

J. H. ORMSBY.

Carriage Spring.

No. 95,828.

Patented Oct. 12, 1869.

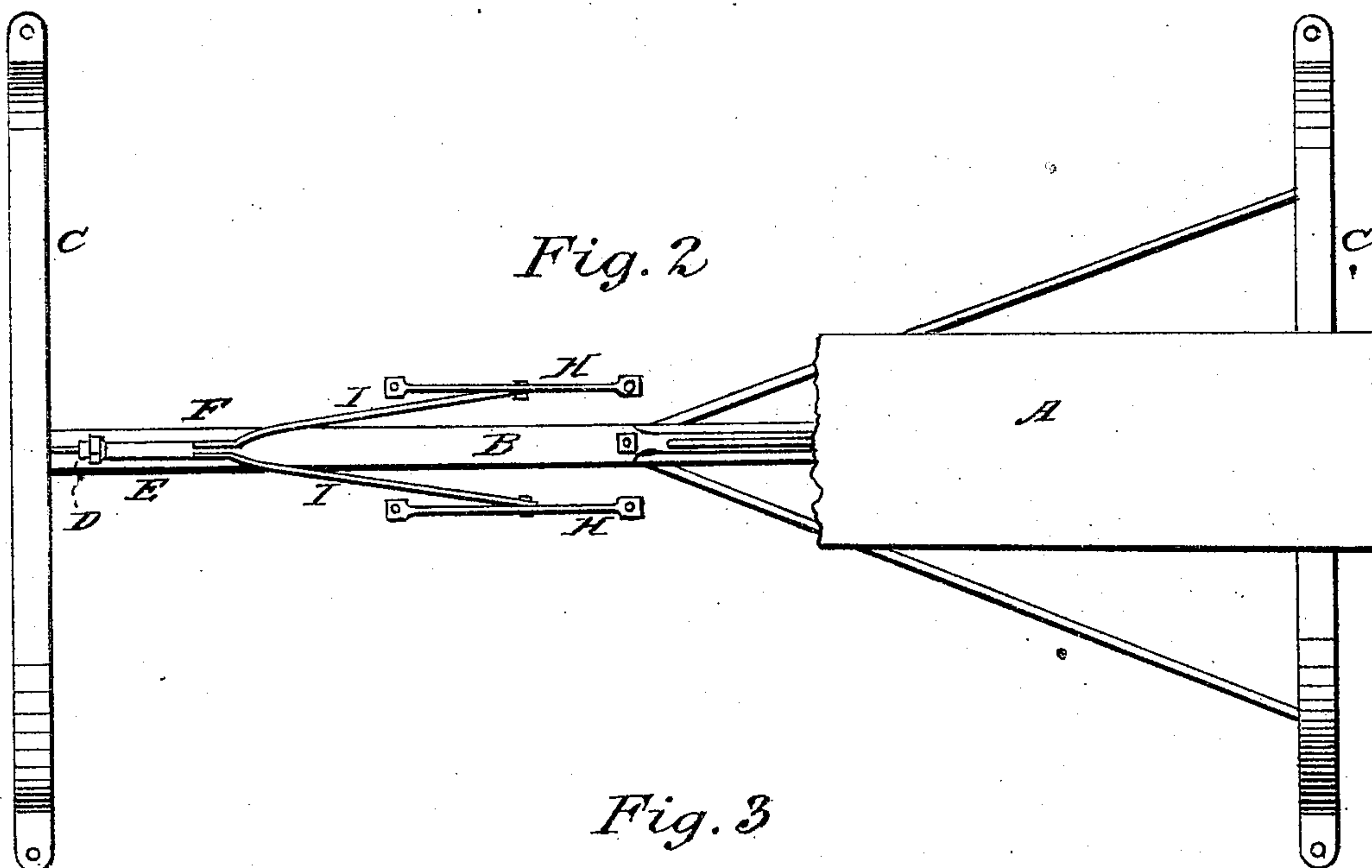
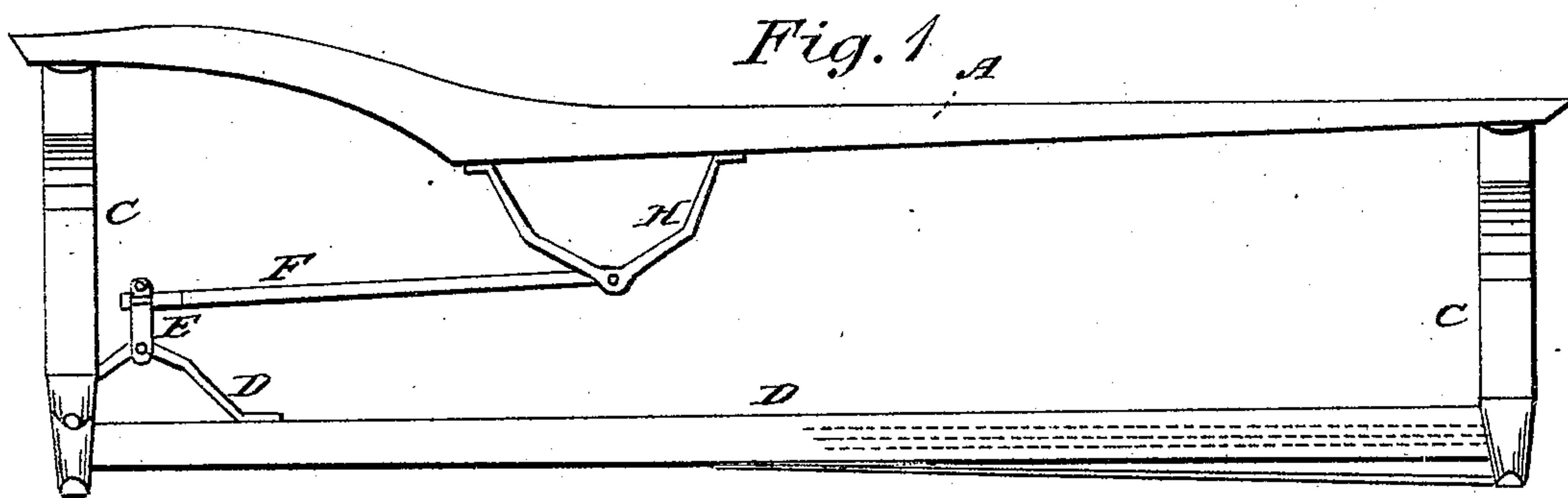


Fig. 3



Witnesses:
J. S. Coburn
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Inventor:
J. H. Ormsby
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United States Patent Office.

J. H. ORMSBY, OF DIXON, ILLINOIS.

Letters Patent No. 95,828, dated October 12, 1869.

IMPROVEMENT IN CARRIAGE-BODY BRACES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, J. H. ORMSBY, of Dixon, in the county of Lee, and State of Illinois, have invented a new and useful "Improvement in Carriage-Body Braces;" and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and the letters and figures marked thereon, which form a part of this specification, and in which—

Figure 1 represents a side elevation of my improved brace as applied;

Figure 2, a top or plan view of the same; and

Figure 3, a section at the line *z*.

The nature of my invention consists in the combination of the parts, hereafter more fully described, whereby the carriage-body is allowed a free vertical and lateral or rocking motion, but is braced to prevent swinging forward or backward over the springs.

To enable those skilled in the art to understand how to manufacture and use my invention, I will proceed to describe the same with particularity.

The same letters of reference refer to the corresponding parts in the different figures.

A represents the bottom of the carriage-body, B, the reach, and C, the springs, all of which may be constructed and arranged in any of the usual ways of constructing and arranging them.

D is a piece, extending from the reach to the spring-grapple, simply to support the pivoted upright piece E. This piece E is so pivoted to D as to vibrate in the direction of the carriage-body.

To the upper end of the piece E is attached, by a journal or wrist-joint, the brace-rod F.

This brace-rod is pronged or forked into two parts, I I, and the ends of these prongs are pivoted to pieces H H, respectively.

These pieces H H are fastened to the bottom of the carriage-body, one upon each side of the reach.

Now, the operation of my invention will be as follows:

When the carriage-body is sprung down upon the springs, the pieces H H descend, clearing the reach, and the brace-rod F, by reason of its being forked, also clears the reach, one prong going upon each side thereof.

If a rut, or obstruction, or improper adjustment of weight in the carriage, or any cause operates to tilt the carriage-body sideways upon the springs, the brace-rod F turns in the wrist-joint, and is consequently subject to none of that twisting strain which is so often the cause of breakage in ordinary braces.

Now, the brace-rod F connects with the piece E at a given angle, which is represented in the drawings as a right angle, and no matter what may be the position of the carriage-body, whether up or down upon the springs, or tilted to one side or the other, the relative position of the piece E and the brace-rod F is not changed, but remains the same.

It is therefore obvious that the carriage-body cannot move upon the springs either forward or backward, because in either case the angle and relative position of the piece E and the brace-rod F must change, and this cannot occur without breaking one or the other, as will be plainly seen in fig. 1.

I am aware that jointed braces have been constructed which will allow a free up-and-down motion to the carriage-body; but the chief advantage of my invention consists in the peculiar wrist or journal-joint above described, whereby the carriage-body may freely tilt and rock upon the springs, without breaking or twisting the brace-rod, and yet at the same time the carriage-body is prevented from swinging backward or forward and upsetting the springs.

My brace braces the springs only through the carriage-body, and whatever weight or strain comes upon it is not carried to the reach at or near its centre, where it would bend and be liable to break.

Having fully described the construction and operation of my invention,

What I claim, and desire to secure by Letters Patent, is—

The carriage-body brace, composed of the pieces D and E, the brace-rod F, and pieces H, when the brace-rod F is connected by a journal or wrist-joint, and the pieces are otherwise constructed and operating substantially as and for the purpose specified.

J. H. ORMSBY.

Witnesses:

G. B. PALMER,
H. P. WICKES.