C. SCHMITT.

Hanging-Carriage.

No. 207,075. Patented Aug. 13, 1878.

fig. 1

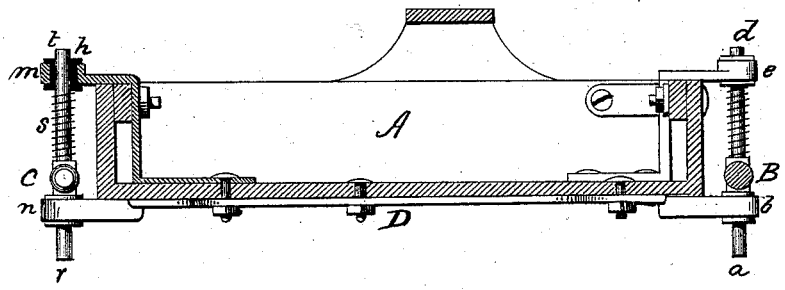


fig. 2

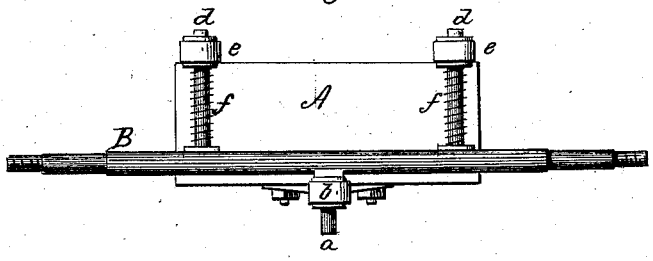
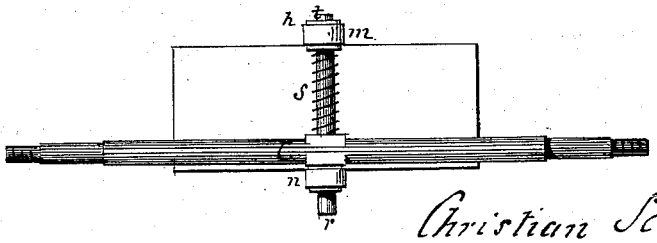


fig. 3



Witnesses.

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A. Atkinson

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UNITED STATES PATENT OFFICE.

CHRISTIAN SCHMITT, OF NEW HAVEN, CONNECTICUT.

IMPROVEMENT IN HANGING CARRIAGES.

Specification forming part of Letters Patent No. **207,075**, dated August 13, 1878; application filed July 12, 1878.

To all whom it may concern:

Be it known that I, CHRISTIAN SCHMITT, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Hanging Carriages; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, longitudinal section; Fig. 2, rear-end view; Fig. 3, front-end view.

This invention relates to an improvement in hanging carriage-bodies, the object being the adaptation of spiral springs thereto; and it consists in the construction as hereinafter described, and more particularly recited in the claims.

A represents a carriage-body, which may be of any of the usual forms, but by preference is made substantially semicircular at the front end. B is the rear axle, constructed to receive the wheels in the usual manner. At the center, on the under side, a stud, *a*, is formed on the axle to pass freely through a socket, *b*, made fast to the body. On the upper side of the axle, and near each side of the body, a post, *d*, extends upward through sockets *e* and around these posts *d*, and between the axle and the sockets spiral springs *f* are arrranged, as seen in Fig. 2.

The three sockets *b e e* serve to maintain the axle and body substantially parallel with each other, so that whatever tendency there may be to depress one side it will be also imparted to the other, and hence prevent the tipping of the body, as in other spring arrangements.

In order to yield to slight transverse strains, as well as to prevent possibility of rattling, the sockets are each provided with an india-rubber or elastic bushing, *h*, as seen in solid black, Fig. 1.

The forward axle is arranged as seen in Fig. 3, one socket, *n*, below, and another, *m*, above, both at the center, and directly over each other; and on the axle C a stud, *r*, extends through the lower socket, and a post, *t*, through the upper socket, with a spring, *s*, between the axle and the upper socket. This arrangement allows the forward axle to be freely turned, and the sockets are provided with the elastic bushing, as before described.

This construction dispenses with the perch and usual connections beneath the carriage, thereby enabling the body to be hung low between the axles, and wheels of equal diameter at the front and rear to be used. There should be a connection between the front and rear lower sockets along the under side of the body, as by a bar, D, so that the two axles are firmly connected together. The rear axle and its springs may be used with some other spring arrangement at the front.

I claim—

1. The rear axle of a carriage constructed with a downwardly-projecting stud, *a*, and upupwardly-projecting posts *d d*, combined with the socket *b* below and sockets *e e* above, and springs around the posts *d d*, between the upper sockets and the axle, substantially as described.

2. The rear axle of a carriage constructed with a downward-projecting stud, *a*, and upwardly projecting posts *d d*, combined with the socket *b* below and sockets *e e* above, and springs around the posts *d d*, between the upper sockets and the axle, and a forward axle, having a central stud, *r*, below, and post *t* above, with central sockets *n n*, and springs *s* around the said post, and with the body of the carriage, substantially as described.

3. In combination with the axle of a carriage constructed with a downwardly-projecting stud and upwardly-projecting posts, corresponding sockets and springs, the said sockets provided with an elastic bushing, substantially as described.

CHRISTIAN SCHMITT.

Witnesses:

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