

No. 859,417.

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J. E. TYTLER & W. H. BOWKER.
THREAD GUIDE OF SPINNING, TWISTING, AND LIKE FRAMES.
APPLICATION FILED FEB. 17, 1904.

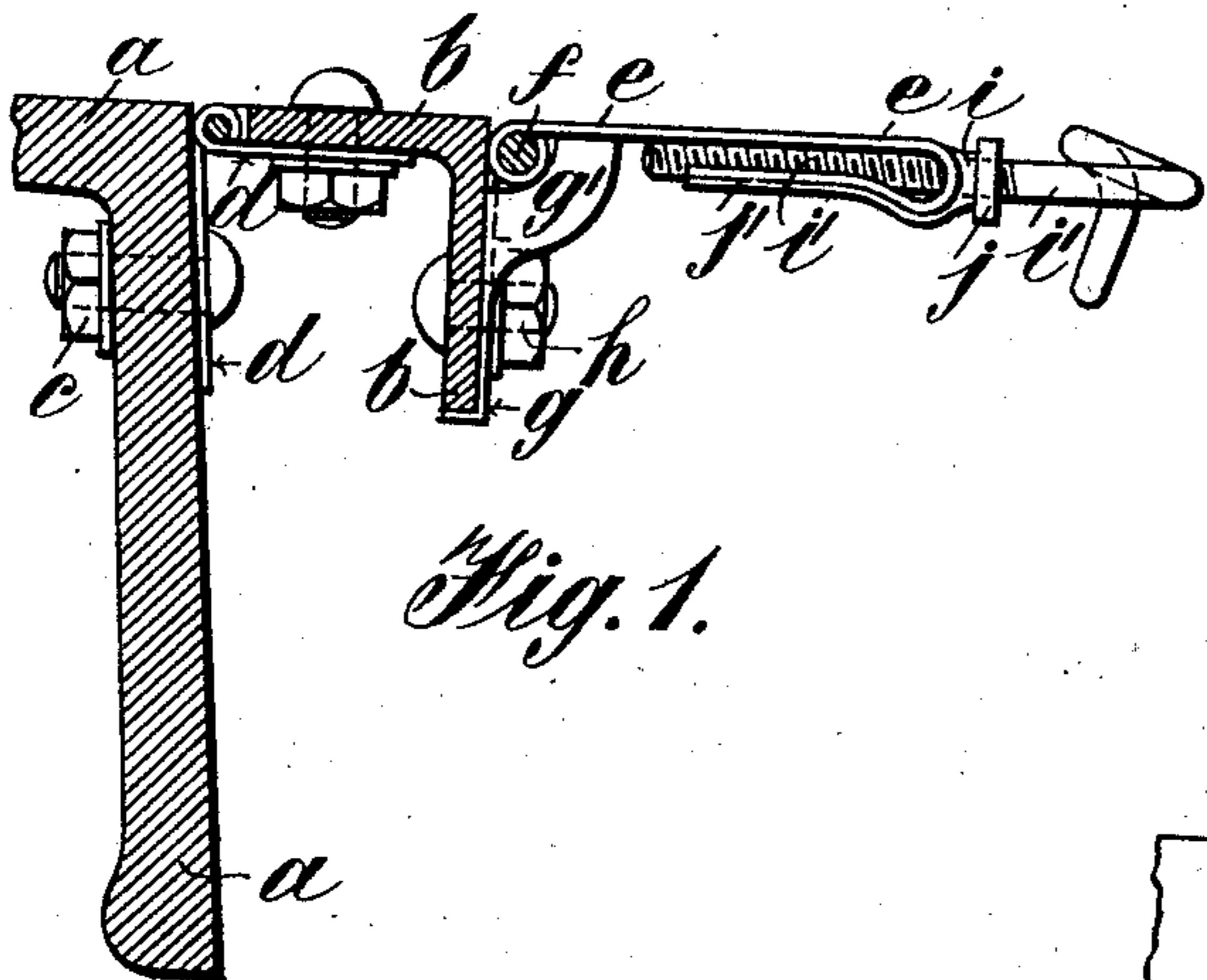


Fig. 1.

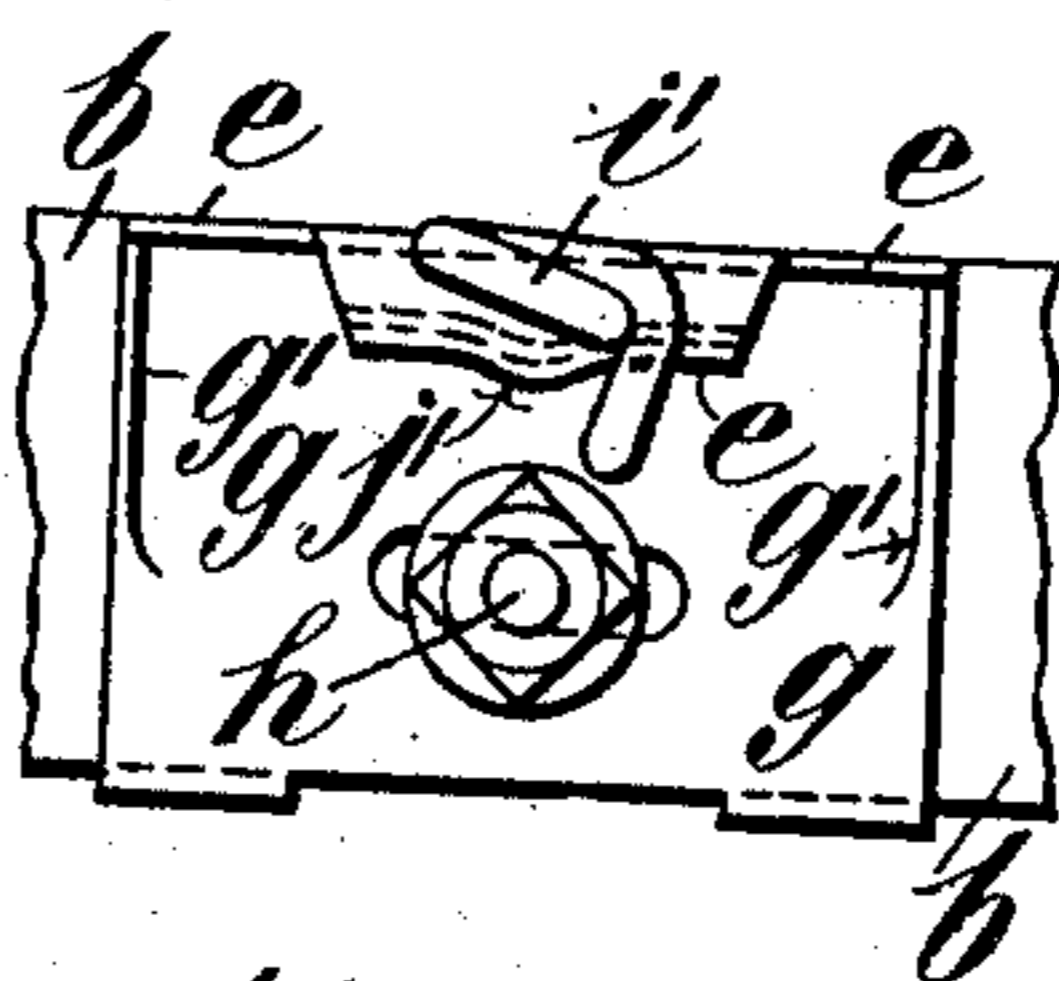


Fig. 2.

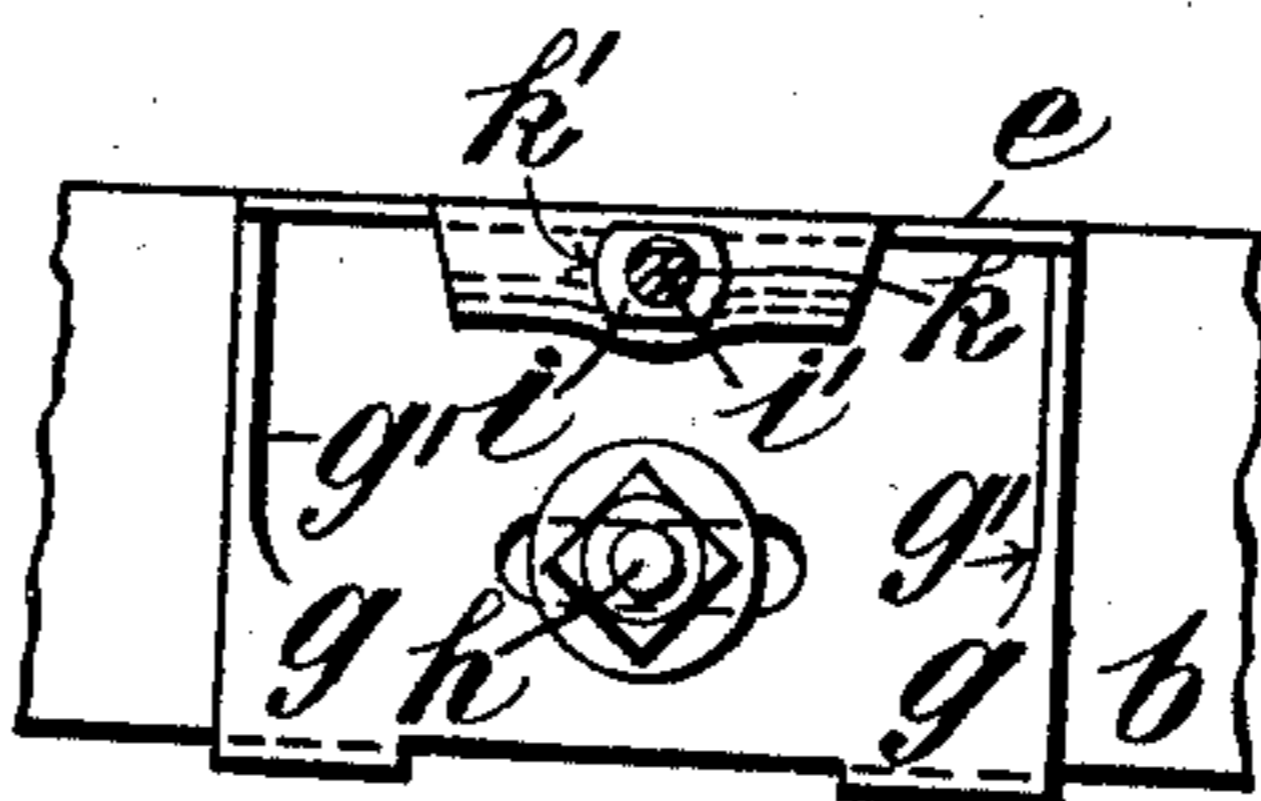


Fig. 5.

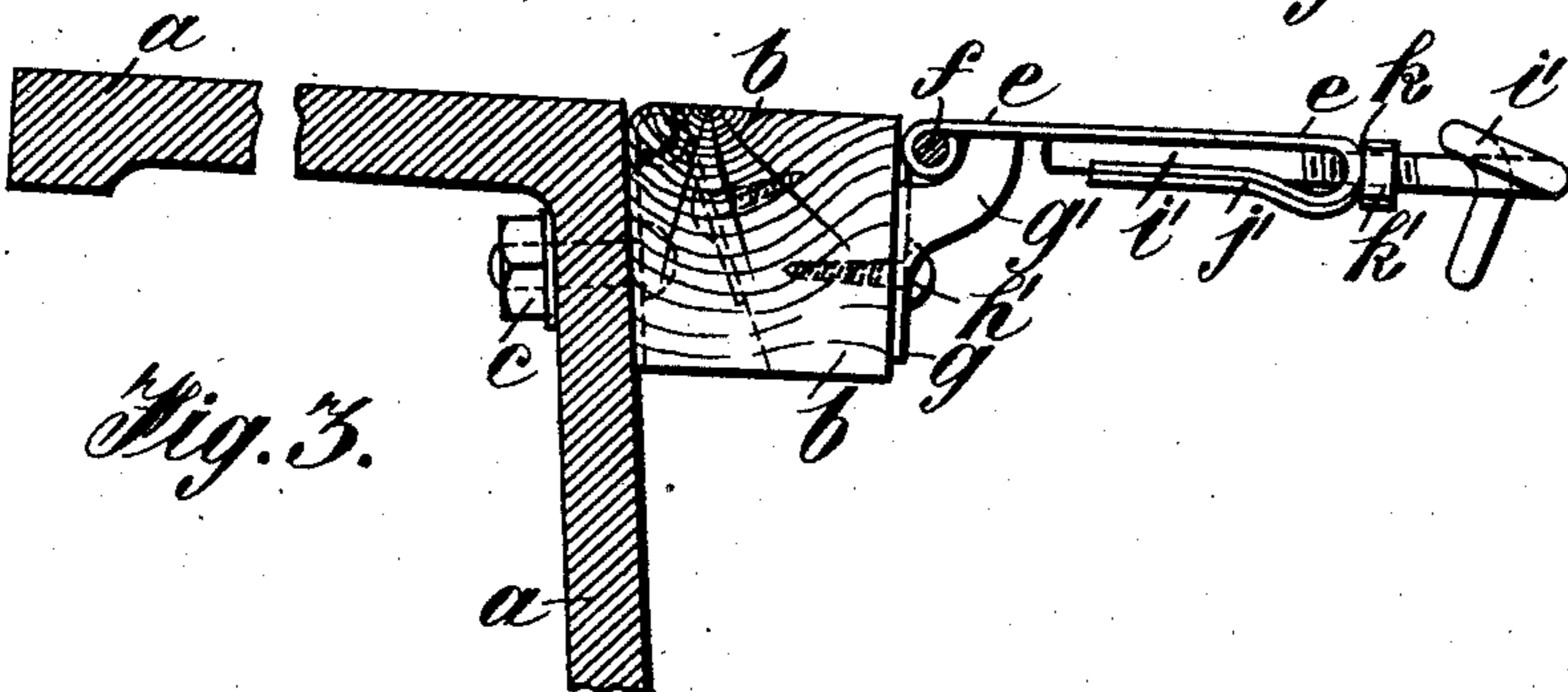


Fig. 3.

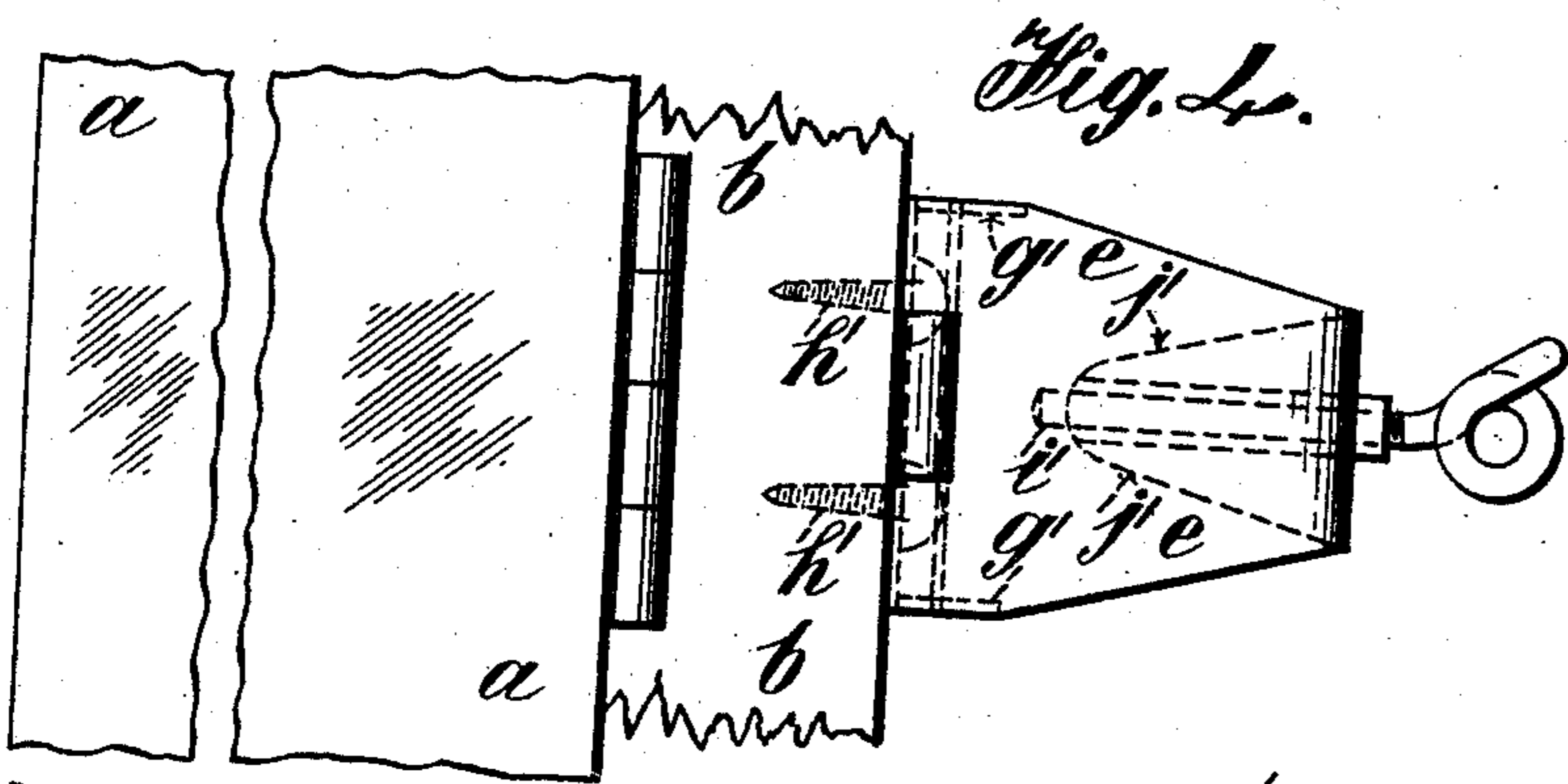


Fig. 4.

Witnesses.
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UNITED STATES PATENT OFFICE.

JOHN ERNEST TYTLER AND WILLIAM HENRY BOWKER, OF MANCHESTER, ENGLAND.

THREAD-GUIDE OF SPINNING, TWISTING, AND LIKE FRAMES.

No. 859,417.

Specification of Letters Patent.

Patented July 9, 1907.

Application filed February 17, 1904. Serial No. 194,021.

To all whom it may concern:

Be it known that we, JOHN ERNEST TYTLER, a subject of the King of Great Britain, and a resident of Manchester, in the county of Lancaster, England, and WILLIAM HENRY BOWKER, a subject of the King of Great Britain, and a resident of Manchester, in the county of Lancaster, England, have invented new and useful Improvements Relating to the Thread-Guides of Spinning, Twisting, and like Frames, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to improvements in thread guides for spinning, twisting and like frames, for yarns, the object being to provide a guide of cheap construction easy to produce and capable of ready adjustment in relation to the spindle.

Our invention will be fully described with reference to the accompanying drawings in which

Figure 1 is an elevation of a thread-guide attached to one of the longitudinal rails of a spinning or like frame, Fig. 2 front elevation of same, Fig. 3 similar view to Fig. 1 of a modification, Fig. 4 plan and Fig. 5 front elevation partly in section.

In these drawings *a* represents the longitudinal rail of a spinning or like frame to which what are generally termed the thread boards *b* of iron as in Fig. 1 or wood as in Fig. 3 are attached by bolts *c* or the like and hinged plates *d*. These parts are of ordinary construction and in carrying out our invention we secure to the rail *b* or in some cases direct to the rail *a* a thread guide holder *e*, preferably one for each spindle so that they may be moved about their hinges *f* independently of each other. Securing plates *g* form part of the thread guide holders and are bolted or otherwise secured to the rail *b* by bolts *h* as in Fig. 1 or screws *h'* as in Fig. 3, the bolt holes being slotted to allow of longitudinal movement on the supporting rail for adjusting purposes. The thread guide holders are kept in a more or less horizontal position by lugs *g'* forming part of the plates *g*. We would here have it understood we are well aware that separate metallic thread guide holders have hitherto been employed but the special feature of our invention consists in turning over the end of each thread guide holder *e* as in Figs. 1 and 2 and forming thereon a boss *i* provided with a screw thread adapted to receive a thread guide-wire *i'* screwed at its rear end and formed at its front end in the same manner as usual. The thread-guide-wire can be adjusted backwards and forwards in order to center it over the spindle of the spinning or like frame, the screw surfaces being adapted to be sufficiently tight to hold the thread guide-wire in proper position while at the same time allowing of the adjusting movement as aforesaid. We may employ a lock-nut *j* as indicated for greater security if necessary and in addition the thread guide holder may have the

turned over portion extended as at *j'* so as to embrace the thread guide-wire *i'* tightly, by compression. The central curved part of the extension *j'* may be formed with screw grooves on its inside surface to engage with the threads of the wire *i'*.

The arrangement shown in Figs. 3 to 5 is very similar to that described except that the thread guide-wire *i'* is passed freely through the hole *k* in the thread guide holder *e*, the hole being preferably D-shaped as indicated in Fig. 5 and the thread guide-wire flattened at one or two sides to prevent it turning round. In this case the thread guide-wire can be pushed far enough in through the hole and afterward withdrawn for adjustment to the spindle by the nut *k'*. The thread guide holder is extended underneath as previously described, and the compression of the parts is sufficient to hold the thread guide-wire sufficiently firm longitudinally.

What we claim as our invention and desire to protect by Letters Patent is:—

1. A metallic hinged thread guide for spinning twisting and like frames turned over at its front end and in a line approximately with the hinge bent under the top portion of the holder parallel therewith and provided with a hole adapted to receive a threaded thread guide wire, the turned over portion being extended and formed on that side nearest to the thread guide wire with screw grooves corresponding to the threaded surface of the thread guide wire, the extended portion being adapted to bear on the thread guide wire, substantially as described.

2. A metallic hinged thread guide holder for spinning, twisting and like frames turned over at its front end in a line parallel with the hinge and bent under the top portion of the holder parallel therewith and provided with a screwed hole at its extreme front end adapted to receive a screwed thread guide wire and a screw threaded guide wire adapted to pass into the hole, substantially as described.

3. A metallic hinged thread guide holder for spinning, twisting and like frames, turned over at its front end in a line parallel with the hinge and bent under the top portion of the holder parallel therewith, and provided with a screwed hole adapted to receive a screwed thread guide wire, the turned over portion being extended and adapted to bear on the thread guide wire and a screw threaded guide wire adapted to pass into the hole in the thread guide holder, substantially as described.

4. A metallic hinged thread guide holder for spinning, twisting and like frames, turned over at its front end in a line parallel with the hinge and bent under the top portion of the holder parallel therewith, and provided with a screwed hole adapted to receive a screwed thread guide wire, the turned over portion being extended and formed on that side nearest the thread guide wire with a screw groove corresponding to the screwed surface of the thread guide wire, the extended portion being adapted to bear on the thread guide wire, and a screw threaded guide wire adapted to pass into the hole of the thread guide holder.

5. A metallic hinged thread guide holder for spinning, twisting and like frames, turned over at its front end in a line parallel with the hinge and bent under the top portion of the holder parallel therewith, and provided with a screwed hole adapted to receive a screwed thread guide wire, the turned over portion being extended and adapted to bear on the thread guide wire, and a lock nut mounted on the screwed end of the thread guide wire adapted to

bear against the forward end of the thread guide holder, and a screw threaded guide wire adapted to pass into the hole in the thread guide holder.

- 5 6. In a metallic hinged thread guide holder for spinning twisting and like frames, turned over at its front end in a line parallel with the hinge and bent under the top portion of the holder parallel therewith and provided with a screwed hole adapted to receive a screw threaded guide wire, the turned over portion being extended and adapted
- 10 to bear on the thread guide wire, and means carried by

the guide wire adapted to contact with the guide holder for holding the wire against longitudinal displacement.

In testimony whereof we have hereunto set our hands in the presence of two witnesses.

JOHN ERNEST TYTLER.

WILLIAM HENRY BOWKER.

Witnesses:

WILLIAM HENRY TAYLOR,

MABEL LEE.