J. M. MEYER.

DITCHING MACHINE.

APPLICATION FILED MAY 4, 1917.

1,280,518. Patented Oct. 1, 1918.

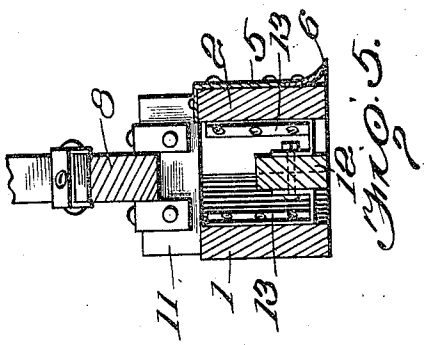


Fig. 5.

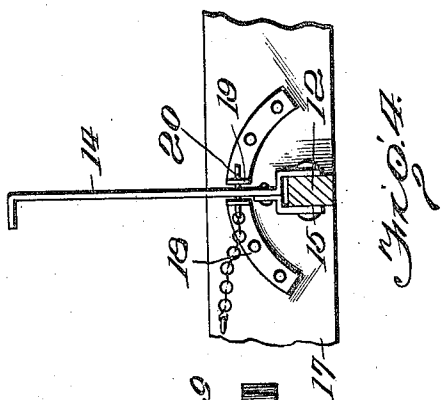


Fig. 4.

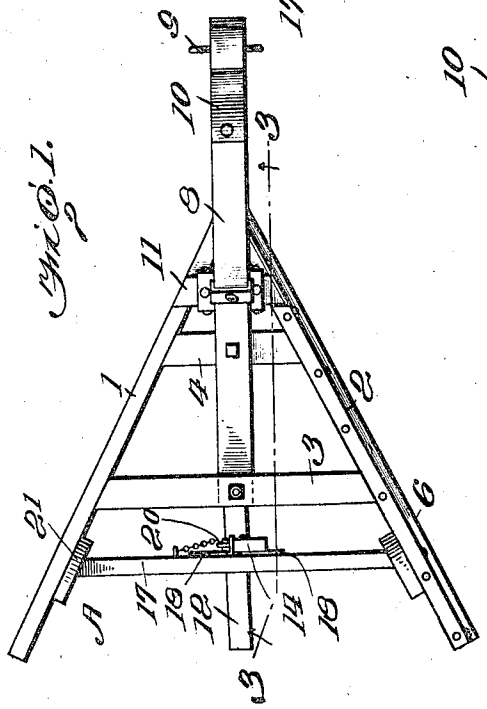


Fig. 1.

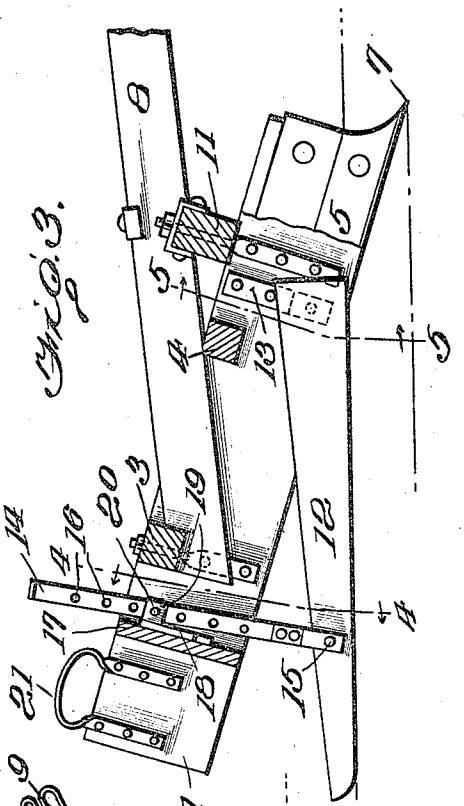


Fig. 3.

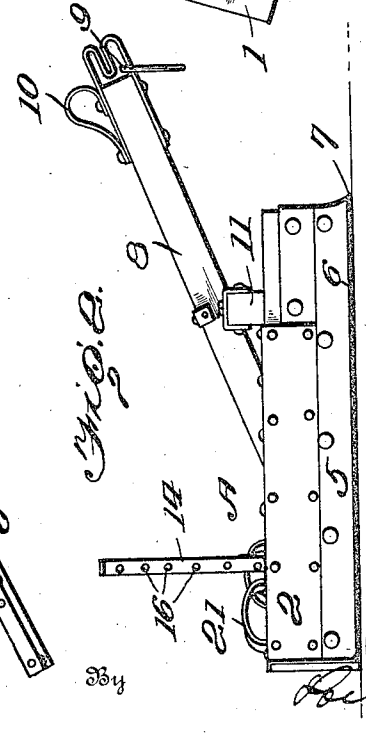


Fig. 2.

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JOHN M. MEYER, OF BRUSH, COLORADO.

DITCHING-MACHINE.

1,280,518. Specification of Letters Patent. Patented Oct. 1, 1918.

Application filed May 4, 1917. Serial No. 166,386.

To all whom it may concern:

Be it known that I, JOHN M. MEYER, a citizen of the United States of America, residing at Brush, in the county of Morgan and State of Colorado, have invented certain new and useful Improvements in Ditching-Machines, of which the following is a specification.

My invention relates to ditchers and the like and the object being to construct one particularly adapted for individual use and one which can be readily handled by one operator.

A further object is to arrange suitable means for adjusting this ditcher whereby ditches of different depth may be excavated, and a still further object is to provide suitable means for clearing the edges of the excavation from weeds and other under growth.

In the drawings:

Figure 1 is a top plan view of the device,

Fig. 2 is a side elevation thereof,

Fig. 3 is a longitudinal vertical section on line 3—3 of Fig. 1.

Fig. 4 is a transverse vertical section on line 4—4 of Fig. 3 and:

Fig. 5 is a transverse vertical section on line 5—5 of Fig. 3.

A represents a substantially V shape frame consisting of side members 1 and 2 and transverse braces 3 and 4. These side members are preferably reinforced along their lower edges with metal strips 5, these metal strips are drawn out and curved outwardly at their lower edges thereby forming laterally disposed cutting edges 6 which serve to cut weeds and other under growth at the outer edges of the ditch being excavated. The extreme front end of this frame is provided with a suitable cutting point 7, which is of such dimension as to completely cover the front end of the V shape frame and it is of such a shape as to form a cutting edge for the ditcher.

Centrally arranged of the frame and extending well over the front end thereof, is a tongue 8. This tongue is adapted to extend upwardly at an angle from the main frame being securely fastened thereto by braces 3 and 4. The outer end of the tongue is provided with a suitable attaching means 9 and also a handle 10. This tongue is further supported by a block 11 placed between it and the end of the frame at the forward end thereof.

The depth of the ditch being excavated is determined by the angle at which the ditcher is adapted to travel for this purpose a suitable runner 12, is arranged centrally of the frame and on the underside thereof. This runner is pivoted at its forward end near the forward end of the frame to suitable brackets 13—13, by means of a bolt 22. Arranged at the outer end of the runner is a vertically adjustable bar 14, this bar is bifurcated at its lower end and is pivotally secured by bolt 15, to the runner and is provided along its body portion with a plurality of orifices 16. Arranged at the rear of the ditcher and transversely thereof is a supporting member 17 to which is secured centrally thereof suitable guide members 18, which are adapted to receive the said adjustable bar 14. A pin 20, is adapted to register with the orifices 19, in the said guide members and orifices 16, in the vertical adjustable bar thereby affording a means for raising and lowering the runner 12. Handles 21 are arranged at the outer rear ends of the side members 1 and 2. These handles are for the purpose of raising the rear of the ditcher at the desired angle it is to be worked. It is obvious that as the rear end is raised the rear end of the runner 12 will remain on the ground and serve to hold the rear end of the ditcher permanently in that position by passing the pin 20, through the orifices 19, and such orifices 16, of the bar which may register therewith at that time.

From the above it will be seen that I have constructed a very simple and efficient ditcher which is particularly adapted for that service and one which can be handled easily by one person, but:

I claim:

1. A ditching-machine comprising a V-shaped main frame, a cutting edge arranged at the forward end of said main frame, a laterally-disposed cutting edge arranged along the entire lower edge of said V-shaped frame, a tongue rigidly secured to the frame and extending obliquely thereof, a runner pivoted between and at the forward end of said V-shaped frame, the lower edge thereof being on the same plane with the lower edge of the V-shaped frame when the latter is in

a horizontal position, guide-members, and an adjustable bar pivoted to the runner having holes therein whereby it is adjustably secured to the guide-member for holding the frame and runner adjusted with respect to each other to regulate the cut of the machine.

2. A ditching-machine comprising a V-shaped main frame, a cutting edge arranged at the forward end of said main frame, laterally-disposed cutting edges arranged along the entire lower edge of said V-shaped frame, cross-braces extending from one side of the V-shaped frame to the other, a tongue rigidly secured to the frame and extending obliquely thereof, a runner pivoted between and at the forward end of said V-shaped frame, the lower edge thereof being on the same plane with the lower edge of the V-shaped frame when the latter is in a horizontal position, guide-members, a detachable bar pivoted to the runner and having holes therein, whereby it is adjustably secured to the guide-members for holding the frame and runner adjusted with respect to each other to regulate the cut of the machine, and handles on the rear end of the frame for raising the latter.

3. A ditching machine comprising a V-shaped frame having a cutting point at the point of convergence, cross-braces extending from one side to the other, a tongue rigidly secured to the frame and extending obliquely thereto, L-shaped brackets housed within the forward end, a runner pivoted between said L-shaped brackets, guide-members, an adjustable bar pivoted to the runner and having holes therein, whereby it is adjustably secured to the guide members for holding the frame and runner adjusted with respect to each other to regulate the depth of cut of the machine, and handles on the rear end of the frame for raising the latter.

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

JOHN M. MEYER.

Witnesses:
LOUIS KOEHLER,
WM. STROMSOE.