

No. 849,990.

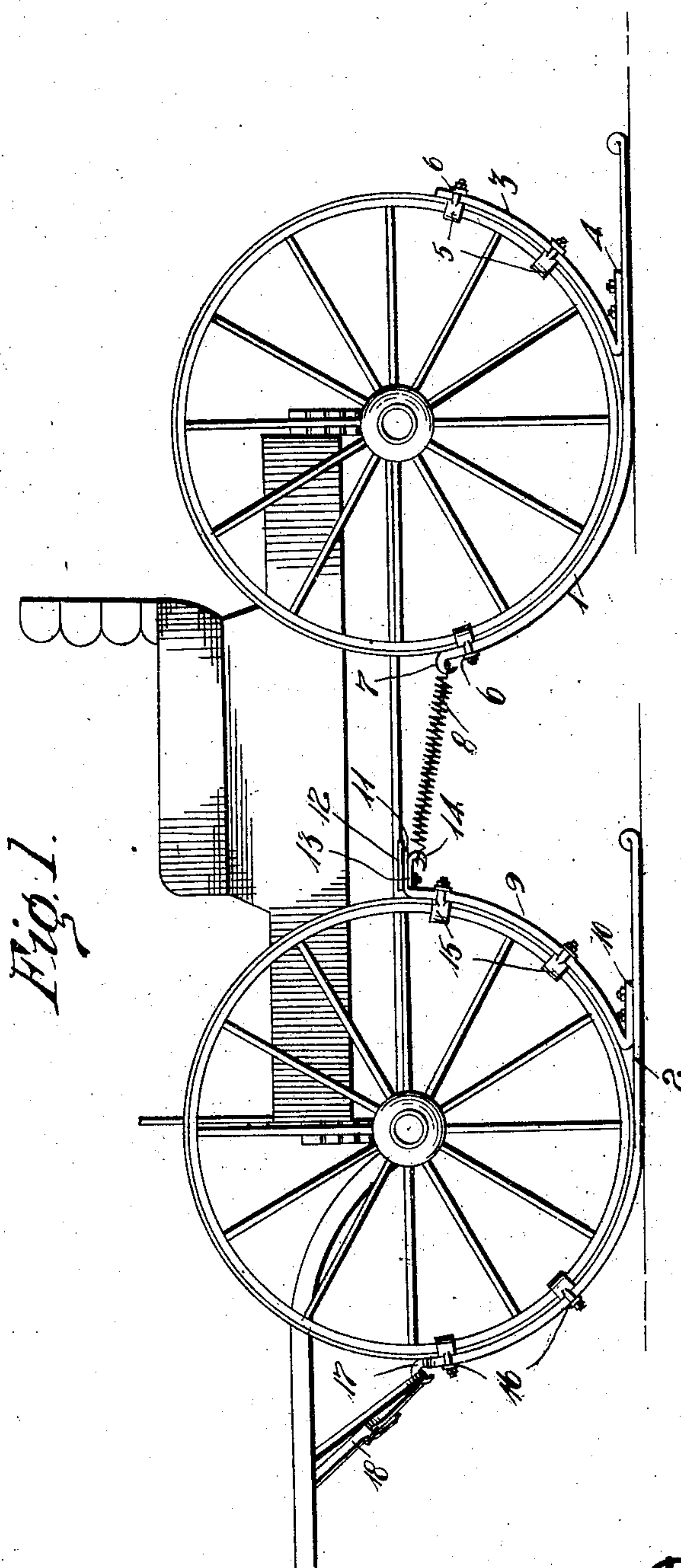
PATENTED APR. 9, 1907.

G. G. FORD.

SLEIGH ATTACHMENT FOR BUGGY WHEELS.

APPLICATION FILED OCT. 22, 1906.

2 SHEETS—SHEET 1.



Witnesses

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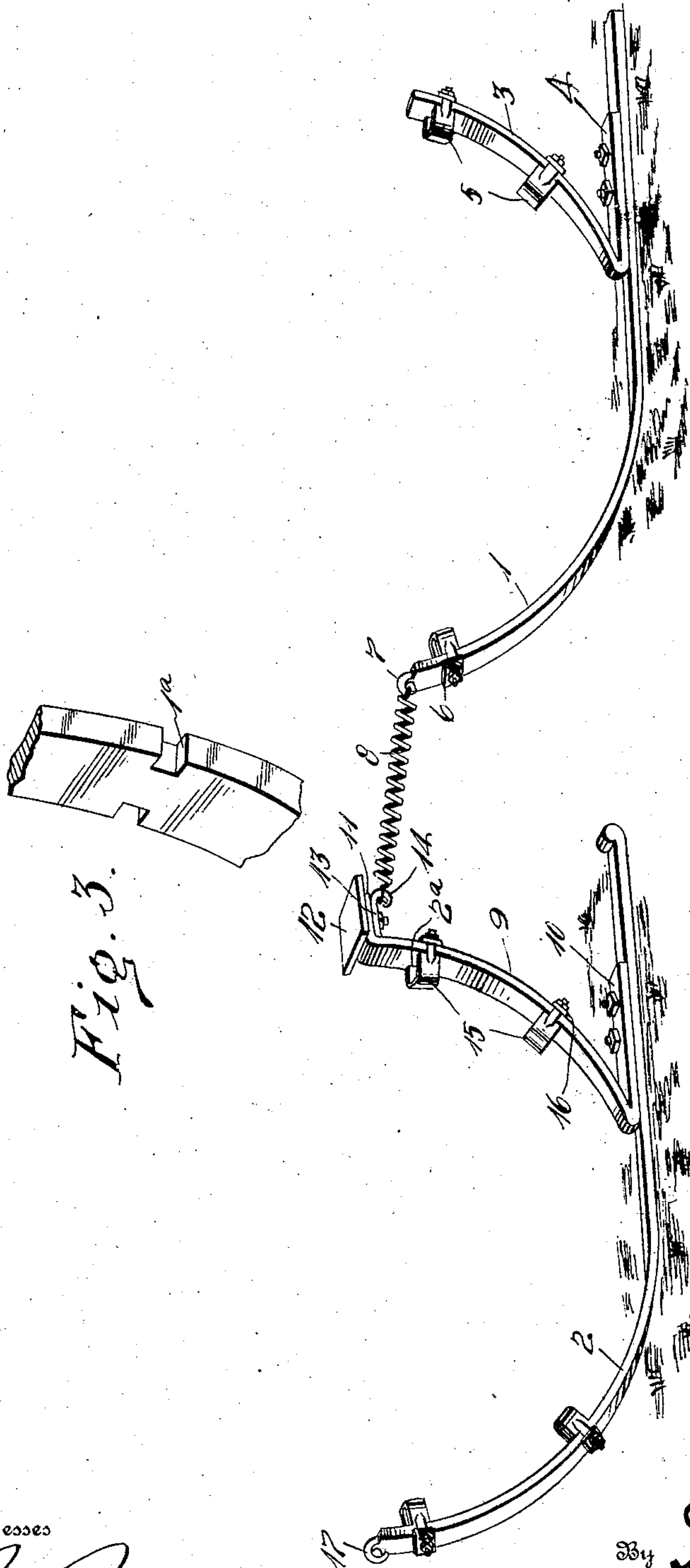


Fig. 3.

Fig. 2.

Witnesses

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UNITED STATES PATENT OFFICE.

GRANT G. FORD, OF SPEED, KANSAS.

SLEIGH ATTACHMENT FOR BUGGY-WHEELS.

No. 849,990.

Specification of Letters Patent.

Patented April 9, 1907.

Application filed October 22, 1906. Serial No. 340,055.

To all whom it may concern:

Be it known that I, GRANT G. FORD, a citizen of the United States, residing at Speed, in the county of Phillips and State of Kansas, have invented certain new and useful Improvements in Sleigh Attachments for Buggy-Wheels and the Like, of which the following is a specification.

This invention contemplates certain new and useful improvements in sleigh-runner attachments for buggy-wheels and the like; and the object of the invention is to provide a simple and durable construction of this nature in which the respective front and rear runners may be readily applied to the vehicle-wheels and as readily detached therefrom and be held securely in place when applied to the wheels and so connected together as to produce a sufficiently yielding and yet rigid structure.

With this and other objects in view, as will more readily appear as the description proceeds, the invention consists in certain constructions and arrangements of the parts hereinafter described, and particularly pointed out in the appended claims.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings, in which—

Figure 1 is a side elevation of a buggy with my sleigh-runner attachment applied thereto. Fig. 2 is a perspective view of one front and one rear runner, connected together; and Fig. 3 is a detail perspective view of a portion of one of the runners.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawings, the numeral 1 designates the pair of rear runners, which are bowed, as shown, and 2 the front runners, which are substantially of the same shape as the rear runners.

Each rear runner 1 is provided with an upwardly-extending bowed arm 3, which is provided with a returned or angularly-disposed lower end constituting a foot 4, which is bolted or otherwise secured to the runner.

5 designates yoke-clamps the arms of which are preferably seated in edge notches 1^a of the runners, and said yokes are secured in

place around the felly of the wheel by nuts binding against the glands 6. In the present instance each rear runner is provided with three of these yoke-clamps for securing it around the rim of the vehicle-wheel. The front end of each rear runner 1 is formed with a hook 7, to which is secured the rear end of a helical spring 8. Each front runner 2 is also provided with an upwardly-extending bowed arm 9, provided with an integral foot 10, by which it is attached to the runner, and the upper extremities of each arm 9 is bent rearwardly in a preferably horizontal plane and supports a step 12 on its upper side.

To the lower side of the rearwardly-extending end 11 of the arm 9 a plate 13 is secured, preferably by a nut working upon a bolt which projects downwardly from the strap and through the end 11 and plate 13. This plate is provided at its rear end with an open hook 14, adapted to be engaged with the front end of the spring 8 for the rear runner on the same side of the vehicle. Yoke-clamps 15, provided with glands 16, secure the front runners to the rim of the wheel, and these yoke-clamps for the front wheels are preferably four in number on each runner, as shown, and are held to the runner and the bowed arm thereof with the arms of the yokes seated in edge notches 2^a.

The front end of each front runner is formed with a hook 17, and straps 18 are received in said hooks and are secured to opposite sides of the doubletree, as illustrated.

From the foregoing description, in connection with the accompanying drawings, it will be seen that I have provided a very simple and efficient structure of sleigh-runner attachment which may be readily attached to the rims of vehicle-wheels, and the front runners are connected to the rear runners by springs, which permit the requisite yielding motion and at the same time be stiff enough to maintain the respective front and rear runners in their proper alinement.

Having thus described the invention, what is claimed as new is—

1. A vehicle attachment of the character described, comprising sleigh-runners arranged to be secured to the wheels of a vehicle, said runners being provided with upwardly-extending bowed arms, and the bowed arms of the front runners being formed at their upper ends with rear extensions, hooks secured to said extensions, and

springs arranged for attachment to said hooks and connected to the front ends of the rear runners, respectively.

2. A vehicle attachment of the character
5 described, comprising independent front and rear sleigh-runners adapted to be attached to the wheels of a vehicle, the front runners being provided at their rear ends with hooks and the rear runners being provided with

hooks at their front ends, and a pair of coil- 10 springs secured to the hooks of the respective front and rear runners.

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

GRANT G. FORD. [L. s.]

Witnesses:

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