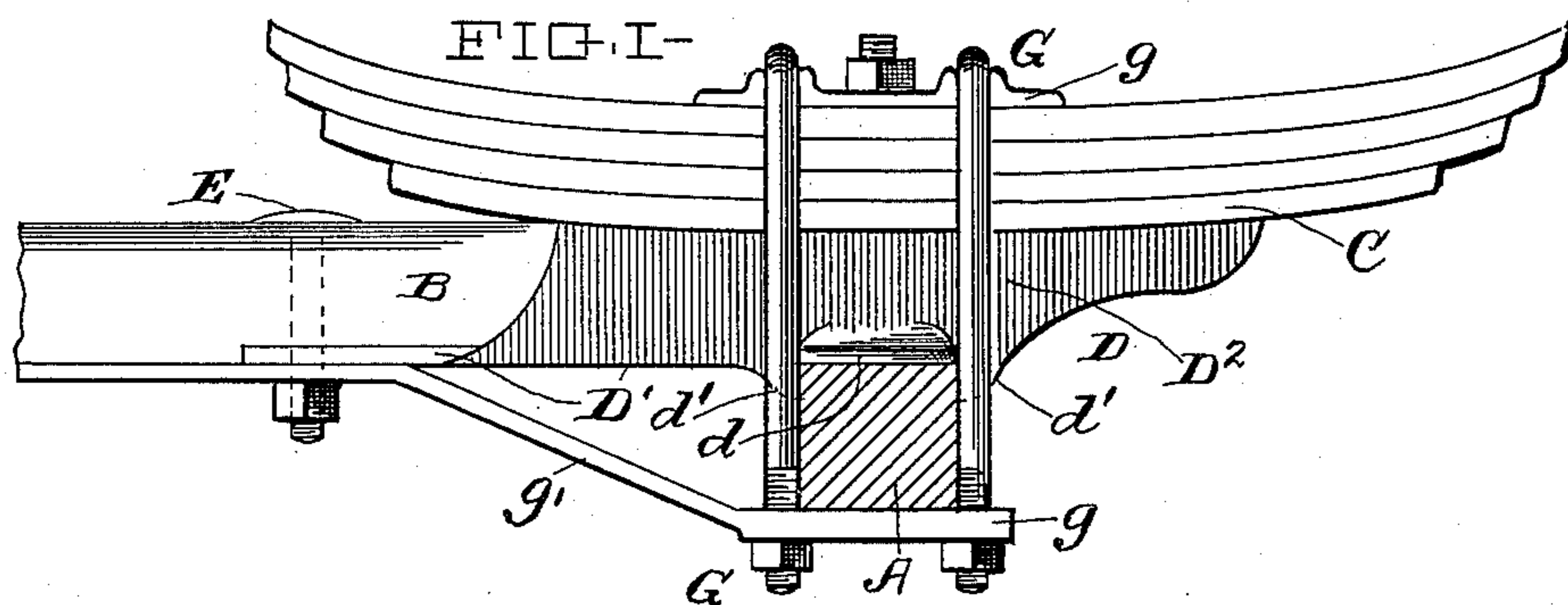
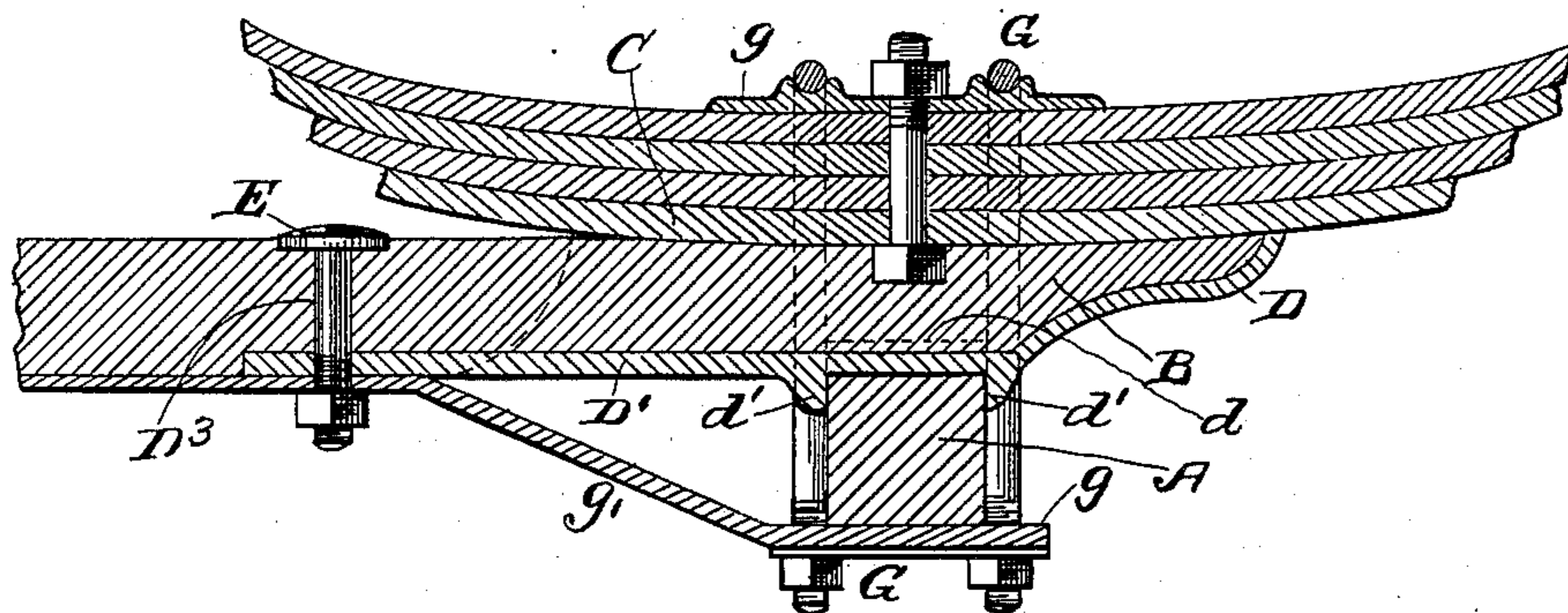


F. SELLE.  
SPRING VEHICLE.

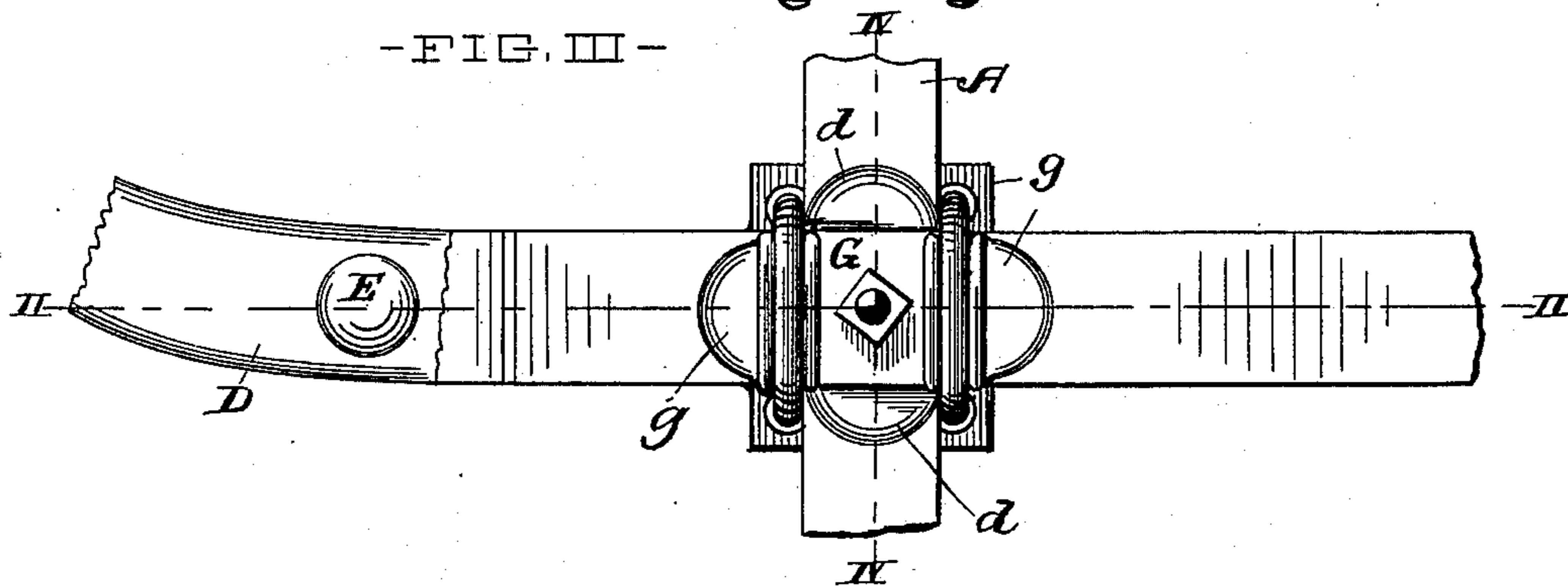
Patented Jan. 4, 1898.



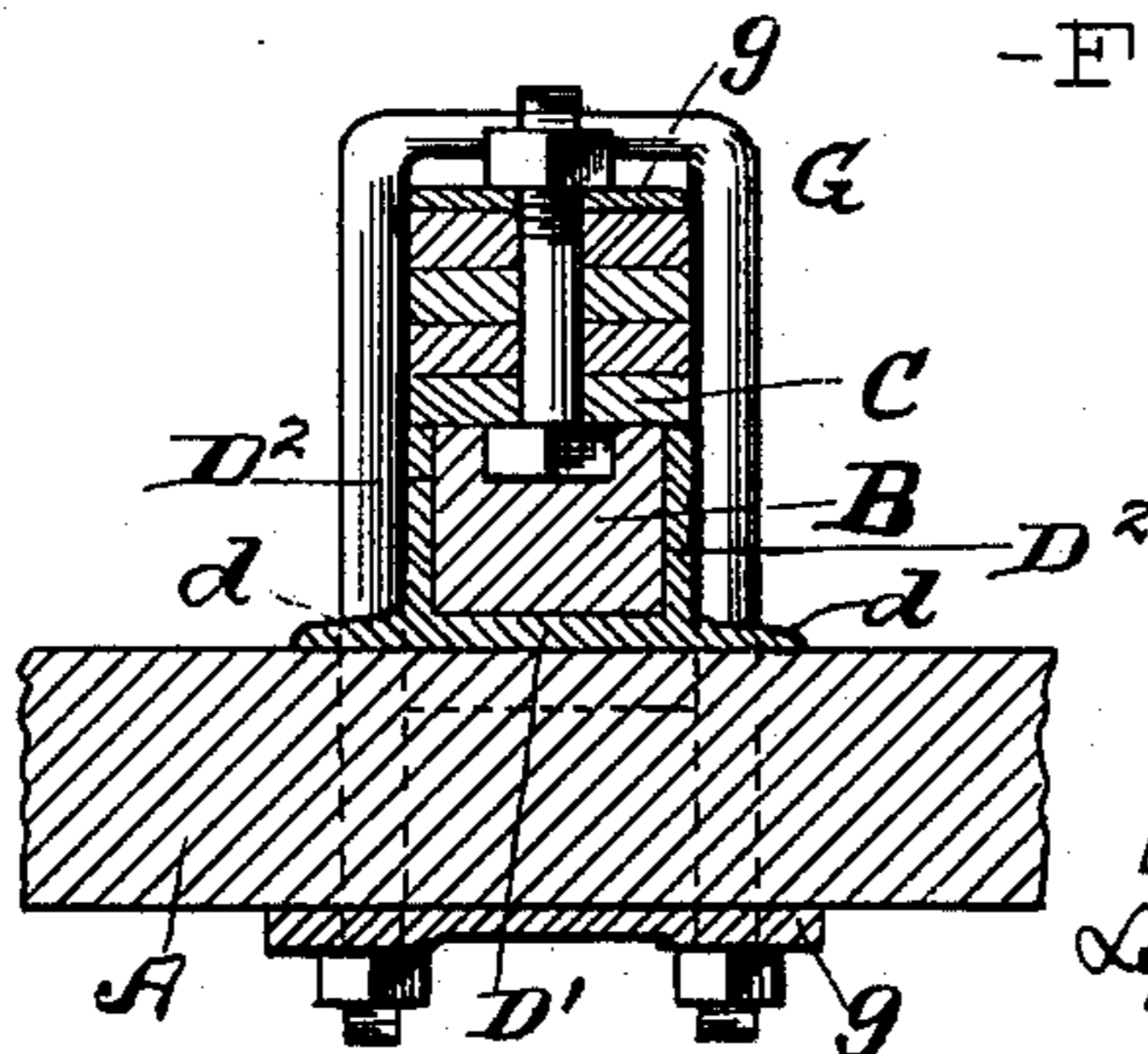
-FIG. II-



-FIG. III-



-FIG. IV-



WITNESSES :

Ella E. Sildus  
L. Ward Hoover.

*INVENTOR*

INVENTOR  
Ardinand Selle

BY  
Lynch, Dorer & Donnelly  
his ATTORNEYS

# UNITED STATES PATENT OFFICE.

FERDINAND SELLE, OF AKRON, OHIO.

## SPRING-VEHICLE.

SPECIFICATION forming part of Letters Patent No. 596,631, dated January 4, 1898.

Application filed May 17, 1897. Serial No. 636,864. (No model.)

*To all whom it may concern:*

Be it known that I, FERDINAND SELLE, of Akron, Summit county, Ohio, have invented certain new and useful Improvements in Spring-Vehicles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

My invention relates to improvements in spring-vehicles, and particularly relates to a new and improved method of forming a spring-block from the reach or hound of the vehicle.

The object of my invention is to provide a lengthened and unyielding seat for the spring to rest upon and thereby prevent the oscillating or rocking motion which frequently occurs in springs resting upon spring-blocks of ordinary construction.

Another object of my invention is to utilize the reach or hound as a spring-block and secure the same to the axle in such a position as to obtain the greatest efficiency and more evenly distribute the strain incidental to use.

My invention involves the employment of a metal cap or shoe for the hinder end of the reach or hound and attaching the same to the axle at the same point as and in the place of the ordinary spring-block.

The invention consists in certain novel features of construction and arrangement of parts hereinafter described, and pointed out in the claims.

Referring to the accompanying drawings, Figure I shows my improved construction in side elevation with the axle in cross-section. Fig. II is a longitudinal vertical section on line II II, Fig. III. Fig. III is a top plan. Fig. IV is a vertical cross-section on line IV IV, Fig. III.

Referring to the drawings, A represents the axle of an ordinary spring-vehicle. The hound or reach B is superimposed above the axle at or approximately at the point of location of the ordinary spring-block, that is not employed in my improved construction.

C represents the bottom or bearing portion of a vehicle-spring.

Hound or reach B at its hinder end is protected by a metal shoe D, which covers the bottom, sides, and rear extremity of said end of the hound or reach. Said shoe is provided

at or near its central portion with outwardly and laterally extending flanges  $d d$ , projecting from opposite sides, respectively, of the shoe and arranged to rest upon the axle A and enlarge the bearing of the shoe (that forms a part of the reach or hound, as already indicated) lengthwise of the axle. The shoe has also two depending flanges  $d' d'$ , arranged at and engaging the forward side and rear side, respectively, of the axle and preventing endwise displacement of the spring-block-forming reach or hound transversely of the axle. The bottom portion  $D'$  of said shoe extends forwardly a short distance beyond the shoe's side portions  $D^2 D^2$  and is provided with a hole  $D^3$  for the reception of the bolt E or other device employed in securing the shoe to the hound or reach. The upper surfaces of the said shoe and reach have the contour required to properly seat the lower side of the spring and support it the full length of the seat.

The hound or reach extends rearward of the axle, as shown, so as to increase the length of the bearing or seat for the spring. The axle and the spring, and the reach and shoe interposed between the spring and axle, are firmly bound together by any suitable means—such, for instance, as a clip G, comprising the upper and lower clip-plates  $g g$ . The lower clip-plate  $g$  is preferably constructed integral with a brace  $g'$ , that is instrumental in supporting the reach or hound and extends forwardly and overlaps for a short distance the forward end of the bottom portion  $D'$  of shoe D and is secured to the shoe and hound or reach by the bolt E, that is employed in securing the shoe to the hound or reach.

What I claim is—

1. In a vehicle-gear, the combination with the axle and spring, of a hound or reach having an end interposed between said axle and spring and protected by a reinforcing-sheathing substantially as described.

2. In a vehicle-gear, the combination with the axle and spring, of a hound or reach having an end interposed between said axle and spring and having said end provided with a metal shoe covering or protecting the bottom, sides and free extremity of said end, substantially as set forth.

3. In a vehicle-gear, the combination with the axle and the spring; of a hound or reach

having an end that is interposed between said axle and spring and that has its sides and bottom covered by a metallic shoe that forms the bearing-surface of the reach or hound, and said shoe having two flanges projecting laterally from opposite sides, respectively, of the shoe and enlarging said bearing-surface longitudinally of the axle, substantially as shown and described.

4. In a vehicle-gear, the combination with the axle and the spring; of a hound or reach having an end that is interposed between said axle and spring and that has its sides and bottom covered by a metallic shoe resting upon the axle and provided with two flanges engaging the forward side and rear side, respectively, of the axle, substantially as shown, for the purpose specified.

5. In a gear for a vehicle of the character indicated, the combination of the axle, the reach or hound having an end resting upon and extending transversely of the axle, the spring having bearing upon said end of the hound or reach, and means tying said parts together, substantially as described.

6. In a gear for a vehicle of the character indicated, the axle; the wooden reach or hound having an end supported from and extend-

ing transversely of the axle, said end having its sides and bottom reinforced by a metallic shoe whose bottom extends forwardly of the axle; the spring having bearing upon said end of the hound or reach; a clip having a top plate over the spring and a bottom plate provided with a forwardly and upwardly brace-forming arm, and means that secures together said arm, shoe and the shoe-engaged wooden portion of the reach or hound, substantially as set forth.

7. In a gear for a vehicle of the character indicated, the combination with the axle, and the spring arranged above and transversely of the axle; of the reach or hound having an end interposed between the spring and the axle, and said hound or reach supporting the spring and extending forwardly and rearwardly of the axle along the bottom of the spring, substantially as shown, for the purpose specified.

In testimony whereof I sign this specification, in the presence of two witnesses, this 1st day of May, 1897.

FERDINAND SELLE.

Witnesses:

C. H. DORER,  
ELLA E. TILDEN.