

(No Model.)

3 Sheets—Sheet 1.

P. B. COFFIN.

SLEEPING CAR.

No. 246,082.

Patented Aug. 23, 1881.

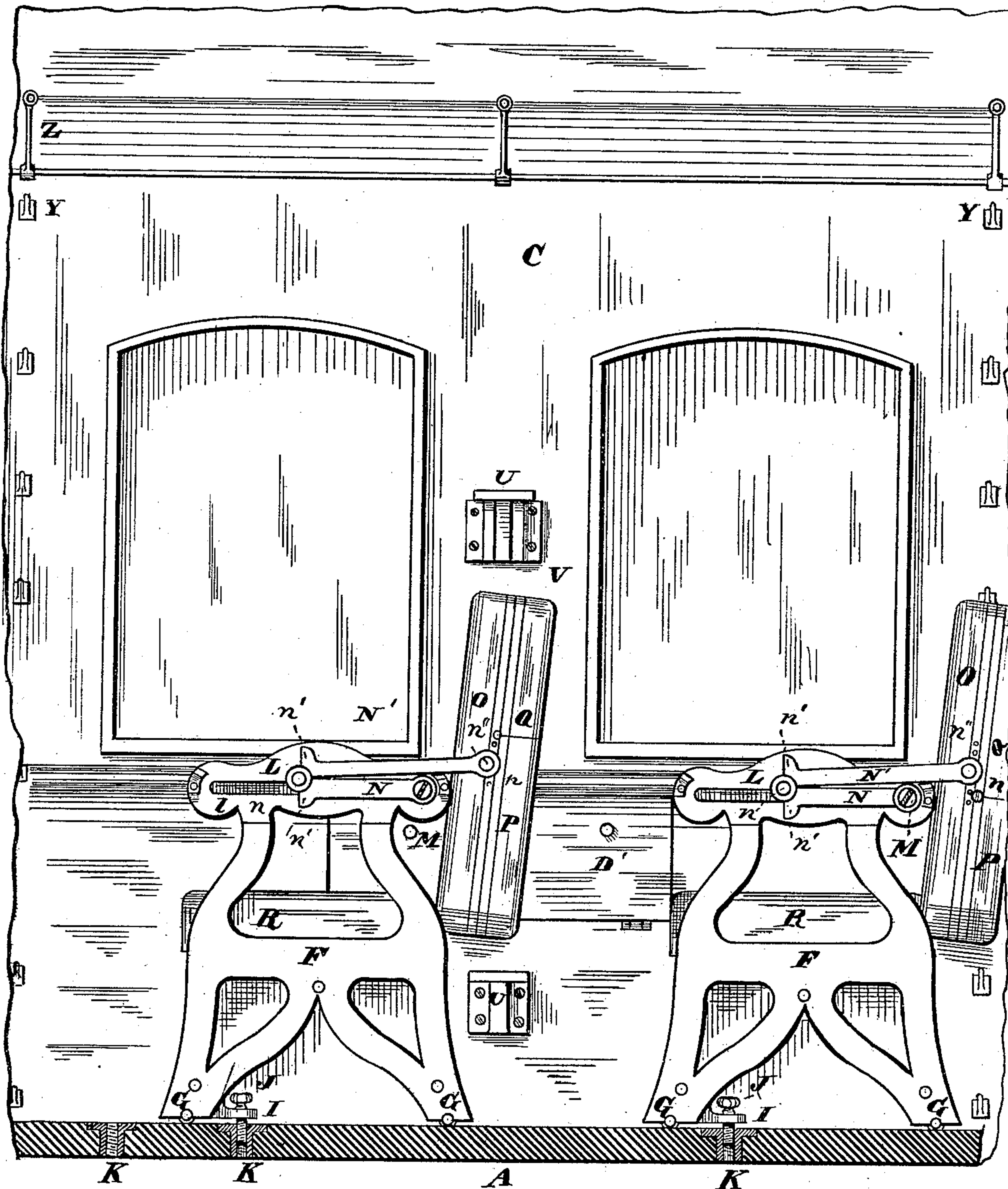


Fig. 1.

Attest
Harry C. Knight
Att. for Invt.

Inventor
Percival B. Coffin
By Knight Bros.
Attys.

(No Model.)

3 Sheets—Sheet 2.

P. B. COFFIN.
SLEEPING CAR.

No. 246,082..

Patented Aug. 23, 1881.

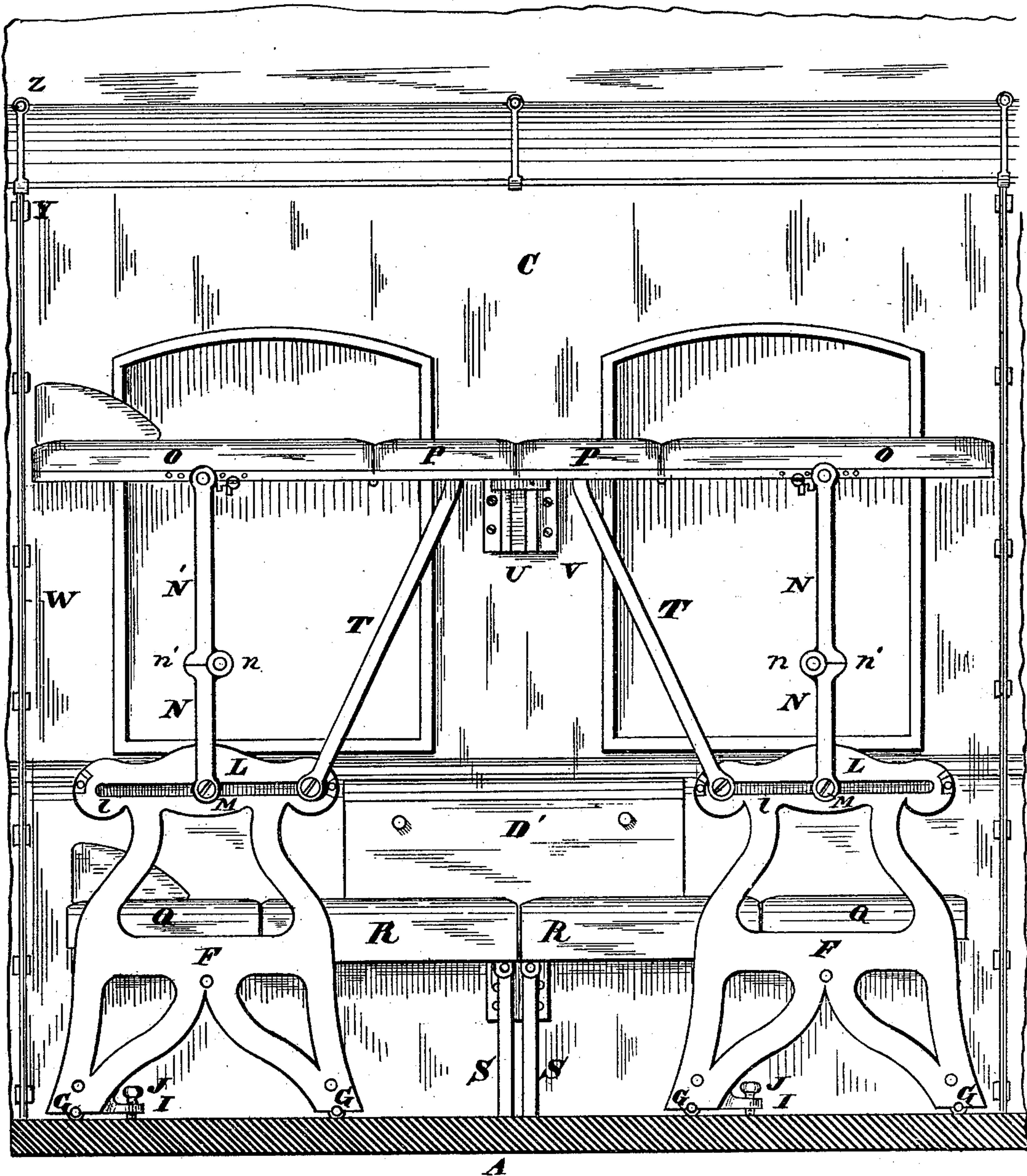


Fig. 2.

Attest
Harry E. Knight
S. E. Chapin

Inventor
Percival B. Coffin
By Knight Bros. Attys.

(No Model.)

3 Sheets—Sheet 3.

P. B. COFFIN.

SLEEPING CAR.

No. 246,082.

Patented Aug. 23, 1881.

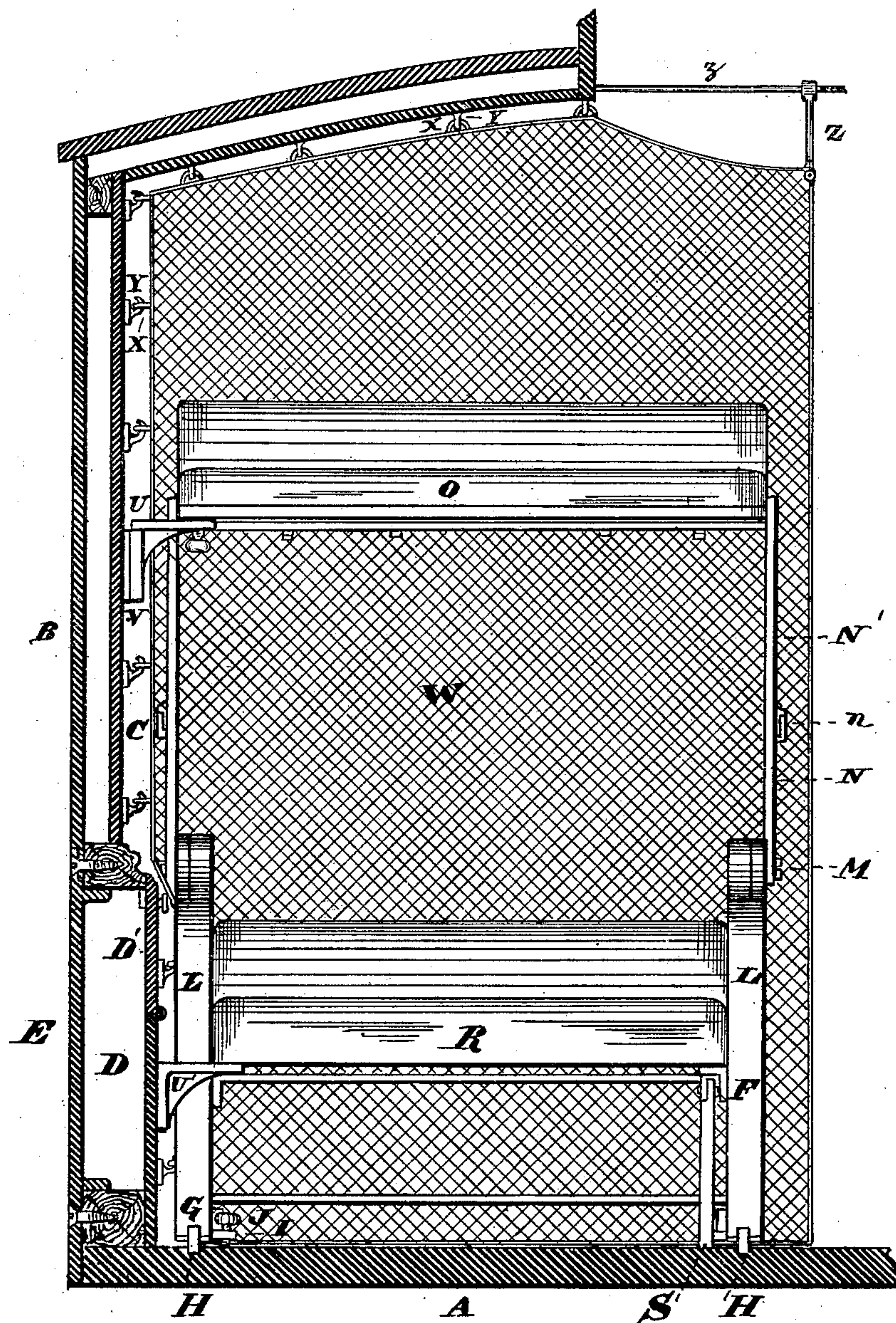


Fig. 3.

Attest
Harry E. Knight
J. H. Hopkin

Inventor
Perival B. Coffin
By Knight Bros
Atty.

UNITED STATES PATENT OFFICE.

PERCIVAL B. COFFIN, OF RICHMOND, INDIANA.

SLEEPING-CAR.

SPECIFICATION forming part of Letters Patent No. 246,082, dated August 23, 1881.

Application filed March 1, 1881. (No model.)

To all whom it may concern:

Be it known that I, PERCIVAL B. COFFIN, of Richmond, Wayne county, Indiana, have invented certain new and useful Improvements in Railway Sleeping-Cars, of which the following is a specification.

My invention is directed to an arrangement and construction of a sleeping-car and its furniture which secures better ventilation both by day and night, ability to face all of the seats for day use, either facing the front or each other at will.

My improvements comprise a construction of car-seats adapted to be rolled upon a track longitudinal of the car and secured to any desired position, so as to be capable of being located equidistant for day travel or of being arranged in couples farther asunder for conversion into couches; a construction of the seat-back which makes it available partly for the lower and partly for the upper berth; a horizontally-slotted seat-arm which, in conjunction with hinged and folding back-brace, and with separable props, and with a bracket-projection from the body-wall, constitutes an effective substructure for the upper berth; a section-partition composed of a net-work of woven wire suitably clothed or covered and provided with certain devices for suspending the same, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a longitudinal section of a portion of a car-body, including two consecutive seats in condition for day use. Fig. 2 represents the same in condition for night use. Fig. 3 is a transverse section of the same.

A may represent the floor; B, the sheathing, and C the wainscoting, which constitute the walls of a sleeping-car. A portion, D, of the interstice, shell, or jacket between the parts B and C, I utilize as a receptacle or closet for bedding. With this object in view I so locate the wainscoting of that portion as to afford an available space between it and the sheathing of not less than six inches, and instead of the usual post at that part I secure the necessary strength of body by the insertion of an iron plate, E, which, being firmly bolted to the car-timbers, is more than the equivalent of such omitted portion of the post. In practice only the alternate posts are required to be thus shortened, the other posts, including those at

the end of the car-body, remaining full length. Each closet thus formed has a door, D'.

Each seat F is shiftable longitudinally of the car, and is for this purpose provided with wheels G, that occupy tracks or trams H in or on the car-floor. Lugs I, that project from the seat-frames, receive screws J, which, being driven into sockets K, serve to retain the seats either to their day position, as represented in Fig. 1, or to their night position, as represented in Fig. 2.

Each seat-arm L has a horizontal slot, l, for the pin M, at the lower extremity of a brace consisting of two members, N N', united to one another by a butt-hinge, n, whose center is considerably out of alignment with said members in their extended condition, in order to avoid any tendency for the brace to accidentally fold by the agitation of the car in traveling. For the purpose of securing still further stability, lips n' are formed on the remote side from the hinge-pintle. The upper end of member N' is pivoted at n'' to the back O.

Hinged to back O, and about two-fifths of its width, is a cushion, P, which is capable of being folded and held by catch p against the rear side of the back, as in Fig. 1, or of being opened out flush with the back, as in Fig. 2. The remaining three-fifths of said rear surface is, in day use, occupied by cushion Q, which has for that purpose any convenient means of ready attachment to the back. For night use the cushion Q is separated from the back and placed upon the seat-bottom, the cushion R, which constitutes the seat proper, being slid forward to join the like cushion on the other seat bottom, each of said cushions R having their outer edges supported by legs S.

When the brace N N' is required to operate as a support for the upper berth its lower extremity is shifted along the slot l until it reaches the mid-length of the same, and the unfolded cushion P is at the same time upheld partly by oblique prop T, whose lower extremity is fastened to the seat-arm, and partly by a bracket, U, which occupies a socket, V, attached to the wainscot. A similar bracket, U, assists in supporting for night use the outslid cushion R.

For separation of the consecutive sections I employ partitions W of wire-netting, of about one-inch mesh, which netting I preferably line

or cover with serge or other suitable fabric. Metallic loops X at the upper and rear margins of the partition enable its suspension upon hooks Y, affixed in the ceiling and wainscot of the car. The front upper corner of said netting has a hook or eye, Z, by means of which it is suspended from cross-rod z.

I claim as new and of my invention—

1. In a sleeping-car, the seats F, having wheels or rollers G, that occupy a longitudinal track in the car-floor, and are secured to any required position for either day or night use by means of lugs I, screws J, and sockets K, substantially as and for the purposes set forth.

2. The combination of horizontally-slotted seat-arm L l, hinged folding and extensible back-brace M N N' n n' n'', back O, hinged cushion P, and the oblique prop T, constituting the upper berth, substantially as set forth.

3. The lower berth, consisting of seat-frames F, slidable seats proper, R, legs S, and the transplaceable back cushion, Q, substantially as set forth.

4. A section-partition for a sleeping-car, consisting of a netting of wire covered with serge or other suitable fabric, and having loops X at the upper and rear margins, adapted to engage with hooks Y, attached to the car-body, and a hook or eye, Z, at the front upper corner, adapted to engage with the cross-rod z, substantially as set forth.

In testimony of which invention I hereunto set my hand.

PERCIVAL B. COFFIN.

Attest:

C. F. COFFIN,
JOHN L. REEFE.