(No Model.)

S. J. WALLACE.

CAR AXLE LUBRICATOR.

No. 280,265. Patented June 26, 1883.

Fig. 1.

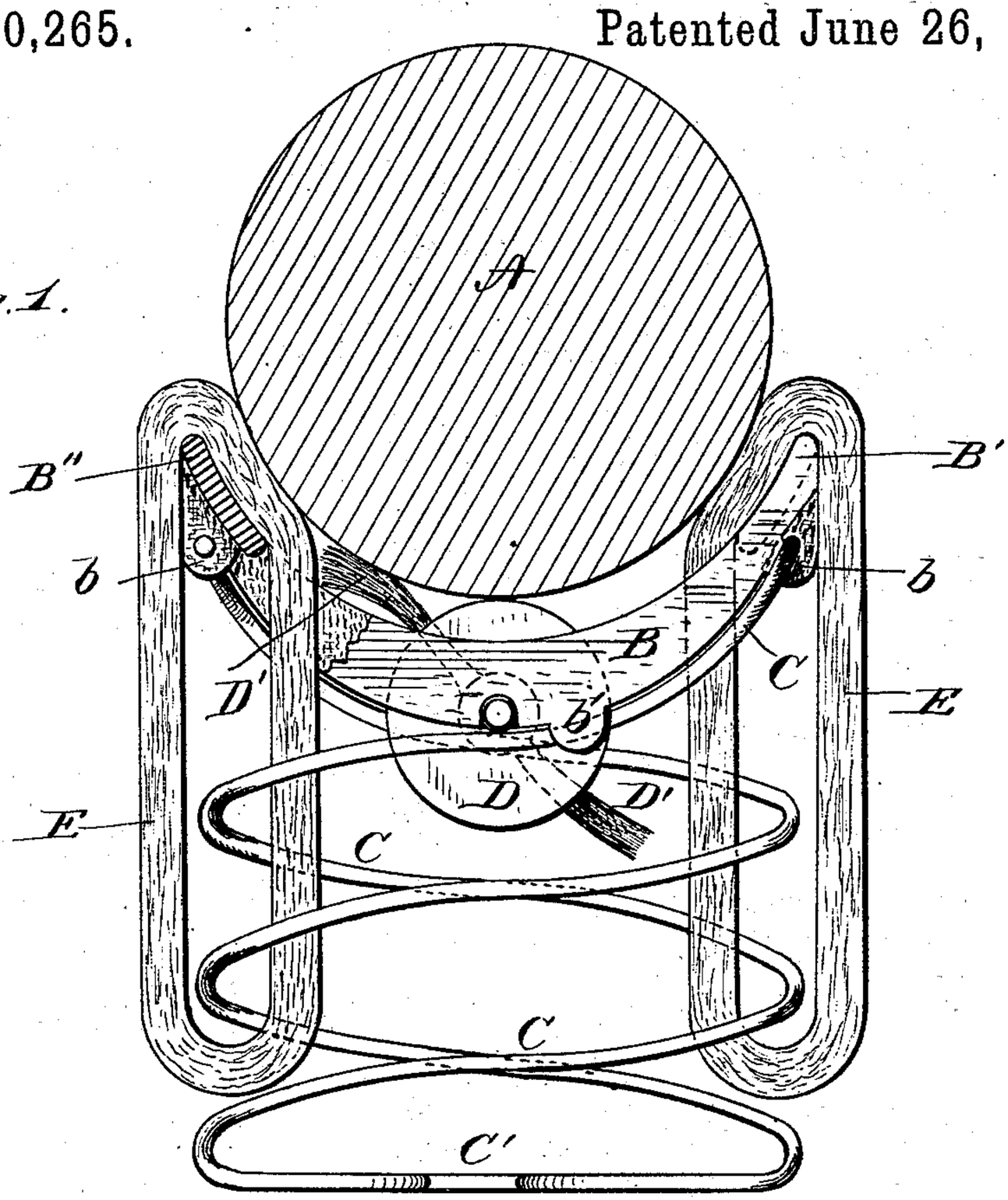
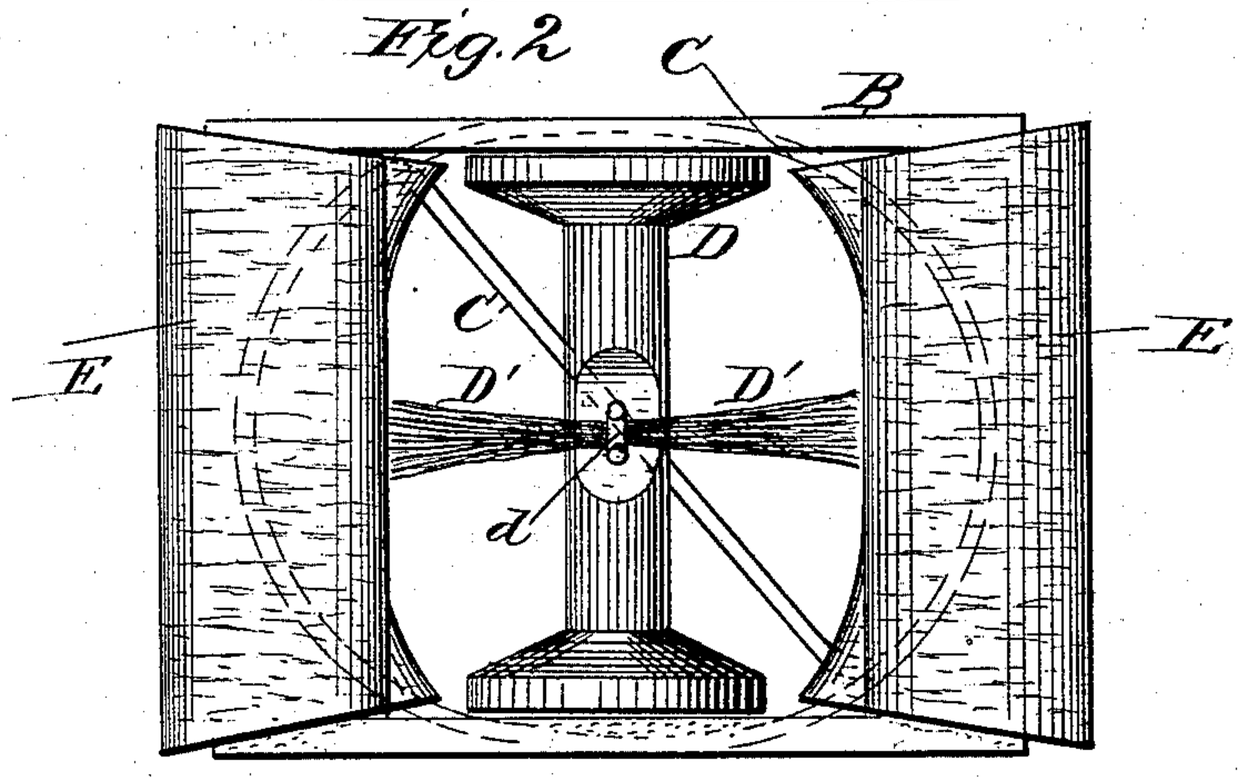


Fig. 2.



WITNESSES

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SAMUEL J. WALLACE, OF KEOKUK, IOWA.

CAR-AXLE LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 280,265, dated June 26, 1883.

Application filed March 9, 1883. (No model.)

To all whom it may concern:

Be it known that I, SAML. J. WALLACE, a citizen of the United States, residing at Keokuk, in the county of Lee and State of Iowa, have invented certain new and useful Improvements in Car-Axle Lubricators, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention is intended for the purposes of wiping and oiling the journals of car-axles; and it consists in a small apparatus to be put under the axle-journal in the oil-box for this purpose. This is made substantially as set forth hereinafter, and as shown in the drawings, in which—

Figure 1 is an elevation, part in section. Fig. 2 is a top or plan view.

The car-axle journal A rests on the apparatus, as shown in Fig. 1, and this is held up to the journal by the spiral spring C, resting on the bottom of the oil-box.

The part B is a four-sided casting or frame, having sides B′ B″ parallel with the journal, and the sides are connected by cross parts, as in the figures, bent down under the axle. The side parts, B′ B″, have lugs *b b*, in which small holes are drilled, and the two ends of the wire of spring C are inserted, one in each, and riveted solid, so the spring will give a good support. Lugs *b′* reach down from the cross parts on each side of each end of the wire to hold it securely in place.

The spring C is made of one spring-wire bent into a double concentric spiral, with **S**-shaped cross part at the bottom, and both its ends projecting upward in like directions to unite with part B.

The casting B has notches cut in its lower side to receive the journals of spool D, and the wire of spring C passes below these notches to complete the journal-bearings. In some cases the part B is made as a frame, and holes are drilled in it for these journals. When the notches are used, the spool can be taken out to renew the bristles, when they are worn too short, and replaced by merely pressing down the wire. The spool D has bearings around its ends to rest against the axle A, so that it will turn with that in either direction. The spool is smaller in the center, and is flattened there on one side. Bristles are laid on this space crosswise and held by a small staple, *d*, driven over them, so their ends project both ways as brushes, and so that as they turn with the spool they will brush against the journal to wipe it off and to bring up oil for it from the oil-box. When the bristles are worn too short, the spool is removed and new bristles put on by taking out and replacing the staple with very little delay.

The endless aprons E E are made of thick coarse wool or felt and put over parts B′ B″, as shown, so as to bear softly onto the axle A to wipe it and supply oil to it. They hang down into the oil and draw it up to supply the axle. When the bristles on the spool are changed, or oftener, these are moved around to bring new places to the axle.

Various changes and modifications of the parts can be used.

The wire of the spring having both its ends brought back and fastened to the same base or holder leaves the spring clean and free of parts liable to catch into waste or other things; and it is so simple in construction that it might admit of other uses. This is an improvement upon the well-known Mitchell lubricator, for the purpose of avoiding practical defects found by use in that, the principal one of which was that when the bristles were too short there was no practical way of renewing them, and the whole was thrown away. The consequence of this was that they had to be made very cheap, producing a poor article, while in this the bristles can be easily replaced by removing the spool and a staple and put back, so that a good article can be used with very little cost for renewals.

I do not confine myself to the exact construction and arrangement of parts shown, as I may vary them in several respects with like results.

I reserve for another application such claims as might have been but which are not fully secured in this patent.

What I claim is—

1. In a lubricating device, the combination, with the frame having side and end parts, of the spring formed of a single wire, having a bottom cross-bar, and its ends bent in concentric coils and secured in the frame, substantially as set forth.

2. In a lubricating device, the combination, with the frame having downwardly-opening

notches for the spool-journals, of a spring having concentric coils and ends secured to the frame, the said coils supporting the journal in the notches, substantially as set forth.

3. In a lubricating device, the combination, with frame having side and end parts, a spring formed of a single wire, with concentric coils supporting the frame, of endless pads E, resting upon the side parts of the frame, substantially as set forth.

4. In a lubricating device, substantially as herein set forth, the combination, with the spool D, having the flattened portion, of the bristle-brush D′, removably secured upon the flattened portion of the spool, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

SAMUEL J. WALLACE.

Witnesses:

D. P. COWL,

W. E. CHAFFEE.