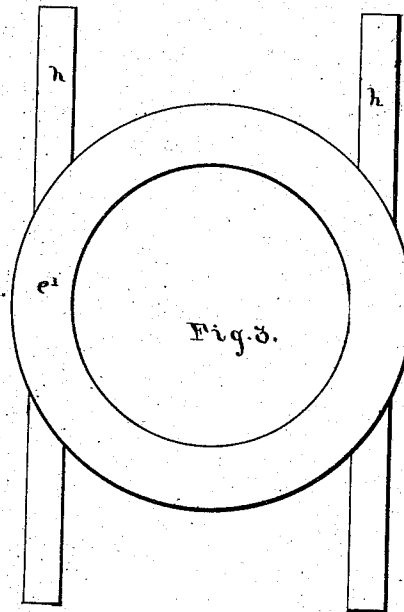
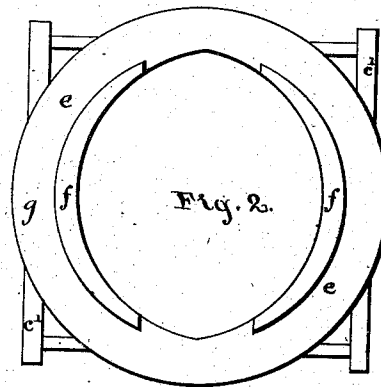
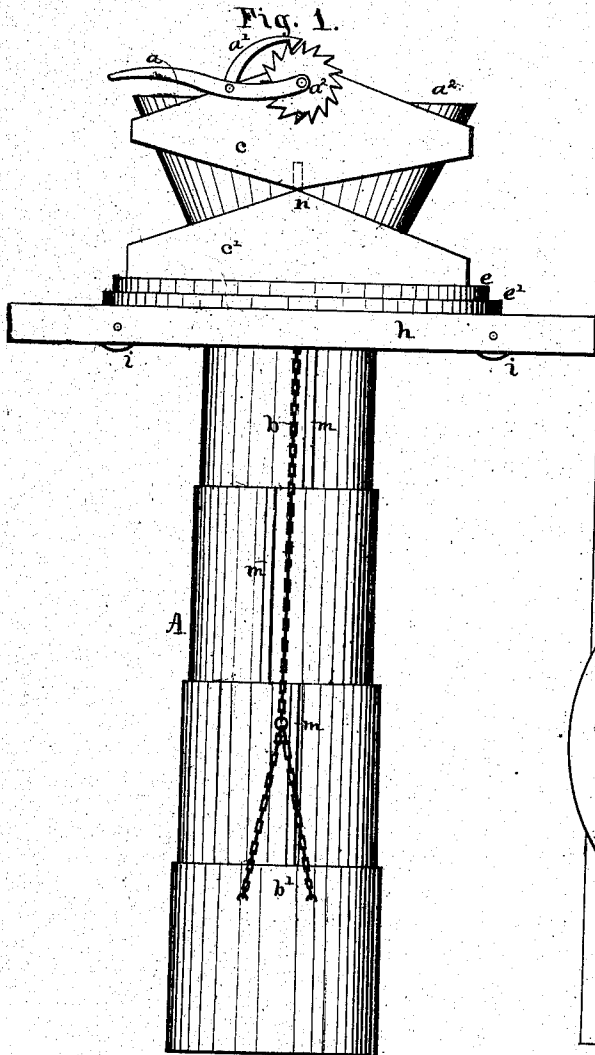


C. H. BASS.

Modes of Loading Coal, &c.

No. 158,567.

Patented Jan. 12, 1875.



WITNESSES:

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CHARLES H. BASS, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN MODES OF LOADING COAL, &c.

Specification forming part of Letters Patent No. 158,567, dated January 12, 1875; application filed November 14, 1874.

To all whom it may concern:

Be it known that I, CHARLES H. BASS, of the city of Brooklyn, State of New York, have invented a new and Improved Method of Handling Coal and other articles, of which the following is a specification:

The object of my invention is to obviate the excessive abrasion of coal and similar articles when being removed from an elevation or into a deep place, such as the hold or coal-bunker of a vessel, and the great waste and loss that is occasioned thereby.

Reference being had to the accompanying drawings, Figure 1 is a lateral view of my telescopic coal-feeder in its extended form.

The tube A is constructed of a number of sections or parts so formed as to slide into each other concentrically, in the manner of a telescope, the lower section forming the exterior, and the upper one the interior, when the tube A is drawn up. The upper section is enlarged at the top, forming a funnel, a^2 . The lever and ratchet a a' operate a windlass in connection with the chain b , for the purpose of shortening the tube A gradually when in use. c is the tipping-frame, by which the windlass and the tube A are supported, and is connected with the balance-frame c' by a pivot-joint, n , to admit of giving the tube A an inclined position, when it is desired to convey the coal to a point not directly under the hatchway or mouth of the machine. e is a circular turning slide, firmly secured to the balance-frame c' , and sustains the weight of the tipping-frame c , the windlass and ratchet a' , and the tube A. The circular turning slide e is represented detached from c' in Fig. 1, and shown in Fig. 2 from a vertical point of view. f f are semicircular guides, projecting from the face surface g to the thickness of the other circular turning slide e' , also detached, and represented from the same point of view in Fig. 3, but still resting on the side bearers h , as shown in Fig. 1. The circular turning slides e and e' are fitted to and work together in the same manner as the fifth-wheel of a wagon, and this, in connection with the tipping-frames c and c' admits of setting the tube A at any required angle of inclination, and in any direction, for the purpose as above stated. The rollers i i under the side bearers h are for the purpose of facilitating the operation of adjusting the apparatus in position for use.

I construct the tube A of iron or other suitable material, the lower section four feet in diameter, more or less, and each one about four feet long, and in a cylindrical form. Three friction-bars are fixed longitudinally and at equal distances on the outer surfaces of the telescoping sections, as represented by m m m in Fig. 1. The tipping and balance frames c and c' are constructed principally of wood, and are connected together at n by a pivot-joint, or otherwise, to admit of the required movement for the purpose stated.

To use my telescopic coal-feeder I place it over the hatchway of a vessel or other receptacle, lower down the tube A to the bottom, set it in the desired position, and commence filling in. When the coal reaches the top, I shorten the tube A gently by means of the windlass and chains b , which latter extend down on both sides of the tube A, and terminate in a loop fastened to the lower section, as shown at b' , thus permitting the coal to spread out below as fast as it is filled in at the top, observing to keep the tube constantly full. The coal thus descends without attrition, and as rapidly as it is allowed to escape at the bottom or filled in at the top.

Thus a vast quantity of coal that is usually ground into dust by the excessive abrasion that occurs when handled in the usual way is saved, and many other articles can thus be moved in bulk with great advantage and little cost.

I claim as my invention—

1. The construction and use of a telescopic coal-feeder, for the purpose of letting down gently from a height, coal and other similarly-affected articles, substantially as described.
2. In combination with the telescopic coal-feeder, the tipping and balancing frames c and c' , and the circular turning slides e and e' , or their equivalents, for producing the turning and inclining operation, as described, and for the purpose specified.
3. In combination with the telescopic coal-feeder, the chains b and b' , the windlass a' , the lever a , and the ratchet a^2 , or their equivalents, substantially as described, and for the purposes specified.

CHARLES H. BASS.

Witnesses:

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