

No. 697,642.

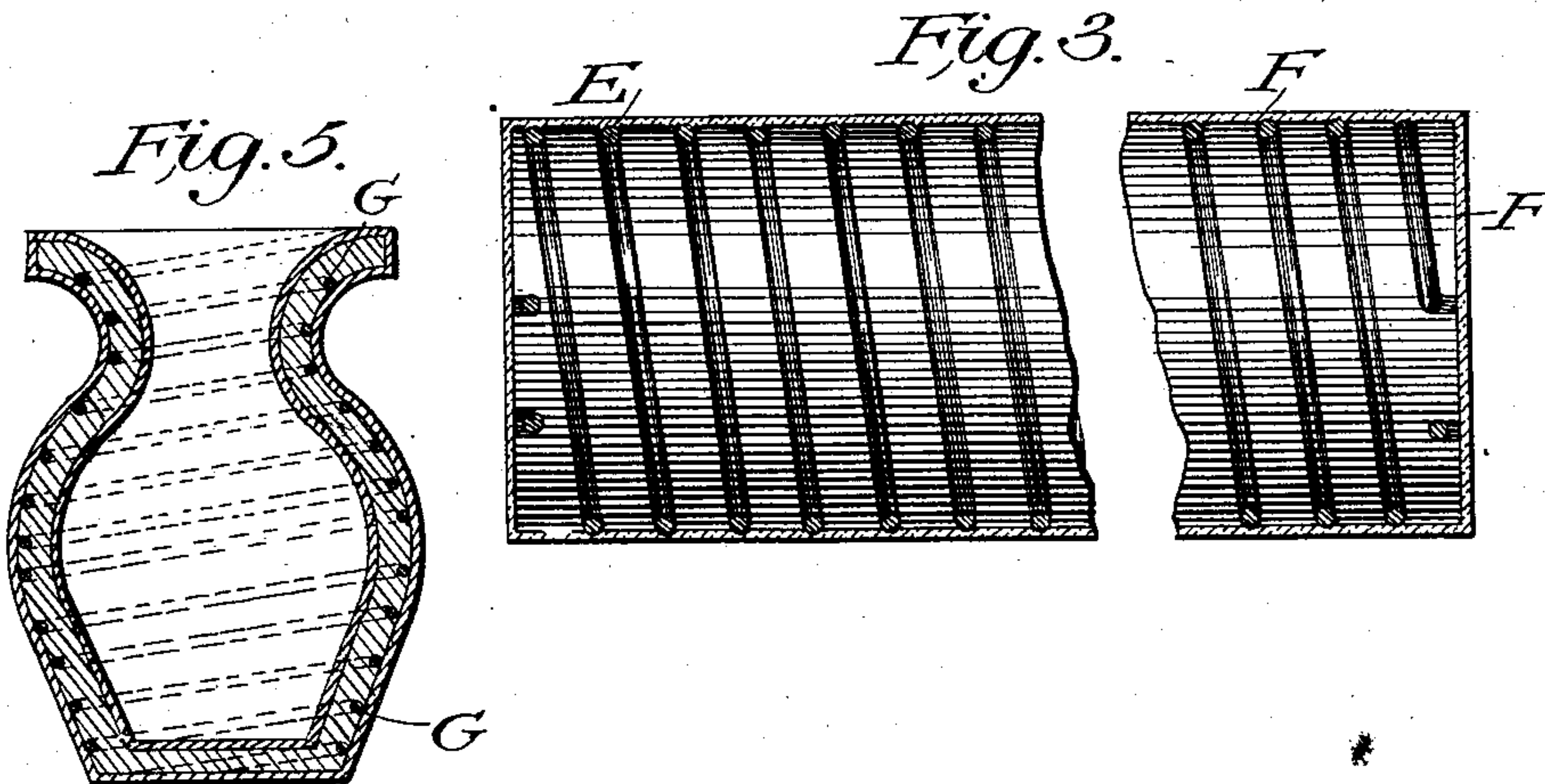
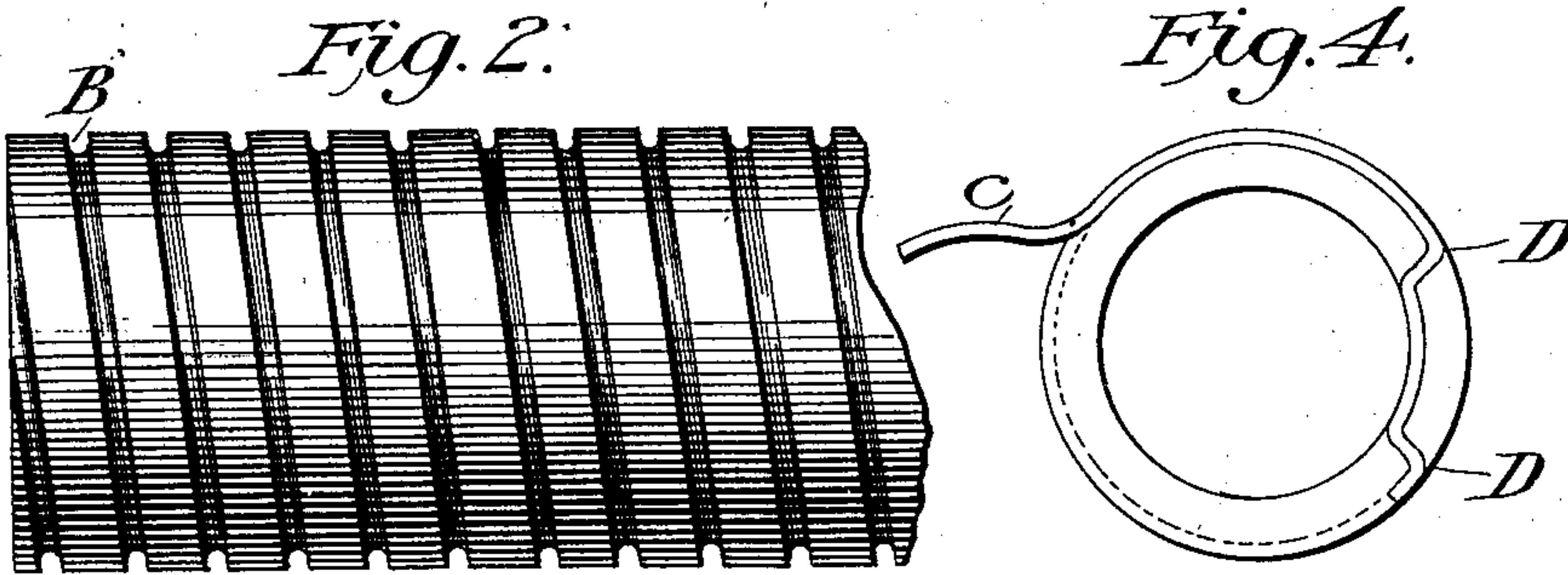
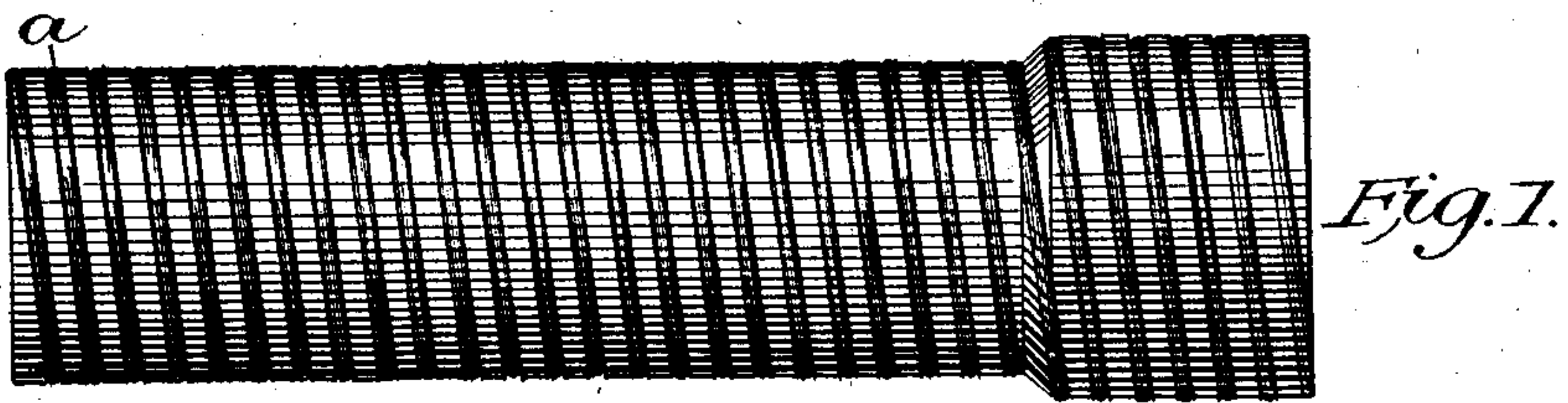
Patented Apr. 15, 1902.

L. MILLET.

PROCESS OF STRENGTHENING CLAY HYDRAULIC PIPE, VASES, CROCKERY WARE, &c.

(Application filed Mar. 8, 1901.)

(Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

LIBERTY MILLET, OF HAGERMAN, IDAHO.

PROCESS OF STRENGTHENING CLAY HYDRAULIC PIPE, VASES, CROCKERY-WARE, &c.

SPECIFICATION forming part of Letters Patent No. 697,642, dated April 15, 1902.

Application filed March 9, 1901. Serial No. 50,519. (No model.)

To all whom it may concern:

Be it known that I, LIBERTY MILLET, a citizen of the United States, residing at Hagerman, in the county of Lincoln and State of Idaho, have invented a new and Improved Method of Strengthening Pipe and other Pottery Articles; and I attain this object by the means and in the manner illustrated in the accompanying drawings; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making the same a part of this specification.

Figure 1 represents a section of pipe wound with wire or iron rods before the glazing is applied. *a* is the wire. Fig. 2 represents section of pipe, showing grooves prepared for the reception of the wire or rod, *B* being the groove. Fig. 3 shows section of pipe after glazing, it then being complete. *e* is the wire. *F* is the glazing. Fig. 4 shows end of pipe with manner of fastening wire or rod to same, *c* being wire or rod. *D D* are the grooves in which the wire or rod is seated. Fig. 5 shows a pottery article when completed. *G G* represent the wire around the same.

After glazing is applied, the wire being entirely covered, the article presents a hard and smooth outside and inside surface.

This invention is especially valuable in this that it gives pipe and pottery articles sufficient strength to bear handling without breakage and to resist almost any pressure from without or within, thus giving pipe and pottery articles a durability beyond anything now in use. The pipe will possess advantages over any now in use in this that it will be unequalled in cheapness and of perfect cleanliness. It also has another advantage over iron or wooden pipe. Water may be kept out of it when desired for any length of time, and it will be ready for immediate use. It is a well-known fact that wooden pipe not in use after having once contained water will shrink, which causes it to leak and often become worthless. The contraction or expansion of iron or steel pipe is such that being out of use for some time it becomes necessary to relay and repair the same before be-

ing again used. Various methods have been devised for preserving pipe and extending its usefulness; but none of them have proven very successful. With the best care and treatment possible hydraulic pipe at best is of short duration. My purpose is to obviate these objections and place on the market an all-purpose pipe at a cost below anything now known. I accomplish these objects in the following manner: Pipe of the required size is first molded from clay suited to the purpose. It is then placed in a kiln and burned to the proper consistency. Then it is placed in a machine suited to the purpose, and a groove is cut around and around the pipe for the reception of the wire or iron rod, as the case may be. Then a coat of glazing is applied both inside and outside, when it is ready for use.

The glazing on the inside prevents any substance from adhering to the pipe and keeps water always pure and clean.

The glazing I apply with a brush; but any method of glazing pottery articles may be used to advantage.

The purpose of wrapping wire around the outside of pottery articles is to strengthen the same, permitting them to be handled with little danger of breakage.

The purpose of wrapping wire around the pipe is to cause it to resist great pressure. If additional strength is needed, the sections of pipe or pottery articles may be grooved and wired lengthwise.

The purpose of glazing pottery articles and pipe is to prevent rust or erosion, contraction, and expansion of the wire or iron rods. The difficulty heretofore has been that the wire or iron bands used have been left exposed, with no protection except paint or coal-tar, and expansion and contraction soon loosens the wrapping and it no longer answers the purpose. Then, again, the wire and bands are subject to rust or erosion, and in this manner soon become injured, and the pipe is no longer serviceable. All these objections I propose to obviate.

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

The method of strengthening pipe and

other pottery articles by first burning the
same to the proper consistency, then groov-
ing the same around the outside, then wrap-
ping wire or iron rods tightly in the grooves,
5 then applying the glazing to form a hard and
smooth surface.

In testimony whereof I have signed my

named to this specification in the presence of
two subscribing witnesses.

LIBERTY MILLET.

Witnesses:

HENRY A. SECOR,
J. P. McMEEKIN.