

(No Model.)

J. F. VAN AUKEER.

THILL COUPLING.

No. 318,836.

Patented May 26, 1885.

Fig. 1.

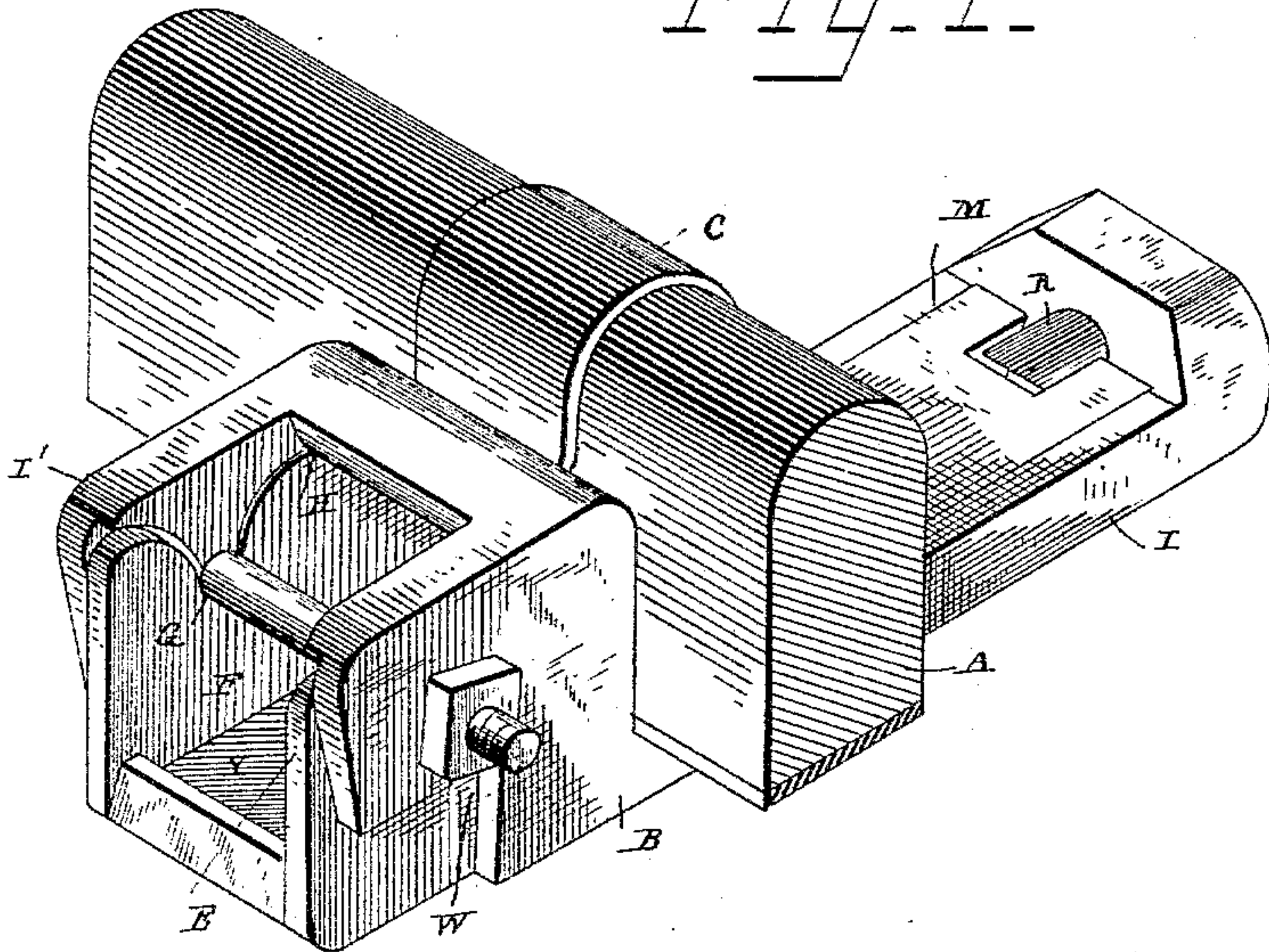
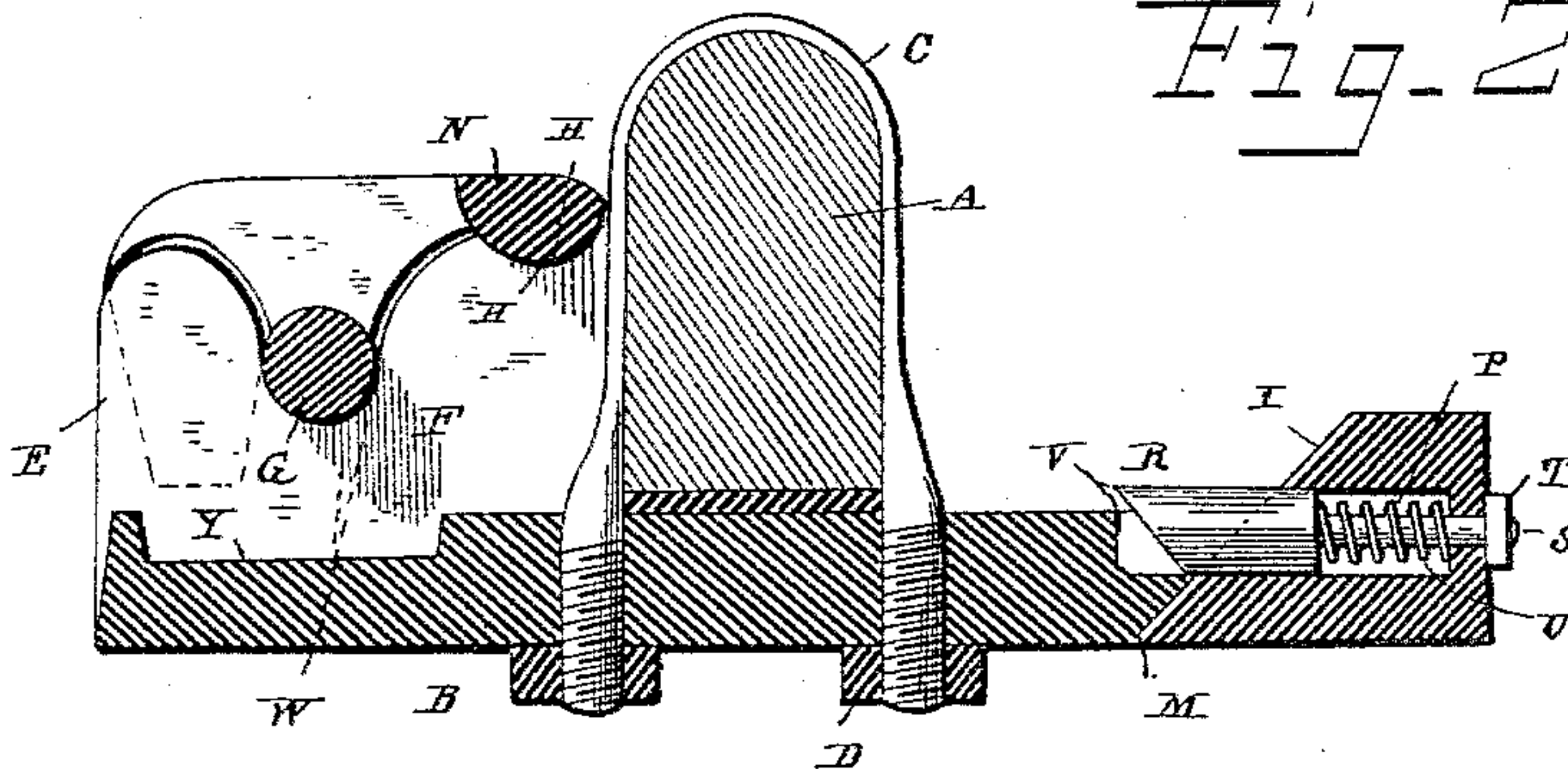


Fig. 2.



WITNESSES

Edwin L. Jewell,
W. S. Simolaugh

INVENTOR

J. F. Van Auker
By L. H. Ginsabaugh
Attorney

UNITED STATES PATENT OFFICE.

JOHN F. VAN AUKEER, OF YOUNGSTOWN, OHIO.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 318,836, dated May 26, 1885.

Application filed June 30, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. VAN AUKEER, a citizen of the United States, residing at Youngstown, in the county of Mahoning and State of Ohio, have invented certain new and useful Improvements in Carriage-Shaft Shackles; and I do hereby declare the following to be a full, clear, and exact description of my invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

This invention relates to certain improvements in that class of shaft-shackles or thill-couplings for vehicles in which the shaft may be secured or removed by opening the parts of the shackle, dispensing with the tedious operation of removing the nut from the eyebolt, and withdrawing the bolt, which are apt to become fast, owing to rust or corrosion.

In the accompanying drawings, forming part of this specification, Figure 1 represents a perspective view of my improved shackle, and Fig. 2 a longitudinal vertical sectional view thereof.

The letter A indicates the front axle of a vehicle of ordinary construction, and B one of the parts of the shackle, which is secured to the axle by means of the clip C, the ends of which are screw-threaded and pass through apertures in the usual binding-plate, being fastened by the nuts D. The said part B consists of a metallic plate having at its forward end two upright lugs, E, with an intervening space, F, into which the eye of the coupling sets. The said lugs are provided with semi-circular recesses G for the eyebolt, and with similar recesses above, as indicated by the letter H, which form bearings for the other part of the shackle.

The said part consists of a metallic plate, I, having side lugs, I', at its forward end, which are adapted to straddle the lugs E of the plate B, as clearly shown in Fig. 1 of the drawings.

The plate I is somewhat longer than the plate B, and has its rear portion slotted, forming a seat, M, within which the rear portion of the plate B sets when the parts are in place.

At the rear of the lugs, and near the upper portion of the part I, is a rounded bearing, N, which rests in the seat H, before mentioned, the parts working upon the same as a fulcrum.

The rear end of the plate I is bored and recessed, as indicated by the letter P, forming a shouldered recess, in which is fitted a beveled sliding bolt, R, which is provided with a stem, S, passing through an aperture at the rear of the recess, and having a nut, T, by which it is clamped in place. Surrounding said stem, and bearing against the bolt and the shoulder at the rear of the recess, is a spiral spring, U, which presses the bolt normally forward into a recess, V, on the rear of the plate B, to lock the two parts together, when desired.

The lugs at the front end of the plate I are provided with inclined slots W, as indicated in dotted lines in Fig. 2.

The operation of my invention will be readily understood in connection with the above description, and is as follows: The parts, when closed, are in the position shown in the drawings, the eyebolt being held between the circular recesses in the lugs of the lower part and the upper ends of the inclined slots in the upper part, the parts being locked by the bolt at the rear. To remove or replace the shaft, the bolt is drawn back and the parts separated or opened, like a pair of scissors, by pressing down the rear end of the plate I, permitting the eye and eyebolt to be removed or replaced without disturbing the nut on the bolt.

In order to render the device noiseless, a seat, Y, is provided in the plate B for a rubber cushion to bear against the outside of the eye and prevent it from rattling.

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

In a shackle for vehicles, the combination of the lower plate, provided with recessed lugs, with the upper plate, having slotted lugs and a bearing setting in the rear recesses of the lugs of the lower plate, the said upper plate being slotted at the rear, so as to fit over the lower plate, and provided with a spring-actuated bolt, whereby the parts may be locked together.

In testimony whereof I have hereunto affixed my signature in the presence of two witnesses.

JOHN F. VAN AUKEER.

Witnesses:

B. F. WIRT,

L. D. WOODWORTH.