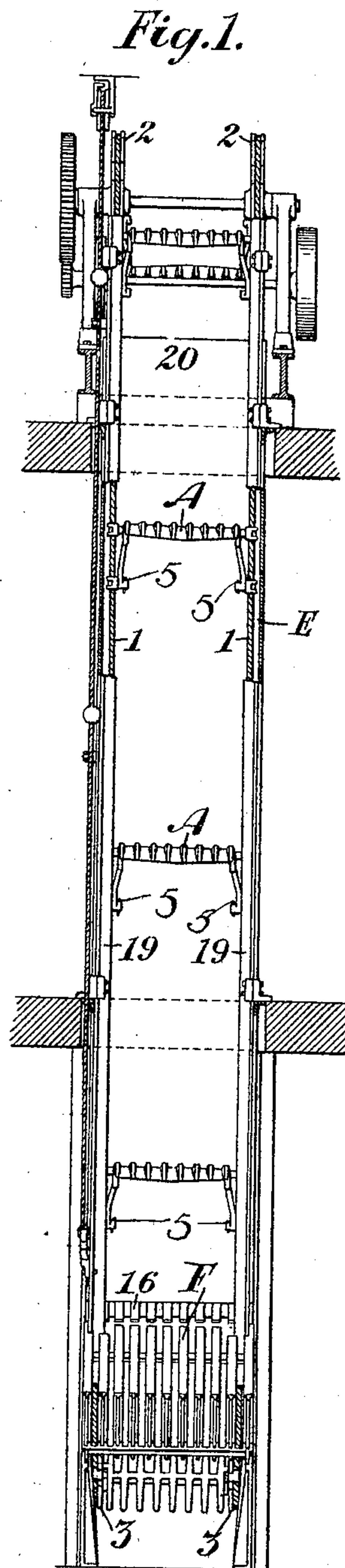
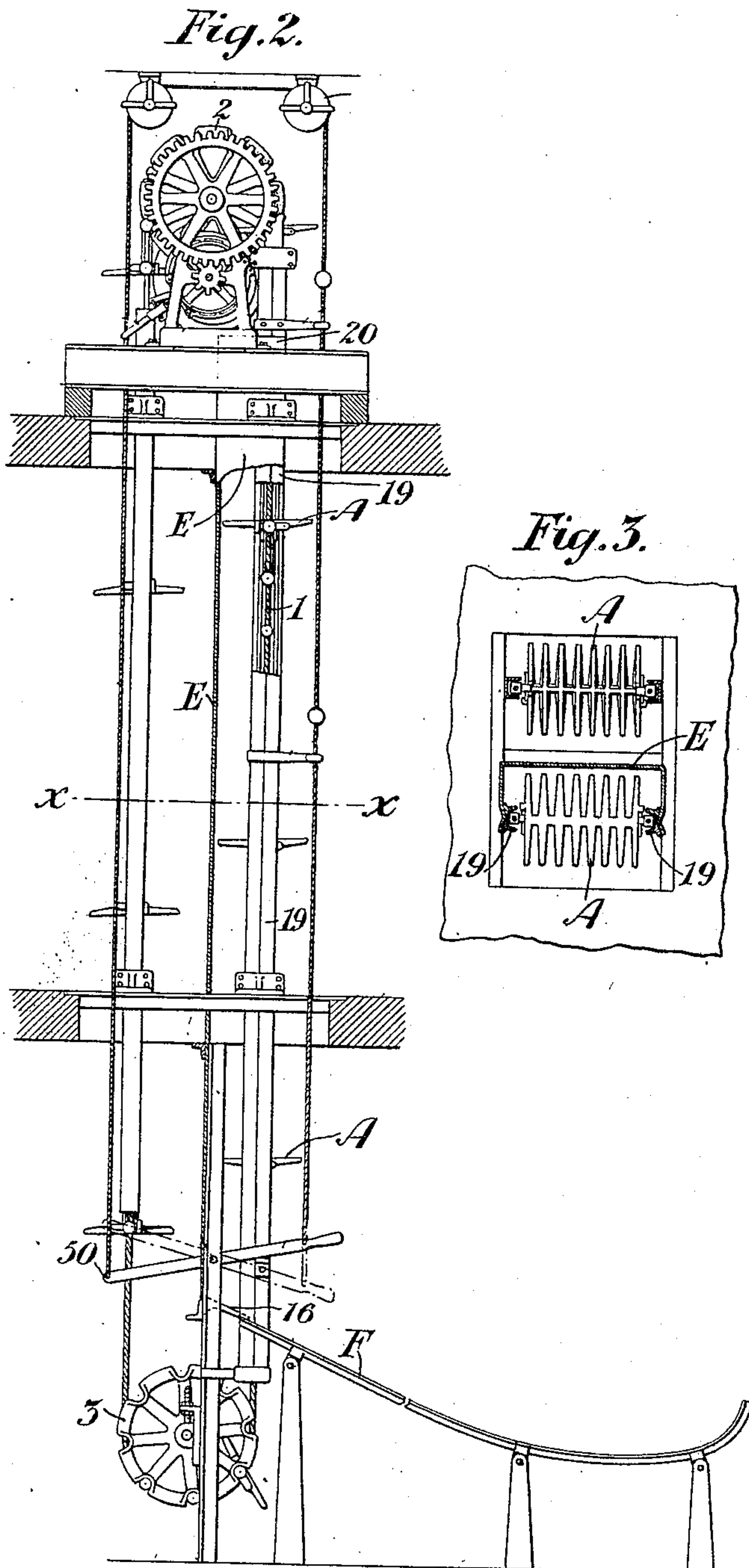


G. W. YOUNKMAN.
FREIGHT CONVEYER.
APPLICATION FILED OCT. 3, 1910.

999,080.

Patented July 25, 1911.

2 SHEETS—SHEET 1.



Witnesses:
M. Levy
B. Roman.

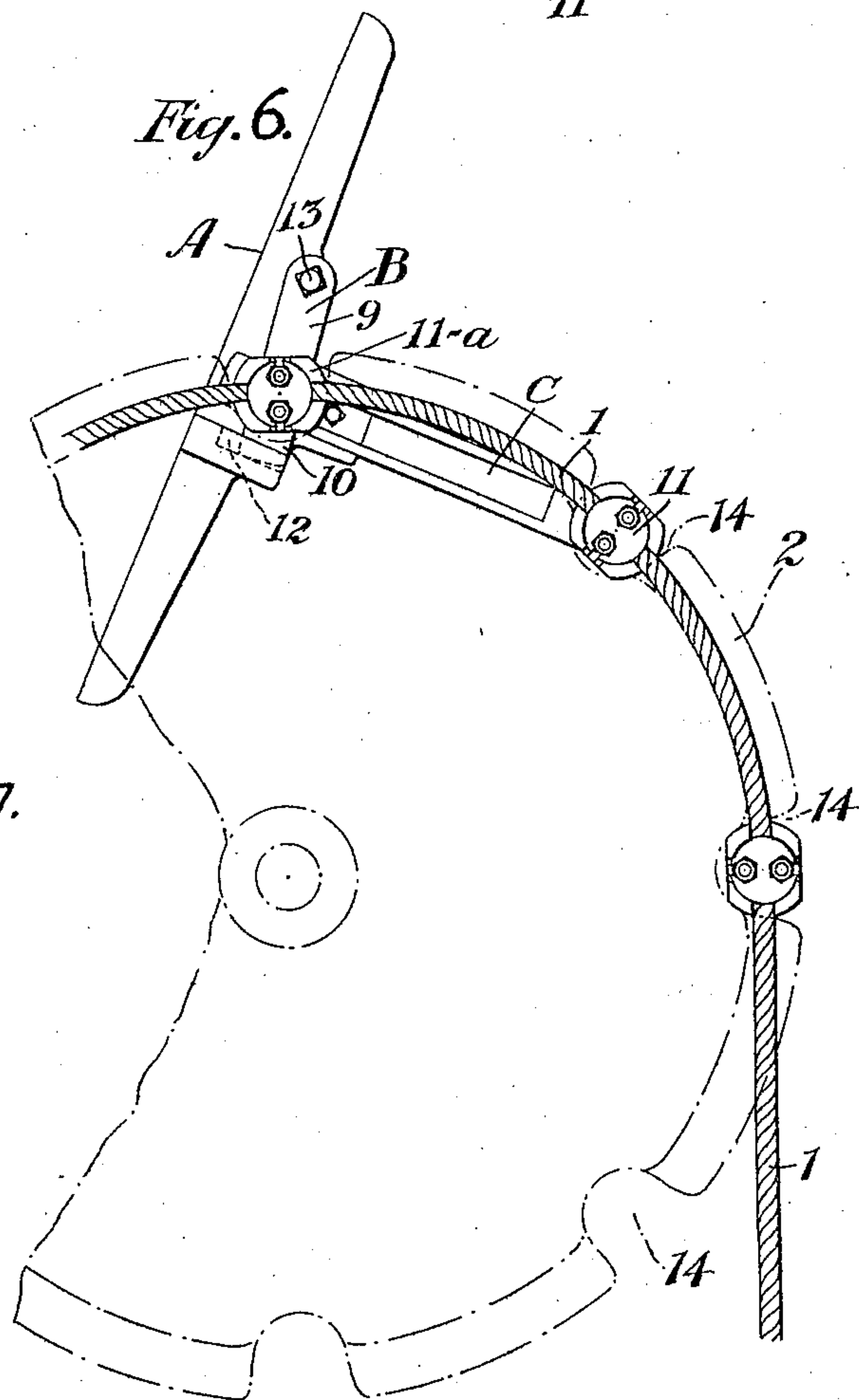
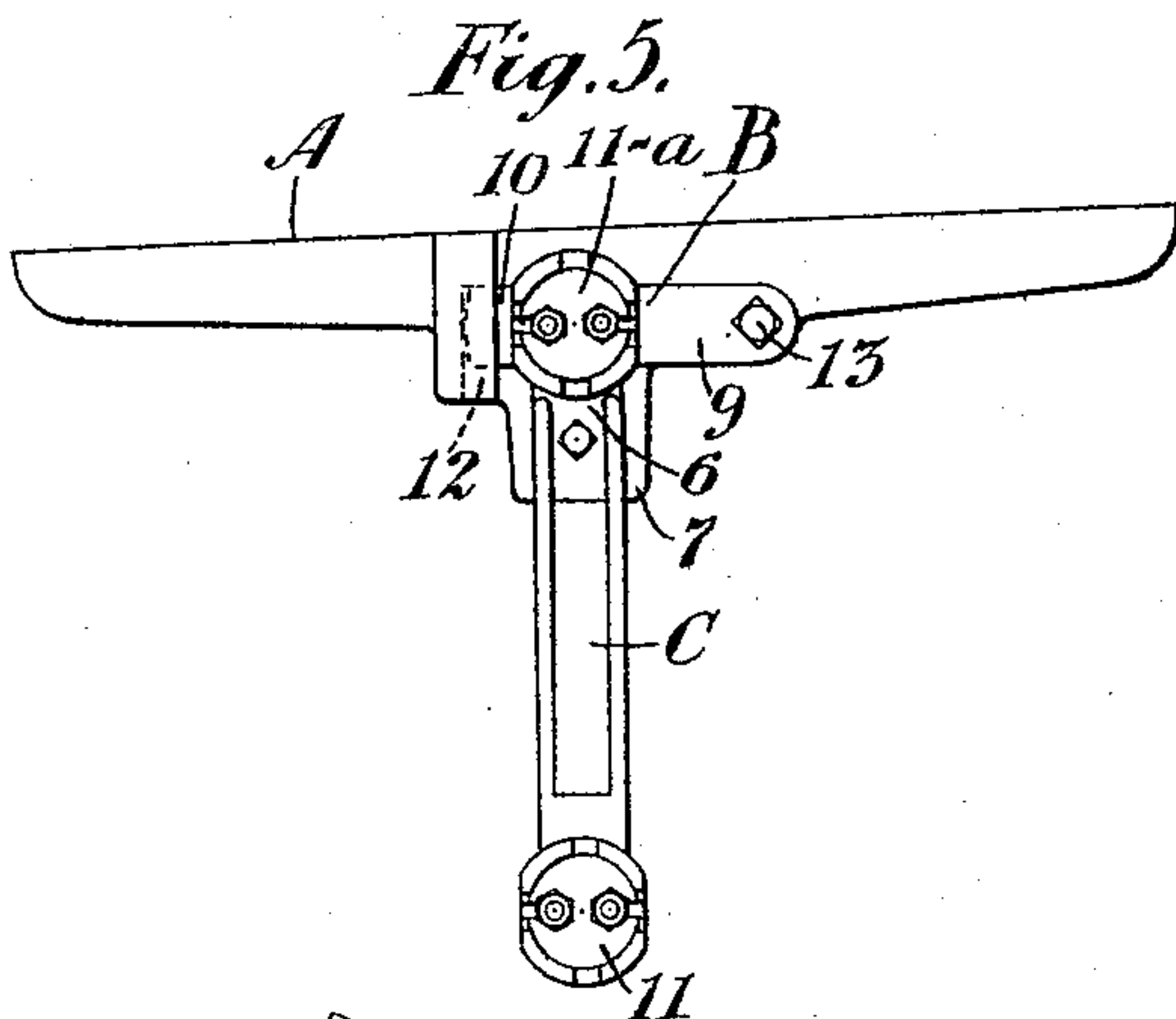
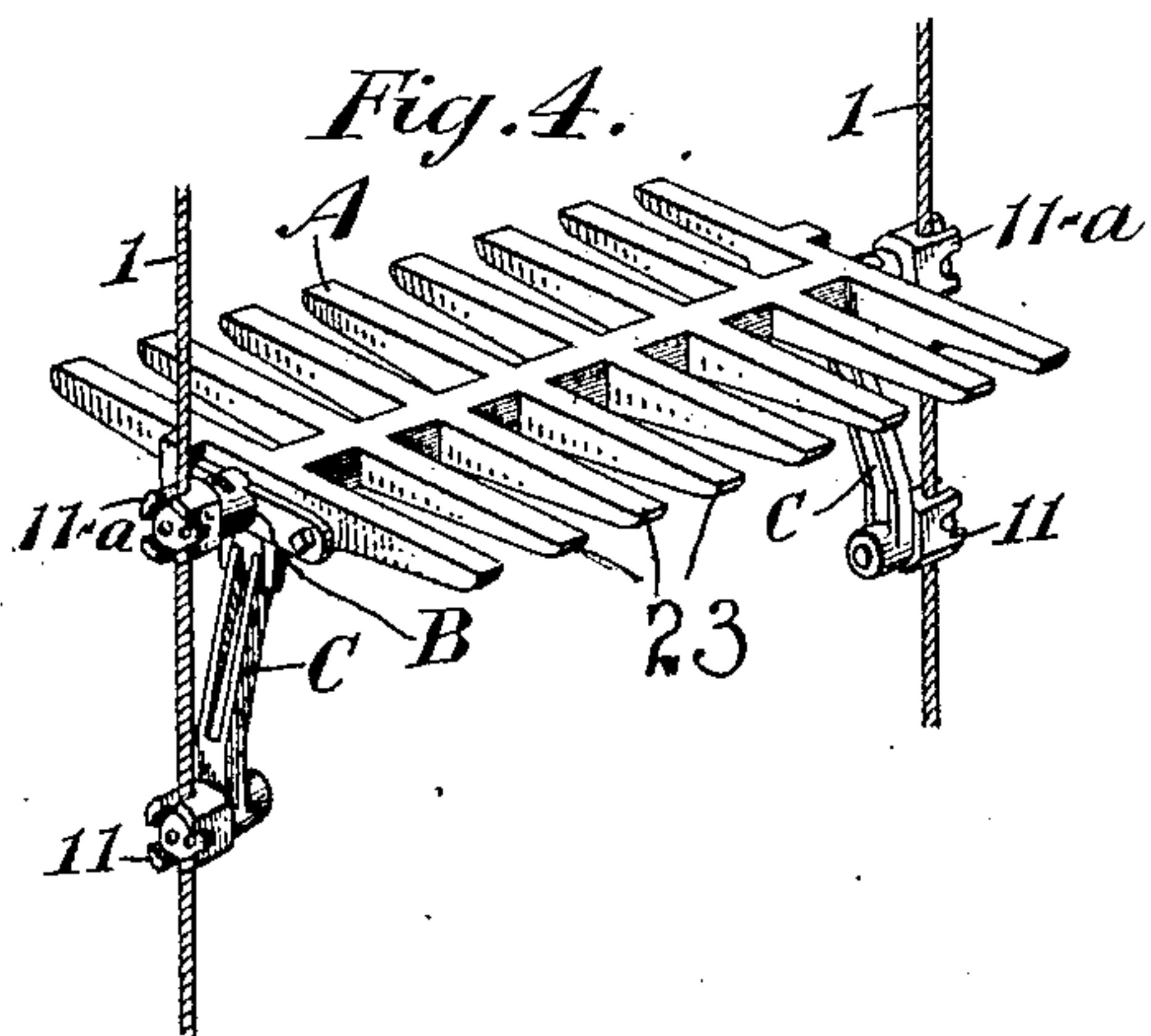
Inventor
George W. Younkman.
By his Attorneys
Mason, Fenwick & Lawrence
Per E. T. Fenwick

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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

GEORGE W. YOUNKMAN, OF NEW YORK, N. Y., ASSIGNOR TO THE YOUNKMAN
LOWERATOR CO., OF NEW YORK, N. Y.

FREIGHT-CONVEYER.

999,080.

Specification of Letters Patent.

Patented July 25, 1911.

Application filed October 3, 1910. Serial No. 585,083.

To all whom it may concern:

Be it known that I, GEORGE W. YOUNKMAN, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Freight-Conveyers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in conveyers, and particularly to the kind of conveyers illustrated and described in my prior Patents Nos. 826,702, 890,746, and 899,854.

The object of my present invention is to provide various improvements in the devices that comprise my said conveyer, and to provide means for carrying freight on the conveyer with safety.

Another object of my invention is to provide a simplified and less expensive construction, while adding to the efficiency and reliability of the conveyer.

With these and other objects in view, my invention consists of the arrangements of parts and features hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a front view of the conveyer, Fig. 2 is a side view of Fig. 1 and Fig. 3 is a section taken at $x-x$ in Fig. 2. Fig. 4 is a perspective view showing the general arrangement of the new car, Fig. 5 is an end view of the same. Fig. 6 is a side view showing the car as it passes over the upper sheaves 2, and Fig. 7 is a section through $y-y$ in Fig. 7.

Similar reference characters refer to similar parts in the different views of the drawings.

In said conveyer a pair of cables 1 being spliced or joined to form endless cables are passed around the upper and lower notched sheaves 2 and 3; platforms or cars A being fastened to the cables at the required distances apart which act as carriers for freight or persons carried down by the conveyer.

The car A consists of the longitudinal bar 21 and the transverse bars 22 extending therefrom. The car rests centrally at its sides on the brackets C, and the lower ex-

tremity of the bracket is provided with a hub 17 into which fits a lug 18 provided on a member which serves for clamping the car to the rope, said clamping member 11 being preferably the same as shown in my invention Pat. No. 899,854. The hub 17 and lug 18 are fastened by driving a tapered pin 4 through both members, and the extremities of the pin passing through transverse slots 5, Fig. 9, in the hub 17 which allows the joint to swivel considerably, the object of which will be seen later. The upper end of the bracket is rigidly fastened by bolts to a projection 7 provided on the car and the projection has a groove formed to receive the end 6, making that end of the bracket flush with the side of the car. A member B is provided comprising a hub 8, Fig. 7 and lever 9 and projection 10, the end of the lever being pivoted at 13 to the car and the rest of the member normally extending perpendicularly to the bracket C. The hub 8 is similar to hub 17 and is fastened to the clamping member 11^a in the same manner. The projection 10 is disposed within the hollowed pocket 12, which is formed at the side of the car, and normally abuts against the upper end of said pocket. It will be seen that in its downward position the car will be maintained as shown in Fig. 5, that is the bracket C will be vertical, the car being held in that position by the lever 9 joined at 13 to the car and the car also resting on the projection 10. This arrangement of the member B serves to allow the rope 1 to pass over the periphery in the groove of sheave 2 which causes the member B to move about the swivel joint 13 and thus give way to the rope, while the car and clamps 11 being held rigidly have the distance between them maintained when the clamps pass over the notches 14 in the wheel as shown in Fig. 8; the distance between the notches 14 and clamps being shortened by the larger circumferential distance between the centers of the clamps. It will be noted that the projection 10 is guided by the pocket 12 in this movement and that the freedom of the clamp-joint for swiveling is necessary when passing over the sheaves.

A modification of the car is shown in D, Fig. 6 wherein the longitudinal web 15 extends at the rear of the car rather than cen-

tral as shown in Fig. 4 and the transverse bars 23 extend therefrom. This is an advantage in many cases and it eliminates the part 16 in Fig. 2, which is necessary with the other car. In using this car the chute F extends to the end of the car which is an advantage in depositing the freight from the car to the chute. The cars slant slightly inward as shown in Fig. 5, to prevent any liability of the freight shifting outward, and falling off the cars. The slant surface tends to keep the freight within the conveyer shaft and as an extra precaution for keeping the freight from falling inside the shaft and to maintain the same on the car safely, a backing E is provided which is clearly shown in Fig. 3. The backing is preferably made of sheet metal fastened to the guide channels 19 and extends inward surrounding the cars, so that if the freight when being carried downward should topple inward it would lean against the backing and thus be prevented from falling into the conveyer shaft, while the slant surface of the car prevents it from falling outside. Vertically, the backing extends from the highest floor where freight is deposited as at 20, Fig. 2, down to the edge of the chute F. It will be therefore seen that the aforesaid improvements fully accomplish the objects and advantages of my invention, since the freight can be carried with perfect safety, and the general construction is greatly simplified and improved.

It must be understood that my invention is not to be limited to the specific form of improved construction or arrangements as shown and described here, but that variations may be made in practice without however departing from the spirit of my invention or the principles involved.

Having thus described my invention, I claim:—

1. In a conveyer, the combination of a platform or car, a guide pocket formed at the side of said car, and a lever being pivoted at its end to said car, the other end of said lever being disposed within said guide pocket and abutting against the upper end of said pocket.

2. In a conveyer, the combination of vertically moving ropes, a platform or car, a guide pocket formed at the side of said car, and a lever being pivoted at its end to said car, the other end of said lever being disposed within said guide pocket and abutting against the upper end of said pocket; of a clamp being fastened pivotally to said lever between its ends and said clamp being fastened to said rope.

3. In a conveyer, the combination of a vertically moving rope and a platform or car rigidly fastened at its sides to the upper end of a support, the lower end of said support being fastened pivotally to a clamp and said clamp being fastened to the conveyer rope, of a lever pivoted at its end to said car, the extremity of said lever being disposed within a guide-pocket formed on said car and abutting against the upper end of said pocket, said lever being fastened pivotally between its ends to a clamp and the clamp fastened to said rope; said lever being actuated to give way to said rope when passing over the conveyer sheave by the convexity of the sheave.

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

GEORGE W. YOUNKMAN.

Witnesses:

B. ROMAN,
HUGO MOCK.