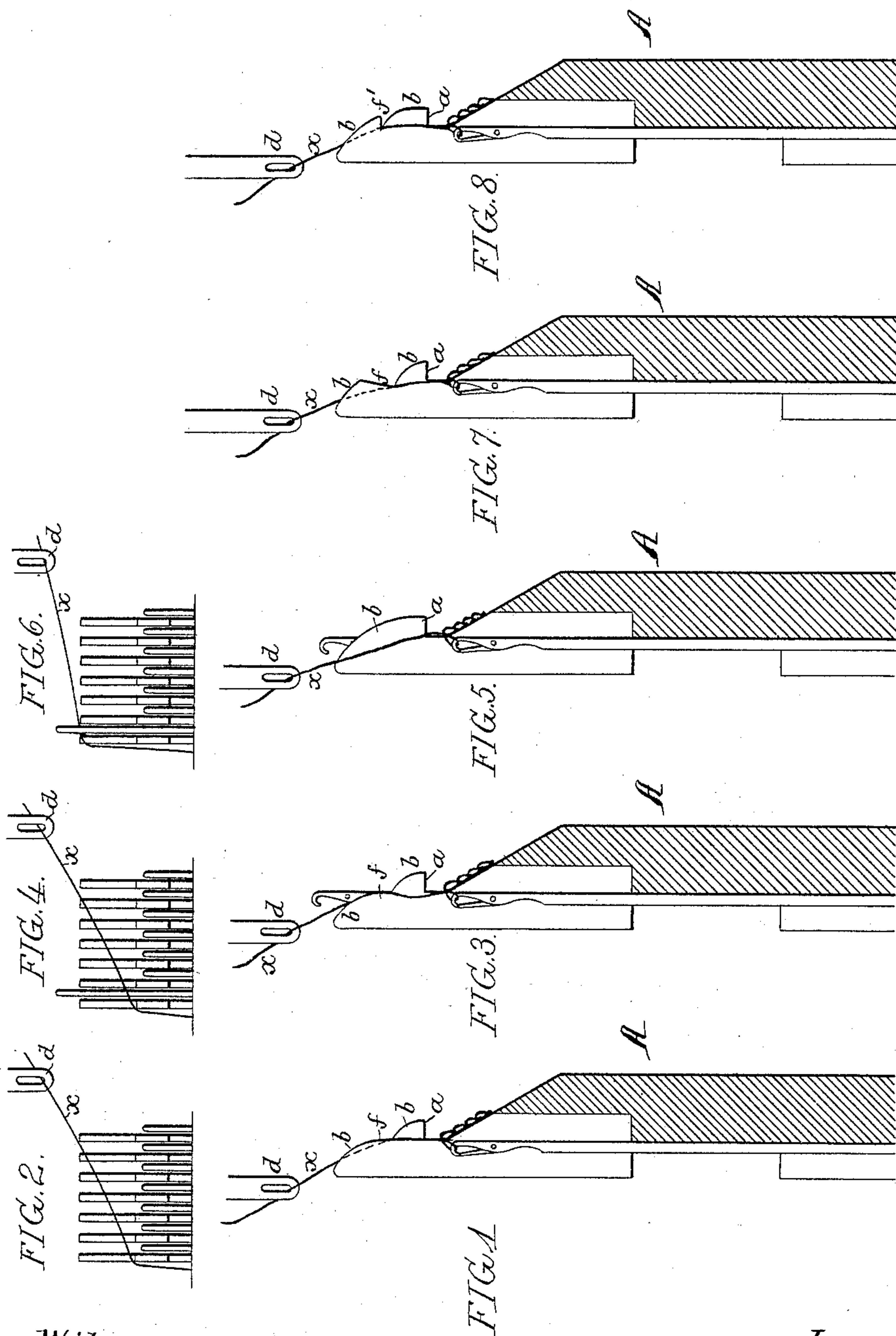


(No Model.)

G. H. GILBERT.
WEB HOLDER FOR KNITTING MACHINES.

No. 435,174.

Patented Aug. 26, 1890.



Witnesses:

Murray C. Boyer
A. V. Grouper.

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UNITED STATES PATENT OFFICE.

GEORGE H. GILBERT, OF PHILADELPHIA, PENNSYLVANIA.

WEB-HOLDER FOR KNITTING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 435,174, dated August 26, 1890.

Application filed April 24, 1890. Serial No. 349,252. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. GILBERT, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Web-Holders for Knitting-Machines, of which the following is a specification.

My invention relates especially to web-holders for knitting-machines of that class in which reciprocating or to and fro knitting is resorted to in order to form flat-fashioned webs or to narrow and widen a web for the purpose of forming a seamless heel or toe pocket upon a knitted tube.

The object of my invention is so to construct the web-holders that they will prevent the knitting-thread from passing to the front of the needles at the ends of the acting or fashioning set until after it has been wrapped around said needles, and will thus prevent the dropping of stitches by said needles. This object I attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

Figures 1 to 4 are diagrams illustrating my improved web-holder. Figs. 5 and 6 are diagrams illustrating the objection to the form of web-holder ordinarily employed, and Figs. 7 and 8 are views illustrating modified forms of my improved web-holder.

Knitting-machines, especially those intended for the production of seamless heel and toe pockets upon knitted tubes, are now commonly provided with web-holding plates arranged around the top of the needle cylinder or carrier A to prevent the rise of the work on or with the needles, each of these web-holders usually having a hook or projection *a* for bearing upon the upper edge of the knitted web to prevent the rise of the same and above said hook an outwardly curved or inclined face *b*, over which the knitting-thread will slip downward as the needle draws the stitch. The objection to this ordinary form of web-holder, however, is that the knitting-thread *x*, leading to the thread-guide *d* from the end needle of the set of needles in action during the knitting of a course in the fashioning of the fabric, has a tendency to rise on the outwardly curved or inclined portion *b* of the web-holder to such an extent as to be

carried to the front of the next needle to be brought into action, as shown in Figs. 5 and 6, for instance, so that on the reverse movement of the thread-guide no loop will be formed around this needle when it is raised into acting position, and said needle will consequently miss its stitch, and thus cause a hole in the work. In order to overcome this objection, I interrupt the continuity of the curved or inclined upper face of the web-holder, preferably by providing said web-holder with a vertical or substantially vertical face *f* between the upper and lower outwardly curved or inclined faces *b b*, so that while the knitting-thread will slip down over the web-holder with the same facility as over an ordinary web-holder the rise of the knitting-thread on the upper face of the web holder will be arrested by this intermediate straight portion *f*, as shown in Figs. 1 and 2, and as the straight portions of the web-holders are in line with the backs of the needles it follows that the new needle in rising must pass in front of the knitting-thread, as shown in Figs. 3 and 4. Hence on the back movement of the thread-guide a loop of the knitting-thread is necessarily formed around the new needle, and the missing of a stitch thereby effectually prevented.

The retaining portion *f* of the web-holder may be undercut instead of straight, as shown in Fig. 7; or the retainer may consist of a supplementary hook *f'* formed above the work-retaining hook *a*, as in Fig. 8, for instance.

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

1. The within-described web-holder for knitting-machines, the same having a work-retaining hook and a thread-retaining portion above the same, whereby the upward and outward movement of the knitting-thread on the web-holder is prevented, substantially as specified.

2. The within-described web-holder for knitting-machines, the same having a work-retaining hook and above the same an outwardly-inclined portion and a retaining portion substantially vertical, as specified.

3. The combination of the needle-carrier and its needles with web-holders having work-retaining hooks and above the same thread-

retaining portions, whereby the knitting-thread is prevented from slipping to the front of those needles which are thrown into action during the fashioning, substantially as specified.
5

4. The combination of the needle-carrier and its needles with web-holders having work-retaining hooks and above the same outwardly-inclined portions and substantially
10 vertical portions, the latter serving as thread-

retainers and extending inwardly to the backs of the needles, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE H. GILBERT.

Witnesses:

EUGENE ELTERICH,
HARRY SMITH.