J. A. MURPHY.

STEAMING PLUG.

APPLICATION FILED APR. 29, 1916.

1,209,869. Patented Dec. 26, 1916.

Fig. 2.

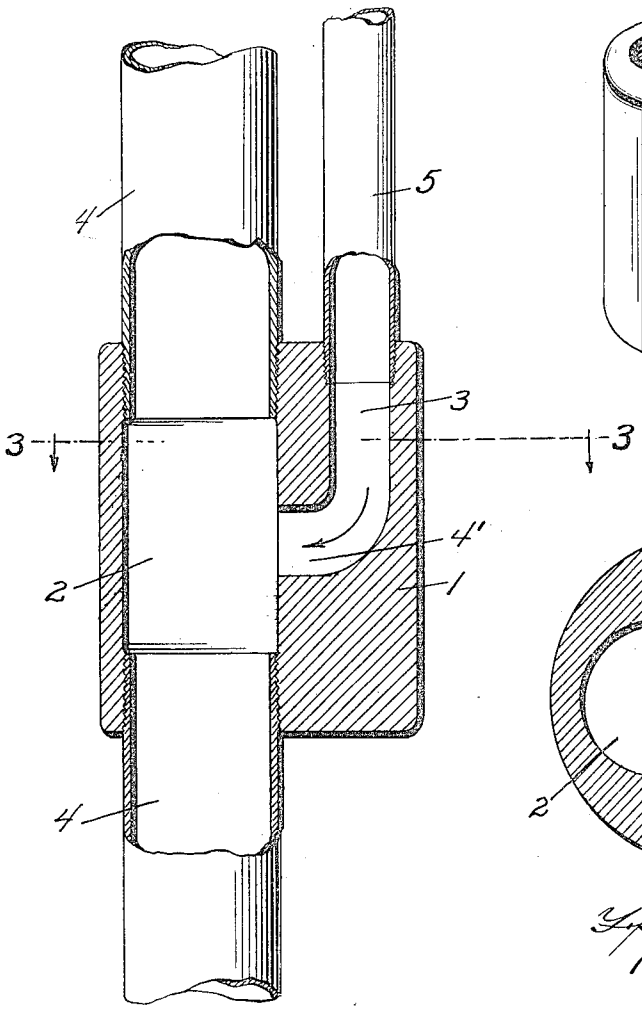
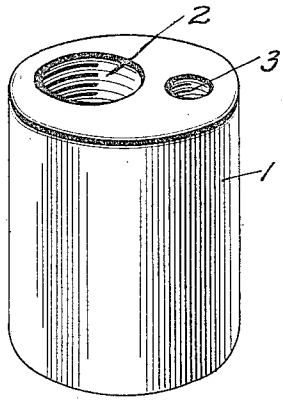


Fig. 1.



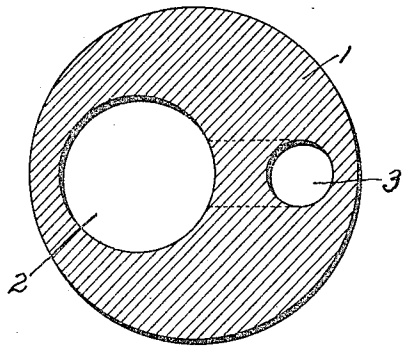


Fig. 3.

WITNESS

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN A. MURPHY, OF PHILADELPHIA, PENNSYLVANIA.

STEAMING-PLUG.

1,209,869. Specification of Letters Patent. Patented Dec. 26, 1916.

Application filed April 29, 1916. Serial No. 94,375.

To all whom it may concern:

Be it known that I, JOHN A. MURPHY, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Steaming-Plugs, of which the following is a specification.

The object of this invention is to provide a novel device for preventing accumulation of paraffin in the casing of oil wells, and, in its nature, comprises a steaming plug, which may be suitably disposed in the casing at whatever distance below the ground is desirable, and which is provided with a longitudinally-extending bore communicating, at its ends, with the oil-well pipe and provided, also, with a steam-port communicating, at one end, with said bore and, at its other end, with a steam-pipe. Steam from the steam-pipe is blown through the plug into the oil-well pipe, thus freeing the latter of accumulation of paraffin and permitting free flow of the crude oil.

Another object is to provide a steaming-plug which is simple in construction, which is cheap to manufacture, and which is thoroughly efficient in operation.

In the accompanying drawing, forming part of this specification, and in which like reference-characters denote corresponding parts throughout the several views: Figure 1 is a perspective view of my steaming-plug; Fig. 2 is a view in central vertical section of my steaming-plug, showing, partly broken away, the oil-well pipe and steam-pipe communicating therewith; Fig. 3 is a horizontal section, on the line 3—3, Fig. 2.

Referring, now, in detail to the drawing: 1 designates my steaming-plug, which is a casting preferably annular in cross section, and provided with a longitudinal bore or opening 2 preferably threaded at both ends thereof for engagement with the threaded ends of oil-well pipe sections 4, 4. The plug is also provided with a port 3 preferably parallel with the bore 2 and having a bent inner end 4 communicating with said bore. The outer end of the port 3 is threaded, preferably, as shown in Fig. 2, for engagement with the threaded end of a steam-pipe 5. The port 3 is preferably of smaller diameter than the opening or bore 2.

In operation, steam from the pipe 5 is blown through the port 3 into the bore 2, and thence through the pipe 4, thereby freeing the latter from paraffin which tends to accumulate therein, and permitting easy flow of the crude oil.

While, for the purpose of complying with the patent statutes, I have described with particularity a concrete embodiment of my inventive ideas, it will be understood that departures in detail from the physical presentment herein disclosed may be made, within the scope of the appended claim, without departing from the spirit of the invention, or sacrificing any of its advantages.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:

The combination with two vertically-disposed and vertically alined sections of an oil-well suction-pipe, the adjacent ends of said sections being exteriorly screw-threaded, of a cylindrical casting having a longitudinally-extending bore, the wall of which, at each end, is screw-threaded and engaged by the threaded ends of said pipe-sections, said casting having, also, a port extending parallel, and at its inner end communicating, with said bore, the wall of said port, at the outer end, being screw-threaded, and a vertically-disposed steam-pipe having an exteriorly-threaded end screwed into the threaded outer end of said port.

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

JOHN A. MURPHY.

Witnesses:
THOS. A. EVERLY,
WM. B. MCLAUGHLIN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."