E. I. DODDS.

STAY BOLT STRUCTURE.

APPLICATION FILED APR. 26, 1918.

1,295,863.

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Fig. 1.

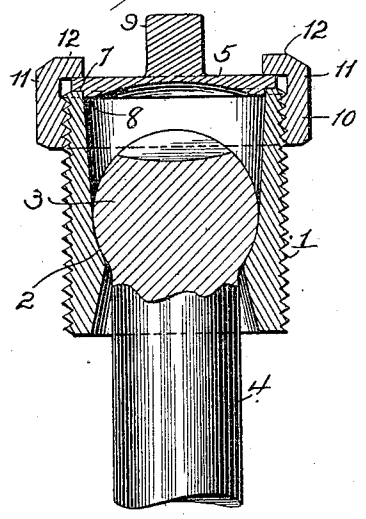


Fig. 2.

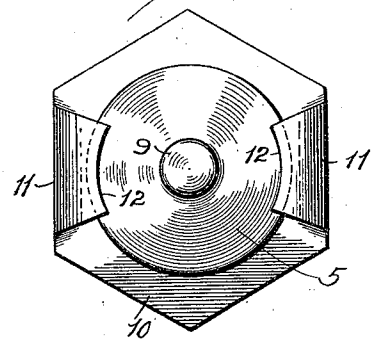
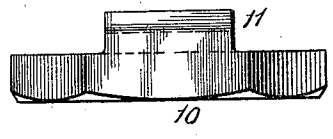


Fig. 3.



WITNESSES

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STAY-BOLT STRUCTURE.

1,295,863. Specification of Letters Patent. **Patented Mar. 4, 1919.**

Application filed April 26, 1918. Serial No. 230,899.

To all whom it may concern:

Be it known that I, ETHAN I. DODDS, a citizen of the United States, and a resident of Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Stay-Bolt Structures; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in staybolt structures,—the object of my present invention being to provide a closure for the outer end of the bearing sleeve, which can be cheaply manufactured, and which can be easily and quickly removed to permit inspection and testing of the staybolt, and as quickly replaced and secured.

With this and other objects in view, the invention consists in certain novel features of construction and combinations of parts as hereinafter set forth and pointed out in the claims.

In the accompanying drawings, Figure 1 is a sectional view of a staybolt structure showing an embodiment of my invention, Fig. 2 is a plan view of the same, and Fig. 3 is a separate view of the clamping member.

1 represents a bearing sleeve which is threaded externally to screw through a suitable hole in a boiler sheet, and provided interiorly with a curved bearing face 2 for the rounded head 3 of a staybolt 4.

The outer end of the bearing sleeve is covered by a cap or closure 5. In the present instance this cap or closure is made in the form of a flat plate or disk which may, if desired, be made somewhat concave in its underside so as to provide suitable clearance for the bolt head. The cap or plate 5 is also recessed in its under face near its periphery to provide a seat 7 for said plate upon the end of the bearing sleeve and also to provide a shallow enlargement 8 which enters the end of the sleeve for accurately centering said plate when the same is being applied to the sleeve. The cap or plate 5 is also provided with a knob or projection 9 which serves as ready means for handling the same in removing it from or applying it to the bearing sleeve, and which also serves as an abutment which may be tapped with a hammer or wrench to loosen the cap or plate in the event that the same should become stuck.

To provide efficient means for clamping the cap or plate in place and for unclamping the same, I employ a clamping ring or nut 10 threaded internally to screw on the bearing sleeve and having a plurality of jaws 11, the lips 12 of which overlie the edge portion of the cap or plate 5.

With the construction and arrangement of parts above described, it is apparent that when the clamping nut is turned in one direction, the cap or plate 5 will be tightly clamped in position, and that when said nut is turned in the reverse direction, the cap will be released and may be quickly removed to expose the head of the bolt. In order to facilitate the use of a wrench to the ring or nut 10 for turning the same, the latter may be made of hexagonal or other angular configuration.

Having fully described my invention what I claim as new and desire to secure by Letters-Patent, is:—

1. In a staybolt structure, the combination with a bearing sleeve, of a removable closure seated on said sleeve and providing a closure therefor, and a clamping nut threaded on said sleeve and having a plurality of jaws overhanging the edge portion of said closure, whereby when said nut is screwed in one direction, the closure may be removed laterally without removing the nut.

2. In a staybolt structure, the combination with a bearing sleeve, of a removable plate seated on said sleeve and providing a closure therefor, a knob on said plate, and a clamping nut threaded on said sleeve and having jaws spaced apart to engage said closure and permit the passage of the closure when being applied or removed from the bearing sleeve.

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

ETHAN I. DODDS.

Witnesses:
S. G. NOTTINGHAM,
R. S. FERGUSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."