

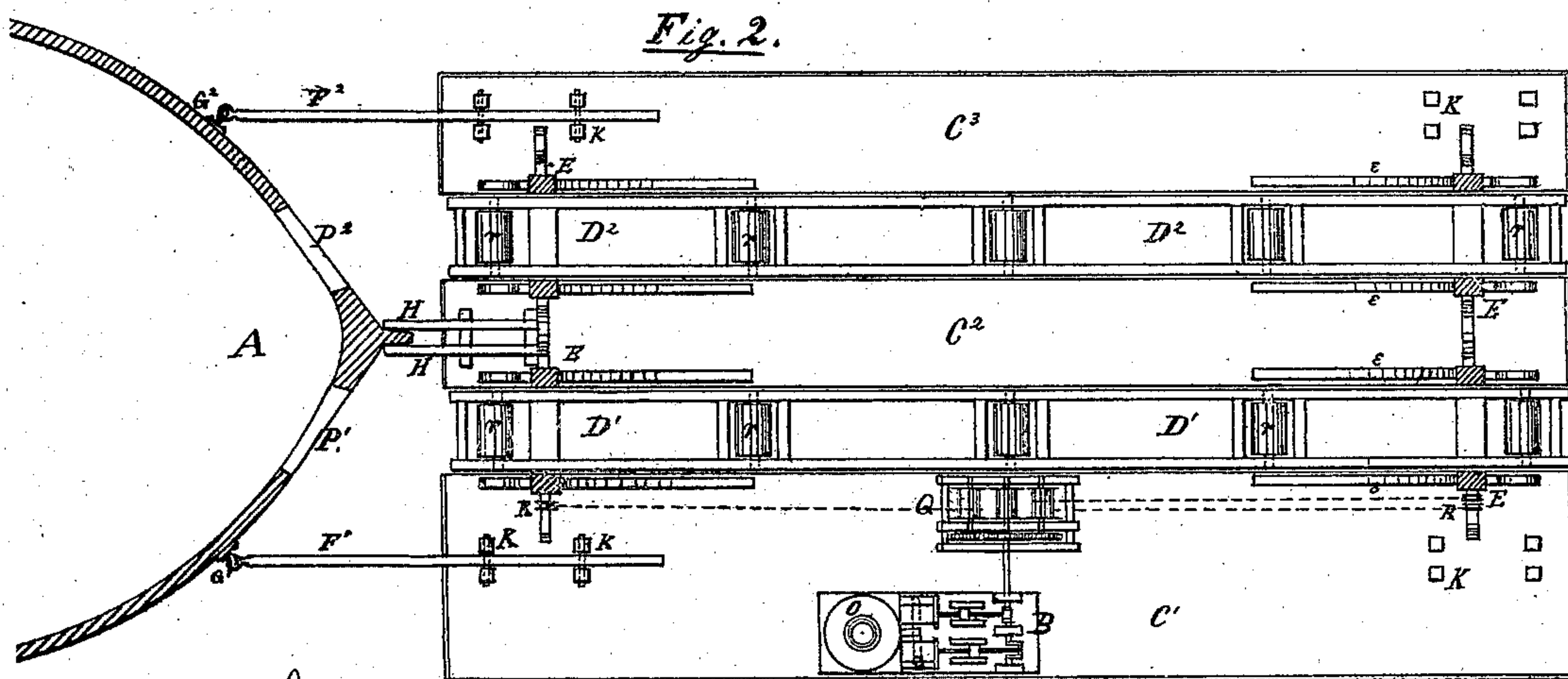
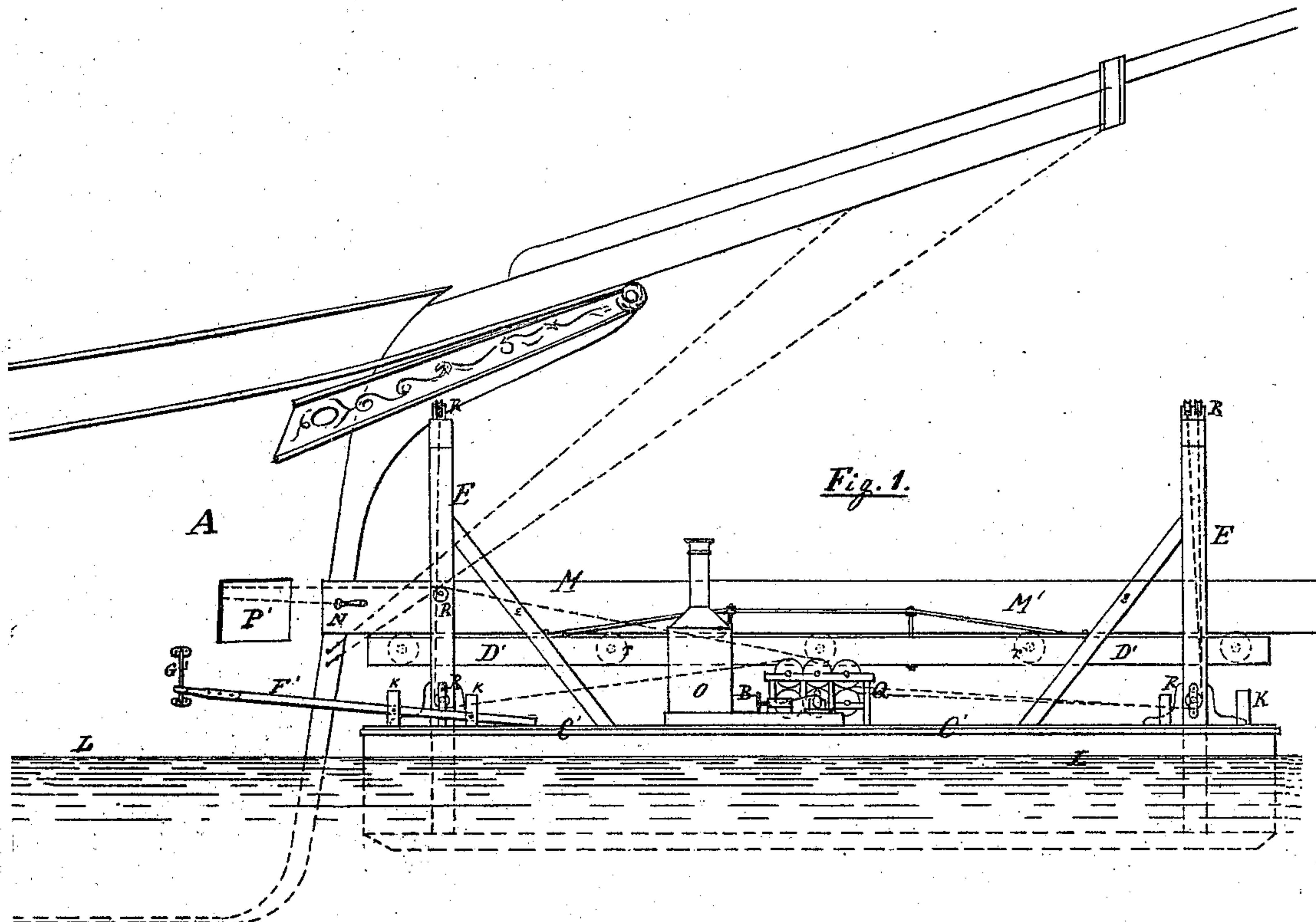
2 Sheets--Sheet 1.

A. BULMAN.

Means of Raising Floating Timber and Loading
Vessels Therewith.

No. 143,873.

Patented Oct. 21, 1873.



WITNESSES:

John L. Galt
W. H. Gerecke

INVENTOR:

Adam Bulman

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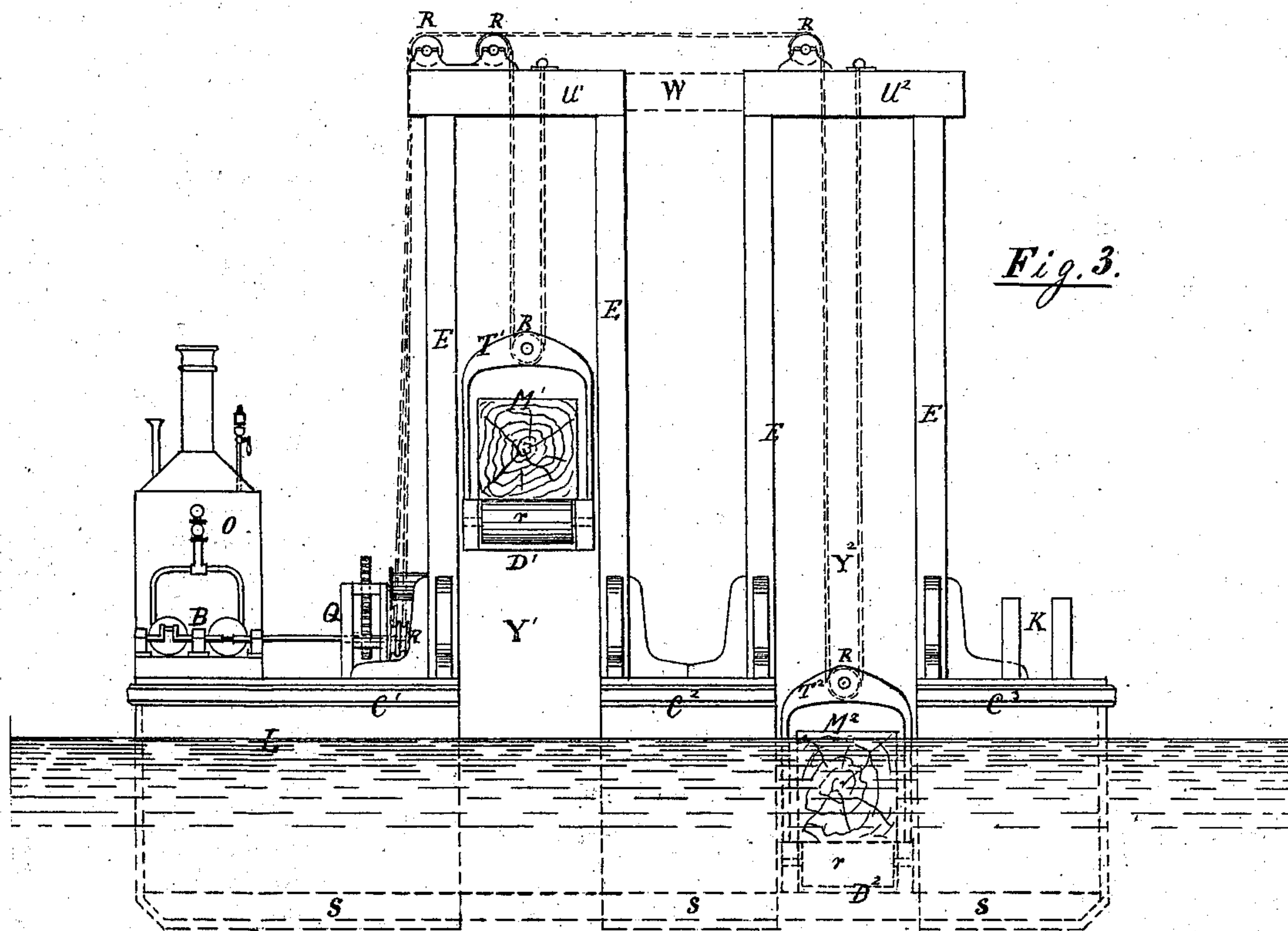


Fig. 3.

WITNESSES:

John C. ...
J. H. Gerecke

INVENTOR:

Adam Bulman

UNITED STATES PATENT OFFICE.

ADAM BULMAN, OF NEWBURG, NEW YORK.

IMPROVEMENT IN MEANS OF RAISING FLOATING TIMBER AND LOADING VESSELS THEREWITH.

Specification forming part of Letters Patent No. **143,873**, dated October 21, 1873; application filed April 19, 1873.

To all whom it may concern:

Be it known that I, ADAM BULMAN, of Newburg, in the county of Orange and State of New York, have invented a Floating Steam-Scow for Loading Timber in Vessels, of which the following is a specification:

The present mode of loading timber in vessels is very tedious, and it requires many days of hard and disagreeable labor to fill a vessel.

My present invention is intended to alleviate the labor and to accelerate the loading of a vessel with timber. For this purpose I build a scow, consisting of three parts, joined together lengthwise by floor-beams at the bottom of the scow, and leaving between each two parts a hoistway for a long platform or carriage, making the distance between the two hoistways to correspond with the distance of the ports of the vessels intended for loading timber. This scow draws water enough so that the logs can be floated in the hoistways on top of the carriage when the same is lowered down to the bottom of the scow. The carriage with the log on it will then be hoisted up to a height that the front end of the log can enter the port of the vessel, and, as each end of the carriage can be hoisted up independently, so that the back end can be elevated more than the front end, the sliding of the log from the carriage into the vessel will be done easily; besides, the carriage-frame contains rollers, on which the log rests, by which means the log will roll down the inclined plane with very little help. The hoisting and lowering of the carriage and the pulling in of the log into the vessel are done by means of a steam-engine and drums, on which ropes are wound, so that by this steam-scow a few men will do as much work in shorter time than at present many men can accomplish. The scow itself is fastened, during the operation of loading the vessel, to the same by outriggers; two in the middle hold it to the stern, and one on each side to the side of the vessel. These outriggers are made in such a way that they allow the vessel to settle lower in the water without interfering with the scow, and have only to be changed two or three times during the time of loading the vessel to her full capacity. The scow can also

be fastened close to the vessel, or farther off, as the case may require.

Referring to the drawings, Figure 1, Plate 1, represents a side view of the steam-scow when attached to a vessel. Fig. 2 on Plate 1 is a plan of the scow during operation. Fig. 3 on Plate 2 is an end view of the scow.

A is a vessel loading with timber. $P^1 P^2$ are the two ports to admit the same. $G^1 G^2$ are the fastenings to which the two outriggers $F^1 F^2$ are attached. $H H$ are the outriggers, which hold the center part of the scow to the stern of the boat. $C^1 C^2 C^3$ are the three parts of the scow; $Y^1 Y^2$, the two hoistways. $D^1 D^2$ are the carriages, with rollers $r r$. $E E$ are the guide-posts, between which the carriages move up and down. $e e$ are main-braces; besides which knees at the bottom of the posts hold the same to the body of the scow. The bottom or floor timbers $S S$ hold the three parts of the scow together, and, when the scow is in position, braces W can be put in to connect the tops of the guide-posts $E E$. M^1 represents a log in the hoistway Y^1 , elevated to a position to pull it into the vessel. The hooks N are attached, which, by means of a rope, are connected to a drum, and, by means of the steam-engine B , the log M will be pulled into the vessel, the rope running over a block fastened in the far-off end of the vessel. M^2 is another log, in the second hoistway Y^2 , just ready to be hoisted up. The carriages $D^1 D^2$ have yokes $T^1 T^2$ attached, which straddle the logs, and to the yokes are fastened rollers R , so that the ropes from the drums Q , leading over the guide-rollers $R R$ and held by the top beams $U^1 U^2$, will hoist the carriages. As each rope has a separate drum, which can be moved or stopped independently, each end of each carriage can be hoisted or lowered separately, and each log can be pulled in independently of the other. Each carriage can be worked alone or together, as circumstances may require. L represents the level of water, to which the scow can be sunk down by ballast, or by letting water into the different apartments until the required depth of water in the hoistways is reached, if the scow should not draw water enough to admit logs into the slips. O represents the steam-boiler; B , the steam-

engine; Q, the group of rollers or hoisting-drums.

As the variety of engines for hoisting is so great, and so many of them suitable for that purpose, I do not claim any special arrangement of machinery, except that it must answer the purpose; but

What I claim as my invention, and desire to secure by Letters Patent, is—

The floating steam-scow C¹ C² C³, with hoist-ways Y¹ Y² E E, carriages D¹ D², with rollers

r r, yokes T¹ T², with the attachments to hold the scow to the vessel, in connection with steam-engine B, boiler O, and hoisting-rigging Q, substantially constructed as described, and for the purpose as specified.

ADAM BULMAN.

Witnesses:

JNO. C. NOE,

J. W. GERECKE.