

No. 776,125.

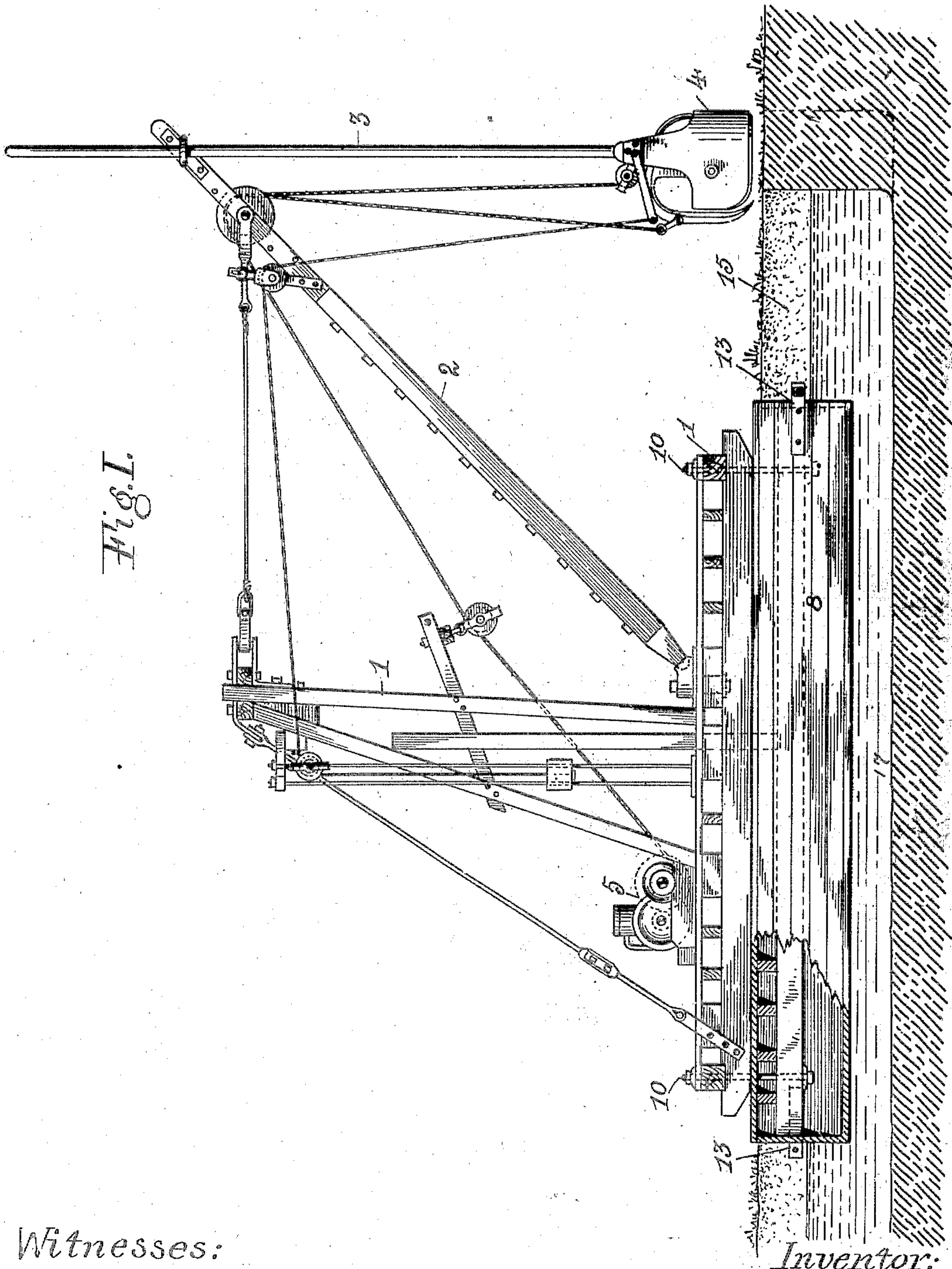
PATENTED NOV. 29, 1904.

J. W. DUTTON.
DITCHING MACHINE.

APPLICATION FILED SEPT. 6, 1904.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses:

Elmer Wicker
Elmer Wicker

Inventor:

John W. Dutton
by J. Richards & Co.
Attys.

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2 SHEETS—SHEET 2.

Fig. II.

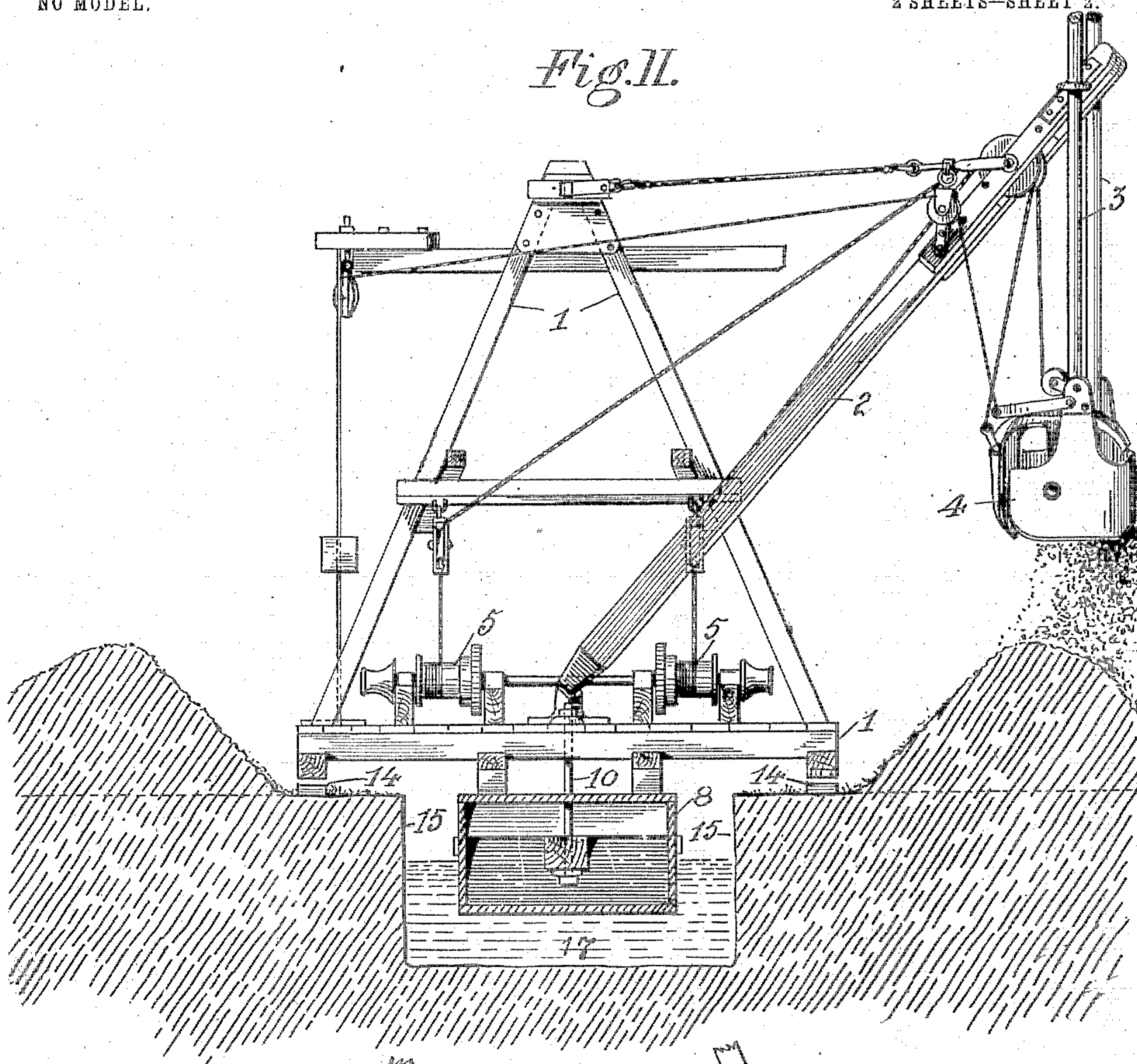
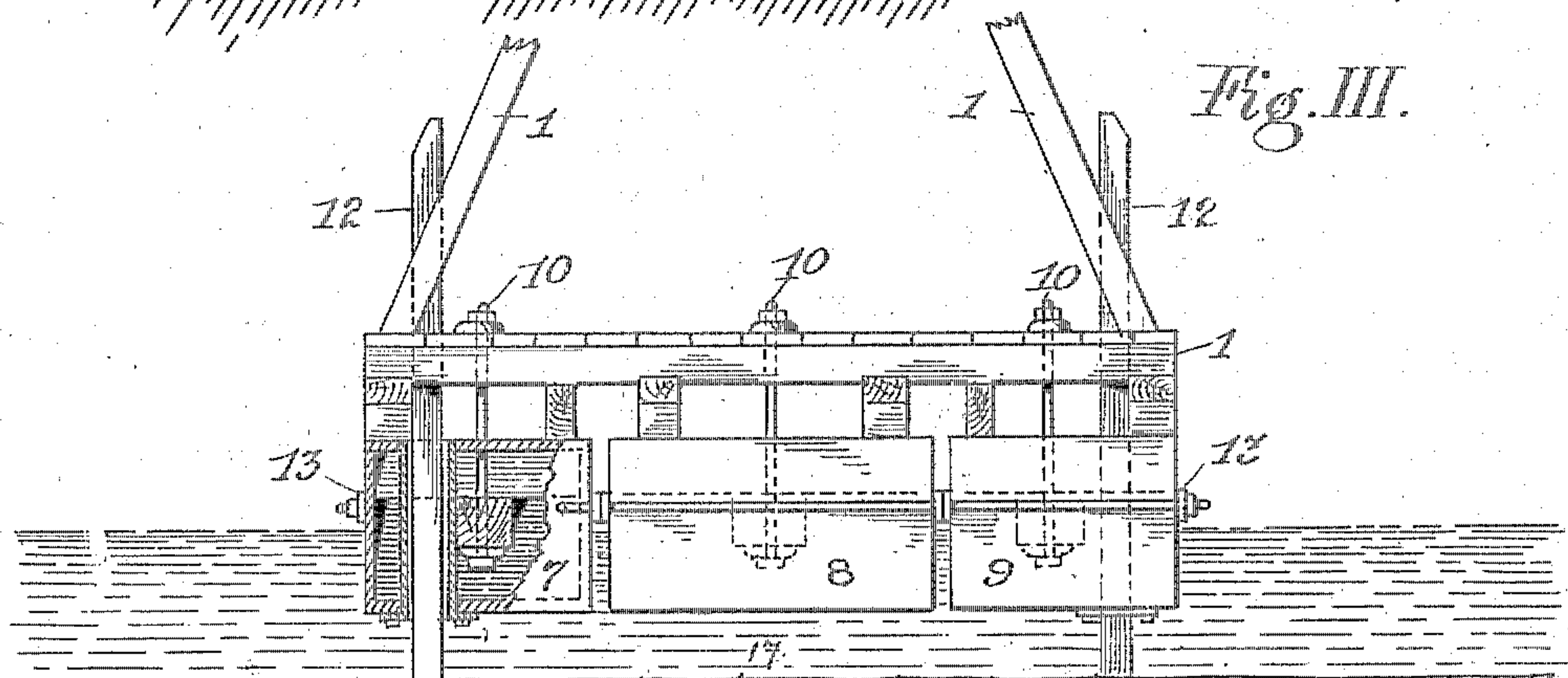


Fig. III.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN WARREN DUTTON, OF DUTTONS LANDING, CALIFORNIA.

DITCHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 776,125, dated November 29, 1904.

Application filed September 6, 1904. Serial No. 223,490. (No model.)

To all whom it may concern:

Be it known that I, JOHN WARREN DUTTON, a citizen of the United States of America, residing at Duttons Landing, county of Solano, and State of California, have invented certain new and useful Improvements in Ditching-Machines; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to dredging or ditching machinery and to certain useful improvements therein, as hereinafter described, and illustrated by drawings that form a part of this specification.

My improvements consist especially in a sectional construction of the boats or pontoons on which the ditching machinery is supported and in dividing these longitudinally into separable parts in proportion to the width of the ditches to be cut and for other objects.

The objects of my invention are to provide ditching apparatus that can be employed in a narrow as well as a wide ditch and can be conveniently moved from place to place when there are not waterways and of such construction that it may be conveniently segregated for transportation at sea, on land, across ditches or embankments, which often becomes necessary in such machinery.

To these ends I construct ditching apparatus, as shown in the drawings, Figure I being a side elevation of a ditching-machine constructed according to my invention. Fig. II an end view of Fig. I, partially in section, showing the machinery in the position of discharging spoil. Fig. III is an end view, partially in section, of the separable pontoons on which the machinery is sustained and moved.

In the reclamation of alluvial and fluvial lands ditches for draining purposes take to a great extent the place of fences and lines of division between lands, in which case the ditches can be made narrow. In cutting such ditches the machinery has to be moved from place to place over a district, frequently across other ditches and embankments already made. In such cases transportation of the operating machinery is easily accomplished

because of its segregated construction; but the supporting-pontoons, as commonly constructed, offer an almost insuperable impediment to such transport because of their dimensions and weight. To avoid this latter-named impediment, I construct the pontoons in separable sections, as shown in the drawings now to be referred to.

The gallows or derrick frame 1, derrick 2, spars 3, spoil-bucket 4, and winding-gearing 5 not forming a part of my present invention and being in part set forth in my copending application, Serial No. 211,020, for improvement in ditching machinery, do not require description here.

The barge, boat, or pontoon for supporting the machinery is composed of longitudinal sections 7, 8, and 9, preferably of widths, as shown in Fig. III, that by different combinations will produce four widths of the pontoon—for example, 7, 8, and 9, 7 and 8, 7 and 9, and 8 alone, the latter being the narrowest form in use. (Illustrated in Fig. II.) These sections 7, 8, and 9 are each and severally, as required, fastened to the base of the derrick-framing 1 by bolts 10 and provided each with the fittings required for independent use—such as anchoring-spars 12, drag-irons 13, also pumps, rope-rigging, and the like.

In the case of transporting the machinery from one part of the country to another by land the derrick-framing 1 is taken down and the pontoons 7, 8, and 9 are separated, so as to be loaded on trucks or railway-cars. The same conditions apply in moving the machinery from one farm or district to another when there are not waterways between them, and when ditches, embankments, or other obstructions are to be crossed the pontoons are moved separately on trucks or rollers one at a time.

In cutting ditches too narrow to receive all of the pontoons 7, 8, and 9, 7 and 8, or 7 and 9 are combined, and when these combinations exceed the width of the ditch the section 8 alone is employed, as shown in Fig. II.

To secure the required transverse stability for handling the derrick and bucket when the pairs or a single section of the pontoons is in use, supporting-rails 14 are laid along the

banks 15 of the ditch 17, so the base-timbers of the derrick-frame A can bear thereon, as shown in Fig. II.

5 Having thus described the nature and objects of my invention and the manner of its application, what I claim as new, and desire to secure by Letters Patent, is—

10 1. In a ditching-machine, comprising apparatus to excavate and raise the spoil, a pontoon to sustain and move this apparatus, composed of separable sections that can be combined to form different widths corresponding to the width of the ditches to be cut, substantially in the manner specified.

15 2. In a ditching-machine, having a gallows-

frame and apparatus to excavate and raise the spoil, a sectional pontoon to sustain and move the ditching apparatus, separable into sections, in the manner described, and bearing-rails disposed alongside the ditch on which the gallows-frame can bear at the sides, substantially as specified. 20

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN WARREN DUTTON.

Witnesses:

ELMER WICKES,
GEO. JOHNSTON.