(No Model.)

W. E. SMITH.

DRIFT.

No. 462,456. Patented Nov. 3, 1891.

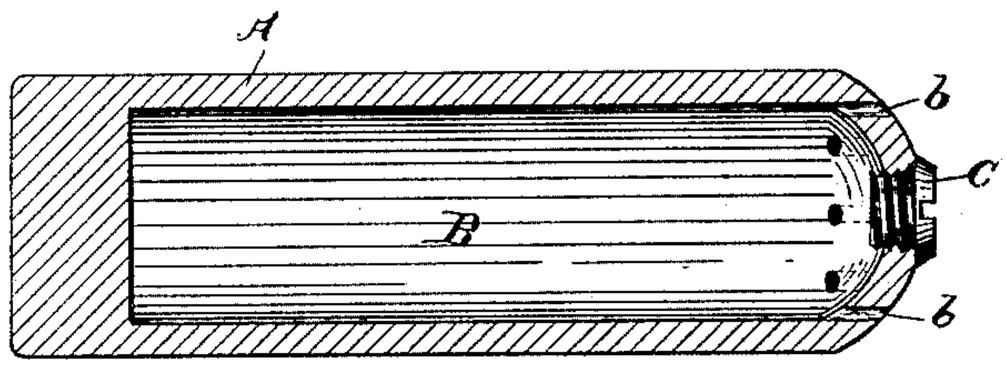

FIG. 1

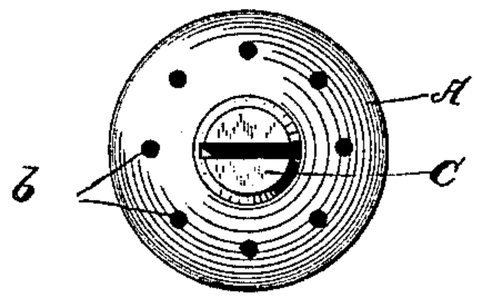

FIG. 2.

WITNESSES.
Belle S. Lourie.
Wm. Clark

INVENTOR.
Walter E. Smith,
By Joseph W. A. Osborn,

ATTORNEY.

UNITED STATES PATENT OFFICE.

WALTER E. SMITH, OF CLEVELAND, OHIO.

DRIFT.

SPECIFICATION forming part of Letters Patent No. 462,456, dated November 3, 1891.

Application filed March 28, 1891. Serial No. 386,796. (No model.)

To all whom it may concern:

Be it known that I, WALTER E. SMITH, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Drifts; and I do hereby declare the following, with the accompanying drawings, to be a full, clear, and exact description of my said improvement, such as will enable others skilled in the art to which it relates to make and use the same.

My invention relates to plumbers' drifts used in straightening lead pipes.

The object of my invention is to provide means whereby the drift and the pipe through which it is driven may be kept oiled at all times to make it easier to drive the drift and to avoid the drift's sticking at places in the pipe.

My invention consists in the novel features of construction shown in the drawings, described herein, and defined in the claim.

In the drawings, Figure 1 is a longitudinal section of my improved drift, and Fig. 2 is a view of the front end of the same.

Heretofore plumbers' drifts have been made solid, and before being driven they have been greased over the exterior surface that they might be more easily driven through the pipe. After being driven a couple of feet the grease would be rubbed off from the surface of the drift, and thereafter it would be hard to drive. By providing such drifts with an oil-chamber and means for allowing a discharge of the oil from the chamber as the drift is driven I obviate this difficulty.

A is the shell of the drift, which has a chamber B, as shown in Fig. 1. Discharge-openings *b b* are formed through the head of the drift. An opening in the center of the head of the drift provides means for filling the chamber with oil. A screw-stopper C closes the feed-opening. I prefer to make the drift of malleable iron or other suitable metal, though it may be made of wood. The advantage of making the drift of metal is that it may be driven with an iron or steel bar without battering the butt-end of the drift.

In the use of my improved drift I remove the stopper C and fill the chamber B through the feed-opening in the drift-head with oil. The stopper is then replaced, and the drift is heated warm enough to make the oil limpid. The drift may be heated before being filled. I then place the head of the drift within the pipe and drive it in the usual way. Each time the drift is struck the concussion forces oil out through the discharge-openings *b b*, and so oils the pipe inside through the whole travel of the drift.

What I claim as my invention, and desire to secure by Letters Patent, is—

A drift having an oil-chamber therein, a feed-opening to fill the oil-chamber, and discharge-openings to allow oil to escape from the chamber as the drift is struck while being driven through a pipe, substantially as shown and described.

WALTER E. SMITH.

Witnesses:
J. A. OSBORNE,
J. F. CLARK.