

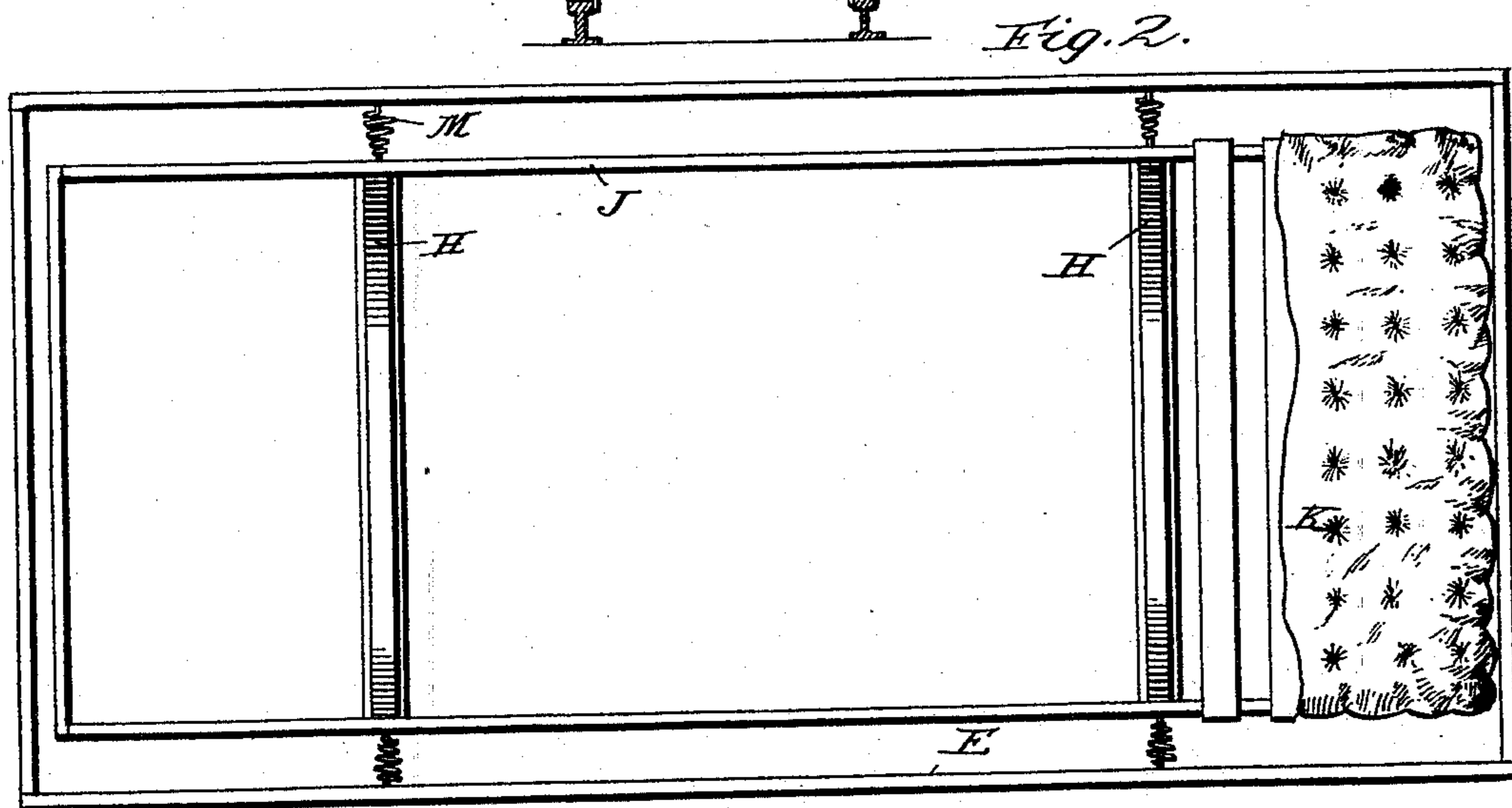
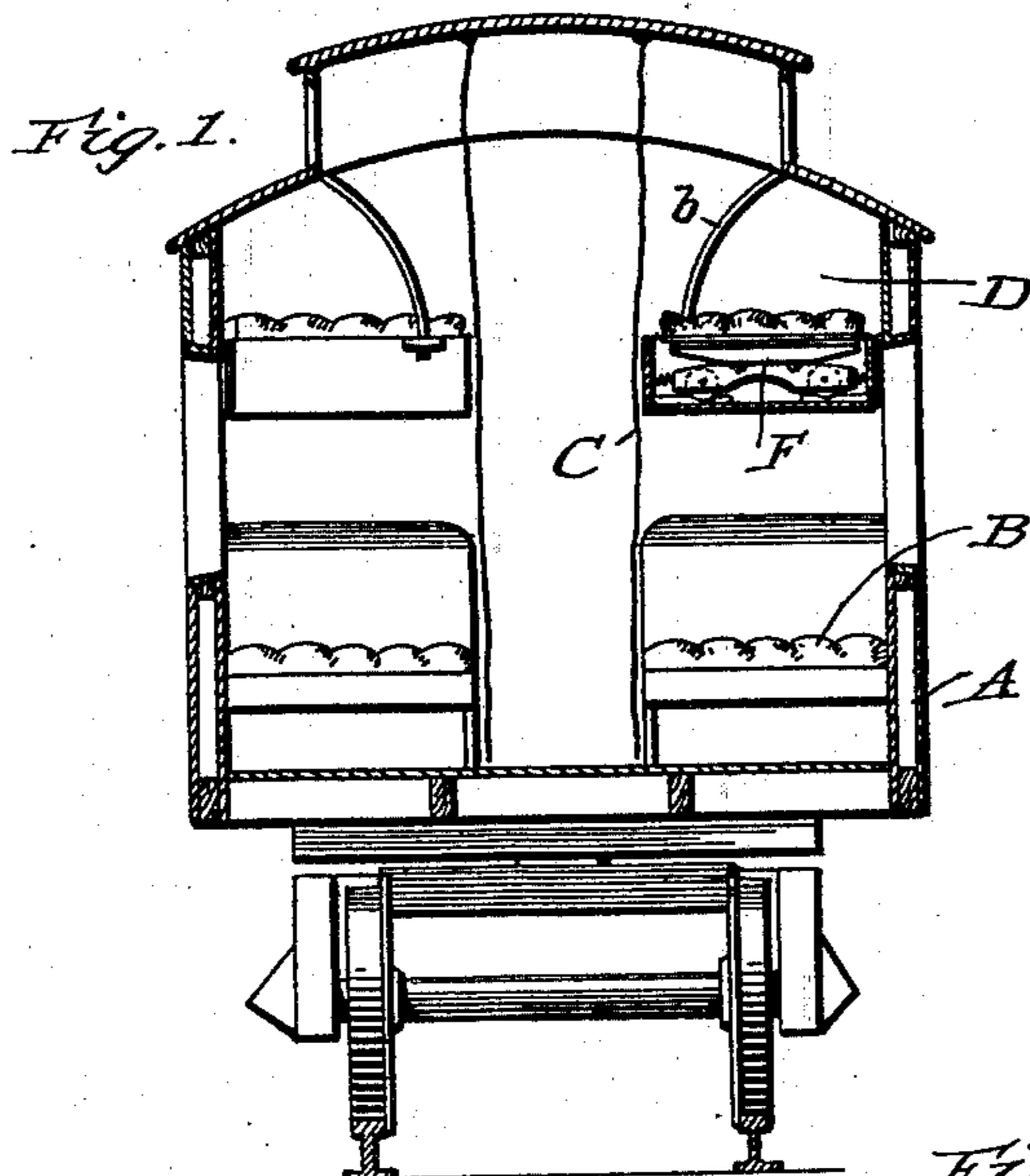
(No Model.)

2 Sheets—Sheet 1.

J. I. NEWBURG.
SLEEPING CAR.

No. 578,897.

Patented Mar. 16, 1897.



Witnesses:
E. A. Rueder
H. A. James

Inventor
John I. Newburg
By *James J. Shuey*
Attorney

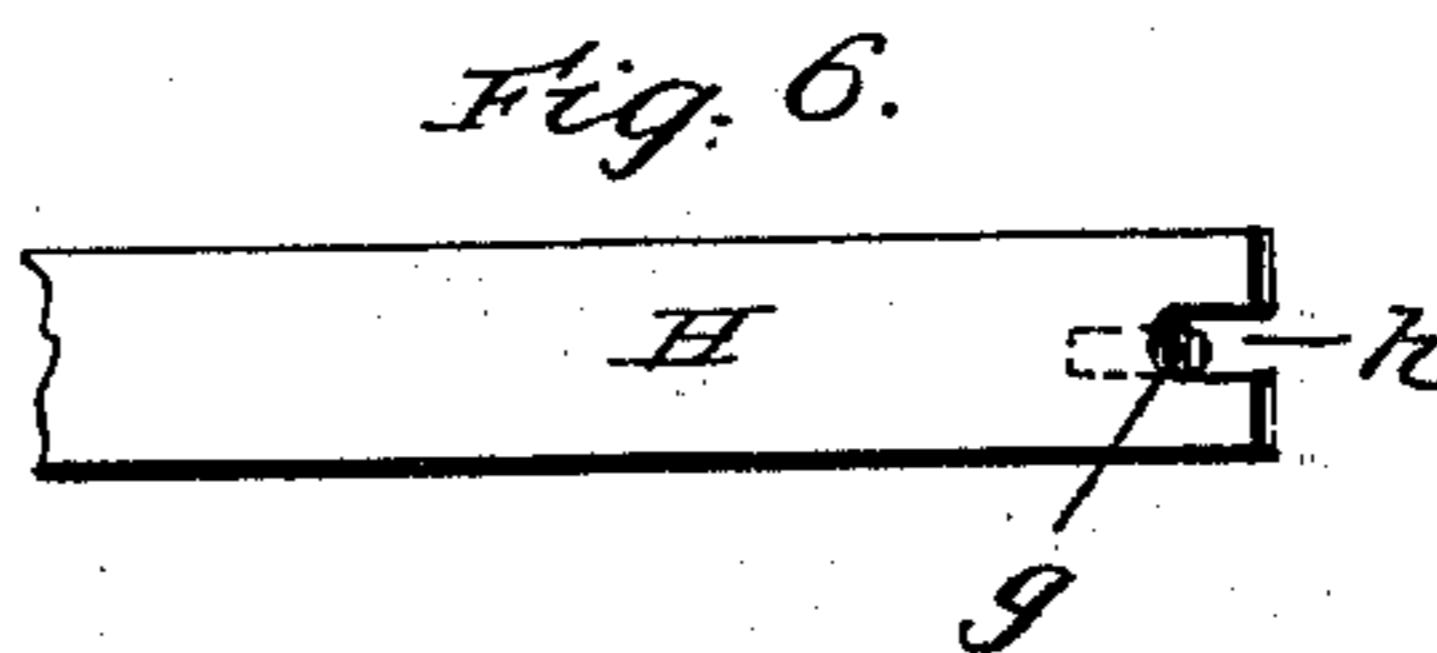
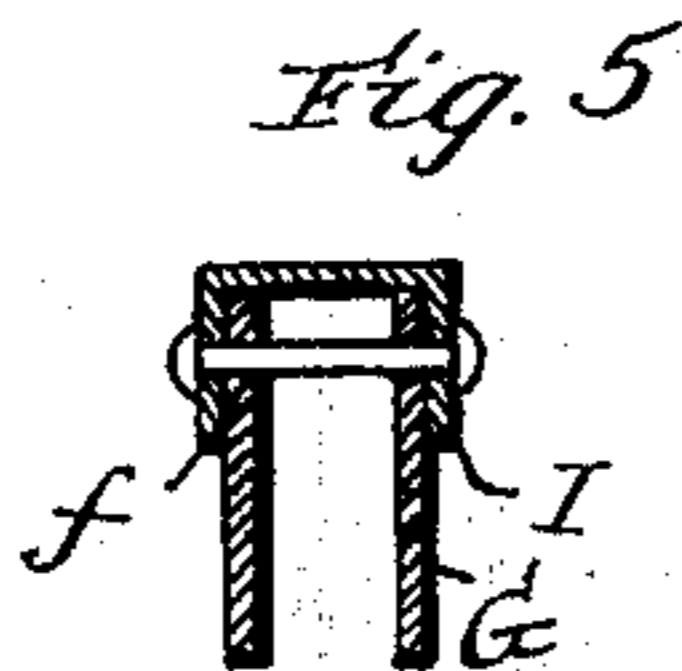
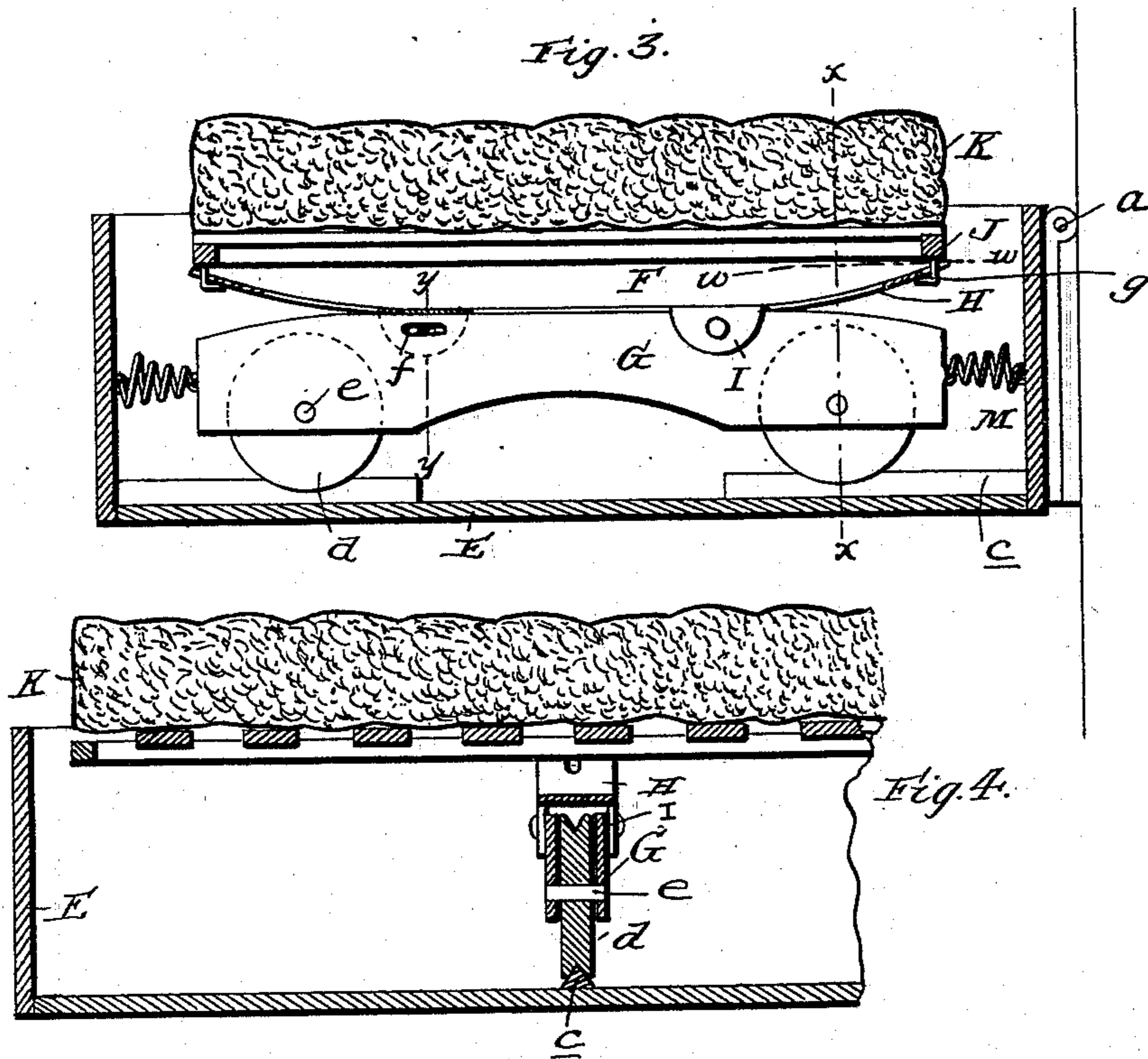
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2 Sheets—Sheet 2

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UNITED STATES PATENT OFFICE.

JOHN ISRAEL NEWBURG, OF VICKSBURG, MISSISSIPPI.

SLEEPING-CAR.

SPECIFICATION forming part of Letters Patent No. 578,897, dated March 16, 1897.

Application filed September 8, 1896. Serial No. 605,085. (No model.)

To all whom it may concern:

Be it known that I, JOHN ISRAEL NEWBURG, a citizen of the United States, residing at Vicksburg, in the county of Warren and State of Mississippi, have invented certain new and useful Improvements in Sleeping-Cars; 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.

My invention relates to improvements in the berths of sleeping-cars, and more particularly to what are commonly known as "upper" berths; and it has for its general object to provide a sleeping-car berth embodying such a construction that it is adapted to take up the shock and jar incident to the rocking and swaying motions of a moving car and prevent the transmission of the same to the sleeper occupying it.

Other objects and advantages of the invention will be fully understood from the following description and claims when taken in conjunction with the annexed drawings, in which—

Figure 1 is a transverse section of a sleeping-car having upper berths embodying my invention. Fig. 2 is a plan view of a berth with the mattress partly broken away. Fig. 3 is an enlarged transverse section of a berth. Fig. 4 is a detail longitudinal section taken in the plane indicated by the line *xx* of Fig. 3. Fig. 5 is a detail section taken in the plane indicated by the line *yy* of Fig. 3. Fig. 6 is a detail section taken in the plane indicated by the line *ww* of Fig. 3.

In the said drawings similar letters designate corresponding parts in all of the several views, referring to which—

A indicates a sleeping-car which in general may be of the ordinary or any other suitable construction.

B indicates the lower berths, which may be formed by the seats in the usual manner.

C indicates the curtains ordinarily employed, and D indicates the upper berths, which embody my invention. These upper berths, like those at present in common use, respectively comprise a receptacle E, of rectangular form, which is connected in a hinged manner to the side wall of the car, as indicated by *a*, and is suspended from the roof

by hangers *b* and is designed when not in use to be swung upwardly against the roof in a manner common to the upper berths of sleeping-cars. Each of the said receptacles E is provided upon its bottom at intervals in its length with the transverse rails *c*, and upon these rails, which are preferably of triangular form in cross-section, are arranged the wheels *d* of the mattress-carriage F, the said wheels having their peripheries grooved in conformity to the shape of the rails, as shown, in order to reduce the liability of them casually leaving the same.

The mattress-carriage F preferably comprises the two (more or less) pairs of parallel transverse bars G, which carry the axles *e*, upon which the wheels *d* are mounted, the springs H, which have depending lugs I at intervals in their length arranged at opposite sides of the bars G and connected thereto by pins which take through the lugs and through slots *f* in the bars G, so as to admit of limited endwise play of the springs, and the frame J for supporting the mattress K. The said frame J is preferably of a rectangular form, as shown, and it is provided with depending lugs *g*, preferably of L shape, which occupy the bifurcations *h* at the ends of the springs H, and thereby connect said springs and the frame, as shown.

M indicates springs, preferably of helical form, which are connected at one end to the side walls of the receptacle E and at their opposite ends to the ends of the bars G of the mattress-carriage, as shown. These springs M are designed and adapted to permit the carriage F to move gently on the track-rails *c* and to cushion such movements so as to effectually prevent the shock and jar incident to the rocking and swaying motions of a moving car from being transmitted to the sleeper occupying the berth. The said springs M are preferably of a helical form, as described, so as to enable their coils or whirls to nest and thereby permit a considerable movement of the carriage F in both directions.

The springs H, which are preferably of the bow type, as shown, serve to yieldingly support the frame J and the mattress thereon and thereby prevent jolting from being transmitted to the sleeper on the mattress.

It will be observed from the foregoing that

while very cheap and simple and adapted to be readily applied to the upper berths of sleeping-cars at present in use without materially altering the construction thereof my improvements will effectually prevent the transmission of all shock and jar to the person occupying the berth and will afford a pleasant motion which will promote rather than prevent comfortable sleep.

I have in some respects specifically described the construction and relative arrangement of the parts of my improved berth in order to impart a full, clear, and exact understanding of the same. I do not desire, however, to be understood as confining myself to such specific construction and arrangement, as such changes or modifications may be made in practice as fairly fall within the scope of my invention. I also do not desire to be confined to applying my improvements to the upper berths of sleeping-cars, as they may be embodied in the lower berths when desired and may also be applied to the berths of vessels.

Having described my invention, what I claim is—

1. A berth comprising a rectangular receptacle or frame adapted to rest in a horizontal position, track-rails arranged upon the bottom of the receptacle or frame and extending in the direction of the width thereof, a carriage arranged and adapted to move in the receptacle or frame in the direction of the width thereof and having wheels adapted to

travel on the track-rails, and springs interposed between opposite sides of the carriage and the opposite side walls of the receptacle or frame, substantially as and for the purpose set forth. 35

2. A berth comprising a receptacle or frame, a carriage arranged and adapted to move in the receptacle or frame, springs interposed between opposite sides of the carriage and the receptacle or frame, a frame mounted on springs carried by the carriage and a mattress arranged in said frame, substantially as and for the purpose set forth. 40 45

3. A berth for sleeping-cars and the like comprising a receptacle or frame, track-rails arranged upon the bottom thereof, the carriage arranged and adapted to move in the receptacle and comprising the parallel bars and the wheels arranged between said bars and upon the track-rails, the bow-springs having lugs connected to the parallel bars, the frame arranged upon and connected to said bow-springs and adapted to support a mattress and springs interposed between and connected to the opposite sides of the carriage and the receptacle or frame, substantially as specified. 50 55 60

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

JOHN ISRAEL NEWBURG.

Witnesses:

D. J. SHLENKER,

MILTON A. SHLENKER.