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J. W. COCHERELL.

COAL CHUTE.

(Application filed Oct. 21, 1899.)

(No Model.)

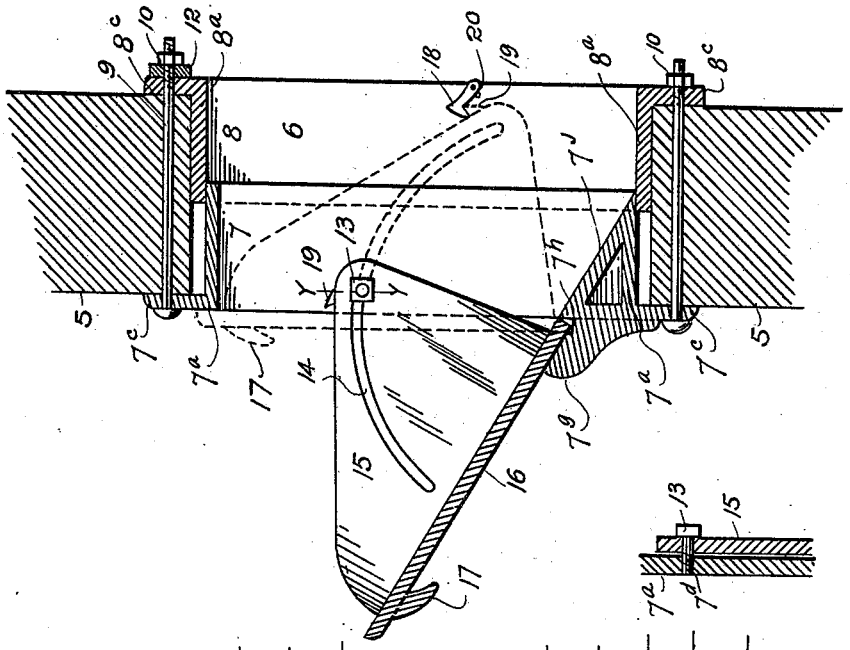

FIG. 2

FIG. 3

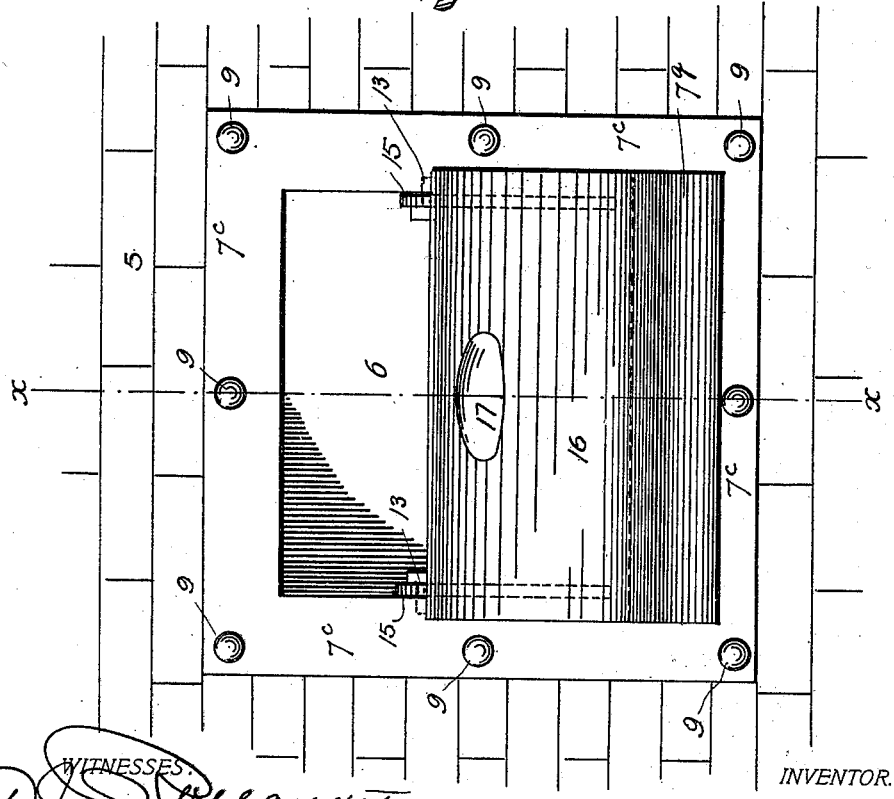

FIG. 1

WITNESSES:

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JAMES W. COCHERELL, OF DENVER, COLORADO.

COAL-CHUTE.

SPECIFICATION forming part of Letters Patent No. 646,930, dated April 3, 1900.

Application filed October 21, 1899. Serial No. 734,306. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. COCHERELL, a citizen of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Coal-Chutes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in coal-chutes adapted for use in discharging coal into cellars through window-openings formed in the wall of the house. Under ordinary conditions the passage of the coal through these openings soon wears out the window-frame and injures the wall of the house.

One important object of my invention is to prevent this difficulty and at the same time provide a convenient chute for the purpose stated; and to these ends the invention consists of the features, arrangements, and combinations hereinafter described and claimed, all of which will be fully understood by reference to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a front elevation of my improved chute. Fig. 2 is a section taken on the line X X, Fig. 1. Fig. 3 is a section taken on the line Y Y, Fig. 2.

Similar reference-characters indicating corresponding parts in the views, let the numeral 5 designate the wall in which is formed the opening 6. In this opening are inserted two telescoping frame members 7 and 8. These members are rectangular in shape and are provided with parts 7^a and 8^a, inserted in the opening from opposite directions, the one from the outside and the other from the inside. The part 7^a slides within the part 8^a, whereby the members may be adjusted to fit any thickness of wall. The two members 7 and 8 are provided with flanges 7^c and 8^c, respectively, extending at right angles to the parts 7^a and 8^a and adapted to engage the wall 5 on the outside and inside, respectively, when the members are in place. These flanges are apertured to receive fastening-bolts 9, which are passed through the wall and fastened on the inside by nuts 10. Above the top of the opening on the inside a wood strip 12 may be placed and secured by the upper bolts. A window (not shown) may be hinged to this strip if it is desired to leave the chute open to have light in the cellar.

In the vertical sides of the part 7^a of the frame are formed threaded openings 7^d on opposite sides, adapted to receive stud-bolts 13, which are passed through curved slots 14, formed in the sides 15 of the chute, whose bottom 16 is provided with an exterior hand-hold 17 to facilitate the opening of the chute preparatory to using it. The inner and lower extremity of the bottom of the chute engages a bracket 7^g, which extends across the lower part of and may be formed integral with or attached to the member 7 of the frame. This bracket is provided with a recess 7^h, into which the lower extremity of the chute-bottom fits when the chute is in the closed position indicated by dotted lines in Fig. 2. When the chute is closed, the sides 15 pass inwardly between the frame members. The inner member 8 is provided with a locking-dog 18, pivotally mounted thereon and adapted to automatically engage a lug 19, formed on one of the sides 15 of the chute, when the latter is closed. This dog is supported by a pin 20, inserted in the frame member. During the operation of closing the chute the lug 19 engages the extremity of the dog 18 and raises it until the dog drops to engagement with the lug, as shown in Fig. 2.

From the foregoing description the use of the apparatus will be readily understood and need not be further described.

To facilitate the passage of the coal after it leaves the bottom of the chute, an inclined part 7^j is formed integral with the member 7 and lying in the same plane with the bottom of the chute when the latter is open.

Having thus described my invention, what I claim is—

1. In a coal-chute the combination of two telescoping frame members adapted for use with walls of different thickness, and a chute member coöperating with the frame members.

2. The combination of two telescoping frame members and a chute member movably connected with one of the frame members, where-

by the chute member may be opened and closed at will.

3. The combination of a window-frame composed of two telescoping parts, a chute member movably mounted on one part and having sides provided with curved slots, and stud-bolts passing through the slots and fastened in the frame member.

4. The combination of a window-frame composed of two telescoping parts, one part being provided with a bracket, a chute member engaging said bracket and provided with sides having curved slots, and stud-bolts passing through said slots and entering threaded openings formed in the frame member.

5. The combination of a window-frame composed of two telescoping parts, one part being provided with a bracket, a chute member engaging said bracket and provided with sides having curved slots, said bolts passing through said slots and entering threaded openings formed in the frame member, and means for automatically locking the chute in the closed position.

6. The combination of a window-frame composed of two telescoping parts, a chute movably connected with one of said parts and provided with sides having curved slots, stud-bolts passing through the said slots in the frame, and a locking-dog mounted on the window-frame and adapted to automatically engage a lug formed on the chute when the latter is closed.

7. The combination of two telescoping frame members adapted to be adjusted to fit walls of different thickness, and locking-bolts connecting the frame members substantially as described.

8. The combination of two telescoping frame members adapted to be adjusted to fit walls of different thickness, and locking-bolts passed through coinciding openings formed in flanges with which the two members are provided.

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

JAMES W. COCHERELL.

Witnesses:
A. J. O'BRIEN,
GRACE MYTINGER.