

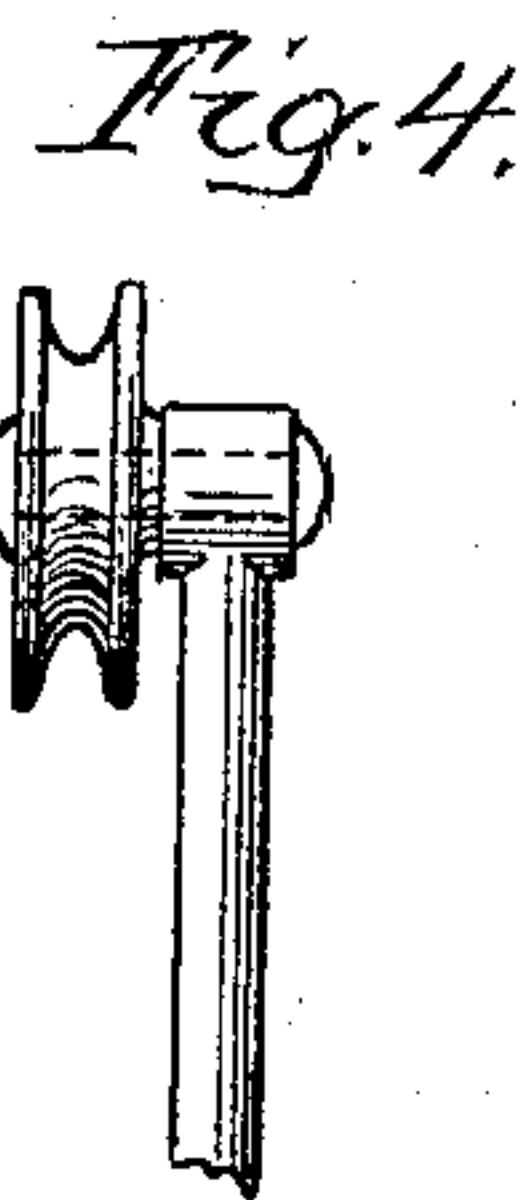
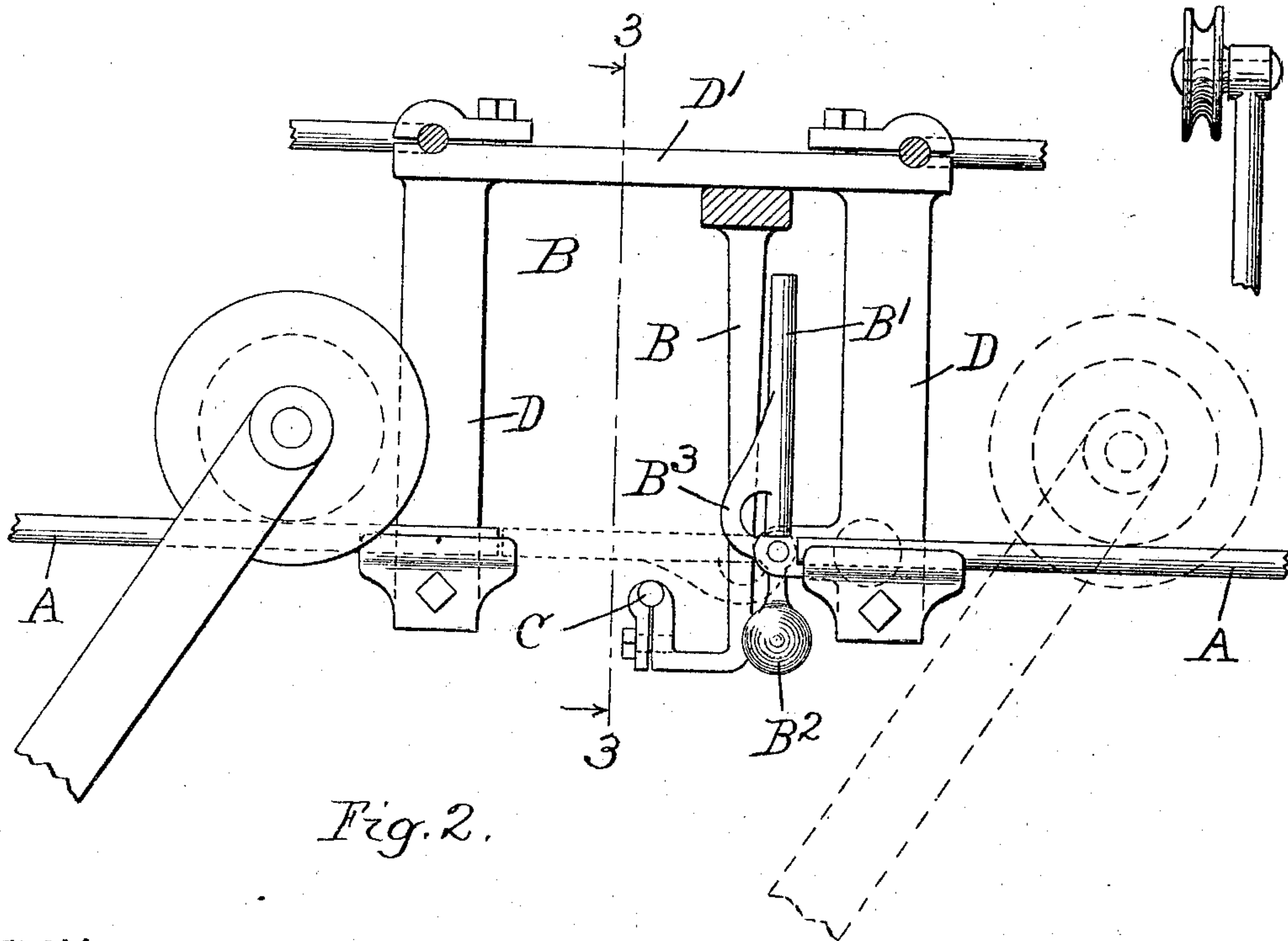
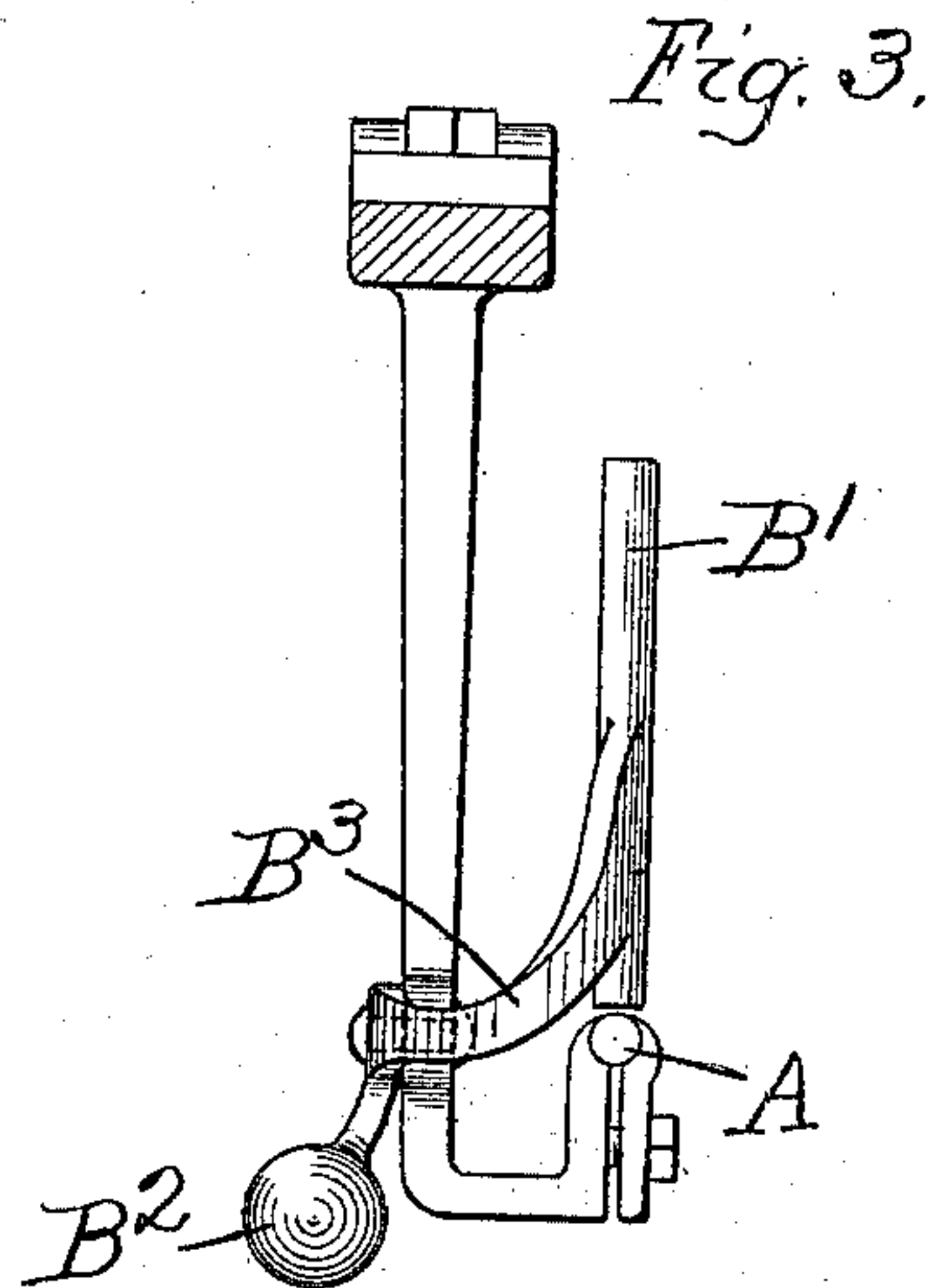
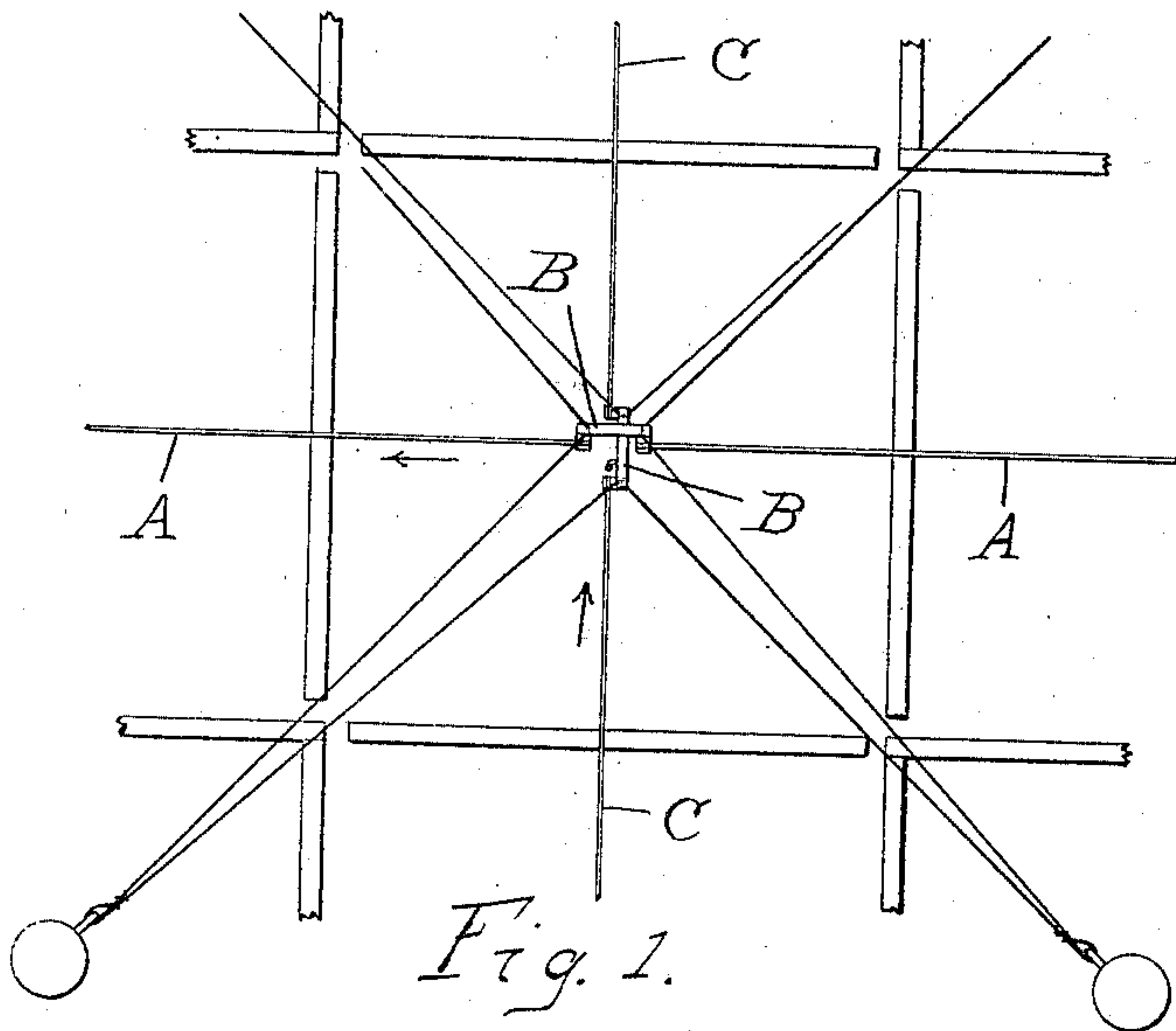
No. 607,918.

Patented July 26, 1898.

C. E. DAVIS.
CROSSOVER FOR TROLLEY SYSTEMS.

(Application filed Nov. 21, 1896.)

(No Model.)



Witnesses,
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UNITED STATES PATENT OFFICE.

CHARLES E. DAVIS, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE LINK-BELT MACHINERY COMPANY, OF SAME PLACE.

CROSSOVER FOR TROLLEY SYSTEMS.

SPECIFICATION forming part of Letters Patent No. 607,918, dated July 26, 1898.

Application filed November 21, 1896. Serial No. 612,958. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. DAVIS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain Improvements in Crossovers for Trolley Systems, of which the following is a specification.

My invention relates to crossovers for trolley systems, and has for its object to provide a new and improved crossover, of which the following is a description, reference being had to the accompanying drawings, wherein—

Figure 1 is a plan view of a crossing provided with my improved crossover. Fig. 2 is an enlarged view of the crossover. Fig. 3 is a section on the line 3 3, Fig. 2, with parts omitted. Fig. 4 is a view of the trolley-wheel and support.

Like letters refer to like parts throughout the several figures.

The crossover herein described is particularly adapted to be used in connection with overrunning trolley-wheels and is used on trolley-wires which cross each other. When said wheel is running on one of the trolley-wires, the ordinary crossover cannot be used for the reason that the support to which the trolley-wheel is connected will come in contact with one of the trolley-wires and thereby obstruct the passage of the trolley-wheel.

The device herein described allows an overrunning trolley-wheel to be used without such wheel being obstructed by the parts of the crossover. The trolley-wire A, Fig. 2, is broken, as shown, the ends being connected to the rigid conducting loop or frame B, so that the electrical connection between the two wires remains unbroken. This rigid loop or frame consists of the two arms D D, connected by the cross-piece D', said cross-piece being in a plane above that in which the trolley-wires are located, the ends of the trolley-wires being connected to the arms D in any desired manner. A bridge-piece B' is pivotally connected in any desired manner to the frame B and is so positioned that when engaged by the trolley-wheel it will be moved so as to form a continuous connection between

the two ends of the trolley-wire A. The bridge B' is normally held in the position shown in full lines by means of the weight B², which is connected therewith. These parts may be constructed in any desired manner. As shown in the drawings, the bridge B' is provided with the arm B³, by means of which it is pivotally connected to the frame B, the weight B² being connected with said arm and being so positioned that the bridge is normally open. When the trolley-wheel comes in contact with the bridge, it is moved to the position shown in dotted lines in Fig. 2, thereby forming a path for the wheel. The trolley-wire C is also broken and is provided with a similar frame and bridge and associated parts. The frames B are supported by means of suitable guy-wires.

I have described these several parts in detail; but it is of course evident that they may be varied in form, construction, and arrangement without departing from the spirit of my invention, and I therefore do not wish to be limited to the exact construction herein shown and described.

The use and operation of my invention will be readily seen from the foregoing description.

When this crossover is used, it is of course evident that the cars must travel the same way at all times on the cross-lines.

I claim—

1. A crossover for trolley systems having overrunning trolleys comprising a broken trolley-wire, an electrical connection between the two parts, of said wire, a normally open bridge-piece pivotally connected in proximity to one end of said broken trolley-wire, and projecting above the same in the path of the trolley-wheel so as to be moved to bridge the break when engaged thereby, a weight below the trolley-wire connected with said bridge-piece so as to normally hold it open.

2. A crossover for trolley systems comprising a rigid loop to which the ends of the trolley-wire are adapted to be connected so as to leave a space between them, said loop provided with engaging pieces adapted to be con-

5 nected with supporting-wires, a bridge-piece pivoted to said loop and provided with an actuating device which normally holds it open, said bridge-piece projecting above the trolley-wire in the path of the trolley-wheel so as to be engaged thereby and moved in the plane of the wire so as to connect the two ends

of the trolley-wire and form a substantially continuous pathway for the trolley-wheel.

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