

(No Model.)

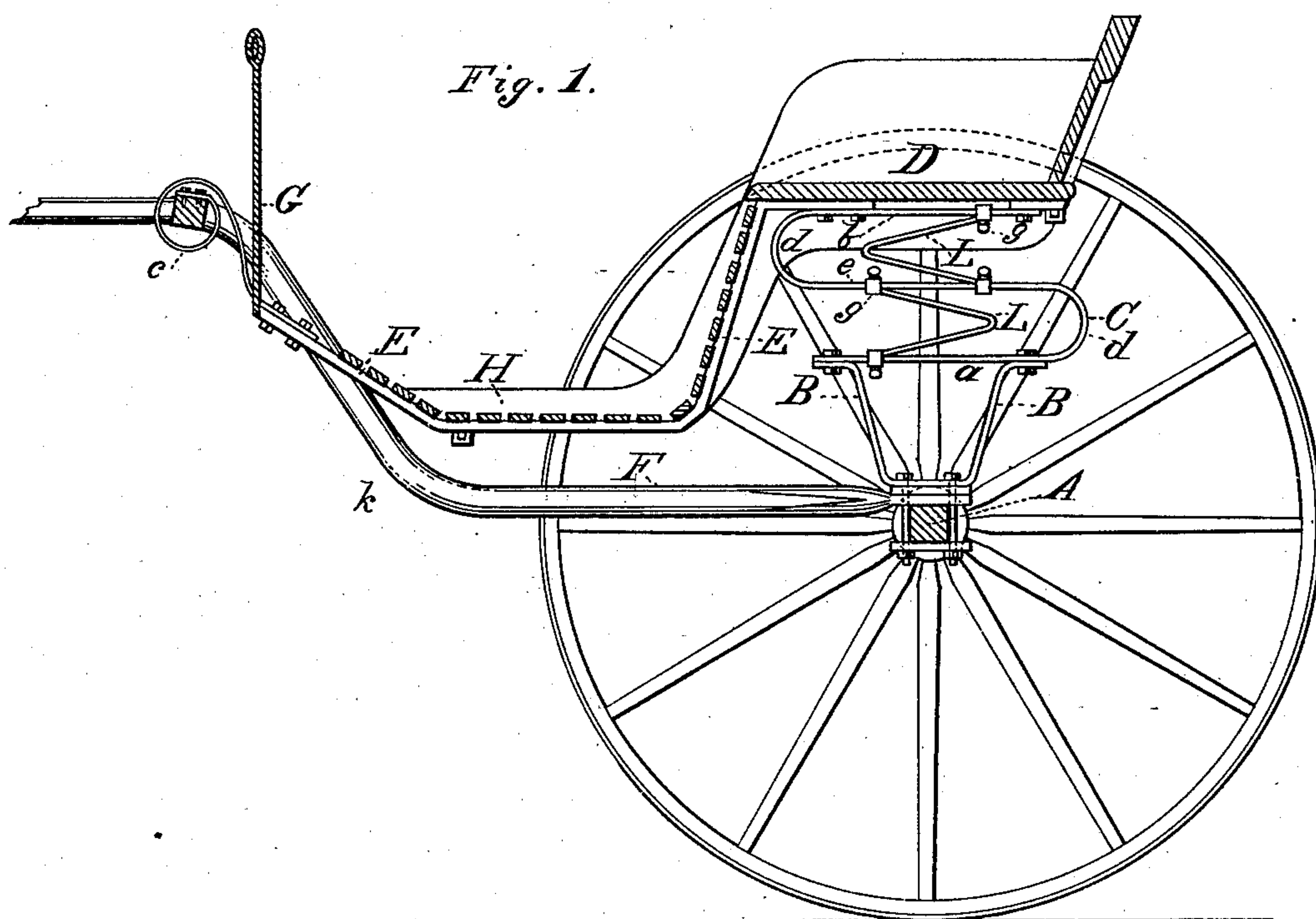
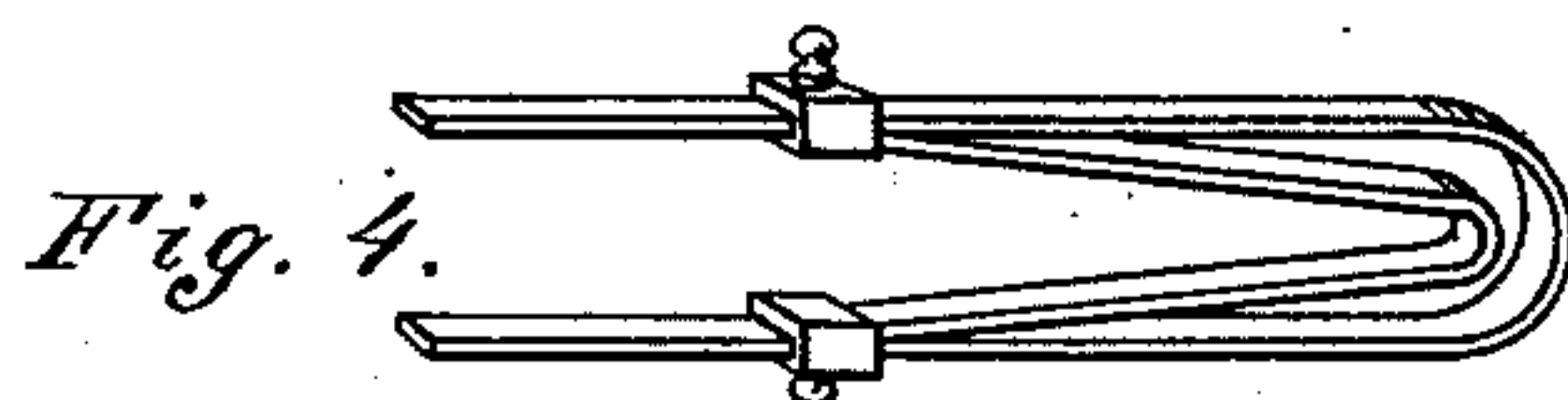
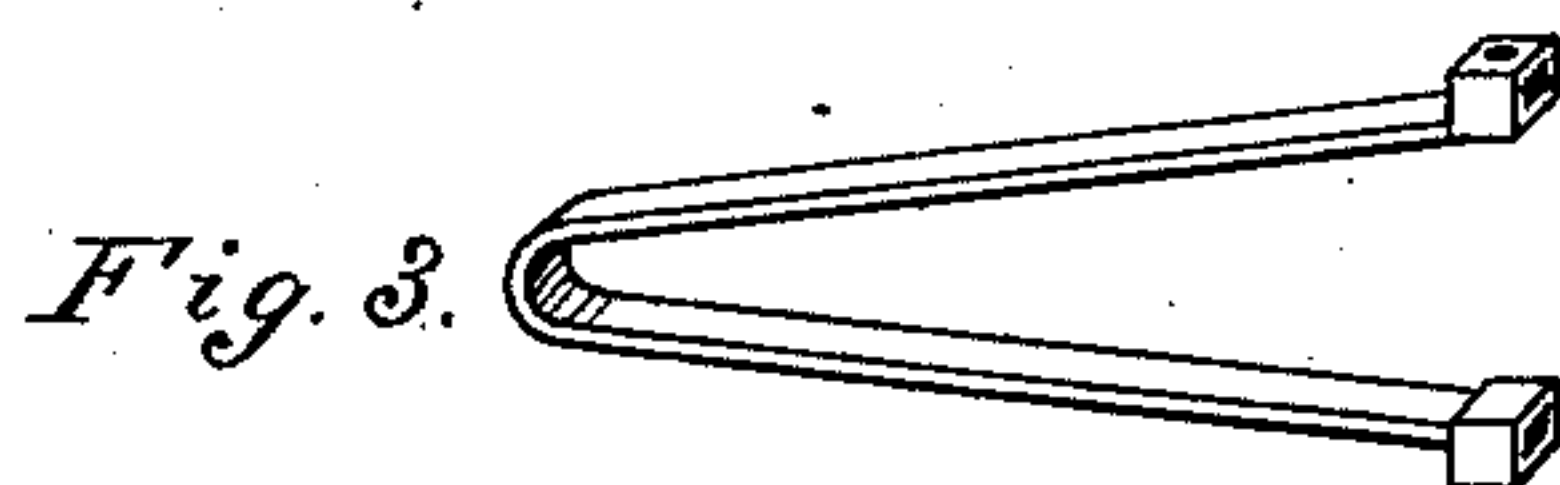
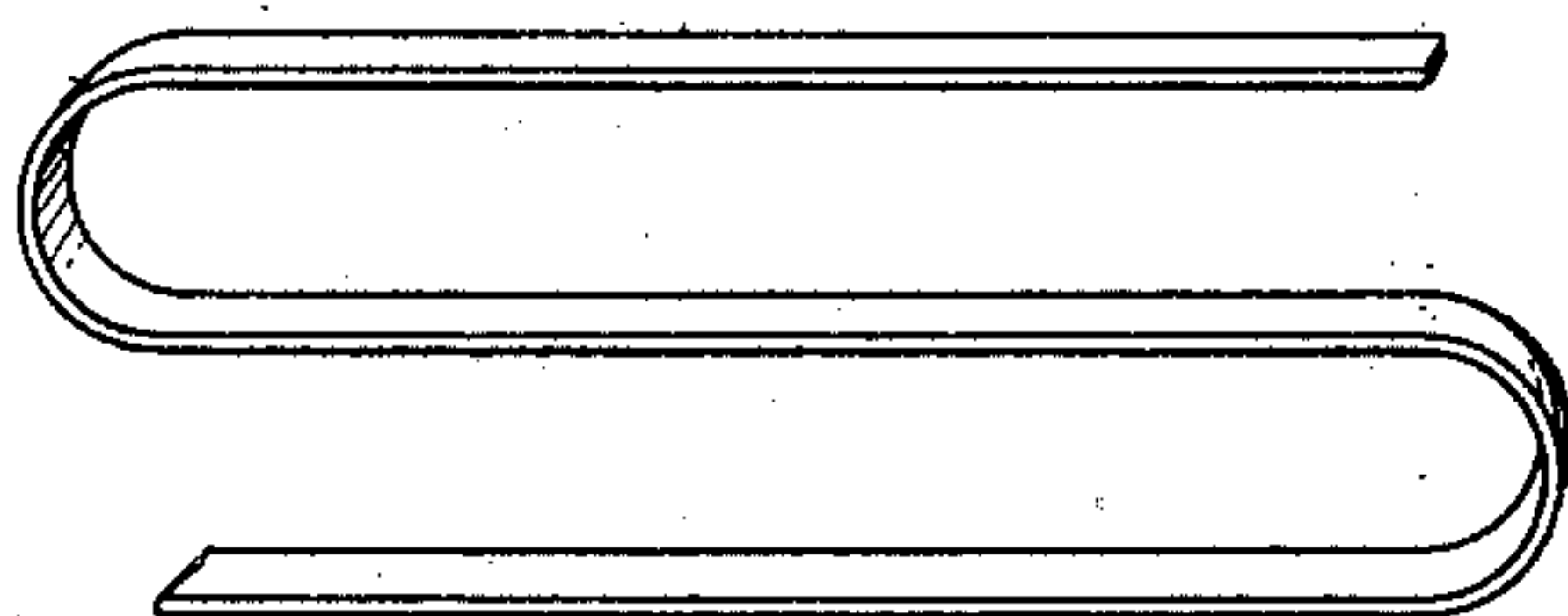
D. ARGERBRIGHT.

VEHICLE SPRING.

No. 279,686.

Patented June 19, 1883.

*Fig. 2.*



WITNESSES

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# UNITED STATES PATENT OFFICE.

DANIEL ARGERBRIGHT, OF TROY, OHIO.

## VEHICLE-SPRING.

SPECIFICATION forming part of Letters Patent No. 279,686, dated June 19, 1883.

Application filed September 23, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, D. ARGERBRIGHT, a citizen of the United States, and a resident of Troy, in the county of Miami and State of Ohio, have invented a new and valuable Improvement in Vehicle-Springs; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of this invention in a vertical section. Fig. 2 is a perspective view of the S-shaped spring. Fig. 3 is a perspective view of the secondary spring. Fig. 4 shows a modification of the spring shown in Fig. 2.

This invention has relation to sulkies or road-carts; and it consists in the construction and novel arrangement of parts, as will be hereinafter fully described and claimed.

In the accompanying drawings, the letter A designates the axle of a road-cart or two-wheel vehicle, and B laterally-arranged supports firmly secured to said axle and extending upward to receive the lower branches, *a*, of the bent or S-shaped springs C, which are rigidly secured to said supports by means of clips or other suitable fastenings in ordinary use. To the upper branches, *b*, of said S-shaped springs the body or seat-frame D is fastened, said body or seat-frame having a depending foot rest or support, E.

F indicates the shafts, which are firmly clipped to the axle, extending forward horizontally therefrom, past the point of side entrance into the vehicle, and formed with an upward double bend, *k*, alongside the front portion of the foot-rest, whence they extend forward, as shown in the drawings.

The dash G is attached to the foot-rest, and the front of the foot-rest is connected to the shafts, or a cross-bar thereof, by means of flexible or elastic couplings *c*, which yield easily to the movements of the foot-rest or seat-frame. Usually these couplings are made in coil-spring form, and are carried around the cross-bar to which they are fastened.

H indicates side forms, which are designed to extend along the sides of the foot-rest and seat to present the appearance of a body-frame. These sides are made detachable, so that they can be readily removed when not required.

The bent springs C may be made single, but are preferably constructed in S form, having an upper branch, *b*, and a lower branch, *a*, which are connected by a middle portion, *e*, extending between the bends *d* of the spring. Within the bow of each branch of the spring is arranged a secondary spring, L, of either bowed or spiral form, said secondary spring being connected to the main spring by means of adjustable clips or fastenings *g*, which can readily be loosened when necessary. The secondary springs L are adjustable toward or from the bends *d* of the main spring C. When it is desired to stiffen the main spring, in order to support a greater weight, the secondary springs should be moved outward from the bends *d*, according to requirement. When the secondary springs are adjusted nearer to the bends *d*, the spring will be more yielding in character. In some constructions it may not be necessary to fasten the upper ends of the secondary springs to the main springs; but for general use it is preferred to fasten both upper and lower ends of the secondary springs in order to prevent clicking or rattling.

A triple C-spring perforated to receive a vertical rod or wire extending upwardly from a rubber cushion on that portion of the spring which is secured to the axle has been provided with a holding-cap and an encircling-spring. The foot-rest has been connected to the cross-bar of the shafts prior to my invention, and I claim neither of these constructions, broadly, herein.

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

1. A bent or S-shaped vehicle-spring, C, having adjustable secondary springs, whereby the main spring can be made more or less yielding, substantially as specified.

2. A road-cart consisting of wheels and axle, spring-supports B, S-shaped main springs C and adjustable secondary springs L, seat D, depending foot-rest attached to said seat, flexible or elastic couplings *c*, and shafts having the double bends *k* near the front portion of the foot-rest, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

Witnesses: DANL. ARGERBRIGHT.  
D. S. SABIN,  
DAVIS BAIRD.