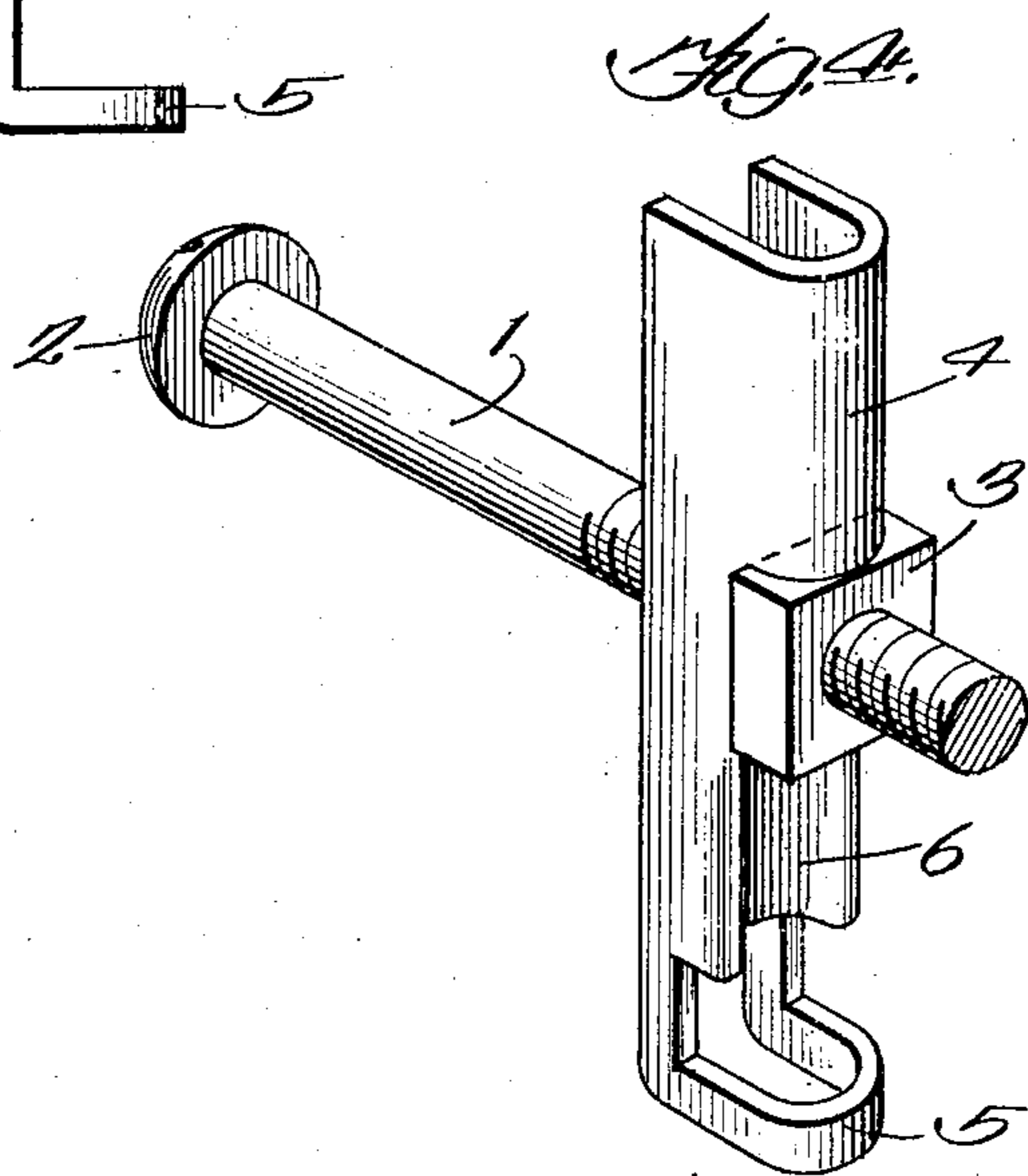
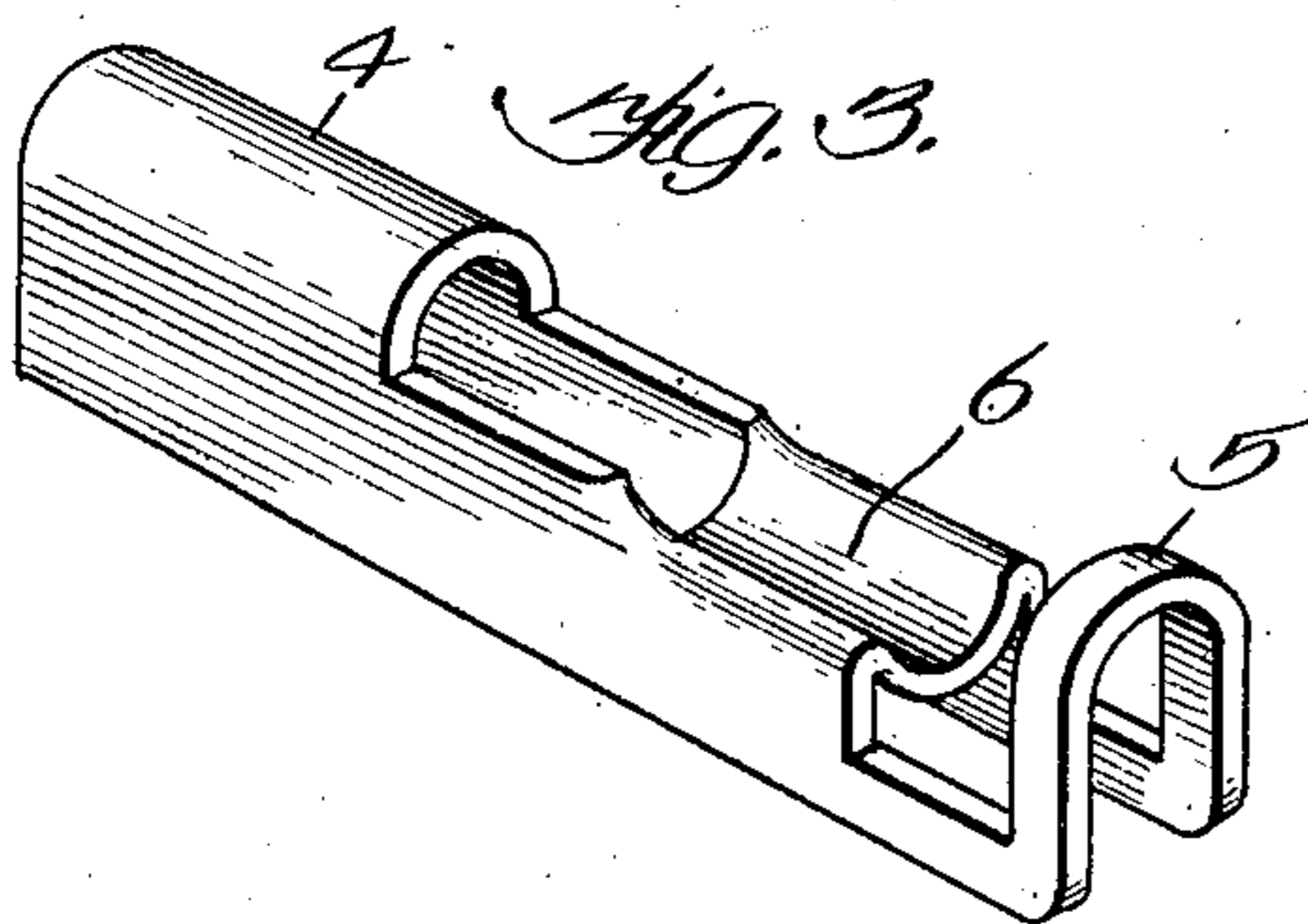
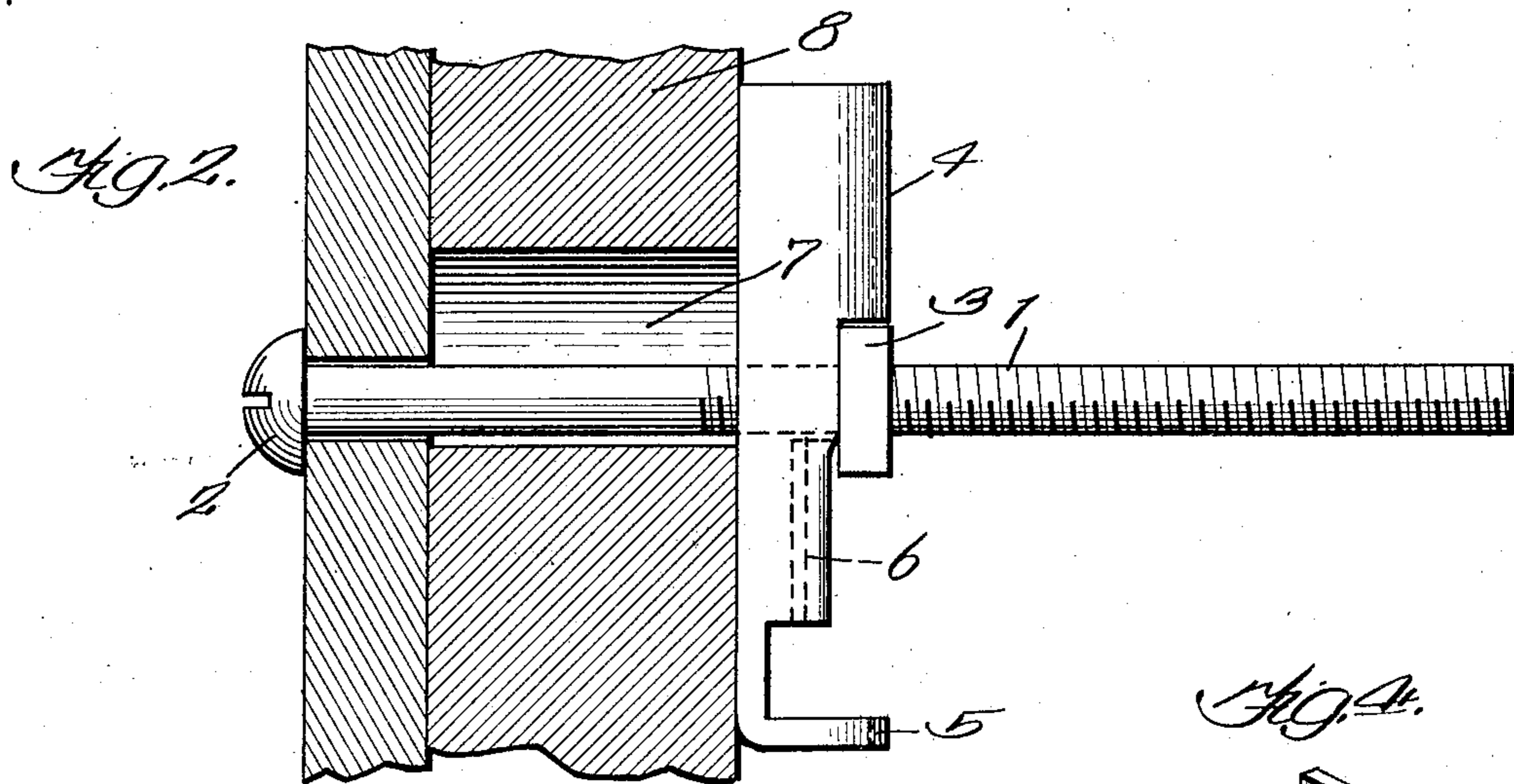
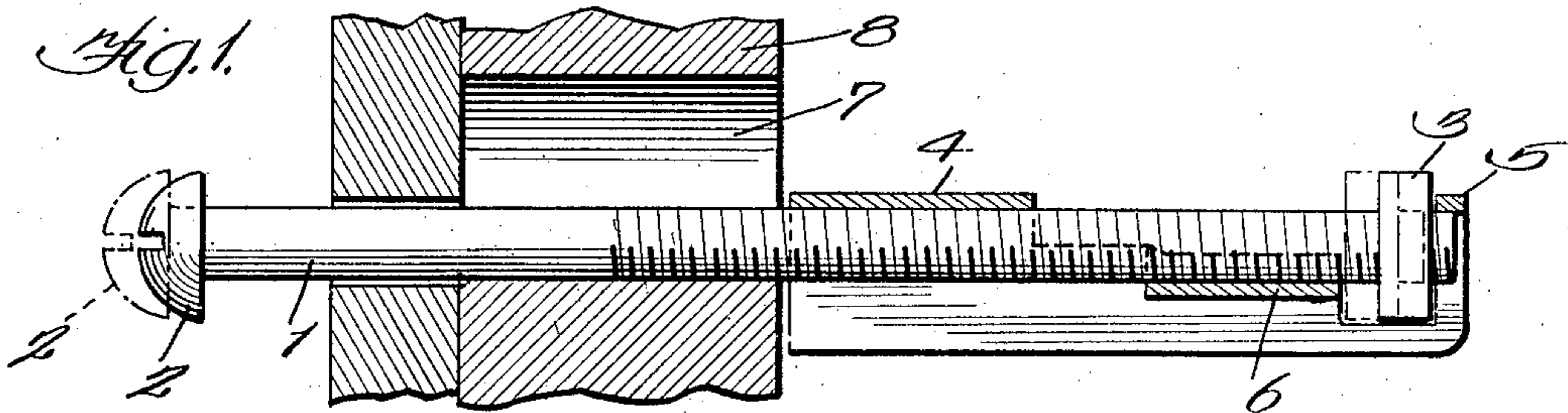


Nov. 18, 1924.

1,516,242

R. S. PEIRCE  
ANCHORAGE DEVICE

Filed July 2, 1923



Inventor:  
Ralph S. Peirce  
By *J. L. Gungg*  
Attg.

Patented Nov. 18, 1924.

1,516,242

# UNITED STATES PATENT OFFICE.

RALPH S. PEIRCE, OF HINSDALE, ILLINOIS.

## ANCHORAGE DEVICE.

Application filed July 2, 1923. Serial No. 649,091.

*To all whom it may concern:*

Be it known that I, RALPH S. PEIRCE, a citizen of the United States, residing at Hinsdale, in the county of Du Page and State of Illinois, have invented a certain new and useful Improvement in Anchorage Devices, of which the following is a full, clear, concise, and exact description.

My invention relates to anchoring devices employing anchorage blocks and rods or bolts with which the anchoring blocks are so related as to hold the bolts in place.

It is the general object of my invention to provide an improved combination of bolt or rod with an anchoring block which dispenses with the necessity of fixed connection between the block and bolt, though the invention is of such a nature that it is not to be limited to a construction which lacks such fixed connection between the bolt and block.

In carrying out my invention the anchorage device has two portions upon one side of the block and a third portion, preferably intermediate the other two, upon the opposite side of the block and separated from the first two portions by a space extending transversely of the block sufficiently to permit the rod to lie along the block, said three block portions and the rod being formed and disposed to engage the rod on opposite sides thereof to prevent the block and rod from relatively turning while the device is being inserted in place. The rod is withdrawable from engagement with one of the two first aforesaid block portions to permit the block to turn upon the bolt or rod after the device has been so far inserted within a hole in a wall or other support to bring the block clear of said hole. The two first aforesaid block portions are spaced apart longitudinally of the block sufficiently to permit the rod to be extended between these parts to lie transversely of the block in order that the block may turn after the device is placed in position. The block is desirably made of sheet metal with a portion at one end thereof formed in a U-shape and a second portion upon the same side of the block with the base of the U-shaped portion, the third portion of the block being opposite the first two and preferably between the same. These three block portions are related to each other and to the bolt as hitherto set forth.

The invention will be more fully explained by reference to the accompanying drawing in which Fig. 1 is a longitudinal

sectional view of an anchorage device constructed in accordance with the preferred embodiment of the invention, a portion of the wall and an element to be held against the wall by the anchorage device being also illustrated; Fig. 2 illustrates a changed position of parts shown in Fig. 1; Fig. 3 is a perspective view of the preferred form of anchorage block; and Fig. 4 is a perspective view illustrating the anchorage block and one form of bolt in assembly.

Like parts are indicated by similar characters of reference throughout the different figures.

The bolt structure illustrated includes a threaded rod 1 having a head 2 integral therewith at one end thereof and a nut 3 threaded thereon, the parts 2 and 3 constituting enlargements upon the rod. The anchorage block is preferably made of sheet metal with an end portion 4 at one end of the block formed into U-shape and a second portion 5 at the other end of the block upon the same side of the block with the portion 4 and at the other end of the block and also desirably of U-shape, both of these end portions extending crosswise of the rod to be engageable therewith when the rod extends along the block. The parts 4 and 5 and the spaces enclosed thereby are aligned to permit the rod or bolt to be inserted within both of these portions when the bolt lies along the block. The block also has a portion 6 opposite and preferably between the portions 4 and 5, the portion 6 being desirably also of U-form and in symmetrical relation with the U-shaped portions 3 and 4. The block portions 4, 5 and 6 are parallel, the block portion 6 being separated from the block portions 4 and 5 transversely of the block sufficiently to permit the rod 1 to lie along the block, said three block portions and the rod being formed and disposed to enable the three block portions to engage the rod upon opposite sides of the rod to prevent the block from turning upon the rod when the device is being placed in position.

After the block has been projected through the hole 7 beyond the wall 8 or other support, the rod is drawn outwardly to clear the innermost block portion 5 whereupon the block may turn upon the rod to occupy a position at right angles to the rod. The block portions 4 and 6 are spaced apart longitudinally of the block sufficiently to permit the rod to be extended between these

block portions to lie transversely of the block in order that the block may be brought to the right angular position.

One of the bolt enlargements, for example the nut 3, is preferably receivable between the other block portion 5 and the block portion 6 whereby this bolt enlargement may exert thrusting action upon the block when the anchorage device is being placed in position.

In order to avoid the necessity of unscrewing the bolt to clear the block portion 5 to permit the block to assume the angular position to the bolt, I desirably provide sufficient space between the opposing edge faces of the block portions 5 and 6 to permit of bodily movement of the bolt outwardly of sufficient extent to withdraw the threaded rod of the bolt from the block portion 5, the extent of this withdrawing movement being illustrated by dotted lines in Fig. 1.

The patent to McCain, No. 1,167,577, lacks the base of applicant's U-shaped element 5. This base constitutes an angular extension of each side of applicant's U-shaped element 5 and bears upon the rod 1 when the device is inserted, making it unnecessary to hold, by hand, the anchorage block and rod in parallelism when the device is initially inserted. After the device is inserted the rod is drawn outwardly to the slight extent shown by dotted lines in Fig. 1, whereafter the block falls. The rod may then be pulled outwardly to the extent limited by the nut which comes into engagement with the adjacent end of the block portion 4 to prevent the nut from turning. The rod is then screwed while still being pulled upon outwardly until the parts are in the final position illustrated in Fig. 2.

While I have herein shown and particularly described the preferred embodiment of my invention I do not wish to be limited to the precise details of construction shown as changes may readily be made without departing from the spirit of my invention, but having thus described my invention I claim as new and desire to secure by Letters Patent the following:—

1. In an anchorage device, the combination with a threaded rod; of an anchorage block having two end portions upon one side of the block and both extending crosswise of the rod to be engageable therewith and a third portion intermediate the other two and upon the opposite side of the block and separated from the first two by a space extending transversely of the block sufficiently to permit the rod to lie along the block, said three portions and the rod being formed and disposed to enable said three block portions to engage the rod upon opposite sides of the rod to prevent the block and rod from relatively turning, one of the two first aforesaid block portions being

spaced apart longitudinally of the block from the intermediate block portion sufficiently to permit the rod to be extended between these block portions to lie transversely of the block.

2. In an anchorage device, the combination with a threaded rod; of an anchorage block made of sheet metal with a portion at one end of the block formed into U-shape, a second portion upon the same side of the block with the base of the U-shaped block portion and at the other end of the block, and a third portion intermediate the other two and upon the opposite side of the block and separated from the first two by a space extending transversely of the block sufficiently to permit the rod to lie along the block, said three portions and the rod being formed and disposed to enable said three block portions to engage the rod upon opposite sides of the rod to prevent the block and rod from relatively turning, one of the two first aforesaid block portions being spaced apart longitudinally of the block from the intermediate block portion sufficiently to permit the rod to be extended between these block portions to lie transversely of the block.

3. In an anchorage device, the combination with a threaded rod; of an anchorage block having two portions upon one side of the block and both extending crosswise of the rod to be engageable therewith and a third portion intermediate the other two and upon the opposite side of the block and separated from the first two by a space extending transversely of the block sufficiently to permit the rod to lie along the block, said three portions and the rod being formed and disposed to enable said three block portions to engage the rod upon opposite sides of the rod to prevent the block and rod from relatively turning, one of the two first aforesaid block portions being spaced apart longitudinally of the block from the intermediate block portion sufficiently to permit the rod to be extended between these block portions to lie transversely of the block, said rod having an enlargement formed to engage and be held from rotation by one of the first two aforesaid block portions and one of the first two of the aforesaid block portions and the third block portion having opposing edge faces sufficiently approached transversely of the block to obstruct relative movement of the rod and block longitudinally of the block when the rod lies along the block and sufficiently spaced apart longitudinally of the block to permit bodily movement of the rod and its said enlargement with reference to the block when the rod lies along the block.

4. In an anchorage device, the combination with a threaded rod; of an anchorage block made of sheet metal with a portion

at one end of the block formed into U-shape,  
a second portion upon the same side of the  
block with the base of the U-shaped block  
portion, and a third portion intermediate  
5 the other two and upon the opposite side of  
the block and separated from the first two  
by a space extending transversely of the  
block sufficiently to permit the rod to lie  
along the block, said three portions and the  
10 rod being formed and disposed to enable  
said three block portions to engage the rod  
upon opposite sides of the rod to prevent  
the block and rod from relatively turning,  
one of the two first aforesaid block portions  
15 being spaced apart longitudinally of the  
block from the intermediate block portion  
sufficiently to permit the rod to be extended  
between these block portions to lie trans-

versely of the block, said rod having an en-  
largement formed to engage and be held 20  
from rotation by one of the first two afore-  
said block portions, and one of the first two  
of the aforesaid block portions and the third  
block portion having opposing edge faces  
sufficiently approached transversely of the 25  
block to obstruct relative movement of the  
rod and block longitudinally of the block  
when the rod lies along the block and suffi-  
ciently spaced apart longitudinally of the  
block to permit bodily movement of the rod 30  
and its said enlargement with reference to  
the block when the rod lies along the block.

In witness whereof, I hereunto subscribe  
my name this 20th day of June A. D.,  
1923.

RALPH S. PEIRCE.