(No Model.)

J. STUBBE.

WIRE OILING DEVICE.

No. 296,645. Patented Apr. 8, 1884.

Fig. 1

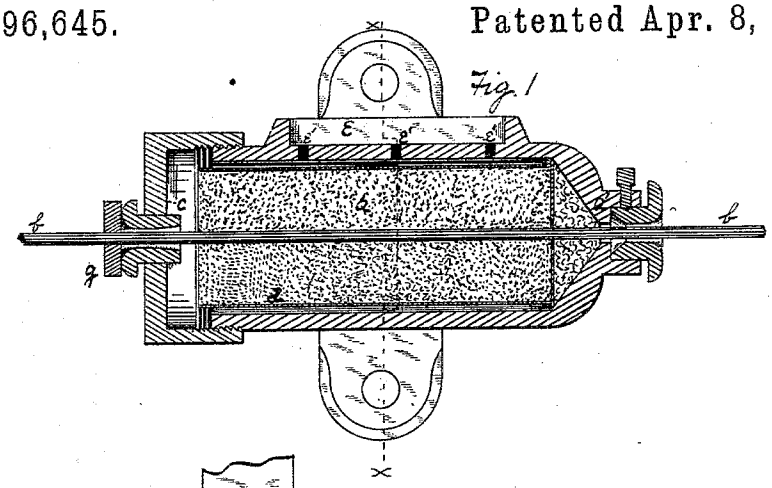


Fig. 2

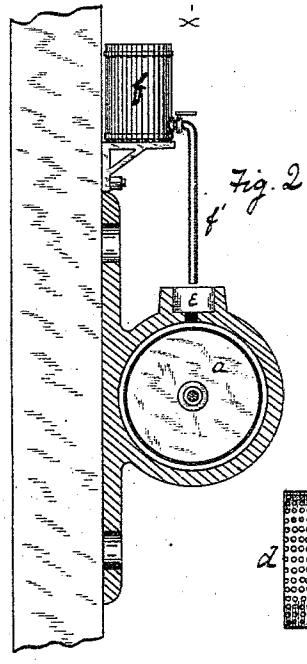
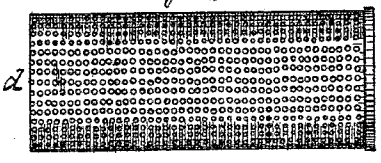


Fig. 3



Fig. 4



Witnesses.
Jno. K. Smith
L. C. Fitler

Inventor.
John Stubbe
by Bakewell & Kerr
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UNITED STATES PATENT OFFICE.

JOHN STUBBE, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO JAMES B. OLIVER, OF SAME PLACE.

WIRE-OILING DEVICE.

SPECIFICATION forming part of Letters Patent No. 296,645, dated April 8, 1884.

Application filed February 1, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN STUBBE, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Wire-Oiling Devices; and I do hereby declare the following to be a full, clear, and exact description thereof.

In the manufacture of barbed fence-wire it is customary to oil the wire before it is put through the barbing-machine, so that it shall pass through the guides of the latter with minimum friction. The usual way of oiling is to dip the hank or coil into a bath of oil, or to pour the oil over it. The objection to this plan is that the oil is not perfectly applied, and the waste is very great, as the oil remains on the surfaces and in the interstices of the inner coils and cannot be dripped or drained out, but remains until the coil is unwound, when it drops or runs down and is lost. Moreover, the waste oil falls on the floor and other surrounding objects and makes them very dirty and disagreeable, as well as increases fire risks. My invention is designed to prevent this loss and inconvenience, and at the same time to effect the perfect oiling of the wire, as well as cleaning of any irregularities and scale adhering thereto.

To enable others skilled in the art to make and use my invention, I will now describe it by reference to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical longitudinal section of my improved wire-oiling device. Fig. 2 is a vertical cross-section on the line *x x*, Fig 1. Figs. 3 and 4 are views of parts of the device.

Like letters of reference indicate like parts in each.

The case *a*, which contains the oil-applying medium, is preferably of cylindrical shape, having a tapering end, *a'*, provided with a hole for the exit of the wire *b*. The other end is closed by a cap, *c*, screwed or otherwise removably fastened thereto. This cap has a central opening for the entrance of the wire, and a conical or concave face for convenience in guiding the end of the wire into the hole. Placed inside of the case *a* is a removable perforated cylinder, *d*, which is used for convenience in packing the oil-applying medium and of putting it in and removing it from the case *a*. It is also useful because it allows the oil to pass down between it and the sides of the case *a*, and so gain access to the oil-applying medium on all sides through the perforations. On the upper side of the case *a* is an oil cup or trough, *e*, which communicates with the interior of the case by means of holes or slots *e'*. A suitable reservoir, *f*, having a feed-pipe, *f'*, leading to the cup *e*, may be provided, so that a supply may be fed constantly to the latter, and thereby obviate the necessity of filling it frequently. A wire wiper or die, *g*, having a bore of proper diameter to permit the passage of the wire, may be placed at the end *c*. This die is made of steel, and has the effect of removing roughness and superfluous scale and coating material from the surface of the wire, and also of straightening it and preparing it for passing through the oiling-box and barbing-machine. The material best adapted for use in the oiling-box for applying the oil is sawdust, for the reason that it will become saturated with oil and pack tightly without solidifying into an impenetrable mass. Other suitable material may be used in the box, if desired.

The cylinder *d*, being filled or packed with sawdust, is placed in the box *a*, the end *a'* of which is filled with wool, waste, or other suitable material to prevent the wire from dragging the sawdust through with it. The oil, passing down through the holes *e'* and around the cylinder *d*, enters the perforations and saturates the sawdust. The end of the wire *b* is passed through the die *g*, and lengthwise through the box *a*. The sawdust being saturated with oil, the latter is applied evenly and properly to the wire. Having a wiping action, the sawdust removes all surplus oil from the surface of the wire and gives it a smooth and uniform coating of oil.

If desired, some wool may be placed at or about the middle as well as at the outer end of the box, to aid in keeping the sawdust in position.

The cylinder *d* may be dispensed with; but I prefer it for the reasons stated.

I do not limit myself to a cylindrical or any other particular form for the box *a* and its inner casing, *d*.

I do not claim the use of sawdust or similar material, as that was the invention of James B. Oliver, and forms the subject-matter of an application of even date by him for Letters Patent thereon.

Having thus described my improvement, what I claim as my invention, and desire to secure by Letters Patent, is—

1. The wire-oiler consisting of the box filled with an oil-absorbent material, having perforated ends for the passage of the wires, and an oil-cup communicating therewith, substantially as and for the purpose described.

2. A wire-oiler consisting of a suitable box, a removable perforated inner case suitable for containing oil-saturated material, and an oil-cup communicating with the interior of the box, substantially as and for the purpose described.

3. The combination of the die *g* with the wire-oiling device, substantially as and for the purposes described.

In testimony whereof I have hereunto set my hand.

JOHN STUBBE.

Witnesses:
J. P. DRYNAN,
ROBT. GARLAND.