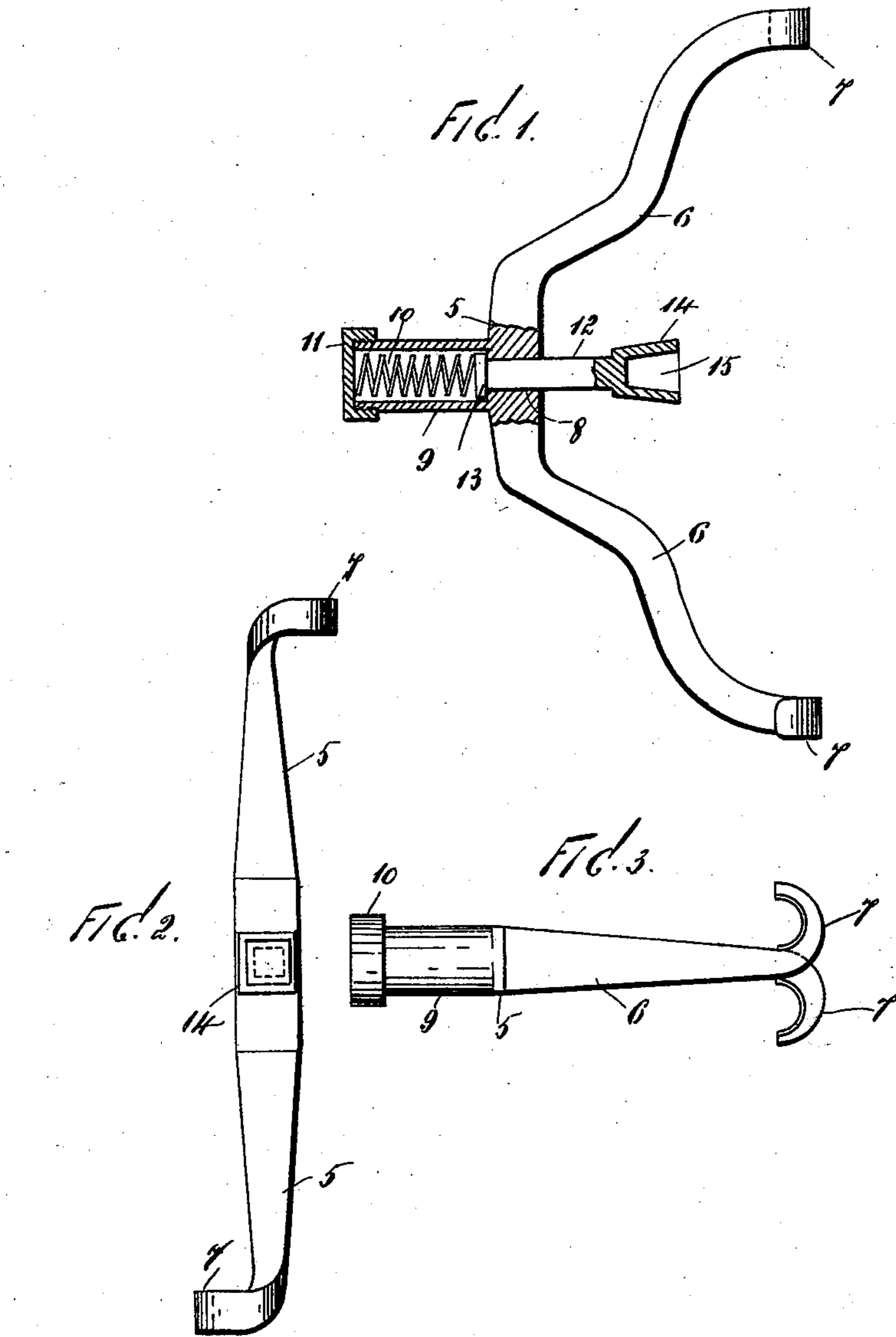


(No Model.)

J. F. ROGERS.
AXLE NUT WRENCH.

No. 591,991.

Patented Oct. 19, 1897.



WITNESS
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JAEI FRANCIS ROGERS, OF SPRINGVILLE, NEW YORK.

AXLE-NUT WRENCH.

SPECIFICATION forming part of Letters Patent No. 591,991, dated October 19, 1897.

Application filed March 10, 1897. Serial No. 626,715. (No model.)

To all whom it may concern:

Be it known that I, JAEI FRANCIS ROGERS, a citizen of the United States, residing at Springville, in the county of Erie and State of New York, have invented certain new and useful Improvements in Axle-Nut Wrenches for Wagons, Carriages, Buggies, and Similar Vehicles, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to axle-nut wrenches for wagons, carriages, buggies, and similar vehicles; and the object thereof is to provide an improved device of this class by means of which the axle or spindle nut of such vehicles may be removed from the axle or spindle or placed thereon by simply turning the wheel, which is held in place on the axle or spindle by said nut.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a sectional side view of my improved wrench; Fig. 2, an end view thereof, and Fig. 3 a side view.

In the drawings forming part of this specification the separate parts of my improvement are designated by the same numerals of reference in each of the views, and in the practice of my invention I provide a wrench for the purpose herein specified which comprises a head 5, which is provided with two outwardly-curved arms 6, each of which is provided at its end with a hook 7, and these hooks 7 are turned in opposite directions, as clearly shown in the drawings.

The head 5 of the wrench is provided with a transverse bore or passage 8, and on the side thereof opposite to that in which the arms 6 are directed, with a tubular casing 9, in which is mounted a spiral spring 10, and the end of the tubular casing 9 is closed by a screw-threaded cap 11, and passing through the bore or passage 8 is a shaft 12, one end of which enters the tubular casing 9, and is provided with a head 13, on which one end of the spring 10 bears, the opposite end of said spring being held by the cap 11, and the outer end of the shaft 12 is provided with a wrench-head 14, which is adapted to engage or to receive the axle or spindle nut.

The operation will be readily understood from the foregoing description when taken in connection with the accompanying drawings and the following statement thereof.

Whenever it is desired to remove an axle or spindle nut, the wrench is manipulated so as to cause said nut to enter the wrench-head 14, which is provided with a cavity or chamber 15, and so as to cause the hooks 7 at the ends of the arms 6 to engage with two of the spokes at the opposite sides of the hub of the wheel, and then by turning the wheel in the proper direction the wrench and the nut will be turned therewith, as will be readily understood, and said nut will be detached from the axle or spindle.

It will be apparent that the nut may be replaced upon the axle or spindle by reversing this operation, and the spring 10 operates so as to provide a proper adjustment of the shaft 12, and so as to hold the hooks 7 in connection with the spokes of the wheel, the pressure of said spring upon the shaft 12 of the wrench serving to force the arms 6, or the body portion of the wrench, outwardly, as will be readily understood.

The shaft 12 is angular in cross-section, as is also the bore or passage 8 in the head 5 of the wrench, the object of this construction being to provide means for preventing the revolution of the wrench-head or the shaft 12, with which said wrench-head is connected in the operation of the wrench, as hereinbefore described.

This device is simple in construction and operation, and perfectly adapted to accomplish the result for which it is intended, and it will be apparent that many changes in and modifications of the construction herein described and in the form of the various parts of my improved wrench may be made without departing from the spirit of my invention, or sacrificing its advantages.

Having fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The herein-described axle or spindle nut wrench, said wrench consisting of a cross-head which is provided with side arms which project in the same direction, and the ends of which are provided with hooks which are turned in opposite directions, said cross-head

being also provided on the outer side thereof with a tubular casing in which is mounted a spiral spring, and a shaft which passes loosely through the cross-head of the wrench, and
5 on which said spring bears, said shaft being provided at its outer end with a wrench-head which is adapted to receive the nut, substantially as shown and described.

2. The herein-described axle or spindle nut
10 wrench, said wrench consisting of a cross-head which is provided with side arms which project in the same direction, and the ends of which are provided with hooks which are turned in opposite directions, said cross-head
15 being also provided on the outer side thereof with a tubular casing in which is mounted a spiral spring, and a shaft which passes loosely through the cross-head of the wrench, and on which said spring bears, said shaft being pro-
20 vided at its outer end with a wrench-head which is adapted to receive the nut, and said tubular casing being provided with a re-

movable cap, substantially as shown and described.

3. The herein-described axle or spindle nut 25 wrench, said wrench consisting of a head provided with arms which are provided with hooks which are adapted to engage with the spokes of the wheel, and with a shaft which passes through an opening formed in said 30 head, and into a tubular casing connected therewith, and a spring which is mounted in said tubular casing, and adapted to bear on the end of said shaft, said shaft being also provided with a wrench-head, substantially 35 as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 23d day of February, 1897.

JAEI FRANCIS ROGERS.

Witnesses:

R. F. DYGERT,
A. E. CONGER.