

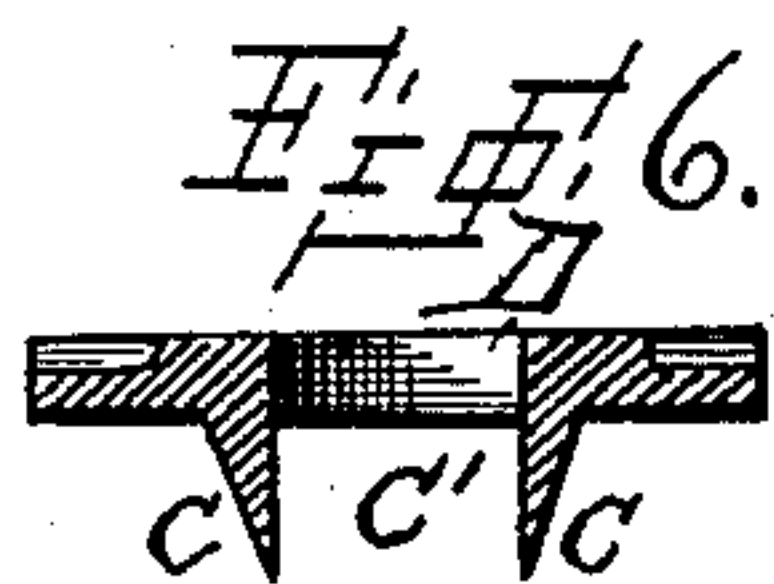
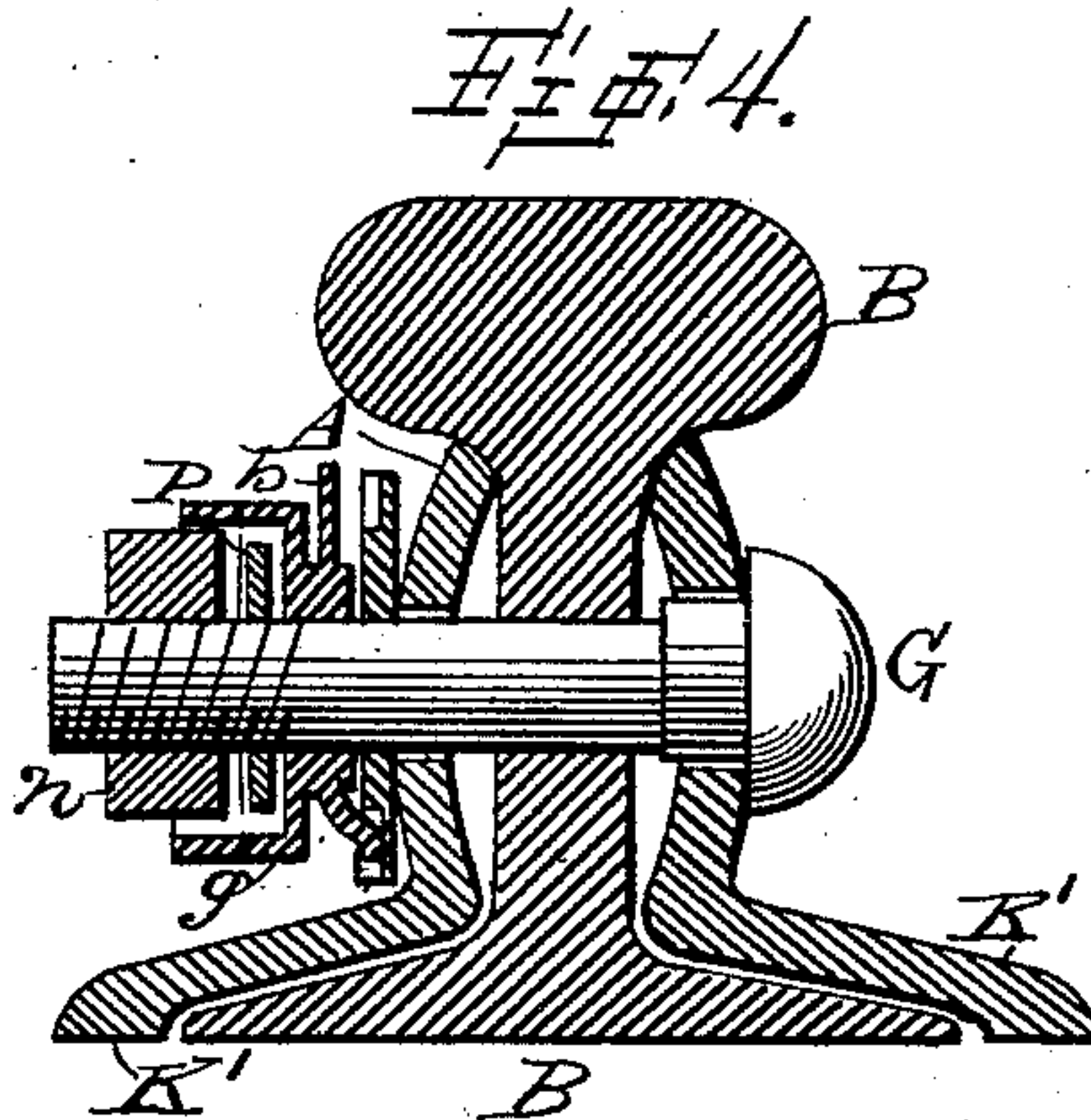
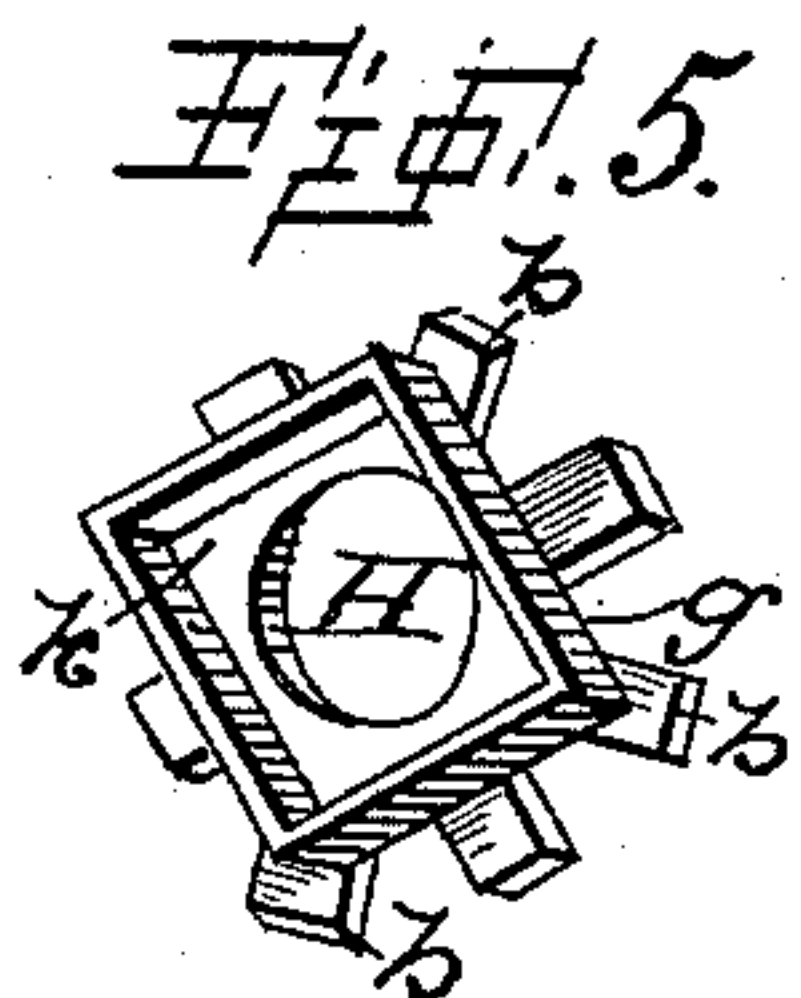
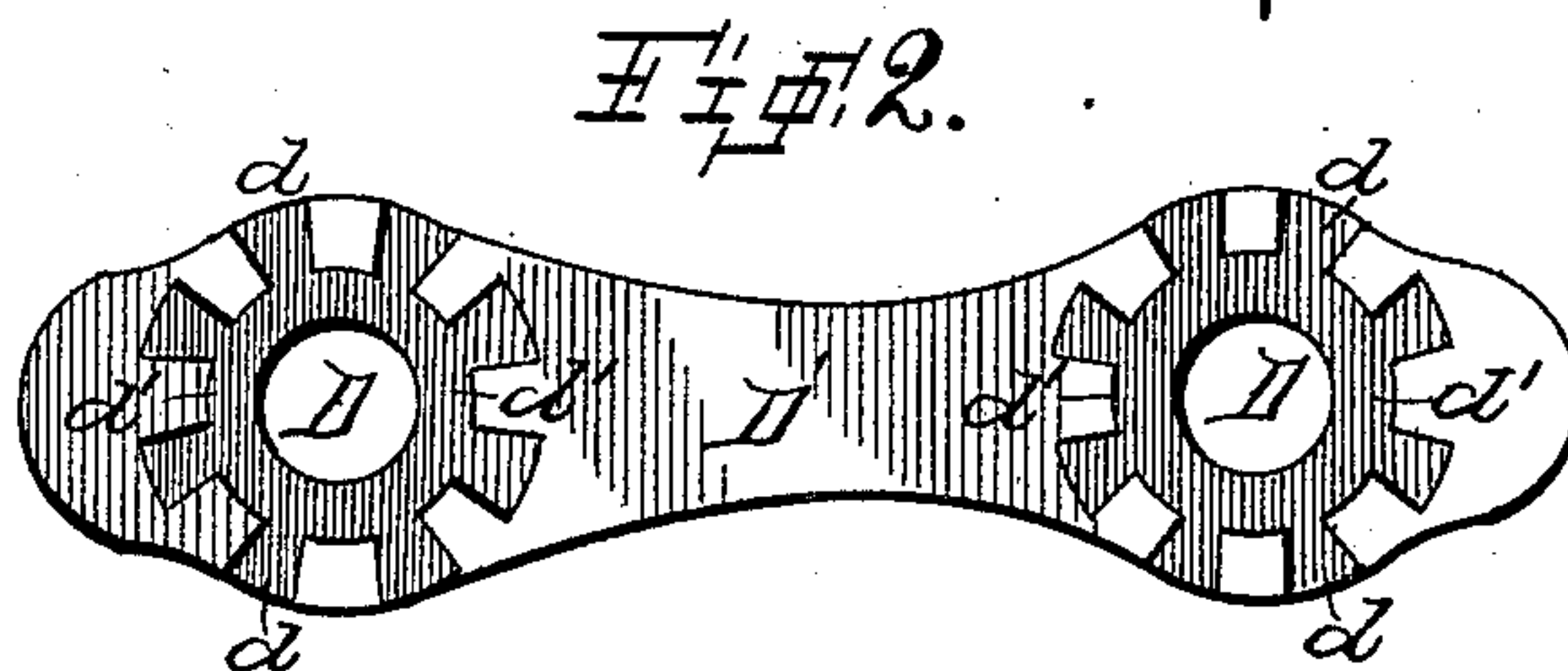
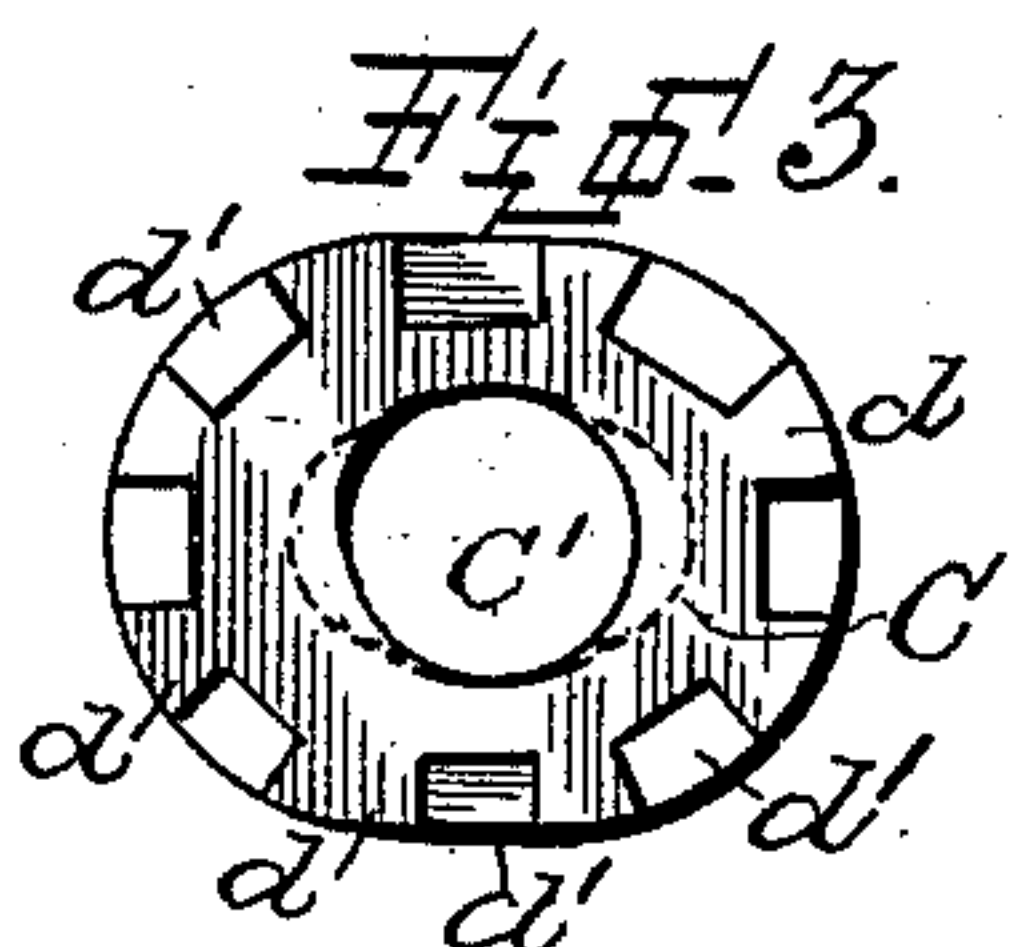
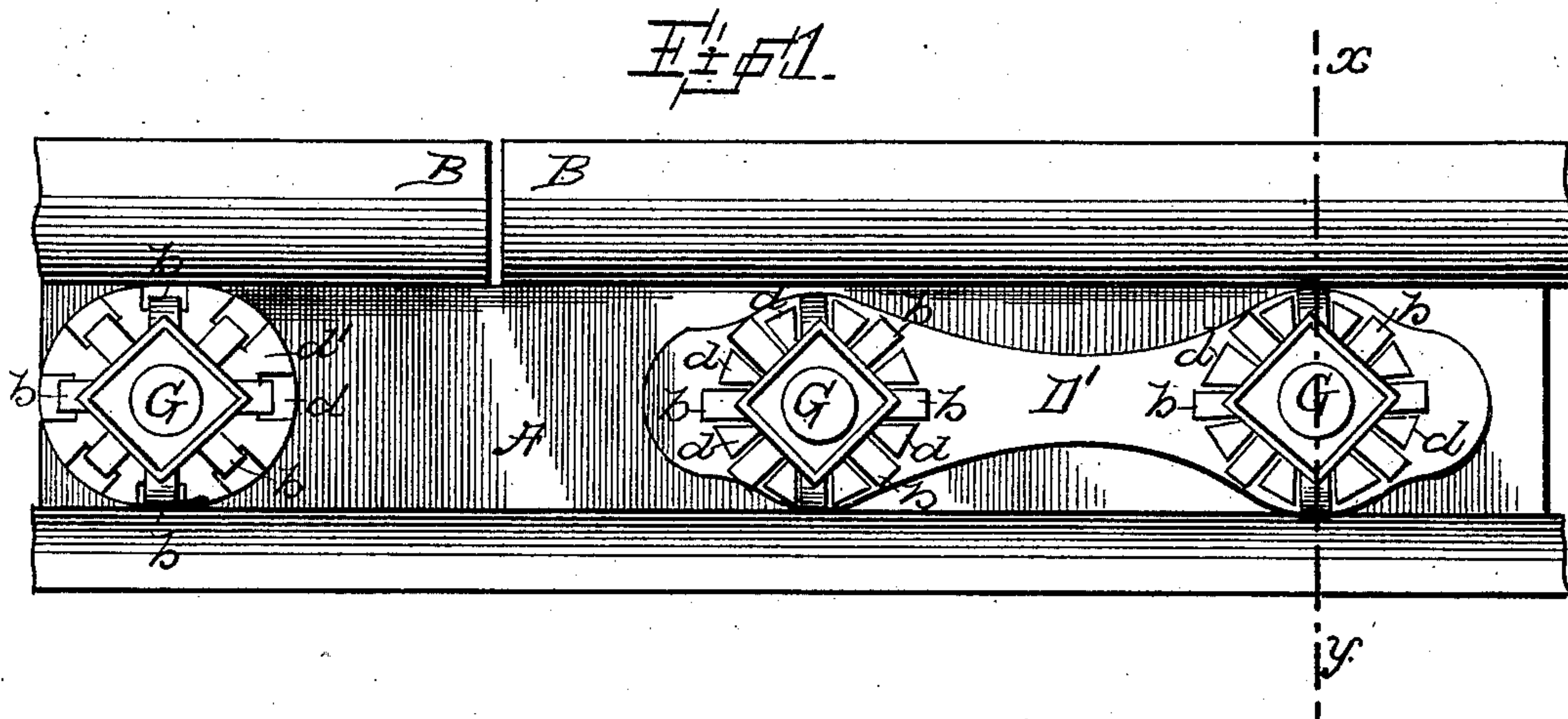
(No Model.)

J. W. ANDERSON.

NUT LOCK.

No. 347,147.

Patented Aug. 10, 1886.



Witnesses

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# UNITED STATES PATENT OFFICE.

JOHN W. ANDERSON, OF LANCASTER, PENNSYLVANIA.

## NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 347,147, dated August 10, 1886.

Application filed September 4, 1884. Serial No. 142,236. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN W. ANDERSON, a citizen of the United States, residing at Lancaster, in the county of Lancaster and State of Pennsylvania, have invented a new and useful Nut-Lock, of which the following is a specification.

My invention relates to nut-locks applicable to ordinary bolts and nuts, in which a peculiarly-constructed cast basal plate and a follower under the nut, made distinct therefrom, co-operate to lock the nut positively, as will be hereinafter particularly described and claimed.

In the accompanying drawings, Figure 1 is a front elevation of a section of railway-track with my nut-locks applied to the track-bolts in pairs and singly. Figs. 2 and 3 represent the base-plate for applying my lock in pairs and singly, respectively. Fig. 4 is a cross-sectional view of the parts taken on line *xy*, Fig. 1. Fig. 5 is a perspective view of the nut-follower, and Fig. 6 is a longitudinal cross-section of the base-plate shown in Fig. 3.

In the drawings my nut-lock is shown applied to a railway-track, but its application is general.

Letter A denotes a fish-plate; B, a part of railway-rail; G, a track-bolt; N, a nut for said bolt. B' denotes the foot of said rail, and K' the foot of said fish-plate.

Letter D' denotes the body of a cast base-plate adapted to apply to two adjacent bolts, of form as shown in Fig. 2, and to apply to a single bolt, as shown in Fig. 3. In either form it has on its front face a raised annular bearing, D, about the eye for the bolt, and the periphery of said bearing is provided with angular recesses or notches *d'*, having the stops *d* between said notches. On the under side of said base-plate are formed the nibs C, arranged oppositely next the eye for the bolt and adapted to wedge into the usual oval holes in the fish-plates beside the bolt inserted therein for keeping both the bolt and the base-plate, when single, against rotation or working to slacken the nut, as hereinafter set forth. Said nibs are also adapted to penetrate the wood-work when used on bolts inserted tightly therein.

Letter *k* denotes the nut-follower, it being

a sort of pedestal on which it rests and by which it bears on said base-plate. Said nut-follower has on top a receptacle for the nut N, erect flanges being thereon adapted to embrace the sides of the nut. The flanges *g* are shown united to form a rim, but sections of said rim at opposite sides will answer nearly as well. Beneath said rim is a neck or grooved part, which is so made as to afford greater length to the guards *b* on the annular foot of the said follower without increased radius of the same, that said guards may be more readily bent into the notches *d'* on the stationary and rigid base-plate. In some situations there is little room exterior to the nut for said guards and notches; hence reducing the circle of the points at which the interlocking may occur, as described, is a great improvement, as said guards may be made to bend at a point near the bolt-hole in the body of the follower—that is, under the nut N—and need not be unobstructed by the foot of the splice-bar or of the rail, and have greater capacity for bending back to and interlocking with said notches in small compass.

I make both the nut-follower and the base-plate of malleable iron or other soft metal, that said guards may be bent into said notches, and that said nibs on base-plate may enter rightly the enlarged or oblong bolt-hole in iron-work. For wood-work, however, the base-plate may be of gray cast-iron. The guards *b* need be only four, paired diametrically opposite each other and preferably at right angles to the flanges *g*.

I claim—

1. The flexible nut-follower having on its outer end a rim for embracing the sides of a nut, and an axially-prolonged body provided at its inner end with a circle of parallel-sided guards projected therefrom, said body being between said rim and guards of less diameter than said rim, whereby the guards can be bent downward beneath the rim, as and for the purposes set forth.

2. The nut-lock set forth, consisting of a base-plate having on its outer face parallel-sided notches arranged as annular bearing at the bolt-hole therein, and having on its inner face the wedge-form nib or nibs next said hole, for filling the surplus space in the bolt-hole

in the fish-plate or other part in which said bolt is inserted, for securing said plate against turning and the bolt against play in said part, and a flexible nut-follower having on its outer 5 end a rim for embracing said nut, a body of less cross-section than the rim, and having parallel-sided guards adapted to be bent to interlock with said notches in the plate, as herein shown and described.

10 3. In a nut-lock, the combination, with the threaded bolt G and the nut N, of the base-plate having on its inner face the wedge-form ribs C next the bolt-hole C', for holding stationary both said bolt and plate, the latter

having also on its outer face the peripheral 15 parallel-sided notches d', of the nut-follower k, having the rim or flanges for embracing the sides of said nut, and the guards b, extending from a body of less diameter than the rim in order to bend at a point under the 20 nut and engage said notches close to said bolt-hole, and of a layer, P, of wood or other material, inserted under said nut, all co-operating as shown and described.

JOHN W. ANDERSON.

Attest:

EUGENE SNYDER,

THEOPHILUS WEAVER.