

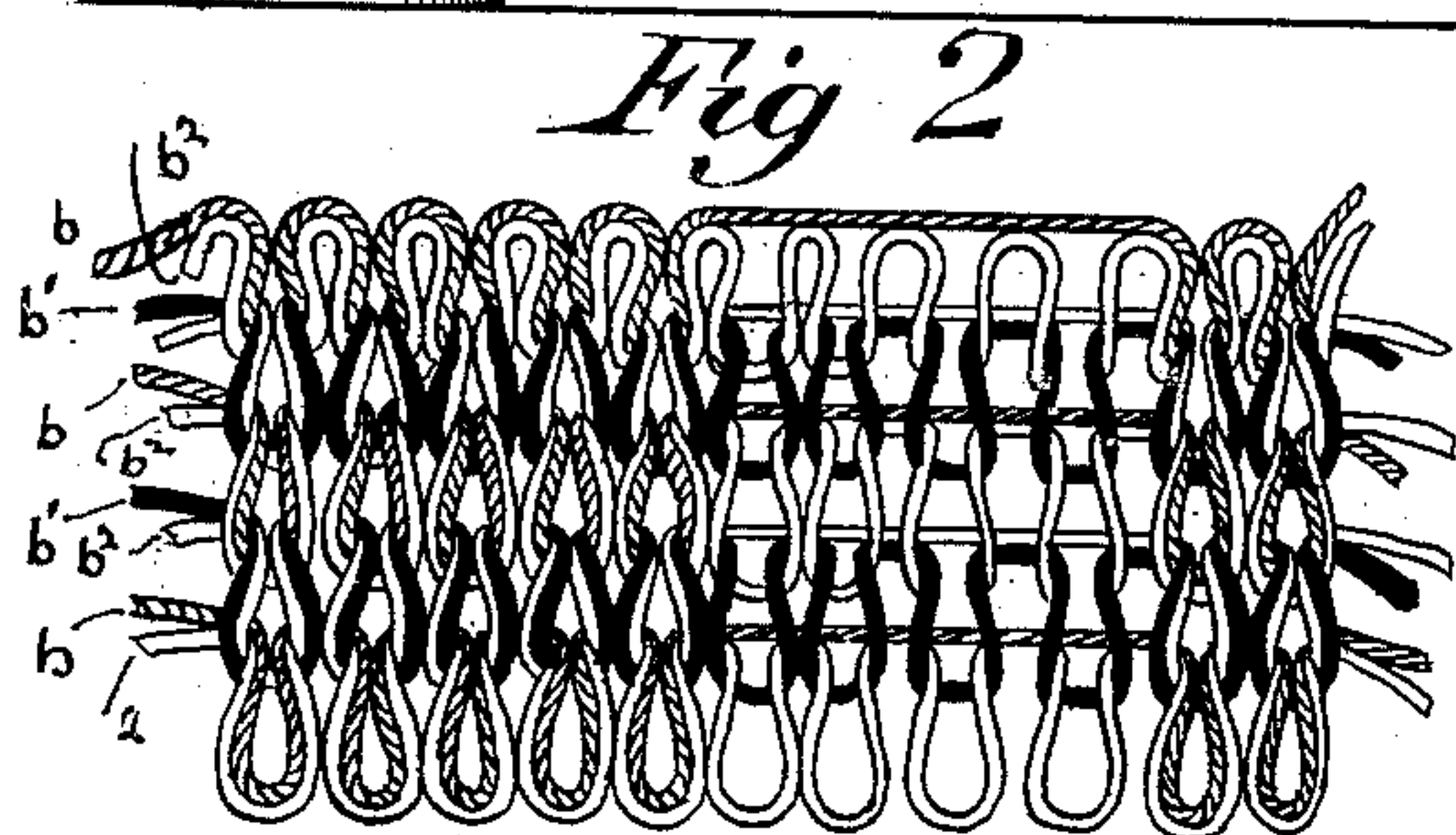
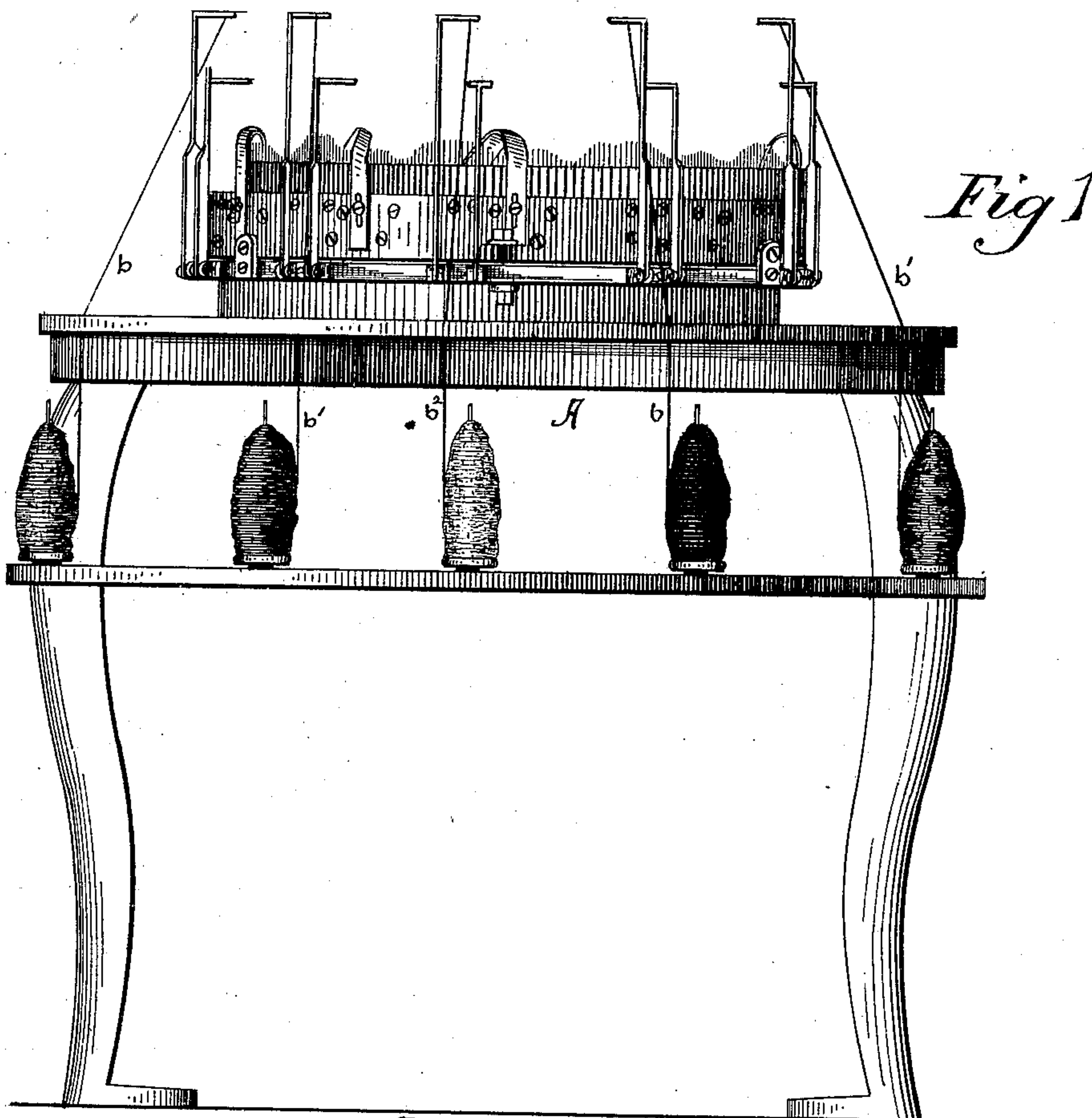
(No Model.)

W. H. DODGE & R. D. O. SMITH.

WOOLEN BOOT.

No. 376,373.

Patented Jan. 10, 1888.



Witnesses
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UNITED STATES PATENT OFFICE.

WALLACE H. DODGE AND ROBERT D. O. SMITH, OF MISHAWAKA, INDIANA.

WOOLEN BOOT.

SPECIFICATION forming part of Letters Patent No. 376,373, dated January 10, 1888.

Application filed October 17, 1887. Serial No. 252,620. (No model.)

To all whom it may concern:

Be it known that we, WALLACE H. DODGE and ROBERT D. O. SMITH, of Mishawaka, in the county of St. Joseph and State of Indiana, have invented new and useful Improvements in the Mode of Making Woolen Boots; and we do hereby declare that the following is a full and accurate description of the same.

This improvement relates to that class of woolen boots wherein the entire quantity of stock required for the leg and foot of the boot is knitted therein so that no wool-bats are required to make the boot desirably stiff. The Patent No. 367,333, granted to M. V. Beiger and A. Eberhart, July 26, 1887, sets forth the advantage of knitting over felting from wool-bats; and this invention is an improvement on said patent in providing a cheaper way of producing an all-knit boot with a sufficiency of stock to make the foot and leg desirably stiff; and it consists in forming the leg and foot by multiple, separate, or weft thread, knitting two or more yarns single twist of ordinary size simultaneously into the fabric, as hereinafter more fully described.

In the accompanying drawings, Figure 1 represents a machine for producing weft-thread knitting. Fig. 2 represents the weft-thread knitting-stitch produced on this machine. Fig. 3 represents said boot when completed.

The mechanism of this machine is not herein particularly described, because it is not particularly necessary to this invention, and the machine is not claimed herein.

We are aware that heretofore the foot and leg has been knitted with a single very coarse loosely-twisted yarn, which required carding, spinning, and knitting machines of unusually large size and expensive construction.

We are also aware that the leg and foot has been knitted with loosely-twisted yarn of ordinary size, several strands being passed simul-

taneously through the same needle, so as, in effect, to produce an exceedingly large yarn of several strands not twisted together; but this requires a knitting-machine as large as in the former case.

Our invention does not require any of the machinery concerned in the production of the boot to be of unusual size or character, and therefore the cost of production is reduced.

A is a weft-thread knitting-machine, taking two or more ordinary loosely-twisted yarns, singly and knitting them together in a multiple way in a single fabric, as shown in Fig. 2. In this way any desired quantity of stock may be knitted into the leg and foot of the boot, so that when the same is fulled and shrunk to size it will be thick and stiff like other woolen boots in the market, and as shown in Fig. 3.

The method of knitting hereinbefore referred to is not of our invention nor claimed by us.

Having described our invention, we claim—

The herein-described mode of making wool boots, which consists, first, in producing a boot of greatly exaggerated size containing a large amount of stock in a relatively loose condition by knitting two or more ordinary loosely-twisted yarns singly through weft-thread needles, substantially as described; second, in compacting the stock so prepared into a stiff felt by fulling and shrinking said boot, and, third, in finishing the same on tree and last.

WALLACE H. DODGE.

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Witnesses as to signature of Wallace H. Dodge:

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