

Levi Adams.
Attaching Hubs to Axles.

74476

PATENTED

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Fig. 1.

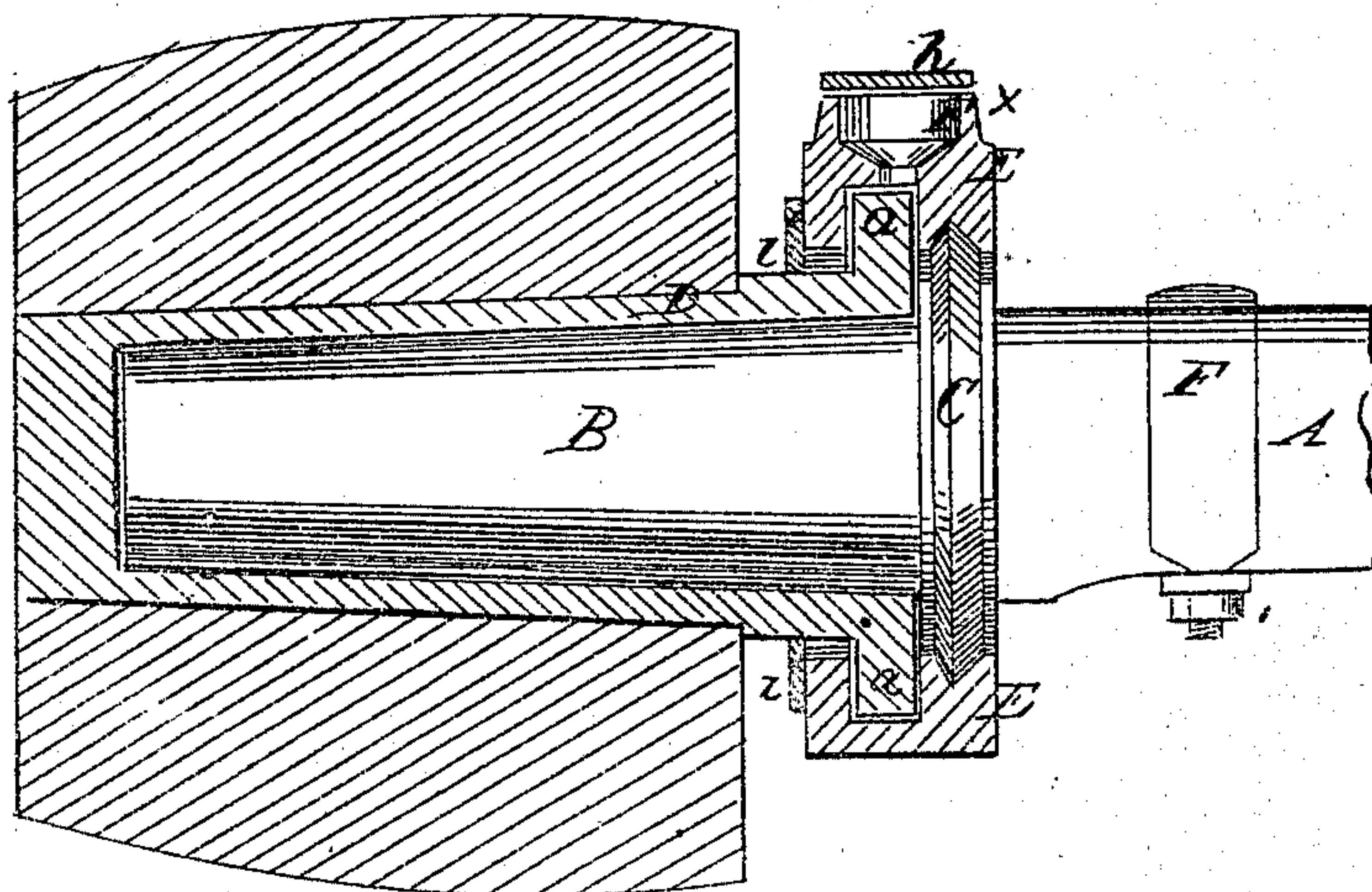
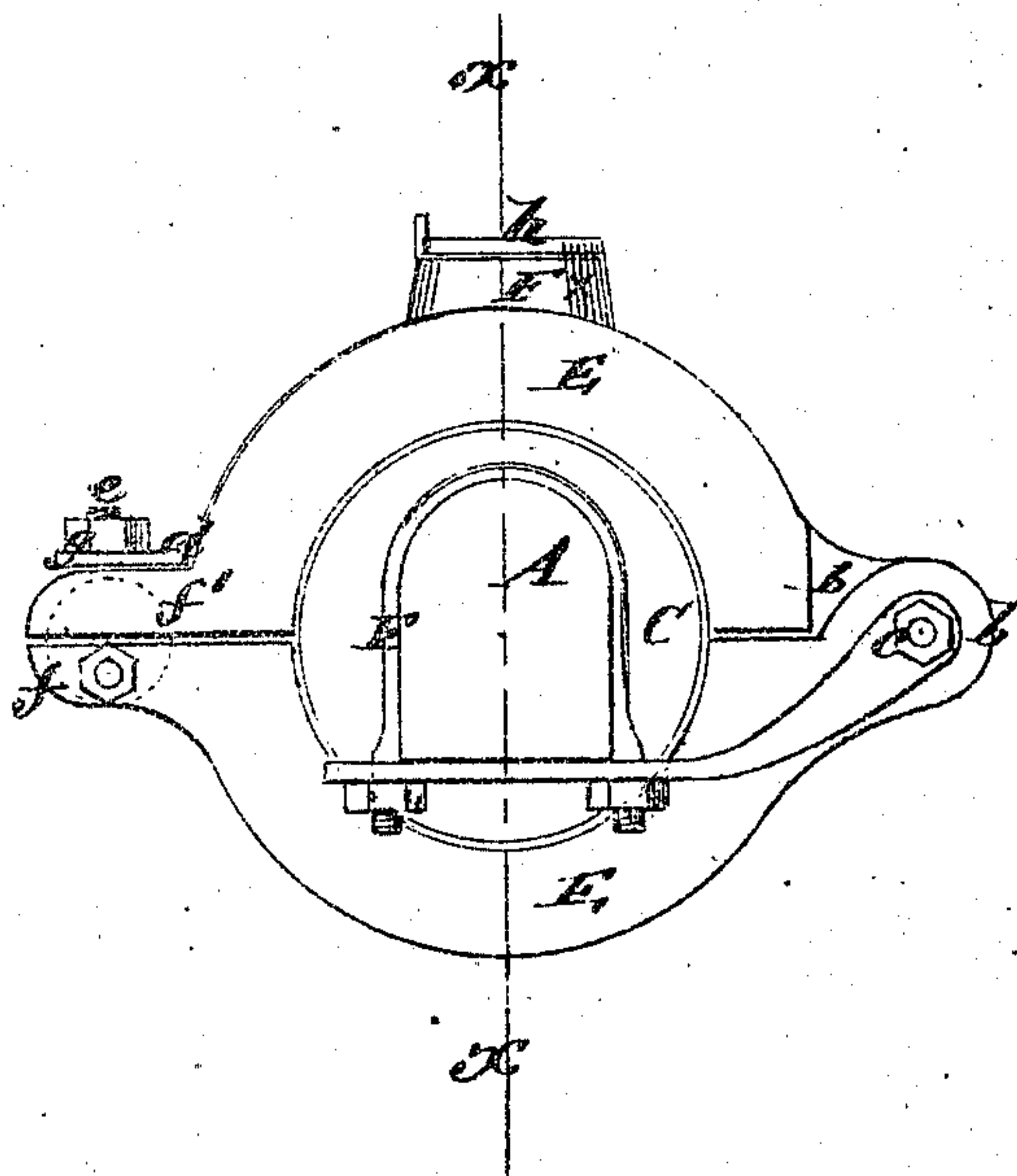


Fig. 2.



Witnesses:

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United States Patent Office.

LEVI ADAMS, OF AMHERST, MASSACHUSETTS.

Letters Patent No. 74,476, dated February 18, 1868.

IMPROVEMENT IN LUBRICATORS FOR AXLES, AND MODE OF ATTACHING THEM TO AXLES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, LEVI ADAMS, of Amherst, in the county of Hampshire, and State of Massachusetts, have invented a new and improved Method of Attaching Hubs to Axles; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and improved manner of attaching hubs to axles, and is designed as an improvement on the old "mail-axle," and all others which are provided with means for securing the hub on the arm, at the inner end of the former.

The object of my invention is to obtain a good bearing for the hub on the arm, effectually prevent the escape of lubricating-material from the arm, prevent the advent of dust between the box and arm, and admit of the wheel being readily attached to and detached from its axle. In the accompanying sheet of drawings—

Figure 1 is a longitudinal central section of my invention; taken in the line *x x*, fig. 2.

Figure 2, an inner end view of the same.

Similar letters of reference indicate corresponding parts.

A represents a portion of the axle of a vehicle, and B one of the arms thereof. These parts may be of usual construction, and therefore do not require a minute description. The arm B is provided with a collar, C, at its inner end, or junction with the axle, said collar having a V-shaped periphery, as shown in fig. 1. D represents the box, which is closed at its outer end, and is secured in the hub so as to turn with it. This box extends beyond the inner end of the hub, and is provided with a flange, *a*, at its inner end, which flange extends all around the box. E E represent two semicircular jaws, provided at one end with lugs or projections, *b b*, connected together by a pintle, *c*, to form a hinge or joint, by which the jaws are permitted to open and close, said pintle being connected with a clip, F, on the axle. These jaws E E are grooved at their inner surfaces, to receive, when closed, the flange *a*, at the inner end of the box D, and a V-shaped groove is also made in the inner surfaces of the jaws, to receive the periphery of the collar C on the arm, (see fig. 1.) The jaws E E are secured in a closed state by means of a button, the same consisting of a metal plate, *d*, attached to a rod, *e*, the lower end of which is pivoted in a lug, *f*, on the lower jaw, a corresponding lug, *f'*, on the upper jaw being slotted, to allow the rod *e* to pass into it, and the plate *d* to fit over the upper surface of the lug *f'*, said plate *d* being screwed firmly down on the upper surface of the lug *f* by a screw-nut, *g*, on the upper end of rod *e*.

It will be seen from the above description that, by the fitting of the jaws E E over the collar C, the jaws are firmly connected to the axle, and by having the jaws fitted over the flange *a*, the hub will be secured on the arm. The upper jaw E is provided at its top with a cup, F^x, which communicates with the groove in the inner surface of said jaw. This oil-cup has a lid, *h*, in order to exclude dust, and the inner side of the jaws E, that is, the side opposite the inner end of the hub, has packing, *i*, attached, which, when the jaws E E are closed, fits snugly around the box D, and prevents the escape of oil from within the jaws, and also prevents the advent of dust therein.

This improvement admits of the very ready attachment of the wheel to the axle, and its detachment therefrom, and is a great improvement over the old and well-known "mail-axle," in which the hub is secured on the axle by means of bolts passing longitudinally through the entire length of the hub, and through a plate or disk, which bears against a collar on the axle.

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

1. The two jaws E E, fitted or secured to the axle, as shown, in combination with the collar C, at the inner end of the arm B, and the flange *a*, at the inner end of the box D, all being constructed and arranged substantially in the manner as and for the purpose set forth.
2. The packing *i* and the oil-cup F, in combination with the jaws E E, the collar C on the axle, and the flange *a* on the box D, all arranged substantially as and for the purpose specified.
3. The button, consisting of metal plate *d*, rod *e*, pivoted in lug *f*, and the nut *g*, when used in combination with the jaws E E, and all arranged substantially in the manner as and for the purpose set forth.

LEVI ADAMS.

Witnesses:

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