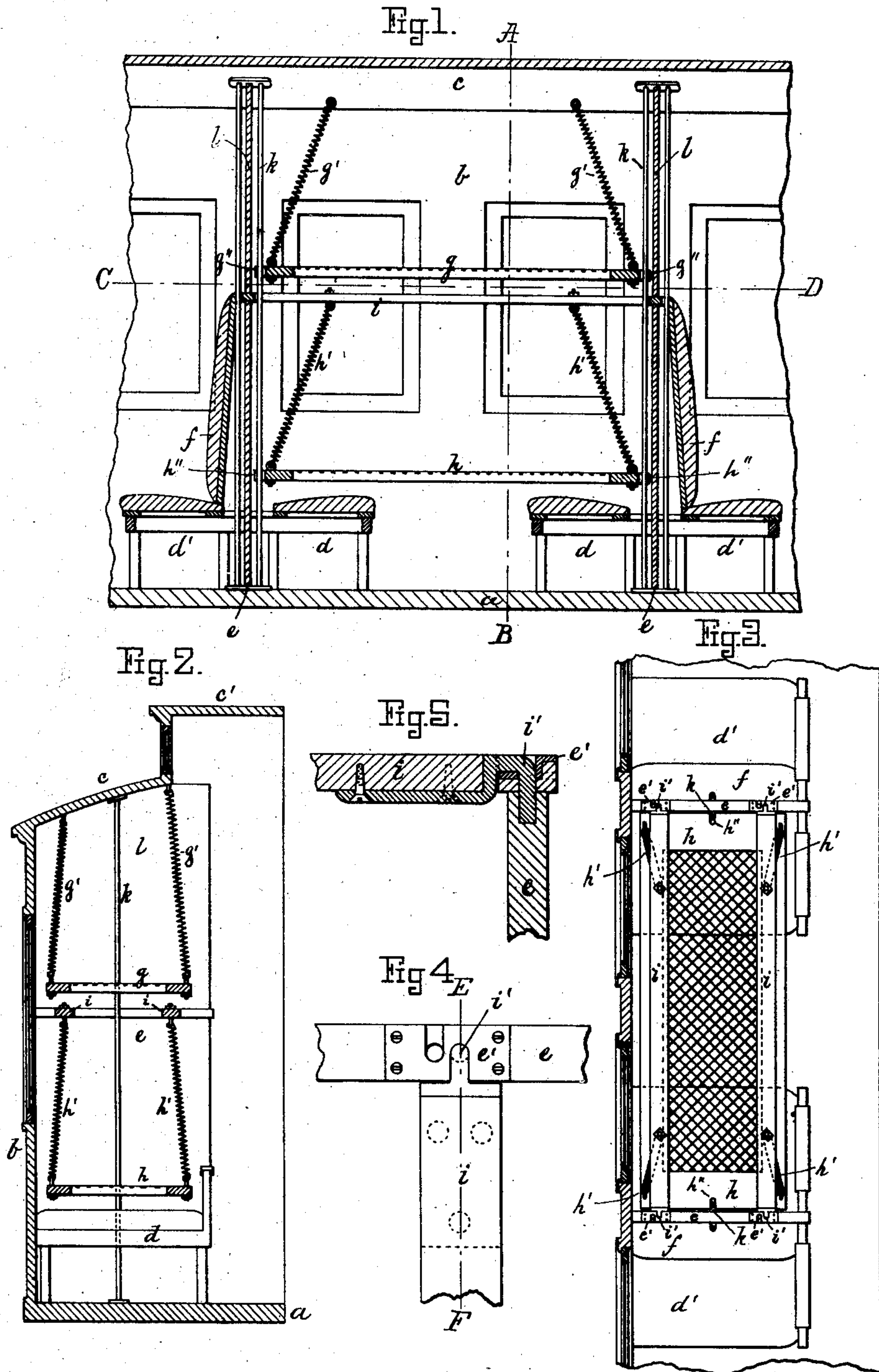


(No Model.)

S. SHAW.
SLEEPING CAR BERTH.

No. 244,772.

Patented July 26, 1881.



Witnesses:
Henry Chadburn.
George E. Ostburg

Inventor:
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by Alban Andren, his atty.

UNITED STATES PATENT OFFICE.

SUMNER SHAW, OF BOSTON, MASSACHUSETTS.

SLEEPING-CAR BERTH.

SPECIFICATION forming part of Letters Patent No. 244,772, dated July 26, 1881.

Application filed June 6, 1881. (No model.)

To all whom it may concern:

Be it known that I, SUMNER SHAW, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Sleeping-Car Berths; and I do hereby declare that the same are fully described in the following specification, and illustrated in the accompanying drawings.

10 This invention relates to improvements in sleeping-car berths, its object being to relieve the occupant of the shake and jar in a vertical direction, as is the case in the ordinary rigid berths, and also to prevent the quick vibratory motion of the berth, both in a longitudinal and lateral direction, and thus to produce an elastic, comfortable, and yielding sleeping-berth for railway-cars, and to avoid the fatiguing and unpleasant quick and sharp vibratory motions now existing in using the ordinary firmly-secured berths on sleeping-cars. For these purposes the invention is carried out as follows, reference being had to the accompanying drawings, in which—

25 Figure 1 represents an interior side elevation of a railway-car as provided with my improved berths. Fig. 2 represents a vertical section of one-half of the car on the line A B, shown in Fig. 1. Fig. 3 represents a horizontal section on the line C D, shown in Fig. 1. Fig. 4 represents a detail view of a portion of the top of the stationary division between the seats, and a part of one of the supporting-bars for the lower berth. Fig. 5 represents a section on the line E F, shown in Fig. 4.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

40 *a* represents the floor of a railway-car, on which *b* is the side and *c* the top with its monitor *c'*, as usual.

d d d' d' represent the chairs or seats, as usual, and *e e* represent stationary partitions between each pair of chairs or seats *d d' d d'*.

45 *f f* represent detachable backs for the seats or chairs, which backs are removed when the compartment is to be used for sleeping purposes, as shown in the middle portion of Fig. 1.

50 *g* represents the bed-bottom for the upper berth, which is suspended from above by means of the elastic spiral-spring supports *g' g' g' g'*,

secured in a suitable manner in their lower ends to the bed-bottom *g*, and in their upper ends to the roof *c* of the car, or to brackets or suitable supports attached to said roof, as may be most convenient. 55

h represents the bed-bottom for the lower berth, which is also suspended from above by means of the elastic expansion spiral-spring supports *h' h' h' h'*, secured in a suitable manner in their lower ends to the bed-bottom *h*, and in their upper ends to a pair of supporting-bars, *i i*, the ends of which are preferably provided with suitable metallic hoops *i' i'*, as shown in Figs. 4 and 5, adapted to rest and to be temporarily held in a perforated plate, *e'*, secured to the upper edge of each of the partitions *e e*, as shown. I do not, however, confine myself to this exact arrangement of the supporting-bars *i i* for the lower berth, *h*, it being only necessary to provide a suitable support on the partitions *e e* for the bars *i i*. 65

g' g' are slotted openings in the ends of the upper bed-bottom, *g*, and *h' h'* are similar slotted openings in the ends of the lower bed-bottom, *h*, as shown, which, in combination with the stationary vertical guide rods or posts *k k*, that pass through said slotted openings *g'*, and *h'*, serve as guides during the yielding, upward, downward, forward, and back motions of the berths when the car is running, and also to prevent too much lateral side motion of the berths, as a sufficient lateral adjustment is obtained by the canting of the berths to compensate for the lateral-swaying motion of the cars. 75

The yielding supporting-springs *g' g' h' h'* for the berths may be arranged obliquely, as shown, or otherwise, without departing from the essence of my invention; and they may be covered with india-rubber or other suitable covering materials, if it should so be desired. 80

When the berths are not to be in use the springs *g' h'* are detached from their upper or lower or both supports, and the bars *i i*, as well as the berths and their beddings, removed or swung to the side of the car, or otherwise disposed of, as may be most convenient, according to the particular construction of the car on which they are used. *l l* are detachable partitions, as usual, between the sections of the car. 85 90 95 100

What I desire to secure by Letters Patent, and claim, is—

1. In a sleeping-car, the yielding berth consisting of the bed-bottom *g*, suspended by the
5 spiral springs *g' g' g' g'*, as and for the purpose set forth.

2. In a sleeping-car, the yielding bed-bottoms *g h*, having slotted openings *g'' h''*, and suspended by the spiral springs *g' g' h' h'*, in combination with the stationary vertical guide-
10 posts *k k*, as herein described and for the purpose set forth.

3. In a sleeping-car, the yielding bed-bottom *h*, suspended by the spiral springs *h' h'*, in combination with the supporting-bars *i i* and supports *e e*, as and for the purpose set forth. 15

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

SUMNER SHAW.

Witnesses:

ALBAN ANDRÉN,
HENRY CHADBOURNE.