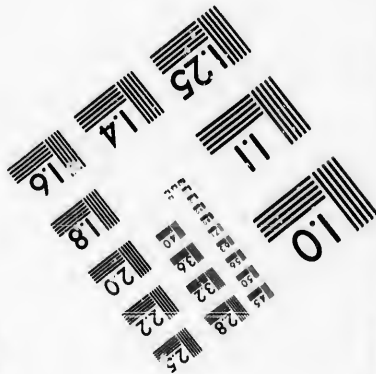
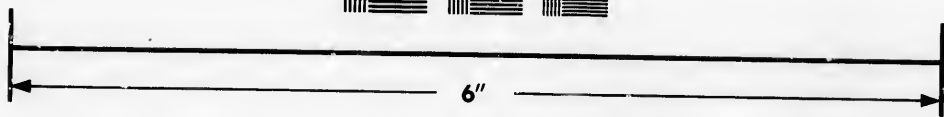
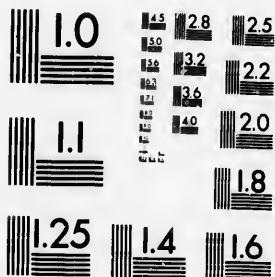


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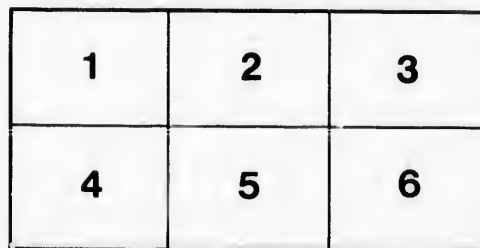
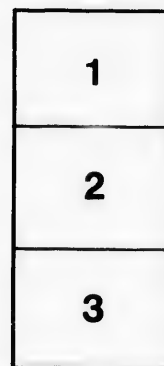
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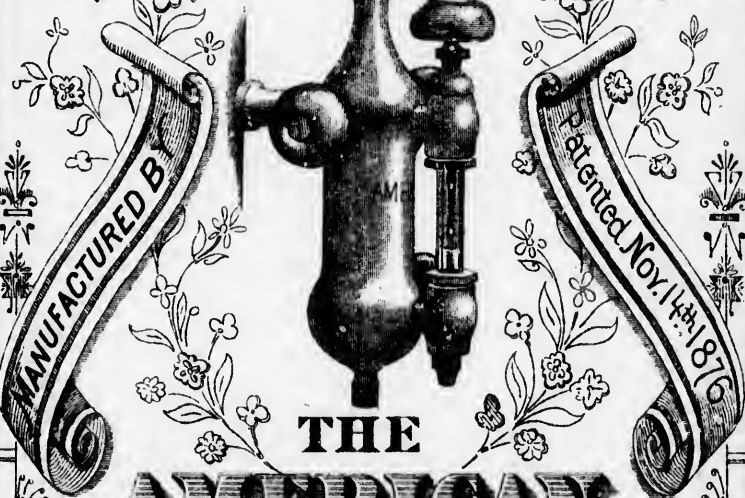
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THE FAR FAMED

AMERICAN LUBRICATOR



THE AMERICAN Lubricator Co.

DETROIT, MICH. U.S.A.

THE GARDNER LITH CO. DETROIT.

The next requisite in order, after adopting the American Lubricator, is the use of first-class oil, the amount necessary to lubricate the interior of an engine is so small that it would be the veriest folly to continue the use of an inferior article. The requirements of oil suitable for steam lubrication are as follows: Freedom from volatile substances, gummy matter, tar, grit and coloring matter; oil should be capable of resisting oxidation at the temperature at which it is to be used. The steam pressure itself is sufficient to flatten and distribute the globules to insure perfect lubrication, and in good oil there is no substance that will precipitate itself onto the metallic surfaces and increase the friction. There is so much tar and gummy matter in black or crude oil as to render it unfit for so fine a purpose as the lubrication of steam. *No man should transform his engine into an oil refinery.* There is so much benzine in black oil that on coming in contact with the steam it will evaporate and act like an alkali on the fatty portion and destroy the value of it, while the tar and paraffine and grit will take the goodness all out of an engine if used any length of time. Animal oils if not combined with refined mineral oil will surely make hens nests out of the recesses in the steam ports, cylinder bottoms and pistons and it will also make the surface porous by its corroding nature.

Oil should have a good body and feel very greasy between the fingers and have a clear color, this of itself is an indication that it is filtered. We have been informed by oil dealers that there is more profit on oil costing 40 cents per gallon than on oil costing \$1.50.

We know by our experiments in many places and on our own engine that a first class cylinder oil has over four times the lubricating capacity than any common or crude oil obtainable.

The commonest oil in the world can be used in our Lubricator, but it will be apparant to any one, that when the consumption of oil is reduced to nearly nothing, the adoption of the best oil should not be avoided.

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WHAT WE CLAIM.

The American feeds oil into the steam pipe of engine, at a point above throttle valve, *thus infusing the steam with foam of oil*, and as the lubricated steam passes through the *throttle, governor, steam chest and cylinder, it lubricates all those parts. Every drop of oil is visible as it passes into the steam pipe.*

It imparts a regular motion to engines because it lubricates the governor valve.

It makes the throttle very easy to turn, keeps it from rusting and cutting, and saves packing and grinding it.

It relieves the friction of the valve or valves, and lubricates the packing around the stem.

It saves piston packing, and piston-rod packing, and lubricates the cylinder.

It will pay for itself in fuel every two months, in oil every seven to ten months, in wear, packing and labor every four months.

The American Lubricator is patented in the United States, Canada, Great Britain, and new patents are pending in the United States, Germany and other foreign countries.

Our Lubricator is applicable to every description of engines and steam pumps.

We are prepared to make liberal arrangements with parties interested in our line, in any part of the world.

PRICE LIST.

Number.	Brass Finished.	Nickel Plated.	Suitable for a Cylinder of which the Dia- meter in inches is.	Capacity of Oil Chamber.
1	14 00	17 00	Up to 8	$\frac{1}{3}$ Pint.
2	20 00	24 00	10 " 12	$\frac{1}{2}$ "
3	26 00	30 00	14 " 18	1 "
4	32 00	37 00	20 " 24	$1\frac{3}{4}$ "
5	38 00	44 00	26 " 30	$2\frac{3}{4}$ "
6	44 00	50 00	32 & over.	4 "

AGENTS WANTED EVERYWHERE.
Write for Particulars.

There are at present writing 12,000 of our Lubricators in use.

The American Lubricator will be shipped on trial to any part of the United States.

Correspondence from foreign countries solicited.

Directions to apply and operate the Lubricator will be sent with each machine.

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With the American Lubricator you can regulate the consumption of oil to the exact quantity required for relief of friction to the valves, valve stems, piston and rod, also the packings, and necessarily reduce the wear of said parts. Poppet valves cushion with ease on oiled seats; the actual horse-power is increased, and the consumption of fuel accordingly lessened, hence the value of positive and even lubrication. All automatic engines are regulated in speed by the earlier or later cut-off of steam to the cylinder, said cut-off being effected by a special valve gear, operated by the motion of the governor balls. This valve gear should move almost without friction, as the balls of the governor or regulator have no power, and are simply suspended on any plane by the velocity of their rotation. And, as it is only the rise and fall of said balls that impart the motion to the valves to cause them to cut off the steam at the proper point, it is obvious that said valves should be properly lubricated to insure regularity of speed.

The American is very easily applied, and neat, clean and durable, requires no watching, will save from 50 to 90 per cent. of the oil required by any other method; its visible feed and absolute regularity enables the engineer to reduce it to the finest feed movement without any danger of clogging; in some instances engineers are using but one drop of oil in two minutes. We have frequently been informed by engineers that they have run the American as fine as one drop in five minutes, to test its sensitiveness.

We make Brass Castings of every description to order, Prices reasonable.

DESCRIPTION.

A. Oil discharge valve. **B.** Water feed valve. **C.** emptying valve. **D.** Filling plug.
E. Connecting end to steam pipe of engine. **F.F.** Water reservoir or condenser.
G.C.C. Oil chamber. **H.** Glass feed and oil indicator connecting and forming part of oil chamber. **J.** Syphon tube, for discharging water from condenser to oil chamber.
K.K. emptying syphon. **L.** Passage leading from steam pipe of engine to condenser
F.F. M. Passage for discharging oil from oil chamber to steam pipe of engine. **N.** Plug to be removed for inserting a glass tube.

Principle of Operation.

Steam enters **L.** and condenses in **F. F.** filling same with distilled water which enters angular passage **P.** passing regulator valve **B.** entering syphon tube **J.** discharged in regulated quantities into oil in glass tube **H.** sinking to bottom through oil which in turn is elevated and passes into **M.** (opened by valve **A.**) thence into steam pipe of engine where it infuses the passing steam, thus lubricating the entire interior of the engine with a regularity and completeness unapproachable by any other device known.



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BEWARE OF INFRINGEMENTS.

Our attention has frequently been directed to the fact that several parties are infringing our first United States patent by using the elevated water reservoir, suspended oil cup and inverted syphon tube, and a number of other details. NO LUBRICATOR CAN USE OUR PRINCIPLE OF FEEDING OIL, WITHOUT INFRINGING OUR PATENT OF 1876. We are determined to have the redress which properly belongs to us, and for that reason we are issuing 100,000 copies of this circular for distribution in the United States alone. We have found by experience that as soon as we have broken up one hive of infringers, another would spring up in some other part of the country.

We ask the public to be guarded against adopting any Lubricator containing any of our patented parts.

Respectfully,

American Lubricator Co.,

Detroit Mich., United States, America.

