C. A. TAFT.

THREAD GUIDING MECHANISM FOR SPINNING OR TWISTING MACHINES.

APPLICATION FILED AUG. 11, 1905.

905,386. Patented Dec. 1, 1908.

Fig. 1.

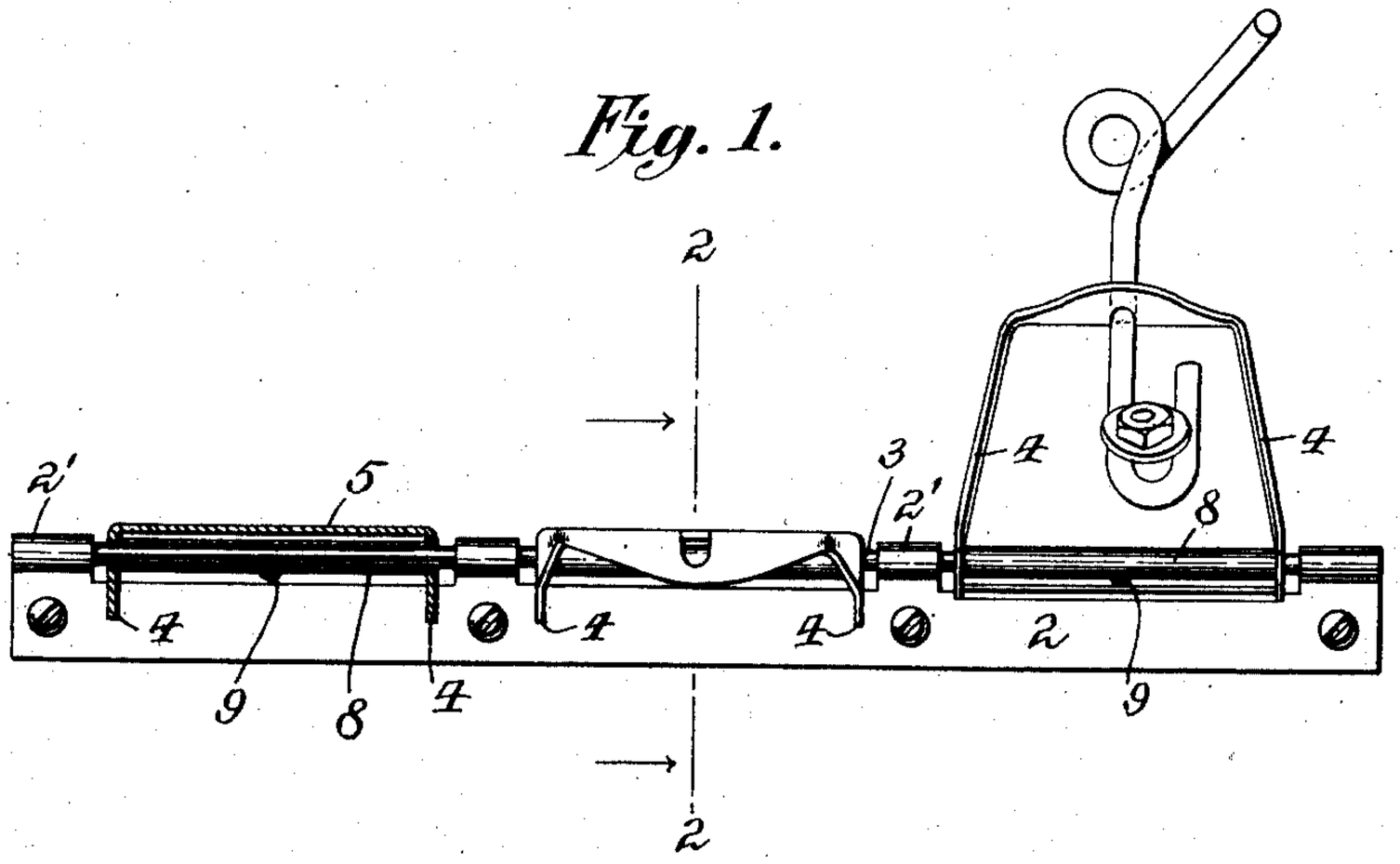
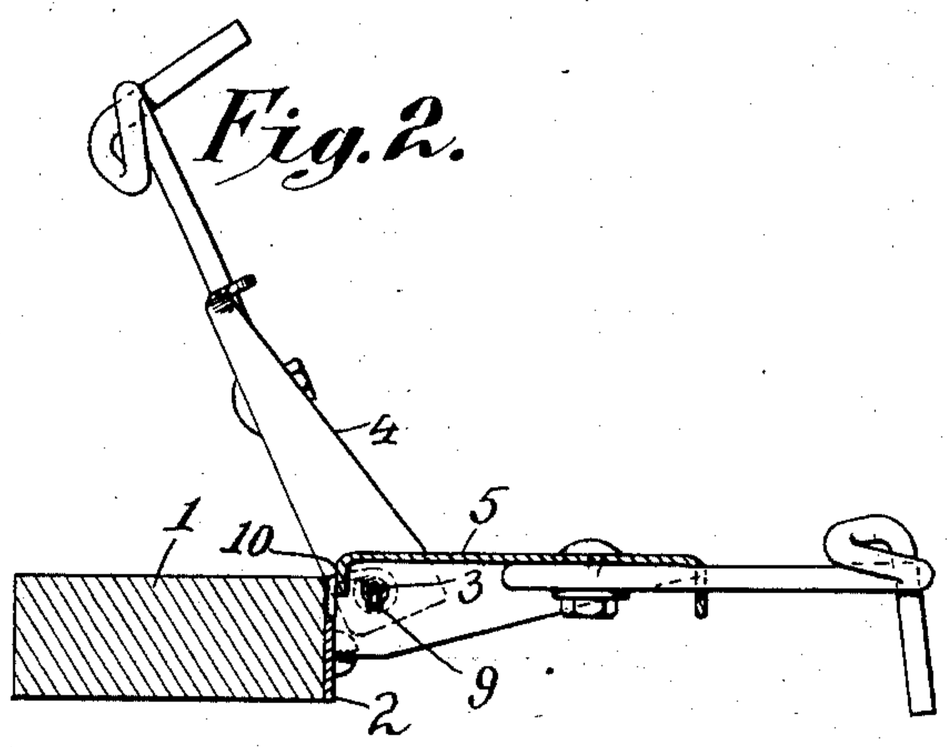


Fig. 2.



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UNITED STATES PATENT OFFICE

CYRUS A. TAFT, OF NORTHBRIDGE, MASSACHUSETTS, ASSIGNOR TO THE WHITIN MACHINE WORKS, OF WHITINSVILLE, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

THREAD-GUIDING MECHANISM FOR SPINNING OR TWISTING MACHINES.

No. 905,386. Specification of Letters Patent. Patented Dec. 1, 1908.

Application filed August 11, 1905. Serial No. 273,729.

To all whom it may concern:

Be it known that I, CYRUS A. TAFT, a citizen of the United States, residing at Northbridge, county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Thread-Guiding Mechanisms for Spinning or Twisting Machines, of which the following is a full, clear, and concise specification.

The present invention pertains to the thread-guiding means of spinning or twisting machines and more particularly relates to certain novel features in the mounting of the finger-heads thereof, whereby they are capable of being accurately and easily spaced or adjusted with respect to their several spindles, all as will be hereinafter fully explained and especially pointed out in the appended claim.

In the accompanying drawing forming a part hereof Figure 1 is a side elevation of three finger-heads, one of them being shown in section through the hinge wire, and Fig. 2 is a transverse section of Fig. 1 through the center of one of the finger-heads on line 2—2 of Fig. 1.

The thread-board rail 1, composed of wood or metal as desired, is adapted to be hinged by any convenient means to the roller-beam or other support of the spinning machine and on its front face or margin it carries a long hinge-member 2 which is formed of a single piece of sheet metal, long enough to accommodate a number of finger-heads and provided with several hinge knuckles or ears 2′. Most desirably there should be one ear between each pair of finger-heads, but a fewer number could obviously be made to suffice. When the member is made as shown it may be permanently fastened to the rail 1 or other support by means of screws or bolts inserted at intervals along its length.

The several ears 2′ hold a hinge shaft or wire 3 which is most economically formed in one continuous length extending across the machine and the said wire is preferably so held by the ears as to have no substantial longitudinal movement. The finger-heads are comprised of sheet metal blanks bent or pressed into the form shown in the drawings, wherein it will be seen that they each have two side flanges 4 depending from a flat body portion 5. The flanges are pierced with alined hinge apertures near their upper corners to receive the hinge wire 3 and they may be so shaped as to have an abutting contact with the face of the rail 1 or the hinge-member 2, to act thereby as stops holding the finger-heads in proper horizontal position. The exact construction of the finger-heads, however, is not essentially pertinent to the present invention, and so long as the said parts are pivotally carried by the hinge wire 3 it is not material whether they are formed or supported exactly as shown, or otherwise. The thread-guiding pig-tails are suitably supported on the body portions 5, for example by means of the bolt shown, or in any other way that may be convenient and will permit of an endwise adjustment thereof.

By means of the present invention the finger-heads are not required to occupy the entire space between the hinge-ears or supports for the hinge wire and, preferably, the said parts are so proportioned as to provide a considerable space for adjustment of the finger-heads longitudinally on the wire. The finger-heads are held in proper lateral position with reference to their respective spindles by means of the sleeves 8 surrounding the wire 3 and adjustably secured to the same by means of the set screws 9 therein. The sleeves are sections of ordinary tubing located between the side flanges 4 of each finger-head and are formed to have engagement with the finger-heads by being cut of the proper length to fit in between the said flanges without binding thereon, but other ways of causing the said sleeves to have engagement with the finger-heads may be employed within the scope of this invention. When the finger-heads are properly located on the hinge wire, the set screws 9 are set in and the sleeves are thereby secured to the wire so that the shifting of the finger-heads thereafter is manifestly impossible. Further endwise adjustment of the pig-tail may then be effected by sliding the shank of the same forward or back in its seat on the body of the finger-head. The finger-heads, in addition to the flanges 4, 4, are also provided with depending back flanges 10 which are located near the rail 1 and tend to close the gaps which would otherwise exist between it and the body portions 5. The sleeves 8 are preferably located beneath the flanged portion of the body so as to be thereby protected from accumulations of lint and fly.

Having described the invention, what is claimed is as follows:

In a thread guiding mechanism, a long hinge-member adapted to be secured to the thread-board rail and provided with a series of hinge-knuckles formed thereon at intervals along its length, a hinge-wire held by said hinge-knuckles and a plurality of finger-heads having perforated side flanges pivotally carried by said wire and adapted to abut against said hinge-member, in combination with spacing sleeves surrounding the wire and occupying the space between the respective flanges of each of said finger-heads and set screws in said sleeves adapted to secure the same in longitudinal adjustment to said hinge-wire.

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

CYRUS A. TAFT.

Witnesses:

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