

(No Model.)

T. SHEARD.

THREAD GUIDE FOR KNITTING MACHINES.

No. 263,065.

Patented Aug. 22, 1882.

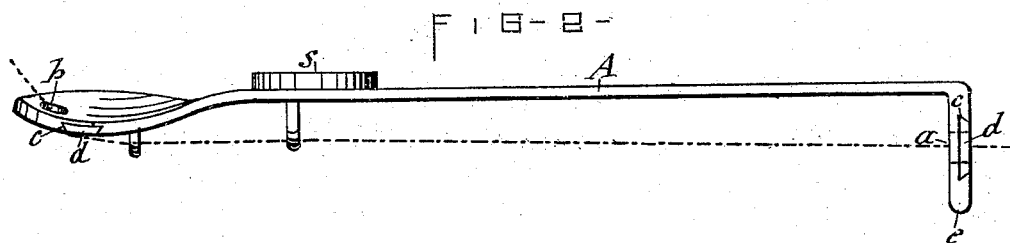
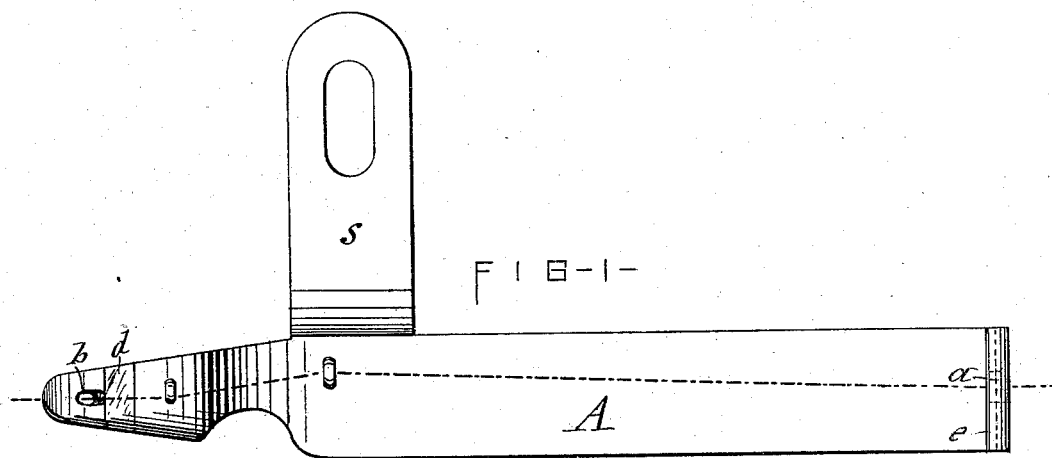
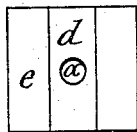


FIG-3-



WITNESSES—
Wm. L. Raymond
Sam. R. Kern

INVENTOR—
Titus Sheard
John Bull, Grass & Hay
his Attys.

UNITED STATES PATENT OFFICE.

TITUS SHEARD, OF LITTLE FALLS, NEW YORK.

THREAD-GUIDE FOR KNITTING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 263,065, dated August 22, 1882.

Application filed May 20, 1882. (No model.)

To all whom it may concern:

Be it known that I, TITUS SHEARD, of Little Falls, in the county of Herkimer and State of New York, have invented new and useful
5 Improvements in Thread-Guides for Knitting-Machines, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

The purpose of this invention is to prevent
10 the rapid wear and resultant undue enlargement and disfigurement of the eyes of the thread-guides, incident to the friction of the thread or yarn being drawn through said eyes.

The invention consists essentially in providing the thread-guide at or near its eyes
15 with a dovetail groove, and inserting in said groove a glass or other anti-friction plate, as hereinafter more fully explained, and set forth in the claim.

In the annexed drawings, Figure 1 is a side view of a thread-guide, such as is usually employed on knitting-machines, for conveying the thread to the so called "burr" or loop-wheel, which passes said thread into the beard of the
20 knitting-needles. Fig. 2 is a top view of the same, and Fig. 3 an end view.

Similar letters of reference indicate corresponding parts.

A represents the thread-guide in the form
30 of a metal bar, usually provided with a vertical shank, *s*, by means of which it is secured to the side of the standard immediately back of the burr or loop-wheel, which passes the thread into the beard of the needles, the arrangement of said devices being so well understood by those skilled in the art to which this invention relates that I deem it unnecessary to illustrate the same in the drawings. Said
35 thread-guide is usually provided with two eyes, *a b*, respectively at the two extremities thereof. The thread to be knitted passes through the rear eye, *a*, which is in a right-angled bend or offset, *e*, of the rear end of the thread-guide. From the eye *a* the thread is extended through
40 the forward eye, *b*, and thence to the usual loop-wheel or burr, which carries said thread

into the beard of the knitting-needle, the thread being drawn along by its engagement with the needles carried on the rotating needle-cylinder. The draft of the thread through
50 the two eyes *a b* produces such friction and abrasion on the parts in contact therewith as to rapidly cut creases or channels in the edge of the said eyes, and disfigure the same to such an extent as to impair the efficiency of
55 the thread-guide. To obviate this defect I secure to the thread-guide, at or near the eyes thereof and in the path of the thread, an anti-friction facing in the form of a plate, *d*, of glass, porcelain, enamel, or other analogous vitrified
60 or equally hard material. Said plate I secure in position by making its edges beveling and inserting it into an undercut dovetailed groove, *c*, in the surface of the thread-guide, as best seen in Fig. 2 of the drawings. If desired, said
65 plate may be further secured in the groove *c* by means of suitable cement. The thread moves over the said anti-friction plate, and is thereby prevented from coming in contact with the metal edge of the eye of the thread-guide,
70 thus effectually preventing the wear of the same.

I do not claim broadly the application of an anti-friction shield to a thread-guide for the purpose of protecting the same against the
75 friction of the passing thread, as I am aware the same is not new; but

What I do claim is—

The combination of the thread-guide A, provided at its eyes *a b* with the dovetail groove
80 *c*, and the anti-friction plate *d*, adapted to be inserted and secured in said groove, substantially as described.

In testimony whereof I have hereunto signed my name and affixed my seal, in the presence of
85 two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 29th day of April, 1882.

TITUS SHEARD. [L. S.]

Witnesses:

C. H. DUELL,
WM. C. RAYMOND.