No. 707,358. Patented Aug. 19, 1902.

H. B. SACKETT.

COAL BAGGER.

Application filed Dec. 29, 1900.

(No Model.)

Fig. 1.

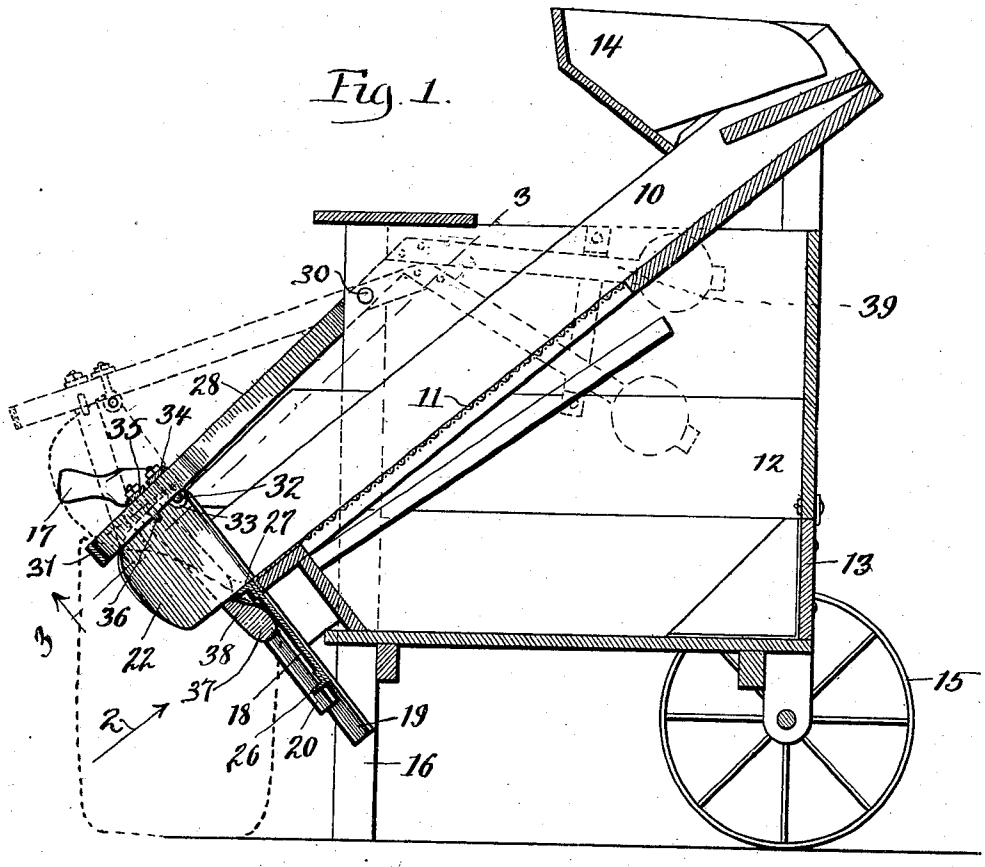
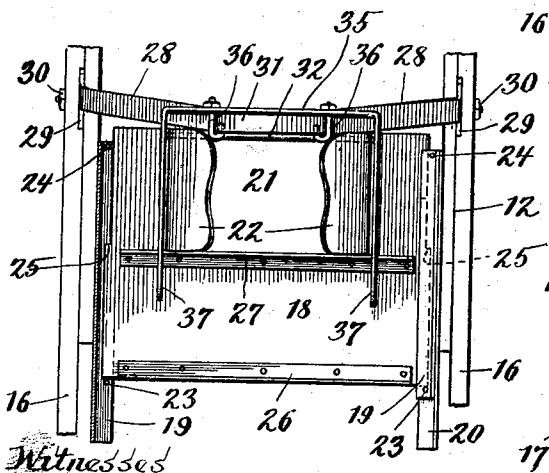
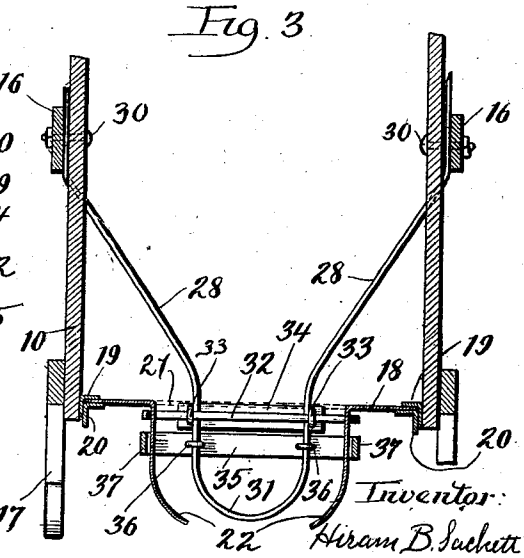


Fig. 2.



Witnesses
Fred G. Dieterich
Morris H. Hobbs

Fig. 3.



Inventor:
Hiram B. Sackett
By Peirce & Fisher.
his Attorneys.

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UNITED STATES PATENT OFFICE.

HIRAM B. SACKETT, OF CHICAGO, ILLINOIS.

COAL-BAGGER.

SPECIFICATION forming part of Letters Patent No. 707,358, dated August 19, 1902.

Application filed December 29, 1900. Serial No. 41,482. (No model.)

To all whom it may concern:

Be it known that I, HIRAM B. SACKETT, a citizen of the United States, and a resident of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Coal-Baggers, of which the following is a full, clear, and exact description.

The invention seeks to provide simple and convenient means by which coal may be rapidly bagged.

In the drawings, Figure 1 is a vertical section through the preferred form of the improved bagger. Fig. 2 is a detail end view looking in the direction of arrow 2, Fig. 1. Fig. 3 is a detail section on line 3 3 of Fig. 1 looking in the direction of the arrow.

The bagger comprises an inclined chute 10, by which the coal is delivered to the bags. This chute is preferably provided with a screen bottom 11, by which the fine particles are separated from the main body of coal. Chute 10 is also preferably mounted in inclined position within a body portion or dust-box 12, which serves to collect the particles separated by the screen and through the open front end of which the lower end of chute 10 projects. A door 13 is located at the lower end of the back of the body portion 12, through which the coal-dust accumulated therein may be removed. A hopper 14 is preferably provided at the upper end of the inclined chute 10, through which the coal may be delivered to the chute and evenly spread over the screen bottom 11. The body portion 12 is preferably portable, and for this purpose, like an ordinary two-wheeled barrow, is provided with wheels 15 at its rear end and with legs 16 and handles 17 at its front end.

A gate or cut-off 18 is mounted to slide across the lower end of chute 10, substantially at right angles thereto. Gate 18 preferably comprises a metal plate mounted to slide in guideways or slots formed between the angle-bars 19 and 20, fixed to the front projecting end of the chute 10. The upper mid-section of the gate is cut away to form an opening 21, and the cut-away portions are bent outwardly on either side of the opening to form a spout 22. In the lower position of the gate or cut-off 18 the opening 21 and spout 22 are in line with chute 10, as shown in full lines in Fig. 1, for free delivery of the coal to the bags, while in its upper position (indicated in dotted lines in Fig. 1) the closed lower portion of the gate comes opposite the chute and cuts off the flow of coal. Stop-pins 23, fixed to the lower ends of guide-bars 19 and 20, engage the lower edge of the gate or cut-off 18 and limit its downward movement, while stop-pins 24, fixed to the upper ends of the guide-bars, engage shoulders 25 on the side edges of the gate to limit its upward movement. The upper portions of the side edges of the gate are cut away to form the shoulders 25 and permit the latter to slide upwardly between pins 24, as shown in Fig. 3, in which view one of the guide-bars 20 is omitted to clearly illustrate this construction. A strengthening angle-iron 26 is preferably secured at the lower edge of the gate. A second cross angle-iron 27, secured to the gate at the lower edge of the opening 21, forms a lip which in the lower position of the gate comes opposite the lower edge of the chute-bottom and assists in directing the coal into the bag.

An operating-lever for shifting the gate is provided and preferably in the form of a metal bar bent to form diverging arms 28, which extend upwardly and rearwardly from the gate. The upper ends of arms 28 extend outside of the sides of the body portion and through slots 29 in the upper portion of the side pieces which form the legs 16, and the arms are pivoted within the slots on bolts 30. The forward ends of the lever-arms 28 are bent to a U shape to form a handle 31 and to which the gate or cut-off is pivotally connected. This connection (see Fig. 3) preferably comprises a pivot-bolt 32, which is held against the lower edge of the lever-arms 28 by eyebolts 33, which extend outside of the arms and through a cross-strip 34, resting upon the upper edge of the arms. The ends of the pivot-bolt 32 extend through openings in the upper inner corners of the spout-flanges 22 of the gate 18 and are provided with pins or headed over to prevent endwise displacement.

A spreader for the bag is secured to the operating lever-arms 28 in front of the gate 18 and preferably comprises a strip 35, rigidly fixed to the lever-arms by hook-bolts 36 and having downwardly-extending arms 37

embracing the spout-flanges 22. In the lowermost position of the parts (see full lines, Fig. 1) the spreader-arms 37 extend inwardly with their lower ends adjacent or against the gate 18, the inner edge of the arms being cut away, as at 38, to clear the lip-piece 27, so that the inner edge of the bag, which is hooked over the lower ends of the arms, is held beneath the lip-piece 27 and against the gate when the opening 21 is opposite the chute, and the coal cannot spill over the inner edge, but must pass into the bag, which is at the same time drawn over the opening of spout 22. However, as the lever-arms 28 move to the upper position the gate 18, pivoted thereto, slides longitudinally, while the spreader-arms 37, being rigidly connected to the lever-arms, swing outwardly away from the gate and release the bag. Furthermore, in the uppermost position the inner edge of the next empty bag may be easily hooked over the lower ends of the spreader-arms, the opening of the bag extended over the spout, and the outer edge of the bag held by the operator over the handle 31. Then by pressing down the handle the bag is lowered to rest on the ground with its inner edge held against the gate or cut-off 18, and with its open mouth drawn over the spout (see dotted lines, Fig. 1) the opening 21 is brought opposite the chute 10 and the coal runs in until the bag is full. The operator then moves the lever-arm 28 upwardly, cutting off the flow of coal and releasing the full bag, which remains on the ground. In this manner the bags may be rapidly and conveniently filled.

Preferably one of the lever-arms 28 is extended and has fixed thereto a counterweighted arm 39, which balances the weight of the arms and the connected parts and assists the operation.

It is obvious that numerous changes may be made in the details of construction without departure from the spirit of the invention.

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

1. In baggers, the combination with a chute, of a cut-off gate therefor, a handle connected to said gate to positively shift the same both to its open and closed positions and a bodily-movable spreader for the bag connected to said handle to simultaneously shift therewith and with said gate, said spreader being arranged to move inwardly as the gate is opened to hold the inner edge of the bag close to the open end of the chute and to move outwardly to release the bag as said gate is closed.

2. In baggers, the combination with an inclined chute, of a sliding cut-off gate therefor, a swinging operating-lever and handle to which said cut-off is pivotally connected and a spreader for the bag rigidly connected to said operating-lever.

3. In baggers, the combination with an inclined chute, of a sliding cut-off gate therefor having a discharge-opening and spout, guides for said gate, a swinging operating-lever above said chute to which said gate is pivotally connected and a bag-spreader rigidly connected to said lever and arranged to embrace said spout.

HIRAM B. SACKETT.

Witnesses:
LOUIS V. LE MOYNE,
CHARLES J. DRIEVER.