W. BARTINE.

TRAMWAY CONVEYER.

APPLICATION FILED OCT. 23, 1918.

1,310,854.

Patented July 22, 1919.

2 SHEETS—SHEET 1.

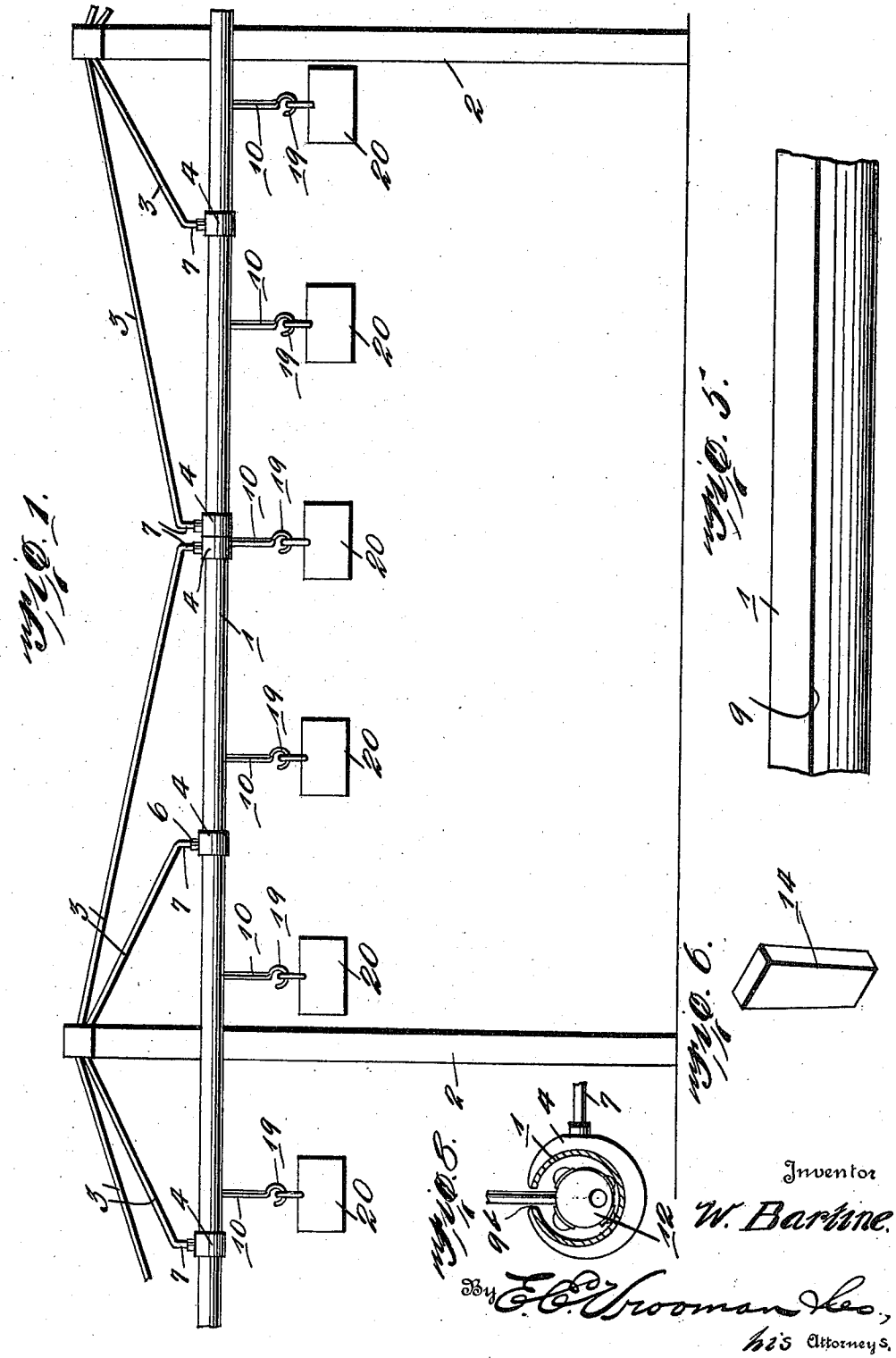


Fig. 1.

Fig. 5.

Fig. 6.

Fig. 3.

Fig. 4.

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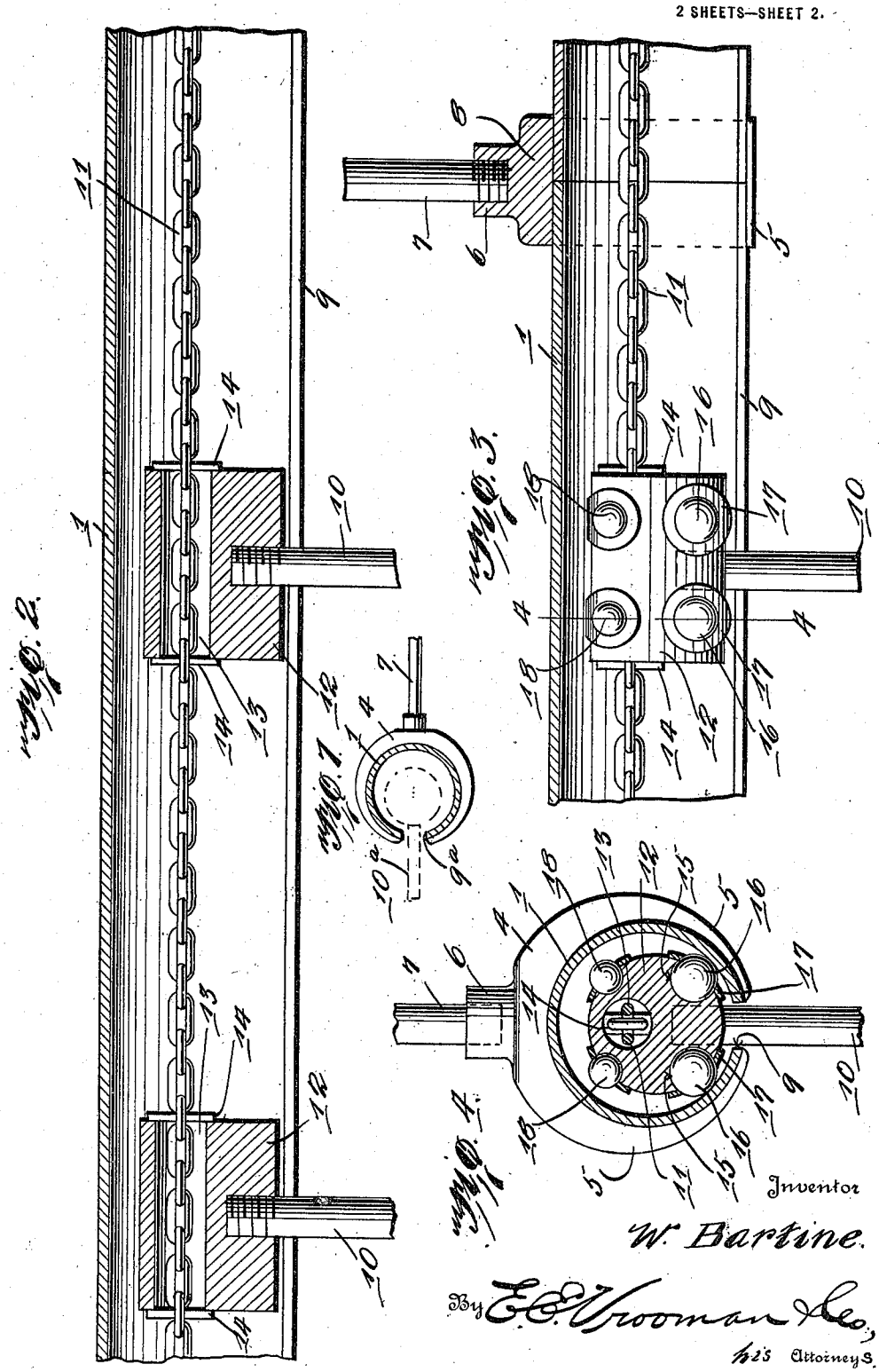
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UNITED STATES PATENT OFFICE.

WESLEY BARTINE, OF PHILADELPHIA, PENNSYLVANIA.

TRAMWAY-CONVEYER.

1,310,854. Specification of Letters Patent. Patented July 22, 1919.

Application filed October 23, 1918. Serial No. 259,305.

To all whom it may concern:

Be it known that I, WESLEY BARTINE, a citizen of the United States of America, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Tramway-Conveyers, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to a tramway conveyer, and has for its object the production of a simple and efficient tramway conveyer, which is so arranged to permit the carrying of a plurality of articles at different points along the line of the tramway conveyer.

Another object of this invention is the production of a simple and efficient article supporting bearings for use in connection with the tramway conveyer.

A still further object of this invention is the production of simple and efficient bracing means in the tramway conveyer tracks.

With these and other objects in view this invention consists of certain novel combinations and arrangements of parts as will be hereinafter fully described and claimed.

In the drawings:—

Figure 1 is a side elevation of a part of the conveyer.

Fig. 2 is a longitudinal section through the conveyer track, showing the bearing supports mounted therein.

Fig. 3 is a longitudinal section through the conveyer track showing one of the bearing supports in a side elevation.

Fig. 4 is a section taken on the line 4—4 of Fig. 3.

Fig. 5 is a bottom plan view of the conveyer track.

Fig. 6 is a detail perspective of one of the binding links for anchoring the conveyer bearings at a set point, upon the conveyer chains.

Fig. 7 is a transverse section through the track showing the hanger slot formed in the side of the track.

Fig. 8 is a transverse section through a modified form of the track, showing the hanger slot extending through the top of the track.

By referring to the accompanying drawings, it will be seen that 1 designates the tramway-conveyer track, which track is suspended upon a plurality of supporting posts of suitable strength, and these supporting posts 2 support diverging downwardly inclined bracing rods 3, which rods 3 radiate from the posts 2, and support the conveyer track 1, by means of the track gripping braces 4.

These track gripping braces 4 comprise body portions which are provided with inwardly curved gripping or supporting fingers 5, which fingers snugly fit around the track 1, and conform to the contour of the outer faces of the track. The body portions 4 are provided with socket portions 6, upon the top thereof, which socket portions receive the lower ends 7 of the hangers 3.

The track 1 comprises a substantially cylindrical body made up of a plurality of sections and the abutting faces of the sections are surrounded by suitable connectors 8, which connectors are formed similar to the gripping braces 4, above described. These bracing members or connecting members 8 are adapted to constitute a socket for the abutting ends of the sections of the track 1. The track 1 is provided with an elongated slot 9, upon the bottom thereof, for the purpose of permitting the article supporting hooks 10, to extend therefrom.

The tramway conveyer chain 11 extends through the track 1, and this chain 11 carries a plurality of bearing heads 12, which bearing heads are provided with apertures 13, through which the chain 11 passes. Anchoring cleats 14 pass through certain links of the chain 11, and abut against the ends of the bearing heads 12, and hold these bearing heads against longitudinal movement, with respect to the chain 11. In this way the bearing heads 12 will be firmly held upon the chain 11. These bearing heads 12 are provided with a plurality of bearing sockets 15 upon the outer face thereof, within which bearing sockets 15, fit balls 16. The balls 16 are firmly held within the sockets 15 by means of the retaining rings 17, secured to the outer face of the bearing heads 12. These ball-bearings 16 are adapted to engage the inner face of the track 1, and permit the bearing heads to readily move longitudinally through the track 1. By carefully considering Fig. 4, it will be seen that the lower ball bearings 16 are of larger size than the upper ball-bearings 18, which upper ball-bearings are mounted upon the bearing heads 12 in a manner similar to that illustrated and described, with respect to the ball-bearings 16. It should be understood

that should the top of the bearing heads 12, come into engagement with the track, these ball-bearings 18 will eliminate any unnecessary friction, which would be likely to retard the motion of the tramway conveyer chain 11. As illustrated in Fig. 1, the article supporting hooks 10, are provided with article engaging hooks 19, at their lower ends, for supporting suitable buckets or other articles, which may be attached thereto.

It, of course, should be understood that the tramway conveyer chain may be produced in any suitable or efficient manner, without departing from the spirit of the invention, and it should be also understood that suitable detail mechanical changes may be made in connection with the chain, without departing from the spirit of the invention, so long as these changes fall within the scope of the appended claims.

By referring to Fig. 7 of the drawings, it will be seen that the hanger track 1 is provided with a slot 9^A formed in the side thereof, for the purpose of permitting article supporting hooks 10^A to extend out from the sides of the track 1 in place of extending out through the bottom, as shown in the perforated embodiment shown in Fig. 4.

In Fig. 8 it will be seen that the hanger track 1 is provided with a longitudinally extending slot 9^B extending through the top thereof, for permitting the article supporting hook to extend through the top of the track, should it be so desired. It of course, should be understood that the longitudinally extending slot may be projected or extended through any portion of the top, that is to say, either through the bottom side or top thereof, without departing from the spirit of the invention.

What is claimed is:—

1. A tramway conveyer of the class described, comprising a track, bearing heads mounted within said track, a tramway conveyer chain passing through said track, said bearing heads mounted upon said chain, said heads provided with sockets formed therein, ball-bearings mounted within said sockets, said ball-bearings traveling upon the inner face of said track, and article supporting hangers connected to said bearing heads.

2. A tramway conveyer of the class described, comprising a track, said track provided with a longitudinally extending slot along the bottom thereof, supporting heads placed within said track, a chain connecting said article supporting heads, said article supporting heads provided with a plurality of support bearings upon the lower face thereof, and a plurality of bearings upon the top face thereof, for relieving friction upon said head, should the same come into contact with the top of said track, and means for supporting said track.

3. In a tramway conveyer of the class described, the combination with a track, an endless conveying means traveling through said track, a head engaging said conveying means, means at each end of the head and carried by the conveying means and preventing independent movement of the head upon said conveying means, and means attached to the head for supporting a load.

4. In a conveyer of the class described, the combination of a track, a head within said track, a head conveying chain extending through said head, cleats on said chain at opposite portions of said head and preventing longitudinal movement of the head on the conveying means, and supporting means attached to said head.

5. In a conveyer of the class described, the combination of a track, of a head in said track, said head provided with an opening therethrough, a conveying member extending through the opening of the head, cleats on said conveying member at opposite ends of the opening and normally closing said opening, preventing independent movement of the head on the conveying member, and means attached to the head for supporting a load.

In testimony whereof I hereunto affix my signature.

WESLEY BARTINE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."