No. 830,897. PATENTED SEPT. 11, 1906.

N. HARRIS.

HUB BOX ATTACHMENT.

APPLICATION FILED OCT. 14, 1905.

Fig. 1.

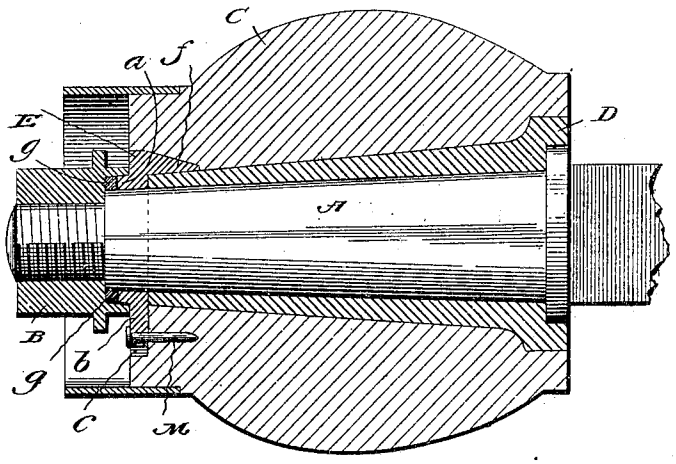


Fig. 2.

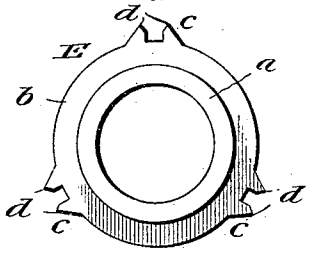


Fig. 3.

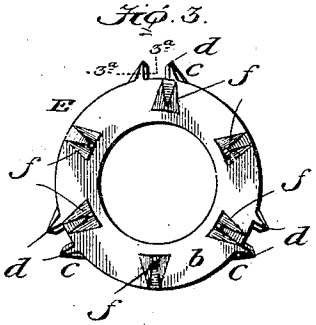


Fig. 3a.



Witnesses

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HUB-BOX ATTACHMENT.

No. 830,897. Specification of Letters Patent. Patented Sept. 11, 1906.

Application filed October 14, 1905. Serial No. 282,837.

To all whom it may concern:

Be it known that I, NOAH HARRIS, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented new and useful Improvements in Hub-Box Attachments, of which the following is a specification.

My invention pertains to devices for compensating for wear of hub-boxes with a view of prolonging the usefulness of same; and it has for its object to provide a simple and inexpensive device for the purpose stated and one adapted to be expeditiously and securely attached to a hub without the employment of skilled labor.

With the foregoing in mind the invention will be fully understood from the following description and claim, when taken in connection with the accompanying drawings, forming part of this specification, in which—

Figure 1 is a view, partly in section and partly in elevation, illustrating a hub equipped with my improved device as properly secured on an axle-spindle. Fig. 2 is an elevation of the outer side of my novel device. Fig. 3 is an elevation of the inner side of the same. Fig. 3^a is an enlarged detail section taken on the line 3^a 3^a of Fig. 3.

Similar letters designate corresponding parts in all of the views of the drawings, referring to which—

A is an axle-spindle equipped with an ordinary nut B.

C is a hub containing a box D, which is shown as worn at its outer end, and E is my novel device, which is shown in Fig. 1 as properly positioned and attached to the hub C.

The device E, constituting the present and preferred embodiment of my invention, is made in one piece of suitable metal and comprises an annular body *a*, having an exterior flange *b*, adapted to rest flush with the outer end of the hub C, Fig. 1; three (more or less) pairs of lugs *c*, arranged on the periphery of the flange *b* and preferably tapered to points, as indicated by *d*, and also tapered or gradually reduced in width from their outer sides to their inner sides, as will be seen by reference to Figs. 3 and 3^a, and six (more or less) prongs *f*, extending inwardly from the inner side of the body *a* and having concave inner sides adapted to snugly fit over the outer side of the box D.

In the practical use of my invention when a hub-box is worn at its outer end the device E is applied as shown in Fig. 1—that is to say, the flanged end of the body *a* is seated in a groove formed in the outer end of the hub around the central opening therein, while the prongs *f* and the lugs *d* are driven into the hub. It will be apparent that both the prongs *f* and the lugs *c* may be readily forced into the hub by hammer-blows applied to the outer end of the device and that when so positioned the prongs *f* serve to embrace the outer end of the box D and hold the attachment centrally over the end of the box. The lugs *c*, on the other hand, catch into the wood of the hub and firmly hold the device in the hub and against casual displacement.

As an additional means of holding the device E to the hub C, I prefer to employ flat-headed nails M, which are driven between the lugs of the pairs and into the outer end of the hub, as shown in Fig. 1.

It will be readily apparent from the foregoing that my novel device may be quickly and easily applied to a hub without the employment of skilled labor and that when the device is applied as shown and described it takes the place of the portion worn off the outer end of the box D, permits the nut B to be fully turned on the threaded end of the spindle A without locking the wheel, and assures the wheel turning on the spindle without wabbling or lateral movement.

The annular body *a* of the device E rests when properly applied in the usual circumferential flange of the nut and against the leather washer *g* generally provided in the nut.

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

The combination of a hub, a box arranged therein, a device for compensating for wear of the box, comprising an annular body, prongs extending inwardly from the body and resting in the hub and at the outer side of the box, and pairs of lugs *c* arranged on

the periphery of the body and tapered from their outer sides to their inner edges and embedded in the end of the hub, and holding devices each of which has a shank resting between the lugs *c* of each pair and in the hub and a head disposed against the outer sides of the said lugs *c*.

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

NOAH HARRIS.

Witnesses:
ORIANA E. PILLET,
WM. C. SMOCK.