

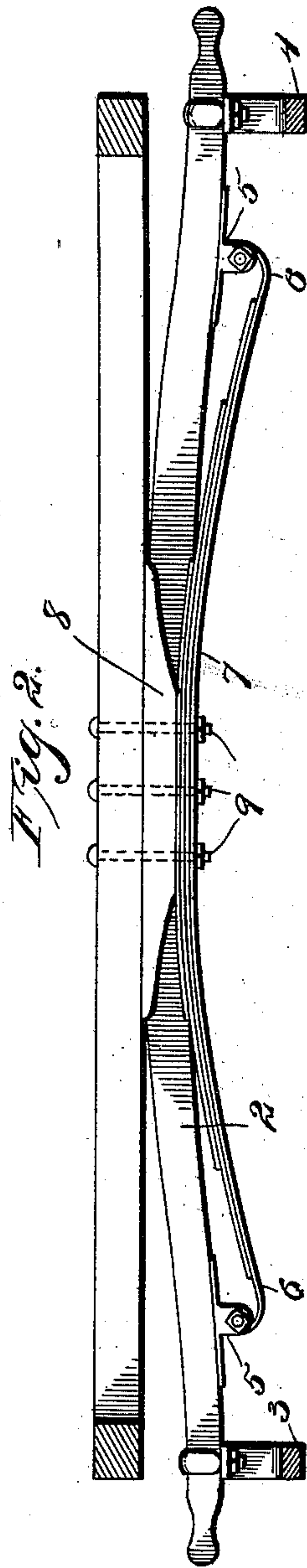
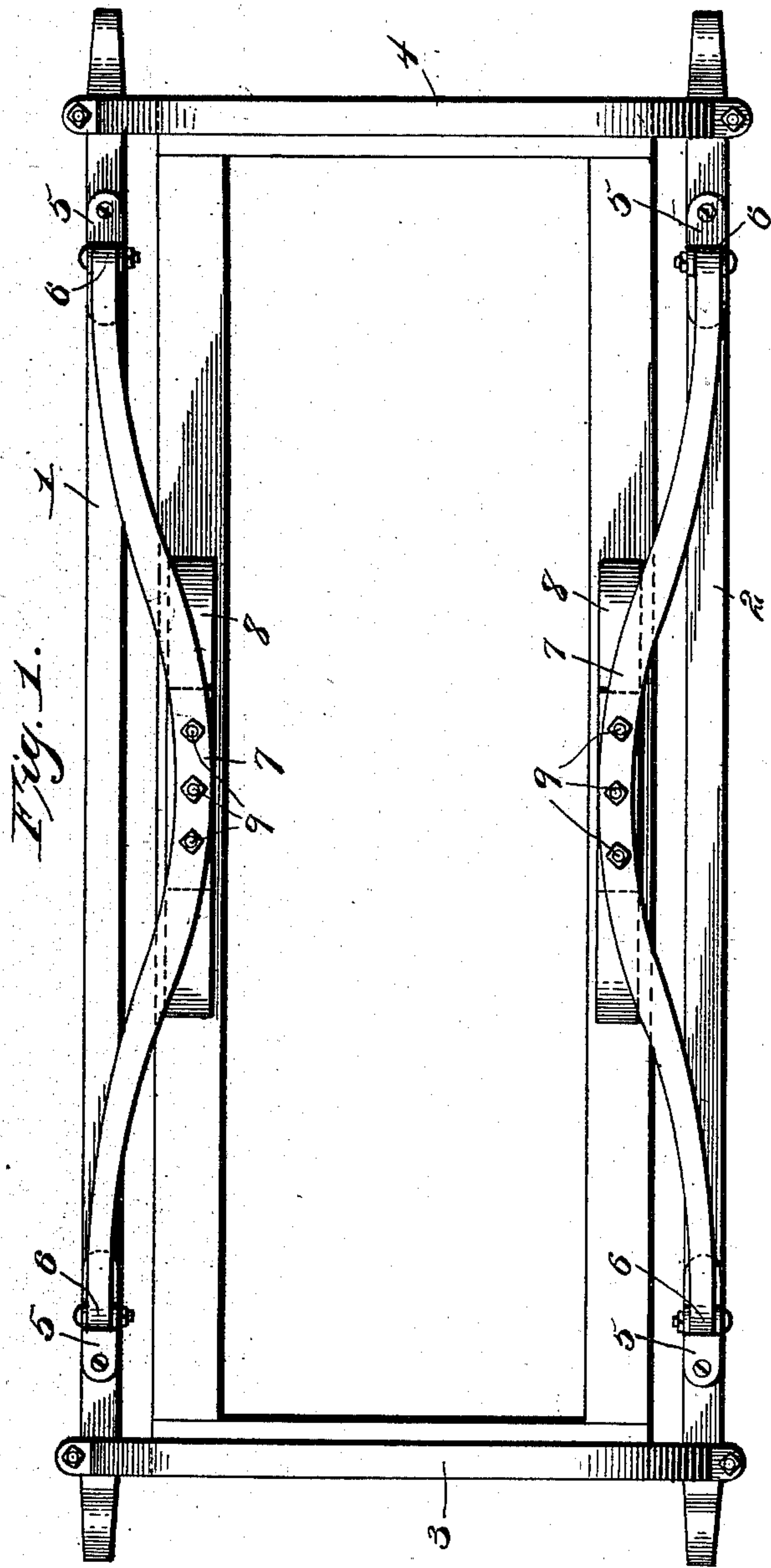
No. 714,574.

Patented Nov. 25, 1902.

E. F. GEHMAN.
VEHICLE SPRING.

(Application filed Nov. 4, 1899.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

EDWARD F. GEHMAN, OF READING, PENNSYLVANIA.

VEHICLE-SPRING.

SPECIFICATION forming part of Letters Patent No. 714,574, dated November 25, 1902.

Application filed November 4, 1899. Serial No. 735,783. (No model.)

To all whom it may concern:

Be it known that I, EDWARD F. GEHMAN, a citizen of the United States, residing at Reading, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in Vehicle-Springs, of which the following is a specification.

My invention relates to vehicle-springs, and more particularly to springs for side-bar buggies.

The primary object of the invention is to provide improved side-bar springs that will insure easy riding and will be equally adapted for buggies of any width.

A characteristic feature of the invention is that the springs are attached directly to the side-bars at the back and front by suitable hangers and are curved inward and at the same time arched upward for attachment to the body of the buggy.

The construction of the invention will be fully described hereinafter in connection with the accompanying drawings, which form a part of this specification, and its novel features will be defined in the appended claim.

In the drawings, Figure 1 is a bottom plan view of a buggy-body with my improved springs applied thereto, and Fig. 2 is a central vertical section of the same.

The reference-numerals 1 and 2 designate the side-bars of the buggy, connected at front and rear by bolsters 3 and 4. The side-bars 1 2 are curved or bowed from their ends toward their middle, as shown in Fig. 2, to increase their supporting power and resiliency. Depending from the side-bars, near the bolsters, are hangers 5, to which are secured the ends of the bottom leaf 6 of the springs 7. Each of these springs consists of a plurality of layers or leaves of varying length, the lower or longest leaf being the most resilient and the strength or stiffness of each leaf varying with its length, the topmost leaf being the stiffest. The springs are bent or curved upwardly, as shown in Fig. 2, and at their centers they are bent inward or curved, as shown in Fig. 1, away from the vertical plane

of the side-bars and secured to side blocks or bolsters 8, depending from the bottom of the buggy and secured thereto by bolts 9.

It will be perceived that by the intervention of the bolster 8 between the body-frame of the vehicle and the bow of the springs the springs at their highest point are secured to a substantial holding-piece, so that they are not liable to displacement or seriously affected by the torsional strain.

By my construction the springs are secured immediately beneath the center of the vehicle-body or under the seat, where the greatest weight is encountered, and the jerky motion incident to the use of short springs for connecting the vehicle-body to the side-bars is avoided. Again, I avoid the employment of heavy bars for attaching the springs to the body and provide side springs which are equally adapted for use with either wide or narrow bodies.

I claim—

The combination with a vehicle having upwardly-curved side-bars with depending bolsters at each end thereof, and hangers secured diametrically opposite each other in rear of the bolsters, the upwardly-curved continuous leaf-springs extending longitudinally with the side-bars and having their opposite terminal ends secured to the hangers, and said continuous leaf-springs being bent inwardly at their central portions, of the body having intermediate bolsters at its central portion, and securing-bolts passing through said body, its bolsters, and the inwardly-bent portions of the leaf-springs thereby securing said parts together, whereby to elevate the body above the side-bars so as to permit of a vertical movement of said body between the side-bars, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD F. GEHMAN.

Witnesses:

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