(No Model.)

G. W. STONE, Jr.

LOCOMOTIVE CAB SEAT.

No. 404,662. Patented June 4, 1889.

Fig. 1.

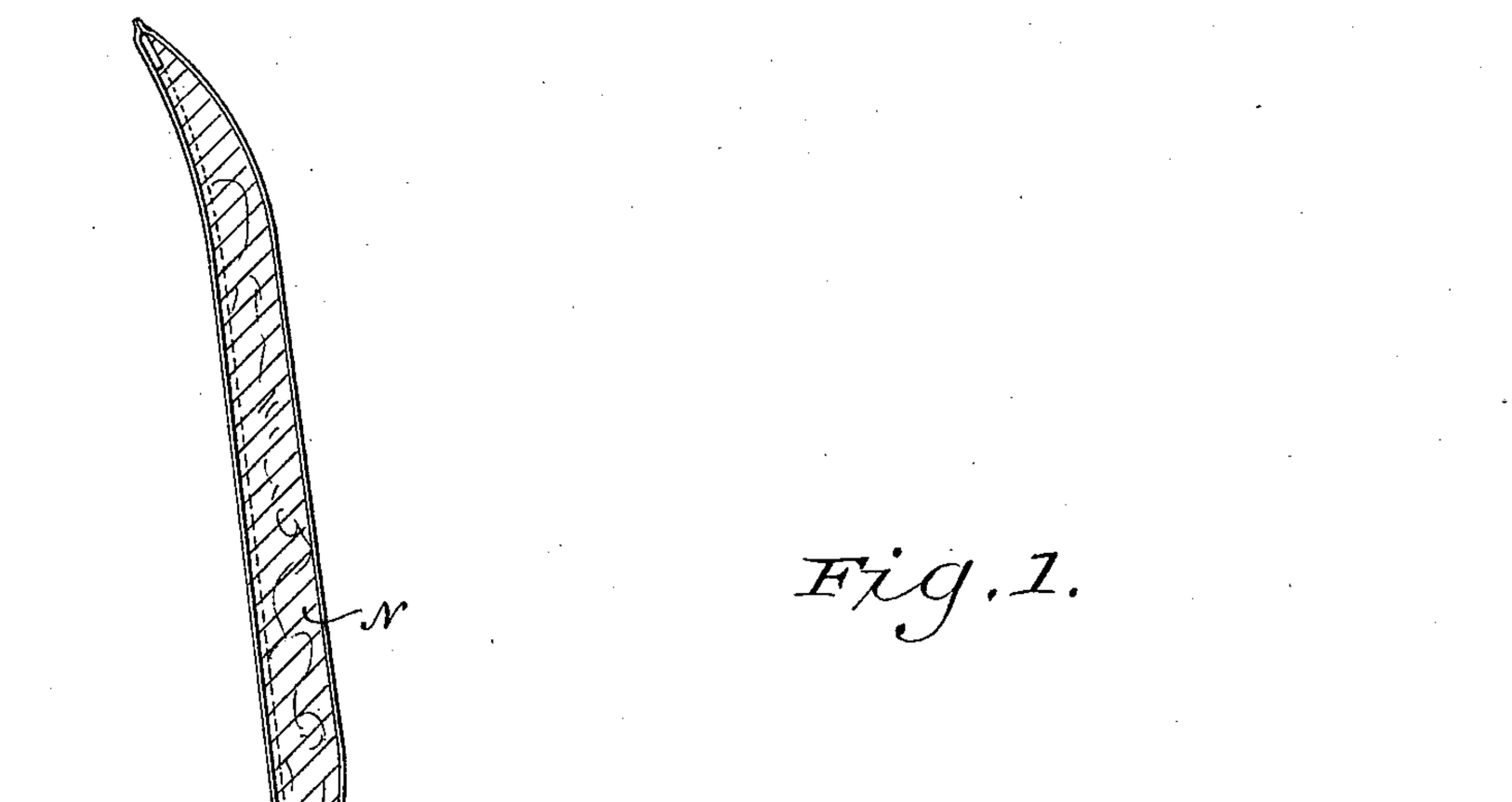
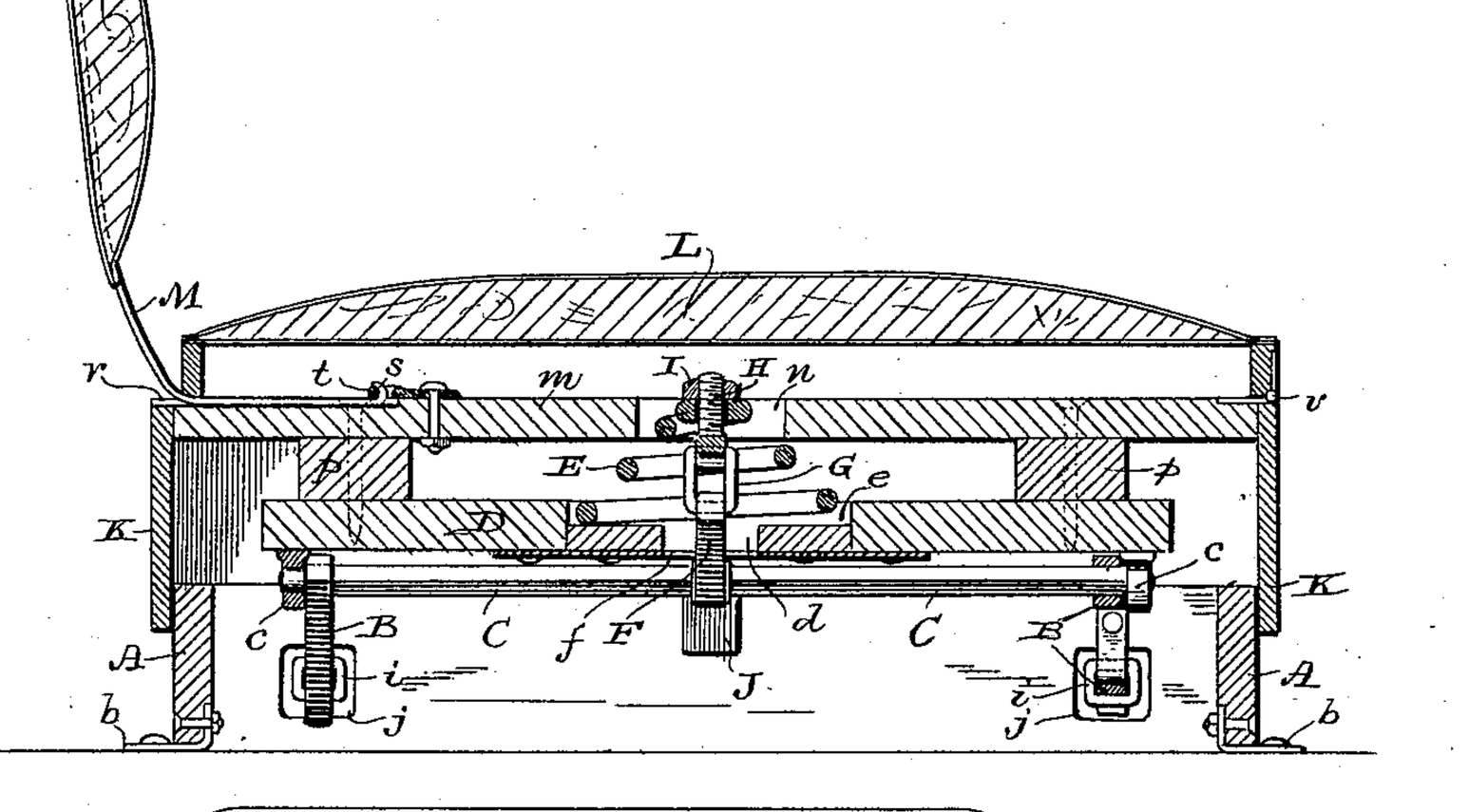


Fig. 2.



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UNITED STATES PATENT OFFICE.

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LOCOMOTIVE-CAB SEAT.

SPECIFICATION forming part of Letters Patent No. 404,662, dated June 4, 1889.

Application filed December 21, 1888. Serial No. 294,280. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. STONE, JR., of Waukesha, in the county of Waukesha, and in the State of Wisconsin, have invented certain new and useful Improvements in Locomotive-Cab Seats; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to locomotive-cab seats; and it consists in certain peculiarities of construction and combination of parts, to be hereinafter described with reference to the accompanying drawings, and subsequently claimed.

In the drawings, Figure 1 represents a vertical longitudinal section of a locomotive-cab seat constructed according to my invention, and Fig. 2 a vertical transverse section of the same.

Referring by letter to the drawings, A represents a frame provided with lateral ears *b*, that are rigidly secured to the top of a side box in a locomotive-cab. Shackled to each side of the frame A are arms B, rigidly connected to longitudinal shafts C, that are journaled in bearings *c*, depending from a platform D, the latter being provided with a central opening *d*, and having its upper side preferably recessed, as shown at *e*, to form a seat for a spiral spring E, said seat being strengthened by means of stay-plates *f*, secured to the under side of the platform.

Rigidly connected to the longitudinal shafts C are arms F, that extend up through the central opening *d* in the platform D, the free ends of these arms and the ones B being respectively provided with slots *g h*, as best illustrated by Fig. 2. The slotted free ends of the arms B engage with the shackle-links *i* on the inner sides of the stationary frame A, these inner sides of said frame being recessed, as shown at *j*, to allow for the play of said arms and links.

The slotted free ends of the arms F engage with links G, that also engage slots *k* in the bifurcated head of a bolt H, the latter being extended up through the spiral spring E to receive a nut I, and by means of this nut the tension of said spring is regulated.

In order to guard against lateral movement of the platform D, I provide the latter with brackets J, that extend down within the frame A and come close against the inner sides thereof. Another frame K, provided with a top piece *m*, having a central opening *n* therein, is supported upon the platform by means of cleats *p* and rigidly secured to said platform by means of screws or other suitable means. The frame K is telescopically arranged with relation to the stationary frame A, and the central opening *n* in the top piece *m* of the former frame accommodates the upper end of the spiral spring E.

Hinged to the top piece *m*, at one end of the frame K, is an upholstered seat L, and at the opposite end said top piece is provided with longitudinal recesses *r*, to receive the lower ends of spring-braces M, belonging to a detachably upholstered back-rest N, said spring-braces being upturned at their ends to form hooks *s*, that engage eyes *t*, bolted or otherwise secured to said top piece of the telescopic frame.

The back-rest is made detachable to suit the convenience of the occupant of the cab-seat, and while I have shown this construction as the preferable one, it is obvious that said back-rest may be permanently attached to the telescopic frame that supports the seat proper. By adjusting the nut I the tension of the spiral spring E is increased or diminished in proportion to the weight of the occupant on the seat L, the latter being swung back on its hinges *v* to permit of access to said nut. When the nut I is run down, the tension of the spring E lifts the platform D to increase the draw against the arms B F, and consequently it requires a greater weight to overcome the resistance of these arms than when said spring is less contracted. The shafts C distribute the strain upon the spring-platform D, and consequently the movement of the latter is equal throughout its length, no matter at what point the opposing force may be applied.

By the above description it will be seen that when the tension of the spring E is regulated to compensate for the weight of any particular person the vertical play of the telescopic frame K with relation to the stationary frame A is proportionate to said tension, because of the elevation or depression of the platform D, on which said telescopic frame is arranged, and consequently this latter frame cannot strike against the side box of the locomotive-

cab, while at the same time there is a free yield to the vibration of the locomotive, whereby the jolting, jarring, and trembling ordinarily experienced by engineers and others upon locomotive-cab seats is obviated, greatly to the comfort and profit of such persons, because it enables them to run more miles per month with less hardship than is the case with locomotive-cab seats of the ordinary construction.

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

1. A locomotive-cab seat comprising a stationary frame, a spring-platform having a yielding connection with the stationary frame and adjustable as to tension, and a seat-supporting frame arranged on the spring-platform to surround said stationary frame and have telescopic movement with relation thereto, substantially as set forth.

2. A locomotive-cab seat comprising a stationary frame, a spring-platform having a yielding connection with the stationary frame and provided with brackets that extend down within the same and come close against the inner sides thereof, and a seat-supporting frame arranged on the spring-platform to surround said stationary frame and have telescopic movement with relation thereto, substantially as set forth.

3. A locomotive-cab seat comprising a stationary frame, a spring-platform having a yelding connection with the stationary frame, the seat proper, a supporting-frame therefor arranged on the spring-platform to have telescopic movement with relation to said stationary frame, eyes secured to the supporting-frame, and a back-rest having depending braces turned up at their ends to form hooks for engagement with said eyes, substantially as set forth.

4. A locomotive-cab seat comprising a stationary frame provided with lateral ears for attachment to a side box in a locomotive-cab, a spring-platform having a yielding connection with the stationary frame, and a seat-supporting frame arranged on the spring-platform to surround said stationary frame and have telescopic movement with relation thereto, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Waukesha, in the county of Waukesha and State of Wisconsin, in the presence of two witnesses.

GEORGE W. STONE, JR.

Witnesses:
ALONZO TYLER,
S. D. JAMES.