J. P. GOLDEN.

CROSS HEAD GUIDE OR BOX FOR ENGINES.

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1,164,500. Patented Dec. 14, 1915.

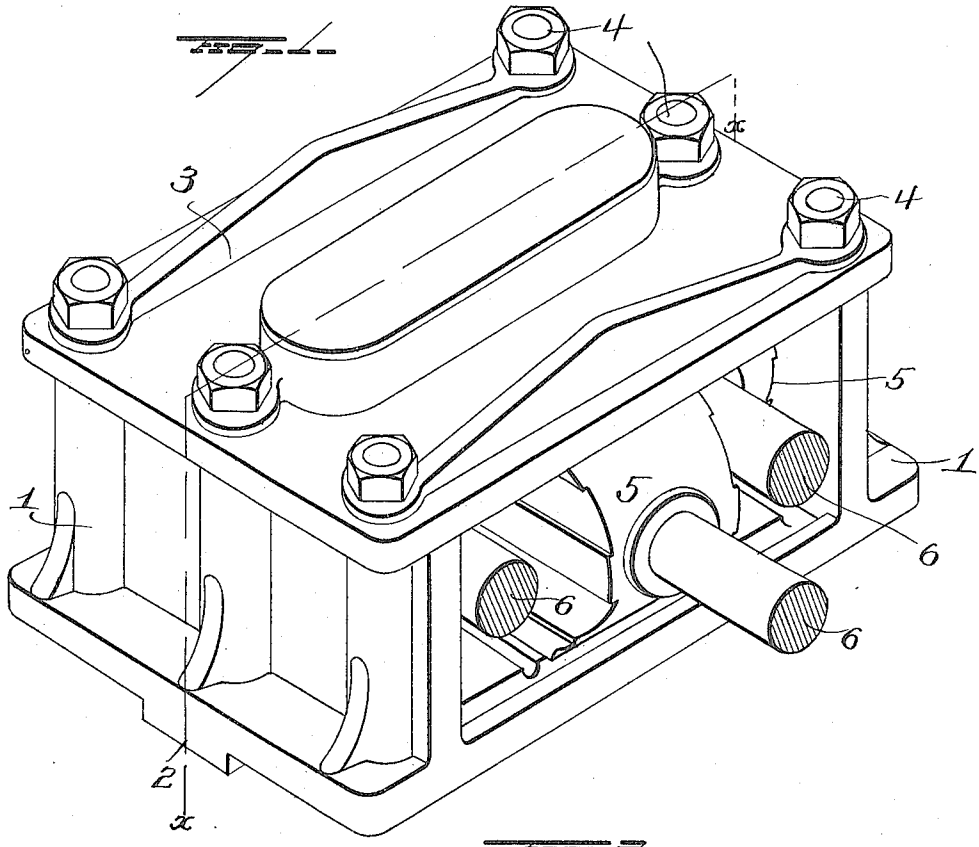
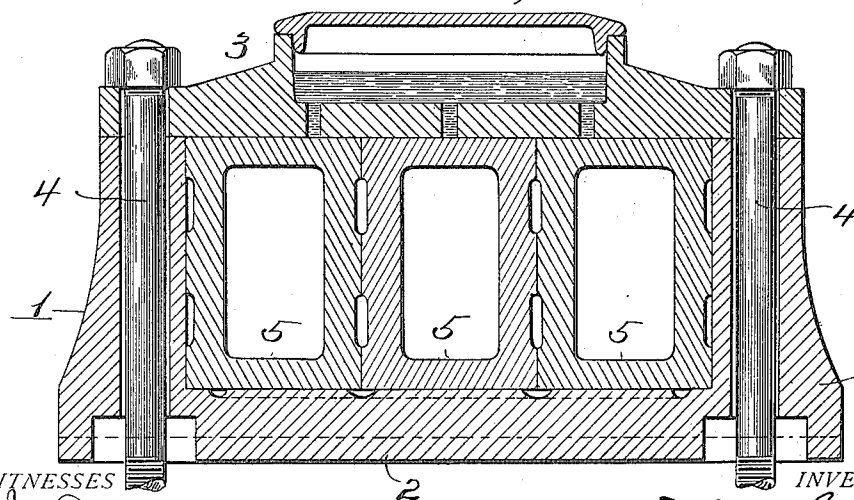


FIG. 2.



WITNESSES

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CROSS-HEAD GUIDE OR BOX FOR ENGINES.

1,164,500. Specification of Letters Patent. Patented Dec. 14, 1915.

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To all whom it may concern:

Be it known that I, JOHN P. GOLDEN, a citizen of the United States, and a resident of Columbus, in the county of Muscogee and State of Georgia, have invented certain new and useful Improvements in Cross-Head Guides or Boxes for Engines; 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.

My invention relates to an improvement in cross-head guides or boxes for engines, pumps and other machinery, the object being to provide a guide or box, adapted to receive and support one or a plurality of cross heads, the box being made in sections so that it may be removed and replaced without disturbing any other part of the engine or pump.

A further object is to provide a cross head guide that is independent of the engine or pump and which may be secured to any suitable support, and capable of being adjusted to compensate for wear.

With these objects in view my invention consists in the parts and combinations of parts as will be more fully explained and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in perspective of my improved box or guide and Fig. 2 is a view in section on the line *x*—*x* of Fig. 1.

1 represents the box or guide composed of a base and two side members all cast integral, the side members being located sufficiently far apart to receive between them the number of cross heads to be carried thereby. It may be adapted for one only, but I have shown it carrying three. The base member of the box is provided on its outer face with a rib 2 adapted to rest within a groove in the bed plate or other part to which the box is secured. This rib insures the proper position of the box at the start, and also in the event it has to be removed for repairs or readjustment.

3 is the cover plate conforming in shape and size to the base of the box, and secured to the latter by the bolts 4, which pass through the cover, sides and base of the box and into the bed plate or other part to which the box is secured and operate to not only secure the cover to the box, but the box or guide to the bed plate. The sides of the box at the points where the bolts pass through the same are enlarged as shown, the enlargements being preferably reinforced by ribs, and the cover plate is also preferably strengthened by ribs extending from one side to the other. The cross heads 5 are mounted in the box, and provided with plunger or piston rods 6 as shown.

The box or guide thus constructed permits free longitudinal movement of the cross heads, and holds them solidly against movement in any other direction; it can be readily removed for repairs or readjustment without displacing any part of the engine and may be used on an engine, pump or any other machinery employing reciprocating cross heads.

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

1. A guide for a cross head, consisting of a box open at the top and having a removable cover, the bottom, sides and top of the box forming guides and supports for the cross head, the box being adapted to be detachably secured to a support.

2. A guide for a cross head consisting of a box open at its ends and having a removable cover, the bottom of the box having a transverse rib to rest within a recess in the part to which the box is secured and means for detachably securing the box to said support.

3. A guide for a cross head consisting of a box open at its ends and having a removable cover and bolts passing through the cover and box and engaging the support for the latter for securing the cover to the box and the latter to its support.

4. A guide for a plurality of cross heads consisting of a box open at its ends and provided with a removable cover, the box having a rib on its lower face to rest within a groove in the support to which the box is secured, the said box being adapted to be detachably secured to a support.

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

JOHN PORTER GOLDEN.

Witnesses:

F. B. SMITH,

FRED W. STINARIUS.

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