J. G. REES.

RAIL FASTENER.

APPLICATION FILED SEPT. 29, 1914.

1,258,460.

Patented Mar. 5, 1918.

2 SHEETS—SHEET 1.

Fig. 1.

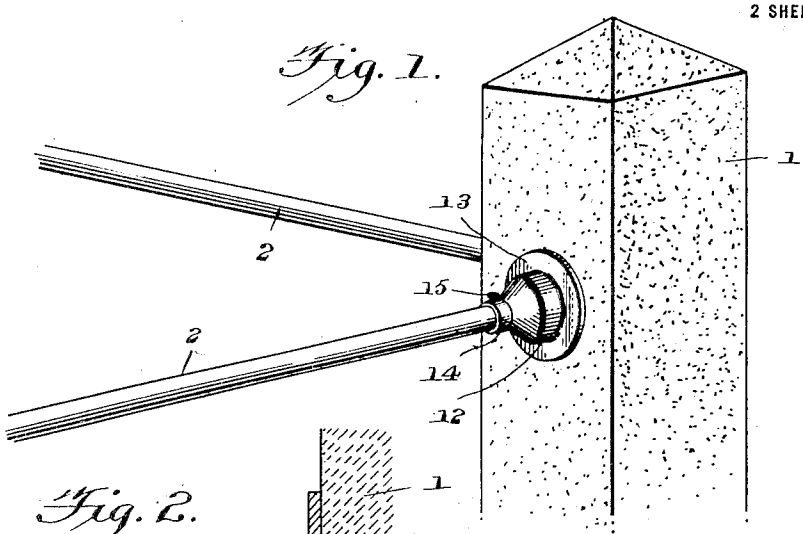


Fig. 2.

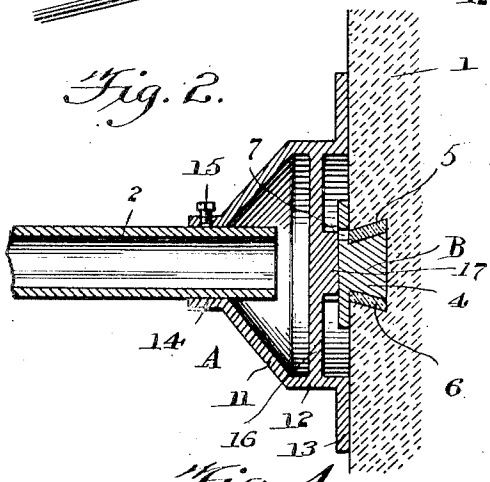


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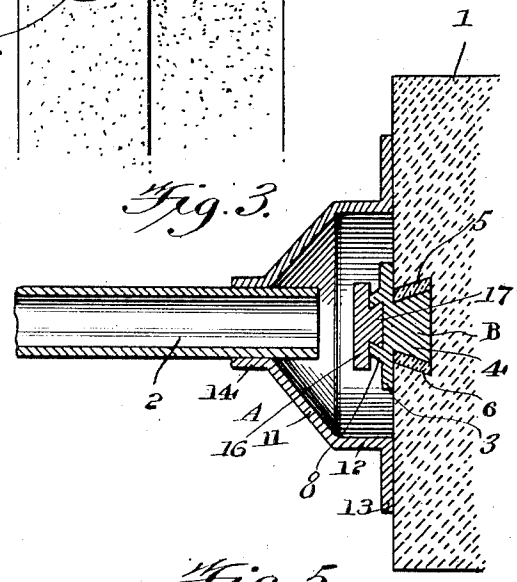


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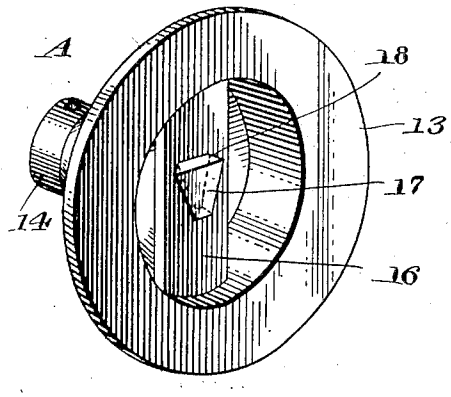
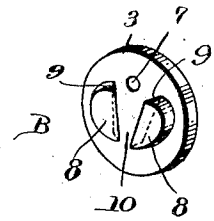


Fig. 5.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 6.

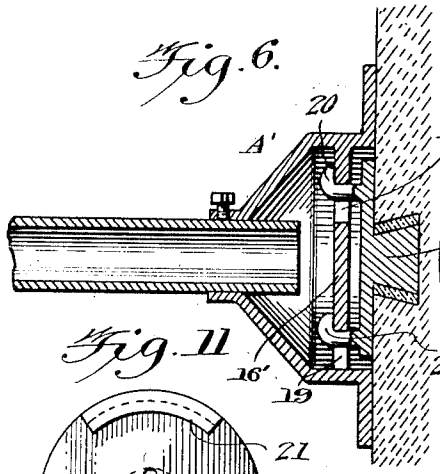


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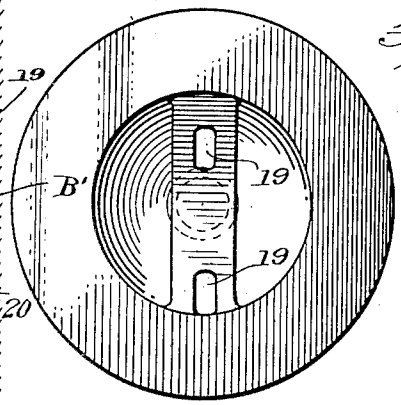


Fig. 8.

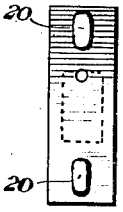


Fig. 11.

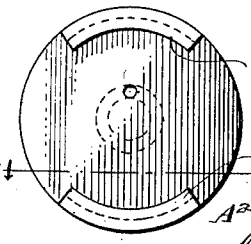


Fig. 9.

Fig. 10.

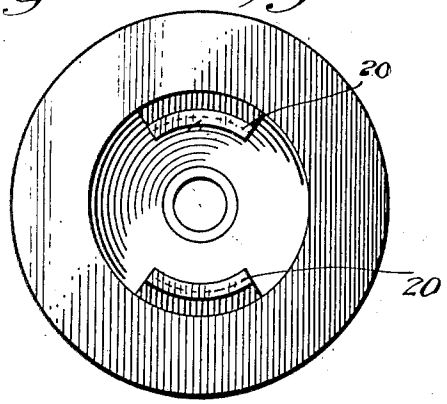
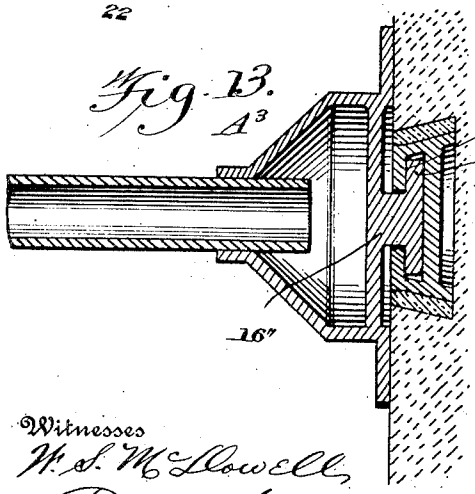


Fig. 12.

Fig. 14.

Fig. 13.



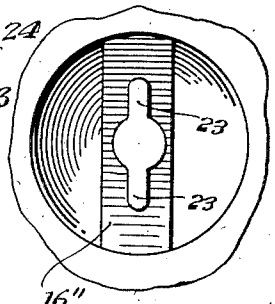
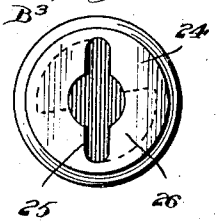


Fig. 15.



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RAIL-FASTENER.

1,258,460. Specification of Letters Patent. Patented Mar. 5, 1918.

Application filed September 29, 1914. Serial No. 864,137.

To all whom it may concern:

Be it known that I, JOHN G. REES, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Rail-Fasteners, of which the following is a specification.

This invention relates to rail fasteners, the object in view being to produce simple and effective means for securing rails, rods, poles and the like to supporting surfaces of various kinds such as posts and walls, obtaining a firm, reliable and secure connection between such rail and its support while admitting of the ready detachment of the rail and the major portion of the fitting when required.

With the above and other objects in view, the invention consists in the novel construction, combination and arrangement of parts, as herein described, illustrated and claimed.

In the accompanying drawings:—

Figure 1 is a perspective view showing the rail fastener of this invention in perspective and showing the same connecting a rail to a post.

Fig. 2 is an enlarged vertical section through the same taken diametrically of the rail and socket member of the fastener.

Fig. 3 is a horizontal diametrical section through the same.

Fig. 4 is a perspective view of the socket member looking toward the inside face thereof.

Fig. 5 is a similar view of the anchoring member or block.

Fig. 6 is a vertical section similar to Fig. 2 showing a modified construction of fastener.

Fig. 7 is an inside face view of the socket member shown in Fig. 6.

Fig. 8 is an outside face view of the anchor block of Fig. 6.

Fig. 9 is a vertical section through another form of fastener.

Fig. 10 is an inside face view of the socket member of Fig. 9.

Fig. 11 is an outside face view of the anchoring member of Fig. 9.

Fig. 12 is a detail fragmentary section of the socket member of Fig. 9 illustrating the oblique wedging wall.

Fig. 13 is a vertical section through another form of fastener.

Fig. 14 is a fragmentary inside face view of the socket member of Fig. 13.

Fig. 15 is an outside face view of the anchor block or member used in Fig. 13.

Referring primarily to Figs. 1 to 5, inclusive, 1 designates a support shown in the form of a stone, concrete or marble post, while 2 designates a pair of rails which it is desired to fasten to the support 1.

The fastening device of this invention comprises a socket member designated generally at A and an anchoring member designated generally at B. In the preferred embodiment of the invention, the anchor member B is constructed as best illustrated in Figs. 2, 3 and 5, the same comprising a disk shaped body 3 having on the rear side thereof a dove-tail shaped projection or key 4 which is adapted to be set into a recess 5 formed in the adjacent face of the support 1, in which recess the key 4 is securely held by a lead filler 6 poured therein while in a molten state, the body 3 being formed with a pouring hole 7 for the purpose.

On its outer face the body 3 is provided with a pair of lugs 8 having undercut adjacent edges 9 thereby forming between the lugs 8 a wedge-shaped recess 10 the purpose of which will appear. It will be understood that the anchor block or member B is fastened permanently and rigidly to the support 1 irrespective of the character of said support.

The socket member A comprises a hollow conical body 11 having a cylindrical portion 12 and a base flange 13 which is adapted to rest in contact with the support 1. At its outer smaller end the body of the socket member terminates in a cylindrical collar or sleeve 14 of proper size to receive the adjacent extremity of the rail 2 which is illustrated in the drawings as of tubular construction such as a hollow rod or gas pipe, the end of the rail being held in fixed relation to the collar 14 and socket member A by means of a set screw 15 which is threaded through the collar 14 and bears against the rail 2.

Adjacent to its inner face the socket member A is provided with a diametrically extending cross bar or web 16 having projecting from the rear side thereof a tongue 17 which is shaped like a wedge or keystone and is provided with undercut opposite edges as indicated at 18 to engage the undercut edges 9 of the lugs 8 of the anchoring member. The anchoring member is sufficiently smaller in diameter than the inter-

nal diameter of the socket member to permit said socket member to be placed over the anchoring member with the tongue 17 above the entrance to the recess 10. The socket member is then moved downwardly until the tongue 17 is firmly jammed in the recess 10 where it will remain.

A modified construction is illustrated in Figs. 6, 7 and 8 in which the web 16′ of the socket member A′ is formed with recesses 19 in the form of vertical slots which are designed to receive and engage hook-shaped tongues 20 projecting from the exposed face of the anchoring member B′. The two members A′ and B′ are associated and disconnected in the same manner as described in connection with the construction hereinabove referred to.

Another form of the invention is illustrated in Figs. 9 to 12, inclusive, in which the socket member A^2 is provided with arcuate tongues 20 which engage correspondingly shaped recesses 21 in the anchoring member B^2, the socket member being given a partial turn or rotation so as to cause the tongues and recesses referred to to interlock with each other as clearly shown in Fig. 9. The walls of the recesses 21 are preferably inclined or oblique as shown at 22 to secure a tight wedging engagement between the parts.

Another form of the invention is illustrated in Figs. 13 to 15, inclusive, wherein the socket member A^3 has projecting from the web 16″ thereof a plurality of oppositely projecting tongues 23 while the anchoring member or block B^3 is provided with a web 24 formed with a recess 25 corresponding in shape to the double tongue projection 23, the inner surface of the web 24 being provided at 26 with an oblique wedging face similar to the wedging face 22 above referred to in connection with Fig. 12. The tongues 23 are inserted through the slot or recess 25 after which the socket member A^3 is given a partial turn thereby effecting an interlocked connection between the anchoring and socket members, and also producing a tight wedging action between the face 23 and the oblique face 26 of the anchoring member.

Under any of the forms hereinabove described, it is a comparatively simple matter to connect and disconnect the anchoring and socket members of the device and also to insert and remove the rails indicated at 2. All forms of the device also embody an interlocking tongue and slot connection between the socket member and the anchor, said parts being adapted to be engaged by moving the socket axially or longitudinally of the rail and being connected by moving the socket transversely to the length of the rail.

What I claim is:—

The combination with a post, and a rail of uniform diameter throughout its length, of a socket member located exteriorly of the post and having a conical portion and a cylindrical portion at the smaller end of said conical portion slidable and loosely mounted on said rail and removable from the end thereof, an anchor member fixed to the post, and a tongue projecting from one of said members, the other of said members having a recess to receive said tongue, said tongue and recess being adapted to be engaged by moving the socket member longitudinally of the rail and also moving said socket member transversely to the length of the rail.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN G. REES.

Witnesses:
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NORMAN J. SMITH.