No. 815,594. PATENTED MAR. 20, 1906.

J. KOVAČEVIĆ.

TELESCOPIC ELEVATOR.

APPLICATION FILED MAY 18, 1904.

Fig. 1.

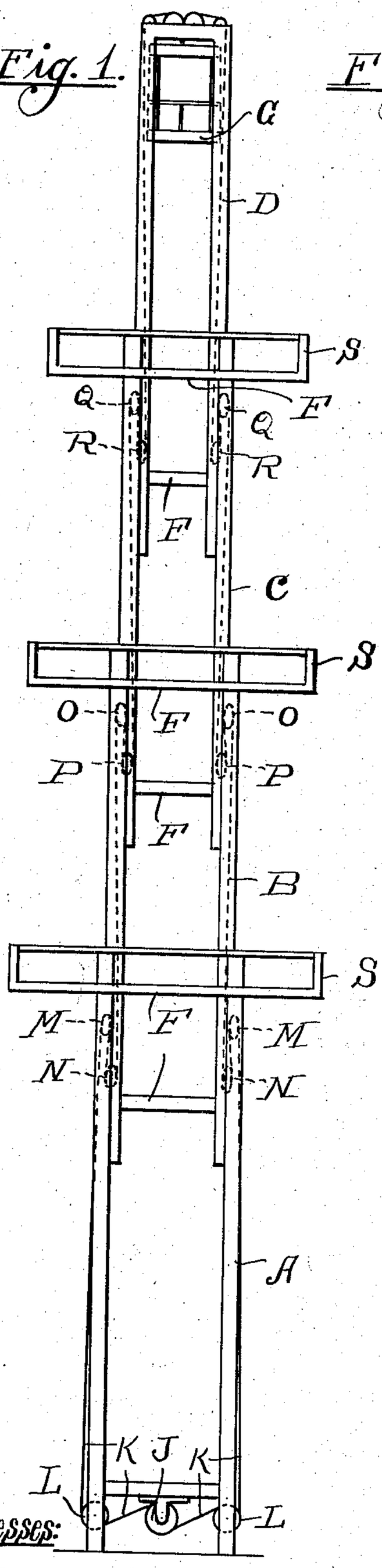


Fig. 2.

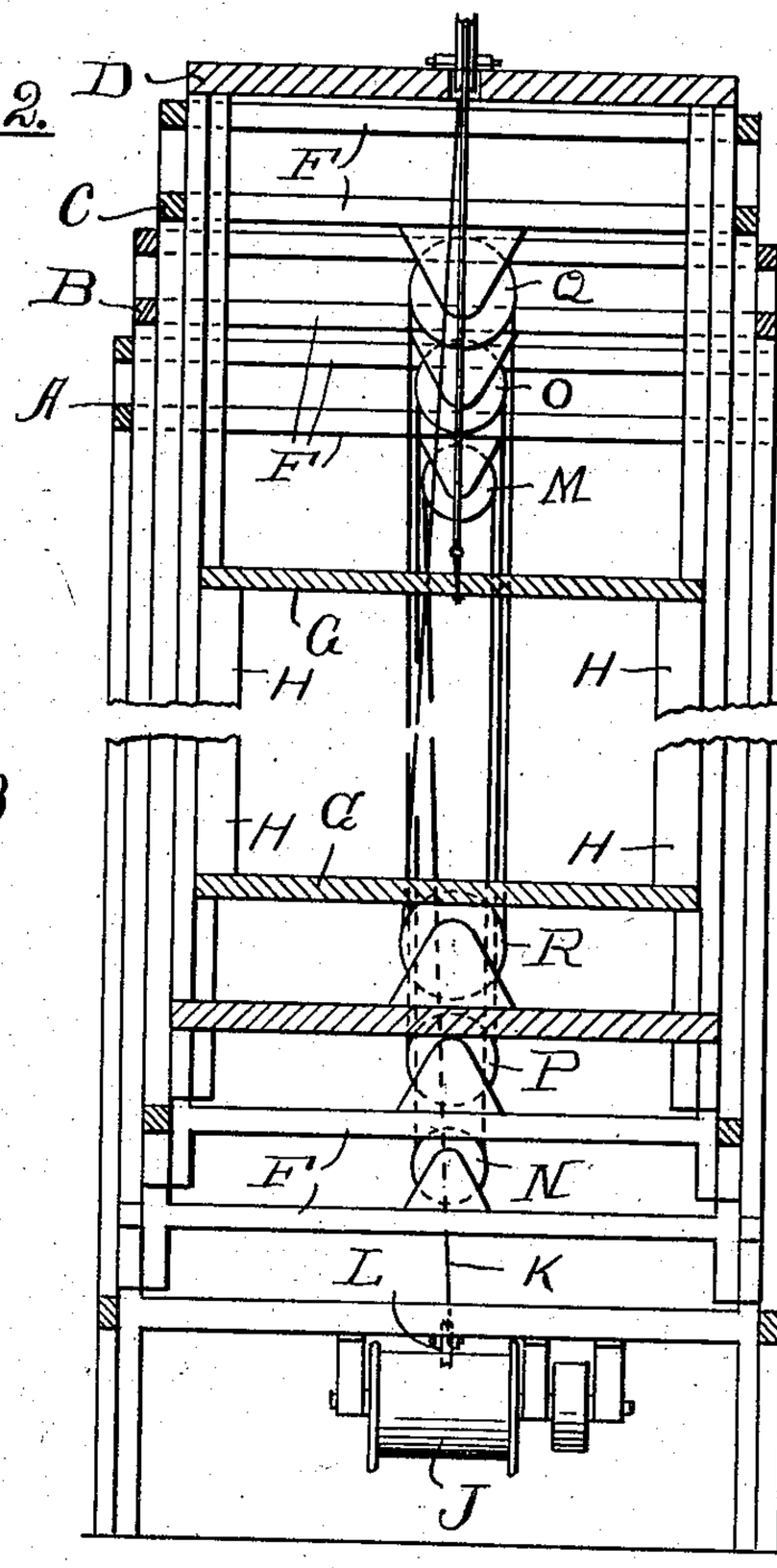
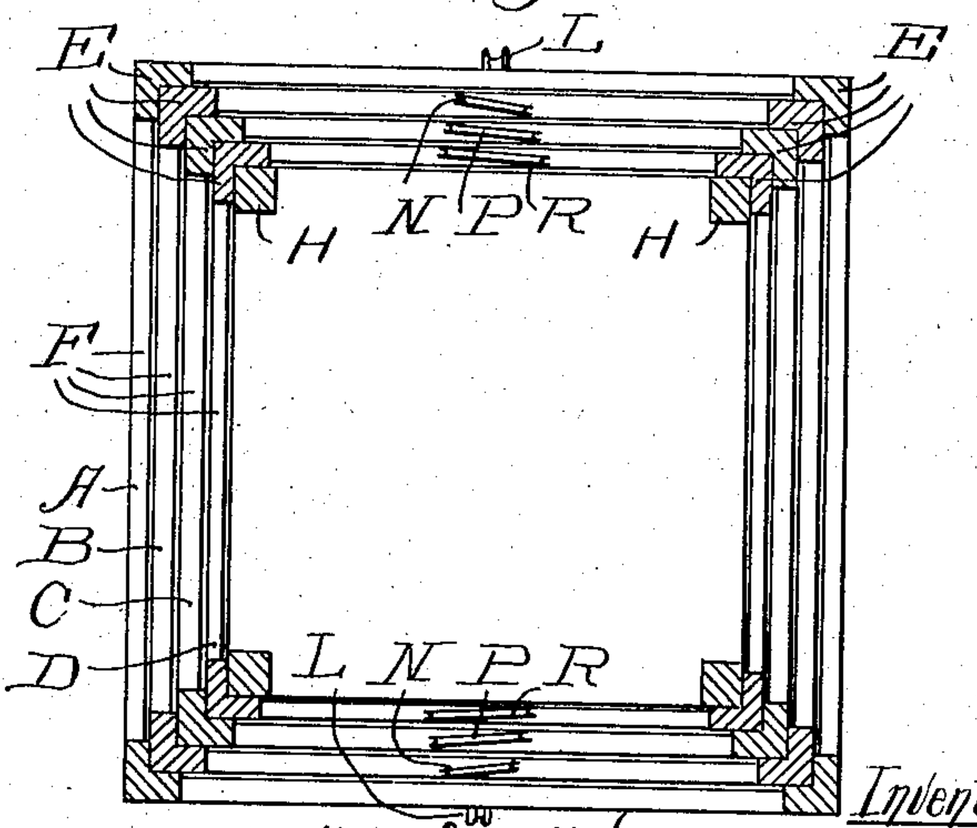


Fig. 3.



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JANKO KOVAČEVIĆ, OF ALLEGHENY, PENNSYLVANIA.

TELESCOPIC ELEVATOR.

No. 815,594. Specification of Letters Patent. Patented March 20, 1906.

Application filed May 18, 1904. Serial No. 208,536.

To all whom it may concern:

Be it known that I, JANKO KOVAČEVIĆ, a citizen of the United States, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Telescopic Elevators; 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.

My invention relates to a novel construction in a telescopic elevator, the object being to provide a device of this character which can be made portable and will be particularly adapted for use in armies for temporary look-out and signal stations and which will be otherwise adapted for use in open spaces where it is desired to raise a person to a high level; and it consists in the features of construction and combinations of parts hereinafter fully described and claimed.

In the accompanying drawings, illustrating my invention, Figure 1 is a side elevation of a telescopic elevator constructed in accordance with my invention. Fig. 2 is a central vertical section of same in its folded position. Fig. 3 is a horizontal section on the line 3 3 of Fig. 2.

My said elevator consists of a plurality of substantially rectangular frames A, B, C, and D, preferably constructed of steel in a light and durable manner and each of which comprises four corner-posts consisting, preferably, of heavy angle-irons E, which are connected by means of suitable cross-bars and braces F, the angle-irons E of said members B, C, and D fitting within each other and forming guides for each other, said frames being longitudinally movable relatively to each other. Within the innermost member D is a longitudinally-movable car G, the corner-posts H of which are movable in the corners of the frame D. Mounted in the lower end portion of the said frame A is a windlass J, over which cables K are adapted to be wound, said cables being connected at their other ends to the upper rim of said car G and trained over a series of pulleys L, M, N, O, P, Q, and R, said pulleys L being mounted upon the lower end portion of said member A, the pulleys M on the upper end portion thereof, the pulleys N on the lower end portion of the member B, the pulleys O on the upper end portion of said member B, and so on, the said pulleys being so set that the said cables in passing over one to the other thereof are maintained in a vertical line as nearly as possible, so as to prevent them from running off said pulleys. By turning said windlass to wind said cables on same the said car G will first be raised to the upper end of said frame D and before reaching the upper limit of its movement, which will be determined by suitable stops on said member D, the said cables will raise said member D and successively thereafter the members C and B until each of same has reached the upper limit of its movement. The number of said members or frames A, B, C, and D may be increased or diminished as desired to attain any desirable elevation, as will be obvious. I also provide platforms S at the upper ends of the members A, B, and C, upon which look-out may be stationed, if desired, or in the event that my said device is employed for sight-seeing purposes at expositions, fairs, &c., to support a number of sight-seers at various elevations, said platforms being relatively so arranged that the floor of each will be supported at a distance greater than the height of a man above the next lower platform, so that as the said members B, C, and D are let down there will be no possibility of accident.

My said device is very simple and efficient and can be constructed to lift a person several hundred feet, if desired.

I claim as my invention—

A telescopic elevator comprising in combination a plurality of rectangular frames disposed one within the other and movable telescopically relatively to each other, the outer frames each comprising four L-shaped corner members connected with each other by means of cross-bars, and the innermost member comprising four rectangular corner-posts connected by means of cross-bars, each outer set of corner-posts constituting guides for the next succeeding inner set of corner-posts, a rectangular platform disposed at the upper end of each of said outer rectangular frames, and being relatively so proportioned that each upper platform is smaller and fits within the next succeeding lower platform, pulleys mounted at the upper and lower ends of each outer frame at opposite sides thereof and disposed so that their planes of rotation are inclined slightly to the planes of the sides of said telescopic frames on which they are disposed and in such relation that the grooves of the upper pulleys of each lower member are in vertical alinement at one point with

one point in the grooves of the lower pulleys of the next adjacent inner frame, said pulleys of succeeding inner frames being successively of larger diameter, a windlass carried by the lower and outermost frame, cables connected at one end with said windlass and at their other ends with said innermost frame, and trained over said pulleys successively between their ends, substantially as described.

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

JANKO KOVAČEVIĆ.

Witnesses:

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