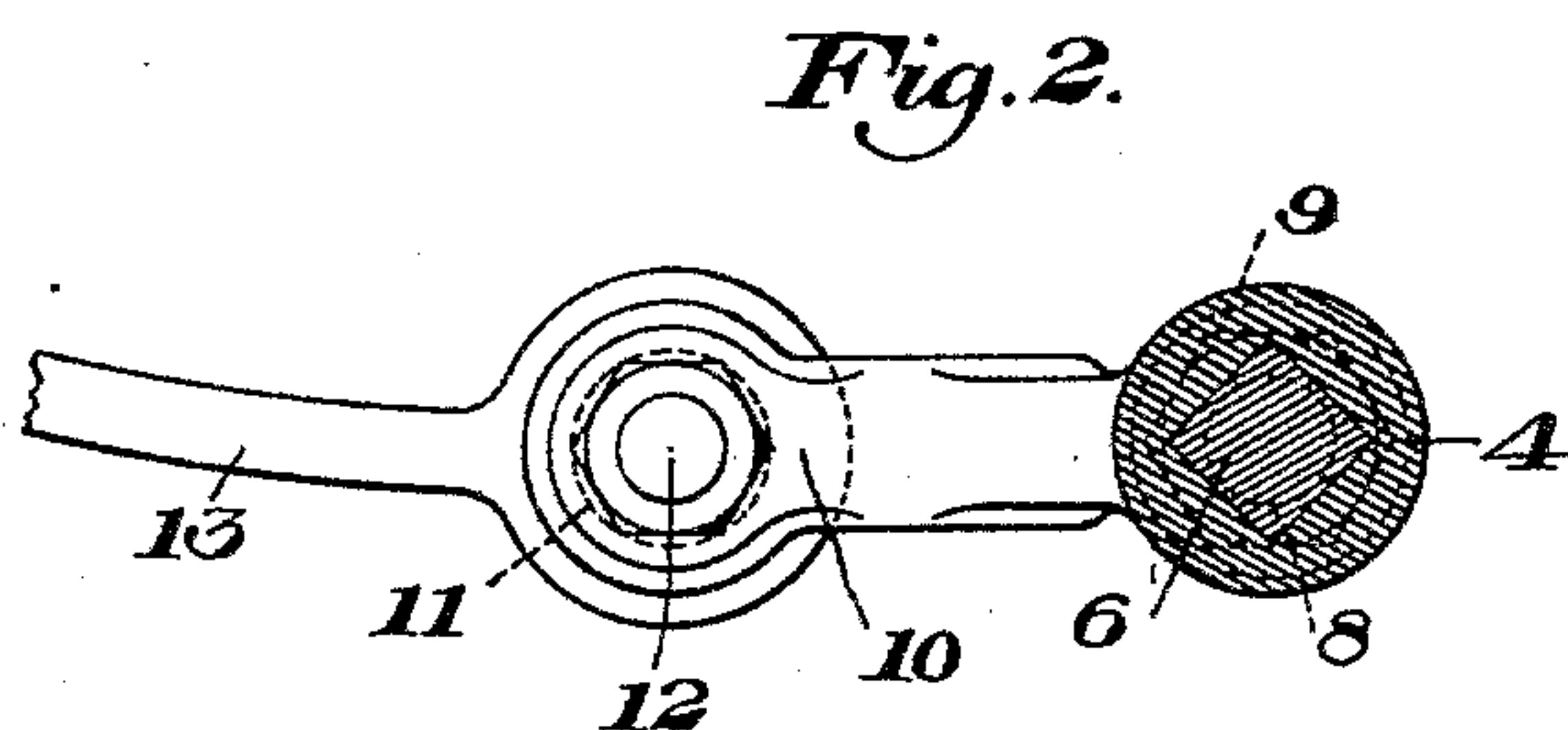
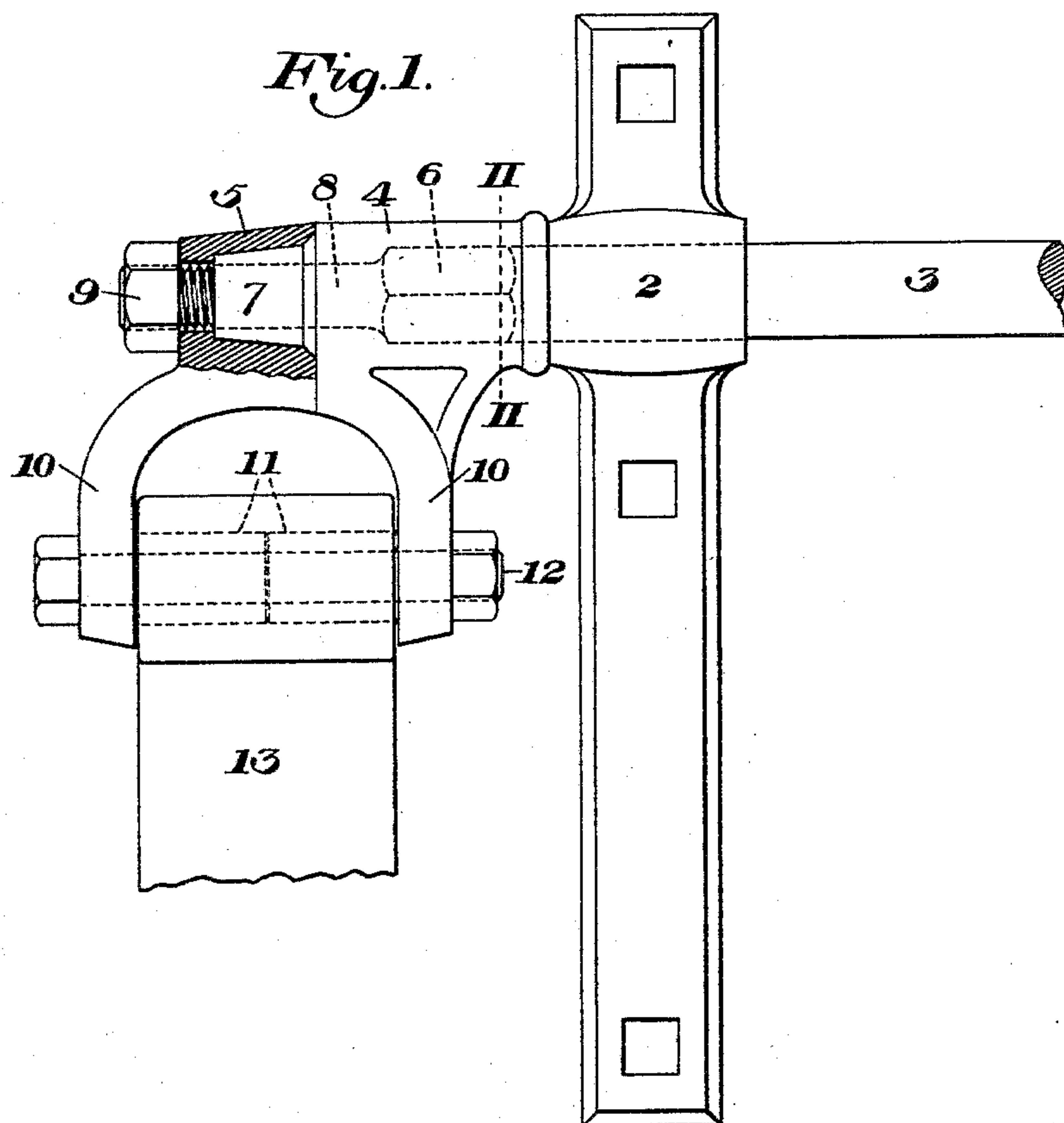


(No Model.)

H. C. SWAN.
SPRING SHACKLE FOR VEHICLES.

No. 597,865.

Patented Jan. 25, 1898.



WITNESSES

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UNITED STATES PATENT OFFICE.

HENRY C. SWAN, OF OSHKOSH, WISCONSIN.

SPRING-SHACKLE FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 597,865, dated January 25, 1898.

Application filed September 30, 1897. Serial No. 653,553. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. SWAN, of Oshkosh, in the county of Winnebago and State of Wisconsin, have invented a new and useful Improvement in Spring-Shackles for Vehicles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top plan view, partly broken away, showing my improved shackle in position; and Fig. 2 is a cross-section on the line II II of Fig. 1.

My invention relates to the spring-shackles employed upon vehicles and is designed to greatly cheapen and improve the same. Heretofore these devices have been constructed entirely of wrought material, and consequently have been difficult and expensive to manufacture. My invention overcomes this difficulty and enables these shackles to be cast into form, thus greatly cheapening their production, so that they may be used upon cheaper grades of vehicles than formerly.

In the drawings, 2 represents the ordinary box or bearing for the equalizer-rod 3, this bearing lying on the top of the perch and axle of the ordinary side spring-gear. The shackle proper is made in two parts 4 and 5, the part 4 being in the form of a hollow sleeve, having a squared portion 6 to receive the correspondingly-shaped portion of the equalizer 3, thus preventing the rotating of the shackle upon the equalizer-rod. Projecting from the outer end of this sleeve is a reduced portion 7, which enters a correspondingly-recessed portion of the sleeve or cap 5 and fits neatly therein. The reduced portion 8 of the equalizing-rod extends through both the parts 4 and 5 and is screw-threaded at its outer end to receive a nut 9, by which the parts are secured in place. Each of the parts 4 and 5 is provided with a projecting ear 10, the ears preferably having the usual inwardly-projecting barrels 11, through which the securing-bolt 12 passes and which are engaged by the end portion of the spring 13.

The operation of the device will be appar-

ent to those skilled in the art, the shackle shown forming a part of the complete set, the equalizing-rods performing their usual function in connection with the springs.

The advantages of my invention result from the cheapness and simplicity of the device, its construction being such that it may be cast into shape, while its appearance is neat and ornamental.

The barrels upon the ears of the shackle may be dispensed with, if desired, the springs encircling the bolt itself, and many other variations may be made in the form and arrangement of the parts to the skilled mechanic without departing from my invention, since

What I claim is—

1. The combination with an equalizing-rod, of a shackle composed of two collars surrounding the same, an angular portion within one of the collars arranged to engage a corresponding portion of the equalizing-rod and prevent rotation thereon, and ears projecting from the collars for connection to the spring.

2. The combination with an equalizing-rod and bearing therefor, of a shackle composed of two collars, one collar having a reduced portion entering a correspondingly-shaped recess in the other, said collars surrounding the equalizer and having projecting ears provided with a through-bolt for attachment of the spring.

3. The combination with an equalizing-rod and bearing therefor, of a spring-shackle consisting of two collars surrounding the rod, one collar being internally squared to receive a squared portion of the rod and having a projecting reduced portion entering a correspondingly-shaped recess in the other collar, said collars having projecting ears provided with inwardly-extending barrels for attachment of the spring.

In testimony whereof I have hereunto set my hand.

HENRY C. SWAN.

Witnesses:

JOHN E. MORRISON,
EMIL W. JAITE.