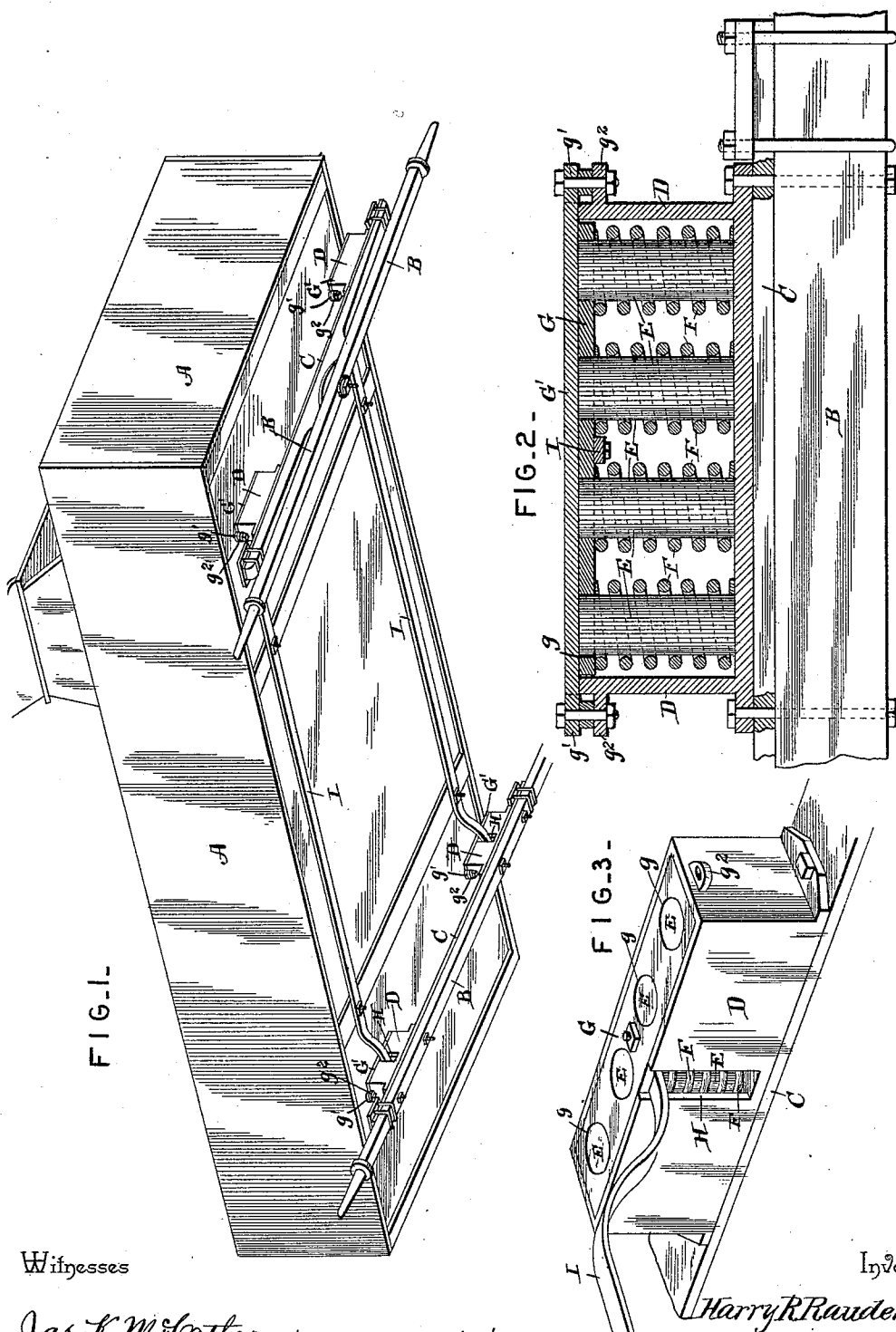


(No Model.)

H. R. RAUDENBUSH.
VEHICLE SPRING.

No. 463,648.

Patented Nov. 24, 1891.



Witnesses

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HARRY RHULE RAUDENBUSH, OF VICKSBURG, PENNSYLVANIA.

VEHICLE-SPRING.

SPECIFICATION forming part of Letters Patent No. 463,648, dated November 24, 1891.

Application filed May 8, 1891. Serial No. 392,049. (No model.)

To all whom it may concern:

Be it known that I, HARRY RHULE RAUDENBUSH, a citizen of the United States, residing at Vicksburg, in the county of Union and State of Pennsylvania, have invented a new and useful Vehicle-Spring, of which the following is a specification.

My invention relates to an improvement in springs for vehicles; and it has for its object to provide springs that will especially adapt themselves for use on vehicles that are adapted to carry heavy loads, such as dray-wagons; and it consists of the novel adaptation of coiled springs to the vehicle-body, arranged and combined in a manner that will be hereinafter more fully described, illustrated in the accompanying drawings, and specifically pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a bottom perspective of a vehicle body and axles provided with my improved springs. Fig. 2 is a transverse sectional view through one of the axles of the wagon provided with my springs. Fig. 3 is a detail in perspective of one of the spring-carrying bars with the lids of the spring-boxes removed.

Referring to the accompanying drawings, A designates the body of an ordinary vehicle provided with the customary front and rear axles B B. Upon each of said axles is suitably secured, by either clips or bolts, transverse bars C, arranged on top of said axles and parallel with the same, and each of said transverse bars is provided on each end with rectangular boxes D, which are secured to said bars by any suitable means. Within said boxes are secured a series of upright posts E, arranged in a direct line with each other, and over which are designed to be placed coiled springs F of a suitable strength for the vehicle to be supported thereby. Directly over said posts and bearing directly upon said springs mounted on the posts is placed a plate G, provided with a series of circular holes g, that are adapted to register with the diameter of said circular posts. The plate G is held over the said posts and upon the springs on the same by a cap or cover G',

that fits over the top of the said boxes, and is secured in place by bolts passing through perforated lugs g' and g², which are formed on the ends of the cap or cover and the ends of the said boxes.

Each of the boxes is provided with a central slot H, through which is designed to work the connecting-bars I, each of which is secured by any suitable means to the perforated plates within said boxes, and are secured to the under portion of the body of the wagon and form the support therefor. Said connecting-bars connect directly from the perforated plate in the box on one of the axles to the perforated plate in the box in the same line therewith on the other axle, thus forming parallel body-supporting bars that are adapted to give to the motion or weight placed upon the vehicle, to which the same are secured.

The operation of my springs is thought to be apparent. The perforated plates, which are connected together in pairs by means of the connecting-bars previously referred to, being mounted upon the circular posts within the boxes and directly over the coiled springs over the posts, give the requisite spring-support for the vehicle, which is supported upon the said parallel connecting-bars.

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

1. In a spring attachment for vehicles, transverse spring-carrying bars adapted to be placed on the upper sides of the axles and provided at each end with boxes, a series of posts within each box, coiled springs adapted to be placed over each post, perforated plates adapted to be placed over said springs and upon said posts, and body-supporting bars working in slots in said boxes and connecting the said perforated plates in pairs, substantially as set forth.

2. In a spring attachment for vehicles, transverse spring-carrying bars adapted to be placed on the upper sides of both axles of the vehicle and provided at each end with boxes, a series of circular posts mounted within said boxes, coiled springs adapted to

be placed over said posts, perforated plates
working over said springs and upon said
posts, tops detachably secured over each box,
and body-supporting bars working in slots
5 in each box and connecting the said perforated plates therein in pairs, substantially as
set forth.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in
presence of two witnesses.

HARRY RHULE RAUDENBUSH.

Witnesses:

H. O. KUNKLE,
WM. F. BARBER.