G. H. SPENCER.

SPRING-ATTACHMENTS FOR VEHICLES.

No. 194,622. Patented Aug. 28, 1877.

Fig. 1.

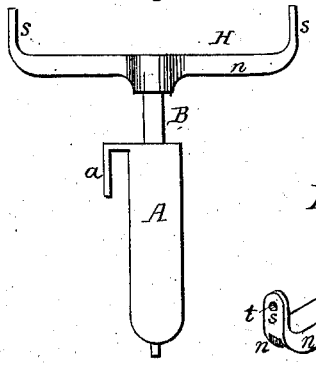


Fig. 2.

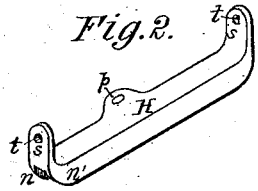


Fig. 3.

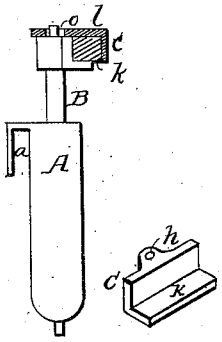


Fig. 4.

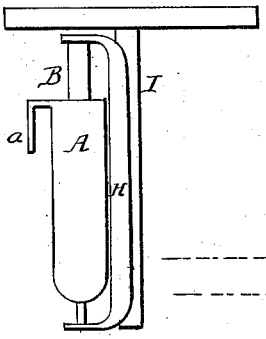


Fig. 5.

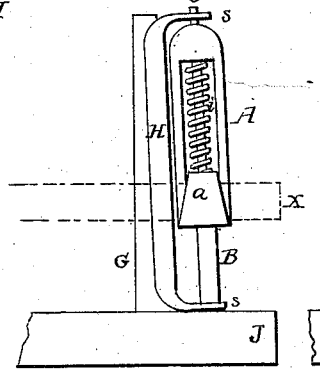


Fig. 6.

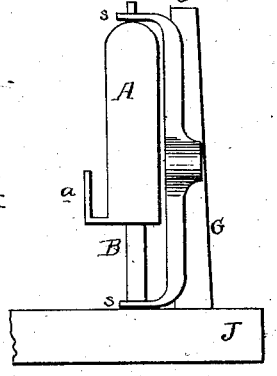
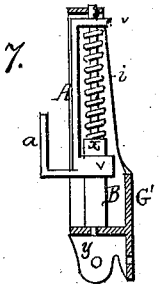


Fig. 7.



Attest:

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Inventor

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By his attorney

Charles E. Foster

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GEORGE H. SPENCER, OF JERSEY CITY, NEW JERSEY.

IMPROVEMENT IN SPRING ATTACHMENTS FOR VEHICLES.

Specification forming part of Letters Patent No. **194,622**, dated August 28, 1877; application filed November 22, 1876.

To all whom it may concern:

Be it known that I, GEORGE H. SPENCER, of Jersey City, Hudson county, New Jersey, have invented an Improved Spring Attachment for Vehicles, of which the following is a specification:

The object of my invention is a spring-support for the bodies and seats of vehicles, constructed as shown in the accompanying drawing, in which—

Figure 1 shows the device arranged as a seat-support; Fig. 2, the cross-piece detached; Fig. 3, a modification; Fig. 4, a view illustrating a different mode of supporting the seat; Figs. 5, 6, and 7, views showing the device arranged in different ways to support the body.

In its simplest form the device consists of a case, A, provided with one or more hooks, *a*, and a rod, B, passing through an opening at the lower end of the case, and having a shoulder, *x*, between which and the closed end of the case is confined a spiral spring, *i*, coiled around the rod.

The case A may be made in various ways. In Fig. 1 it is of metal, open at the inner side, to reduce its weight, and cast in one piece with a hook, *a*. In Fig. 7 it is a bar bent to form lugs *v v*, through which the rod passes.

Thus constructed, the hook *a* or other fastening serves to secure the case to the side of a wagon, while the seat, connected to the rod B, is supported by the spring *i*.

To facilitate the support of the seat, I employ a detachable cross-bar, H, Fig. 1, on which the seat may rest, or a shorter bar, C, Fig. 3, may be used, a plate, *l*, on the seat, having a socket, *o*, to receive the upper end of the rod B, and the cross-piece of the seat resting on a flange, *k*, of the cross-bar.

To adapt the device to support the body of the vehicle, the cross-bar H is provided with parallel flanges *n n'*, for receiving between them one of the standards G of an ordinary springless wagon, a socket, *p*, for receiving the upper end of the bar B, and lips *s s* at the ends, having sockets *t* for the ends of the bar.

When the device is applied to the inside of the standard G, as shown in Fig. 6, the hook *a* catches beneath the side of the body, which is thus provided with a spring-support.

When t he device is applied to the outside of the bolster, as shown in Fig. 5, cross-bars X are placed in the hooks *a*, for the body to rest on. In either case the bar H is secured in any suitable manner to the standard, which fits between the flanges *n n'*.

By securing a strip, I, in the bar H, and hanging the device to the side of the vehicle, a spring-support for the seat arranged differently from that shown in Fig. 1 is obtained.

Another mode of utilizing the device to support the body is to insert the rod with its spring and case in bearings of a hollow metallic standard attached to the bolster, as shown in Fig. 7.

I claim—

The tubular case A, having a hook, *a*, the rod B, spring *i*, and the bar H, having flanges *n n'* and sockets *t*, all constructed and adapted to each other, and to be applied to the side or seat of a vehicle, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE H. SPENCER.

Witnesses:

FRANCIS WILLIAM LAMB,

JOHN PYNE.