

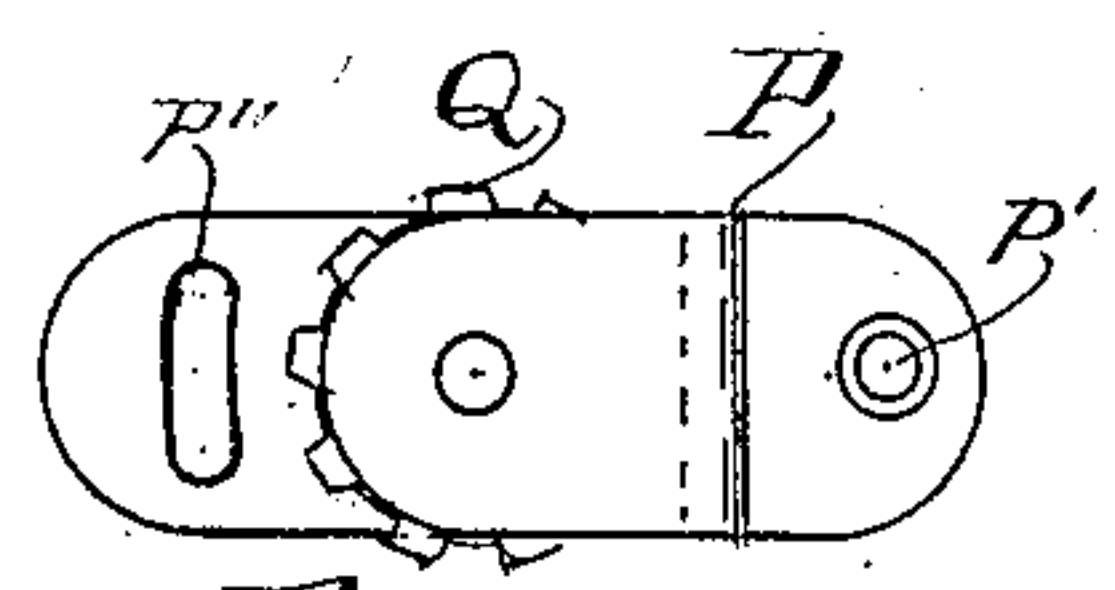
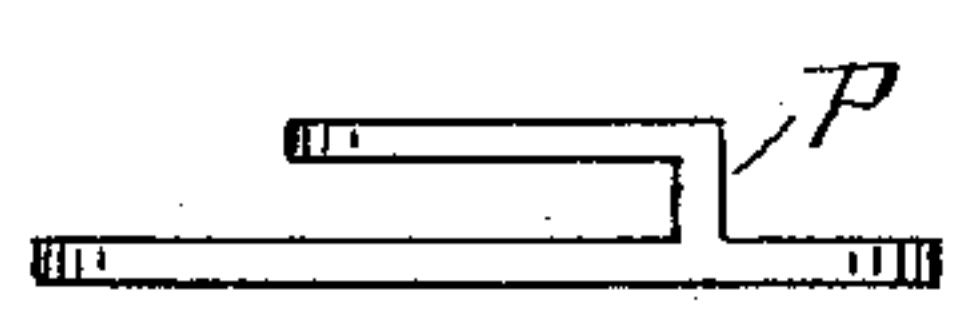
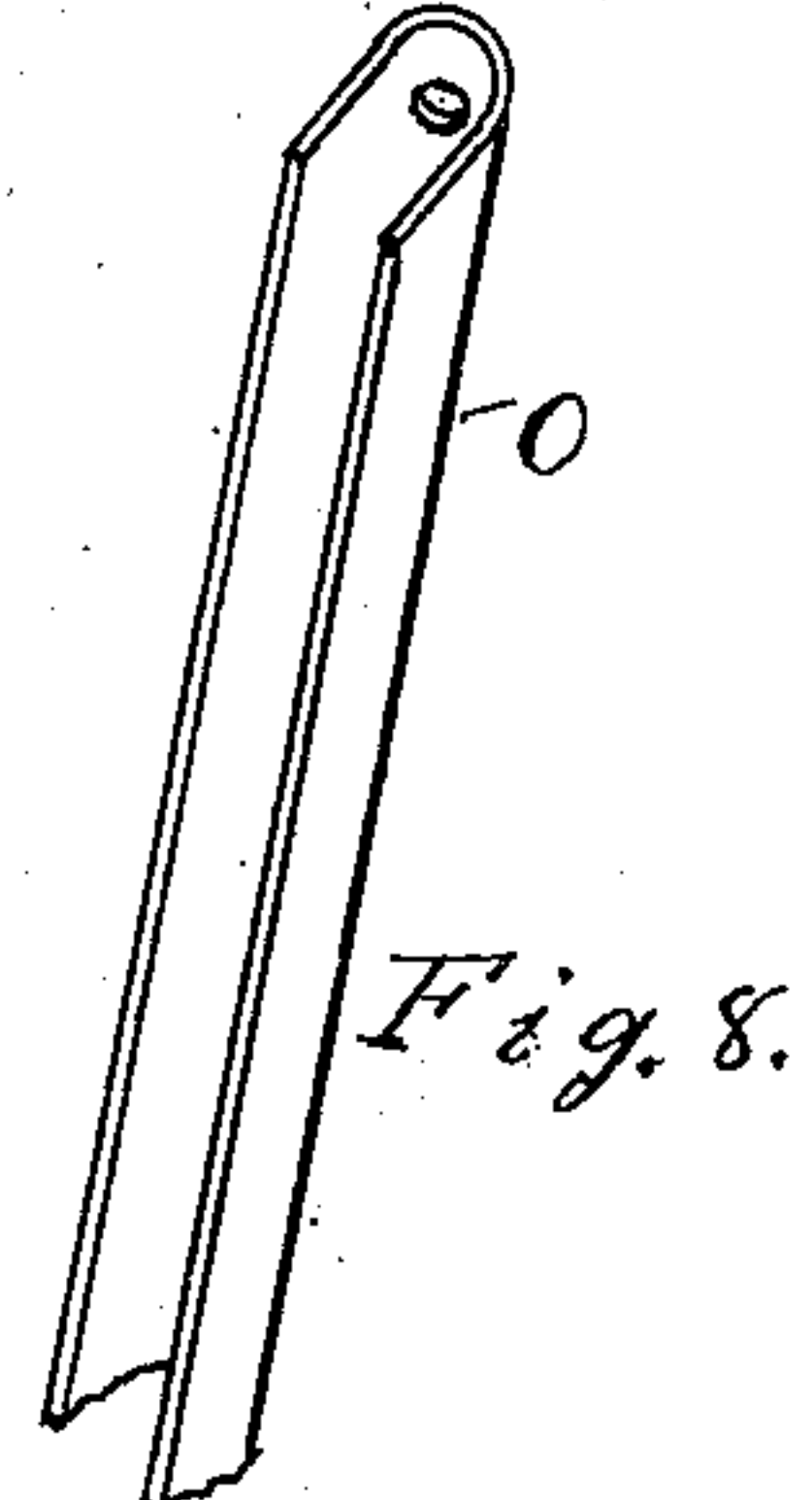
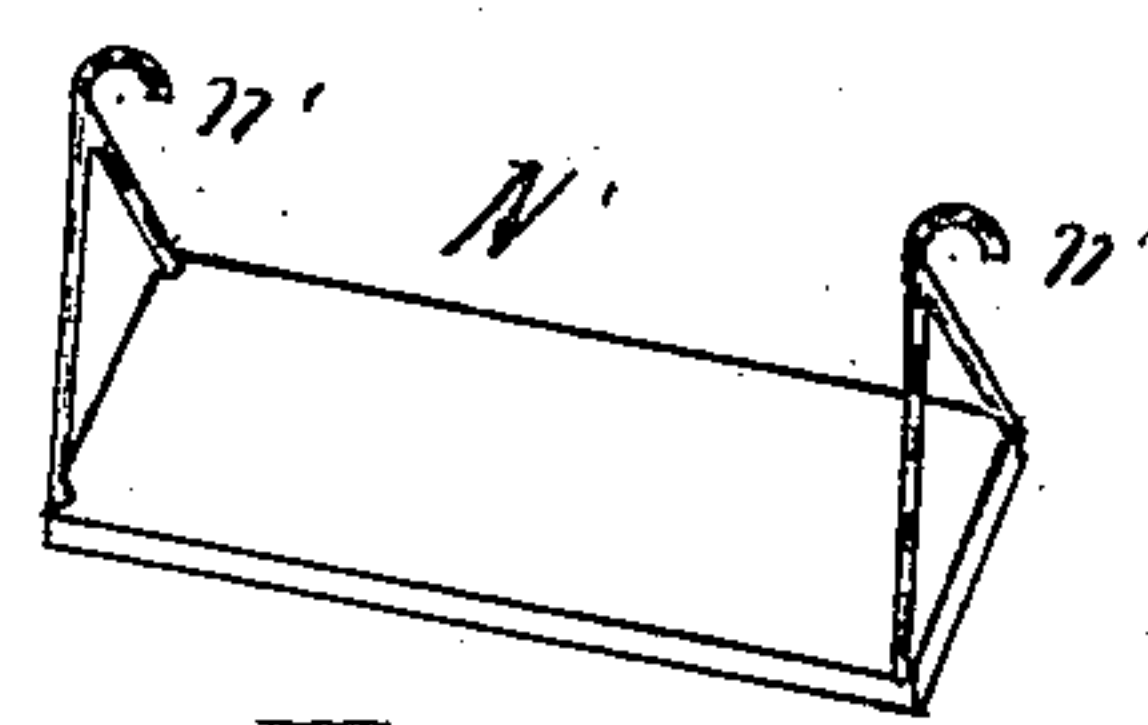
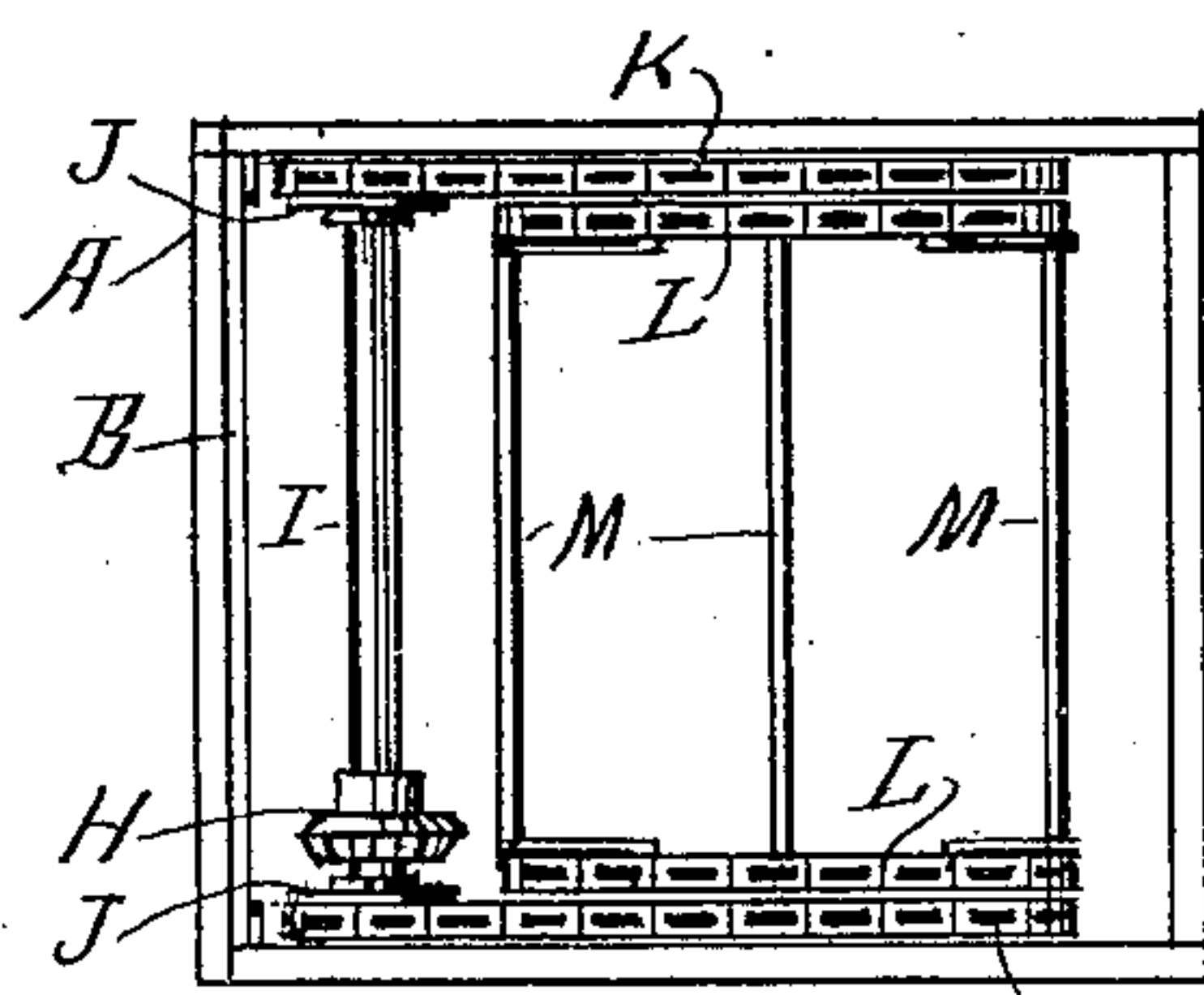
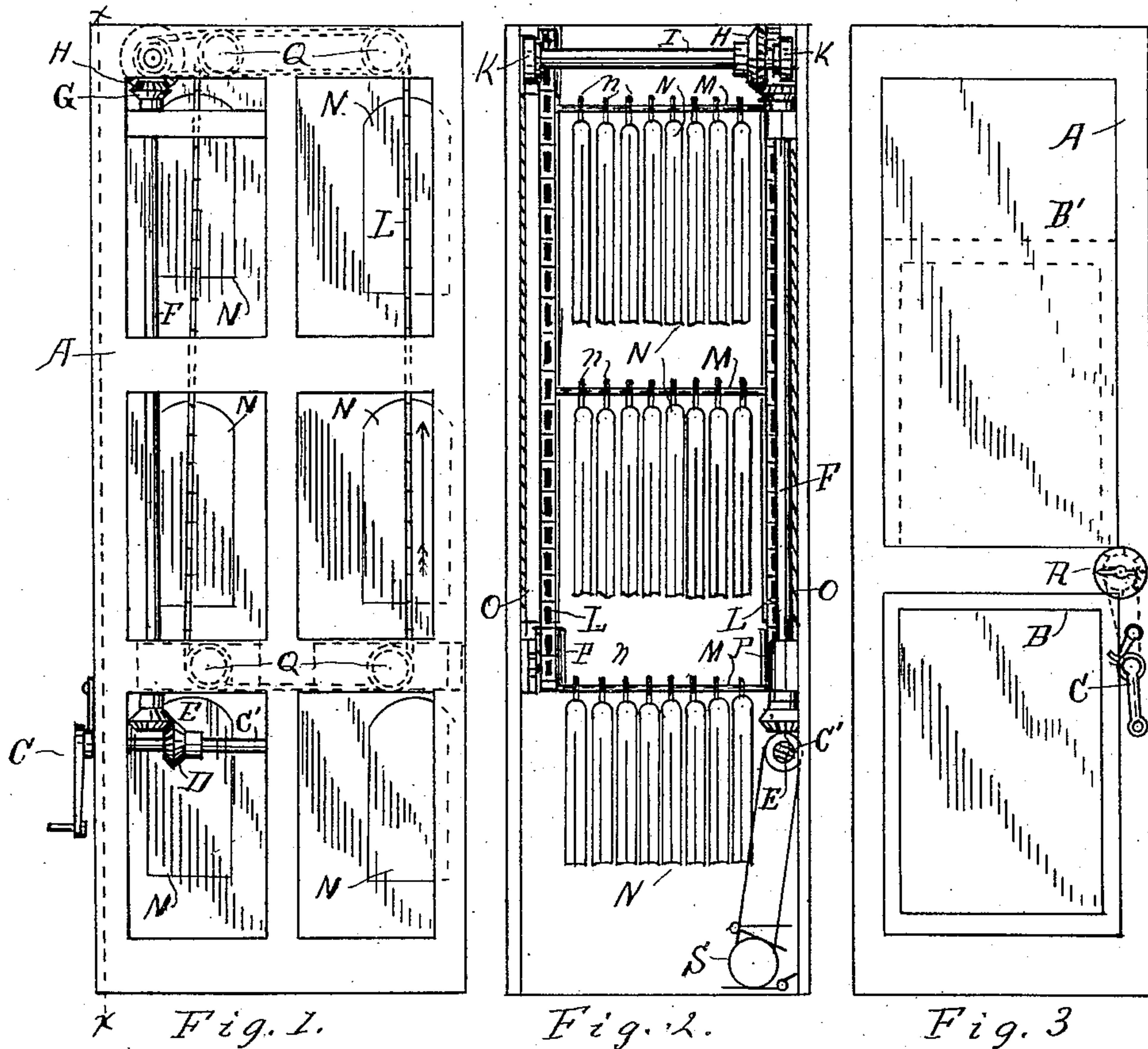
No. 870,268.

PATENTED NOV. 5, 1907.

E. S. BEDFORD.

SHOW CASE.

APPLICATION FILED MAY 21, 1906.



Witnesses

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EBENEZER S. BEDFORD, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR OF ONE-HALF TO RAYMOND M. FERGUSON, OF GRAND RAPIDS, MICHIGAN.

SHOW-CASE.

No. 870,268.

Specification of Letters Patent.

Patented Nov. 5, 1907.

Application filed May 21, 1906. Serial No. 318,108.

To all whom it may concern:

Be it known that I, EBENEZER S. BEDFORD, a subject of Great Britain, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Show-Cases, of which the following is a specification.

My invention relates to improvements in show cases for use in exhibiting gents dress goods, &c. in stores where the rooms are very high, and its objects are: First, to utilize the entire height of the room for storing and exhibiting goods, and second, to provide a means whereby the goods in any part of the show case may be easily and conveniently brought to position to be easily inspected or removed from the case.

I attain these objects by the mechanism illustrated in the accompanying drawing in which

Figure 1 is a side elevation of the show case. Fig. 2 is a front elevation of the same with the casing removed upon the line *xx* of Fig. 1. Fig. 3 is the same with the casings in place. Fig. 4 is a top plan of the case open to show the distribution of the several elements inside the case; Figs. 5 and 6 are a top plan and a side elevation respectively of the hangers that support the sprocket wheels in the case; Fig. 7 is a perspective of a form of hanger to use with the show case for exhibiting shoes and other shelf articles, and Fig. 8 is a perspective of one form of available guard for the sprocket chains to run in.

Similar letters refer to similar parts throughout the several views.

The first necessary element in this show case is the frame A which is made of a height to correspond with the height of the room in which it is to be used. This frame or case may be inclosed with glass panels, as indicated in Figs. 1 and 3, and has a door B that slides upward; as indicated by the dotted lines B', so that the case may be easily entered, when desired.

For storing the goods, as gents furnishing goods, &c., I provide two endless sprocket chains L L, which are each supported upon four sprocket wheels Q,—or such other number as may seem desirable—, and place bars M across from one chain to the other, of sufficient strength to support a number of suits of clothes, as indicated at N, said suits being secured upon said bars M by any desired form of hangers, as *n*;—or in case shelf goods are to be exhibited, I provide a shelf N' which may be hung upon the bars M by the hooks *n'*.

For the purpose of carrying the goods up and around in the case so that different samples may be readily brought to the desired position, I have shown a crank C secured to a shaft C'. Secured to this shaft is a bevel gear D arranged to mesh with the bevel gear E on the shaft F, which, in turn, is provided with a bevel gear G at the opposite end, arranged to mesh with the

bevel gear H on the shaft I, and this shaft is provided with two sprocket wheels J J from which sprocket chains K K pass to and engage with corresponding sprocket wheels on the sides of the sprocket wheels Q at the top of the case, so that when the crank C is made to revolve the motion of the shaft C' will be transmitted to the upper wheels Q and cause the chains L, and with them, any goods that may be stored in the case, to travel with them from bottom to top, and vice versa, to bring the desired goods to the desired position. I prefer that the chains, when being loaded with goods, be made to travel in the direction of the arrow in Fig. 1, as by this means, the goods being placed in the case from the front will, to a certain extent, tend to assist in raising the goods being carried upward at the back of the case. That is, the goods may, thereby, be carried up with much less exertion on the part of the operator than if the chains were made to travel in the opposite direction, and, besides, the goods are, by this means, carried constantly away from the operator and the placing of the goods in the case is much more convenient, though it is designed to cause the chain to travel in either direction so that goods may be readily brought from either direction to the desired position in the case.

In Fig. 2 I have shown the guard O in section so that the chain may be plainly exhibited, but it will be readily seen that this guard is designed to project out at both sides of the chain beyond the edges so that the goods cannot be injured by coming in contact with the chain, and the gear wheels Q are likewise protected by the outer wing of the supports P, and these supports are pivoted to the frame A by a screw at *p'*, with a slot *p''* at the other end so arranged that this end may be swung around to tighten the chains L L in case they become loose by wear, or otherwise.

I prefer that the sprocket wheels Q be run upon ball bearings as this averts the necessity of using lubricants to prevent wear upon the journals supporting them, and thus remove a very productive source of accident to the goods while in the case.

R represents a gage or indicator to show which grade of goods is upon exhibition. This gage averts the necessity of placing the price &c. upon the goods themselves, but is not a necessary adjunct to the case as the price placed upon the goods will answer the purpose, except that with the gage the position of any grade of goods not in sight may be located and much labor avoided by knowing which way to turn the crank to bring the desired goods sooner to the operator. This gage or indicator may be actuated from the shaft C', as indicated by the dotted lines in Fig. 3, or from any other available source.

The shaft I, with the sprocket wheels J J and the

chains K K, form an equalizing shaft that compels both of the chains L L to travel uniformly so that the bars M will always be level no matter how many times they may be carried around in storing or exhibiting goods in the case, or which way they may be carried.

If desired a motor, as indicated at S in Fig. 2, may be applied to the shaft C' to actuate the elevating mechanism of the case, and the case may be illuminated and actuated as an advertising device without digressing from the spirit and intent of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is:—

1. In combination with a vertical show case, independent hangers adjustably secured to each side of the case, a short shaft in each of said hangers, a sprocket wheel revolubly mounted on each of said shafts, endless sprocket chains mounted vertically on said sprocket wheels, a crank and shaft, an equalizing shaft set to one side of the vertical chains, means for transmitting motion from the crank shaft to the equalizing shaft, a sprocket chain connecting the sprocket wheel at each end of the equalizing shaft to a corresponding sprocket wheel connected with each vertical chain so that each chain will be driven independent of, but in unison with the other.

2. In combination, a vertical show case, independent adjustable hangers secured to each side of the case at top

and bottom, a short shaft in each of said hangers, a sprocket wheel revolubly mounted on each of said shafts, vertical sprocket chains mounted on said wheels, one at each side of the case and each independent of the other, cross bars between said chains, an equalizing shaft to one side of said chains, a sprocket wheel at each end of the equalizing shaft, a sprocket chain connecting each of said sprocket wheels with a sprocket wheel arranged to drive the sprocket wheels that carry the chain, each independent of but in unison with the other, means for revolving the equalizing shaft and through it the sprocket wheels in the case, and guards covering the vertical chains.

3. In combination, a vertical show case, independent sprocket wheels mounted therein each upon a short shaft independent of the other, vertically movable chains mounted on said sprocket wheels, an equalizing shaft mounted in the case some distance from the chains, means for revolving the equalizing shaft, a sprocket wheel at each end of the equalizing shaft, a sprocket chain from each of said sprocket wheels to a corresponding sprocket wheel in position to transmit motion to each of the first named sprocket chains independently of but in unison with the other, and an index connected with and actuated by the mechanism that transmits motion to the chains.

Signed at Grand Rapids Michigan May 18 1906.

EBENEZER S. BEDFORD.

In presence of—

I. J. CILLEY,

A. ALLGUR.