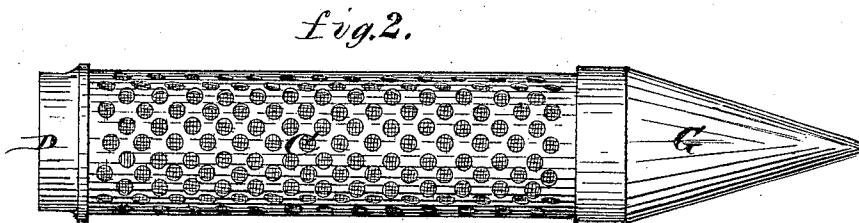
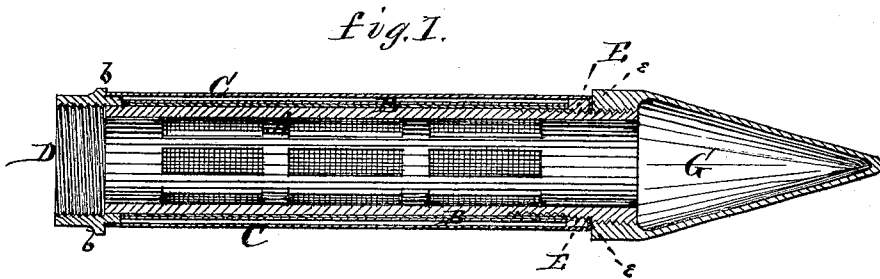


D. A. DANFORTH & A. N. CHAMBERLAIN.

Improvement in Well-Point Filters.

No. 128,126.

Patented June 18, 1872.



Witnesses

J. A. Kelly.  
J. P. White.

Inventor

D. A. Danforth & A. N. Chamberlain

Per,

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# UNITED STATES PATENT OFFICE.

DELOSS A. DANFORTH AND ALBERT N. CHAMBERLAIN, OF ELKHART, IND.

## IMPROVEMENT IN WELL-POINT FILTERS.

Specification forming part of Letters Patent No. 128,126, dated June 18, 1872.

### SPECIFICATION.

*To all whom it may concern:*

Be it known that we, D. A. DANFORTH and A. N. CHAMBERLAIN, of Elkhart, in the county of Elkhart and State of Indiana, have invented certain new and useful Improvements in Well-Point Filters; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon which form a part of this specification.

The nature of our invention consists in the construction and arrangement of a filter and point for well-tubes, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a longitudinal vertical section, and Fig. 2 is a side view of our filter and point.

A represents a malleable-iron stock or inside framework, over which the screen B and shield C are placed. D is a coupling attached to the upper end of the stock or frame A, and on the outside of the lower end of said frame are screw-threads, as shown, upon which a jam-nut, E, is placed. The screen B is held on the frame at the end of the coupling D and the jam-nut E. This screen is double, thereby making it a perfect filter, one that will work in quicksand, and keep out the finest sand. By doubling the screw it renders it less liable to be spoiled or torn in putting it down. The outside covering or perforated shield C is held at its upper end against a shoulder, *b*, on the coupling, and at its lower end is an inward-turned flange, *e*, which comes under the jam-

nut E. The hollow point G is then screwed up against said flange and nut, thus holding the shield firmly in its place.

Our mode of putting these filters down is as follows: We screw a heavy coupling, rimmed at the lower end, onto ordinary gas-pipe. By forcing this with the coupling end down, the coupling being larger than the pipe, forces the dirt inside of the pipe; and after driving a few feet withdraw the pipe and rap on the same when the dirt will fall out. Repeat this operation until the required depth is obtained, then screw on the filter and force it to its place.

When putting down our filter through clay when it is puddled, we wrap it with coarse paper and tie with paper twine. The filter is, by this means, kept clean, when otherwise it would be filled up more or less. The water soon dissolves the paper and twine.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The double screen B, used in combination with the malleable-iron frame A, shield C, coupling D, jam-nut E, and hollow point G, all constructed and arranged as shown and described, and for the purposes herein set forth.

2. The method of passing a filter through clay by wrapping the same with paper, substantially as herein set forth.

In testimony that we claim the foregoing as our own we affix our signatures in presence of two witnesses.

D. A. DANFORTH.

A. N. CHAMBERLAIN.

Witnesses:

B. TURNOCK,

GEO. M. COLBURN.