

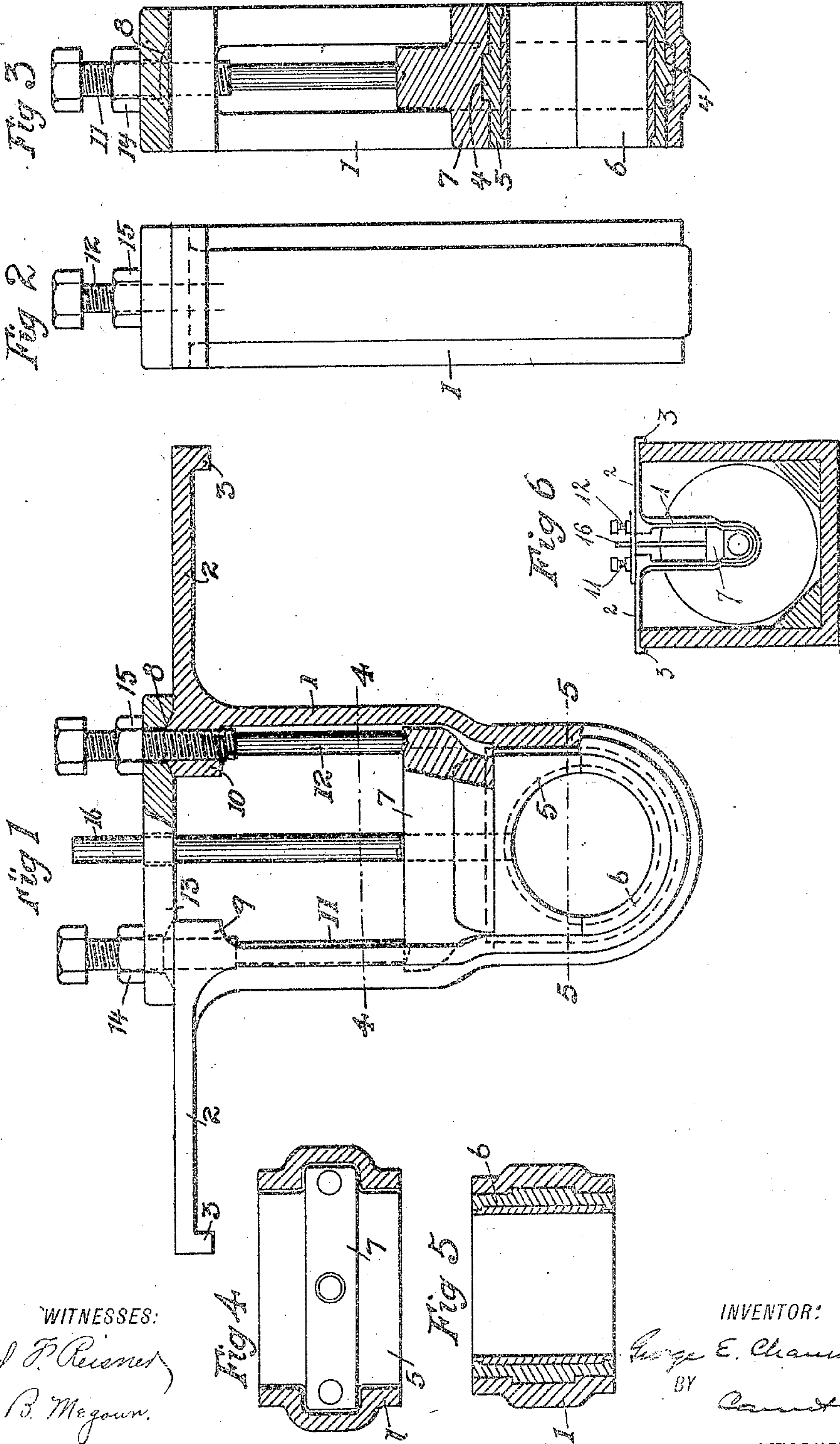
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PATENTED MAY 29, 1906.

G. E. CHAMBERLAIN.

SHAFT HANGER.

APPLICATION FILED MAY 19, 1905.



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SHAFT-HANGER.

No. 822,183.

Specification of Letters Patent.

Patented May 29, 1906.

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To all whom it may concern:

Be it known that I, GEORGE E. CHAMBERLAIN, a citizen of the United States, and a resident of the city of St. Louis and State of Missouri, have invented a new and useful Improvement in Shaft-Hangers, of which the following is a specification.

It is a common fault with shaft-hangers in general use for supporting screw-conveyer shafts that their fastening nuts or bolts or other parts work loose in practice and fall into the conveyer-trough. The parts that thus get into the conveyer-trough are carried along with the material and often cause serious accidents to the machinery that the material is fed to.

It is the principal object of my invention to avoid the danger of parts of the hanger getting into the feed-trough.

Another important object is to provide for the easy removal of the conveyer-shaft without loosening the shaft-hanger.

Another important object is to avoid the obstruction of the conveyer-trough as far as practicable.

My invention consists in the parts and arrangements and combinations of parts hereinafter described and claimed.

In the accompanying drawings, which form part of this specification, and wherein like symbols refer to like parts wherever they occur, Figure 1 is a vertical view of my hanger, partly in elevation and partly in section, looking endwise of the shaft. Fig. 2 is a side elevation of my hanger. Fig. 3 is a vertical cross-section thereof. Fig. 4 is a horizontal section on the line 4 4 of Fig. 1. Fig. 5 is a horizontal section on the line 5 5 of Fig. 1, and Fig. 6 is a cross-section through a conveyer-trough, showing the hanger in position.

My shaft-hanger comprises a yoke 1, whose arms are provided with lateral extensions 2 at their upper ends. These lateral extensions are adapted to rest upon the side walls of the conveyer-trough and are provided with downturned flanges 3, overhanging said walls. They may also be secured to the walls of the trough by any other suitable means. The lower portion of the yoke is of less width than the upper portion, and this lower portion is preferably rounded at the corners, so as to cause as little obstruction as practicable in the trough. The inner face of the narrower lower portion of the yoke is provided with a groove, and in this groove fit ribs 4, provided

for the purpose on the separable members 5 6 of the journal-bearing. The journal-bearing is of any suitable type and provided with the usual lining. Resting on the upper member 6 of the journal-bearing is a heavy block 7, whose under side is grooved to fit over the rib on the top surface of the upper member of the journal-bearing. Obviously the block and the upper member might be made of one piece.

At the top of the yoke, on the inner faces thereof, are lugs 9 10, through which vertical screw-threaded holes extend. The upper faces of these lugs are beveled, and over their beveled surfaces rest the counterbored portions of a cover-plate 13, which has holes arranged in alinement with the lug-holes. Threaded bolts extend through the cover-plate and the threaded lug-holes downwardly against the top surface of the block, the upper portion of the yoke 1 being grooved to accommodate said bolts. These bolts are provided with set-nuts 14 15, which bear against the cover-plate. An oil-tube 16 also extends downwardly through the cover-plate and through the block and the upper member of the journal-bearing.

In practice the shaft-hanger is mounted on the side walls of the conveyer-trough and secured firmly in place by any suitable means. When it is desired to remove a section of the conveyer-shaft, it is not necessary to unfasten the shaft-hanger from the conveyer-trough. In such case the bolts are unscrewed from the lugs without removing the set-nuts from the bolts. Then the cover-plate and the block and the upper member of the journal-bearing are removed and the shaft-section lifted out.

It is to be noted that the interlocking of the cover-plate with the yoke gives great rigidity and strength to the hanger. It is also noted that the loosening of the bolts is not only guarded against, but that such loosening cannot result in the accidental falling of the bolts or other parts into the conveyer-trough.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A shaft-hanger comprising a depending yoke having substantially parallel branches provided with grooves on their inner sides, said yoke having lateral extensions on the outer sides of its branches and lugs on the inner sides of its branches provided with threaded holes alined with said grooves, a journal-bearing removably arranged in the

lower portion of said yoke and screws to secure said bearing in position passing through said holes in said lugs and lying in said grooves.

2. A shaft-hanger comprising a depending yoke, a bearing mounted in the lower portion of said yoke, the upper portion of said yoke being open, a cover-plate closing said yoke at the top, and screws securing said cover-plate to said yoke and engaging said bearing and
10 securing the same in position.

3. A shaft-hanger comprising a depending yoke having branches separated from each other at the top and having lugs on the inner faces of the upper ends of said branches provided with tapped holes, a cover-plate connecting the upper ends of said branches and provided with holes in alinement with said
15 tapped holes, a bearing removably mounted in the lower portion of said yoke, and screws

passing through said holes in said cover-plate 20 and said lugs and engaging said bearing.

4. A shaft-hanger comprising a depending yoke having substantially parallel branches separated from each other at the top and provided with grooves on the inner sides between their ends and lugs at their upper ends provided with tapped holes alined with said
25 grooves, a cover-plate connecting the upper ends of said branches and having holes in alinement with said tapped holes, a bearing
30 removably mounted in the lower portion of said yoke, and screws passing through said holes in said cover-plate and said lugs, lying in said grooves and engaging said bearing.

GEORGE E. CHAMBERLAIN.

Witnesses:

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