

No. 627,940.

Patented June 27, 1899.

J. P. NICHOLLS.
LOCOMOTIVE CAB SEAT.

(Application filed Oct. 25, 1898.)

(No Model.)

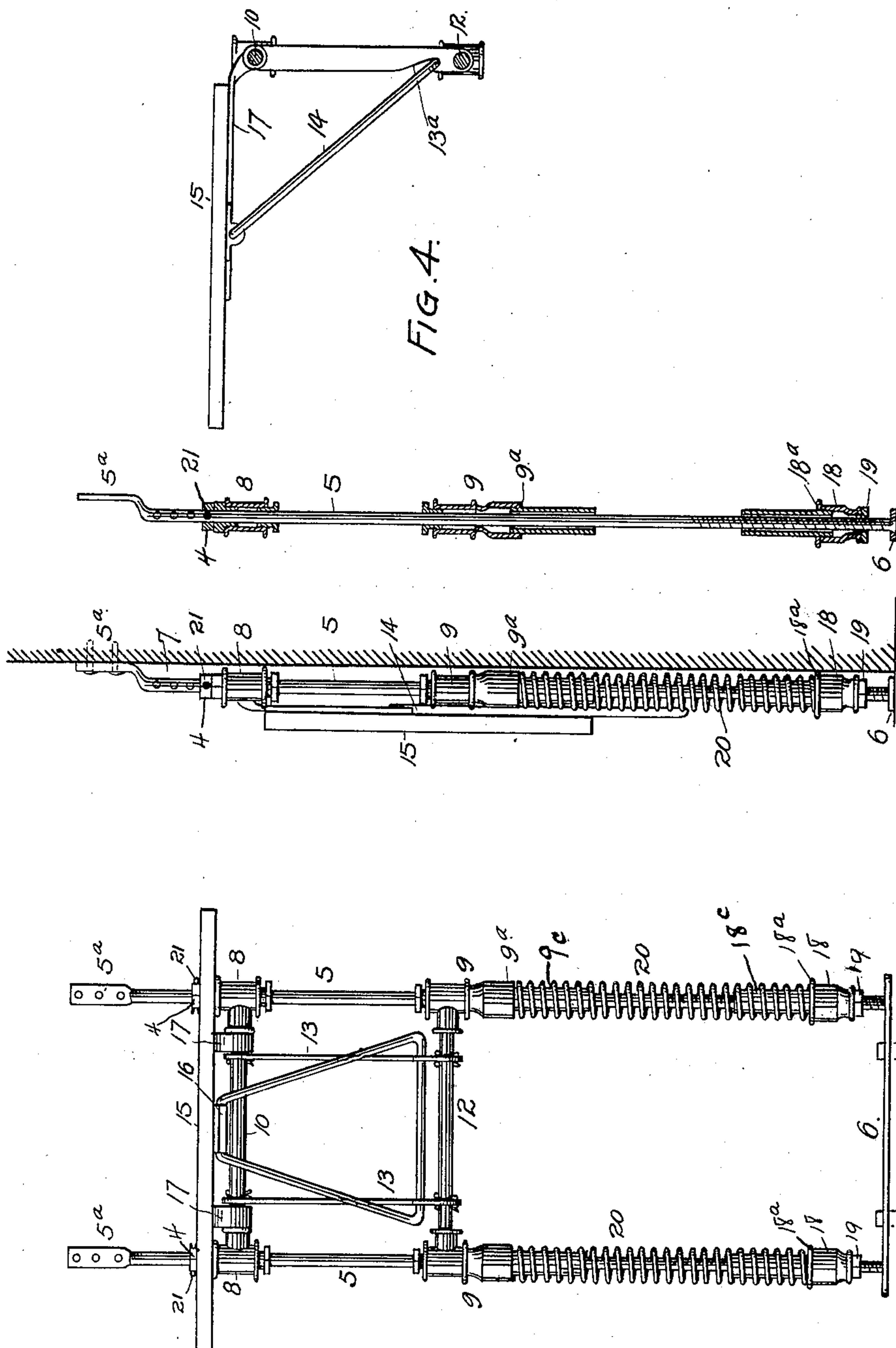


FIG. 2 FIG. 3

FIG. 1

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UNITED STATES PATENT OFFICE.

JOSEPH P. NICHOLLS, OF DENVER, COLORADO.

LOCOMOTIVE-CAB SEAT.

SPECIFICATION forming part of Letters Patent No. 627,940, dated June 27, 1899.

Application filed October 25, 1898. Serial No. 694,546. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH P. NICHOLLS, a citizen of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Locomotive-Cab Seats; and I do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in seats adapted for attachment to the cab of a locomotive for use by engineers and firemen. The jar and vibration of the engine result injuriously to these men and being long continued oftentimes brings on disease, compelling cessation of work and the permanent retirement of men who, so far as age is concerned, should be in the prime of life.

The object of my invention is to provide a seat which shall relieve these men of the aforesaid injurious effects incident to their work; and to this end the invention consists of the features hereinafter described and claimed, all of which will be fully understood by reference to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a front view of my improved cab-seat. Fig. 2 is a side elevation of the same. Fig. 3 is a section taken through the attachments mounted on one of the supporting-rods forming the legs of the seat. Fig. 4 is a fragmentary section of the mechanism.

Similar reference characters indicating corresponding parts in the views, let the numeral 5 designate each of two upright rods forming the legs of the seat. The lower extremities of these rods are attached to a base-plate 6, which may be secured to the floor of the cab in any suitable manner. The upper extremities 5^a of the rods are flattened and apertured for attachment to the wall 7 of the cab. Upon each of these rods are mounted two sleeves 8 and 9. The upper sleeves 8 are connected by a horizontal rod 10 and the lower sleeves 9 by a similar rod 12. The rods 10 and 12 are

connected by two separated vertical bars 13, located intermediate the legs 5. These bars are provided with notches 13^a, adapted to engage the lower part of a supporting-brace 14, which is hinged to the lower surface of the seat proper, 15, as shown at 16. The seat 15 is hinged to the rod 10 by means of two arms 17, made fast to the seat, their rear extremities being provided with eyes surrounding the rod 10, upon which the eye extremities of the arms are adapted to turn freely. The lower extremities of the rods 5 pass through sleeves 18, which are supported by adjusting-nuts 19, screwed on the threaded extremities of the rods. Each leg 5 is surrounded by a coil-spring 20, whose lower extremity engages a shoulder 18^a, formed on the sleeve 18. The upper extremities of these springs engage shoulders 9^a, formed on the sleeves 9. The sleeves 9 and 18 are also provided with extensions 9^c and 18^c. The springs 20 surround these extensions, which determine the size of the coil and prevent any friction between the springs and the legs.

The seat 15 is supported in the position shown in Figs. 1 and 4 by means of the brace 14 when the latter engages the notches in the keeper-bars 13.

To fold the seat to the position shown in Fig. 2, it is only necessary to raise it sufficiently to disengage the brace 14 from the notches 13^a.

From the foregoing description it will be understood that the springs 20 support the entire movable frame, composed of the sleeves 8 and 9, the horizontal rods 10 and 12, and the vertical keeper-bars 13. The tension of these springs may be regulated to correspond with the weight of the different individuals by means of the adjusting-nuts 19.

The upper portions of the rods 5, just below the extremities 5^a, are each provided with a series of openings 5^d. A collar 4, engaging the upper extremity of each sleeve 9, is held in place by a key 3, which passes through an aperture 5^d and also through openings formed in the collar 4. The seat may be raised and lowered to suit the different individuals by adjusting these collars.

Having thus described my invention, what I claim is—

1. In a cab-seat, the combination of two upright stationary legs, two separated sleeves slidingly mounted on each leg, a transverse rod mounted on the upper sleeves of the legs, a similar rod mounted on the lower sleeves of the legs, an upright bar connecting the two transverse rods, a seat mounted on one of the rods, coil-springs surrounding the legs, their lower extremities engaging the lower sleeves of the legs, other sleeves movably mounted on the legs below the springs and engaging their lower extremities, the spring-engaging sleeves being shouldered and provided with reduced extremities which determine the size of the springs and prevent friction between the springs and the legs, and adjusting-nuts screwed upon the legs which are threaded for the purpose, said nuts engaging the lower ends of the lowermost sleeves.

2. The combination of two upright, stationary legs, two separated sleeves slidingly mounted on each leg, a transverse rod mounted on the upper sleeves of the two legs, a similar rod mounted on the lower sleeves of the two legs, an upright bar connecting the two transverse rods, a seat hinged on one of the rods, a brace hinged to the seat and adapted to engage the bar which is notched for the purpose, coil-springs surrounding the legs, their upper extremities engaging the lower sleeves of the legs, sleeves movably mounted on the legs below the springs and engaging their lower extremities, and adjusting-nuts screwed upon the legs which are threaded for the purpose, said nuts engaging the lower ends of the lowermost sleeves.

3. The combination of two upright, stationary legs, two separated sleeves slidingly mounted on each leg, a transverse rod mounted on the upper sleeves of the legs, a similar rod mounted on the lower sleeves of the legs, two upright ratchet-bars rigidly connecting the transverse rods, a seat hinged to one of said rods, a seat-supporting brace hinged to the seat and adapted to engage the ratchet-bars, coil-springs surrounding the rods, their upper extremities engaging the lower sleeves of the legs, other sleeves movably mounted on the legs below the springs and engaging their lower extremities, and adjusting-nuts screwed upon the rods which are threaded for

the purpose, said nuts engaging the lower ends of the lowermost sleeves.

4. The combination of two upright stationary legs, two separated sleeves slidingly mounted on each leg, a transverse rod mounted on the two upper sleeves of the legs, a similar rod mounted on the two lower sleeves of the legs, an upright bar connecting the two transverse rods, a seat mounted on one of the transverse rods, springs coiled around the rods, their upper extremities engaging the lower sleeves of the legs, suitable adjustable stops mounted on the rods and engaging the lower extremities of the springs, and a suitable seat mounted on one of the transverse rods.

5. The combination of two upright stationary legs, two separated sleeves slidingly mounted on each leg, a transverse rod mounted on the upper sleeves of the legs, a similar rod mounted on the lower sleeves of the legs, an upright bar connecting the two transverse rods, a seat mounted on one of the rods, coil-springs surrounding the rods, their upper extremities engaging the lower sleeves of the legs, sleeves movably mounted on the legs below the springs and engaging their lower extremities, and adjusting-nuts screwed upon the rods which are threaded for the purpose, said nuts engaging the lower ends of the lowermost sleeves.

6. The combination of two upright stationary legs, two separated sleeves slidingly mounted on each leg, a transverse rod mounted on the two upper sleeves, a similar rod mounted on the two lower sleeves, a seat mounted on one of the rods, a bar connecting the two transverse rods, coil-springs surrounding the legs, a stop surrounding each leg and engaging the lower extremities of the springs, their upper extremities engaging the two lower sleeves of the legs, and an adjustable collar engaging the uppermost sleeve of each leg for adjusting the height of the seat, substantially as described.

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

JOSEPH P. NICHOLLS.

Witnesses:

A. J. O'BRIEN,
EDITH HIMSWORTH.