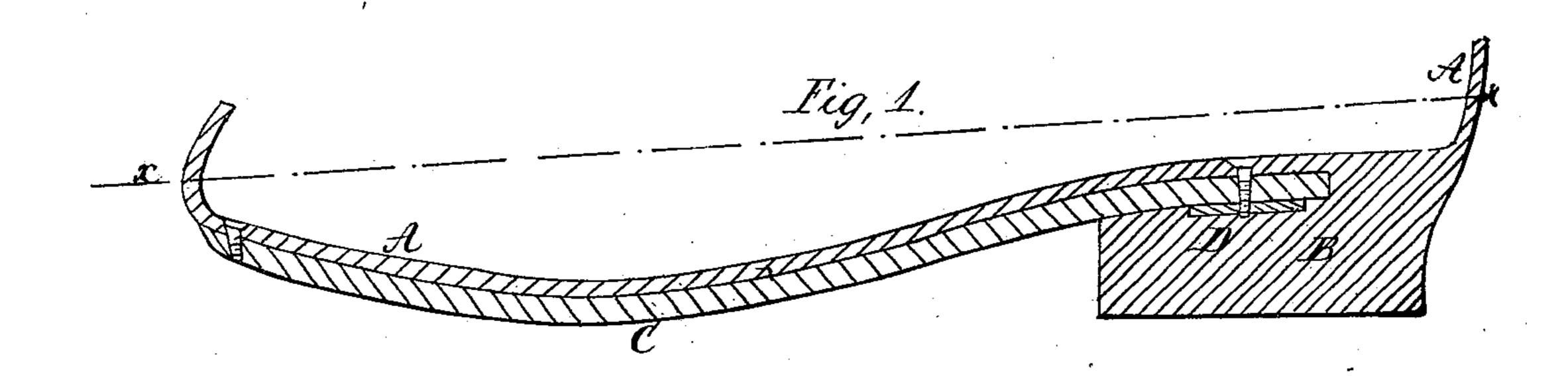


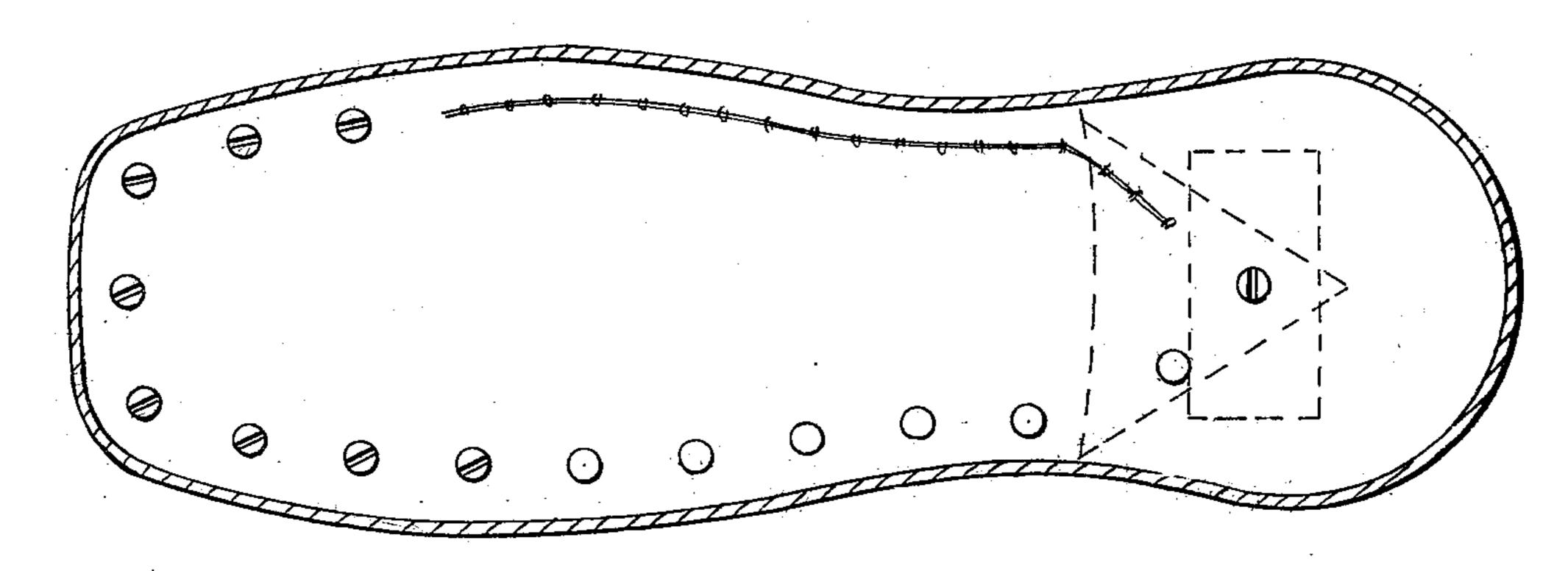
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Fig, 2.



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Inventor Francis Phynn DE Somest & Mis attorneys

Anited States Patent Office.

FRANCIS FLYNN, OF WOONSOCKET, RHODE ISLAND.

Letters Patent No. 96,412, dated November 2, 1869.

IMPROVEMENT IN SOLES OF RUBBER BOOTS AND SHOES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, Francis Flynn, of Woonsocket, in the county of Providence, and in the State of Rhode Island, have invented a new and useful Improvement in Boots and Shoes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 represents a longitudinal vertical section of such portion of a rubber boot as is necessary to illustrate my improvement.

Figure 2 is a section in line x x of fig. 1.

The nature of my invention consists in providing rubber boots, shoes, and such like articles, with a leather sole, while the rubber is still in the plastic state, and afterward subjecting such shoes, boots, &c., together with the leather sole thus attached, to the vulcanizing-process.

Hitherto it has been considered infeasible to fasten a leather sole to rubber boots, shoes, &c., before they had been vulcanized, because it was believed that the heat required for such process would inevitably destroy the qualities of the leather.

After many experiments I have found that oak leather is an exception to this rule, and that it will stand such heat without loosing its qualities.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction.

In the annexed drawings—

A represents a rubber boot;

B, the heel;

C, the leather sole; and

D, a metal plate, embedded in the heel.

These parts are constructed and united together in the fonowing manner:

The heel is first prepared and vulcanized, having suitable recesses formed in it for the reception of the tongue of the leather sole and the metal plate.

This latter is then placed in the heel and upon it the tongue of the sole, the plate having first been tapped in the proper place. The rubber sole of the boot is then formed by spreading a sheet of sufficient thickness, of prepared gum, upon the leather sole and the heel adhering thereto.

For additional security the leather sole may then be screwed to the rubber sole, as shown in the drawings, or it may be tacked or sewed thereto, if preferred.

It is desirable to use a screw in the heel, penetrating the rubber and leather sole, and screwing into the metal plate, so that the heel may be more firmly secured.

The formation of the boot, shoe, &c., is then to be completed, after which it is placed in the vulcanizing heater and properly vulcanized. It can then be finished in any approved manner.

Having thus described my invention,

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

Attaching oak-tanned leather soles to soles of rubber boots and shoes, substantially in the manner described, and then causing them to adhere to rubber boots and shoes by the ordinary means of vulcanization.

The above specification signed by me, this 23d day of August, 1869.

FRANCIS FLYNN.

Witnesses:

EDWIN ALDRICH, EUGENE M. MASON.