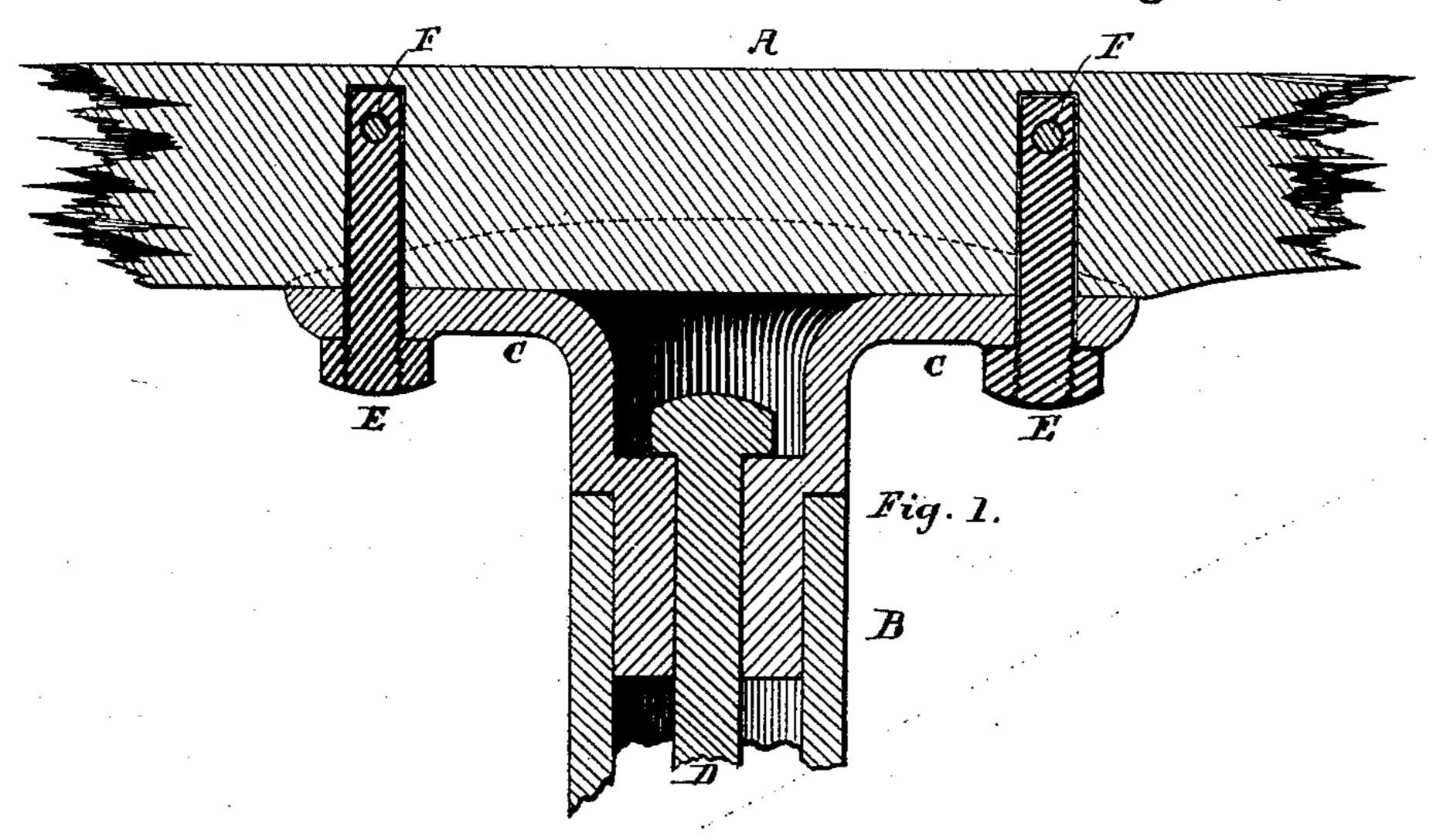
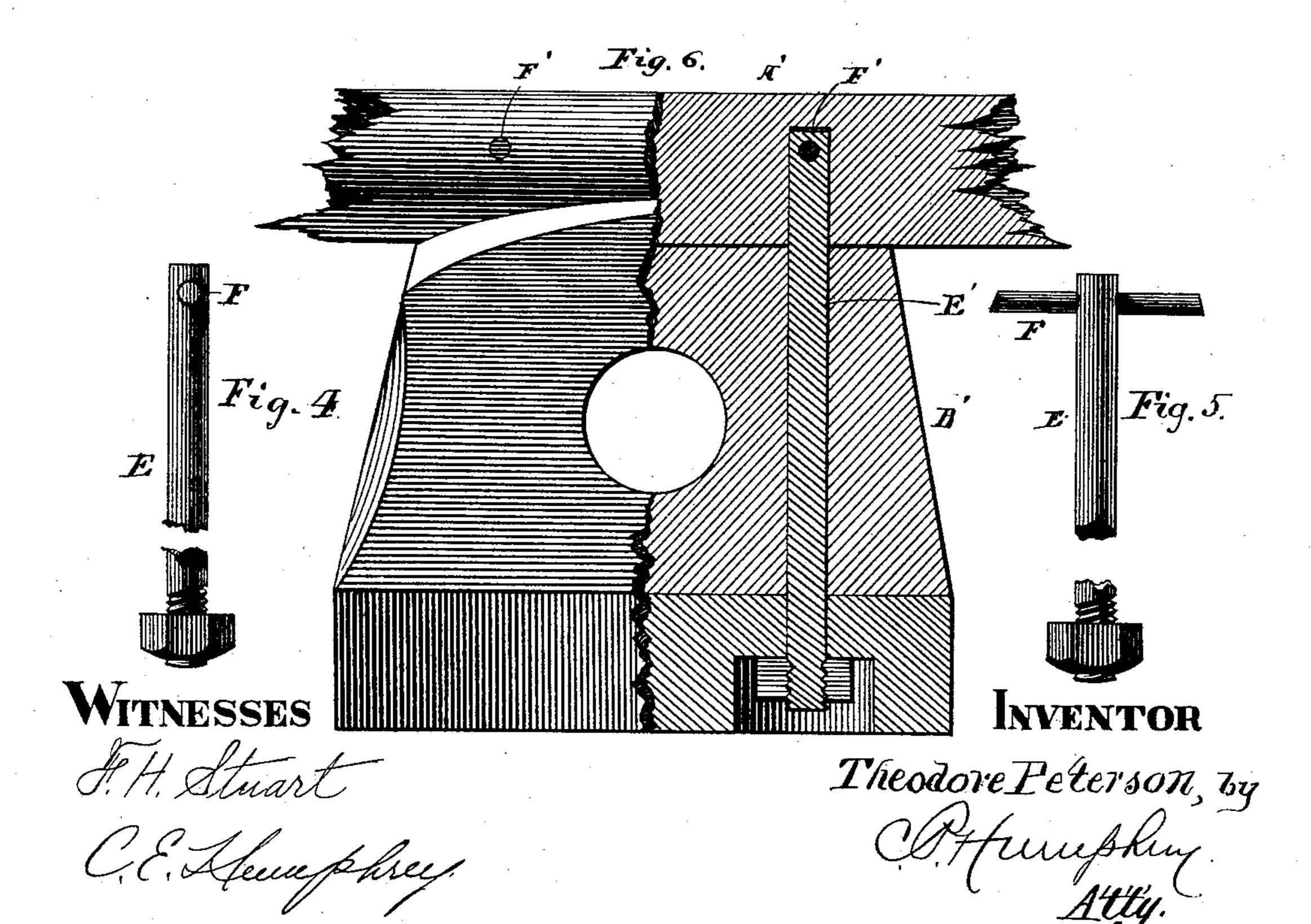
T. PETERSON. PARALLEL BARS.

No. 481,509.

Patented Aug. 23, 1892.





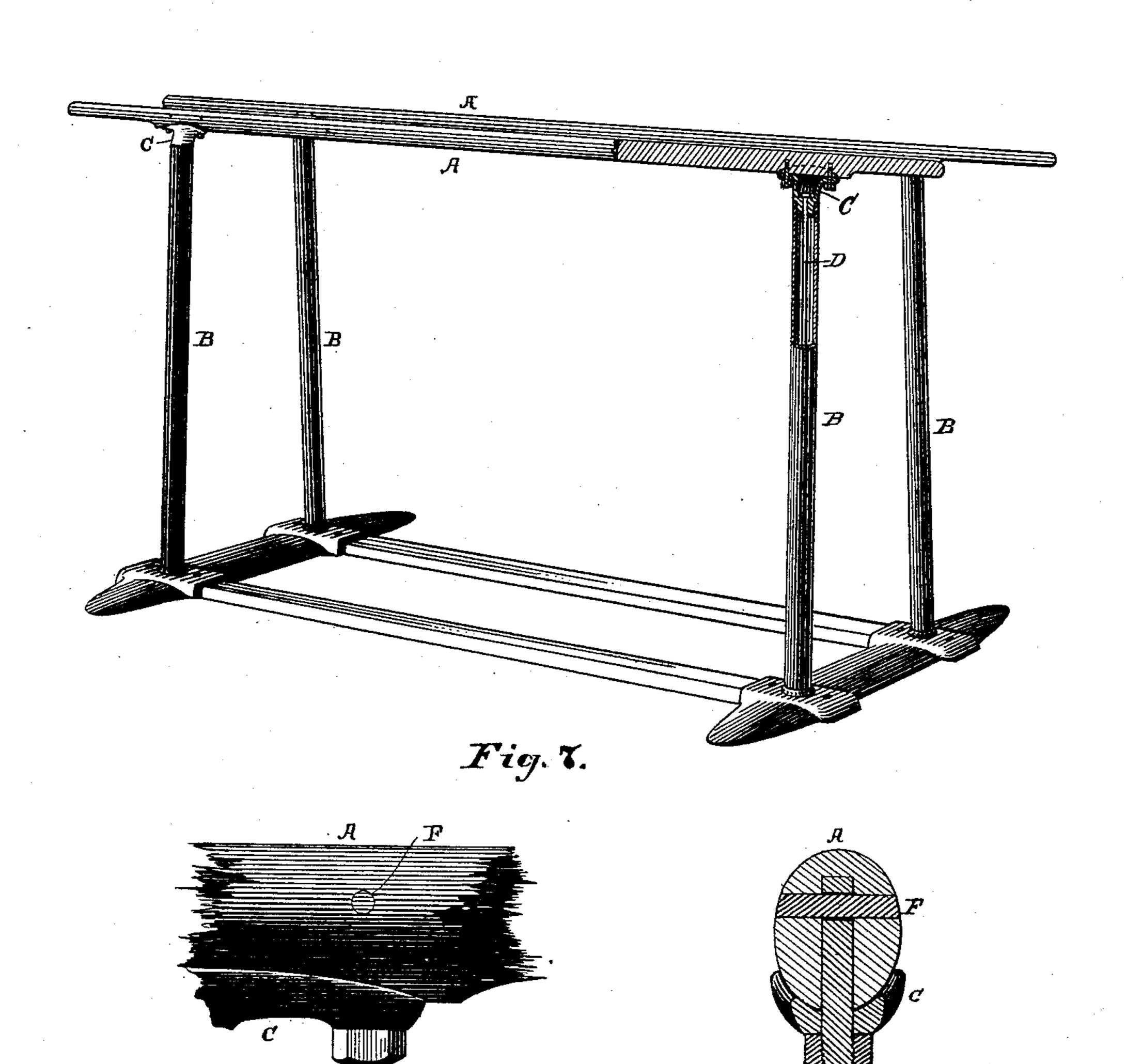
(No Model.)

2 Sheets—Sheet 2.

T. PETERSON.
PARALLEL BARS.

No. 481,509.

Patented Aug. 23, 1892.



Joseph Sterson CE Hrmytohney

Fig.2.

Attorner

15) Entor
HEODORE PETERSON
S
PHILLIPAN

Fig. 3.

United States Patent Office.

THEODORE PETERSON, OF AKRON, OHIO.

PARALLEL BARS.

SPECIFICATION forming part of Letters Patent No. 481,509, dated August 23, 1892.

Application filed October 22, 1890. Serial No. 368,894. (No model.)

To all whom it may concern:

Be it known that I, THEODORE PETERSON, a citizen of the United States, residing at Akron, in the county of Summit and State of 5 Ohio, have invented a certain new and useful Improvement in Devices for Connecting Parts of Exercising Apparatus, of which the following is a specification.

My invention relates to improvements in 10 devices for uniting parts of exercising apparatus, and is especially designed to unite horizontal parallel bars with their supports, but !

may be used in uniting other parts.

The objects of my invention are to provide 15 a more secure means of connecting adjacent parts than that heretofore employed for that purpose; to provide for taking up the slack of the parts incident to wear, and to conceal the connecting device within the wood parts, 20 so that there will be no projecting parts to injure the user.

To the aforesaid purpose my invention consists of the devices, construction, and combination of parts illustrated in the accompany-25 ing drawings, as hereinafter described, and then specifically pointed out in the claims.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is a central vertical longitudinal 30 section of a part of a parallel bar and a support, showing my improvement; Fig. 2, a side elevation of a part of the same; Fig. 3, a vertical transverse section of Fig. 2 through the center of the attaching-bolt; 35 Figs. 4 and 5, elevations of the retaining-bolt and key; Fig. 6, a view of the invention applied to low parallel bars, the right half from the broken line in central vertical longitudinal section and the left half in elevation; and 40 Fig. 7, a perspective view of the parallel bars and supports, the near bar being partly shown in vertical longitudinal section.

Referring to the construction shown in Figs. 1, 2, and 3, A represents a portion of one of 45 the parallel bars; B, a part of one of the supporting-posts, upon the upper end of which rests a clip or rest C, connected therewith by a bolt D.

In the lower face of the bar A are bored

| bar A, of exact size to receive retaining-bolts E E, and transversely through these holes are smaller holes to accurately fit the keys F. The bolts E are of the form shown, being straight round rods screw-threaded at one end 55 and provided with a nut and having a transverse hole near the other end of proper size to receive and accurately fit a key F.

In operation the bolt E is forced into the hole in the lower face of the bar A until the 60 hole in its upper end registers with the transverse hole in the bar, through which holes the key F is passed, thereby securely retaining the bolt. The bolt is then passed through the clip C and the nut screwed on and turned 65 tight, thereby making a rigid connection and which can always be maintained in case of wear by tightening the nut. The ends of the key F are filed off and polished even with the faces of the bar A, and thus present no pro- 70 jections or roughness for the hand.

In construction it may be and often is found preferable to bore the orifice for the key from one side nearly through the bar A', and by shortening the key enable it to be entirely 75 inclosed within the bar and permit the orifice to be closed with sawdust and glue or other suitable composition, so that the ends of the key F will be entirely hidden from sight or touch.

The application of the fastener to uniting low parallel bars and supports is illustrated in Fig. 6, in which the parts are identical with or analogous to the parts just described, are indicated by the same reference-letters bear- 85 ing prime-marks, and in which A' is the bar, B' the supporting-block, E' the bolt, and F' the key, the construction and arrangement of which will be readily understood from the drawings and the foregoing description.

The only difference between the construction just described and the entire machine shown in Fig. 7 is that in the support shown in section in that figure the clip is found on top of and integral with the support.

Having thus described my invention, what I claim is—

1. The parallel bars and supports, combined with vertical bolts to unite said supports and 50 holes, which do not extend to the top of the I bars and horizontal keys to retain said bolts 100 in the bars, substantially as shown and described.

2. The combination, with the parallel bars and the supports provided with clips, of vertical bolts arranged to pass through said clips and into said bars and keys arranged to pass through said bars and bolts, substantially as shown and described.

In testimony that I claim the above I hereunto set my hand.

THEODORE PETERSON.

In presence of— C. P. Humphrey, C. E. Humphrey.