Oct. 18, 1927. 1,645,982

O. E. BISHOP

SHAFT BOX

Filed Nov. 23, 1926

Fig. 1.

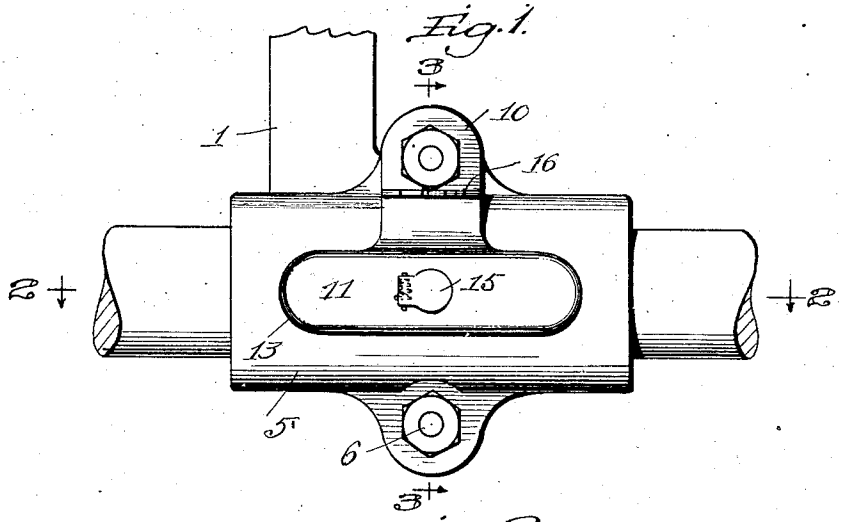


Fig. 2.

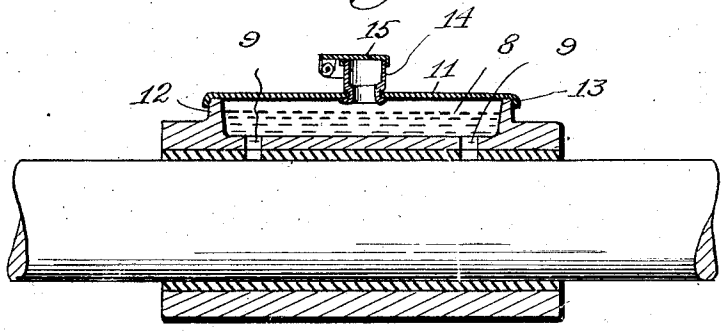


Fig. 3.

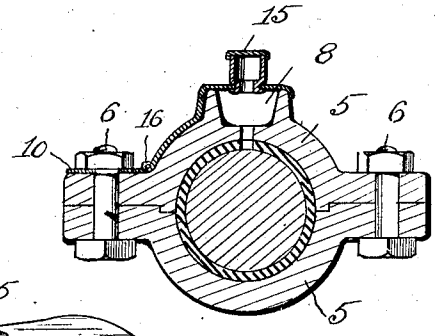
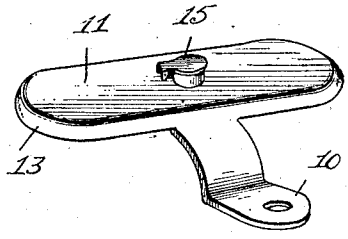


Fig. 4.



Inventor

O. E. Bishop

By Davis & Davis

Attorney

Patented Oct. 18, 1927. 1,645,982

UNITED STATES PATENT OFFICE.

ORIEN E. BISHOP, OF CLIFTON, SOUTH CAROLINA, ASSIGNOR TO E. E. CHILD COMPANY, OF SPARTANBURG, SOUTH CAROLINA, A CORPORATION OF SOUTH CAROLINA.

SHAFT BOX.

Application filed November 23, 1926. Serial No. 150,271.

The object of this invention is to provide a simple attachment for shaft-boxes which will prevent lint, etc., collecting in the oil-pocket and which at the same time will, in looms, protect the cloth from oil-spots which occur when "blowing off" the looms, as more fully hereinafter set forth.

In the drawing—

Fig. 1 is a plan view;

Fig. 2 is a longitudinal sectional view; and

Fig. 3 is a transverse sectional view of a shaft-box embodying my invention;

Fig. 4 is a detail perspective view of the cover-plate.

In the drawing annexed, I have illustrated one well-known form of shaft-box consisting of two semi-circular plates 5 bolted around the shaft by means of bolts 6, one of these plates being formed integral with or otherwise carried by a part 7 of the frame of a loom or other machine. In the top side of the top-plate 5 is formed an oil-pocket 8 adapted to receive a quantity of oil and to deliver the same to the shaft through the holes 9.

I clamp to the upper face of the upper half 5 of the box a thin metal plate having at one end an arm 10 through which the bolt extends and having at its other end a laterally-elongated plate 11 which fits down over the upwardly-extending cup-flange 12, the edge of this plate 11 being provided with a flange 13 adapted to fit closely around the rim of the oil-cup-flange 12. Fitted in the center of plate 11 is a filler-nipple 14 having the usual snap cover 15.

It will be observed that with my attachment, I convert the usual well or pocket 8 into a complete oil-cup, protected on all sides from the entry of lint, etc., as well as the exit of oil therefrom during the "blowing off" process in the operation of looms. My device is particularly desirable, therefore, for use on looms and I have constructed it so that it may be readily attached to the looms now in use. My device also is simple and inexpensive to manufacture. To attach or detach my device, it is simply necessary to loosen one of the box-bolts, and from time to time as the oil needs replenishing this may be accomplished through the snap-cover 15, as is usual with lubricating bearings.

The arm 10 may be hinged at 16, i. e., at a point between its anchorage and the cover-plate 11, preferably at a point where the arm is bent to conform to the shape of the box, so that the plate 11 may be thrown back out of the way for either replenishing the oil in the well or cleaning the well out. In Fig. 4, this hinge is omitted; in this form the oiling must be done exclusively through the nipple 14.

What I claim as new is:

1. The combination with a shaft-box consisting of a pair of halves adapted to embrace the shaft, of bolts clamping these halves upon the shaft, the upper half being provided with a flanged oil-pocket in its upper side, and a cover-plate for said oil-pocket consisting of a flanged plate adapted to fit over the rim of the flange of the oil-pocket and provided with a covered filler-tube, said cover-plate being also provided with a lateral extension clamped to the top half of the box through the medium of one of the aforesaid bolts.

2. In combination with a shaft-box having an oil-well in the upper surface of its upper half, a cover device for this oil-well embodying an arm provided with a hole to enable the box-bolt to pass therethrough in clamping the device to the box, said arm being provided with a cover-plate adapted to be clamped down over said well when the box-bolt is tightened.

3. In combination with a shaft-box having an oil-well in the upper surface of its upper half, a cover device for this oil-well embodying an arm provided with a hole to enable the box-bolt to pass therethrough in clamping the device to the box, said arm being provided with a cover-plate adapted to be clamped down over said well when the box-bolt is tightened, said arm being provided with a hinge at a point between the bolt anchorage and the plate.

In testimony whereof I hereunto affix my signature.

ORIEN E. BISHOP.