

No. 762,508.

PATENTED JUNE 14, 1904.

C. W. WELD.
DELIVERY CHUTE.

APPLICATION FILED NOV. 4, 1903.

NO MODEL.

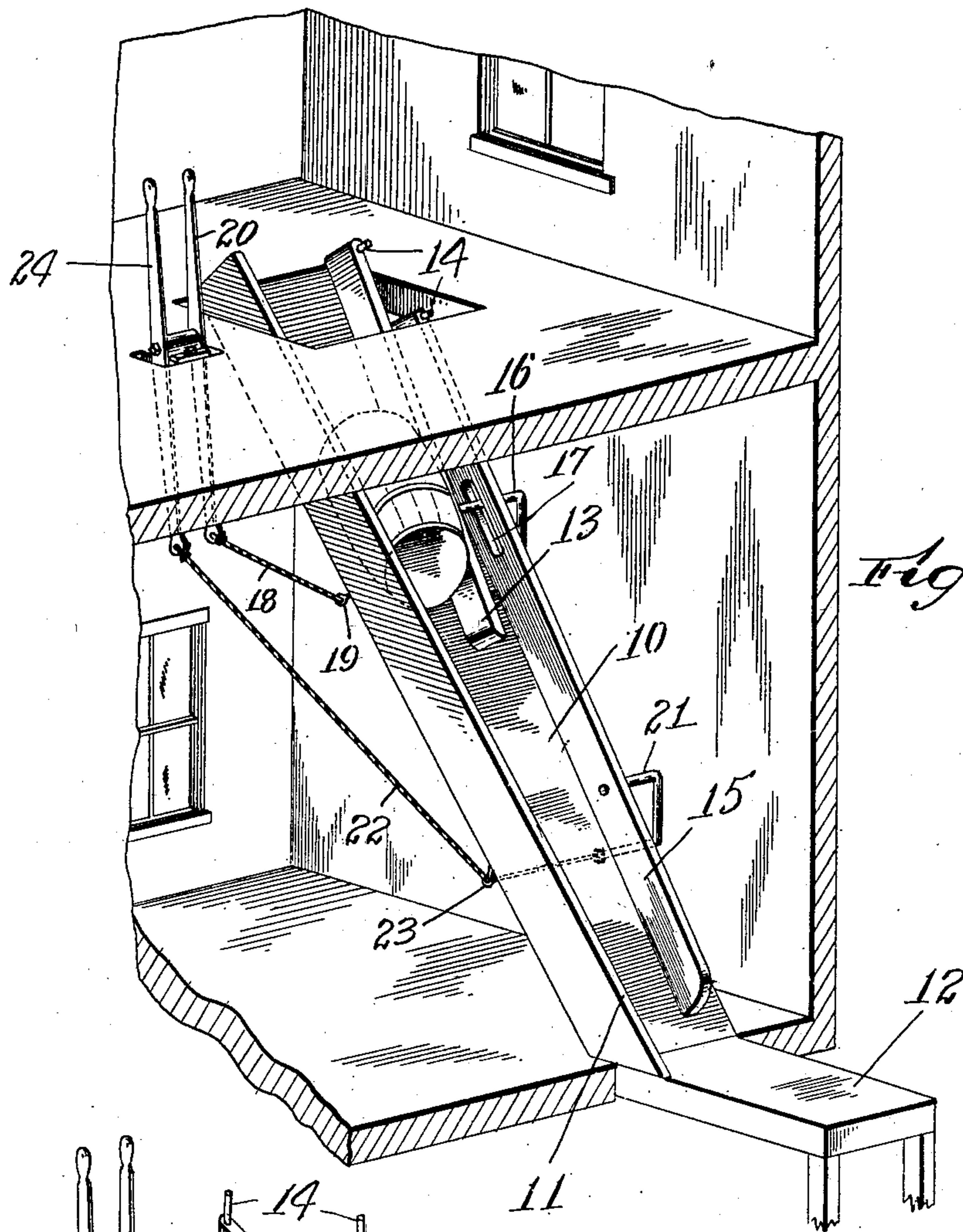


Fig. 1.

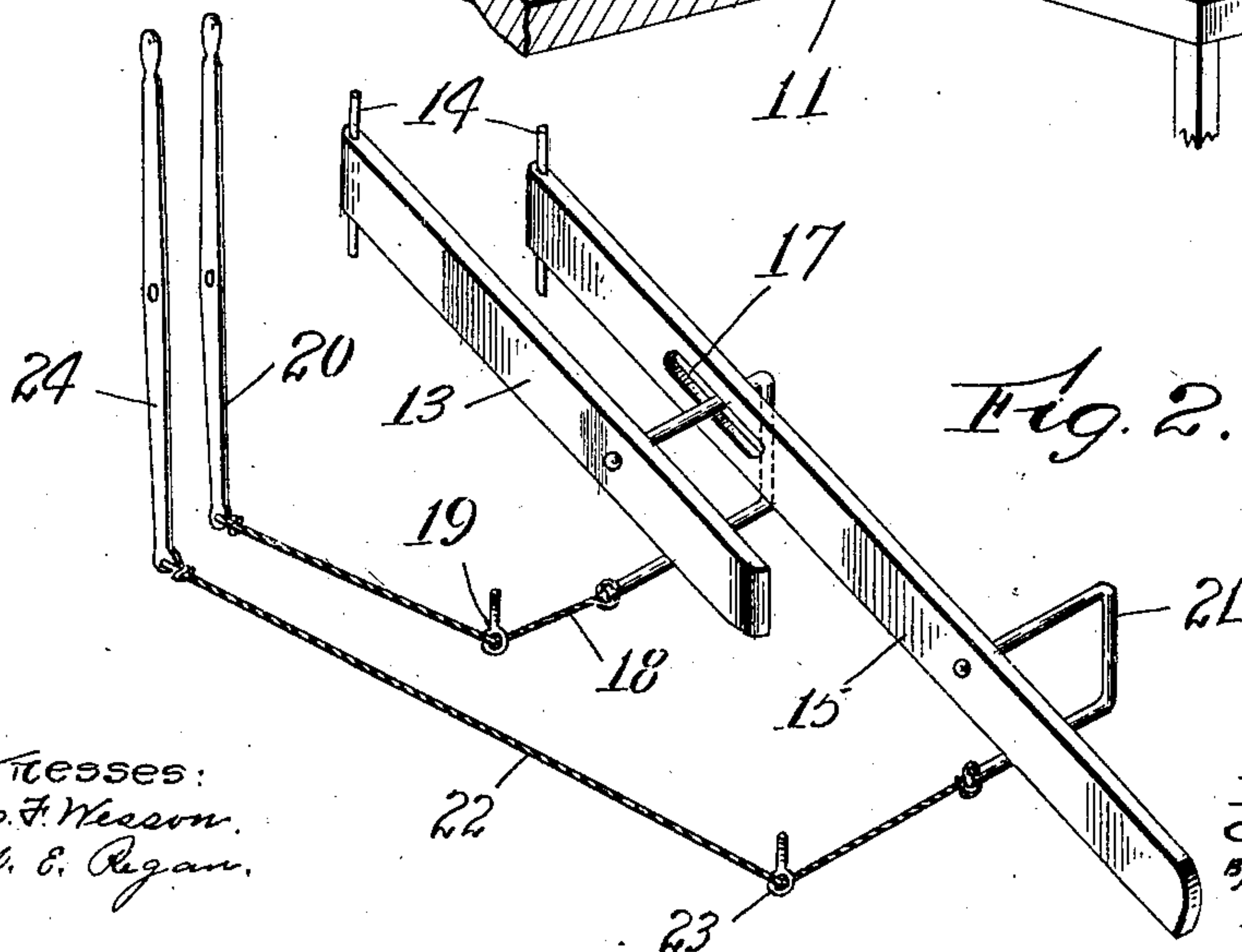


Fig. 2.

Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES W. WELD, OF SOUTHBRIDGE, MASSACHUSETTS.

DELIVERY-CHUTE.

SPECIFICATION forming part of Letters Patent No. 762,508, dated June 14, 1904.

Application filed November 4, 1903. Serial No. 179,769. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. WELD, a citizen of the United States, residing at Southbridge, in the county of Worcester and State of Massachusetts, have invented a new and useful Delivery-Chute, of which the following is a specification.

This invention relates to an apparatus for handling barrels, bags of flour, or other packages and for delivering the packages in safe, expeditious, and efficient manner from an elevated point to a lower point—for example, for delivering packages from one story of a building to a lower story.

The especial object of my invention is to provide a chute or runway with a simple and efficient form of brake for controlling the speed of successive packages as they slide down the chute.

To this end this invention consists of the parts and combinations of parts, as hereinafter described, and more particularly pointed out in the claims at the end of this specification.

In the accompanying drawings, Figure 1 is a fragmentary perspective view of sufficient parts of a building to illustrate the application of my invention thereto, and Fig. 2 is a detached perspective view of the brakes and the operating connections therefor.

The use of an unobstructed chute for delivering packages from one story of a building to a lower story I have found to be objectionable, because a chute of this character is necessarily built at slight inclination, and hence occupies a large amount of room, and although a chute of this character may be designed for a particular class of packages—for example, bags of grain or flour—yet the same chute could not be used for other classes of packages—for example, barrels, because of the undesirable speed at which the barrels would descend an unobstructed chute. In an apparatus constructed according to this invention I have provided a simple and efficient form of brake which has enabled me to use a steeply-inclined chute for handling a considerable variety of packages. The steep inclination of the chute in an apparatus construct-

ed according to my invention permits the construction to occupy comparatively little room.

Referring to the accompanying drawings and in detail, I have illustrated my construction applied for delivering packages from one story of a building to the story below, although it is to be understood that my apparatus may be used in other situations and for longer runs, if desired.

In the construction illustrated the chute comprises an inclined bottom 10 with a stationary or fixed side piece 11. At its lower end the chute is connected to a delivery-platform 12, and the upper end of the chute opens through a hatchway or opening in the floor.

The brakes which I employ in an apparatus constructed according to my invention comprise a side piece 13, which is pivoted at its upper end upon a rod or stud 14 or is otherwise hinged to be moved in toward the stationary side of the chute. Below the movable side piece 13 I provide a second movable side piece 15, which is similarly hinged at its upper end. The swinging side pieces 13 and 15 constitute the brakes, which act to successively control the speeds at which packages pass down the chute. The operating connections for the piece 13 comprise an arm 16, which extends out through a hole 17 in the lower brake-piece 15 and is connected at its end to a rope 18, which passes through a guide-eye 19 and is connected to the lower end of an operating-lever 20. The connections for operating the second swinging piece 15 are of similar construction and comprise an arm 21, a rope 22, which passes through an eye 23, and an operating-lever 24.

In the use of the apparatus as thus constructed the barrel or other package is placed in the chute, as shown in Fig. 1, and in the upper part of the chute the speed of the barrel is controlled by the pivoted piece or brake 13, and after the barrel has passed the first brake 13 its speed can still be controlled by the second piece or brake 15. In setting or swinging in the second brake 15 it will be noticed that the upper brake 13 is also partly set or swung in, so that for some packages it may

only be necessary to use the outside lever 24, and although in the present construction I have shown only two brake-pieces 13 and 15 it is obvious that additional brakes may be
5 provided for longer runs or steeper inclinations.

I am aware that other changes may be made in practicing my invention by those who are skilled in the art without departing from the
10 scope thereof as expressed in the claims. I do not wish, therefore, to be limited to the construction I have herein shown and described; but

What I do claim, and desire to secure by
15 Letters Patent of the United States, is—

1. In an apparatus for handling packages, the combination of a chute, a brake consisting of a piece pivoted at its upper end, and means for swinging the lower end of the piece
20 in toward the stationary side of the chute to control the speed of packages descending the chute.

2. In an apparatus for handling packages, the combination of an inclined chute, a brake
25 consisting of a piece pivoted at its upper end, and a lever pivoted near the entrance to the chute and connected to swing the lower end of the piece in toward the stationary side of the chute to control the speed of packages de-
30 scending the chute.

3. In an apparatus for handling packages,

the combination of an inclined chute, a brake consisting of a side piece pivoted at its upper end, and operating connections for the side piece comprising an arm extending out there- 35 from, a rope connected to the arm and passing underneath the chute, a guiding-eye for the rope, and a lever connected thereto and pivoted near the entrance to the chute, said parts being combined to swing the lower end 40 of the side piece in toward the stationary side of the chute to control the speed of packages descending the chute.

4. In an apparatus for handling packages, the combination of an inclined chute, brakes 45 for successively controlling the speed of packages descending the chute, and operating connections for each of said brakes, each set of connections comprising an arm extending from one of the side pieces, a rope connected 50 thereto and passing through a guiding-eye, and a lever connected to the rope, said lever being pivotally mounted in position to be controlled from the entrance to the chute.

In testimony whereof I have hereunto set 55 my hand in the presence of two subscribing witnesses.

CHARLES W. WELD.

Witnesses:

PHILIP W. SOUTHGATE,
LOUIS W. SOUTHGATE.