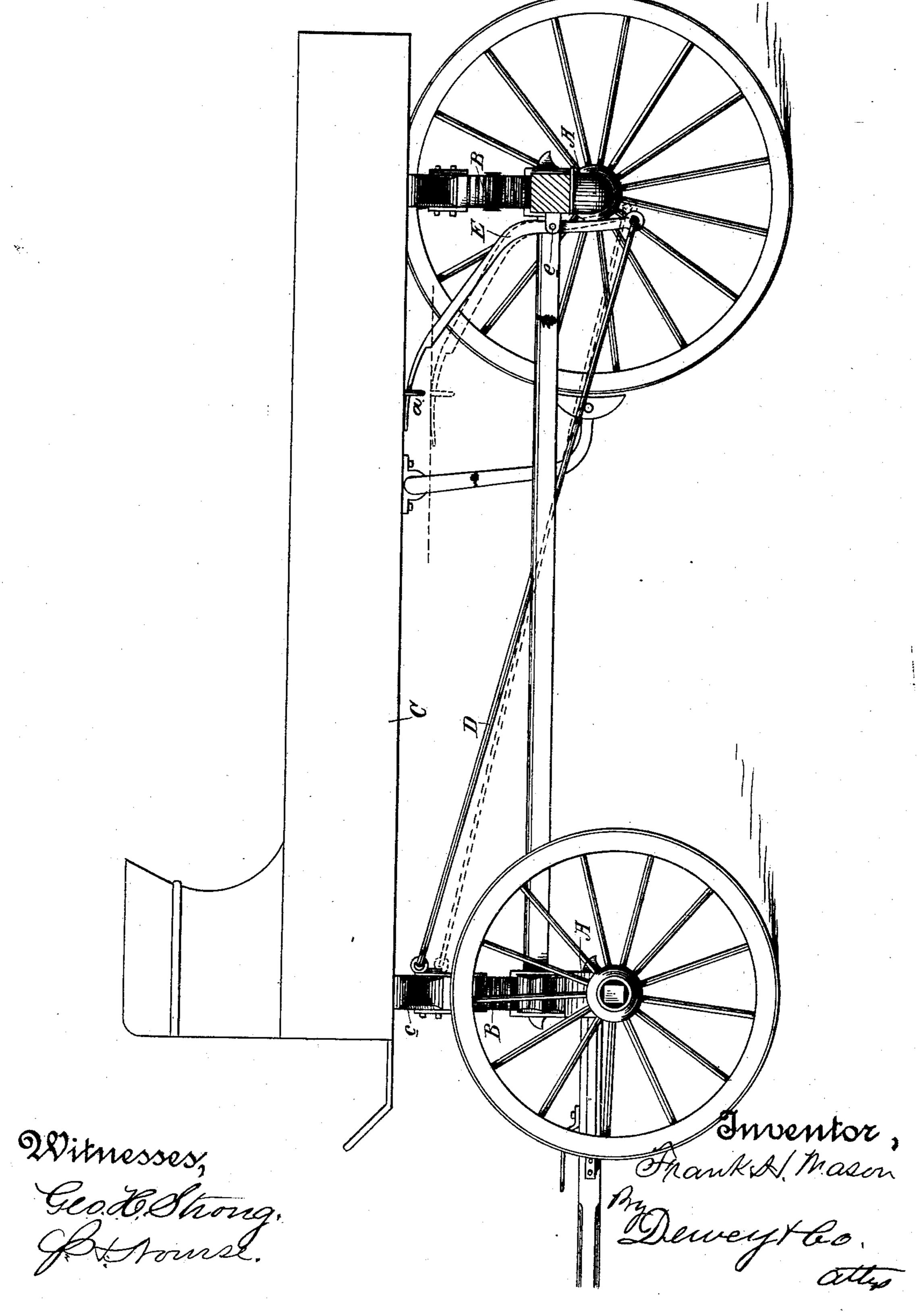
## F. H. MASON.

WAGON SPRING BRACE.

No. 375,826.

Patented Jan. 3, 1888.



## United States Patent Office.

FRANK H. MASON, OF SAUCELITO, CALIFORNIA, ASSIGNOR OF ONE-HALF TO GEORGE V. KENNEDY, OF SAME PLACE.

## WAGON-SPRING BRACE.

SPECIFICATION forming part of Letters Patent No. 375,826, dated January 3, 1888.

Application filed February 10, 1887. Serial No. 227,207. (No model.)

To all whom it may concern:

Be it known that I, Frank H. Mason, of Saucelito, Marin county, State of California, have invented an Improvement in Wagon-5 Spring Braces; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to certain improvements in the class of wagons, and especially to re a new and useful improvement in the braces, by which the springs are kept in position; and my invention consists in the specific construction and combination of elements, which I shall hereinafter fully describe and claim.

Referring to the accompanying drawing for a more complete explanation of my invention, the figure is a side elevation of a wagon showing my invention.

A represents, generally, the running gear of 20 the wagon having the cross springs B.

C is the bed mounted on the springs.

D is the brace for holding the springs in position. In ordinary cases this brace extends from the front spring-block, c, backwardly and 25 downwardly, and is secured to the rear axle, both connections being freely-playing ones, in order to permit the movement of the bed up and down with the springs. Its object is to keep the springs in position by resisting the 30 tendency of the bed to spring them forward or back. Now, it will be seen that where the ordinary brace is used, attached as I have described, the following effect is produced namely, when the bed is loaded, and is thereby 35 pressed down, the brace is slackened. The reason for this is obvious. The brace moves on a center at the rear end, and the bed itself moves down in a vertical plane, and therefore the former, which is tight when the bed is at 40 its normal height, practically lengthens, and thus loosens, and the consequence is that herein described. though the brace is tight when the bed is unloaded it becomes slack and loose when the load is placed upon the bed. In addition, therefore, to losing its function of bracing the springs, it rattles, much to the annoyance of the driver. This slackening or loosening of the brace results, as may be supposed, in allowing the

springs to be forced out of place. It is to remedy this difficulty that I provide the following: 50 Instead of securing the rear end of the brace to the rear axle directly, I secure it to the lower end of a lever, E, which is pivoted to the rear axle at e, and its upper end extends to the under surface of the bed, to which it is 55 connected by suitable guides, a, which permit it to have a sliding movement thereon, an intervening friction-plate preventing wear on the bed. The brace is connected by a link with the spring-block c, on which the bed rests, cand it is properly pivoted to the lower end of the lever E.

It will now be seen that when the load is placed upon the bed, and it is thereby pressed down, the effect is to move the upper end of 65 the lever E forward, thereby throwing its lower end backward and keeping the brace tight, so that no matter how far the bed may be pressed down the brace will be always kept tight. It will therefore perform its function 70 under all circumstances, and will not rattle.

I am aware it is not broadly new to connect the spring-brace with a lever operated by the bed, whereby the brace may be kept tight at all times. Therefore I do not claim such con- 75 struction, broadly, but limit myself to the specific construction herein claimed.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a wagon, the combination, with the running-gear, the springs, and the bed having the guide a upon its bottom, of the brace D, attached at its front end to the forward springblock, a lever pivoted to the rear axle, having 85 its short arm connected with the rear end of the brace, and its long arm playing loosely in the guide on the under surface of the bed, as

In witness whereof I have hereunto set my 30 hand.

FRANK H. MASON.

Witnesses:

S. H. Nourse, H. C. LEE.