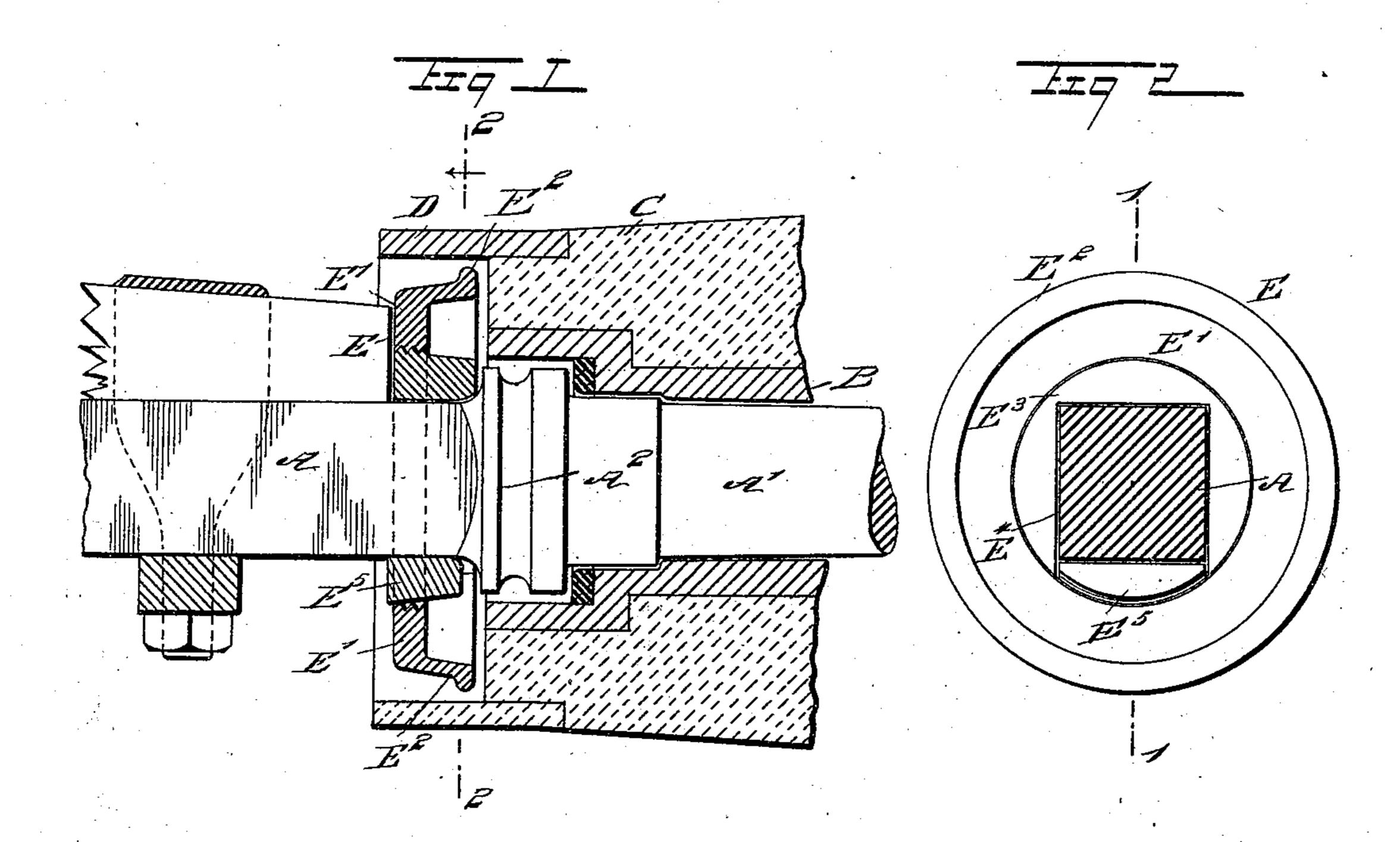
(No Model.)

## H. W. RUSSELL & S. VAN RIPER. SAND BAND.

No. 549,025.

Patented Oct. 29, 1895.



WITNESSES: HWalker Rev. J. Houth

ATTORNEYS.

## United States Patent Office.

HARRY W. RUSSELL AND STEPHEN VAN RIPER, OF DOWAGIAC, MICHIGAN.

## SAND-BAND.

SPECIFICATION forming part of Letters Patent No. 549,025, dated October 29, 1895.

Application filed October 30, 1894. Serial No. 527,437. (No model.)

To all whom it may concern:

Be it known that we, HARRY W. RUSSELL and STEPHEN VAN RIPER, of Dowagiac, in the county of Cass and State of Michigan, have invented a new and Improved Sand-Band, of which the following is a full, clear, and exact description.

The invention relates to the hubs of vehicles; and its object is to provide a new and improved sand-band which is simple and durable in construction and arranged for conveniently attaching it to the axle.

The invention consists, principally, of a sand-band in the form of a disk made in sections, of which one is adapted to straddle an axle and the other is slidable longitudinally of the first-named section and serves to fasten the disk in place on the axle.

The invention consists also of certain parts and details and combinations of the same, as will be hereinafter fully described, and then pointed out in the claim.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both views.

Figure 1 is a sectional side elevation of the improvement as applied, the section being taken on the line 1 1 of Fig. 2. Fig. 2 is a cross-section of the same on the line 2 2 of Fig. 1.

The square axle A is provided with the usual spindle A', formed at its inner end with a collar A<sup>2</sup> and fitted into the box B, secured 35 in the hub C, having a band D, forming a recess on the inner end of the hub for the entrance of the sand-band E. The latter is secured on the square end of the axle A, next to the collar A2, and is formed in sections, of 40 which the section E' is ring-shaped and provided with an annular flange E2, adapted to abut against the inner end of the wooden portion of the hub, as indicated in Fig. 1, to render the axle dust-proof. When the axle is worn, the flange E<sup>2</sup> prevents friction by having more clearance for oil to run out to avoid gumming of the contacting parts.

The ring-section E' is formed with a thread screwing onto a section E<sup>3</sup>, formed with a recess E<sup>4</sup> to permit of straddling the top and 50 sides of the square end of the axle A, as plainly indicated in Fig. 2, the open end of the section E<sup>3</sup> forming a longitudinal guideway adapted to be engaged by a wedge E<sup>5</sup>, resting against the under side of the axle and 55 engaging the sides of the section E<sup>3</sup>, as well as part of the inner surface of the section E'. Now it will be seen that the ring-section E' can be readily passed over the spindle A' and the collar A<sup>2</sup>, as the interior diameter of the 60 said section is somewhat more than the diameter of the collar A<sup>2</sup>.

The straddling section E<sup>3</sup> is fitted onto the axle A, and then the ring-section E' is screwed on it, after which the wedge E<sup>5</sup> is driven into 65 position, so as to fasten the several sections securely to the axle A.

Thus it will be seen that the sand-band is made in sections, of which one serves to clamp the other in position on the axle, at the same 70 time permitting of conveniently fitting the several parts onto the square end of the axle A after the spindle A' and collar A<sup>2</sup> are finished. It will also be observed that the clamping-section is capable of a longitudinal sliding 75 movement on the axle relatively to the other section and is put in position by sliding it longitudinally into the corresponding recess of the other section.

Having thus described our invention, we so claim as new and desire to secure by Letters Patent—

A sand band, comprising a ring-shaped section, a straddling section on which screws the ring-shaped section, and a wedge engaging 85 the said straddling section, the axle and the ring-shaped section, to fasten the several parts in position on the axle, substantially as shown and described.

HARRY W. RUSSELL. STEPHEN VAN RIPER.

Witnesses:
W. C. EDWARDS,
T. J. EDWARDS.