No. 628,776. Patented July 11, 1899.

J. M. DODGE.

SLIDE BLOCK FOR CONVEYERS.

(Application filed Apr. 8, 1898.)

(No Model.)

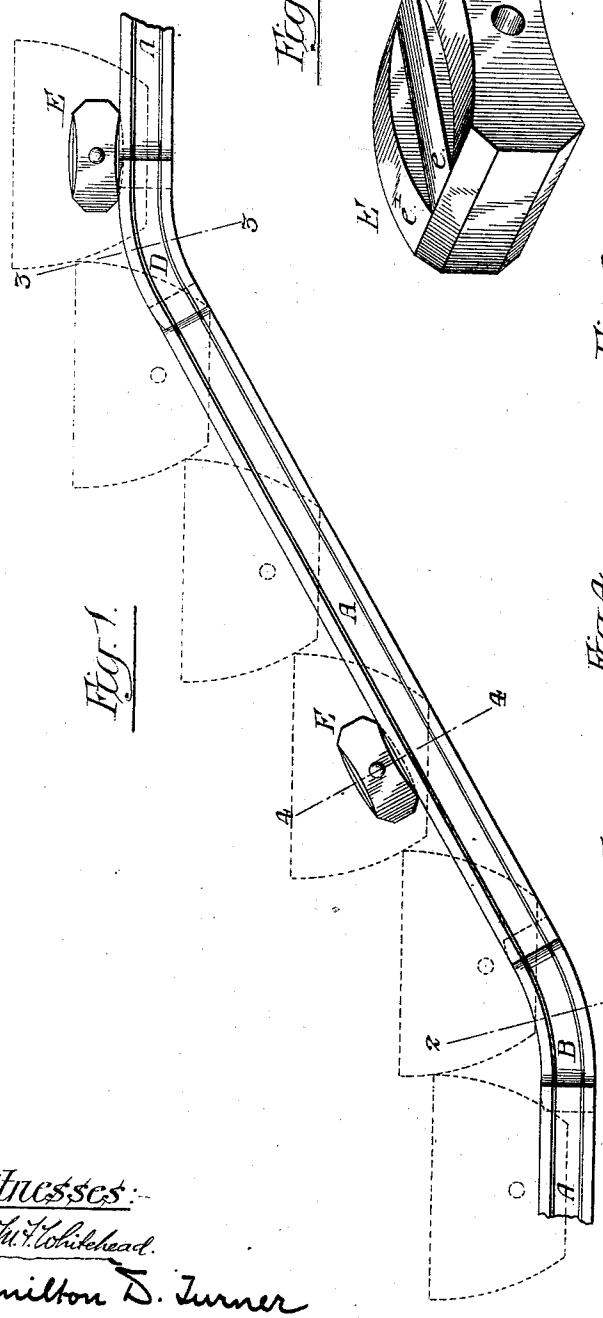


Fig. 1.

Fig. 3.

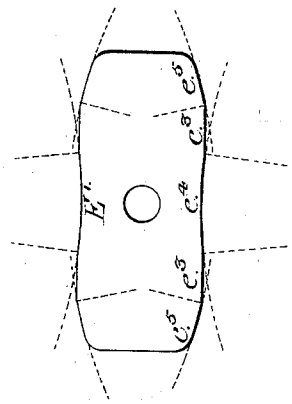


Fig. 6.

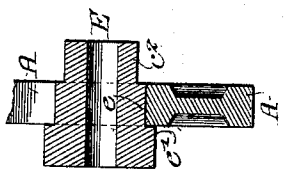


Fig. 4.

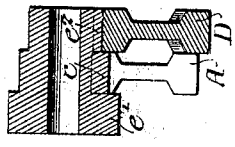


Fig. 5.

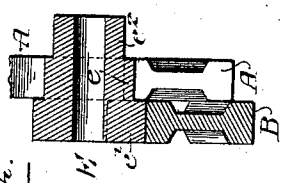


Fig. 2.

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SLIDE-BLOCK FOR CONVEYERS.

SPECIFICATION forming part of Letters Patent No. 628,776, dated July 11, 1899.

Application filed April 8, 1898. Serial No. 676,950. (No model.)

To all whom it may concern:

Be it known that I, JAMES M. DODGE, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Slide-Blocks for Conveyers, of which the following is a specification.

The object of my invention is to prevent the rapid wearing of the slide-blocks of conveyers. This object I attain in the following manner, reference being had to the accompanying drawings, in which—

Figure 1 is a side view showing the track, two slide-blocks in full lines, and traveling step-sections in dotted lines. Fig. 2 is a section on the line 2 2, Fig. 1. Fig. 3 is a section on the line 3 3, Fig. 1. Fig. 4 is a section on the line 4 4, Fig. 1. Fig. 5 is a perspective view of the slide-block shown in Fig. 1. Fig. 6 is a view of a modification of the slide-block.

The view shown in Fig. 1 of the drawings represents in full lines the guide-rails of a moving stairway, and the blocks resting upon the rails are attached to the step-sections, which are shown by dotted lines. These step-sections are moved forward in any suitable manner, so that a passenger stepping onto one of the sections will be conveyed up or down, according to the direction of travel of the stairway. It will be noticed that the track has straight portions connected by curved portions, one curve being concaved and the other convex.

In using an ordinary slide-block one surface travels over the entire track. On the flat surfaces it has a full bearing, but on the concaved surfaces the bearing is at each end, whereas on the convex surfaces the bearing is only at the center. This shifting of the bearing causes the blocks to wear very rapidly; and the object of my invention is to overcome this by providing an independent surface adapted to the straight portions of the track, a convex surface for the concaved portion of the track, and a concaved surface for the convex portion of the track, so that the block will have a full bearing as it travels over the track.

Referring to the drawings, in the present instance A are rails forming the straight portions of the track.

B is a rail, forming the concaved portion of the track, set to one side of the rails A, as shown in Fig. 2.

D is the rail forming the convex portion of the track on the opposite side of the rails A.

The blocks E are made as shown in Fig. 5 of the drawings, having three bearing-surfaces e e' e^2 on each side. The surface e is flat and is adapted to the rails A. The surface e' is convexed and is adapted to the concaved rail B, while the surface e^2 is concaved and adapted to the convex rail D, as clearly shown in Figs. 2, 3, and 4.

It will be seen that as the block E travels over the track it will be carried first by the straight rail A, then by the concaved rail B, then by another straight rail A to the convex rail, and at the terminal of the incline it will be carried by the convexed rail D, and then by a straight rail A.

In Fig. 6 I have shown a modification of the block. Instead of the surfaces being side by side, as indicated in Fig. 5, they are arranged longitudinally. The block E' has straight surfaces e^3 at each side of the center, a concaved surface e^4 at the center, and convex surfaces e^5 beyond the straight surfaces e^3. In this case the track may consist simply of a single rail bent to form, instead of being made up of three rails side by side.

While I have illustrated my invention in connection with traveling stairways, it will be understood that it can be used for conveyers of any form that slide upon rails or guides.

I claim as my invention—

1. The combination of a track having one or more curves therein, with a slide-block having independent surfaces some of which are curved, one adapted to travel on the straight portion of the track and the others on the curved portion, substantially as described.

2. The combination of the track having a straight surface, a convex surface and a concaved surface, a bearing-block having three bearing-surfaces, one adapted to the straight portion of the track, one adapted to the concaved portion and the other adapted to the convexed portion, substantially as described.

3. The combination of a track made up of two or more rails side by side, with a bearing-

block having two or more surfaces some of which are curved, one surface adapted to one rail of the track, the other surfaces adapted to the other rail of the track, substantially as described.

4. The combination of a track having straight rails, convex rails and concaved rails on different lines, a bearing-block having three surfaces, one surface being flat, one concaved and the other convex, each surface being adapted to a rail, substantially as described.

5. A slide-block for conveyers having three bearing-surfaces on each side, one bearing-surface being concaved, one convex and the other straight, substantially as described.

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

JAMES M. DODGE.

Witnesses:
WILL. A. BARR,
JOS. H. KLEIN.