No. 855,507. PATENTED JUNE 4, 1907.

L. H. ERICKSON.

DITCHING MACHINE.

APPLICATION FILED SEPT. 8, 1906.

Fig. 1.

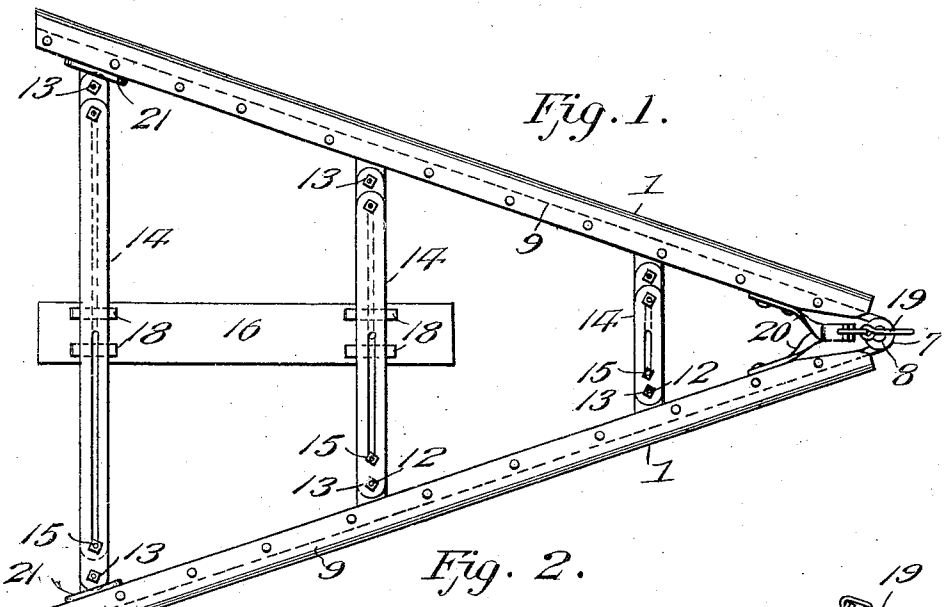



Fig. 2.

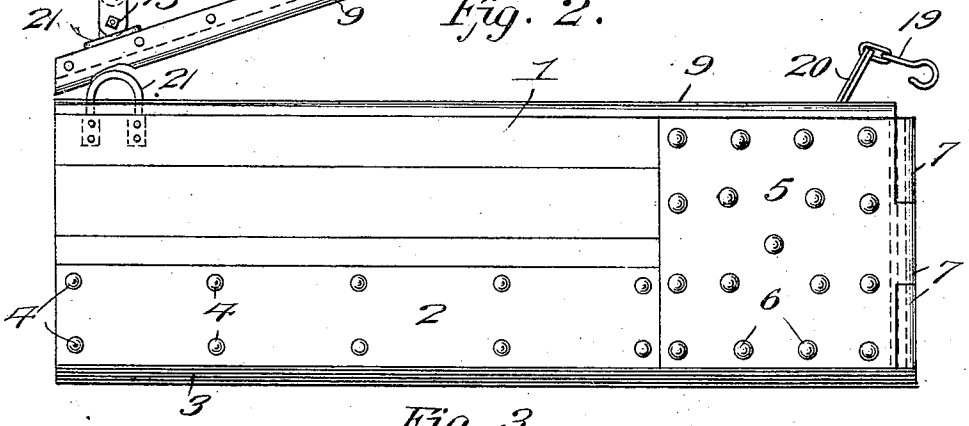
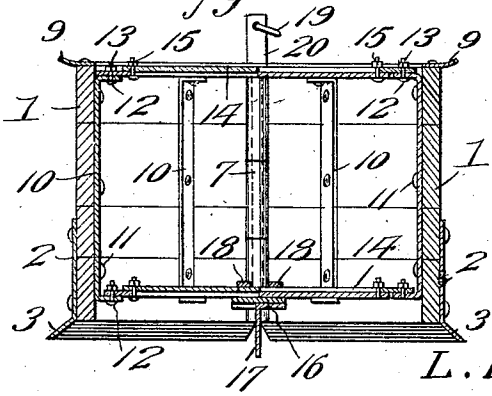



Fig. 3




Witnesses

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# UNITED STATES PATENT OFFICE.

LAURITZ H. ERICKSON, OF GUNNISON, UTAH.

## DITCHING-MACHINE.

No. 855,507. Specification of Letters Patent. Patented June 4, 1907.

Application filed September 8, 1906. Serial No. 333,862.

*To all whom it may concern:*

Be it known that I, LAURITZ H. ERICKSON, a citizen of the United States, residing at Gunnison, in the county of Sanpete and State of Utah, have invented new and useful Improvements in Ditching-Machines, of which the following is a specification.

This invention relates to ditching machines and one of the principal objects of the same is to provide a machine of simple construction which can be quickly adjusted laterally to ditches or canals of different width.

Another object of my invention is to provide a machine for cleaning canals or ditches and which will operate efficiently for throwing the refuse from the bottom of the ditch or canal upon opposite sides thereof.

Still another object of the invention is to provide means for guiding the machine centrally in the ditch or canal and to prevent its being moved laterally from side to side of the ditch or canal.

The foregoing objects are attained by means of the construction illustrated in the accompanying drawings, in which:

Figure 1 is a plan view of a ditching machine made in accordance with my invention. Fig. 2 is a side elevation of the same. Fig. 3 is a vertical section.

Referring to the drawing for a more particular description of my invention, the numeral 1 designates the opposite side members of the machine, said members being each composed of thick oak planks having suitable strengthening plates secured thereto. At the bottom edge of the side members 1 is a longitudinal plate 2 having outwardly inclined lower edges 3, said plate being secured to the planks by means of rivets 4. At the front end of the side members is a hinge plate 5 which extends from top to bottom of the side members and is riveted thereto by means of rivets 6. In front of said plates 5 are integrally formed pintle bearings 7, and extending through said bearings is a pintle 8 upon which the members 1 are hinged. At the upper edge of the members 1 is a deflector plate 9, the outer edges of which are curved upwardly as shown in Fig. 2 and said plates are secured to upright braces 10 riveted to the planks as at 11 and provided with inwardly extending upper and lower ends 12. Secured by bolts 13 to the inwardly extending lugs 12 are a series of slotted cross braces 14, each consisting of a slotted plate which permits lateral adjustment of the side members 1, said slotted plates being held in adjusted position by means of the bolts 15. It is to be noted that the adjustable cross braces 14 are duplicated at the lower or bottom portion of the machine. A guiding shoe 16 provided with a downwardly extending holding flange 17 is secured to the two lower rear cross braces by means of suitable clamps 18 which inclose the lower cross braces at the rear and near the center of the machine. A suitable clevis 19 is secured to plates 20 riveted to the inner surfaces of the side members 1. Loops 21 are secured to the members 1 near their rear ends to accommodate a suitable lifting bar which may be utilized for lifting the machine out of the canal or ditch in order that it may be adjusted to different widths.

From the foregoing the operation of my invention may be readily understood and may be briefly referred to as follows: The two members 1 are adjusted laterally to substantially conform to the width of the ditch or canal to be cleaned and the guiding shoe 16 is clamped in place in a central position relatively to the sides in order that the flange 17 may penetrate the bottom of the ditch or canal and prevent the lateral movements of the plow or ditcher, the two members 1 being laterally adjusted to bear at their rear ends against the side walls of the ditch, the dirt collected by the scraper plates at the bottom of the sides is thrown at opposite sides of the ditch by means of the deflector plate 9 at the top of said side portions 1.

A machine made in accordance with my invention may be quickly adjusted for canals or ditches of different widths and when drawn along will thoroughly scrape and clean the bottom and throw the refuse matter upon the opposite banks of the ditch or canal, the guiding shoe serving to hold the machine to its work.

Having thus described the invention, what I claim is:

1. A ditching machine comprising side members hinged together at their forward end, slotted cross braces connecting the side members, means for holding said cross bars in adjusted position, a centrally disposed vertical guide shoe, clamps on said guide shoe for securing the same centrally upon the cross braces, and outwardly extending deflector plates at the upper edges of the side members, substantially as described.

2. A ditching machine comprising side

members hinged together at their forward ends, upright braces inside said side members, adjustable cross braces secured to said upright braces and provided with means for holding the side members in adjusted position, outwardly flaring scraper plates at the lower edges of said members, deflector plates at the upper edges of said members and a centrally disposed vertical guide shoe, substantially as described.

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

LAURITZ H. ERICKSON.

Witnesses:

WILLIAM J. GRIBBLE,

LOREZO CHILDE.