Dec. 18, 1928. 1,695,754

N. BENN

OIL CELLAR FOR JOURNAL BOXES

Filed June 17, 1926

Fig. 1.

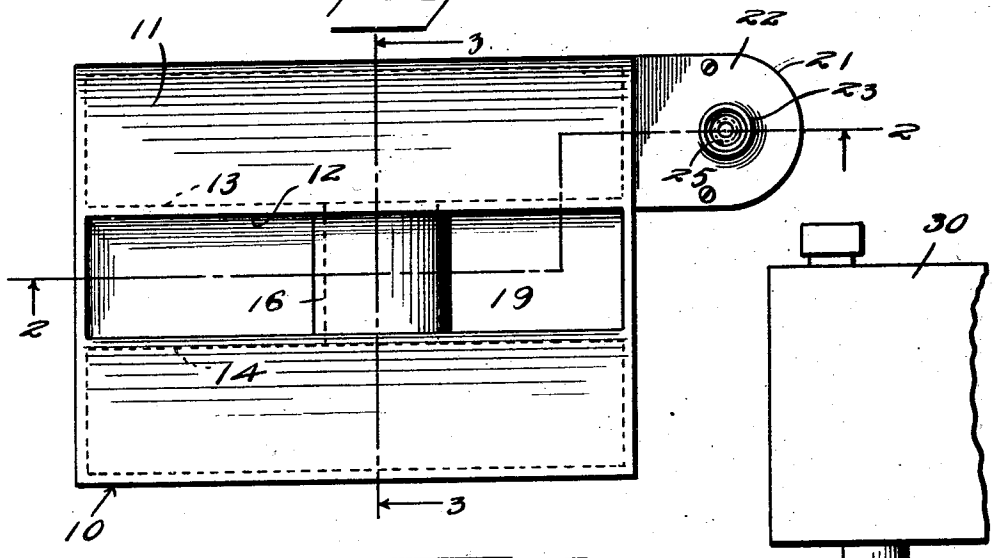


Fig. 2.

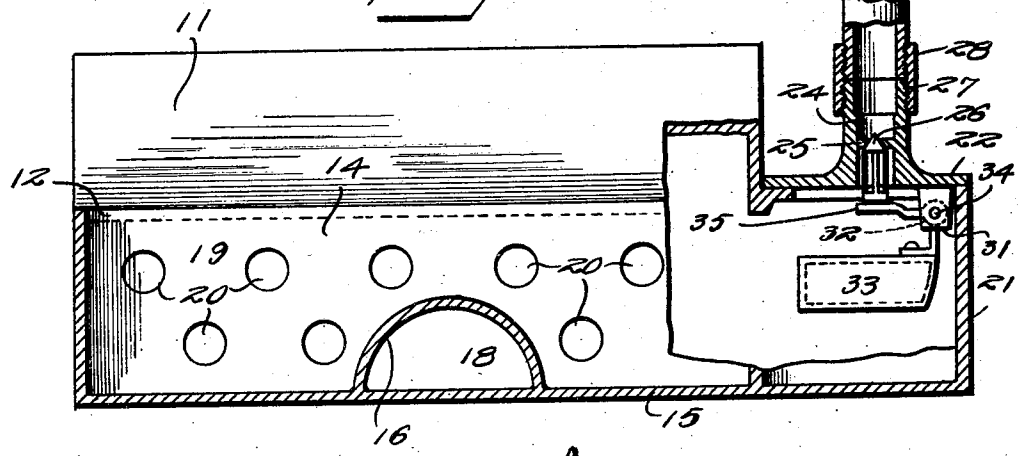
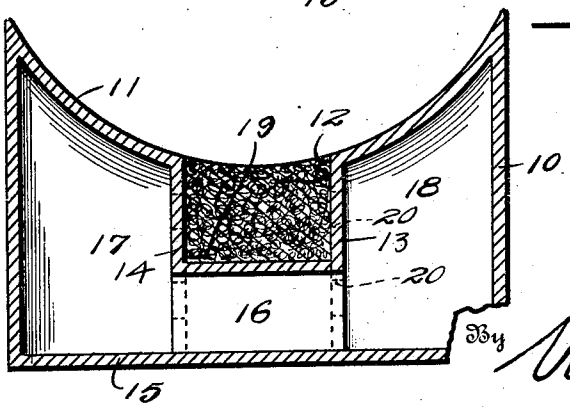


Fig. 3.



Inventor

Noah Benn

By Watson E. Coleman

Attorney

Patented Dec. 18, 1928. 1,695,754

UNITED STATES PATENT OFFICE.

NOAH BENN, OF ANDERSON, INDIANA.

OIL CELLAR FOR JOURNAL BOXES.

Application filed June 17, 1926. Serial No. 116,640.

This invention relates to oil cellars for journal boxes and more particularly to a device of this character for automatically supplying oil to the journal.

An important object of the invention is to provide a device of this character having a construction such that a constant oil level is maintained within the cellar and means provided for steadily transferring this oil to the journal.

A further object of the invention is to provide a construction such that oil is uniformly distributed to the journal along the length of this journal.

These and other objects I attain by the construction shown in the accompanying drawing, wherein for the purpose of illustration is shown a preferred embodiment of my invention and wherein:—

Figure 1 is a plan view of an oil cellar for journal boxes constructed in accordance with my invention;

Figure 2 is a section on the line 2—2 of Figure 1;

Figure 3 is a section on the line 3—3 of Figure 1.

Referring now more particularly to the drawing, the numeral 10 generally designates a casing, the top 11 of which is curved to conform to the shaping of the shaft which is to be received therein. This top is formed at the bottom of the curved portion thereof with a longitudinally extending slot 12 and from the side edges of the slot, partition walls 13 and 14 extend downwardly to the bottom 15 of the casing. At the bottom of the casing, the partition walls are connected by a conduit 16 which places the chambers 17 and 18 between the side walls of the casing and the partitions 13 and 14 respectively into communication with one another. The chamber 19 produced between the partition walls is in communication with the chambers 17 and 18 by perforations 20 formed in the partition walls. The chamber 18 is provided with an extension 21 having a removable cover 22 provided centrally with an upwardly extending boss 23. This boss has a bore 24 formed intermediate its ends with a valve seat 25 for coaction with a check valve 26. The upper end of the boss is threaded at 27 for engagement with a coupling 28 by means of which it may be connected with an oil pipe 29 leading from a suitable supply tank 30. The under surface of the cover has spaced depending ears 31 receiving therebetween an eye 32 secured to a float 33, so that the eye and ears may be connected by a hinge pin 34. Extending over the float from the eye is an arm 35 rigid to the eye and projecting beneath the lower end of the check valve 26, so that when the float has raised to a predetermined degree, the valve is forced into engagement with the seat 25.

In the use of the device, the chamber 19 is filled with wool waste or wicking for transmitting oil to the shaft. Oil from the supply tank 30 enters the chamber 18 and passes through the conduit 16 to the chamber 17. Oil from the chambers 17 and 18 passes through the perforations 20, engaging the wicking, so that it is delivered to the shaft by capillary action. By distributing the openings 20 well along the length of the partition walls, as illustrated, uniform distribution of the oil along the engaged length of the shaft is assured.

Since the construction hereinbefore set forth is obviously capable of a certain range of change and modification without materially departing from the spirit of the invention, I do not limit myself to such specific structure except as hereinafter claimed.

I claim:—

An oil cellar for journals consisting of a casing having a top concaved wall provided along its median longitudinal dimension with a slot, partition walls located interiorly of the casing and joining with the top wall thereof at the longitudinal edges of the slot forming a recess packed with lubricating material, a conduit wall passing through the partition walls and bridging the space between them and located approximately midway between the ends of the slot and below the top wall, said partition walls being provided with perforations located beyond the sides of the conduit wall.

In testimony whereof I hereunto affix my signature.

NOAH BENN.