Taggart, Chichester & Mills,

Grain Conveyer.

No. 48,495. Patented June 27, 1865.

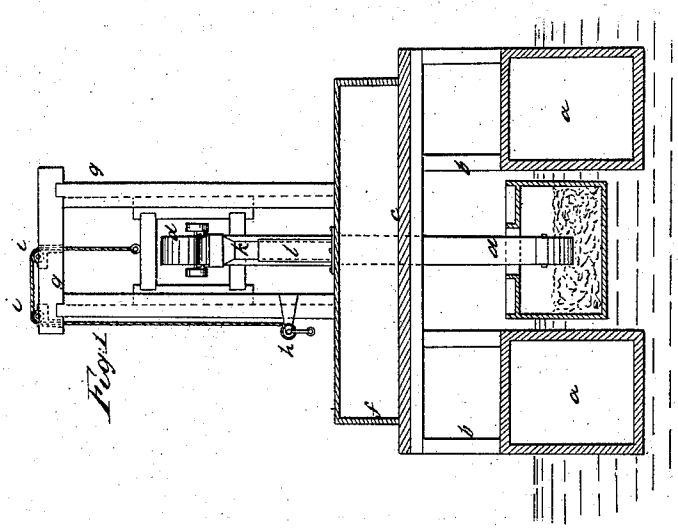


Fig. 1.

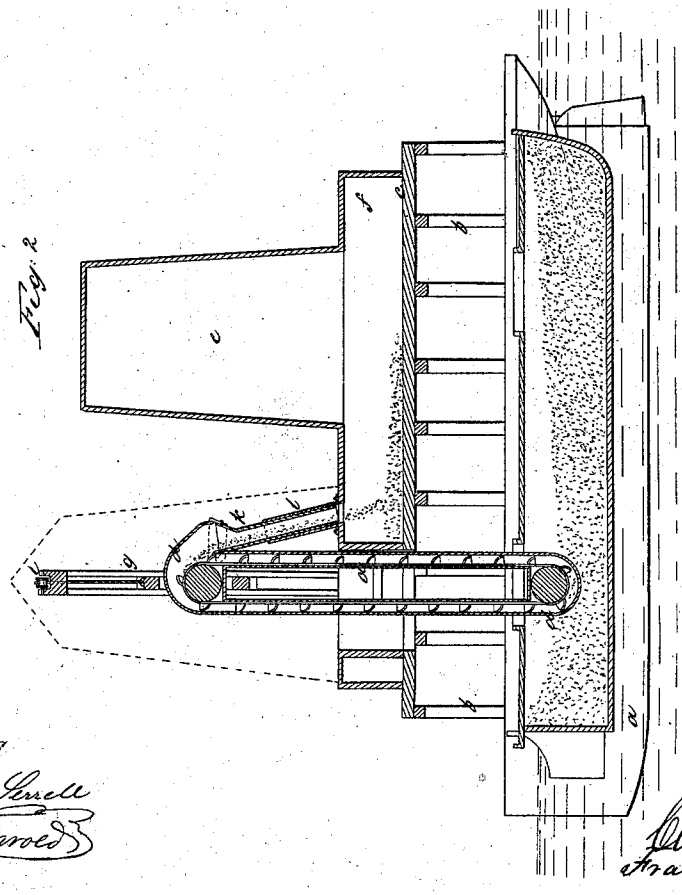


Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

REISSUED

FRANCIS TAGGART, LEWIS S. CHICHESTER, AND CLARK W. MILLS, OF BROOKLYN, NEW YORK, ASSIGNORS TO GEORGE H. NICHOLS, OF SAME PLACE.

IMPROVEMENT IN GRAIN-ELEVATORS.

Specification forming part of Letters Patent No. **48,495**, dated June 27, 1865; antedated June 12, 1865.

To all whom it may concern:

Be it known that we, FRANCIS TAGGART, LEWIS S. CHICHESTER, and CLARK W. MILLS, of Brooklyn, in the county of Kings and State of New York, have invented and made a certain new and useful Improvement in Floating Grain-Elevators; and we do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is a cross-section of our improved floating elevator, and Fig. 2 is a longitudinal section of the same.

Similar marks of reference denote the same parts.

Grain generally arrives at tide-water in canal boats and barges, and usually in bulk. Heretofore it has been usual to discharge such grain by a steam-elevator into a store-house, or else into a vessel for transportation, by means of a floating elevator. These floating elevators have to be placed between the canal boat or barge and the vessel or store-house, and in wet weather the discharging of the cargo often has to be suspended, because the hatches cannot be left open for introducing the elevator.

The nature of our said invention consists in an elevator applied between two floats, and in a deck or house covering the space between said floats, and into which space the canal boat or barge is floated, so as to be entirely under cover, and at the same time the elevator is made much more steady in consequence of its base being broader, and space is furnished in the deck or house for the temporary reception and storage of grain or its transportation from place to place; and the same deck or house can be used for drying, cleaning, and cooling the grain previous to its delivery on shipboard, or for grinding grain or feed, or any like work arising in connection with the grain or flour business.

In the drawings, *a a* are hollow floats or narrow vessels, whose timbers are extended sufficiently above the decks, as at *b b*, for the reception of a platform or deck, *c*, that connects the floats together, and at the same time ample space is left between the floats for a canal boat or barge to be drawn in and have its cargo discharged while beneath and protected by said platform or deck *c*.

The floats *a a* should be provided with rudders, as usual, and with propellers driven by a suitable engine or engines, so as to be propelled or moved from place to place as occasion may require. The engines employed for the propellers should also be fitted to uncouple, in order that they may be employed for actuating the grain-elevator *d* or performing any other work that may be done on the floating elevator.

We construct a house, *f*, upon the deck or platform *c*, which house is to be of a size and shape adapted to the work to be performed in it. We have represented a tower, *e*, that can contain a drier and cooler for the grain, and also a second elevator for passing the grain to a vessel or store-house, and in this house *f* fanning-mills and machines for cleaning or grinding grain may be introduced, if desired.

The elevator *d* is set to be raised or lowered in a frame, *g*, by means of a winch, *h*, from which a rope or chain passes over the pulleys *i i* to said elevator *d*, this device being required for raising the elevator as the canal boat or barge is drawn in between the floats, and for lowering said elevator as the grain is discharged. The elevator *d* is provided with a spout, *k*, that passes into the trunk *l*, so that the delivery pipe or spout will not become disconnected or allow the grain to spill out as the elevator is raised or lowered. The elevator *d* should be inclosed in a house or tower, as seen by dotted lines in Fig. 2.

We have represented a canal-boat at *m*, and shown the grain as being delivered in bulk into the house *f* by the elevator *d*.

What we claim, and desire to secure by Letters Patent, is—

1. A floating elevator for grain, formed with a deck extending across above a space left for the reception of a canal boat or barge between

two floats, and provided with an elevator or elevators working through such deck, for the removal of grain from the said canal boat or barge, substantially as specified.

2. The spout *k*, sliding in the trunk *l*, in combination with the elevator *d*, fitted to be raised or lowered, as and for the purposes specified.

In witness whereof we have hereunto set our signatures this 21st day of November, 1864.

FRANCIS TAGGART.
LEWIS S. CHICHESTER.
CLARK W. MILLS.

Witnesses:
LEMUEL W. SERRELL,
THOS. GEO. HAROLD.