

E. J. GERDON & C. W. SCHINDLER.
OIL CUP FOR LUBRICATING SHAFTS.

No. 73,795.

Patented Jan. 28, 1868.

Fig. 1

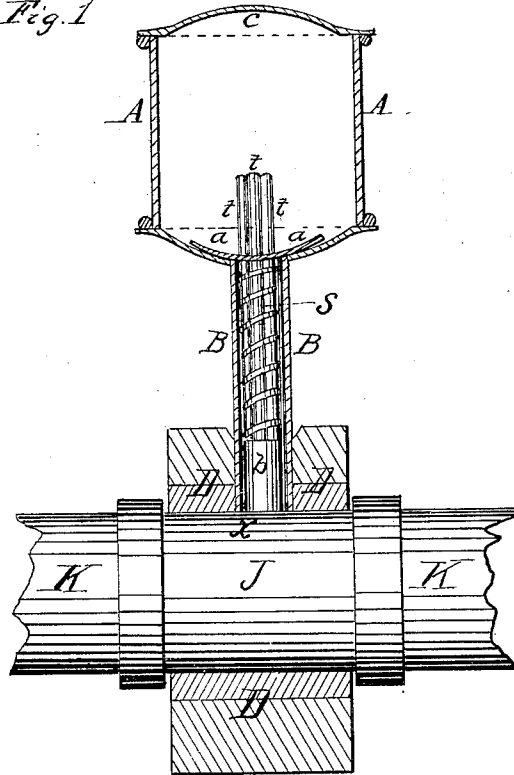
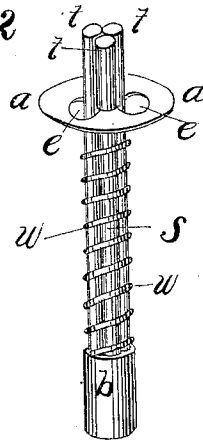


Fig. 2



Witnesses
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EMERICH JOSEPH GERDOM AND CHARLES WILLIAM SCHINDLER, OF
ALBANY, NEW YORK.

Letters Patent No. 73,795, dated January 28, 1868.

IMPROVEMENT IN OIL-CUP FOR LUBRICATING SHAFTS.

The Schedule referred to in these Letters Patent and making part of the same.

Be it known that we, EMERICH JOSEPH GERDOM and CHARLES WILLIAM SCHINDLER, both of Albany, State of New York, have invented a new and improved Oil-Cup for the Journals of Shafts of Machinery; and we declare the following specification, with the drawings forming part thereof, to be a full and complete description of our invention.

Figure 1 represents the cup in position, as attached to the box of a shaft, the cup itself, with its tube, and the shaft-boxes, being in centre vertical section; the revolving oil-distributor and the shaft in full body.

Figure 2 represents the revolving oil-distributor in perspective.

Similar letters denote the same parts of the apparatus.

A is the oil-cup, of the usual form; B, its tube, which extends downwards from the bottom of the cup; C, the top of the cup. Within the tube B there is placed a revolving shaft, S, consisting of three metal tubes, *t*, (the number may be more or less, according to the quantity of fluid to be passed.) The tubes are small, being in internal diameter usually about one-fourth of an inch. They are long enough to extend from about three-fourths of an inch above the top of the tube B to about one-fourth of an inch below its bottom. They are held together near the top by a disk or plate, *a*, secured to them so as to lie upon the bottom of the cup, and suspend them within the tube B. At the bottom they are secured by a short band of metal, *b*, soldered around them, the band having its lower edge faced truly at right angles to the axes of the tubes. They are also held together by a wire, *w*, wound spirally from the disk to the band, which, besides binding them, has the effect of carrying down regularly the oil that passes through orifices *e* (two of which are seen in the drawing) in the disk *a*, to and over the band *b*, to the journal of the shaft. J represents the journal of the shaft K, which is to be oiled; D, the boxes and brasses. The tube B is to be entered through the usual opening, E, in the cap-plate of the box and upper brass, and lowered down until the bottom of the band *b* rests upon the shaft K, but it must approach the shaft, not at right angles to it, but with a slight inclination, so that the edge of the base of the band *b* shall touch it at one corner only, at *x*. The object of this is to cause the shaft, by its motion, to revolve rapidly shaft S, the surface of K and the edge of *b* acting as bevel-gear, driving the smaller shaft with the velocity due to the difference of their respective diameters.

The oil-cup is intended to be used with stiff preparations or unguents of tallow or fat, or any oil, animal or vegetable, it being understood that such compositions, when they can be used, are far more economical than the oils usually employed to lubricate machinery. The applicants of this patent prepare an unguent, the knowledge of whose composition they for the present retain to themselves, and for the proper use of which the above-described apparatus was invented, and the employment of which they declare to result in a large saving of cost, as compared with oil or tallow, or any lubricant now used.

The operation of the apparatus is thus: The cup, being filled with the lubricating-material, and dropped down in contact with the journal J, the shaft S revolves with great rapidity, by its movement sufficiently warming the stuff, so as to render the portion near the tubes so fluid as to pass it in drops slowly through them, and through orifices *e* along the wire *w*, down to the journal J.

The nature of the composition they propose to use is such that its mass can never be rendered more fluid by the operation of the machine than to pass a regulated quantity (enough, but without waste,) to the journal.

What we claim, and desire to secure by Letters Patent, is—

In combination with an oil-cup A, a shaft, S, constructed of tubes, communicating with the journal J, and rotated by the motion of the journal, substantially as and for the purpose described.

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C. W. SCHINDLER.

Witnesses:

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