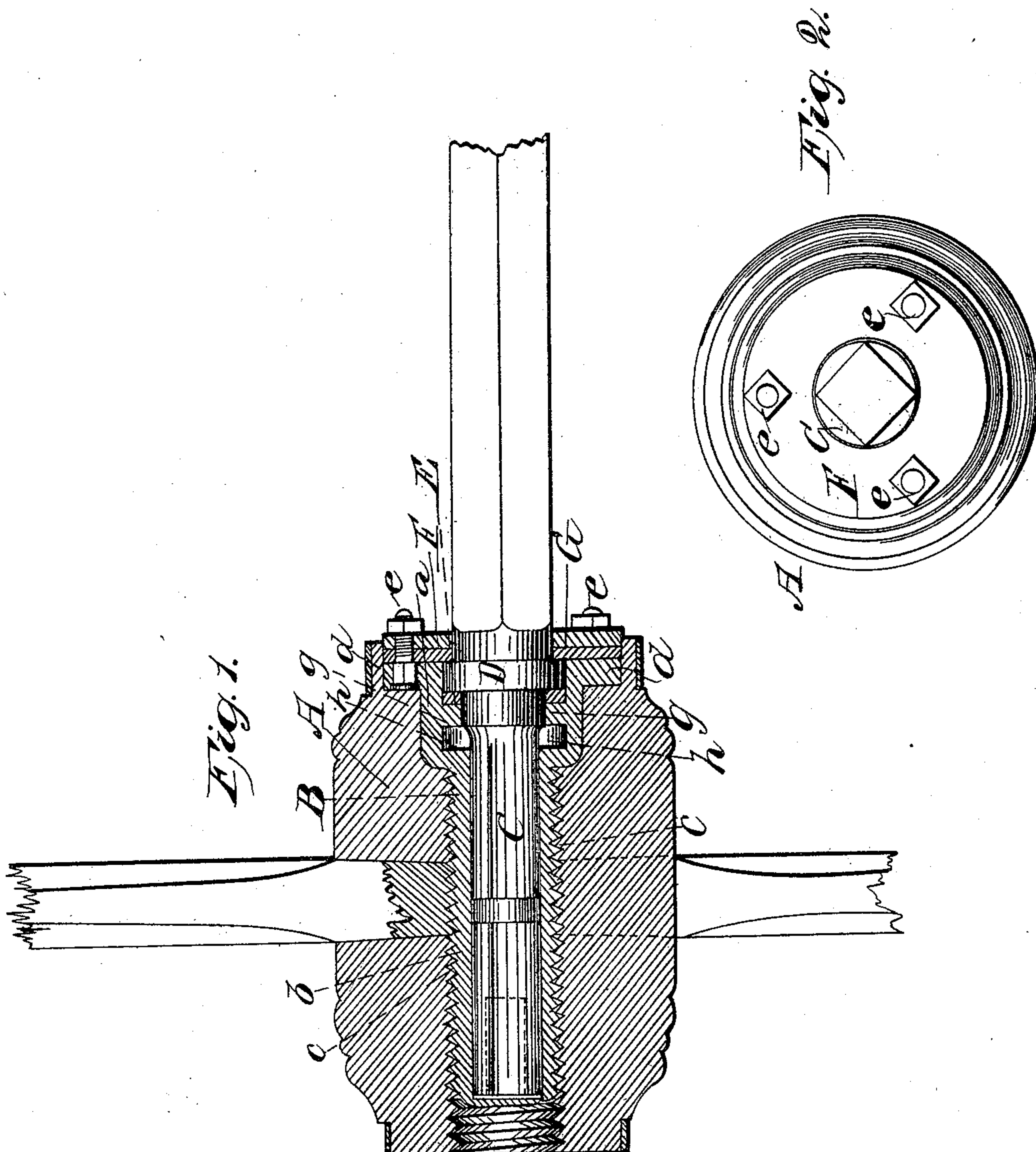


J. KRITSCH.
SECURING BOXES TO WHEEL HUBS.

No. 36,412

Patented Sept. 9, 1862.



Witnesses:

J. W. Coombs
R. J. Spurr

Inventor:
Jacob Kritsch
Jas. Munro
Attorneys

UNITED STATES PATENT OFFICE.

JACOB KRITSCH, OF BINGHAMTON, NEW YORK.

SECURING BOXES TO WHEEL-HUBS, &c.

Specification of Letters Patent No. 36,412, dated September 9, 1862.

To all whom it may concern:

Be it known that I, JACOB KRITSCH, of Binghamton, in the county of Broome and State of New York, have invented a new and useful Improvement in Securing Boxes in Wheel-Hubs and in Attaching the Same to Their Axles; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a longitudinal central section of a hub with my invention applied to it. Fig. 2 a back end view of ditto.

Similar letters of reference indicate corresponding parts in the two figures.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A represents the hub of a wagon wheel, which may be turned or made in the usual form, and B is a box which may be of cast-iron with a socket or enlarged portion *a*, at its inner end, as shown clearly in Fig. 1.

On the smaller portion *b*, of the box B, which constitutes its greater length there is cut a screw *c*, and this portion is screwed directly into the hole in the hub, an enlarged opening being made to receive the socket *a*, as well as a flanch *d*, thereon, the latter extending out at right angles from the sockets *a*.

Through the flanch *d*, screw bolts *e*, pass, the heads of the bolts fitting in counter sunk holes *f*, at the inner sides of the flanch *d*.

C is the arm of the axle which is fitted in the box B, said arm having a small collar D, upon it which fits within the socket *a*, and has a leather E, interposed between the collar and a shoulder *g*, in the socket *a*. Within the socket *a*, there is an oil-chamber *h*,—see Fig. 1.

F is a circular plate technically termed a "moon." This plate is equal in diameter to the flanch *d*, of the socket *a*, of the box,

and said plate is fitted loosely on the axle, with a leather washer G, interposed between it and the flanch *d*. The screw-bolts *e*, pass through the washer E, and "moon" F, and with the collar D, secure the hub to the arm or axle. The washer G, is fitted snugly to the axle, and it is equal in diameter to the flanch *d*, and "moon" F, and effectually prevents leakage of oil from the box as well as prevents the admission of dust therein.

It will be seen from the above description that the fitting of the box B, in the hub is but the work of a moment, as all that is required is to apply a wrench to the projecting screw bolts *e*, and then screw the box directly into the hub. All the trouble and embarrassment attending the wedging of the boxes in the hubs is avoided and as the box fits snugly in the hub its whole length, the tenons of the spokes may bear against it and the box serve as a support for the spokes, preventing the latter being forced inward.

The implement does not involve any material additional expense in construction while the labor, expense and time expended in its application is far less than that of the ordinary boxes.

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

The arrangement of the perforated flanch *d*, with the screw bolts passing through in combination with the screw *c*, upon the exterior of the box B, so that by unscrewing the box access may be had to the inside of the flanch for the insertion or removal of the screw bolts as herein shown and described for the purpose set forth.

JACOB KRITSCH.

Witnesses:

S. W. ROGERS,
W. W. WHEROTON.