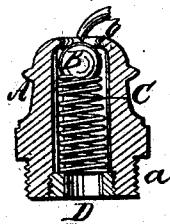
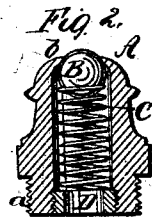
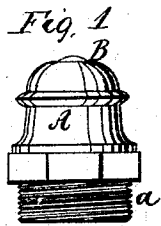


The specification in this patent
is not to print.

No. 8,251.

PATENTED JULY 29, 1851.

A. RICHARDSON.
OIL CUP FOR JOURNAL BOXES.



UNITED STATES PATENT OFFICE.

AARON RICHARDSON, OF BELLOWS FALLS, VERMONT.

OIL-CUP FOR JOURNAL-BOXES.

Specification of Letters Patent No. 8,251, dated July 29, 1851.

To all whom it may concern:

Be it known that I, AARON RICHARDSON, of Bellows Falls, in the county of Windham and State of Vermont, have invented a new and useful Improvement in Oil-Cups for Lubricating the Journals or other Bearings or Rubbing Surfaces of Machinery; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1, is a side view of one of the cups and Figs. 2, and 3, are vertical sections through the center.

Similar letters of reference indicate corresponding parts in each of the several figures.

My invention consists in providing the interior of the oil cup, with a valve, which fits in a seat around the mouth and is held there by a spring; serving to close the mouth of the cup and exclude dirt but yielding to the slightest pressure of the spout of an oil can or feeder, and allowing the oil or other lubricating material to be introduced; closing itself when the pressure is removed and forming in fact a self acting stopple.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A, represents the body of the cup which has a screw socket *a*, at its bottom, for the purpose of screwing it into the cap of a journal box, or any bearing in which it is to be used. Its external form may be any that is considered desirable, but its mouth *b*, is contracted or made smaller than the part of the inside below it, to form a valve seat.

B, is a spherical valve fitting within the valve seat *b*. Any other description of valve may be used but I consider this form the best as it will more readily find its place.

C, is a spiral spring within the cup. This and the valve are inserted through the bottom of the cup, and are kept in by a ring D, which is screwed into the bottom or socket *a*, and forms a bearing for the spring, which

presses under the valve and causes it to keep the mouth *b*, closed (as shown in Fig. 2,) when it is not opened by some external or downward pressure.

The oil is fed into the cup by simply pressing the spout of the feeder (as shown in Fig. 3) upon the upper surface of the valve, which may or may not project above the mouth when closed, the spring requiring to be only strong enough to hold the valve in place, yields readily to the pressure, and allows the valve to descend sufficiently to admit the oil to the inside, and on the feeder being withdrawn it raises the valve and closes the entrance. A wick may be used within the cup if thought desirable to prevent the oil escaping too freely to the bearing.

This oil cup possesses one great advantage over the oil cup in common use, as many bearings are placed in such positions that when the machinery of which they form part is in motion, it is difficult to remove their stopples, while this may be opened by a long spouted feeder, where the hand could not reach. Another advantage is that it will be impossible to leave it open as is sometimes done by forgetfulness, to the detriment of machinery. For locomotive engines I consider it particularly well adapted, as it will exclude the dirt and dust which are so destructive, and will allow the engineer to oil his bearings with one hand while the engine is running.

I do not confine myself to any form of valve or spring, but

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

The employment within the mouth of an oil cup of a valve B, operated upon by a spring C, or its equivalent in the manner and for the purpose substantially as herein described.

AARON RICHARDSON.

Witnesses:

JOHN N. BAXTER,

HENRY E. STOUGHTON.