

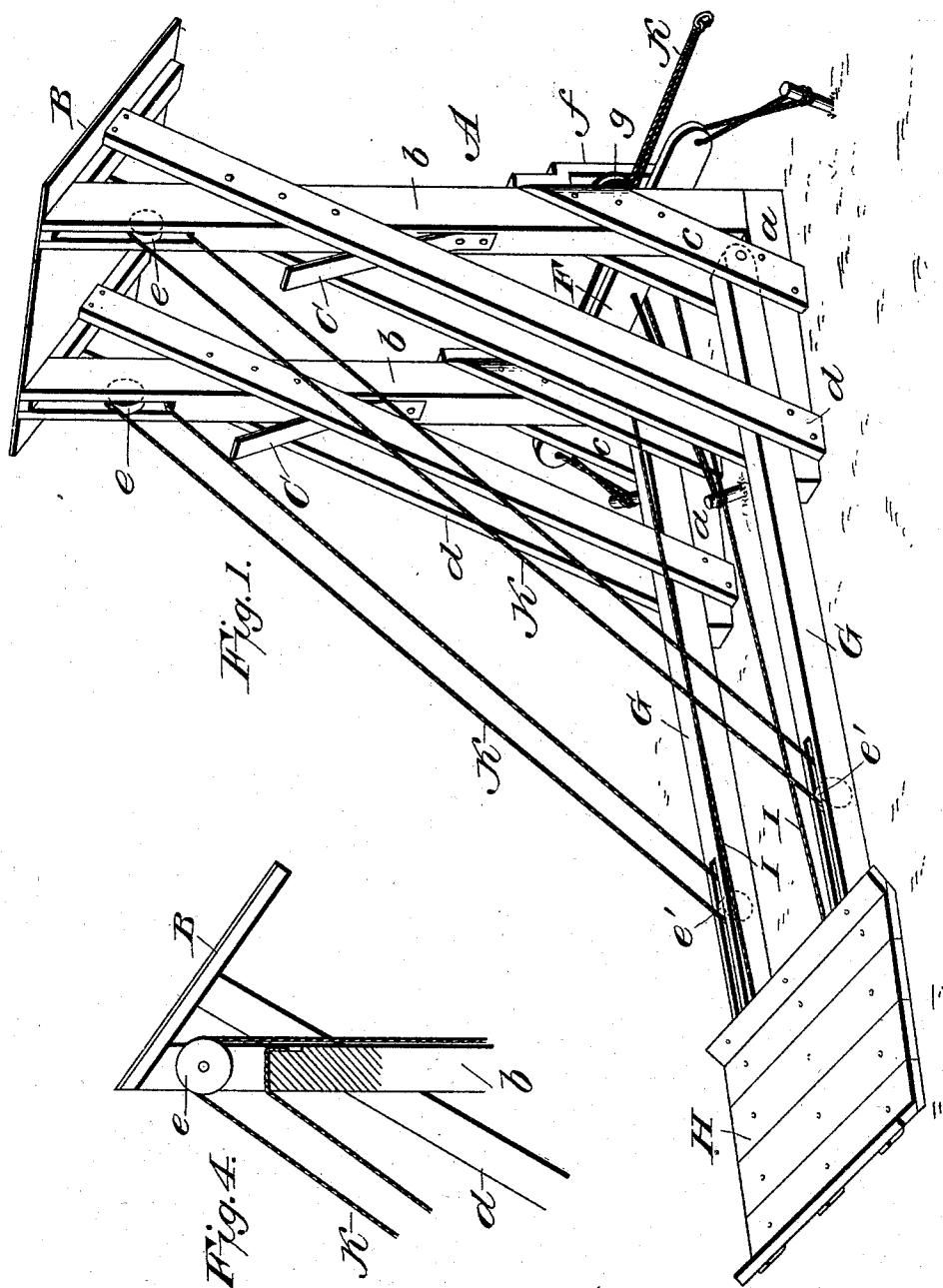
(No Model.)

2 Sheets—Sheet 1.

C. M. FURGASON
LOADING DEVICE.

No. 504,976.

Patented Sept. 12, 1893.



Charles M. Furgason
INVENTOR

WITNESSES
L. S. Elliott.
W. M. Johnson

—by *[Signature]*
Attorney

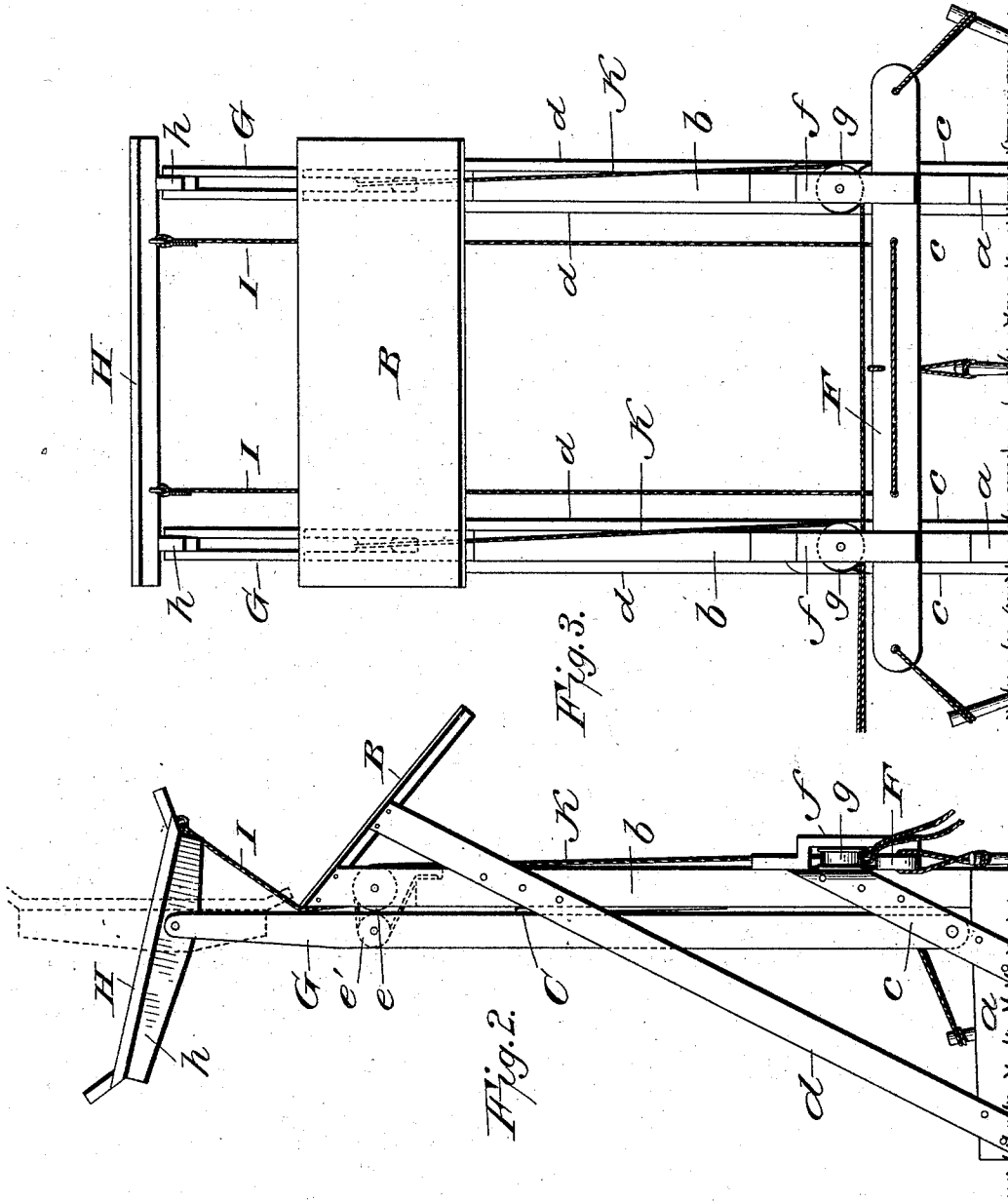
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UNITED STATES PATENT OFFICE.

CHARLES M. FURGASON, OF OTO, IOWA.

LOADING DEVICE.

SPECIFICATION forming part of Letters Patent No. 504,976, dated September 12, 1893.

Application filed April 13, 1893. Serial No. 470,220. (No model.)

To all whom it may concern:

Be it known that I, CHARLES M. FURGASON, a citizen of the United States of America, residing at Oto, in the county of Woodbury and State of Iowa, have invented certain new and useful Improvements in Loading Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to

15 which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification. This invention relates to improvements in

loading devices, the object of the same being to provide a cheap, simple and effective means for elevating and dumping dirt or other material upon an inclined platform from which it may fall into a wagon or car.

20 The invention consists in providing a suitable frame which supports an inclined platform and arms which carry a movable platform at their outer ends, the arms being adapted to be raised and lowered, and while being

25 raised the platform carried thereby will maintain a horizontal position until it reaches its highest elevation when it will be automatically tilted to dump the load, as will be hereinafter fully set forth, and particularly pointed out in the claims.

30 In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of a loading device constructed in accordance with my invention, showing the

35 arms carrying the movable platform lowered. Fig. 2 is a side elevation showing, in full lines, the platform raised to its highest point and in a horizontal position, and, in dotted lines, the platform as tilted. Fig. 3 is a front elevation, and Fig. 4 is a detail view showing the upper part of the frame and hoisting means attached thereto.

40 A designates a suitable frame, which consists of sill pieces *a a* and uprights *b b* braced to each other by planks or strips *c c* and *d d*, the strips *d d* extending beyond the uprights to assist in supporting an inclined platform, or chute, B. The upper ends of the uprights are recessed to receive pulleys *e e*, below which

50 are attached springs *C C*, the purpose of which will be hereinafter set forth. Near the lower ends of the uprights are attached frames *f f*

which support pulleys *g*, the lower ends of the frames bearing upon a suitable cross-bar *F* which is attached to the uprights and is apertured to receive ropes or chains for securing the main frame rigidly in position, said ropes or chains being attached at their other end to stakes or posts driven into the ground.

60 *G G* designate arms which are pivoted immediately above the sill pieces, between the strips or braces *c c*, and pass between the strips or braces *d d*, so that when they are elevated they will strike against the springs *C C* hereinbefore referred to. The arms are recessed at suitable points to receive pulleys *e'*, and to the outer ends of the arms is pivoted a platform *H*, the boards making up said platform being rigidly attached to cross-pieces *h h*, said cross-pieces being pivotally attached to the arms, so that more of the platform will be on one side of the arms than on the other.

70 *I I* designate flexible connections which are attached to the pivoted platform *H* and extend therefrom to the cross-bar *F*, to which they are secured.

75 *K K* designate the hoisting and lowering ropes, one of the ends of each of which is attached to the uprights below the pulleys *e*, the ropes being passed over said pulleys to the pulleys *e'* to and over the pulleys *e* down to and around the pulleys *g*, from which they extend, and are connected to each other by a ring or eye to which is attached a whiffletree.

80 In operation, the device is placed where an excavation is to be made and the laborers shovel or otherwise deposit the material upon the pivoted platform *H*, which has been lowered, and when said platform is filled the hoisting ropes are drawn upon, which will cause the arms carrying the pivoted platform to be raised, and as said platform is pivoted to the arms to one side of its center the preponderance of weight will tend to overbalance the outer end of the same, and as the arms are raised a tension will be exerted upon the flexible connections *I I*, which maintain the platform in a horizontal position as it is being raised, and as the platform reaches its highest point the flexible connections *I I* will engage with the inclined platform or chute *B* and draw upon one side of the platform and tilt the same, so that the load will be deposited upon the inclined platform or chute, from

which it falls into a vehicle or car. When the arms G G have been raised to their full extent they will compress the springs C C, and said springs will tend to throw the arms away from the uprights when the load has been dumped so that the platform will be readily lowered when the hoisting rope is slackened.

It will be noted that the platform H can be loaded when the arms are partially raised, as the arms can be maintained in a partially elevated position by fastening the hoisting ropes. The flexible connections I I, instead of striking against the inclined platform or chute, may strike against a suitable cross-bar. It will also be noted that the inner edge of the pivoted platform is flared so that the contents can be discharged over the inner edge of the inclined platform or chute.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an elevating or loading device, the combination, of a frame constructed substantially as shown, arms pivoted to said frame and carrying at their free ends a pivoted platform, hoisting and lowering ropes attached to the frame and extending therefrom to and around pulleys journaled in the outer ends of the pivoted arms and from there around

pulleys supported by the uprights of the main frame to a suitable draft attachment, together with ropes or flexible connections attached at one end to the pivoted platform and at the other to the main frame and adapted to be moved against the main frame to tilt the pivoted platform, for the purpose set forth.

2. In an elevating or loading device, the combination, of a frame constructed substantially as shown, arms pivoted to said frame and carrying at their outer ends a pivoted platform, hoisting and lowering ropes attached to the pivoted arms and extending to suitable draft mechanism, ropes or flexible connections attached at one end to the pivoted platform and at the other to a stationary part of the main frame and adapted to strike against a part of the main frame to tilt the pivoted platform, and a spring or springs secured to the main frame and adapted to operate against the pivoted bars, substantially as shown, and for the purpose set forth.

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

CHARLES M. FURGASON.

Witnesses:

EDWIN S. FURGASON,
JAMES M. GRIFFITH.