

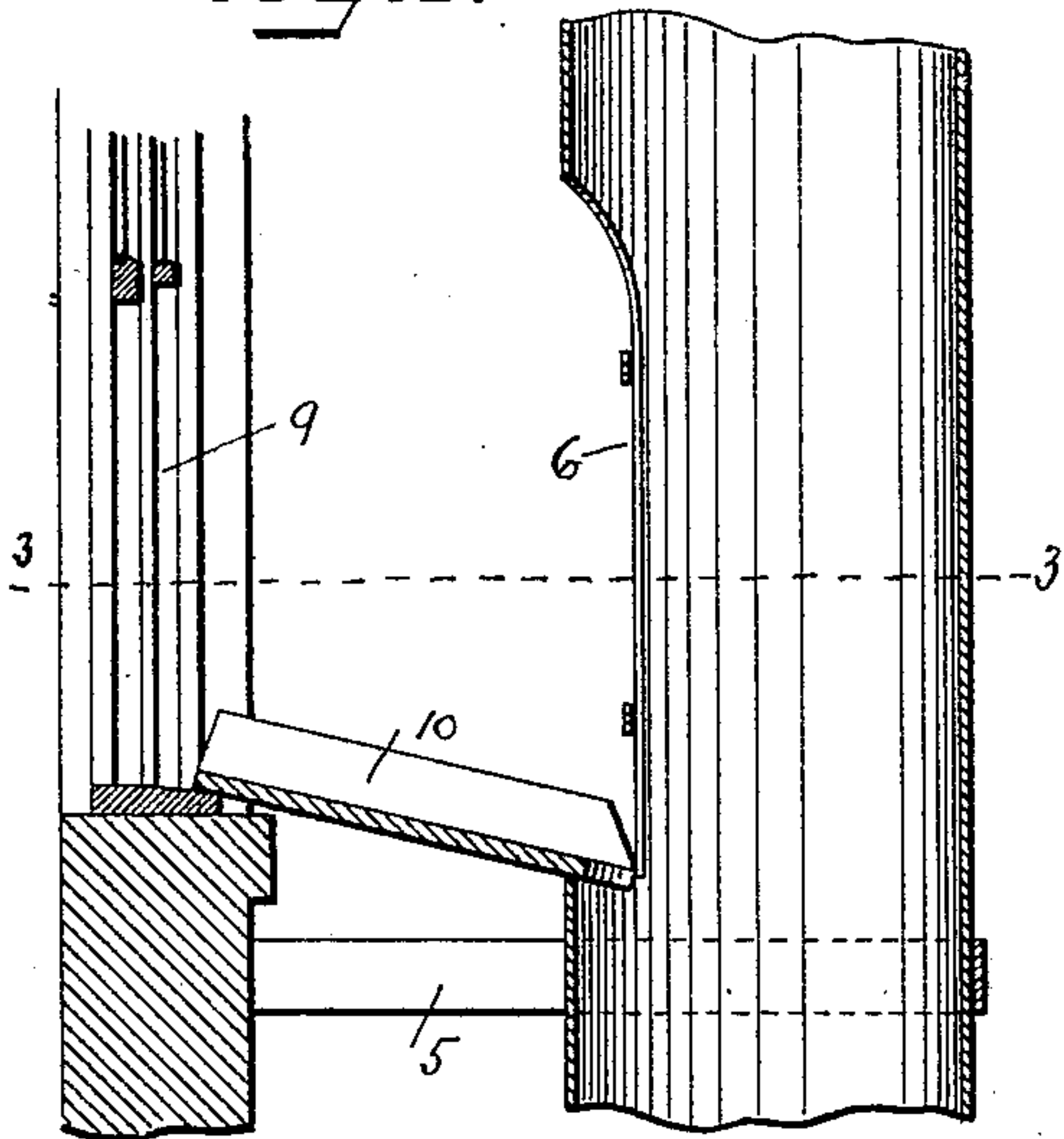
(No Model.)

C. W. ZIEGLER.  
CONVEYER.

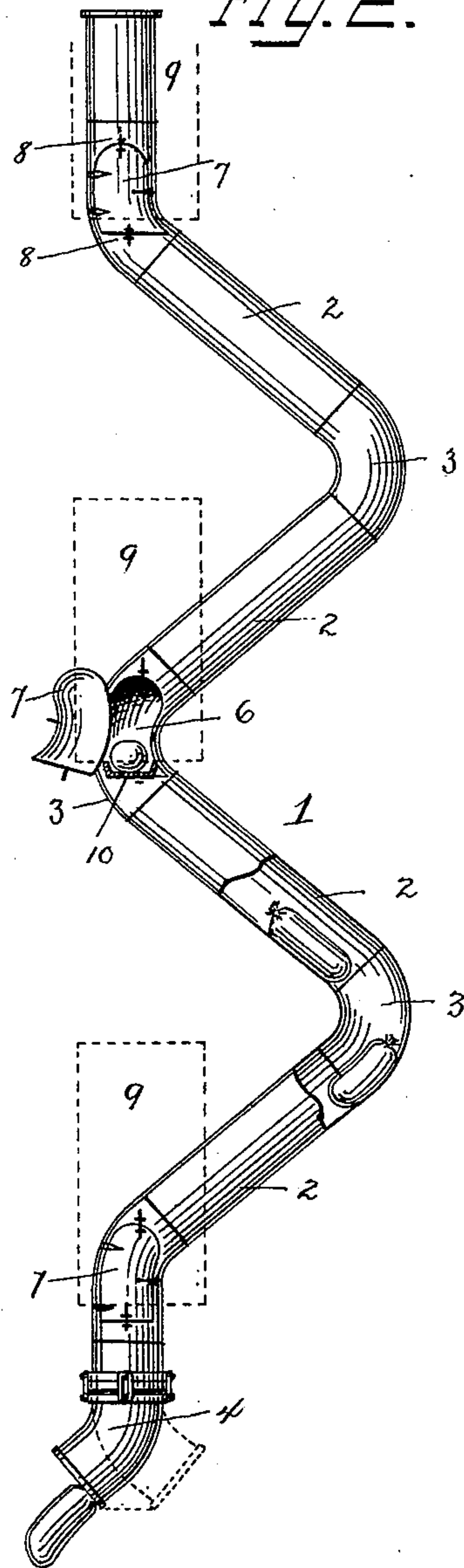
No. 582,571.

Patented May 11, 1897.

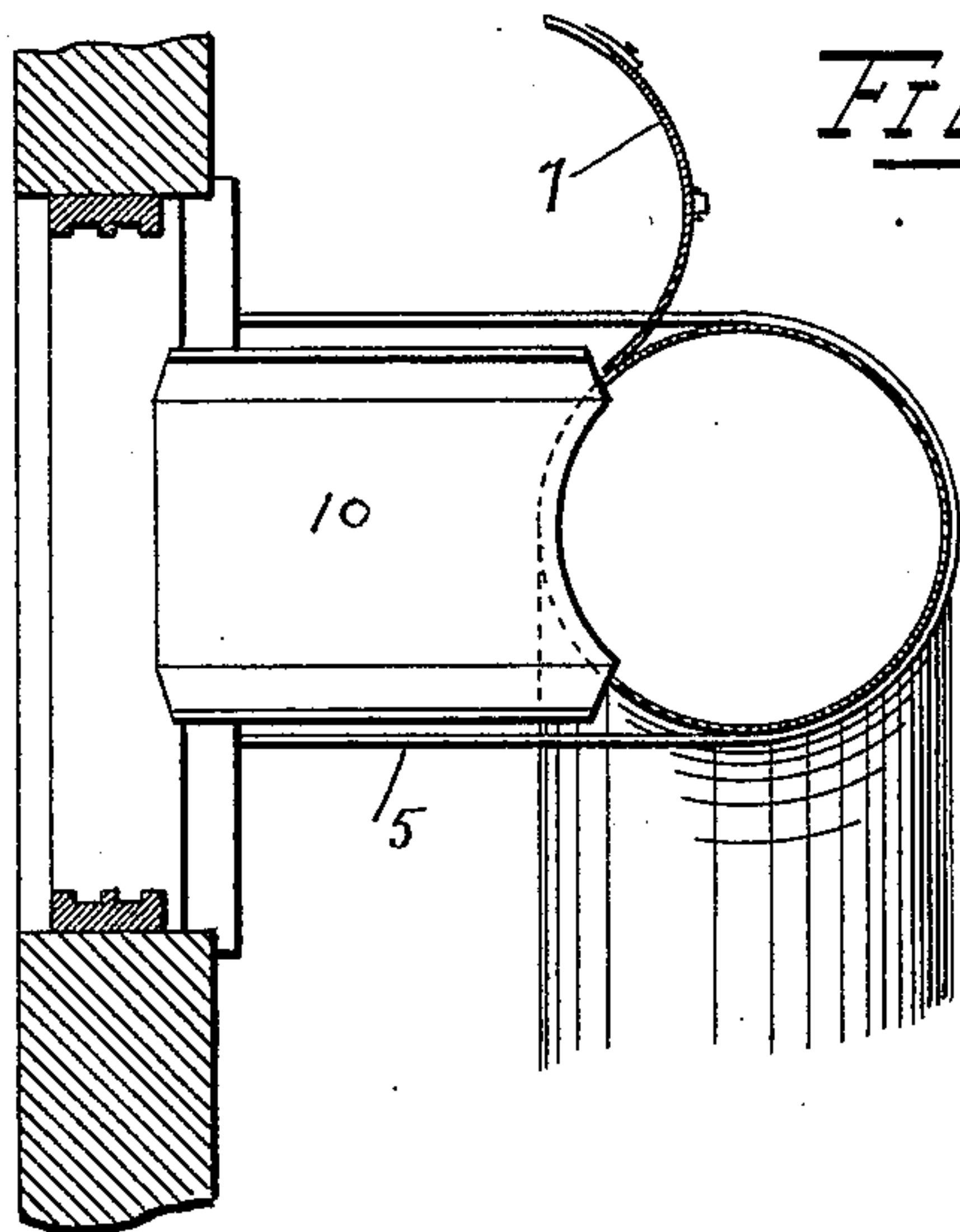
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESS:

*Henry Graber*  
*Geo. W. Rea*

INVENTOR

*Chas. W. Ziegler.*

BY

*Walter H. Cook*  
ATTORNEY



# UNITED STATES PATENT OFFICE.

CHARLES W. ZIEGLER, OF OCEAN SPRINGS, MISSISSIPPI.

## CONVEYER.

SPECIFICATION forming part of Letters Patent No. 582,571, dated May 11, 1897.

Application filed December 10, 1896. Serial No. 615,184. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES W. ZIEGLER, a citizen of the United States, residing at Ocean Springs, in the county of Jackson and State of Mississippi, have invented certain new and useful Improvements in Conveyers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the figures of reference marked thereon.

This invention relates to conveyers, and especially to that class of conveyers employed for the purpose of conveying merchandise—such as coffee packed in sacks, for example—from any of the upper stories of a building to the ground floor or one of the floors below.

My invention has for its object to provide a conveyer of the character referred to which will occupy but little space, which will be cheap and simple in construction, and in which the packages as they descend by gravity will be checked in their descent at suitable intervals and their speed retarded, thus preventing the sacks being torn and bursted and their contents injured or wasted.

To these ends my invention consists in the features and in the construction, combination, or arrangement of parts hereinafter described and afterward particularly pointed out in the claims, reference being had to the accompanying drawings, forming a part of this specification, wherein—

Figure 1 is a vertical sectional view of a portion of my improved conveyer, illustrating one of the inlet-openings arranged in juxtaposition to a window of a building. Fig. 2 is a view in elevation of my improved conveyer, illustrating it as applied to a three-storied building; and Fig. 3 is a horizontal sectional view taken on the line 3 3 of Fig. 1.

Referring to the drawings, the numeral 1 indicates a tubular chute consisting of straight cylindrical sections 2 and intermediate bent sections or elbows 3, the sections 2 being alternately inclined in opposite directions, as shown in Fig. 2.

The chute is arranged to extend from the top story of the building to the ground floor, and at its lower end is provided with a swiveled discharge-spout or section 4, that may

be rotated or turned axially to discharge the sacks or packages in any direction desired.

The chute is preferably arranged outside of the building and parallel to and a short distance from the wall, to which latter it is connected by straps or brackets 5.

The chute at suitable distances apart is provided with apertures or inlet-openings 6, which are closed by hinged doors 7, provided with locking-bolts 8 or other suitable fastenings. In the preferred construction the inlet-openings 6 are formed in the elbows 3 and the chute is so arranged that one of said elbows shall be opposite a window 9 or other suitable opening on each floor of the building and the bottoms of the inlet-openings slightly below the sills of the windows. Troughs 10 are provided, one for each window and inlet-opening, each of said troughs extending from the sill of a window to a corresponding inlet-opening in the chute, as most clearly shown in Figs. 1 and 3.

The operation of my improved conveyer is as follows: When it is desired to transfer the packages from an upper floor to the lower floor, all the doors 7 below the said upper floor are closed, the troughs 10 being first withdrawn. The packages are then placed on the trough 10, extending from the said upper floor, down which they slide into the conveyer through the opening 6. They descend the conveyer by gravity and are prevented from acquiring too great a velocity by the serpentine or zigzag shape of the conveyer, and at each elbow or bend their descent is checked or impeded, and there being one such elbow at every floor and intermediate the floors the sacks or packages descend at a uniform and regulated speed and such as will not rupture or injure them. By turning the swiveled spout 4, as indicated by full and dotted lines in Fig. 2, the packages are discharged in any desired direction.

I have described the conveyer as being especially adapted for conveying sacks of coffee and other merchandise in packages, but it will be manifest that it can be employed for conveying various different articles or materials, whether in packages or in bulk.

Having described my invention, what I claim is—

1. A conveyer, consisting of a tubular chute comprising straight sections alternately inclined in opposite directions and joined together by elbows, and a plurality of openings  
5 located at different points in said chute to communicate with different parts of a building and provided with opening and closing doors, substantially as described.

2. A tubular chute consisting of straight  
10 sections alternately inclined in opposite directions, curved elbows uniting the adjacent ends of said straight sections and having inlet-openings, and doors for closing said inlet-openings, substantially as described.

15 3. A tubular chute consisting of straight sections alternately inclined in opposite directions, curved elbows uniting the ends of the straight sections, a plurality of inlet-openings located at different points in said chute  
20 to communicate with different parts of a building, a plurality of opening and closing doors

for said openings, and a discharge-pipe swiveled on the extremity of the lowermost chute-section, substantially as described.

4. A conveyer for conveying merchandise  
25 from the upper to the lower floor of a building, consisting of a serpentine or zigzag tubular chute arranged parallel to the wall of the building and having an inlet-opening arranged opposite a window on each floor of  
30 the building, hinged doors for closing said inlet-openings, and troughs extending from the windows to said inlet-openings, substantially as described.

In testimony whereof I have hereunto sub-  
35 scribed my name in the presence of two witnesses.

CHAS. W. ZIEGLER.

Witnesses:

W. H. COOK,

THOS. T. NOLFENDEN.