(No Model.)

T. A. CRABTREE.

HUB ATTACHING DEVICE.

No. 289,627. Patented Dec. 4, 1883.

Fig. 1.

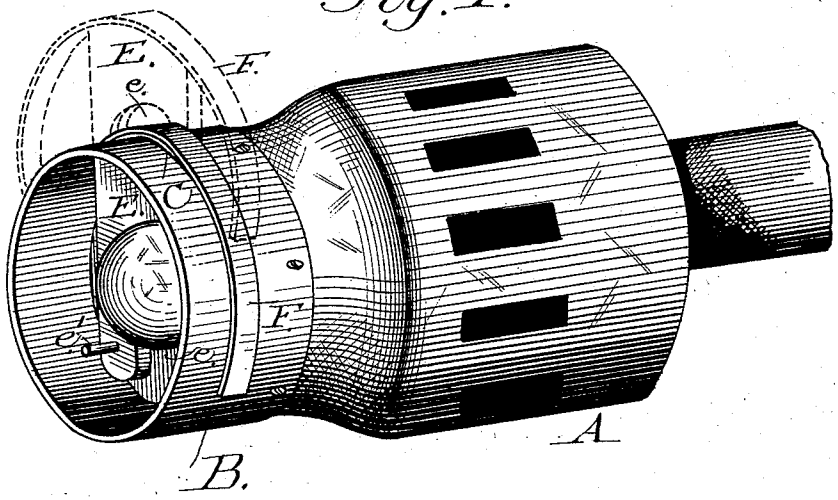
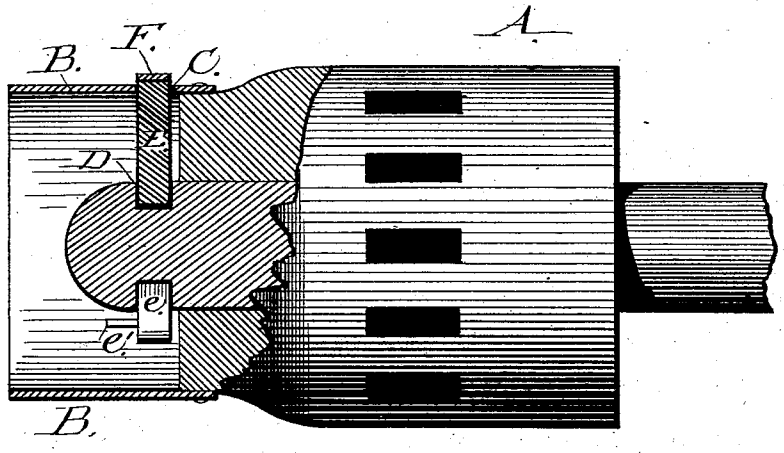


Fig. 2.



Witnesses;

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UNITED STATES PATENT OFFICE.

THOMAS ALDIN CRABTREE, OF EAST SURRY, MAINE.

HUB-ATTACHING DEVICE.

SPECIFICATION forming part of Letters Patent No. 289,627, dated December 4, 1883.

Application filed October 6, 1883. (No model.)

To all whom it may concern:

Be it known that I, THOMAS A. CRABTREE, a citizen of the United States of America, residing at East Surry, in the county of Hancock and State of Maine, have invented certain new and useful Improvements in Attaching Hubs to Axles; and I do hereby declare the following to be a full, clear, and exact description of the 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, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in means for attaching the hubs of wheels to axles; and it consists in providing an axle or spindle with an annular groove which is adapted to receive a sliding catch-plate which passes through a slot in the end of the hub-band, said catch-plate being provided on its outer end with a spring, which will embrace the hub-band, as will be hereinafter more fully set forth.

My invention also consists in providing the sliding plate within the hub-band with projecting pins, which will prevent the same from being withdrawn from the band.

In the accompanying drawings, which illustrate my invention, Figure 1 is a perspective view, showing the sliding plate raised in dotted lines, and Fig. 2 is a longitudinal section.

A represents the hub of an ordinarily-constructed wheel, which is provided on its outer end with a band, B, which projects beyond the outer face of the hub. This band is secured to the hub in the usual manner, and is provided near its inner edge, immediately above the outer end of the hub, with a slot, C. The spindle on the end of the axle, instead of being screw-threaded, as is usual, is provided with an annular groove or recess, D, which has vertical edges. Within the slot C in the hub-band B is placed a sliding plate, E, which is provided at its central portion with an open slot, *e*, which is rounded at its closed end. The side walls of this slot, at its curved end, when the same is in position, will lie within the annular groove in the spindle D. To the upper part of this sliding plate E is attached a flat spring, F, which is preferably curved upon a smaller circle than the hub-band, so that the same will embrace the band snugly, and will exert a pressure upon the same. The lower portion of the sliding catch-plate is provided with two outwardly-projecting pins, *e'*, which will prevent the same from being withdrawn from the slot in the hub-band.

When it is desirable to attach the hub to the spindle, the sliding catch-plate E is raised, the spring, when this plate is raised, being located above the center of the hub, its ends bearing upon the band, so as to prevent the same from falling. The spindle may then be inserted and the sliding plate pressed upon the same. The spring will then hold the sliding plate securely in place.

If desirable, the upper portion of the sliding plate may be provided with a projecting portion, which will serve as a thumb-piece when it is desired to withdraw the same. It will be seen that this sliding plate, besides forming a ready means for attaching the spindle to the hub, will also serve as a dust-cap, as when the same is placed within the annular groove fully three-fourths of the opening in the axle is covered; or, if desired, the end of the band B may be covered by suitable plates.

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

1. As a means for connecting hubs to axle-spindles, the catch-plate E, provided at its upper end with a spring, which embraces externally the hub-band, which is provided with a slot for the reception of the sliding plate, and the axle-spindle provided with an annular groove, the parts being organized and combined substantially as shown.

2. In combination with a hub provided with a band, B, having slot C adjacent to the end of the hub, and a spindle provided with an annular recess near its end, the sliding plate E, having at its lower end an open slot and projecting pins, and at its upper end a flat spring which encircles the outer side of the hub-band, substantially as shown, and for the purpose set forth.

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

THOMAS ALDIN CRABTREE.

Witnesses:

A. F. BURNHAM,

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