(No Model.) 2 Sheets—Sheet 1.

F. SCRIPTURE.

DUMPING OR DISCHARGING DEVICE.

No. 590,594. Patented Sept. 28, 1897.

Fig. 1.

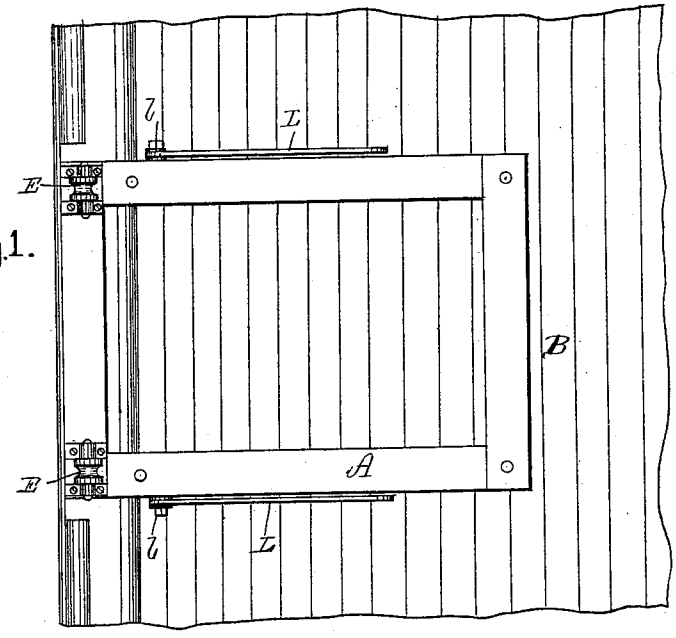
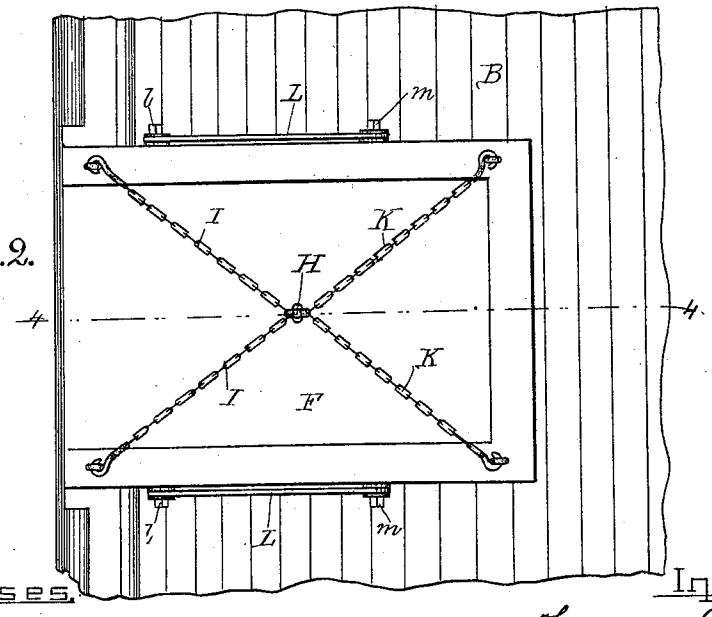


Fig. 2.



Witnesses.

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Charles A. Harris

Inventor.

Frank Scripture

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

(No Model.) 2 Sheets—Sheet 2.

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DUMPING OR DISCHARGING DEVICE.

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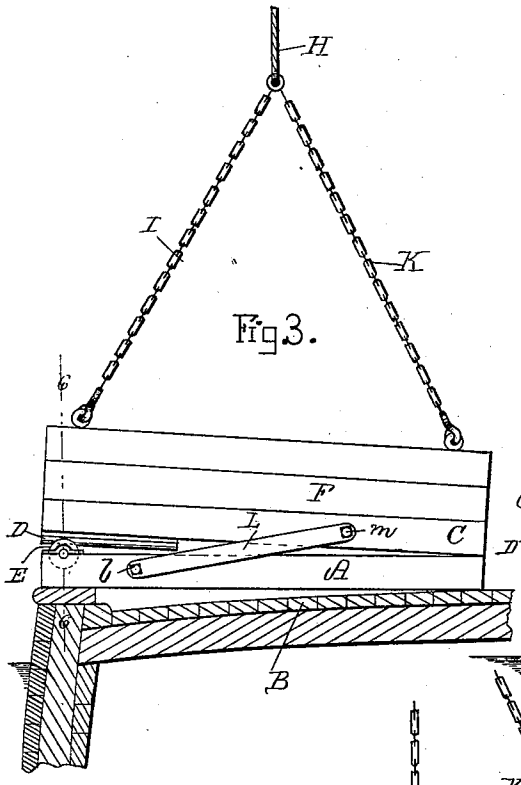


Fig. 3.

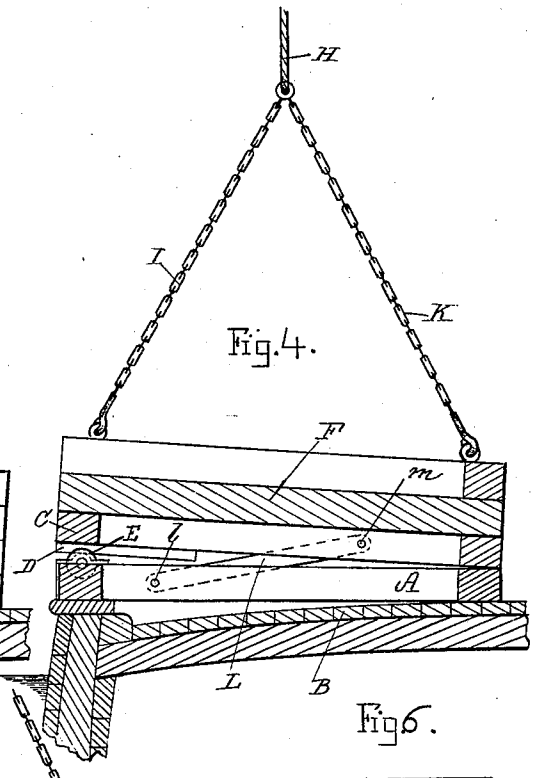


Fig. 4.

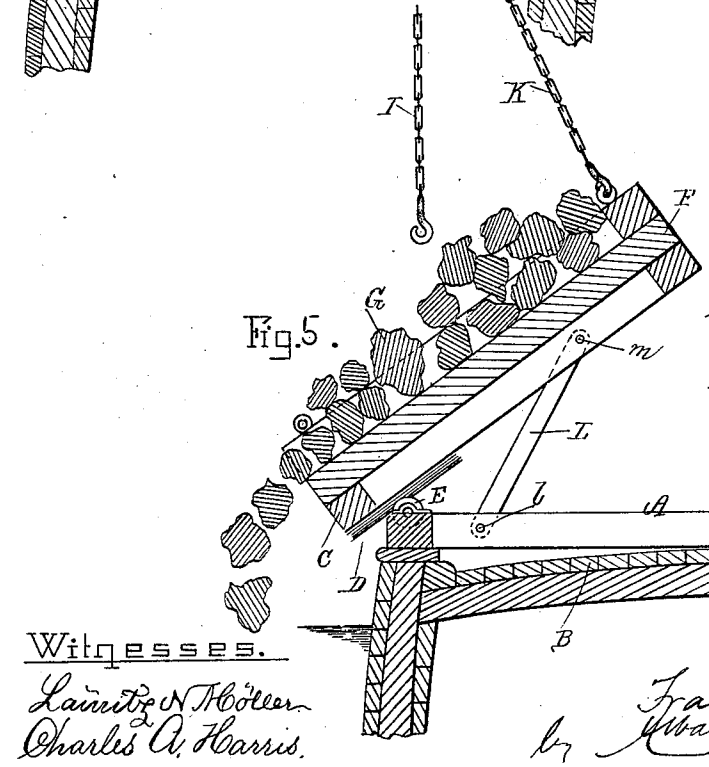


Fig. 5.

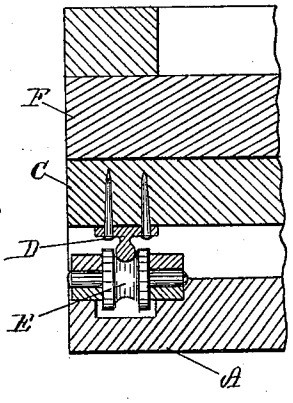


Fig. 6.

Witnesses.

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UNITED STATES PATENT OFFICE.

FRANK SCRIPTURE, OF ROCKPORT, MASSACHUSETTS.

DUMPING OR DISCHARGING DEVICE.

SPECIFICATION forming part of Letters Patent No. 590,594, dated September 28, 1897.

Application filed February 26, 1897. Serial No. 625,135. (No model.)

To all whom it may concern:

Be it known that I, FRANK SCRIPTURE, a citizen of the United States, and a resident of Rockport, in the county of Essex and State of Massachusetts, have invented new and useful Improvements in Dumping or Discharging Devices, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention relates to improvements in dumping or discharging devices, and it is especially well adapted for discharging stones or other filling material into the sea from vessels for the purpose of constructing breakwaters, &c., but it may to equal advantage be used on railway-cars for ballasting the road with sand, stone, &c., or for other similar purposes to which it may be applicable.

The invention is carried out as follows, reference being had to the accompanying drawings, wherein—

Figure 1 represents a detail top plan view of the stationary base or frame, adapted to be secured to the deck of a vessel, a dumping-car, or other object from which the dumping or discharge is to be made. Fig. 2 represents a top plan view of the adjustable box or "scale" adapted to be pivotally connected to the stationary base or frame. Fig. 3 represents a side elevation of Fig. 2. Fig. 4 represents a longitudinal section on the line 4 4 shown in Fig. 2. Fig. 5 represents a similar longitudinal section of the dumping device, showing the dumping-box tipped for discharging its contents; and Fig. 6 represents an enlarged cross-section on the line 6 6 shown in Fig. 3.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

In the drawings, A represents a stationary frame or base which is permanently or detachably secured to the deck B of a vessel or other object from which the material is to be discharged.

C is a movable frame adapted to rest upon the base A and preferably provided with metal rails or bars D D on its under side, adapted to lie in contact with wheels or rollers E E, journaled in bearings on the outer end of the base A, as shown.

F is the dumping-box or scale, which is permanently or detachably secured in a suitable manner to the frame C, and such box is adapted to hold the stone or other material G that is to be dumped or discharged.

H is the hoisting rope or chain, leading to a suitable overhead hoisting device or mechanism in any well-known manner. To the hoisting-rope H are attached the chains or ropes I I, detachably secured to the forward end of the dumping-box F, and to said hoisting rope or chain H are also attached chains or ropes K K, secured to the rear end of said dumping-box, as shown in the drawings.

The stationary base A is pivotally connected to the tipping-frame C by means of links or rods L L. The forward end of each such link or rod is pivotally connected to the base A by means of a pivot-bolt *l*, and the rear end of such link or rod is pivotally connected to the tipping-frame C by means of a pivot-bolt *m*, as shown in the drawings.

The operation is as follows: If used on board a vessel, a number of dumping-boxes or scales F are used, and after being filled by the stone or other material they are stored or placed on the deck, after which the vessel is moved to the place where the dumping is to be done. One of the loaded boxes F is then hoisted by means of the rope or chain H and the corner ropes or chains I K, and the loaded box is then placed on top of the base A, after which the rear ends of the links L L are pivotally connected to the sides of the said box by means of the bolts *m m*. The chains or ropes I I are then detached from the forward end of the box F, after which the rear end of the dumping-box is hoisted upward a proper distance, causing it to be tipped, as shown in Fig. 5, sufficiently to cause the load to be automatically discharged. During such tipping motion of the box its forward end is caused to roll without much frictional resistance upon the wheels or rollers E E, and the links L L during such tipping motion serve to prevent the box from shooting outward and downward during the dumping operation. Such is the operation if the tipping-frame C is permanently attached to the under side of the box F, but if the said frame is made separate from said box the links L L may in such case be permanently pivotally connected to the stationary base A and tipping-frame C,

and to unload a dumping-box F it is only necessary to place it on top of the tipping-frame C and secure it temporarily thereto in any suitable manner, after which the dumping is done in a manner as hereinabove described.

In the same manner the device may be used for discharging ballast, &c., from platform railroad-cars or for excavating, building, or similar purposes.

Having thus fully described the nature, construction, and operation of my invention, I wish to secure by Letters Patent and claim—

The herein-described dumping or discharging device consisting of in combination a stationary base, wheels or rollers journaled at the forward end thereof, a portable dumping-box links pivotally connected to said base and dumping-box or its frame, and means substantially as described for hoisting and dumping the load as and for the purpose set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 13th day of February, A. D. 1897.

FRANK SCRIPTURE.

Witnesses:

ALBAN ANDRÉN,

LAURITZ N. MÖLLER.