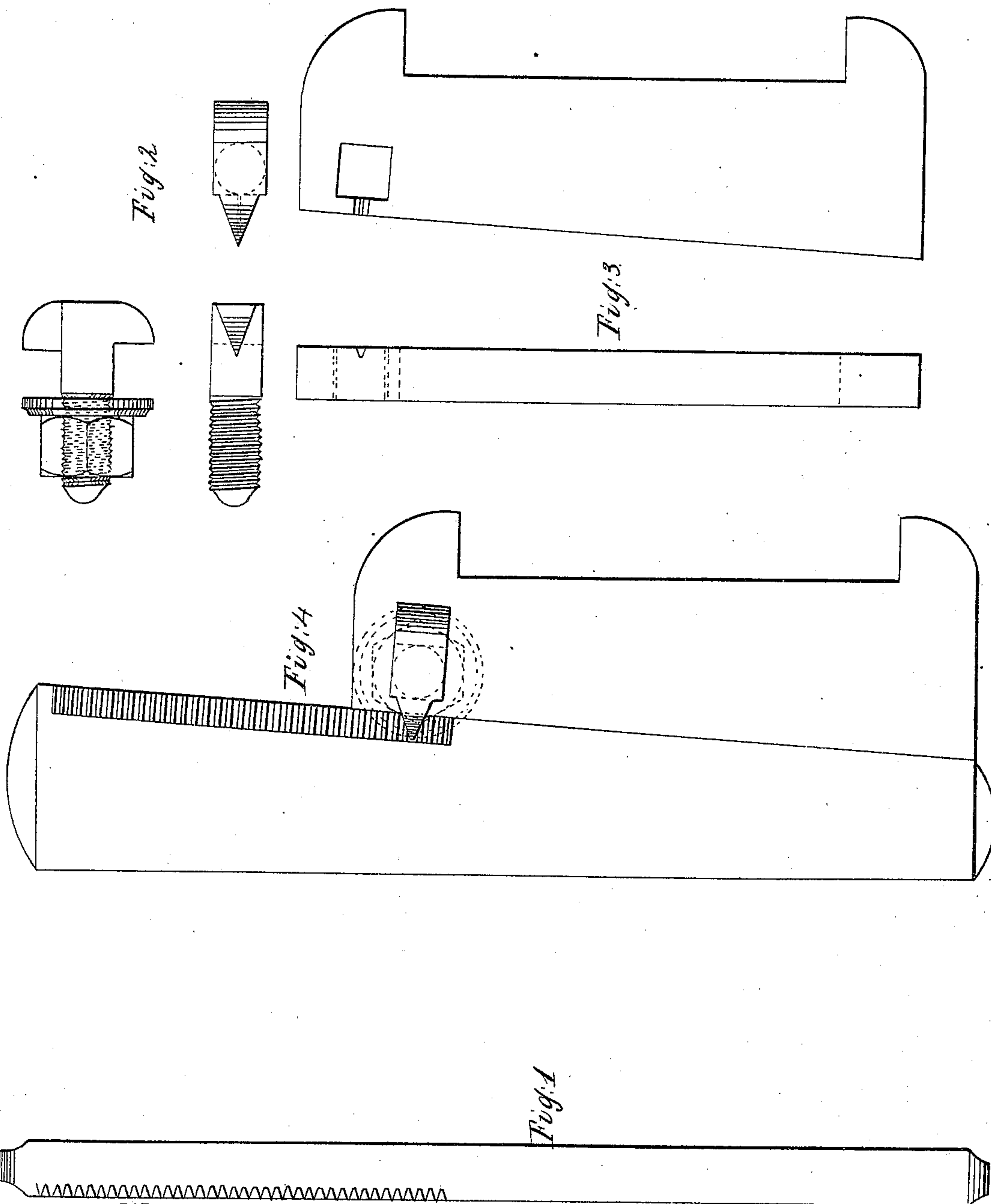


T. Cook,

Key Connection.

N^o 23,743.

Patented Apr. 19, 1859.



Witnesses
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UNITED STATES PATENT OFFICE.

TRUMAN COOK, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR TO A. THOMAS SMITH, OF SAME PLACE.

HOLDING KEYS FOR STRAP CONNECTIONS FOR ENGINES.

Specification of Letters Patent No. 23,743, dated April 19, 1859.

To all whom it may concern:

Be it known that I, TRUMAN COOK, of the city of Washington, in the District of Columbia, have invented a new and improved mode of holding keys in strap connections for marine, locomotive, and other engines securely at their places of adjustment; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of my invention consists in the combination of parts, as herein set forth, whereby the key is held at any place of required adjustment, as if immovably fixed to the gib, and at the same time occupies no room available for any other purpose.

Figure 1, represents a plan of the key with a series or range of notches, A, on one of its sides, at one edge. Fig. 2, the bolt, I, with its peculiarly formed head, one part of which is shown at B, is shaped so as to fit into the said notches, A. Fig. 3, the gib, with a square hole, C, in one of its ends, and a notch, D, at the edge next to, and which is in contact with the key as shown in Fig. 4, and which suits the wedge form of the said bolt head. Fig. 4, plan of key, bolt and gib, put together.

In constructing my said invention the key is first made after the usual plan and proportions, a slit E, as shown in Fig. 4, is made, say one fourth of an inch and ranging from that to one half of an inch from the edge of the key, which is to be fitted to the edge of the gib, which slit is parallel to the edge of the key and occupies in length that portion of the key intended to be driven in, to take up the loss motion caused by wearing of the boxes or journals. The slit E, is made as narrow as possible and in depth from one eighth to three sixteenths of an inch. F at Fig. 4, represents notches of about the same depth as the said slit and formed at right angles to it. The distance

these notches shall range from each other will depend upon the draft or pitch of the key and may vary from one eighth to one fourth of an inch, and these may be so formed as to size, that in driving the key one notch, the loss motion of one hundred and twenty-eighth part of an inch will be taken up. The square hole C, in the end of the gib will vary as the proportions of the gib and key to some extent, so as to suit a bolt ranging in diameter from one half to one inch. The bolt I, is made of steel; that part of its head shown in the drawing B, having the wedge form, and which fits into the said notches, is to be hardened and left about the temper of chisels used for chipping wrought iron; the other end of this bolt head, G, G, is fitted so as to make a good contact with the gib. The said bolt is provided with a nut and washer H, H, the washer must be of such diameter as will embrace a part of the surface of the key; and when the key has been adjusted to the required point, so that the head B of the said bolt will fit one of the said notches, the bolt is to be driven to its place and then and there secured by screwing its said nut so as to hold it in that position.

I do not claim generally the principle of securing keys for the purposes herein stated, as various devices have been resorted to with the hope of obtaining this object. But

What I do claim therein and desire to secure by Letters Patent is—

The notches A, F, in the key, as shown in Figs. 1 and 4; the hole C in the gib, the notch D at the side of the said hole, the bolt I with its peculiarly formed head B, and the combination and arrangement of these parts, substantially upon the principle and in the manner as herein set forth.

TRUMAN COOK.

Witnesses:

H. G. MURRAY,
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