of the advantages of the invention.

One of the many possible embodiments of the invention is illustrated in the accompanying drawings, in which:—

Figure 1 is a side elevation of a plow embodying the invention; Fig. 2 is a bottom plan view thereof; and Fig. 3 is a section taken on line 3—3 of Fig. 1, on a larger scale.

In the drawings, the numeral 10 designates the main frame of the implement, which is, preferably, rectangular in form, and supported at its rear by two wheels 11 and at its front end by a suitable steering wheel 12. The steering wheel is mounted in a fork 13, which is rotatably arranged in a bearing 14 on the front end of the frame, said fork being provided with a steering means 15 of any suitable construction. This steering means extends within the reach of the operator on an operator's seat 16, which is disposed on the rear end of the frame 10.

On the main frame 10 is vertically slidable an auxiliary frame 17, including a front beam 18 and a rear beam 19, which are connected by diagonal beams 20. All of these beams are disposed in a horizontal plane and are provided with vertical posts 21, which are slidably disposed in guide-grooves 22 in the longitudinal or side beams 23 of the main frame. The front beam 18 carries a plurality of fixed colters 24, which project downwards from the said beam in a single row and may be of any preferred construction. On one of the diagonal beams 20 are mounted, in any preferred manner, turning plows 25, which may be of any suitable size and type, according to the requirements. The ground turned by plows is thoroughly broken up by a cultivator 26, disposed in rear of the plows below the rear beam 19. The cultivator comprises, in the case illustrated in the drawings, a shaft 27, rotatably mounted in hanger bearings 28 on the beam 19 and having fixedly attached thereto a plurality of disk cutters 29, which are suitably spaced apart, each extending in a plane parallel to the longitudinal axis of the frame 10.

The mechanism for raising and lowering the frame 17 and the elements carried thereby comprises an actuating lever 30, that is pivoted at 31 to the front end of the frame 10, the free end of said lever being disposed within the reach of the operator on the seat 16. Through the lever 30 extends, substantially at its middle portion, a transverse bar 32, connected at each of its ends to a lever 33. Each lever 33 is disposed adjacent to one of the longitudinal members 23 of the frame 10 and is fulcrumed at 34 to a standard 35 on the respective member 23. Each lever 33 is connected by a link 36 with the front portion of the frame 17. Similar links 37 connect the rear portion of the frame 17 with levers 38, the latter being fulcrumed at 39 to the respective frame members 23 and connected by links 40 with the levers 33.

On the actuating lever 30 is slidably mounted a latch 41, co-operating with a row of notches 42 in a vertically extending bar 43, that is pivoted at 44 centrally to the frame 17 and passes through the lever 30. The latch 41 is connected by a link 45 with a spring-pressed bell-crank lever 46, that is fulcrumed adjacent the free end of the lever 30. By disengaging the latch 41 from the bar 43 and swinging the actuating lever 30 around its pivot 31, the frame 17 is raised or lowered by the intermediary of the interconnected levers 33 and 38 and the links 36 and 37 above referred to. In this manner the colters, plows and cultivator are raised or lowered, at will, simultaneously.

The operation of the plow is as follows: The plow may be made in the form of a self-propelled vehicle, or it may be attached to a tractor or other power may be provided for propelling the same. In order to transport the machine to the field that is to be cultivated, the implements thereon must be raised so as to be out of contact with the ground. For this purpose only one operation is necessary, that is to say the swinging in the proper direction of the lever 30. In the positions of the elements shown in Fig. 1 of the drawings all implements are in their operative positions, ready to perform their respective several operations. In starting the movement of the machine with the elements in the positions shown in Fig. 1 of the drawings, the colters cut the soil preparatory to its being turned by the plows, the cultivators 26 thoroughly loosening the soil and preparing the same for the reception of the seed. If it is necessary to change the depth of the cut of the plows and consequently that of the colters 24 and cultivator 26, the frame 17 is raised or lowered to the desired position by disengaging the latch 41 from the bar 43 and shifting the lever 30 around its pivot, permitting the latch to engage the proper notch 42 in the bar 43 when the desired adjustment has been made.

In order to raise all implements of the machine to inoperative positions, the lever 30 is moved around its pivot downwards and the latch 41 engaged with the bottom notch in the bar 43, whereby the colters, plows and cultivator disks are raised above the ground.

What I claim is:—

An agricultural machine, comprising a rectangular main frame including longitudinal beams having vertical guide grooves therein, an auxiliary frame vertically movable thereon including horizontal transverse beams provided with vertical posts disposed in said guide grooves, farming implements mounted on said auxiliary frame, a plurality of levers and links connecting said two frames, an actuating lever fulcrumed to said main frame co-operating with said first-mentioned levers and links, a notched bar pivoted to said auxiliary frame and extending through said actuating lever, and a latch on said actuating lever co-operating with said notched bar.

Signed at New York, in the county of New York and State of New York, this 25th day of January, A. D. 1922.

ALEXANDOR MÉSZÁROS.