

(No Model.)

E. S. WATSON.

CAR FOR ELEVATED RAILWAYS.

No. 288,193.

Patented Nov. 6, 1883.

Fig. 1.

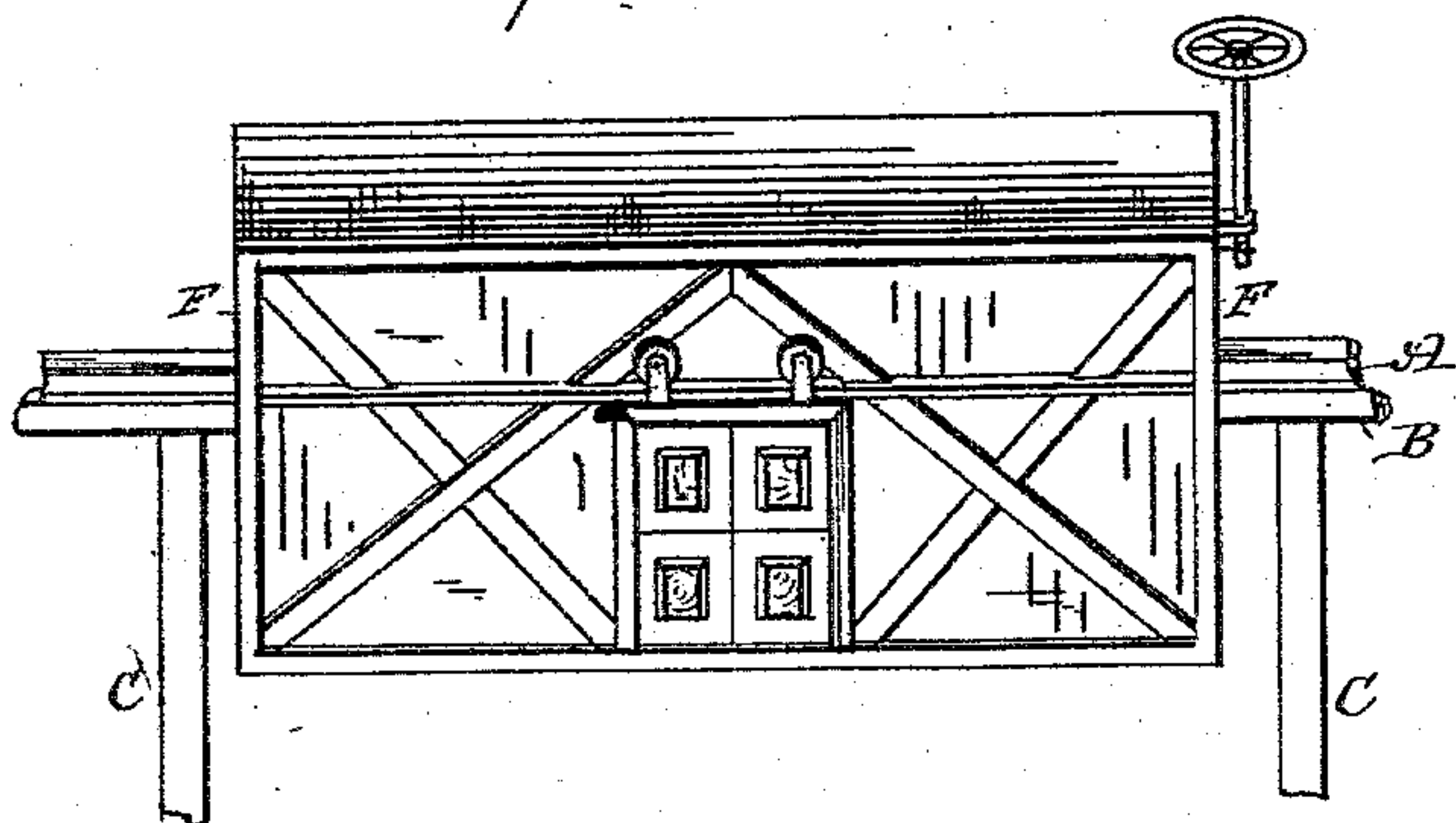


Fig. 2.

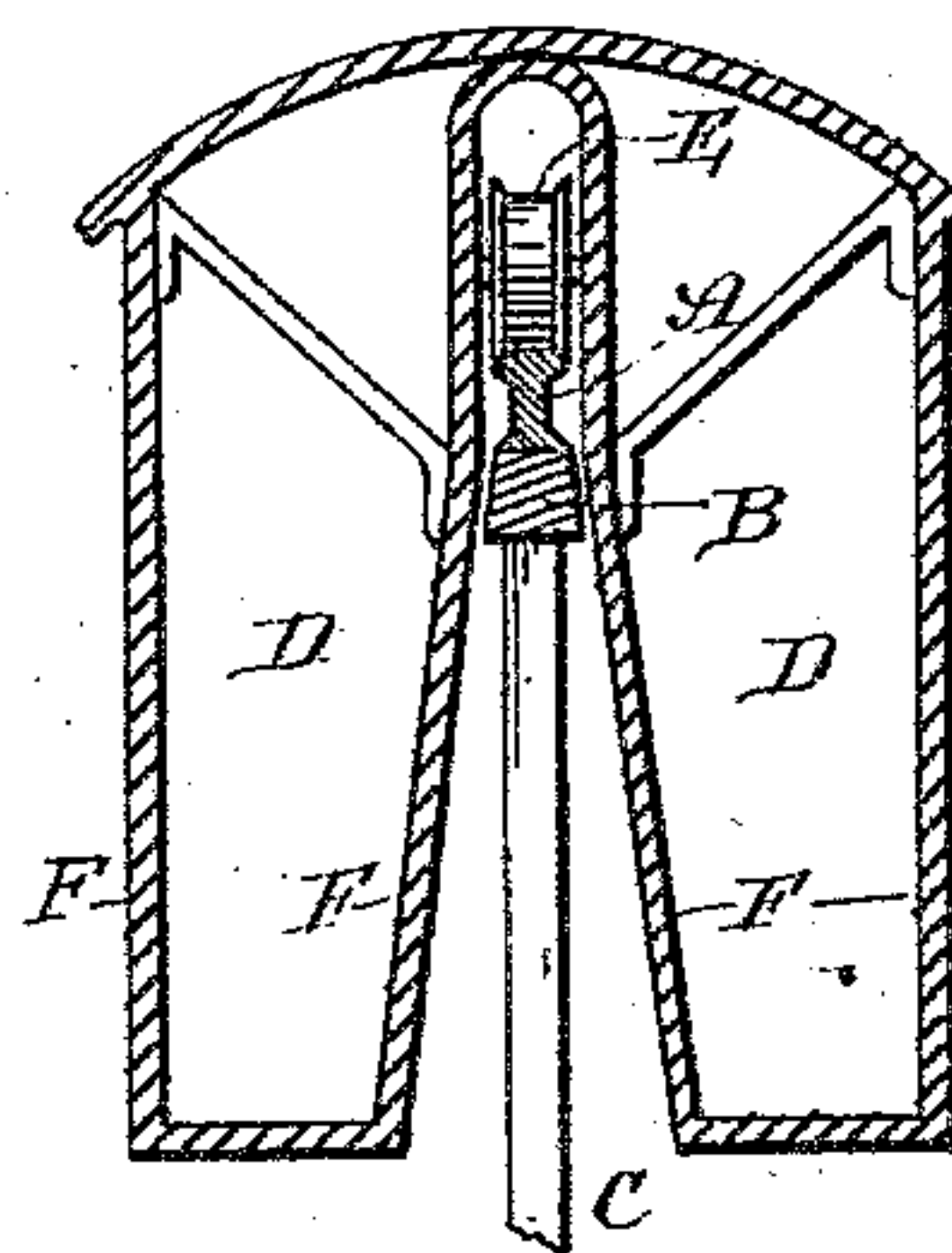
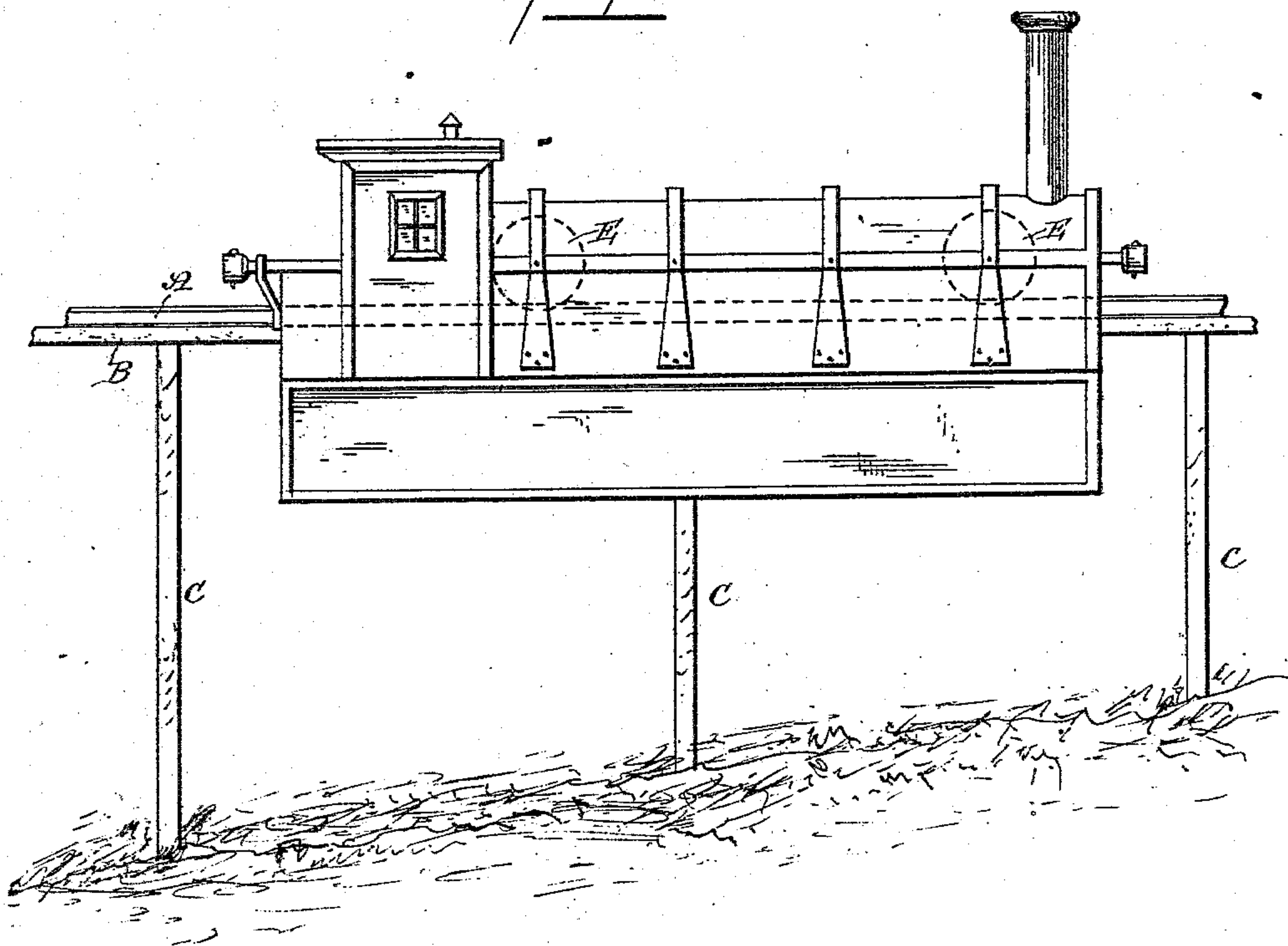


Fig. 3.



— WITNESSES. —

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CAR FOR ELEVATED RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 288,193, dated November 6, 1883.

Application filed March 27, 1883. (No model.)

To all whom it may concern:

Be it known that I, ELIJAH S. WATSON, of Water Valley, in the county of Yalabusha and State of Mississippi, have invented certain new and useful Improvements in Railways; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in elevated railways and cars therefor; and it consists in a single rail supported upon stringers secured to posts or pillars raised above the ground to a suitable height, and a car made in two sections, one on each side of the track, and having wheels located centrally near the top of the car, the greatest weight of the car and load being thrown below the track and wheels.

The novel construction of the several parts embodied in my device and their general arrangement will be hereinafter more fully described, and pointed out in the accompanying drawings, in which—

Figure 1 is a side view of my improved single-rail track with a car thereon; Fig. 2, a vertical section of the car and track, and Fig. 3 a side elevation of a locomotive for the same.

The rail A is the ordinary T-rail laid upon longitudinal string-pieces B, properly secured to the vertical posts or pillars C, which rise from the ground a suitable distance, depending upon the depth of the car and the requirements of the ground. Upon this single rail the cars travel. Each car is composed of two sections, D, and is made as follows: Frame-pieces F F are located at each end of the car, and are preferably made of angle-iron of sufficient size to bear a strain greater than the load placed upon them. The frame-pieces F F extend above and below the rail and on each side thereof, as shown in Fig. 2. These frame-pieces are preferably made of angle-iron, which gives greatest strength with least weight of metal; or they may be of wrought-iron or steel rods. The lower or bent portions of the

frame-pieces are suitably bolted together on each side; or I may make them of one continuous piece of metal. The box or body of the car is made in the ordinary way of tongued-and-grooved lumber, the bottom resting on the bottom of the frame-pieces. I may also have as many intermediate frame-pieces similar to F F along the body of the car as may be deemed essential for strength.

The wheels E E, which have a double flange, may be journaled in journal-boxes secured to the upper or lower side of two parallel beams, which may be placed in the upper bend of the frame, and to which the pieces F are bolted and secured. The exterior sides of the frame-pieces are made straight or hang vertical. The interior ones are bent outwardly from the track, commencing at a point at or near the top of the stringer B. The object of this is to throw the weight outwardly from the roadway, and thus prevent oscillation of the car. The greatest weight is brought below the rail, and the strain comes upon the wheel and rail, and there is a stability thus given to the cars which will prevent them leaving the rail, and insures an absence of vibration or oscillation. One side of the car cannot approach the track without overcoming the gravity of the opposite side and lifting said side to a greater height than the descent of the first side mentioned, so that it is virtually impossible for the car to be derailed. The greater the load on the car the greater the traction on the rail and the greater the steadiness of motion.

The engine will have a boiler and fire-box on each side of the rail, and the driving mechanism can be placed at each side of the beams, or located in any suitable position. The car can also be actuated by a system of pivoted levers secured to the driving-wheels.

A railway built as described can be run over a rough or plain country, and is particularly applicable for mining regions, where track-grading is expensive. It is also easily and economically constructed in swamp-lands, as nothing more is required than a pile foundation for the posts or supports C.

Having thus described my invention, what I claim is—

A car for a single-rail track, having end frame-pieces made of a single bar of metal, F, bent or curved at its upper portion, so as to afford room for the wheels E, the interior
5 sides of the bar being bent outwardly from a point near the track, the exterior sides being vertical, the car consisting of two sections, one on each side of the track, substantially as

shown and described, and for the purpose set forth. 10

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

ELIJAH S. WATSON.

Witnesses:

J. W. FRY,
F. W. SPENCE.