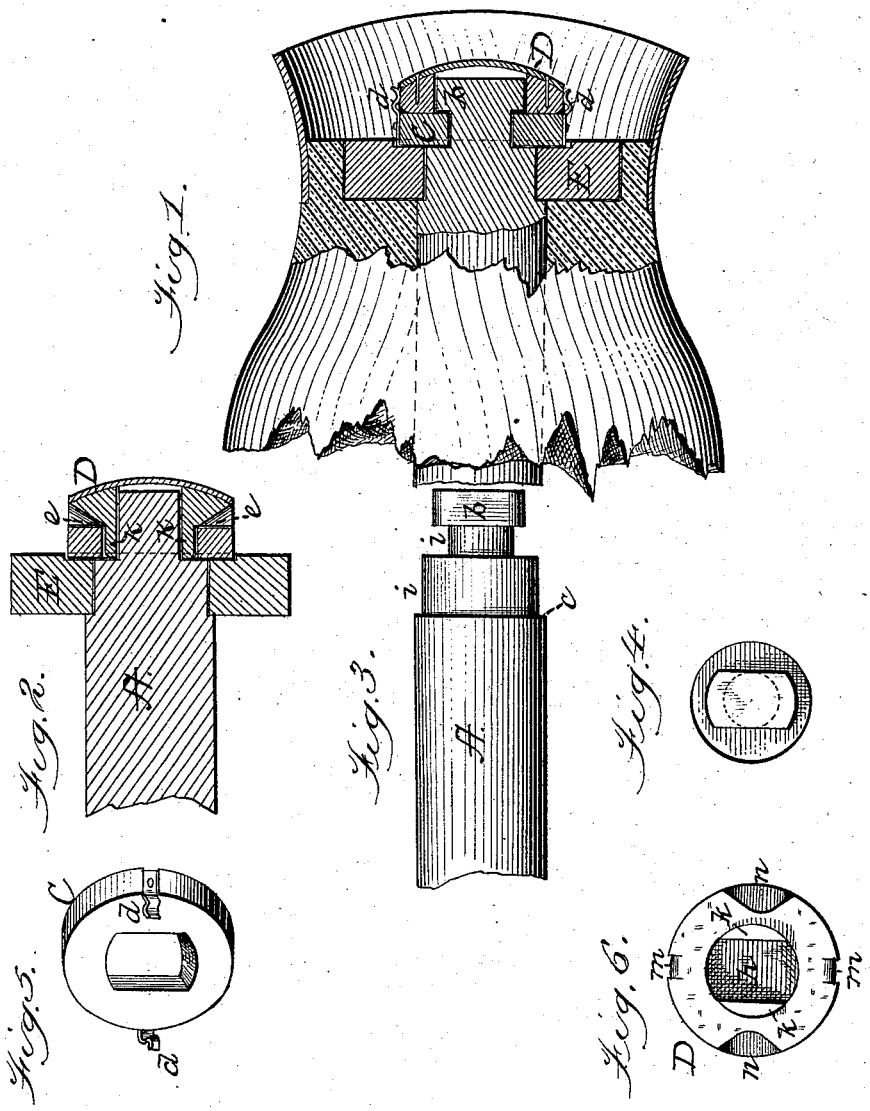
(No Model.)

G. K. FARRINGTON.

HUB ATTACHING DEVICE.

No. 261,326. Patented July 18, 1882.



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UNITED STATES PATENT OFFICE.

GEORGE K. FARRINGTON, OF KIRKSVILLE, MISSOURI, ASSIGNOR OF TWO-THIRDS TO HOSMER C. FARRINGTON, OF SAME PLACE, AND BRADFORD S. POTTER, OF SHIPPENSBURG, PENNSYLVANIA.

HUB-ATTACHING DEVICE.

SPECIFICATION forming part of Letters Patent No. 261,326, dated July 18, 1882.

Application filed December 16, 1881. (No model.)

To all whom it may concern:

Be it known that I, GEORGE K. FARRINGTON, a citizen of the United States of America, residing at Kirksville, in the county of Adair and State of Missouri, have invented certain new and useful Improvements in Means for Securing Wheels to Axles, of which the following is a specification, reference being had therein to the accompanying drawings.

The nature of my invention consists in the novel construction and combination of parts, as will be hereinafter described and claimed.

In the accompanying drawings, Figure 1 is sectional elevation of the improvements applied to a hub. Fig. 2 is a sectional view of the axle and the end-coupling means. Fig. 3 is an end elevation of the axle, and Fig. 4 is an end view of the axle. Fig. 5 is an elevation of the lock-plate. Fig. 6 is a plan view of the key-plate.

To enable others skilled in the art or science to which it most nearly appertains to make and use my invention, I will proceed to describe its construction and operation.

The letter A represents an axle, upon which is turned a button or projection, *b*, forming two bearings or shoulders, *i i;* or the button may be screwed into the end of the axle. This axle is also formed with a washer or collar shoulder, *c*, for the purpose hereinafter stated.

The letter C represents the lock-plate, (see Fig. 5,) formed with an oblong opening and side spring-jaws, *d*. This lock-plate is passed over the button end *b* of the axle, and adjusted thereon by turning the same about one-fourth a revolution, which brings it into the position as shown in Fig. 1 of the drawings.

The letter D (see Fig. 6) represents the key-plate, formed with a recess or cavity, *h*, to fit over the button end of the axle, and the plano-convex projections *k* to enter the openings or passages formed between the axle and lock-plate. This key-plate is also formed with two notches, *m*, to receive the locking-springs *d* of the lock-plate, and recesses *n* to receive the fingers in removing the key-plate.

The letter E represents a washer or collar fitted on the axle to exclude dust, &c., from the axle. When the lock-plate is in position, as shown in Figs. 1 and 2, the key-plate D is placed on the head or button *b*, and the projections *k k* thereof fit into spaces *e e*, and are held in place by the side springs, *d d*. The key-plate D is made of malleable iron, the lock-plate of cast-steel to prevent wear, and may be replaced by new plates at any time. As there is no wear or friction on the key-plate, it need never be replaced. It may be made highly ornamental, and as there is no wrench required to remove it or the lock-plate any ornamentation or plating will not be marred in removing a wheel.

One of the objects of this invention is to furnish a neat and secure fastening for wheels, and to facilitate the removal of the same without the aid of a wrench, for purposes of lubricating or for any other purpose.

Should the lock-plate become worn too much, a thin piece of leather may be put on the outer face, between it and the key-plate. As no wear comes on the leather, the lock-plate can be made to last a long time and fit closely to the wheel.

The locking-springs *d d*, it will be observed, fit in a slot in the edge of the lock-plate, and are held firmly in position at their base by rivets or other means, and they facilitate the removal of the lock-plate, being also used as points by which to turn and remove the plate.

The object of having the keys of the key-plate enter the slots close to the axle head or button (they could be put on the outer surfaces and enter mortises in the lock-plate) is that thus they fill the space left by turning the lock-plate to catch under the shoulders of the axle-point and form a cylindrical surface, which in the case of carriage-axles strengthens these points from lateral pressure or shock.

The outer edge of key-plate *b* may have a flange or molding to facilitate its removal.

It is obvious that these improvements can be applied to axles or shafts for securing or attaching end pulleys; also, I claim the right to vary the construction and equivalents without departing from the spirit of the invention.

Having thus described my invention, what I

claim as new, and desire to secure by Letters Patent, is—

The combination of an axle formed with the shoulder-bearings *i i* and button or projections *b*, lock-plate C, with projections *d d*, and cap-plate D, with extensions *k k*, all arranged for operation substantially as described.

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

GEORGE K. FARRINGTON.

Witnesses:
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