No. 710,934. Patented Oct. 14, 1902.

W. H. ASTON.

DRIVING CHAIN FOR CONTINUOUS ELEVATORS.

(Application filed Mar. 27, 1902.)

(No Model.)

Fig. 1.

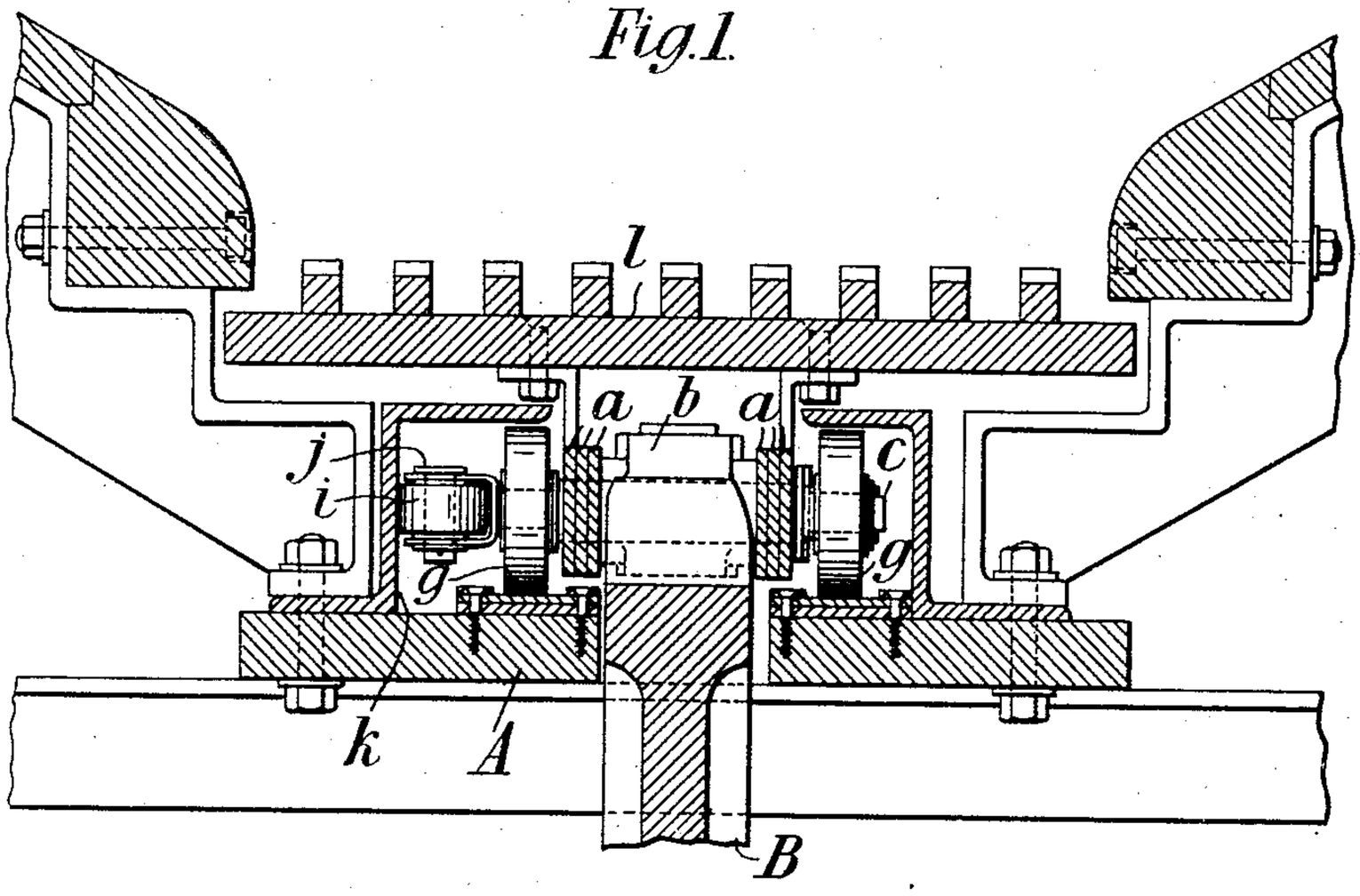


Fig. 2.

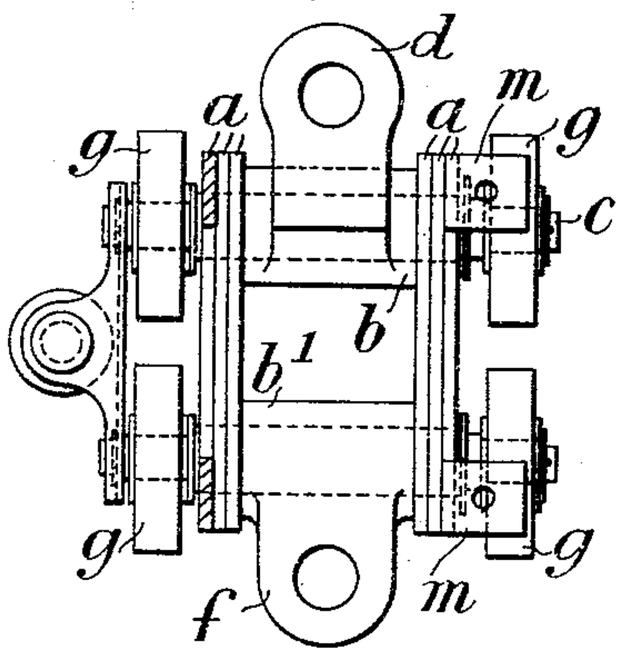
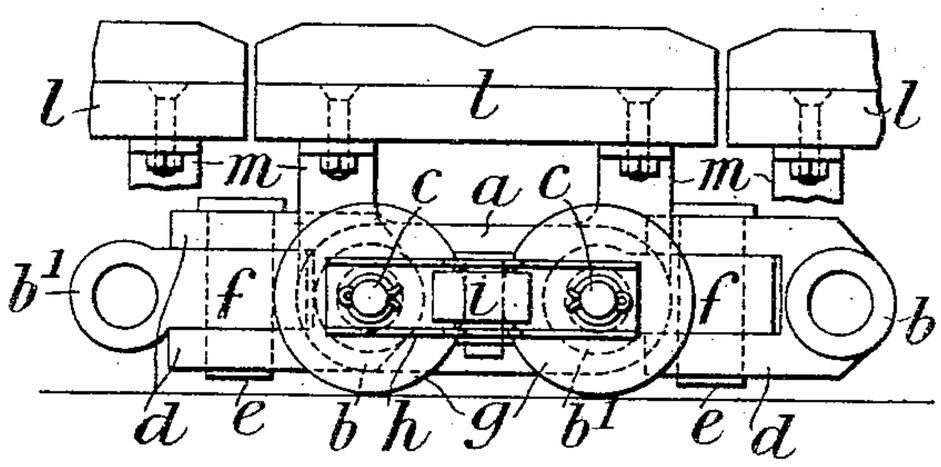


Fig. 3.



Witnesses.
John E. Bousfield.
C. G. Redfern

Inventor.
W. H. Aston

UNITED STATES PATENT OFFICE.

WILLIAM HENRY ASTON, OF LONDON, ENGLAND.

DRIVING-CHAIN FOR CONTINUOUS ELEVATORS.

SPECIFICATION forming part of Letters Patent No. 710,934, dated October 14, 1902.

Application filed March 27, 1902. Serial No. 100,282. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HENRY ASTON, a subject of the King of Great Britain, residing at 46 Eagle Wharf road, London, England, have invented new and useful Improvements in Driving-Chains for Continuous Elevators, of which the following is a specification.

This invention relates to improvements in driving-chains for continuous elevators, particularly of the kind designed for conveying passengers upward and downward in a spiral path.

According to the invention I construct a chain which is capable of moving around horizontal and vertical pivots and the links of which themselves carry the platform of the conveyer which the chain is designed to drive and also the supporting-rollers for the said platform.

To enable the invention to be fully understood, I will describe it by reference to the accompanying drawings, in which—

Figure 1 is a transverse section illustrating an elevator-track upon which the movable platform is driven and supported by a chain made according to the invention. Fig. 2 is a sectional plan view of a portion of the chain, and Fig. 3 is a side view of the improved chain and platform.

A represents the track, which may be of any suitable known construction, and B is the chain-wheel for driving the chain.

Each link of the improved chain comprises a number of side plates *a a a*. In the drawings three such plates are shown as forming each side plate, the said side plates being maintained at the requisite distance apart by the distance-pieces *b* and *b'*. Each distance-piece is bored longitudinally to receive a pin *c*, which passes therethrough and also through holes formed in the side plates, as clearly shown in the drawings. The distance-piece *b* is formed with a fork projection *d*, which is provided with holes receiving a vertical hinge-pin *e*, by means of which it is pivoted to a lug projection *f* upon the distance-piece *b'* of the next link.

The pins or spindles by means of which the side plates of each link are carried project on either side of the said side links, and the projecting portions have mounted upon them the rollers *g g* designed to support the chain and platform upon the track. Furthermore, upon one side the two spindles *c c* are connected by a plate or bracket *h*, which carries a roller *i*, loosely mounted upon a vertical pin or pivot *f*, this roller being designed to bear against the inner side *k* of the track, as clearly shown in Fig. 1, thus taking up the pressure which is caused by the movement of the platform in a spiral path.

The slats *l l* of the movable platform are supported upon extensions *m m* of the outer strips or sections of the side plates *a a* of each link, as clearly shown, so that, as above mentioned, my improved chain is a simple and cheap means for supporting and driving the endless platforms of conveyers.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. A chain for supporting and driving the endless platforms of conveyers comprising links having vertical and horizontal pivots, the side bars of the said links having extensions carrying the platform and the horizontal pivots of the said links carrying supporting-rollers, substantially as described.

2. A chain for supporting and driving the endless platforms of conveyers, comprising links, having vertical and horizontal pivots, the side bars of said links having extensions forming supports for the platform, the horizontal pivots of said links carrying supporting-rollers, said links being provided on one side with lateral rollers mounted upon vertical spindles, substantially as described.

3. A chain for supporting and driving the endless platforms of conveyers, comprising links, having vertical and horizontal pivots, the side bars of said links having extensions forming supports for the platform, the horizontal pivots of said links carrying supporting-rollers, the horizontal pivots of a link being connected on one side by a bracket, and a lateral roller carried by said bracket and working on a vertical pivot, substantially as described.

4. A chain-link for a chain for driving and supporting a conveyer-platform, comprising

among its members, side plates provided with platform-supporting extensions, spacing-blocks located between said side plates, horizontal pivots passing through said side plates and spacing-blocks, and provided with supporting-rollers, said spacing-blocks being provided with means for receiving vertical pivots for connecting them with the adjacent links of the chain, substantially as described.

WILLIAM HENRY ASTON.

Witnesses:
JOHN E. BOUSFIELD,
C. G. REDFERN.