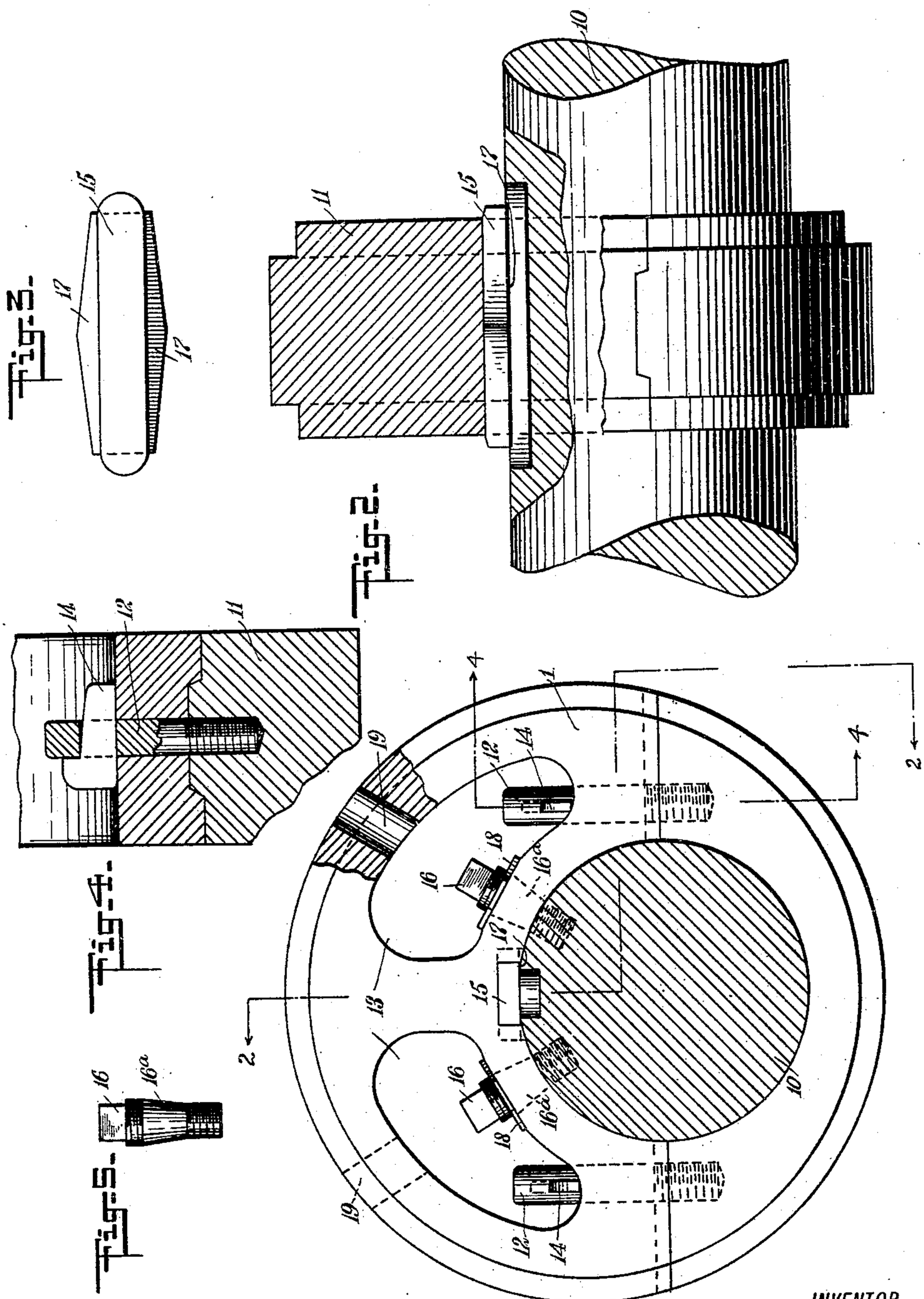
F. P. SASAMAN.

ECCENTRIC FASTENING.

APPLICATION FILED JAN. 7, 1910.

979,207.

Patented Dec. 20, 1910.



WITNESSES

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ECCENTRIC-FASTENING.

979,207. Specification of Letters Patent. **Patented Dec. 20, 1910.**

Application filed January 7, 1910. Serial No. 536,828.

To all whom it may concern:

Be it known that I, FRANK P. SASAMAN, a citizen of the United States, and a resident of West Pittston, in the county of Luzerne and State of Pennsylvania, have invented a new and Improved Eccentric-Fastening, of which the following is a full, clear, and exact description.

Considerable difficulty has been experienced in fastening the eccentrics of a locomotive on the axle of the driving wheels so that they will not work loose or slip, and yet be easily removed and applied, as when making repairs. I have been able to overcome this difficulty by my invention, which embodies a key having an inner portion fitting into a key-way in the axle, and an outer portion fitting into a key-way of the eccentric, as is usual, but with that portion fitting into the eccentric tapering toward each end, with its widest portion at or near the center.

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

Figure 1 is a section through an axle or shaft showing an eccentric secured thereto as contemplated by my invention; Fig. 2 is a section on the line 2—2 of Fig. 1; Fig. 3 is an inner face view of the key; Fig. 4 is a section on the line 4—4 of Fig. 1; and Fig. 5 is a side view of one of the set-screws.

For the purpose of illustrating the nature and application of my improvements, I have shown an axle or shaft 10, provided with a locomotive eccentric 11, of conventional form, the eccentric consisting of two sections having a joint arranged diametrically of the axle, separating the enlarged and smaller portions of the eccentric, the two sections being detachably connected together by studs 12, which are threaded into the smaller section of the eccentric and pass into the usual openings 13, formed in the opposite section of the eccentric, where each is provided with a slot receiving a tapered key 14, drawing the two sections of the eccentric together.

For securing the eccentric to the shaft or axle I provide a key 15 and set-screws 16, the key having an inner portion which is shown to be about one-half the depth of the thickness of the key, and of uniform width, fitted into a longitudinal key-way formed in the shaft, and the outer portion relatively wider than the inner portion and tapering from a point at or near the center toward each end, the widest portion of this part of the key being at the center. With the key thus constructed and located centrally relatively to the enlarged section of the eccentric, as shown, it is impossible for the eccentric to slide longitudinally on the shaft, and offers a greater resistance to the eccentric turning on the shaft than the ordinary key, in view of the shoulders 17 presented by the under side of the outer portion of the key seating and supported on the periphery of the shaft, as shown in Fig. 1. To make the security of the eccentric complete, the set-screws at the opposite sides of the key are provided. These set-screws are radially arranged and threaded a substantial distance into the shaft, each set-screw having a conical body portion 16^a, fitting in a corresponding opening formed in the enlarged section of the eccentric, and at its outer portion provided with a lock-nut 18, which bears against the eccentric and prevents the screw from working loose, this being further insured by the conical bodies of the screws binding in the like openings in the eccentric. The set-screws are passed into the openings 13 formed in the side of the eccentric through holes 19 drilled radially through the circumferential portion.

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

1. The combination of a shaft, an eccentric arranged on the shaft, and a key having the inner portion fitted into a longitudinal key-way in the shaft, with the outer portion of the key enlarged near the center and tapering toward each end and fitted into a key-way in the eccentric.

2. The combination of a shaft, an eccentric arranged on the shaft, and a key having the inner portion fitted into a longitudinal key-way in the shaft, with the outer portion of the key enlarged near the center and tapering toward each end and fitted into a key-way in the eccentric, with the under side of the outer portion of the key presenting shoulders seating on the shaft.

3. The combination of a shaft, a member arranged on the shaft, and a key having the inner portion fitted into a longitudinal

key-way in the shaft, with the outer portion of the key fitting into a key-way in the member and relatively wide at an intermediate point and tapering toward each end.

4. The combination of a shaft, a member arranged on the shaft, and a key having the inner portion fitted into a longitudinal key-way in the shaft, with the outer portion of the key fitting into a key-way in the member and relatively wider at an intermediate point than at the ends.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANK P. SASAMAN.

Witnesses:

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