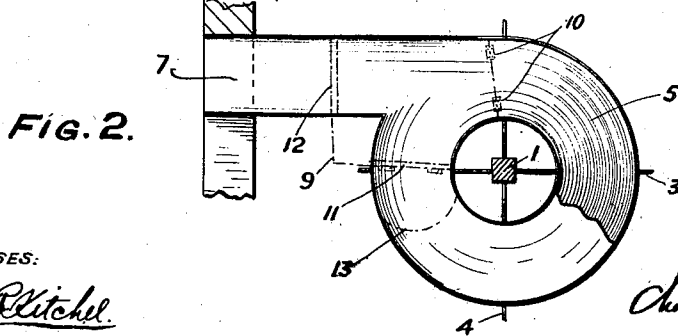
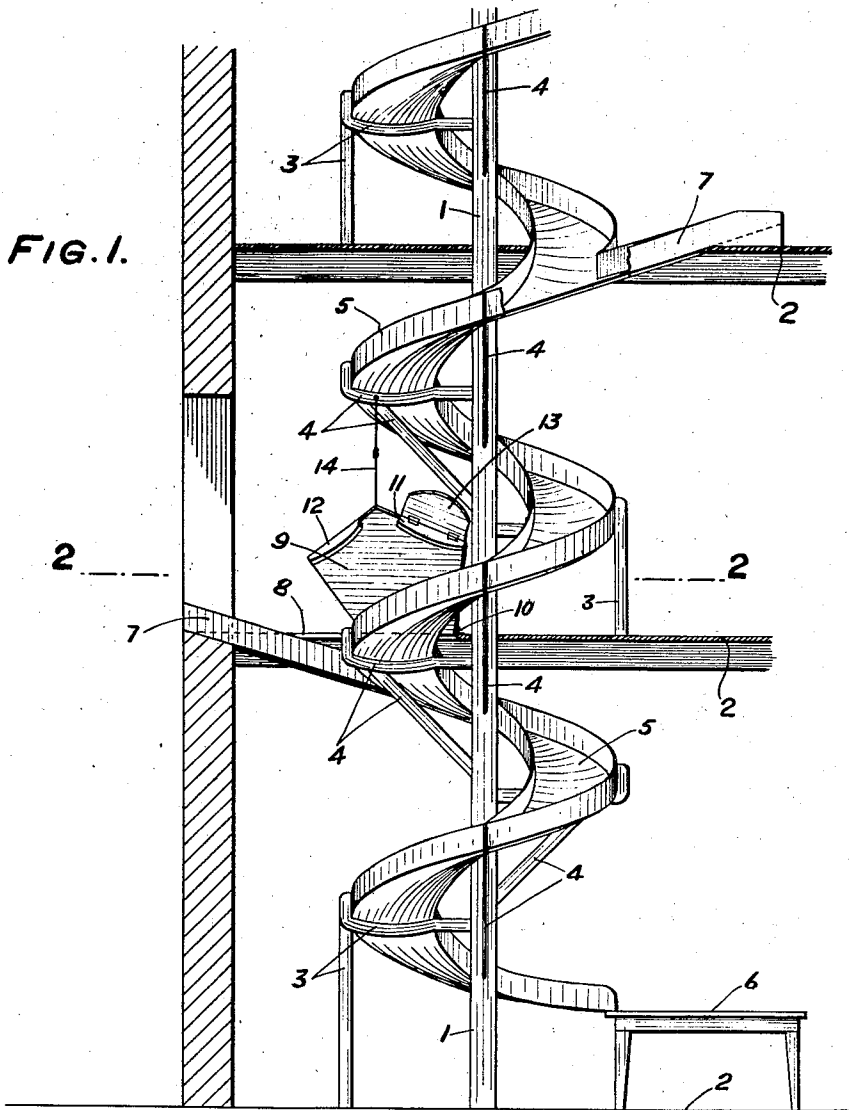


C. F. CORMACK.
 MERCHANDISE CHUTE.
 APPLICATION FILED MAR. 6, 1909.

961,340.

Patented June 14, 1910.



WITNESSES:

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CHARLES F. CORMACK, OF MILL VALLEY, CALIFORNIA.

MERCHANDISE-CHUTE.

961,340.

Specification of Letters Patent. Patented June 14, 1910.

Application filed March 6, 1909. Serial No. 481,785.

To all whom it may concern:

Be it known that I, CHARLES F. CORMACK, a citizen of the United States, residing at Mill Valley, in the county of Marin and State of California, have invented certain Improvements in Merchandise-Chutes.

My improvements relate to chutes such as are in use in warehouses for lowering merchandise by gravity and particularly to spiral chutes which pass successive floors or levels where it is desired to charge materials. It is my purpose to provide such chutes with improved means for conveniently charging and discharging merchandise at various levels and in conjunction therewith providing automatic mechanism for trapping fires. To this end branch feed chutes, having direction tangential to and pitch the same as the main chute, enter the latter from several floor levels while traps at the floor levels are adapted for closing and opening the chute as well as the floor passages therefor.

The characteristic features of my invention are disclosed in the accompanying drawings and the following description thereof.

In the accompanying drawings, Figure 1 is an elevation of a spiral chute having my improvements applied thereto, part being broken away for the purpose of better illustration, and Fig. 2 is a plan view taken on the line 2—2 of Fig. 1.

In the embodiment of the improvements illustrated in the drawings, a center post 1 and the warehouse floors 2 carry the respective brackets 3 and 4 which support the spiral chute 5, the latter extending through several floors to the landing table 6. Branch feed chutes 7, having the pitch of the main chute and direction tangential thereto, extend from the several upper floors of the building into the main chute, the junction of the floors of the main and branch chutes being without break or obstruction to the regular movement into the main chute from the branch chutes of sacks, packages or other containers delivered to the latter from the warehouse floors. Preferably the floors of the branch chutes at the entrance thereto are

raised slightly above the building floors or to a height convenient for receiving from handling trucks and preventing the accidental movement of matter upon the building floors into the chutes.

The passages 8 for the main and branch chutes through the floors 2 and also the chutes are adapted to be closed by traps 9 connected by hinges 10 to the floors 2, the traps having the respective flanges 11 and 12 adapted to fit the respective chutes 5 and 7 so as to close them and the hinged flap 13 adapted to fit against the bottom of the main chute so as to form a bridge therefrom to the corresponding building floor when its trap is down. A cord 14 serves to hold up the trap when this is desired, the string being disconnected manually when it is desired to lower the trap or otherwise automatically in case of fire.

Having described my invention, I claim:

1. A chute in combination with a trap having a flange rigidly fixed thereto transversely to the plane thereof, said flange being adapted for closing said chute, in combination with a floor having an aperture closed by said trap.

2. A merchandise chute having a branch in combination with an apertured floor and a trap having means for closing said floor chute and branch.

3. A spiral merchandise chute having a branch, in combination with a floor and a trap hinged to said floor, said trap having means for closing said chute and branch.

4. A spiral chute in combination with a floor and a trap hinged to said floor, said trap having a flange fixed thereto for closing said chute and a bridge hinged thereto for carrying materials from said chute onto said trap when the latter is down.

In witness whereof I have hereunto set my name this 23rd day of February, A. D. 1909, in the presence of the subscribing witnesses.

CHARLES F. CORMACK.

Witnesses:

ROBERT JAMES EARLEY,
JOS. G. DENNY, Jr.