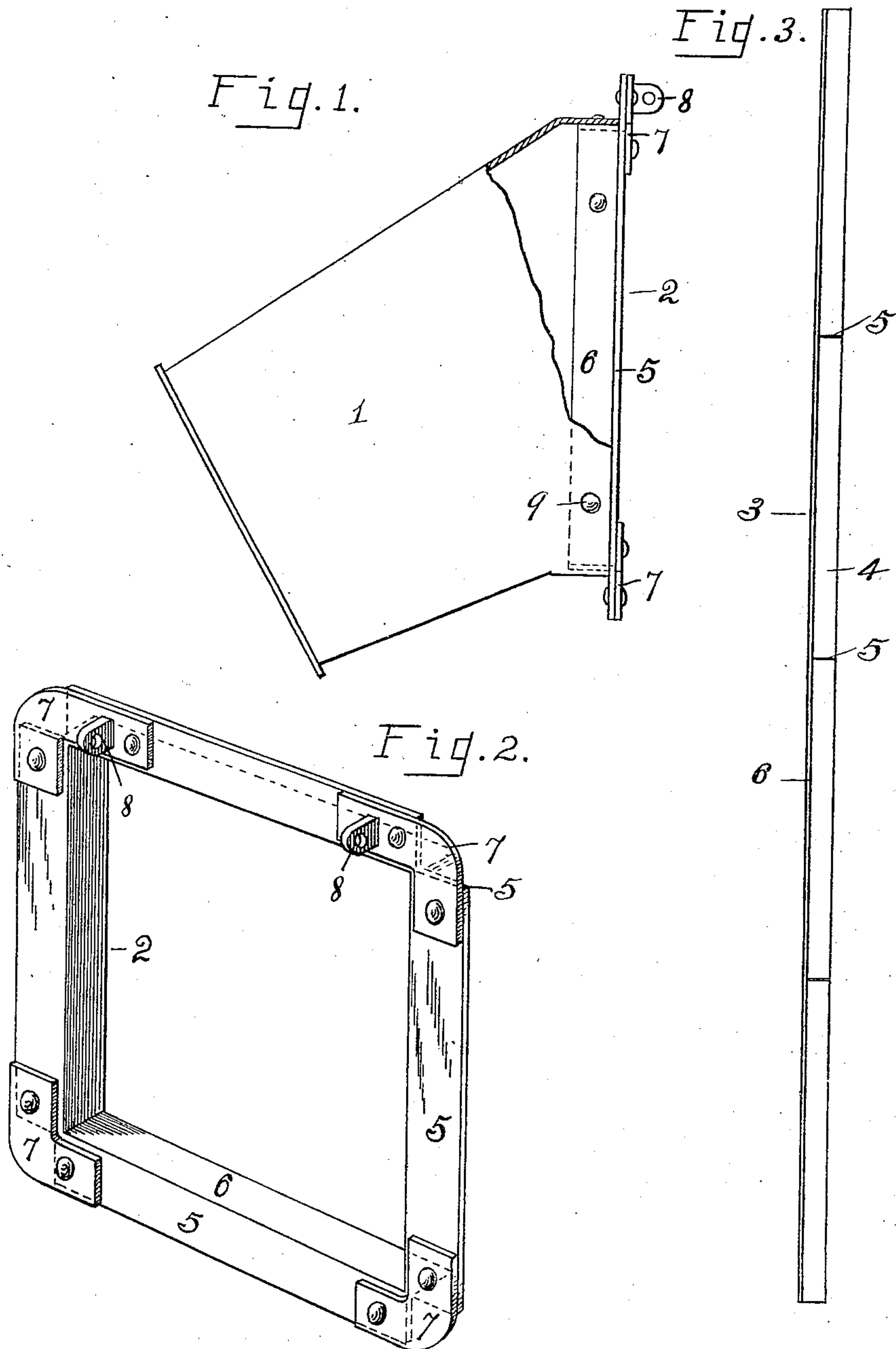


No. 870,524.

PATENTED NOV. 5, 1907.

J. M. TRIGGS.
CHUTE FRAME.
APPLICATION FILED MAY 1, 1907.



WITNESSES:
D. C. Walter
Hazel B. Kett

INVENTOR.
James M. Triggs,
By Owen & Owen
His attys.

UNITED STATES PATENT OFFICE.

JAMES M. TRIGGS, OF MORENCI, MICHIGAN, ASSIGNOR OF ONE-HALF TO WILLIAM B. RORICK, OF MORENCI, MICHIGAN.

CHUTE-FRAME.

No. 870,524.

Specification of Letters Patent.

Patented Nov. 5, 1907.

Application filed May 1, 1907. Serial No. 371,333.

To all whom it may concern:

Be it known that I, JAMES M. TRIGGS, a citizen of the United States, and a resident of Morenci, in the county of Lenawee and State of Michigan, have invented a certain new and useful Chute-Frame; 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 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 coal, wood or vegetable chutes, and particularly to the frames to which the bodies thereof are secured.

The object of my invention is the provision of a highly efficient frame of this class, which is not liable to breakage when a piece of wood or other heavy, bulky article strikes it, is simple and economical in its construction, and in the manufacture thereof is adapted to be easily and quickly formed into any desired polygonal shape to suit the shape of the window or opening with which it is to be associated.

The invention is fully described in the following specification and illustrated in the accompanying drawing, in which,—

Figure 1 is a side elevation of a chute provided with my frame with a portion of the body broken away. Fig. 2 is a perspective view of the frame, and Fig. 3 is a view of a length of angle-iron from which the frame is formed.

Referring to the drawings, 1 designates the chute body, which may be square or of any other polygonal construction suitable to the window opening or use to which it is to be applied, and 2 the frame to which one end of the body is riveted or otherwise suitably secured and which comprises the features of my invention.

The frame 2 is formed from a length of angle-steel or iron 3, the flange 4 of which is provided with slits 5 at the points where it is desired to make the bends, and the flange 6 thereof is bent along lines coincident with the slits 5 to form the frame in the desired shape. As the bar is bent the slits will of course open up and I close such gaps and strengthen the frame at the corners by angled corner-plates 7, which are bolted or

otherwise firmly secured to the flange 4 at opposite sides of the openings, as shown. One of these plates also unites the meeting ends of the bar. Two of the plates 7 are provided with apertured lugs 8, to which a door or closure member may be hinged to close the frame opening. The body 1 is secured by rivets or other suitable securing means 9 to the inwardly projecting flange 6 of the frame, and projects therefrom through the window or other opening with which it is associated.

It is thus apparent that I have provided a frame which is of light, simple, and strong construction and obviates the objections incident to the use of cast metal frames due to the breakable nature and other inherent features thereof which are apparent when used in connection with a chute.

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

1. A chute comprising a frame formed of a single piece of angle-bar, having one flange provided with a series of slits, and its other flange folded along lines coincident with said slits to form the frame, metal reinforcing means secured to the slit flange at the corners of the frame, and a chute body telescoping with the bent flange of the frame and secured thereto.

2. A chute comprising a bar of angle-steel having one flange slit at intervals to form a plurality of sections and its other flange folded at the slit points to form a frame, angled plates secured to and connecting the contiguous ends of the separated sections of the slit flange and uniting the meeting ends of the bar, and a chute body secured to the bent flange.

3. In combination, a chute-frame comprising a bar of angle-steel having one flange provided with a series of slits corresponding to the number of bends to be made in the bar and the other flange being bent at such slit points to form a polygonal frame, angle-plates secured to and connecting the contiguous separated ends of the slit flange sections and firmly uniting the ends of the bar, two of said plates having pivot lugs projecting therefrom, and a chute body telescoping with the bent flange and secured thereto.

In testimony whereof I have hereunto signed my name to this specification in the presence of two subscribing witnesses.

JAMES M. TRIGGS.

Witnesses:

ALBERT V. FOSTER,
W. B. RORICK.