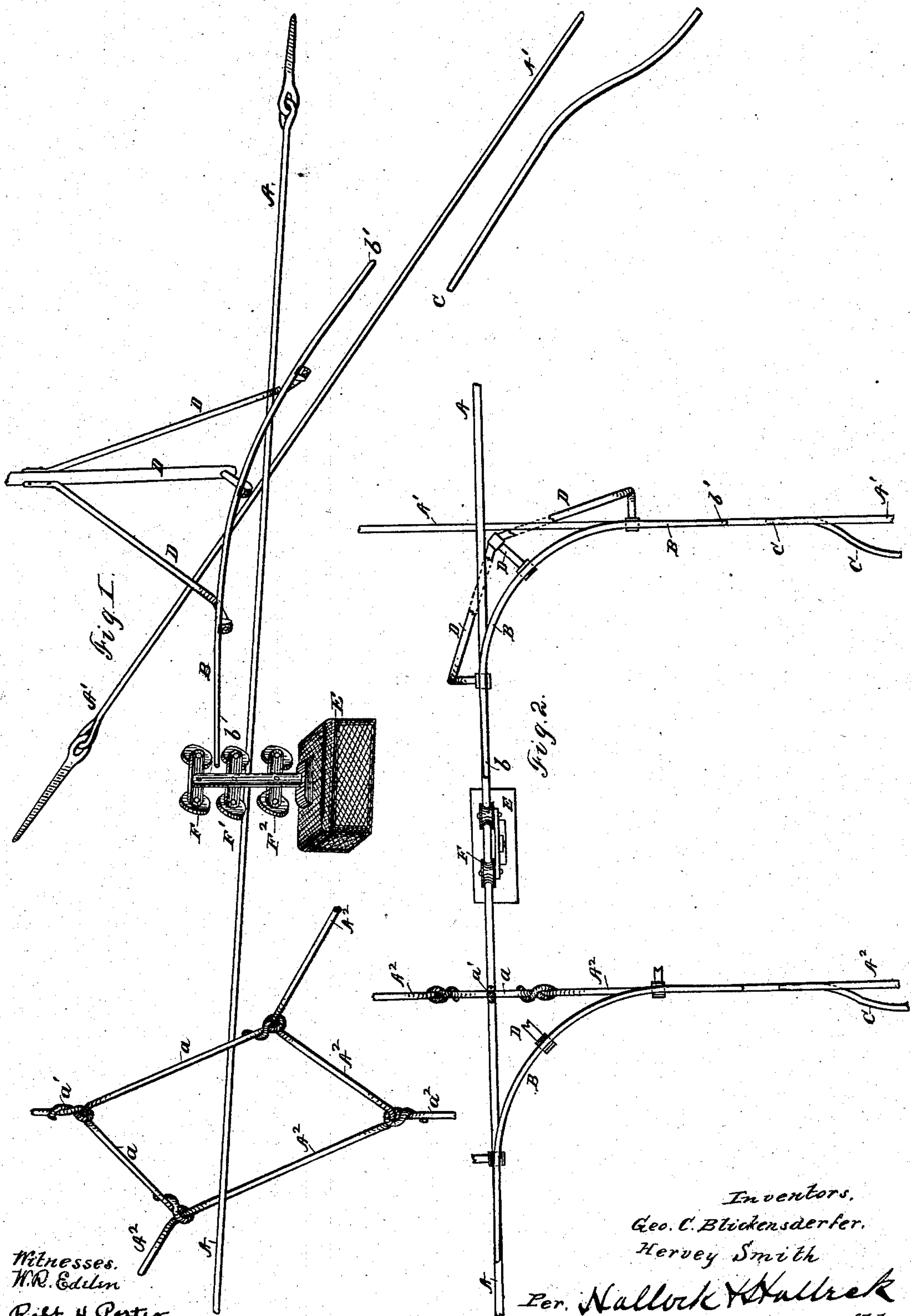


(No Model.)

H. SMITH & G. C. BLICKENS DERFER.  
CONVEYER APPARATUS.

No. 295,448.

Patented Mar. 18, 1884.



Witnesses.  
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# UNITED STATES PATENT OFFICE.

HERVEY SMITH AND GEORGE C. BLICKENSDERFER, OF ERIE, PENNSYLVANIA.

## CONVEYER APPARATUS.

SPECIFICATION forming part of Letters Patent No. 295,448, dated March 18, 1884.

Application filed February 7, 1884. (No model.)

*To all whom it may concern:*

Be it known that we, HERVEY SMITH and GEORGE C. BLICKENSDERFER, citizens of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Conveyer Apparatus; and we 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.

This invention relates to conveyers, such as conveyers of packages and cash in stores and other like purposes.

The invention consists in providing a new and improved transfer-switch track for taking cars from one track and putting them onto another, or for carrying cars around corners or angles by taking them from the track on one side of the angle and putting them onto the track on the other side of the angle.

Our invention also consists in providing a running-gear for a car which will adapt it for use upon lines of track which have the said transfer-switch in connection with a series of station-switches.

We have filed two applications for patents for conveyer apparatuses prior to this application, which show two different methods of switching cars off the main track and two different methods of putting cars on the main line at the stations. These prior applications also show two different constructions of curved tracks for carrying the cars around angles in the line, and they also show two different forms of running-gear for the cars. Such parts as are shown in this instance which form part of the inventions claimed in said former applications we hereby disclaim as forming any part of this invention, and when such parts are referred to herein it will be without describing the same specifically. In our last prior application we showed two forms of switches, one of which we called the "receiving-switch" and the other the "shipping-switch," the former being used to take cars off the track at stations and the latter to put cars on the track and ship them from the stations. The transfer-switch here shown is both a receiving and a shipping switch. At its upper end it is constructed and adjusted precisely the same as

the aforesaid receiving-switch, and at its lower end it is the same as the shipping-switch. Between its points it is curved to suit the requirements—that is to say, the position or location of the two tracks which it connects. In the accompanying drawings we show it applied to carry a car around an angle in the track, and to take a car from a main line and transfer it to a branch line.

In the said drawings, Figure 1 is a perspective view, and Fig. 2 is a plan view.

The track A runs from the cashier's desk to the end of the room, and the track A' runs across the end of the room. These two tracks may be of one continuous wire, as shown in our former application, or of two separate wires, as shown here. The line A<sup>2</sup> is a branch line leading from the main line at a point between the cashier's desk and the end of the room. This track, of course, must be a separate line. The manner of erecting such branches will constitute an essential feature of a subsequent application by us, and so will not be here described or claimed.

In Fig. 2 we show our transfer-switch applied both to the tracks A' and A<sup>2</sup>.

C C represent station-switches, which may be constructed as shown in either of our prior applications.

B is the transfer-switch. *b* is its receiving end, and *b'* its discharging or shipping end. The two tracks with which it connects are so graded as to form a continuous incline, and the switch B is supported by its hanger D, so as to set at an incline to correspond with the grade of the two lines. The receiving-point *b*, it will be understood, has a less precipitous incline than the track A, and the discharging end *b'* has a more precipitous incline than the track A', (or A<sup>2</sup>;) so that the car E, as it comes down A, is taken on its upper wheels, F, on the switch B, and when it reaches *b'* the wheels F' again come onto the track A', (or A<sup>2</sup>.) The curved part or body of the switch B has the general grade of the two main lines with which it connects. The switch B may be below or above the main lines.

If the cars and station-switches are constructed as in our first prior application—that is, with one set of wheels on the car made to trip off the track—only two sets of wheels on



a car need be used; but if the construction is as in our second prior application, and there is more than one station-switch on the tracks A' or A<sup>2</sup>, then there will have to be three sets of wheels on each car. Thus: one set, F, adjusted properly to meet the transfer-switch of the line to which the car is to be transferred and not meet the other transfer-switches along the line A; another set, F<sup>2</sup>, adjusted properly to meet the station-switch on the line A' or A<sup>2</sup> to which said car is destined and not meet any of the other station-switches; and, finally, a third set, F', for use on the main lines. Of course it will be understood that if both the transfer-switches and the station-switches are on one side of the tracks, the relative arrangement or function of the wheels as just given would be changed accordingly, and so too if the station-switches and transfer-switches had their positions transposed.

In a subsequent application to be filed by us we shall show a car having its sets of wheels lying horizontally, in place of one above the other.

The transfer-switch here shown may be used with such a car by placing it in a substantially-horizontal plane with the main track, so it will be understood that we do not wish to be limited to the position of said switch as here shown.

What we claim as new is—

1. In a conveyer apparatus substantially as shown, the combination, with the main track and a car having two or more sets of wheels,

arranged substantially as shown, of a transfer-switch placed at the angles or branches of said main track which will receive said car from one part of the main line upon a set of wheels not used on said line, convey it by a proper curve to the other part of said main line, and place it thereon upon a set of wheels not used on said switch, substantially as shown.

2. In a conveyer apparatus substantially as shown, the combination, with a main track having branches or intersecting lines and station-switches along said branches, of transfer-switches at the intersecting points which have their points lying removed from and in vertical planes with said lines, as shown, and a car having a separate set of wheels for the main tracks, the transfer-switches, and the station-switches, substantially as shown and described.

3. In a conveyer apparatus substantially as shown, the combination, with the main track branched or angled, as shown, of a transfer-switch, B, having its points *b* and *b'* graded with relation to the grade of said main track, in a manner substantially as shown, and for the purposes mentioned.

In testimony whereof we affix our signatures in presence of two witnesses.

HERVEY SMITH.

GEO. C. BLICKENSDECKER.

Witnesses:

JNO. K. HALLOCK,

ROBERT H. PORTER.