

J. R. MITCHELL.
 THREAD GUIDE.
 APPLICATION FILED DEC. 7, 1908.

920,486.

Patented May 4, 1909.

Fig. 1.

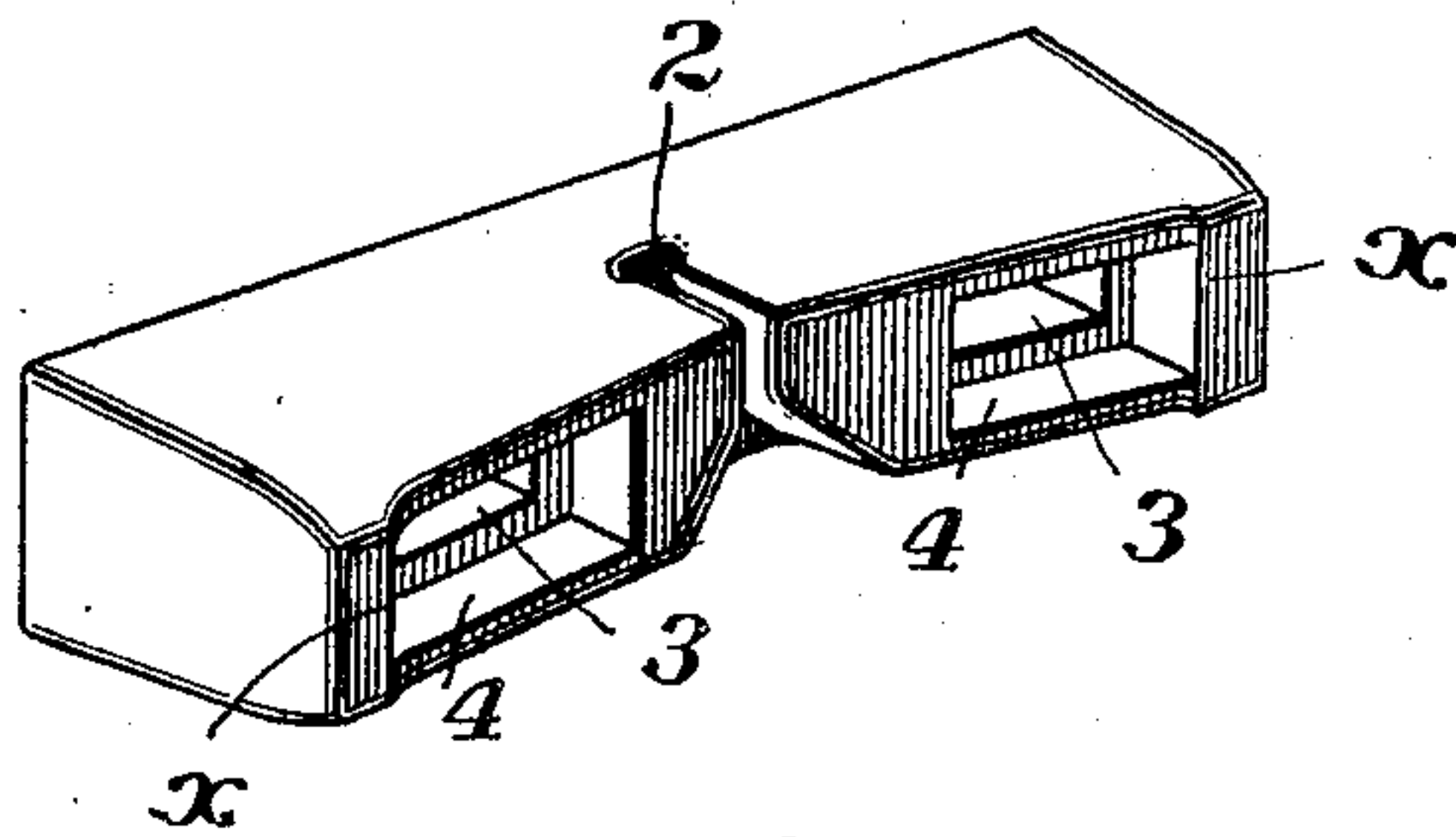


Fig. 2.

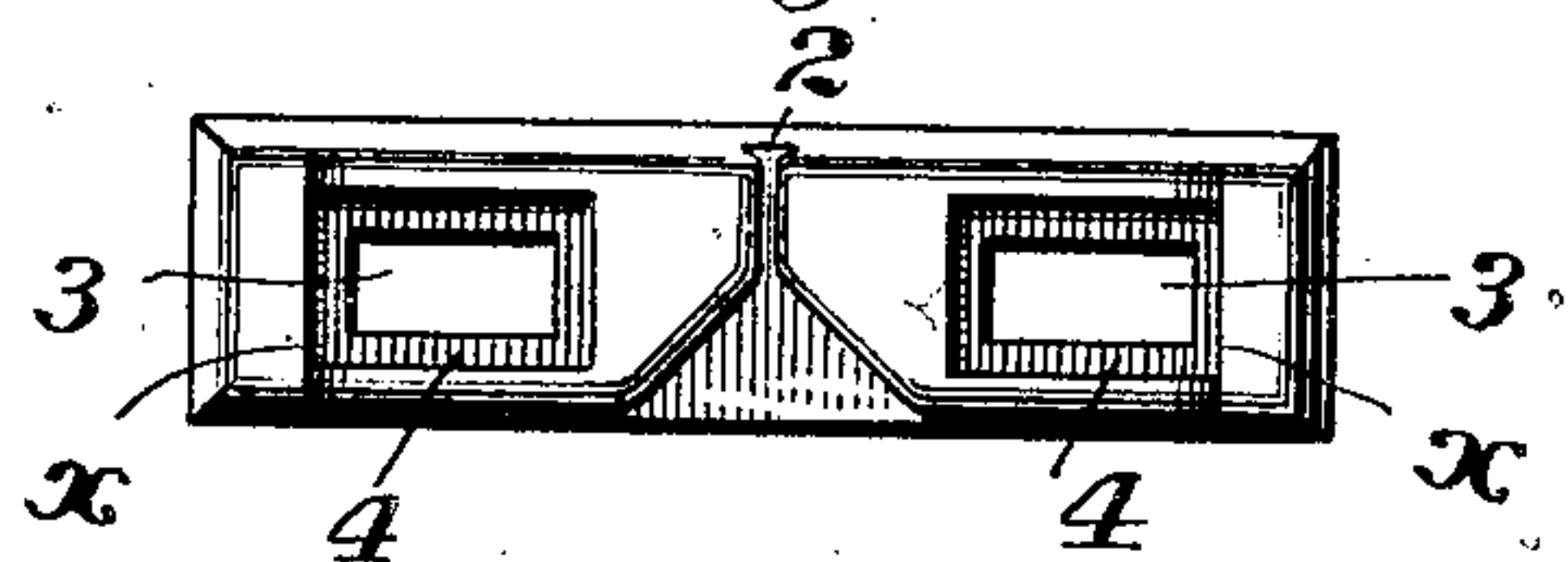


Fig. 3.

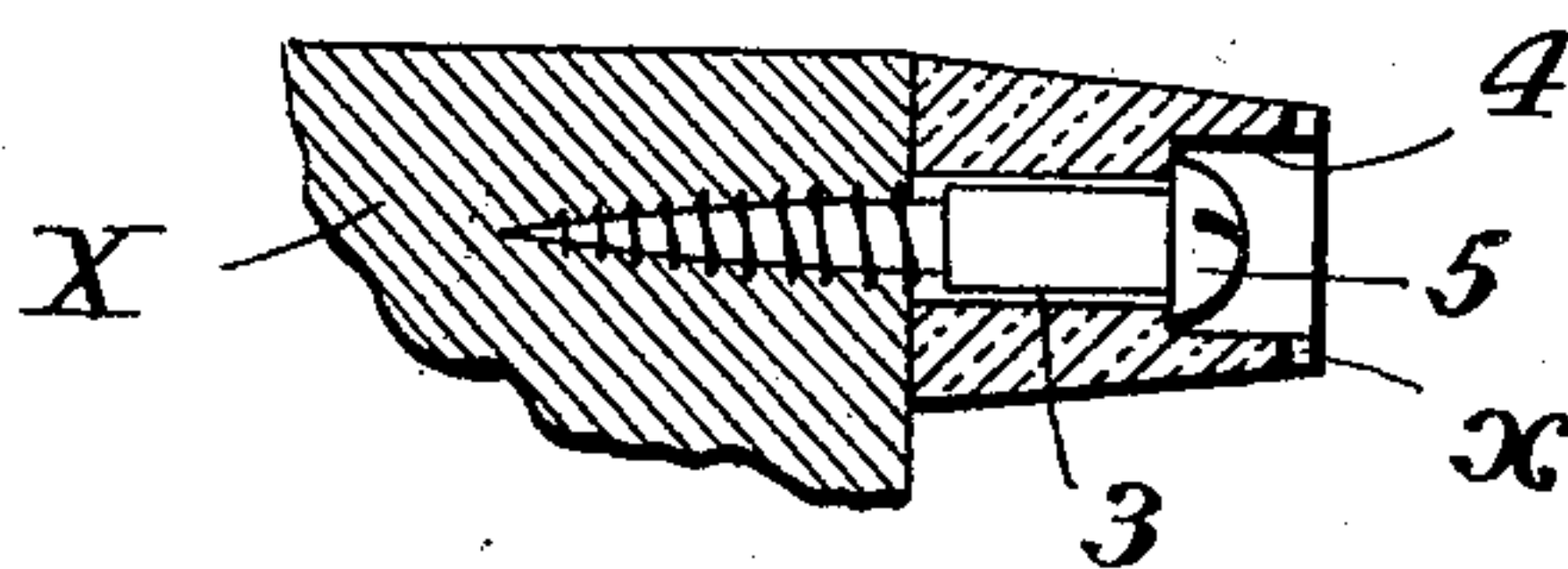


Fig. 4.

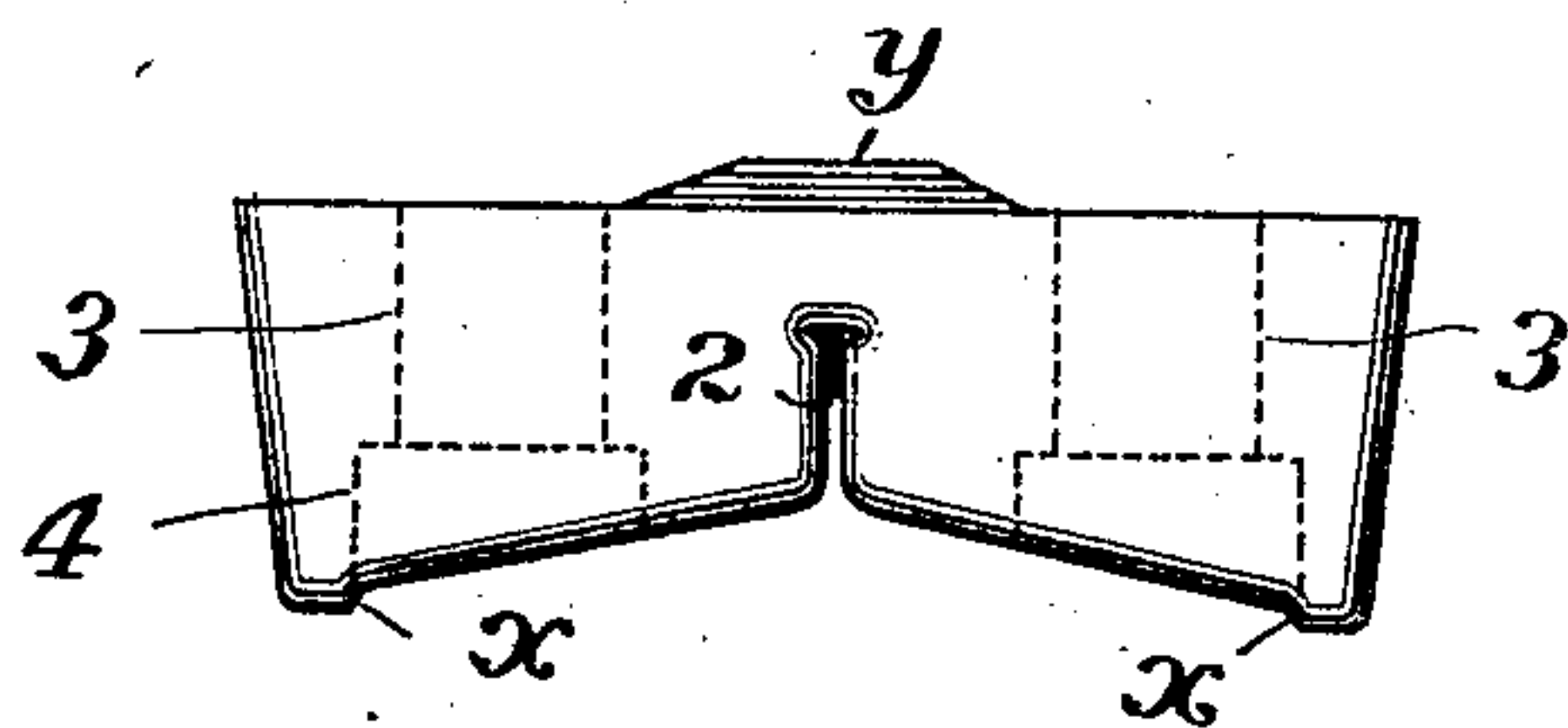
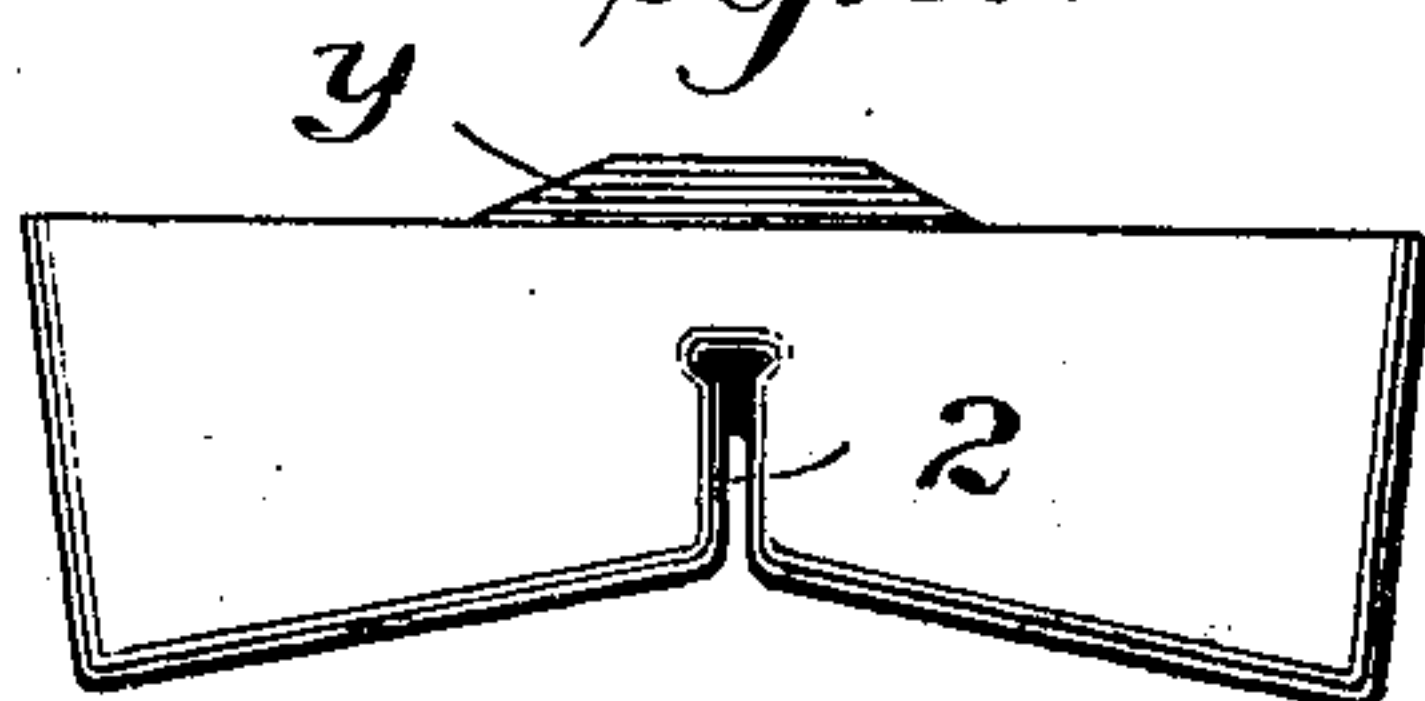


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN R. MITCHELL, OF MONTCLAIR, NEW JERSEY.

THREAD-GUIDE.

No. 920,486.

Specification of Letters Patent.

Patented May 4, 1909.

Application filed December 7, 1908. Serial No. 466,401.

To all whom it may concern:

Be it known that I, JOHN R. MITCHELL, a citizen of the United States, and resident of Montclair, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Thread-Guides, of which the following is a specification.

My invention relates to that class of thread guides for spooling and other machines such as is set forth in my Letters Patent issued to me July 5, 1904, No. 763,995, and has for its object to simplify and improve the construction of the device of said Letters Patent, to which end I construct the guide as fully set forth hereinafter and as illustrated in the accompanying drawing, in which:

Figure 1 is a perspective view of a thread guide embodying my improvement; Fig. 2 is a front face view; Fig. 3 a transverse section showing the guide as applied to its support; Fig. 4 is a plan view of the guide; and Fig. 5 a plan view illustrating a modification.

The guide consists essentially of a block which is made of a material capable of being finished to a smooth outer surface, preferably of porcelain, and substantially rectangular in cross section so that the front edge presents a somewhat extended vertical face, and in the center of the guide is a groove or notch 2, conforming in character to that set forth in my aforesaid Letters Patent.

In the construction of the aforesaid Letters Patent the guide is provided with notches to receive the ends of wires which confine it to its position upon the guide rail. This has proved in many cases to be unsatisfactory not only because the guide may slip from position, but because the operators will often fail to adjust the guides properly, and to overcome these objections, as well as to secure other desirable results, I provide the guide with transverse longitudinal slots or recesses 3, 3, which have expanded outer ends or portions 4 and adapted to receive screws or bolts 5 by which the guide is confined in place upon the guide rail X, or in any other suitable position. As shown the shank of the screw 5 will pass through the narrow portion of the slot while the head of the

screw lies in the expanded portion and as a result the screw is not exposed at any point and it is impossible for the yarn or thread to engage or be caught and injured by the head of the screw, the yarn passing freely and without friction over the broad front face of the guide and across the screws without contact therewith. Inasmuch as the slots 3 are elongated they permit the guide to be adjusted longitudinally to any desired extent, and the screws serve as a means whereby after the guide is adjusted it may be so firmly fixed in place that it cannot be jarred from its position or moved out of place except by the determined purpose of the operator.

In order that the yarn may properly pass to the central opening or notch and be deflected inward in case it is displaced, I incline the outer face of the guide from both ends toward the central notch or slot as shown in Figs. 1 and 4, and to further prevent the yarn from slipping off of the guide in case it should be thrown onto this face I provide vertical shoulders *x, x*, although in some cases, as shown in Fig. 5, these may not be employed.

In order to aid in securing the guide firmly in place upon its support without preventing its longitudinal adjustment I provide it at the rear with one or more longitudinal fins or webs *y*, a single web being shown.

Without limiting myself to the precise construction and arrangement of parts shown, I claim:

1. A thread guide consisting of a continuous block with a central guide groove, a front face inclined from both ends toward said groove, and with perforations at opposite sides of the groove enlarged at their outer portions for the purpose set forth.

2. A thread guide consisting of a continuous block with a central guide groove, a front face inclined from both ends toward said groove, and with longitudinal slots at opposite sides of the groove enlarged at their outer portions for the purpose set forth.

3. A thread guide consisting of a continuous block with a central guide groove, a front face inclined from both ends toward said groove, and with shoulders *x, x*, and

perforations at opposite sides of the groove enlarged at their outer portions for the purpose set forth.

4. A thread guide consisting of a continuous block with a central guide groove, a front face inclined from both ends toward said groove, and with perforations at opposite sides of the groove enlarged at their

outer portions, and a rib *y* at the back, for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN R. MITCHELL.

Witnesses:

FREEMAN CASS,

MARGUERITE COLEMAN.