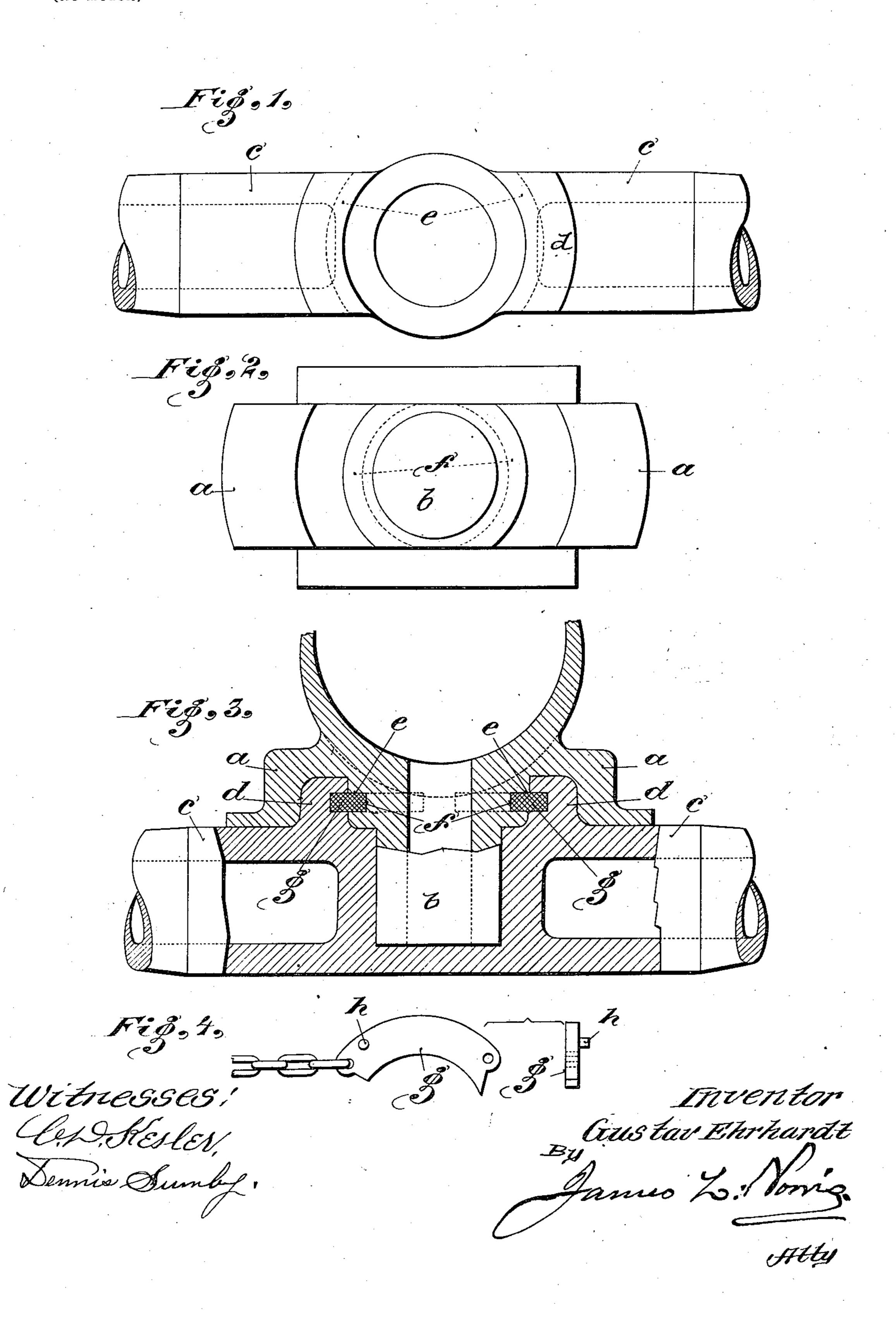
G. EHRHARDT.

MEANS FOR SECURING THE PIVOTS OF GUNS TO CARRIAGE AXLES.

(Application filed June 13, 1902.)

(No Model.)



United States Patent Office.

GUSTAV EHRHARDT, OF EISENACH, GERMANY.

MEANS FOR SECURING THE PIVOTS OF GUNS TO CARRIAGE-AXLES.

SPECIFICATION forming part of Letters Patent No. 717,364, dated December 30, 1902.

Application filed June 13, 1902. Serial No. 111,526. (No model.)

To all whom it may concern:

Be it known that I, GUSTAV EHRHARDT, engineer, a citizen of the United States of America, residing at Eisenach, in the Grand Duchy of Saxe-Weimar and German Empire, have invented certain new and useful Improvements in Means for Securing the Pivots of Guns to Carriage-Axles, of which the following is a specification.

My invention relates to a construction of the means for securing or locking the pivotgudgeon to the axle in pivoting guns disclosed by Patent No. 700,633, dated May 20, 1902.

The arrangement is illustrated by the ac-

companying drawings, in which—

Figure 1 is a plan of the axle. Fig. 2 is a plan of the under side of the shoulder upon the pivot. Fig. 3 is a section of the parts secured together. Fig. 4 shows in detail the means for securing the parts together.

In the arrangement shown in Figs. 1 to 4 the locking or securing device is not fitted to the pivot-gudgeon itself, but to the boss or 25 shoulder above it. Segments are employed; but they do not form a closed circle, because, as illustrated by Fig. 2, the boss or shoulder of the pivot is flattened on both sides. The shoulder a, with which the pivot b rests on 30 the axle c, overlaps two concentric raised portions d, of rectangular section, integral with the axle. (See Fig. 3.) These raised portions have concentric grooves e turned therein, which correspond with similar grooves f35 in the shoulder of the pivot, so as to form, respectively, one continuous groove each. Suitably-shaped segments g are inserted into

these grooves. (See Fig. 4.) Two large securing-segments only are applied in each instance. Each segment has at one end a stoppin h (see Fig. 4) to serve as a stop in the operation of inserting the segment, while at the other end each segment has an eye to receive a pin for securing it against falling out. Each segment is fastened to the axle by means of a chain, which also serves as a handle for pulling it out. This arrangement has the advantage of offering a large smooth bearing-surface to take up the strain of the shock.

Having now particularly described and as-50 certained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

In a device for securing the pivot of guns to the carriage-axle, the combination of an 55 axle provided with raised portions, said raised portions having grooves therein, a pivot-gudgeon provided with shoulders fitting over the raised portions of said axle, said pivot-gudgeon having a circular groove therein, the 60 groove in said pivot-gudgeon and the grooves in said raised portions being concentric with each other and registering together, a plurality of segments fitting into said concentric grooves, and means for retaining said seg-65 ments in position.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GUSTAV EHRHARDT.

Witnesses:
JOHANNES REUTEB,
WILHELM JUNIUS.