J. KELLOGG.

Attaching Hubs to Axles.

No. 6,870. Patented Nov. 13, 1849

Fig. 1.

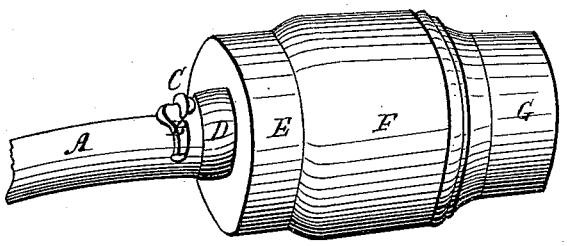


Fig. 5.

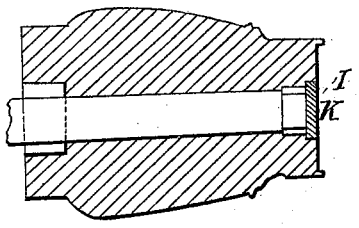


Fig. 2.

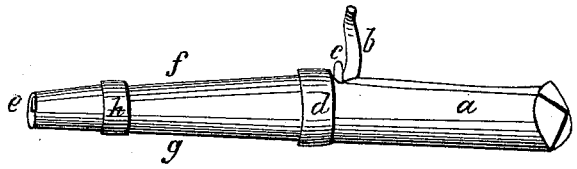


Fig. 3.

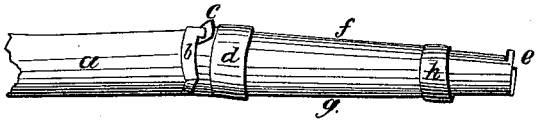
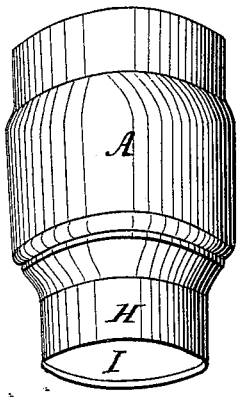


Fig. 4.



UNITED STATES PATENT OFFICE.

JOHN KELLOGG, OF MADISON, OHIO.

CONNECTING HUBS TO AXLES.

Specification of Letters Patent No. 6,870, dated November 13, 1849.

To all whom it may concern:

Be it known that I, JOHN KELLOGG, of Madison, in the county of Lake and State of Ohio, have invented a new and Improved Mode of Constructing the Axle and Hub of Wagons and other Wheeled Carriages; and I do hereby declare that the following is a full and exact description.

The nature of my invention consists in so constructing the axle and interior portion of the hub, that the ordinary linch pin or nut on the outer end of the axle, is dispensed with, and the complete closing of the outer end of the hub, so that no tar or oil can escape, or sand or dirt find an entrance.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation, reference being had to the annexed drawings, making a part of this specification.

I construct the hub in the ordinary manner, except the small box which works on the outer end of the axle, and the cap upon the out side of the small end of the hub. This cap is shown upon the hub at G, and H, Figures 1 and 4, F, Fig. 1, and A, Fig. 4, representing the hub. This cap forms the band as at G and H, Figs. 1 and 4, and is composed in front, of a circular plate of metal, as seen at I, Fig. 4, to prevent the ingress or egress of any substance to or from the hub, leaving a small space between the inner surface of the plate I, and the outer end of the box as seen in section Fig. 5, at I, K,—I, being the plate and K, the space between the plate and box.

The axle is made in the usual form, as seen in Figs. 2 and 3, being just long enough to reach from the shoulder band D, *d*, *d*, Figs. 1, 2 and 3, to the inner surface of the plate I, Figs. 4 and 5, the outer edge of the shoulder band resting against the butt end of the hub, as seen at D, Fig. 1.

For the purpose of supplying the place of a linch pin, or nut, on the end of the axle, a round rod of iron is introduced as seen at *f*, *f*, Figs. 2 and 3, which passes under the bands *d*, *h*, *d*, *h*, Figs. 2 and 3. The forward end of this rod *f*, is furnished with a nib or projection, upon one side as seen at *e*, *e*, Figs. 2 and 3, which fits into the space K between the plate I, and the box, as seen in Fig. 5. The opposite end of the rod *f*, is furnished with a crank or arm, *b*, *b*, turning off at nearly right angles with the projection *e*, as represented in Figs. 2 and 3, slightly curved so as to fit the form of the axle-tree A, *a*, *a*, Figs. 1, 2 and 3, when pressed down upon its surface. When this arm stands perpendicular, as seen at *b*, Fig. 2, the nib *e*, falls into a depression fitted to receive it, as at *e*, Fig. 2, thus allowing the axle to pass freely into the boxes of the hub, then by depressing the arm *b*, to the position represented at B, *b*, Figs. 1 and 3, the nib *e*, rises into the cavity K, Fig. 5, thus allowing a free rotary motion of the hub, but perfectly secured from working off from the axle.

What I claim as my improvement, and desire to secure by Letters Patent, is—

The introduction of the rod *f*, with the nib *e*, working into the cavity K, in the manner and for the purposes herein set forth.

JOHN KELLOGG.

Witnesses:

S. G. BRANCH,

E. W. BRANCH.