

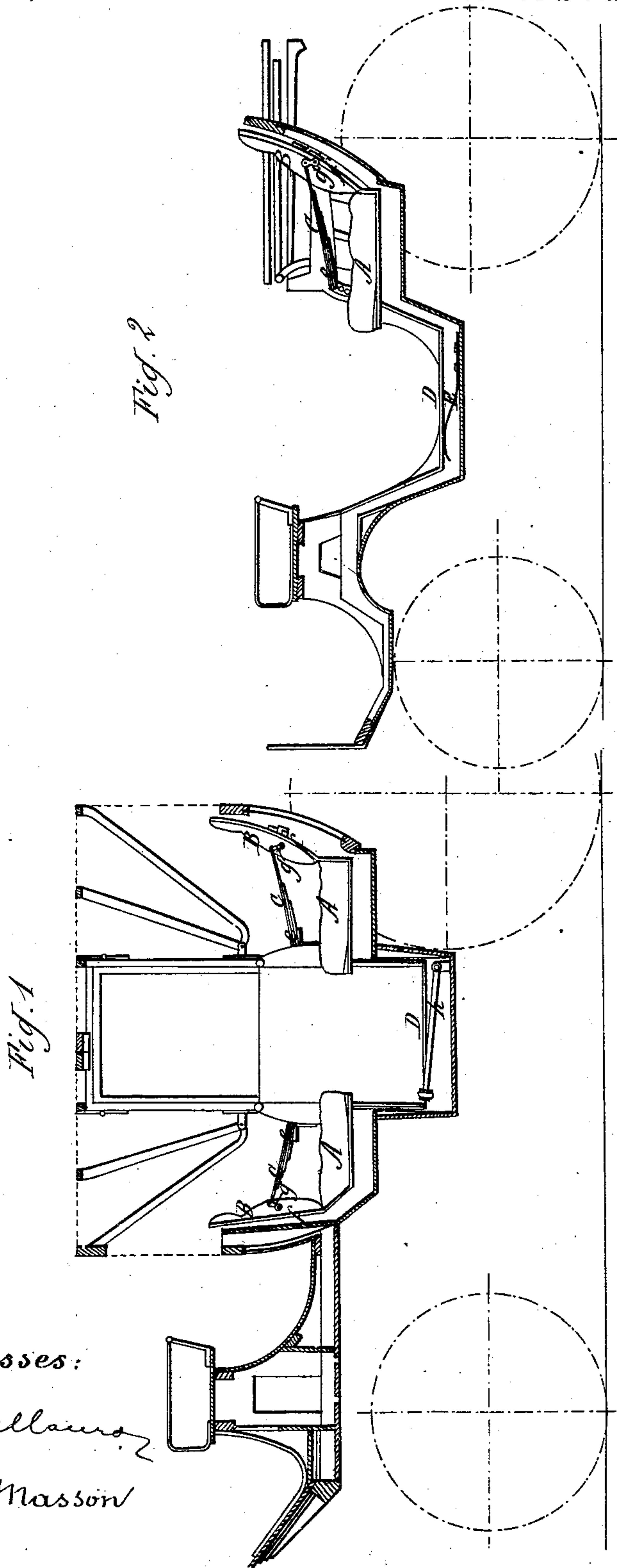
(No Model.)

2 Sheets—Sheet 1.

E. DELESSERT.
Carriage.

No. 243,524.

Patented June 28, 1881.



Witnesses:

Philipellama

E. E. Masson

Inventor

Edouard Delessert
by A. Pollok
his attorney.

(No Model.)

2 Sheets—Sheet 2.

E. DELESSERT.
Carriage.

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Patented June 28, 1881.

Fig. 3.

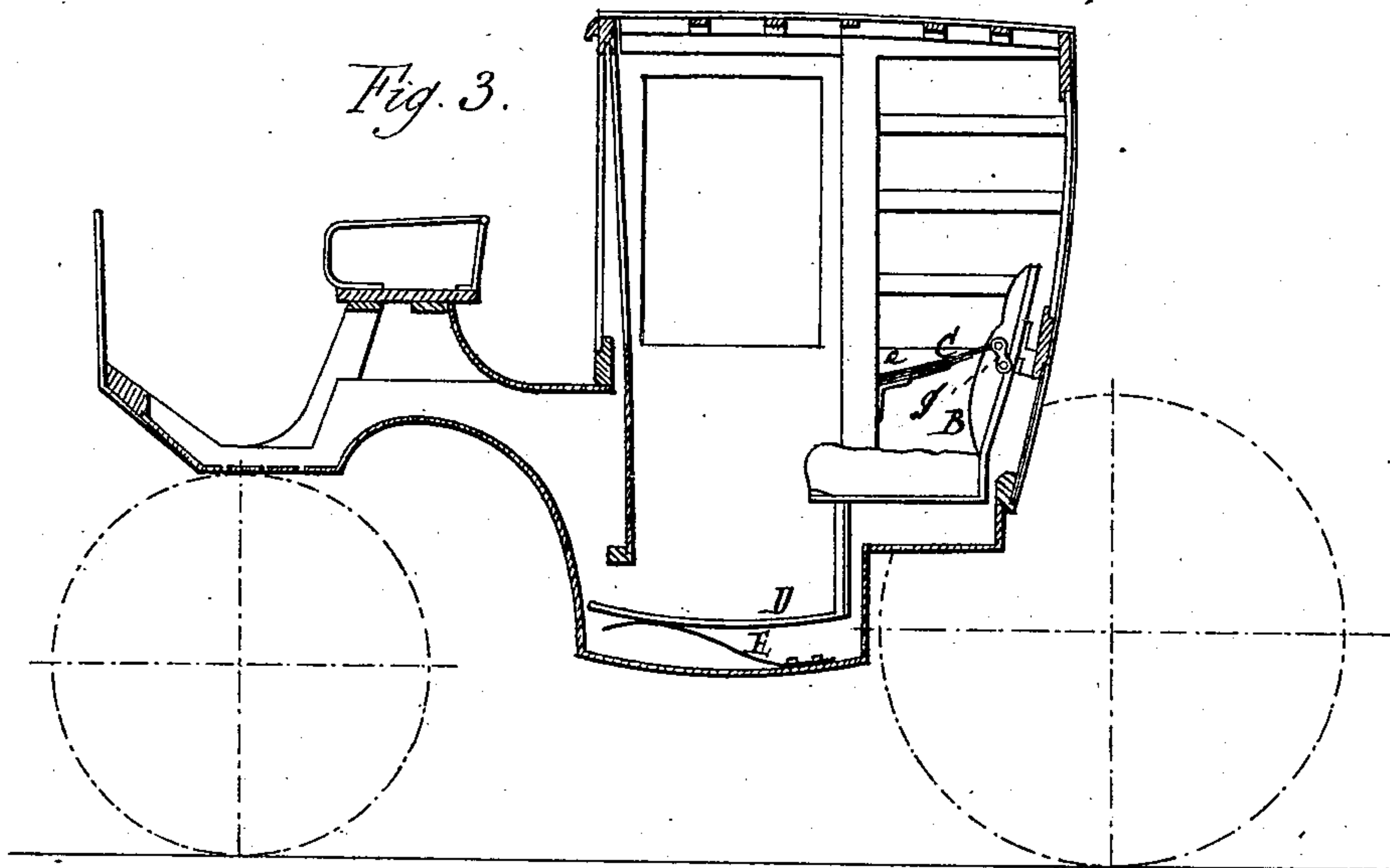


Fig. 4.

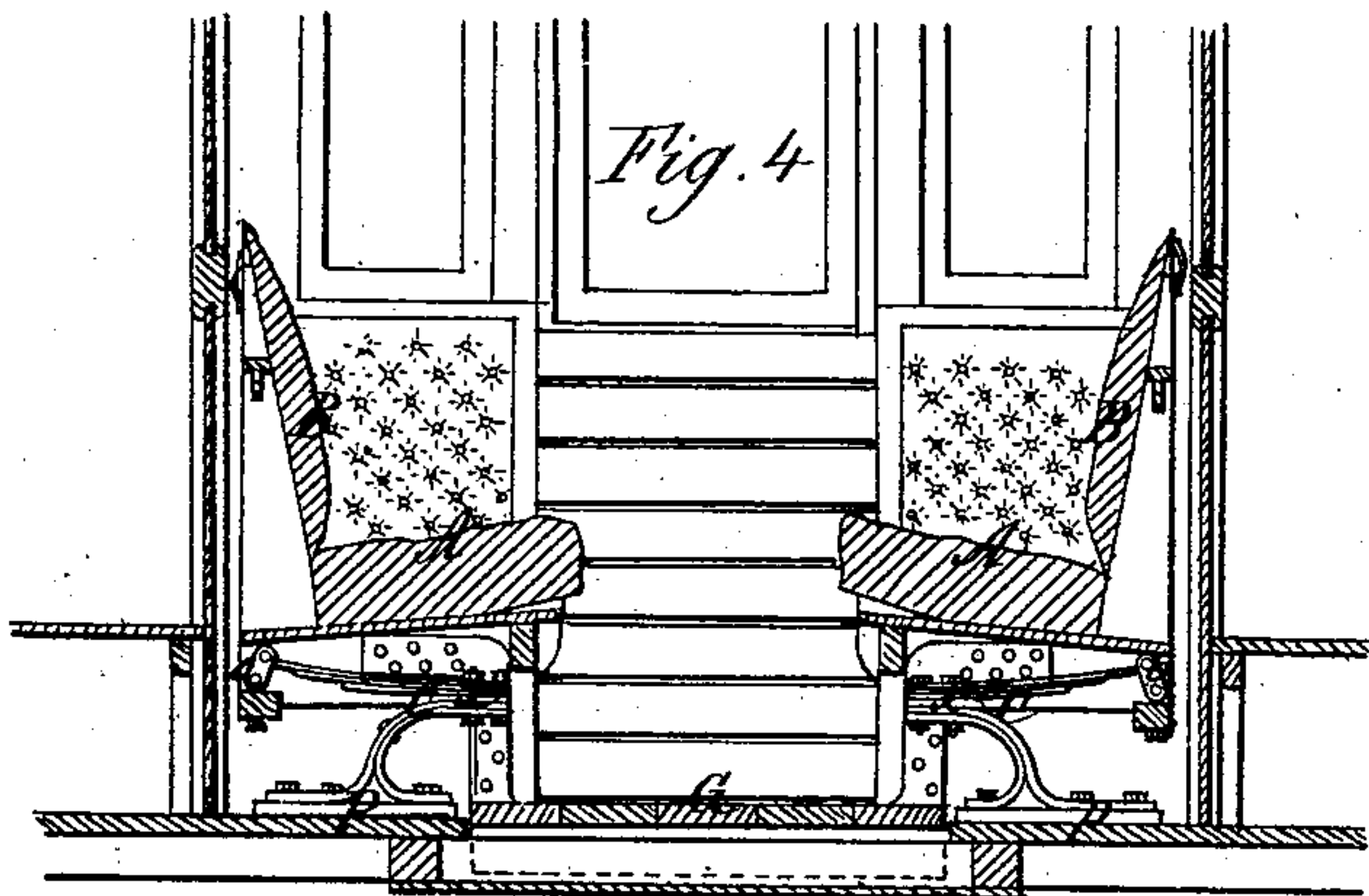


Fig. 5.

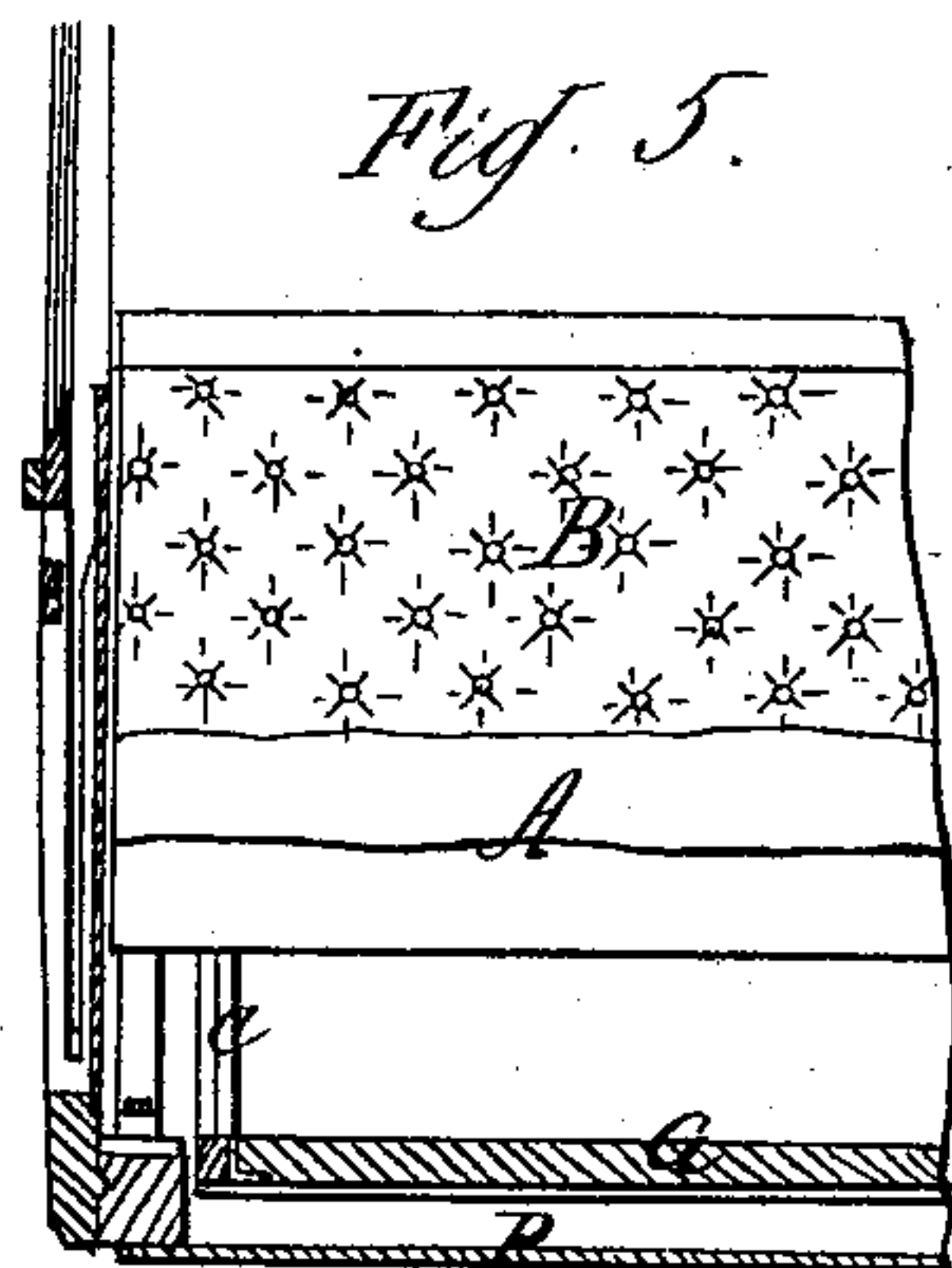
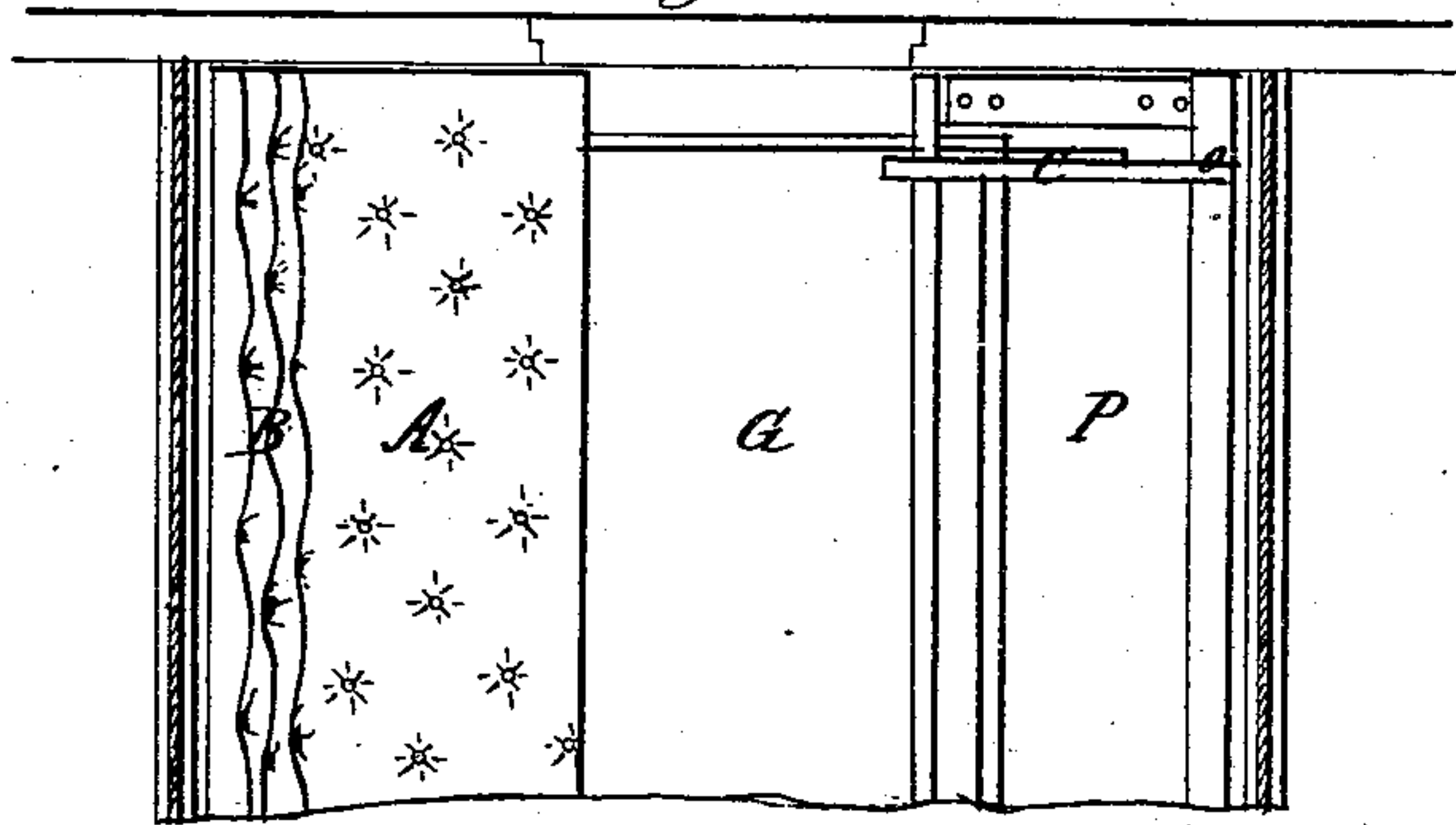


Fig. 6.



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Inventor
Edouard Delessert
by *A. Follok*
his attorney.

UNITED STATES PATENT OFFICE.

EDOUARD DELESSERT, OF PARIS, FRANCE, ASSIGNOR TO ALFRED DE-
LESSERT, OF SAME PLACE.

CARRIAGE.

SPECIFICATION forming part of Letters Patent No. 243,524, dated June 28, 1881.

Application filed April 29, 1881. (No model.) Patented in France June 6, 1879.

To all whom it may concern:

Be it known that I, EDOUARD DELESSERT, of Paris, in the Republic of France, have invented a new and useful Improvement in Carriages, Railway-Cars, and other Vehicles, which improvement is fully set forth in the following specification.

In carriages, railway-cars, and other vehicles it has been customary heretofore to suspend the entire body by means of springs, which, on account of the weight to be supported, must be of such strength that they are deficient in sensitiveness.

The present invention relates to a system of applying springs so that this defect is remedied; and it consists in rendering the interior or the seats with their backs, foot-boards, and other accessories movable independently of the main or exterior portion of the body and supporting the same on suitable springs. The weight to be supported being reduced, the inertia and amplitude of lateral movement are much less than heretofore, and more sensitive, supple, and consequently easier springs can be employed. The body of the vehicle may rest upon the usual external springs, though this is not necessary.

In the accompanying drawings, which form a part of this specification, the application of the invention to different vehicles is illustrated.

Figure 1 is a view in longitudinal vertical section of the body of a landau embodying the invention; Figs. 2 and 3, similar views of a "mylord" and a coupé, respectively; and Figs. 4, 5, and 6, views, respectively, in longitudinal section, cross-section, and plan, partly in section, of a compartment of a railway-car.

Referring to Fig. 1, the interior of the carriage, comprising the seats A, with the backs B and foot-board or floor D, is made independent of the exterior body, and is suspended by leaf-springs C fixed at *e* to the body of the carriage and connected through the links *g*

with the bars *f*, by which the seats and other parts are supported. A lever, *h*, beneath the foot-board or floor of the vehicle, serves also to limit the oscillation and give steadiness to the movable interior.

In the vehicles shown in Figs. 2 and 3 a leaf-spring, E, beneath the foot-board or floor, is used in addition to the leaf-spring C.

In the railway-car shown in Figs. 4, 5, and 6 the leaf-springs C are placed beneath the seats A and connected with them by the links *o* at their free ends. They are fixed at their opposite ends at *x* to the brackets P. The two seats are connected with each other by the foot-board or floor G.

It is obvious that various modifications may be made in the construction and arrangement of the several parts without departing from the spirit of the invention.

The seats with their foot-boards and backs could be supported from above as well as from below, or at the sides, and by helical springs or by other forms of springs as well as by leaf-springs; but leaf-springs arranged and connected as shown are preferred.

I claim—

1. The combination, with the body of a carriage, railway-car, or other vehicle, of one or more seats with their backs and foot-boards movable independent of said body and suspended by springs, substantially as described.

2. The combination, with the body of a vehicle and the seats and their foot-boards, of leaf-springs interposed between the said body and said seats and connected with them, substantially as described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

EDOUARD DELESSERT.

Witnesses:

ALFRED DE LESSERT,
CHARLES MARDELET.