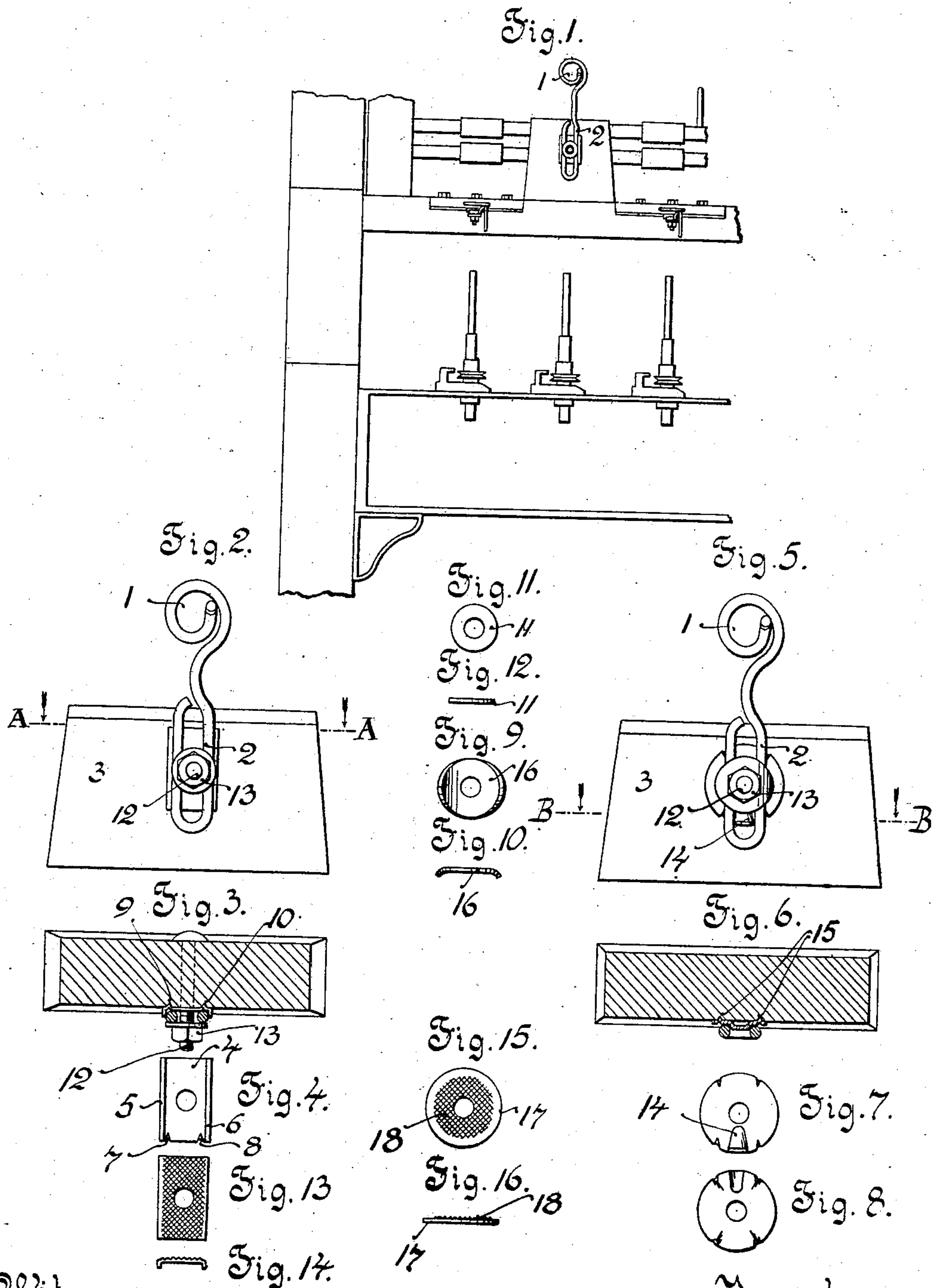


No. 884,037.

PATENTED APR. 7, 1908.

I. E. PALMER.  
THREAD GUIDE.

APPLICATION FILED DEC. 26, 1906.



Witnesses:  
Gustave Browne.  
Henry Thome.

Inventor  
I. E. Palmer  
by attorney  
Thomson & Seward



# UNITED STATES PATENT OFFICE.

ISAAC E. PALMER, OF MIDDLETOWN, CONNECTICUT.

## THREAD-GUIDE.

No. 884,037.

Specification of Letters Patent.

Patented April 7, 1908.

Application filed December 26, 1906. Serial No. 349,377.

*To all whom it may concern:*

Be it known that I, ISAAC E. PALMER, a citizen of the United States, and resident of Middletown, in the county of Middlesex and State of Connecticut, have invented a new and useful Improvement in Thread-Guides, of which the following is a specification.

My invention relates to thread guides and more particularly to thread guides for use in connection with spinning or twisting machines, the object being to provide a simple and inexpensive guide which may be adjusted in a horizontal plane to bring its eye in exact alinement with the axis of the spindle with which it is intended to coöperate.

In the accompanying drawings, Figure 1 represents several thread guides attached to the under sides of a finger board, one of the sections of the finger board being turned into upright position, Fig. 2 is a bottom plan view of one of the finger board sections with guide thereon showing the same on an enlarged scale, Fig. 3 is a transverse section of the same in the plane of the line A—A of Fig. 2, Fig. 4 is a plan view in detail of the bearing plate, Fig. 5 is a bottom plan view of one of the finger board sections with guide thereon, showing a modified form of bearing plate and washer, Fig. 6 is a transverse section of the same in the plane of the line B—B of Fig. 5, Fig. 7 is a plan view in detail of the bearing plate, Fig. 8 is a reverse view of the same, Fig. 9 is a view in detail of the retaining washer, Fig. 10 is an edge view of the same, Fig. 11 is a plan view of the flat washer, Fig. 12 is an edge view of the same, Fig. 13 is a plan view of another modified form of bearing plate, Fig. 14 is an end view of the same, Fig. 15 represents a plan view in detail of still another modified form of bearing plate, and Fig. 16 is an edge view of the same.

The gist of my present invention is the interposing of a bearing plate between the shank of the thread guide and the face of the finger board and providing the said bearing plate with means for locking it against lateral and longitudinal displacement in relation to the face of the finger board. This feature of the bearing plate may be accompanied by another feature capable of holding the loop portion of the guide against distention or it may be formed without this feature and a retaining washer may be employed to perform the function of preventing the loop from spreading as may be desired.

The guide which my present invention contemplates is formed of wire turned at one end to form an eye 1 and at its opposite end turned back along itself to form a loop 2. The bearing plate interposed between the loop portion of the shank of the thread guide and the face of the finger board 3 as represented in Figs. 1, 2, 3 and 4, is of flat oblong shape, the body of said bearing plate being denoted by 4, its edges being turned upwardly to form retaining flanges 5 and 6 and its body being punctured as at 7 and 8 to form spurs 9 and 10 for piercing the surface of the wooden finger board section 3 when the parts are pressed into assembled adjustment. When the bearing plate is provided with these retaining flanges, a flat washer 11 may be employed to rest in engagement with the outer face of the shank of the guide and the parts may be held in assembled adjustment by means of a bolt 12 provided with a nut 13.

Instead of the bearing plate 4 being oblong in shape, it may assume other shapes as, for example, a circular form as shown in Fig. 5 and instead of having its edges turned to hold the loop of the thread guide shank in position on the bearing plate it may have a lug 14 struck up from its body and adapted to seat between the branches of the loop 2 of the guide, the said washer being punctured at several places in the present instance four, to form spurs 15 for piercing the face of the finger board to hold the bearing plate in position relative thereto. When so constructed, the bearing plate may act in conjunction with a retaining washer 16 having its opposite edges bent to partially embrace the outer face of the loop 2 of the shank of the guide.

Instead of providing the bearing plate with spurs, the body of the bearing plate may assume a substantial flat form and its face may be hatched as shown in Figs. 15, 16 where the bearing plate is denoted by 17 and its hatched surface by 18. This hatched surface will provide a frictional grip on the face of the finger board and serve to retain the bearing plate in such position as may be required.

In use, the bearing plate is adjusted in position to give to the thread guide the proper lateral adjustment with respect to its alinement and then the thread guide is adjusted longitudinally to complete its adjustment and the parts are then secured in per-

manent adjustment by screwing the nut up snugly on the bolt.

What I claim is:—

In combination, a finger-board, a thread  
5 guide, a bearing plate interposed between  
the shank of the thread guide and the  
finger-board, the said bearing plate being  
provided with sharp projections on its inner  
face and means for locking the shank to the  
10 bearing plate and forcing the sharp pro-

jections on the bearing plate into the face of  
the finger-board.

In testimony, that I claim the foregoing as  
my invention, I have signed my name in  
presence of two witnesses, this 11th day of 15  
December 1906.

ISAAC E. PALMER.

Witnesses:

FREDK. HAYNES,  
C. S. SUNDGREN.