

UNITED STATES PATENT OFFICE.

ELIZUR NEWBERRY, OF TITUSVILLE, PENNSYLVANIA.

IMPROVEMENT IN TOPICAL HEATERS FOR OIL-WELLS.

Specification forming part of Letters Patent No. 118,384, dated August 22, 1871.

To all whom it may concern:

Be it known that I, ELIZUR NEWBERRY, of Titusville, Crawford county, State of Pennsylvania, have invented an Improved Apparatus for Cleansing and Opening the Crevices in Oil-Wells, of which the following is a specification, reference being had to the accompanying drawing, of which—

Figure 1 is a sectional view; Fig. 2, a cross-section; Fig. 3, a view of the graduated chain, showing a tied link every foot; Fig. 4, a view of link for every ten feet; Fig. 5, a view of link for every one hundred feet; and Fig. 6, a perspective view of the method employed in heating.

The object of my invention is, first, to reach with exactness the crevices in artesian wells sunk for the purpose of obtaining oil; and second, to cleanse and open those crevices by boiling and dissolving the paraffine and other impurities with

which they are generally clogged.

For this purpose the round bar A, of copper, brass, iron, or other metal, of diameter and length suitable to the size of the hole, is laid upon the iron forks BB driven into the ground, and heated over a fire to as great a heat as can be obtained

short of the melting-point. It is then lowered into the well by the graduated chain C, measured off so as to allow of its suspension directly opposite to the oil-bearing crevices.

The intense heat of the bar will cause the water to boil in the well and crevices adjoining and melt and clear out the paraffine and other substances clogging them. Every fifth link of the chain, making one foot in length, is designated by a tie or cross-bar; every ten feet in length of the chain is placed a link marked x, xx, &c.; and every one hundred feet a link marked c, cc, &c.

The inelasticity of the chain and the freavy weight of the bar at the end will obviate all the difficulty here experienced in making a correct measurement of the depth of a well—a fact upon which depends all the efficacy of any methods employed to clear the crevices.

I claim—

The heated bar A, in combination with the graduated chain C, for the purposes above set forth.

ELIZUR NEWBERRY.

Witnesses:

HENRY E. WRIGLEY, ARCHIE R. GRAY.