J. M. PRESSEY.

Vehicle-Spring.

No. 160,229. Patented Feb. 23, 1875.

FIG I

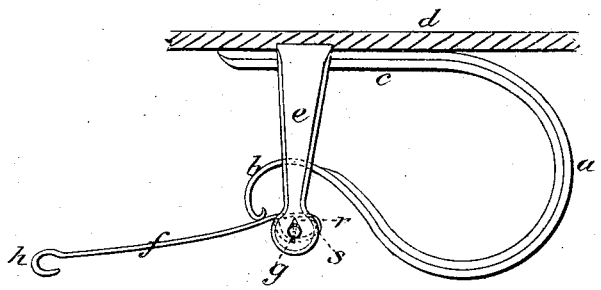


FIG II

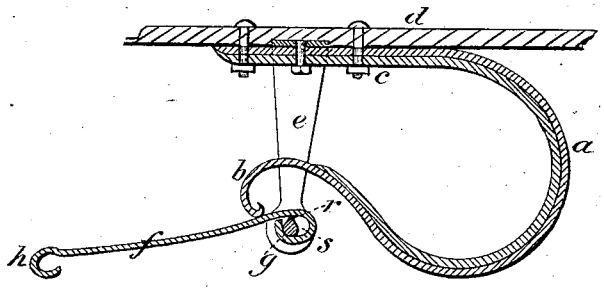
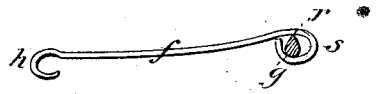


FIG III



WITNESSES

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J. H. Rutherford

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UNITED STATES PATENT OFFICE.

JEREMIAH M. PRESSEY, OF SALINEVILLE, OHIO.

IMPROVEMENT IN VEHICLE-SPRINGS.

Specification forming part of Letters Patent No. **160,229**, dated February 23, 1875; application filed February 3, 1875.

To all whom it may concern:

Be it known that I, JEREMIAH M. PRESSEY, of Salineville, in the county of Columbiana and State of Ohio, have invented a certain new and useful Improvement in Springs, of which the following is a specification:

My improvement consists in combining with the lever-spring a joint of peculiar construction, whereby the lever is made to have the least possible friction in its action with the spring.

In the accompanying drawings, Figure 1 represents a side view of my improved spring; Fig. 2, a vertical section, and Fig. 3 a detached view, of the lever.

The spring *a* has the form somewhat resembling the letter **C**, with the lower end terminating in a scroll, *b*, and the upper portion *c* formed straight for attachment to the corners of the body of the vehicle, of which *d* may represent a portion. Two or more leaves may be united together to form the spring. The scroll end of the spring is embraced by a clip, *e*, secured to the upper part *c*, and a lever, *f*, is pivoted to a cross-bolt, *g*, in the ends of the clip, and extends therefrom in the same direction as the scroll end, so as to form a bearing and support for the free end of the spring, the scroll end of which passes over the pivot-joint of the lever, and rests upon the upper surface of the latter. The opposite end *h* of the lever is secured to the rocker or axle of the vehicle in any suitable way. The weight of the vehicle-body is therefore borne by the scroll end of the spring upon the pivoted lever; and, as this point of support is near the pivot-bearing of the lever in the clip-arms, the friction of such bearing would necessarily be very considerable, and to avoid which I form the bolt *g* with a knife-edge bearing, *r*, which, passing through the eyed end of the lever, affords only an edge-bearing at such junction, so that the movement of the spring and lever combined will be rendered comparatively free and easy at the joint.

There is another feature in connection with this joint which still further increases the free action of the spring. This is in making the joint-eye *s* oblong, for the purpose of compensating for the movement of the lever in the arc of a circle, because its outer end *h* being fixed to the axle, and the clip *e* secured to the fixed end of the spring, the junction of the lever with the spring would bind and strain the connections, were it not for the loose joint thus formed by the oblong eye, by which I obtain the advantages of a loose compensating joint, with a knife-bearing for a lever-spring.

I claim—

1. The combination of the spring *a* and pivoted lever *f*, having the knife-edge bearing *r* at the junction of said lever with the spring, substantially as set forth.

2. The combination, in a spring having its bearing-point *b* upon the pivoted end of a lever, *f*, of a knife-edged and oblong bearing-joint, substantially as set forth.

3. The combination of the spring *a* and the lever *f*, provided with the oblong eye *s*, with the clip *e*, and the knife-edge bearing-bolt *g*, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JEREMIAH M. PRESSEY.

Witnesses:

JOHN T. DYSART,

JOHN WEAVER.