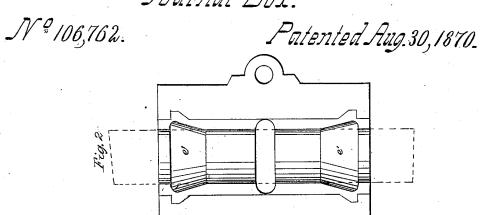
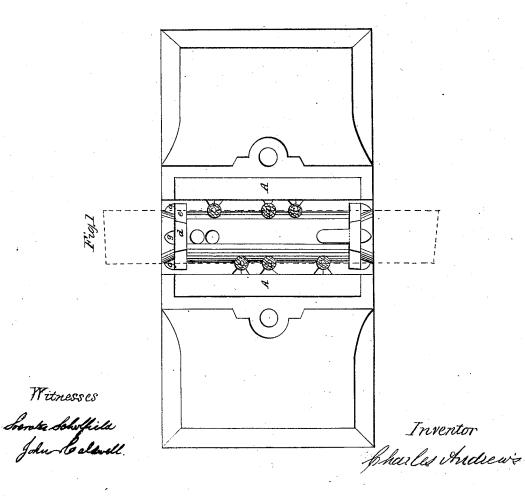
C. Andrews,

Journal Box.





United States Patent Office.

CHARLES ANDREWS, OF PROVIDENCE, RHODE ISLAND.

Letters Patent No. 106,762, dated August 30, 1870.

IMPROVEMENT IN LUBRICATING-BOXES.

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

To all whom it may concern:

Be it known that I, CHARLES ANDREWS, of Providence, in the county of Providence and State of Rhode Island, have invented an Improvement in Self-lubricating Boxes; and do hereby declare that the following is a full and exact description, reference being had to the accompanying drawings making a part of this specification.

The nature of my invention consists in preventing the spread of oil upon the shaft beyond the box by means of suitable notches or inclined surfaces and openings so arranged as to scrape the oil from the shaft and return it to the lower reservoir; also, in leaching the oil as it passes from the side tanks to the shaft.

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

Figure I is a top view of the box, and Figure 2, an inside view of the cap.

The blue dotted lines denote the shaft.

Immediately below the box is a reservoir containing a full supply of oil, which is to be raised to the shaft by means of an endless chain passing over the shaft and through the holes a a connecting with the reservoir, a groove, b, being provided in the cap so as to allow the chain to turn with the shaft.

A portion of the oil brought up by the chain will flow over into the side tanks A A, and from thence it is leached through the wicks or packing $c\ c\ c\ c$ upon the shaft.

The arrangement of the wicks or leaches $c\ c\ c\ c$ differs from anything heretofore employed from the fact that the head of oil in the side tanks is always

above the leaches, being constantly supplied by means of the revolving chain, and by this means all impurities are retained in the side tanks, and only pure oil can reach the shaft.

d are openings for the return of oil to the lower reservoir, these openings being arranged at the bottom of the grooves e e, which serve to catch the oil

as it passes outward along the shaft.

The corresponding grooves e' e' upon the cap are made wider than the grooves e e of the box, and a notch, f, or hole, f', made near the edge of the groove, which will operate to scrape the surplus oil from the shaft and return it to the lower reservoir.

If there should any oil pass the grooves e e, I return it to the groove by means of inclined notches or nicks, g g, or by an equivalent inclined surface pressing against the shaft.

What I claim as my invention, and desire to secure

by Letters Patent, is-

A side tank, A, supplied with oil from a reservoir, in combination with a wick or leach, c, operating to purify the oil as it passes to the shaft, substantially as described.

Also, the notch f, or hole f', in combination with the groove e, in the box, and the wider groove e' in the cup, substantially as and for the purpose specified.

Also, the inclined nick or notch g, or an equivalent inclined surface, operating to scrape or guide the oil back into the groove e, substantially as described.

CHARLES ANDREWS.

Witnesses:

SOCRATES SCHOLFIELD, JOHN CALDWELL.