Sept. 22, 1925. 1,554,947

B. H. BLOSE

LUBRICATING MEANS FOR JOURNAL BOXES

Filed May 2, 1925

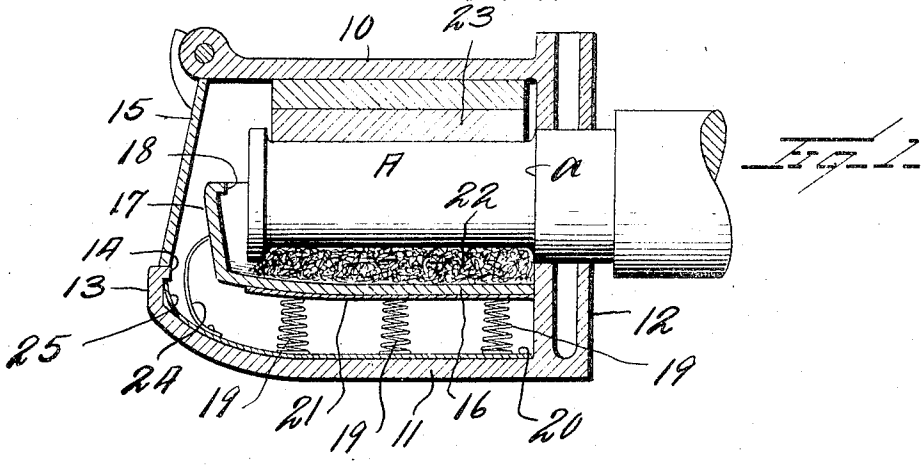


Fig. 1

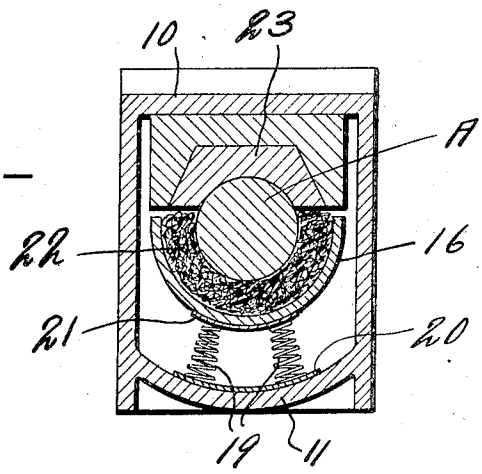


Fig. 2

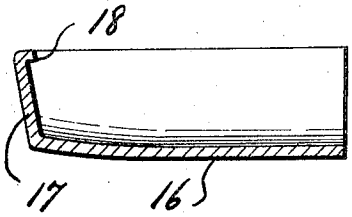


Fig. 3

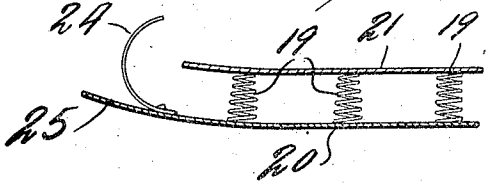


Fig. 4

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UNITED STATES PATENT OFFICE.

BERT H. BLOSE, OF JOHNSONBURG, PENNSYLVANIA.

LUBRICATING MEANS FOR JOURNAL BOXES.

Application filed May 2, 1925. Serial No. 27,489.

To all whom it may concern:

Be it known that I, BERT H. BLOSE, a citizen of the United States, residing at Johnsonburg, in the county of Elk and State of Pennsylvania, have invented certain new and useful Improvements in Lubricating Means for Journal Boxes, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to lubricating means for journal boxes, and particularly to certain improvements upon the lubricating means shown in my Patent #1,510,377, granted September 30, 1924.

One of the objects of the invention is to provide means whereby the oil cellar may be resiliently urged upward against the axle so as to hold the packing against the axle at all times and take up wear on the packing.

A further object is to provide means whereby the cellar may be urged rearward against the shoulder of the axle or against the rear wall of the journal box and resiliently held in this position.

A still further object is to provide a base for the oil cellar separate therefrom and this base carrying means whereby the oil cellar is resiliently supported and urged toward the axle and whereby it is resiliently urged rearward toward the rear wall of the journal box.

Other objects will appear in the course of the following description.

My invention is illustrated in the accompanying drawings, wherein:—

Figure 1 is a vertical longitudinal sectional view through a car journal box showing my improved lubricating device applied thereto;

Figure 2 is a vertical cross sectional view therethrough;

Figure 3 is a longitudinal sectional view of the cellar;

Figure 4 is a longitudinal sectional view of the cellar support;

Referring to these drawings, 10 designates a journal box of approximately ordinary construction and having the lower wall 11, the rear wall 12, and at its front the lower wall is upwardly curved and then extends straight upward, as at 13, and is formed with an inwardly projecting shoulder 14. The upper edge of this wall 13 is disposed nearly vertically below the forward end of the upper wall of the journal box and a relatively long lid 15 is provided which is disposed nearly in a vertical plane and which extends downward to and rests against the upper edge of the upper wall 13. This takes the place of the relatively short and somewhat more inclined lid which is ordinarily found on journal boxes. The purpose of this relatively large lid 15 is to permit the ready insertion of the cellar.

Inserted into the journal box is the axle A provided at its rear end with the shoulder *a*. Designed to be supported within the journal box beneath the axle A is the cellar 16. This cellar is open at its rear end and has the upwardly extending forward wall 17 formed with an inwardly extending shoulder 18 at its upper edge. The cellar is rounded transversely or approximately semi-circular in cross section, as illustrated in Figure 2, and the cellar is urged upward by means of coiled compression springs 19 which are mounted upon a plate 20 to fit the bottom wall 11 of the journal box. This plate may be made of thin metal and is transversely curved and longitudinally curved upward at its forward end, and the springs 19 are mounted upon this plate 20. These springs support a plate 21 which is transversely and longitudinally curved to fit the bottom of the cellar and upon which the bottom of the cellar rests. Preferably there are two longitudinally extending series of the springs 19 so that this plate will be supported properly and the cellar will be supported from any tipping movement. The cellar carries the packing 22 which extends upward partially around the axle and to a height equal to the height of the cellar, and disposed above the axle and bearing down thereon is the brass 23 usually found in journal bearings.

For the purpose of holding the cellar resiliently urged against the rear wall 12 of the journal box and the packing against the shoulder *a*, I mount upon the forward end of the plate 20 the spring 24, which spring is preferably in the form of a leaf spring, though not necessarily so, and bears against the forward wall of the cellar, as illustrated in Figure 1, resisting any forward movement of the cellar and resiliently urging the cellar rearward. The plate 20 which constitutes the base upon which the cellar is supported extends forward beyond this spring 24, as at 25, and bears against the

shoulder 14 so that when this plate is in place it cannot work forward and thus the cellar itself cannot work forward.

It will be obvious that the cellar can be readily withdrawn through the opening normally closed by the lid 15 and that the base 20 may also be withdrawn through this opening by lifting the forward end of the base 20 upward and inward and then withdrawing it, thus making the two parts readily removable from the journal box so as to permit any repairs or replacements to be made.

While I have illustrated certain details of construction and arrangement of parts, I do not wish to be limited thereto as it is obvious that these might be varied in many ways without departing from the spirit of the invention as defined in the appended claims.

I claim:

1. The combination with a journal box having a forward wall provided with a shoulder and an axle projecting into the journal box, of means for lubricating the axle comprising a lubricant cellar having a forward wall but open at its rear end and adapted to receive the axle, a plate resting upon the bottom of the journal box and extending forward and engaging said shoulder to thereby hold the plate from forward movement, coiled compression springs mounted upon the plate and upon which the cellar is adapted to operatively rest, and a spring carried upon the forward end of the plate and bearing against the forward end of the cellar and urging the cellar rearward.

2. The combination with a journal box having a forward wall formed with an inwardly extending lug and an axle extending into the journal box, of means for lubricating the axle comprising an oil cellar open at its rear end but having a front wall in which the axle is adapted to be disposed, a plate formed to fit upon the bottom of the journal box and extending forward at its rear end and engaged with said lug, a plurality of springs mounted upon the plate, a second plate resting upon said springs and bearing against the bottom of the cellar, and a spring attached to the forward end of the plate, extending upward and rearward, and bearing against the forward end wall of the cellar and urging said cellar rearward.

In testimony whereof I hereunto affix my signature.

BERT H. BLOSE.