

A. HARRIS.

Improvement in Strainer-Pipes.

No. 129,025.

Patented July 16, 1872.

Fig. 1.

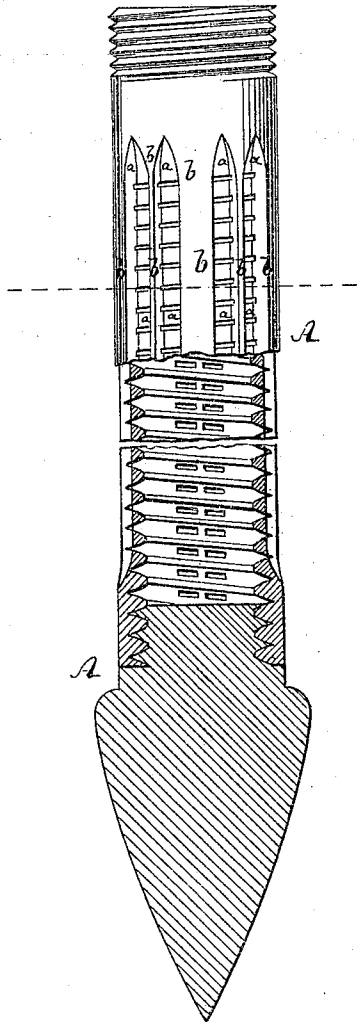


Fig. 2.



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UNITED STATES PATENT OFFICE.

AMOS HARRIS, OF MINNEAPOLIS, MINNESOTA.

IMPROVEMENT IN STRAINER-PIPES.

Specification forming part of Letters Patent No. 129,025, dated July 16, 1872.

Specification describing a new and useful Improvement in Strainer-Pipe, invented by AMOS HARRIS, of Minneapolis, in the county of Hennepin and State of Minnesota.

Figure 1 is a sectional side view, and Fig. 2 is a transverse section, of my invention.

Similar letters of reference indicate corresponding parts.

This invention relates to a new manner of perforating pipes to be used in oil-wells and other places, so that they will serve as strainers for water or other liquids. The invention consists in grooving such pipe longitudinally on one side, and in cutting a screw-thread along its other side to such depth that the spiral grooves will be deeper than the material left under the longitudinal grooves. This will cause a perforation to appear at every crossing of a spiral and longitudinal groove on opposite sides of the pipe. A very fine and regular system of strainer is thus produced, which will be cheap to produce, of great strength, and more convenient to handle than the tubular strainers now in use.

A in the drawing represents a section of pipe of suitable length, diameter, and thickness, and material. Into its outer face are cut, by means of a planing-knife or other tool, a series of grooves, *a a*, lengthwise, though they may also be more or less oblique, or slight-

ly spiral. Between these grooves are left to project as many ribs *b b* as there are grooves. Into the inner side of the tube is cut a spiral screw-thread of suitable pitch and width, and of such depth as to cut through the thin parts of the tube, perforating it wherever there is an outer groove, *a*, and cutting slightly into the ribs *b*. In this manner the perforations can be produced as close together, as wide, and long as desired.

A pipe thus prepared will be particularly useful for wells, as the apertures formed by the screw-thread can be made wider on the inner than on the outer part to prevent clogging. The pipe may also be grooved lengthwise on the inner and threaded on the outer side for the same or other purposes. If made of iron, I prefer to galvanize the pipe after it is cut and previous to using it.

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

A strainer-pipe, perforated by having a screw-thread on one side and longitudinal grooves or channels on the other side, as specified.

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Witnesses to signature:

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