M. POTTER.

Sand-Band for Vehicle-Wheels.

No. 224,795. Patented Feb. 24, 1880.

Fig. 1.

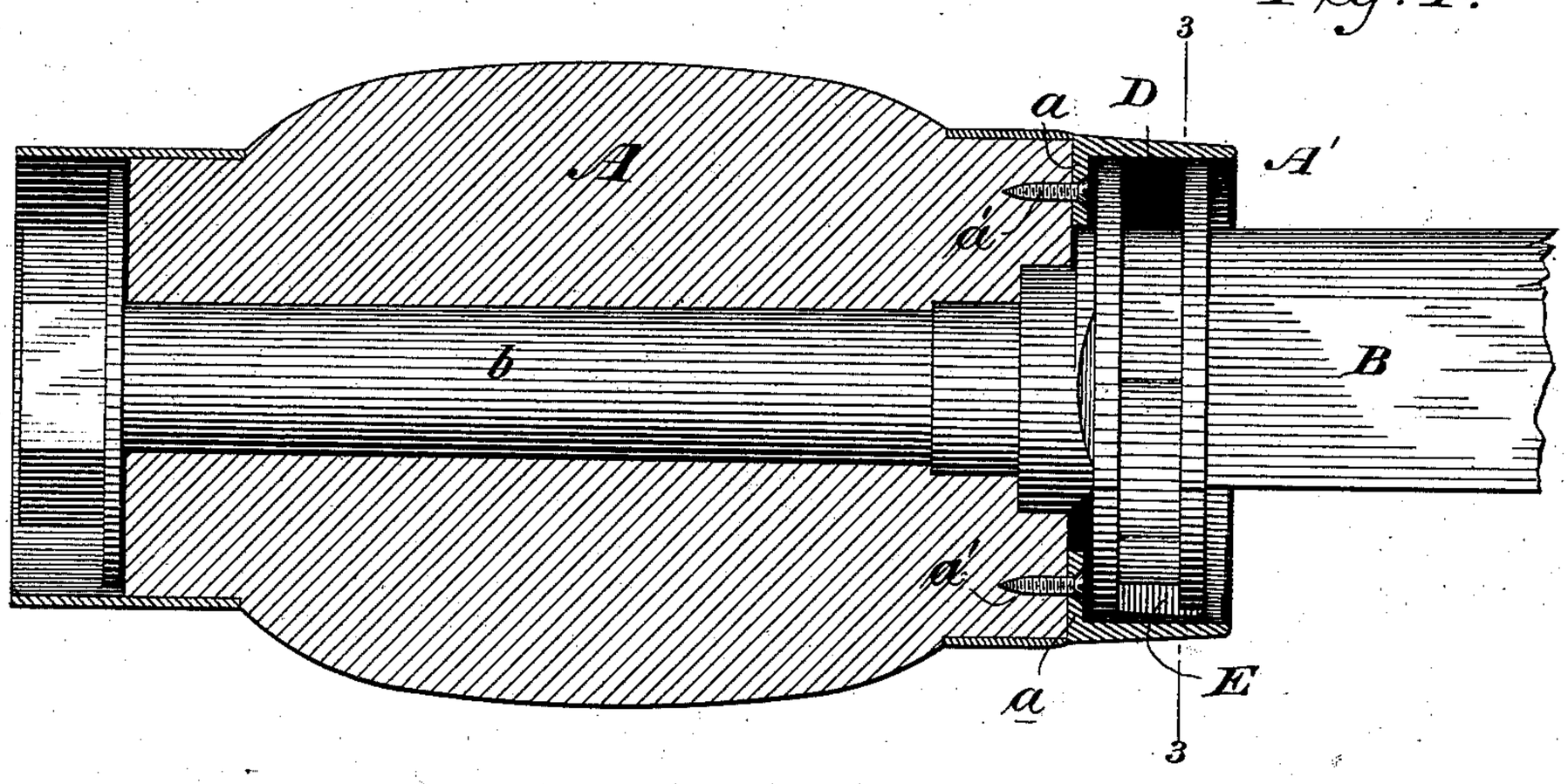


Fig. 2.

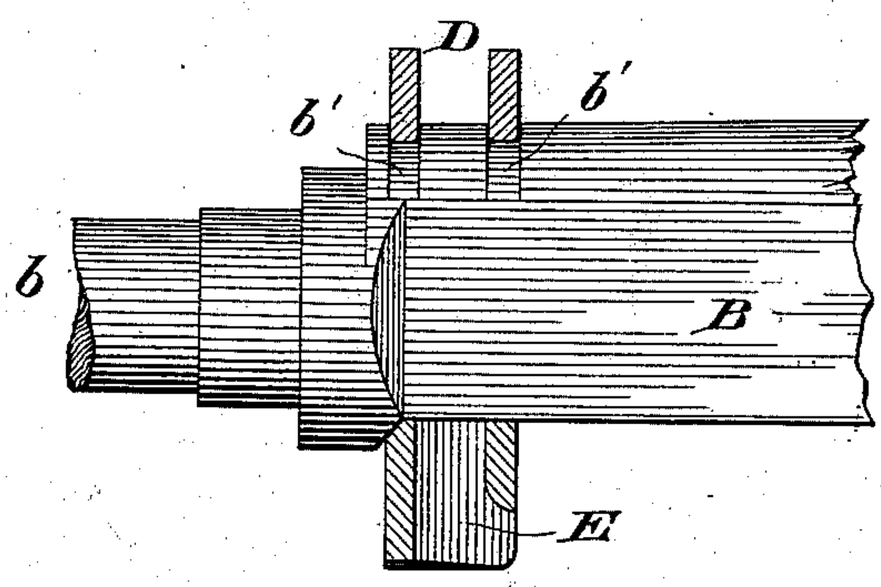


Fig 3.

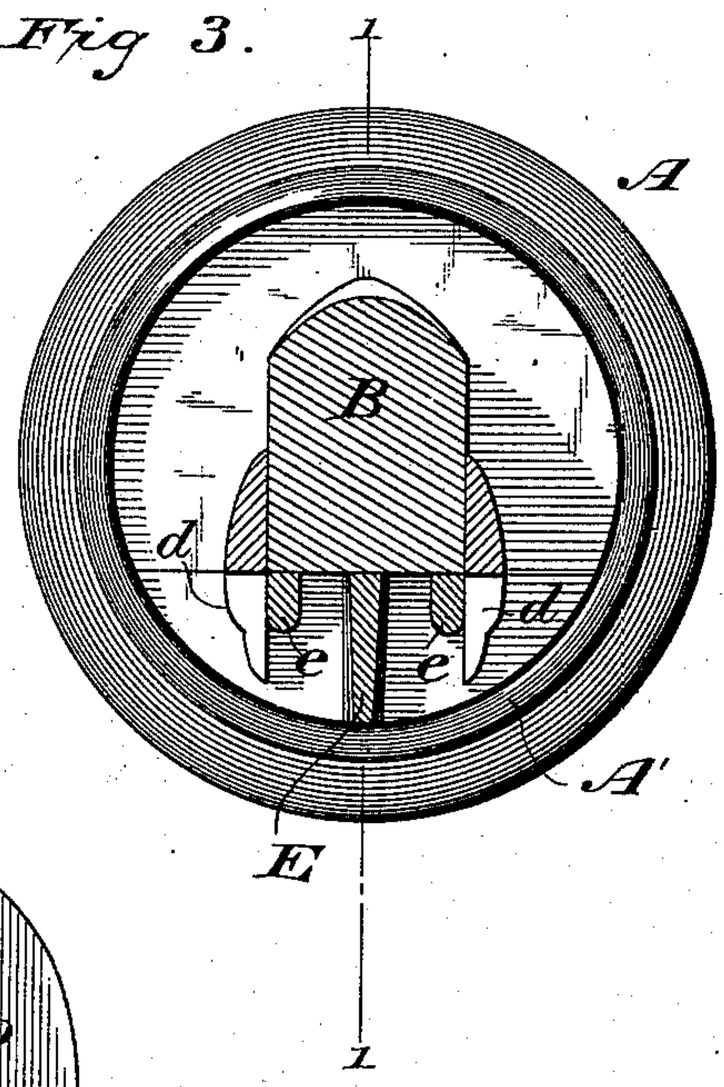
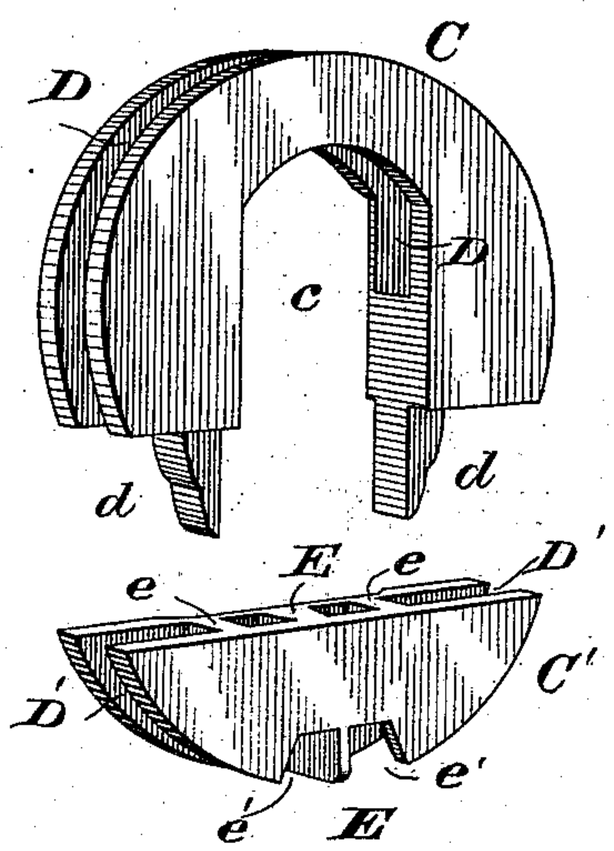


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

MORTON POTTER, OF MENDON, MICHIGAN.

SAND-BAND FOR VEHICLE-WHEELS.

SPECIFICATION forming part of Letters Patent No. 224,795, dated February 24, 1880.

Application filed January 3, 1880

To all whom it may concern:

Be it known that I, MORTON POTTER, of Mendon, in the county of St. Joseph and State of Michigan, have invented certain new and useful Improvements in Sand-Bands for Vehicle-Wheels, of which the following is a specification.

My invention relates to improvements in that class of bands or guards which are made in separate parts for ready attachment to and removal from the axles of the wheels, from the hubs of which they exclude sand, &c.

The subject-matter considered novel will hereinafter specifically be designated by the claims, after first being fully described by the aid of the accompanying drawings, which represent so much of an axle, wheel-hub, &c., with my improvements applied as deemed necessary to illustrate the invention claimed.

Figure 1 is a view, partly in elevation and partly in vertical longitudinal section on the line 1 1 of Fig. 3. Fig. 2 is a view of a portion of the axle in side elevation, with the upper or main portion of the sand-band thereon in section. Fig. 3 is a vertical transverse section on the line 3 3 of Fig. 1; and Fig. 4 is a view, in perspective, of the sand-band detached, its two parts being separated.

A wheel-hub, A, constructed in the ordinary way, and suitably secured on the arm or journal *b* of the axle B, has a flanged covering-ring or sand-band receiver, A′, secured by screws *a′* to its inner end. These screws pass through the base-flange *a* of the ring, which is thus made to form an inwardly-extending part of the hub surrounding the end of the axle proper or stock, B.

Grooves *b′ b′* are made across the top of the axle for engagement by the sand-band, which consists of two interlocking parts—a top section, C, and bottom section, C′, Fig. 4. The top part embraces the axle above and at its sides, and the lower part fits against the bottom of the axle when the band is in place. Each part of the band is made of a front or outer and a back or inner plate or wall, with a sand space or channel, D D′, between the walls of the respective parts.

The walls of the part C are connected at bottom at the opposite inner corners at the sides of the opening *c* for the axle, and arms *d d* project downward and enter the sand space or channel D′ of the lower section, C′, when the parts are connected. These arms engage the section C′ just outside of the cross bars or ribs *e e*, between the front and back plates thereof.

A beveled division-piece or scraper, E, separates the plates of the lower section and divides the channel D′ beneath the axle into two parts. Openings *e′ e′* are made at the sides of this scraper.

In operation, the sand-band is secured in place by sliding the wheel outward on the axle-arm *b*, then placing the main part or upper section, C, of the sand-band in place, next adjusting the lower section, and then sliding the wheel back again until in place with the covering-ring over the sand-band. Any movement of the sand-band endwise on the axle is prevented by the engagement of the band-plates with the axle-grooves *b′*, while the sections are held together by the ring on the hub. Any sand which works in over the outer or front plate of the band will pass down the channel and escape at the discharge-openings at one side or the other of the partition E, which, owing to its chamfer, acts, in connection with the revolving ring A′ of the hub, as a scraper.

I am aware that sectional interlocking detachable sand-bands are old, and that grooved or channeled sand-bands, as well as covering-rings or receivers on the hubs for sand-bands, are old, and I do not broadly claim any such features.

I claim as of my own invention—

1. The axle B, transversely grooved on top to engage the sand-band and prevent its movement endwise of the axle, as described.

2. The upper section, C, of the sand-band, having the channel D between its front and back plates, and provided with the downwardly-projecting arms *d d*, as and for the purpose described.

3. The lower section, C′, of the sand-band, having the channel D′ and scraper E, as and for the purpose described.

4. The sectional sand-band consisting of the combination of the upper part, to embrace the

top and sides of the axle, and having the channel and arms, and the channeled lower section engaged by said arms, and having the division-piece or scraper and discharge-openings, substantially as hereinbefore set forth.

5. The combination of the wheel-hub, the covering-ring, the sand-band composed of the two interlocking channeled sections, and the axle, grooved to engage the top section of the sand-band, substantially as set forth.

In testimony whereof I have hereunto subscribed my name.

MORTON POTTER.

Witnesses:
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