(No Model.)

C. W. ALLEN.

TIME REGISTER FOR SEATS.

No. 312,176. Patented Feb. 10, 1885.

Fig. 1

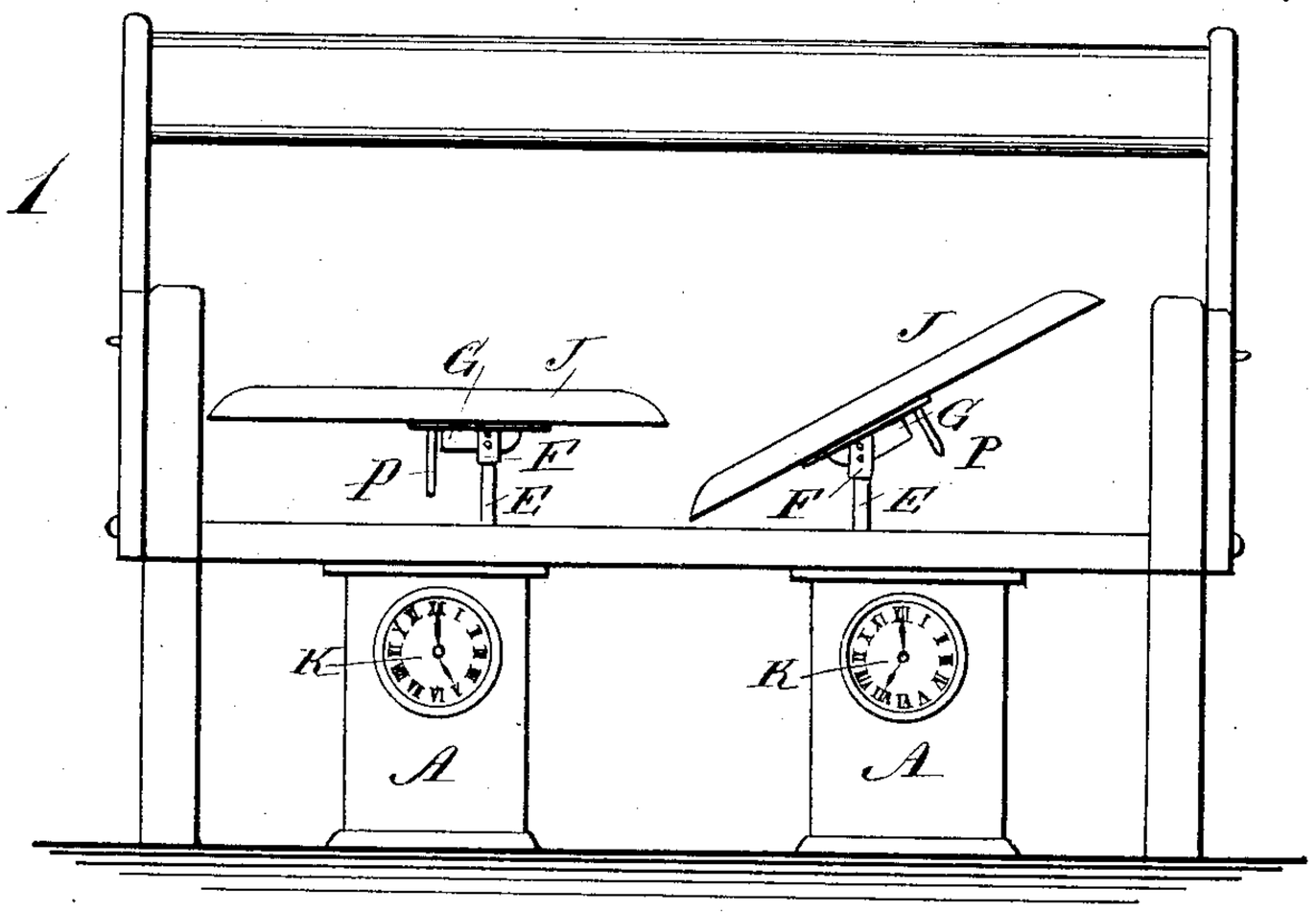


Fig. 2

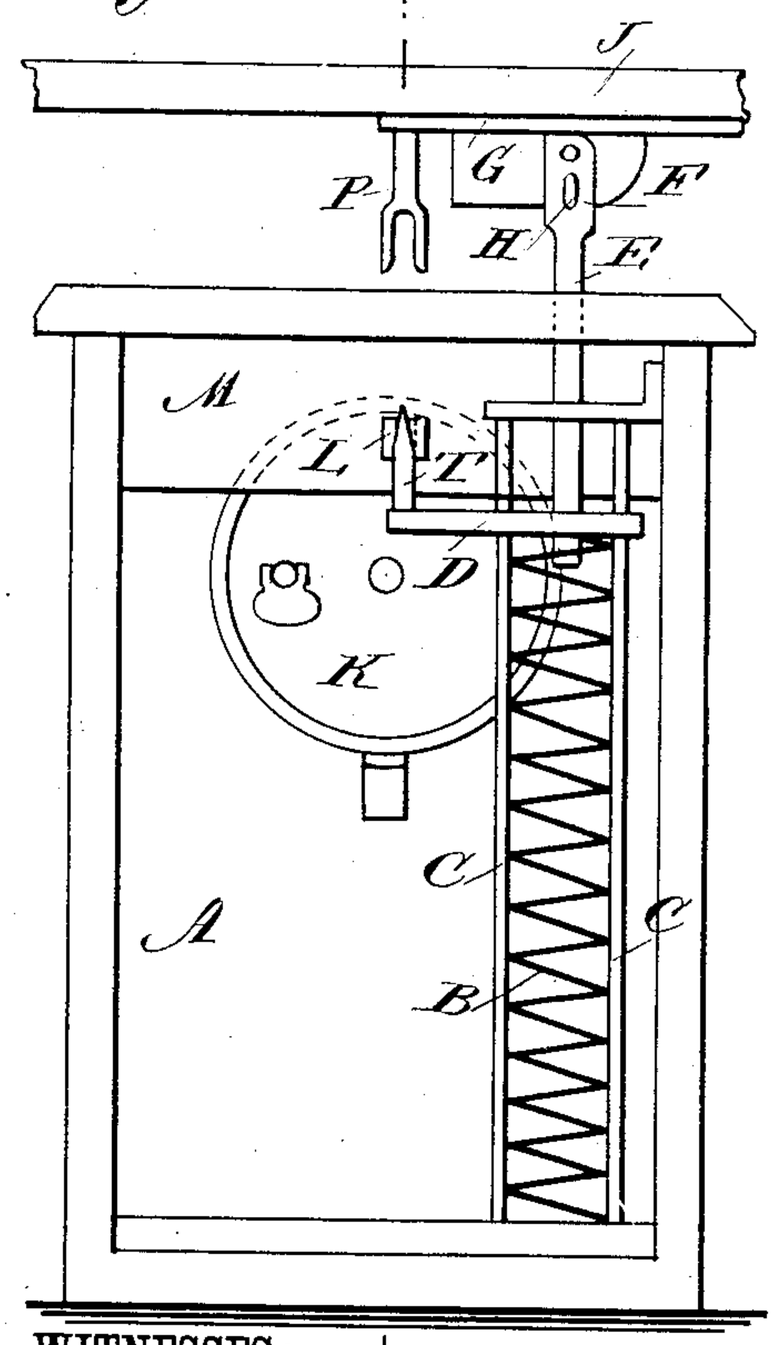


Fig. 3

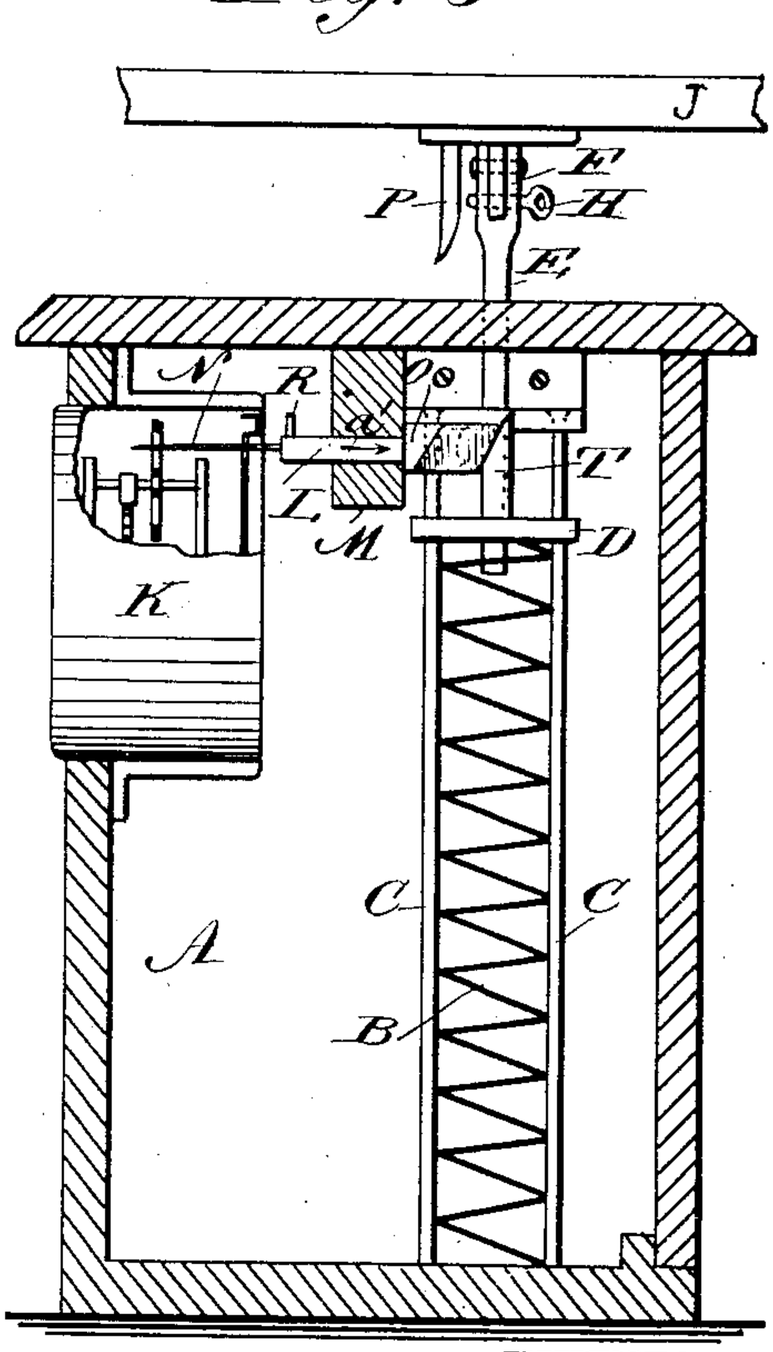
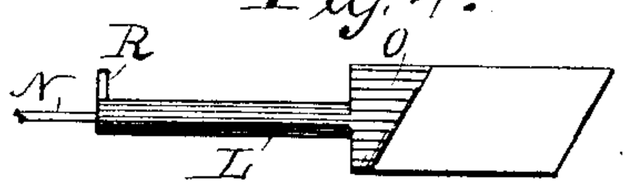


Fig. 4.



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UNITED STATES PATENT OFFICE.

CHARLES W. ALLEN, OF VALENTINE, NEBRASKA.

TIME-REGISTER FOR SEATS.

SPECIFICATION forming part of Letters Patent No. 312,176, dated February 10, 1885.

Application filed March 31, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. ALLEN, of Valentine, in the county of Cherry and State of Nebraska, have invented a new and Improved Time-Register for Seats, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved time-register for seats, for the purpose of automatically registering the time that a seat has been occupied.

The invention consists in the peculiar construction and arrangement of parts, as hereinafter fully described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front view of a car-seat provided with my improved time-register for seats. Fig. 2 is a rear view of my improved time-register for seats. Fig. 3 is a cross-sectional elevation of the same on the line *x x* in Fig. 2. Fig. 4 is a detail view.

Within a box or casing, A, a powerful coiled spring, B, is held between a series of upright rods or thick wires, C, or in a slotted casing, and on the upper end of the spring B a plate, D, rests, which is guided by the rods C, or by the casing of the spring.

From the plate D a rod, E, projects up through an aperture in the top of the casing A, and is provided at its upper end with a fork, F, in which a plate, G, is pivoted, which is secured to the under side of the seat J. The plate G and the prongs of the fork F are provided with apertures for receiving a key or pintle, H, for locking the seat J in a horizontal position on the upper end of the rod E. A small clock, K, is held in the front of the casing A, and behind the said clock a horizontally-sliding bar, L, is held in a hanger or block, M, projecting down from the top of the casing, which bar is provided on the end toward the back of the clock with a projecting pin or needle, N, adapted to be passed through an aperture in the back of the clock and engage with one of the wheels of the clock mechanism, and thereby stop the clock. The opposite end of the bar L is beveled from the bottom to the top edge and outward, and a short distance from the beveled end one or two shoulders, O, are formed on the sides of the block, which shoulders are parallel with the end bevel of the said bar. An upright rod, T, is held on one end of or on an arm of the plate D, and has its upper end beveled parallel with the end bevel of the bar L. A forked prong, P, projects down from the plate G, and is adapted to pass through an aperture in the top of the casing A, and to act on beveled shoulders O of the bar L.

The operation is as follows: Ordinarily the seat is held in a horizontal position on the upper end of the rod E by the pin H. If a person occupies a seat, the same is forced down, and the prong P is forced through the opening in the top of the casing, and, acting on the beveled shoulders O of the bar L, forces the bar in the direction of the arrow *a'*, thereby withdrawing the pin N from the clock-work, which is released, and thus starts as soon as the seat is pressed down. If a person rises, the spring B, which has been compressed by forcing down the seat, expands and forces the plate D upward, causing the upper beveled end of the rod T to act on the outer beveled end of the rod L, thereby moving the said bar in the inverse direction of the arrow *a'*, and causing the pin N to enter the clock mechanism, engage with one of wheels, and thus stop the clock-work. If the time by the clock K at which the seat was occupied is noticed, the time that the seat was occupied can be ascertained, as the clock stops as soon as the person rises. Fares in cars, carriages, &c., can be collected for the time the seat was occupied, and the conductors and collectors can be fully controlled. If one seat is occupied, the other can be inclined as a head-rest, as shown in Fig. 1, and as the spring B has such tension that it requires the full weight of a person to compress it the inclined seat will not be depressed. If the time-register is not to work, a suitable block or prop is placed between the seat and the seat-frame to prevent the seat from being forced down.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with a clock mechanism, a vertically-sliding seat, and a spring for pressing the seat upward, of a horizontally-sliding pin alternately operated by pins on the seat, and springs for causing it to engage and to be disengaged from the clock mechanism, substantially as herein shown.

2. The combination, with a seat, of a spring for pressing it upward, and sliding bar provided with a pin adapted to be passed into the clock-casing to stop the works, a plate resting on the spring, a prong projecting upward from the said plate and adapted to press the bar toward the clock, and of a prong projecting down from the under side of the seat and adapted to press the said bar in the direction from the clock, substantially as herein shown and described.

3. The combination, with the seat J, of the spring B, the plate D, the bar L, having a beveled end and beveled shoulders O, the pin N, the clock K, the upwardly-projecting prong T on the plate D, and the downwardly-projecting prong P on the seat, substantially as herein shown and described.

CHARLES W. ALLEN.

Witnesses:
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