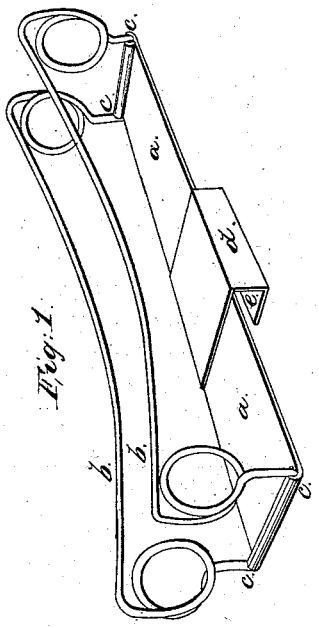
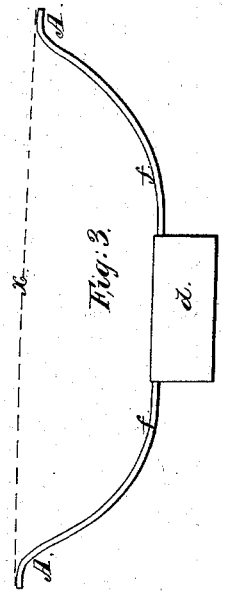
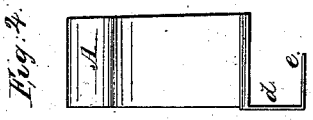
N. Gates,

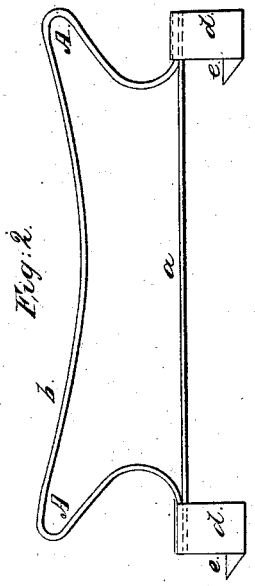
Head Rest.

No. 48,270. Patented June 20, 1865.









Witnesses:
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UNITED STATES PATENT OFFICE.

NELSON GATES, OF MIDDLETOWN, OHIO.

IMPROVED HEAD-REST FOR RAILROAD-CAR SEATS.

Specification forming part of Letters Patent No. **48,270**, dated June 20, 1865.

To all whom it may concern:

Be it known that I, NELSON GATES, of Middletown, in the county of Butler and State of Ohio, have invented a new and Improved Head-Rest for Railroad-Cars; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to the construction of spring head-rests for the use of persons traveling in railroad-cars; and it consists in the combination and arrangement of an elastic rest or cushion for the head with a device by which the elastic rest or cushion is attached to the back of the car-seats or other part of the car. The peculiar construction and contemplated modifications thereof will be herein more fully described.

To enable others to make and use my invention, I will proceed to describe the same, with reference to the accompanying drawings, which are made a part of this specification.

Figure I represents a perspective view of my head-rest with the cushion detached, the upper part being of wire. Fig. II represents a side elevation of the same. Fig. III represents a side elevation of the rest without the cushion, made of a plate of spring-steel. Fig. IIII represents an end view of the head-rest as represented in Fig. II, made of spring-steel.

The body of my new head-rest, as represented in Fig. I, is or may be made with a base, *a a*, of metal or other material, of a suitable length for the front or back of the head of a person to conveniently rest upon it. In this figure that portion or part *b b* upon which the cushion will be placed is represented as made of elastic wire, which is fastened to the four corners of the base *a* at *c c*, the wires being coiled near their extremities to afford the necessary elasticity to furnish an easy yielding rest for the head of a person when traveling by railroad.

d is the fastening by which the head-rest is secured to the top of the seat. The lip *e* of fastening *d* is to be of a proper length to reach beneath the fillet or strip of wood fastened to the front of the back of the car-seat near its top. This fillet is a part of the seat which secures the cushion upon the back of the car-seat along the top thereof.

The body or frame of my head-rest, as represented in Fig. II, is made of thin plates of spring-steel; and Fig. IIII represents an end view of this mode of constructing the head-rest of the same material. When made of steel plates, as represented in the last-named figures, they may be used with or without a cushion, as a person will find that the mere use of a pocket-handkerchief will serve the purpose of the cushion, yet the latter is to be preferred.

Fig. III represents a modified form of the frame or body of my spring head-rest, it being made of but two pieces of material. The fastening *d*, like the same device in the other figures, may be of brass or other material, while the part *f* is a thin plate of steel. The two are connected by the use of rivets or other means. When my invention is thus formed of spring-steel I propose to use an elastic web as a cushion, to be secured to the ends of the curved plate *f*, as represented in dotted lines.

It is obvious that my invention may be embodied in various modifications or structures, by means of which the same results will be attained—as, for example, the fastening may be varied in form, so as to be capable of clasping the back of the car-seat, while the base *a a* will rest upon the top of the seat-back and the head of the traveler will rest upon the cushion, his body being inclined forward; or the fastening clasp or hook may be of the form of the block-letter S or hook, (thus ⨍ ,) the upper part of which will hook upon the top edge of the seat-back, and the base of the head-rest may be secured to the top or upper side of the bottom of this hook, whereby the use of my improved head-rest will not interfere with or discommode the occupant of the seat to the back of which the head-rest is attached. When thus attached to the seat in front of the user he will assume an inclined position of the body, leaning forward at an angle of about forty-five degrees, which will bring his head upon the cushion or elastic webbing shown in Fig. III at *x*.

It will be readily seen that my device may be easily connected with the back of the same

seat occupied by the user of the head-rest, and in this case the user would bring the head upon the cushion by a gentle or slight inclination backward. In either case the same result is accomplished.

To meet the wishes or necessities of persons of different sizes or statures, I propose to construct the hook or fastening so as to give a greater or less lateral inclination to the body of the head-rest when secured to the seat. This modification is apparent, and within the scope of ordinary mechanical skill.

Instead of the metal clasp or hook fastening it is contemplated by me to suspend my cushion or spring head-rest from another convenient part of the car, whereby the same may be made a permanent fixture thereof.

I should regard the use of spiral springs arranged upon the base *a a* to support the cushion as equivalent to the spring-steel plates, and the entire superstructure may be made of india-rubber supported upon a base of wood, metal, or other material.

I deem the present improvement in traveler's head-rests as a decided advance in this class of devices for the reason of its simplicity, compactness, and consequent convenient portability, and particularly because it combines cheapness of manufacture with durability and unusual comfort to the user. It may be made in an artistic and ornamental manner, so as not to be unsightly or cumbersome when worn suspended from the button of the user's coat or vest.

It will be noticed that in using my improvement the yielding nature of the spring, cushion, or elastic webbing is such as to be considerably depressed by the weight of the head, and this depressing of the center of the web or spring will cause a corresponding inclination of the ends of the head-rest at A A inwardly, whereby sufficient lateral support will be given to the user's head to keep it in position.

Having fully described the manner of constructing and mode of using my improved head-rest for railroad-cars, what I claim therein as my invention is—

1. The spring head-rest constructed, arranged, and applied to use in the manner and for the purpose substantially as described.

2. The spring head-rest constructed as described, in combination with the fastening by which it may be attached to the car, substantially as and for the purpose set forth.

In testimony whereof I have, this 28th day of February, 1865, set my hand.

NELSON GATES.

Witnesses:

GEO. H. HENKEL,

H. P. K. PECK.