No. 847,849. PATENTED MAR. 19, 1907.

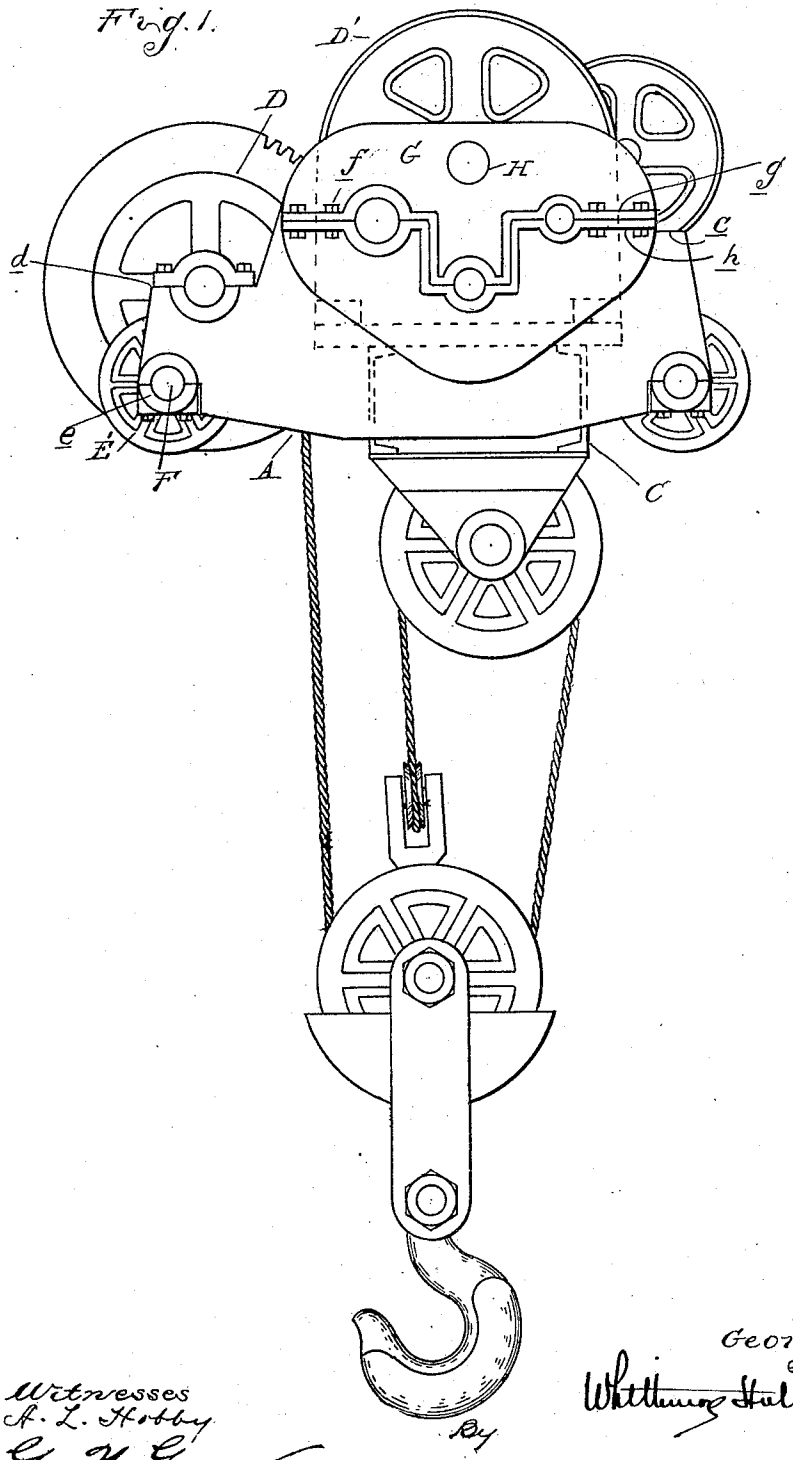
G. A. TRUE.

TROLLEY FOR TRAVELING CRANES.

APPLICATION FILED JUNE 30, 1906.

3 SHEETS—SHEET 1.

Fig. 1.



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3 SHEETS—SHEET 2.

Fig. 3.

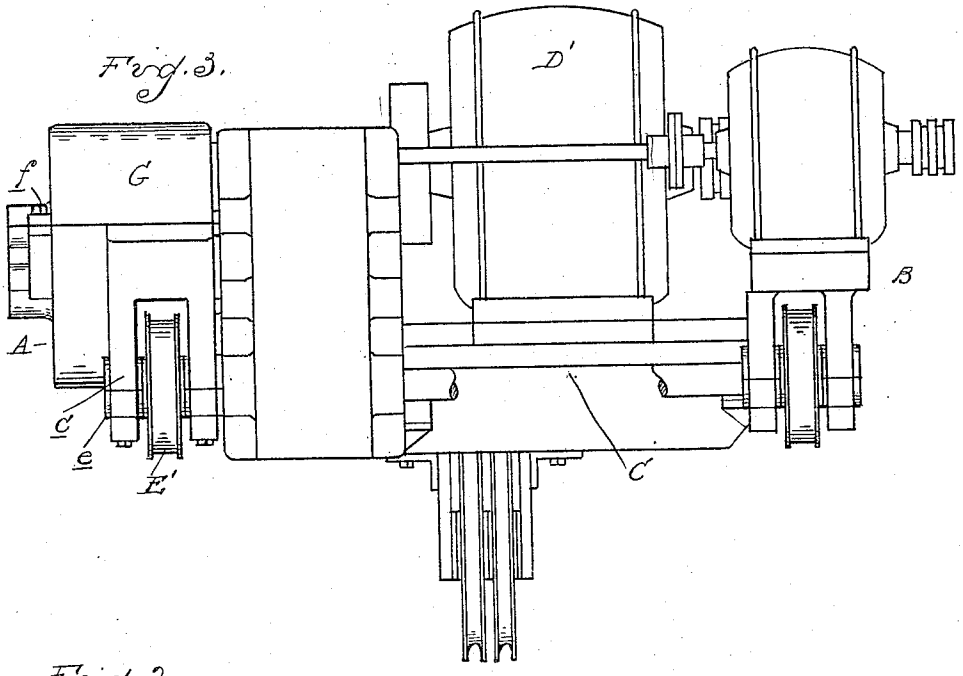
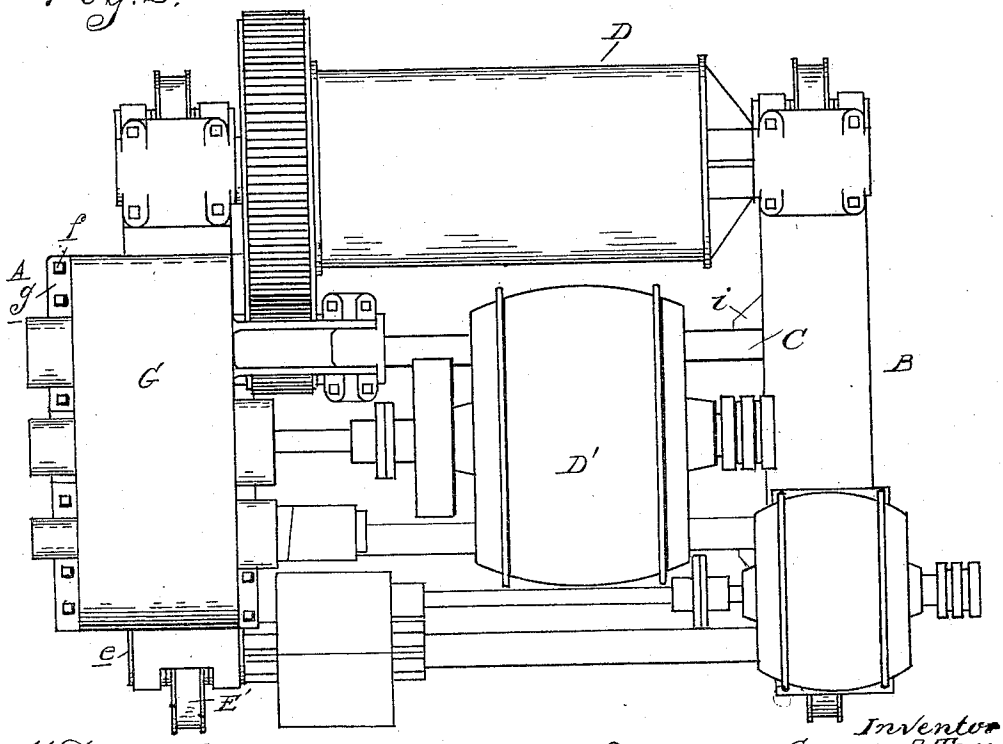


Fig. 2.



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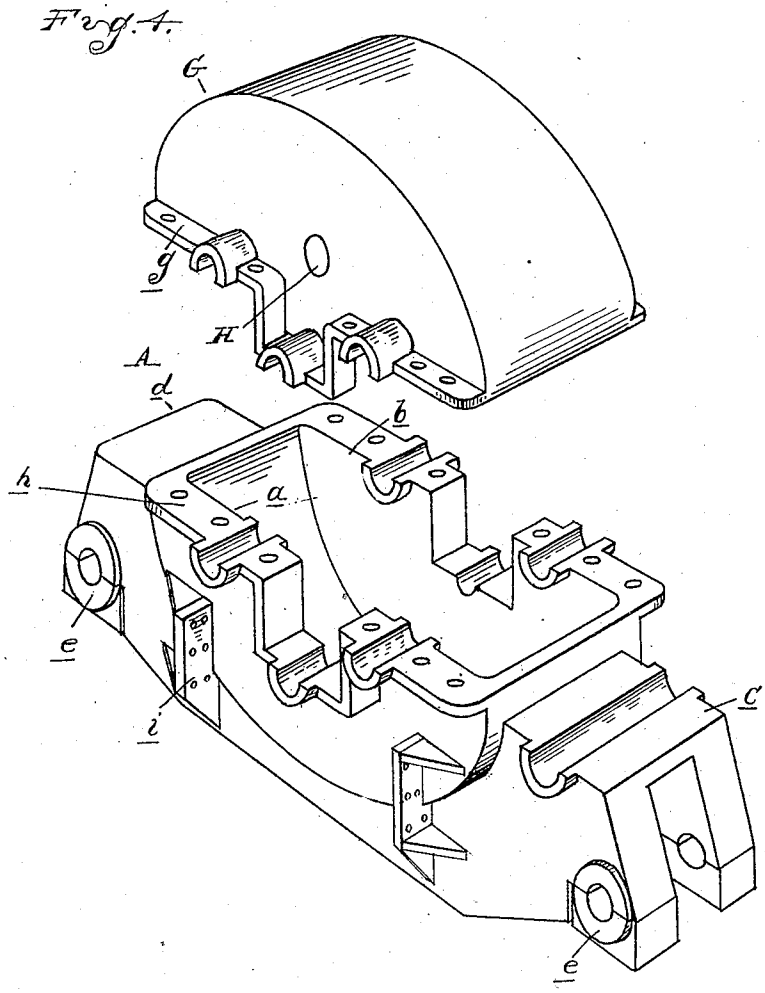
3 SHEETS—SHEET 3.

Fig. 4.



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UNITED STATES PATENT OFFICE.

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TROLLEY FOR TRAVELING CRANES.

No. 847,849. Specification of Letters Patent. Patented March 19, 1907.

Application filed June 30, 1906. Serial No. 324,266.

To all whom it may concern:

Be it known that I, GEORGE A. TRUE, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Trolleys for Traveling Cranes, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to traveling cranes, and particularly to the construction of trolley or traveling carriage which supports the hoist.

It is the object of the invention to obtain a construction which may readily be adapted to the use of motors of different size and power; further, to provide a simple means for housing the gearing, and, further, to obtain a simple and inexpensive construction.

With these objects in view the invention consists in certain features of construction, as hereinafter set forth.

In the drawings, Figure 1 is a side elevation of the trolley. Fig. 2 is a plan. Fig. 3 is an end elevation, and Fig. 4 is a perspective view, of one of the side frames detached.

In general construction the trolley comprises a frame consisting of cast side members A and B, each of which is provided with a pair of track-wheels and connecting spacers or cross-girders C. In this frame is journaled the winding-drum D, extending across between the side members, and upon the cross-girders C is mounted an electric motor D', which operates the drum through the medium of a suitable gear-train. It is usual to arrange this gearing outside of the side member of the frame, the shafts being journaled in this member and the gears overhanging. In the present construction the gearing is housed and bearings are provided for each gear-shaft at opposite ends on opposite sides of the gear. This result is accomplished by making the side member A hollow, as illustrated in Fig. 4, in which *a* and *b* are separated side walls in the central portion of member A, which merge into extensions *c* and *d* at opposite ends of said member. The extensions *d* and *c* are channeled on the under side to receive the track-wheels E', these being mounted on shaft F, journaled in bearings *e* in the opposite side walls of the channel. At the top of the member A are formed a number of half-bearings for the several shafts to be journaled, and the contour of the upper face of the member is such as to pass through the center of each of the various bearings. The complementary portions of the bearings are formed in a cap member G, and this member is secured to the member A by bolts *f* engaging abutting flanges *g* and *h*.

It will be observed that the members A and G, together constitute a complete housing for the gear-train; also, that all of the shafts are removable when the cap G is detached, and that bearings are provided for the shafts on opposite sides of each gear.

The side member A is secured to the cross-girders C, preferably by providing integral lugs *i* on the member A, to which the girders are bolted. This permits of varying the height of the girders as may be necessary to accommodate electric motors of different sizes. The motor is, as has already been stated, mounted directly upon these girders, and the end of the motor-shaft is journaled in bearings, preferably formed completely within the cap member G, as indicated at H. These bearings are formed in bosses integral with the cap member, which are bored to receive the shaft, and the point of boring may be varied for different constructions of motor.

If it is desired at any time to replace the motor on the trolley by a larger or smaller one, it is only necessary to change the height of the cross-girders by changing the connections with the lugs *i*.

What I claim as my invention is—

1. A traveling trolley comprising separated side members and a cross connection thereof, one of said side members being hollow and constituting a housing for a gear-train.

2. A traveling trolley comprising separated side members and connecting cross-girders, track-wheels for supporting the side members and a motor mounted on said cross-girders, one of said side members being hollow and forming a housing for a gear-train.

3. A traveling trolley comprising separated side members, each supported by track-wheels, the motor being located between said side members, a cross connection upon which said motor is mounted, and means of attachment between said cross con-

nection and said side members whereby the height of the former may be varied.

4. A traveling trolley comprising separated side members and a cross connection thereof, said side members being formed with a hollow central portion forming a portion of a gear-housing and a removable cap forming a complementary portion of said housing.

5. A traveling trolley comprising side members and a cross connection, one of said side members being an inverted-U-shaped bar having track-wheels in the channel of the U and the central portion of said member being recessed on its upper side to form a gear-housing.

6. A traveling trolley comprising separated side members, track-wheels supporting the same, a motor and a cross connection between said side members forming a support of variable height for said motor.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE A. TRUE.

Witnesses:

EDWARD S. REID,

HENRY W. STANDART.