

No. 713,492.

Patented Nov. 11, 1902.

P. RAYSON.
SPANNER ATTACHMENT.

(Application filed Aug. 18, 1902.)

(No Model.)

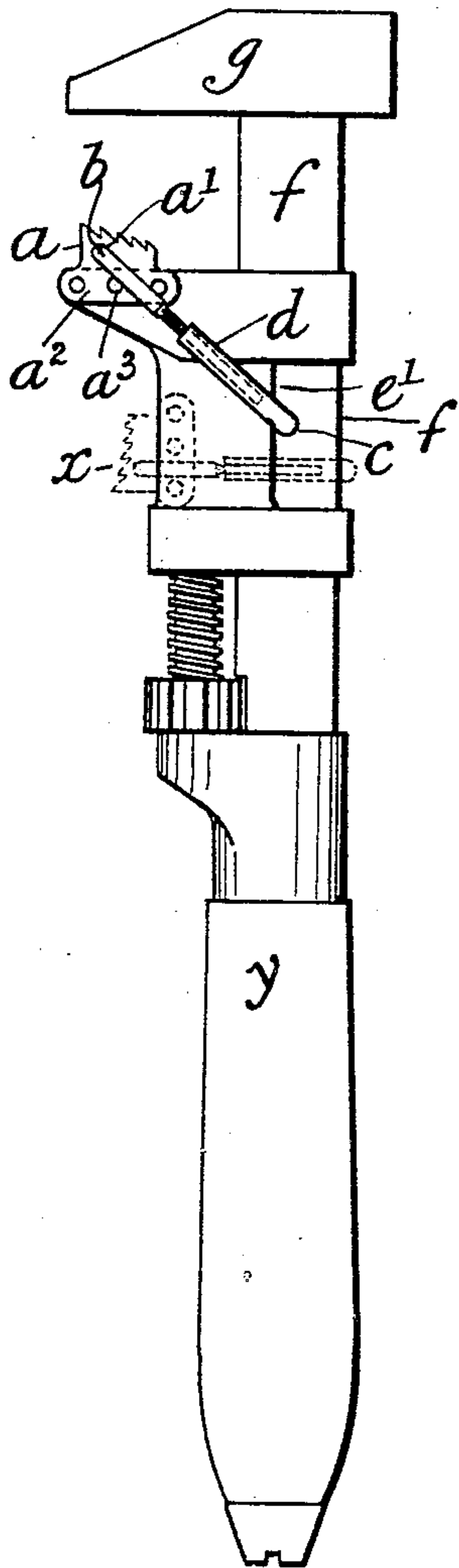


Fig 1

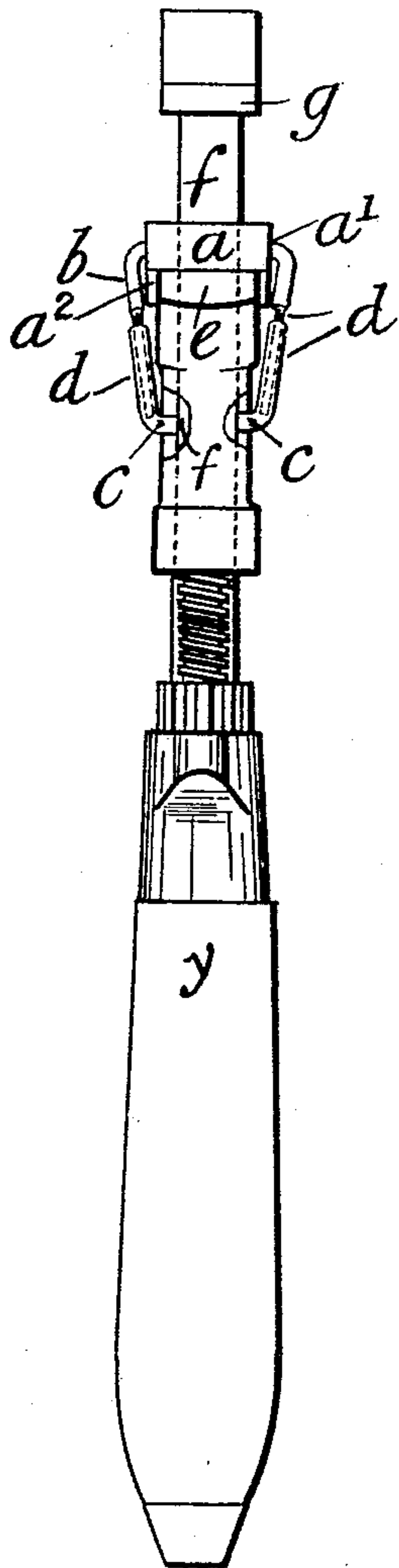


Fig 2

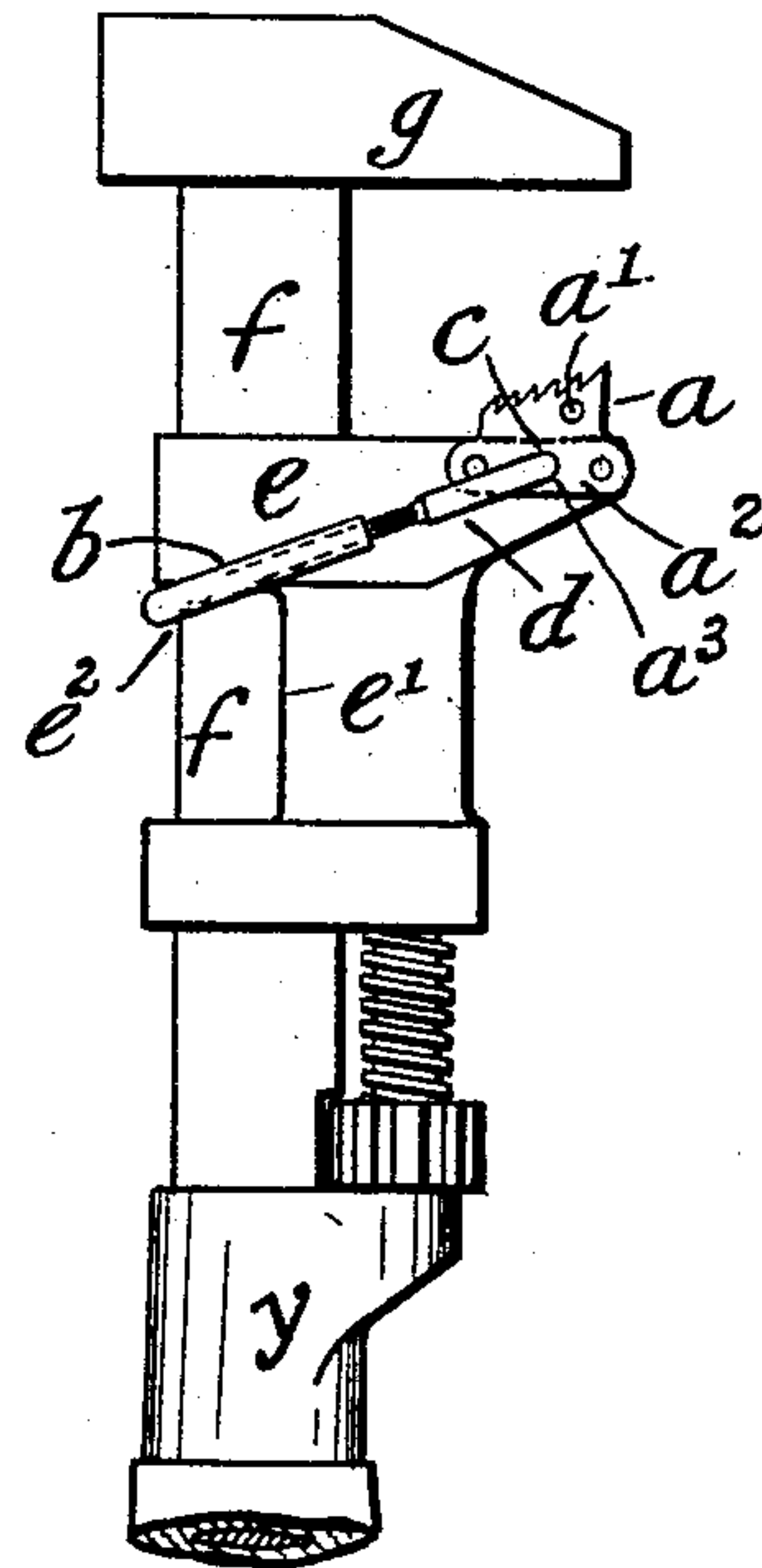


Fig 3

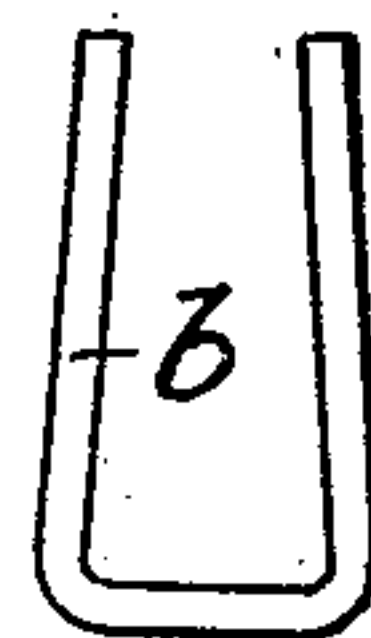
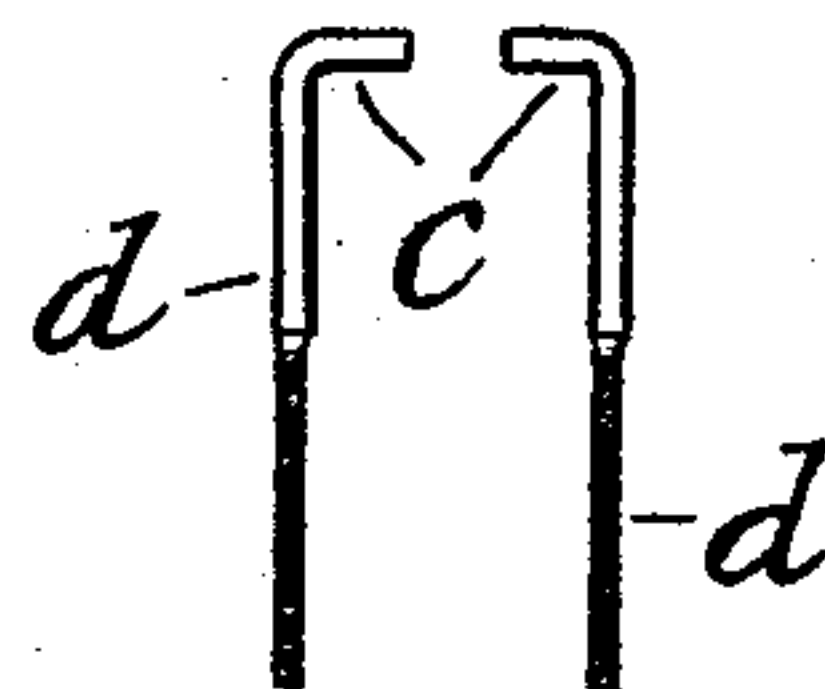


Fig 4

Witnesses
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UNITED STATES PATENT OFFICE.

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SPANNER ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 713,492, dated November 11, 1902.

Application filed August 18, 1902. Serial No. 120,130. (No model.)

To all whom it may concern:

Be it known that I, PHILIP RAYSON, a subject of Edward VII, King of Great Britain and Ireland, residing at Elsternwick, in the State of Victoria, Commonwealth of Australia, have invented certain new and useful Improvements in Spanner Attachments; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

It happens at times in mechanical operations that a pipe or rod needs to be gripped or turned when there is no pipe-wrench available, although a common spanner (or "wrench," as it is also called) is at hand. In these circumstances the purpose has been sometimes served by utilizing a loose metal block in combination with one jaw of the wrench. Such a block is apt to be lost or to shift out of position when being used; and my invention has for its object the provision for a spanner of an adjustable attachment characterized by the following features: First, the spanner may without being altered be converted by my invention into a pipe-wrench; second, as the spanner-jaws (when my attachment is fitted thereto in a certain manner) are made to approach one another the block which forms part of my attachment will be automatically brought closer to the stationary post along which the movable jaw slides, so that a pipe may be gripped by screwing up the wrench without the mechanic having also to hold the block in place by hand; third, my attachment has a device by which it will grip the spanner normally, but allowing easy removal, said device withstanding displacement strains in some directions; fourth, my attachment is applicable to spanners of various styles and sizes and is not limited to any particular part of the spanner as to where it grips the same; fifth, adjustment of the radius of the attachment is provided for when required.

In the accompanying drawings a useful form embodying the invention is illustrated, Figure 1 being a side elevation, and Fig. 2 a front elevation of Fig. 1 with part broken away. Fig. 3 is a side elevation showing a

modification in the position of the parts, and Fig. 4 certain details of the attachment in plan view.

In the figures, *a* represents a block having a flat or like under side to contact slidably with the face of one jaw, as *e*, of the wrench *y*, the other jaw of which is marked *g*. This block *a* has an upper side inclined, serrated, or similarly made suitable for gripping the pipe, serrations being shown in a plane, though a curve might instead be used. This block *a* has also a perforation, as at *a'*, into or through which passes (in the case of Figs. 1 and 2) a rod or wire *b*, having (at a distance from block *a*) lugs or projections *c*, adapted to rest upon and grip either a part of stationary post *f* of the tool, as shown in Figs. 1 and 2, or such other part as may be preferred. In the drawings the said device comprises three parts united—that is, a spring-bow *b* (the members of which tend toward one another, as in Fig. 4) and two limbs *d* (having lugs *c*) screwed into engagement with the bow to vary the length as desired. A single piece of round or other wire bent to shape could be used instead of the said united parts when greater simplicity of construction is sought.

e' is a shoulder against which lugs *c* may be located, as in Figs. 1 and 2, to help the block *a* to resist displacement by knocks or strains should these occur. It is not necessary to utilize, however, shoulder *e'* to insure that block *a* will swing or slide automatically toward post *f* as jaw *e* is moved toward jaw *g*. The block swings so, because lugs *c*, Fig. 1, remain stationary on post *f*. Hence limbs *d*, with bow *b*, move radially. This sliding of block *a* is avoidable by letting lugs *c* rest on jaw *e*. A location by which the attachment may be secured to the spanner out of the way of the jaw-faces is seen dotted at *x*. Block *a*, which engages one spanner-jaw, is shown provided with side wings *a²*, which may be perforated, as at *a³*, to take, if desired, set-screws, while instead of having lugs *c* bearing upon the sides of jaw *f* or elsewhere distant from block *a* the bow *b* may, as shown in Fig. 3, bear around the back of said jaw, as in angle *e²*, and the lugs *c* pass through hole *a'*, or, when preferred, through holes *a³*, and bear firmly

upon the jaw *e*. By so locating the attachment it could not be forced off the spanner by violent knocks or strains.

In some respects the construction set forth
5 may be modified without departing from the pith and scope of my invention. For example, the lugs or wings *a*² might be extended and made springy, so as to grip the spanner at their lower ends.

10 What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

1. In a wrench attachment, the combination
15 of a serrated slide and means for imparting transverse movement thereto upon the operation of the movable jaw of the wrench.

2. In a wrench attachment, the combination
20 of a serrated slide, mounted on the movable jaw of the wrench, and means for moving said slide transversely of said movable jaw upon operating the latter.

3. In a wrench attachment, the combination
25 of a serrated block, and means for retaining said block on one of the jaws of the wrench, comprising a spring-bow having longitudinally-adjustable gripping-arms.

4. In a wrench attachment, the combination
30 of a serrated block, of means for retaining said block on the movable jaw of the wrench, comprising a spring-bow having longitudinally-adjustable arms and gripping-lugs on said arms.

5. In a wrench attachment, the combination

of a serrated slide, provided with guiding-wings, mounted on the movable jaw of the wrench, and means for moving said slide
35 transversely of said movable jaw, upon operating the latter.

6. In a wrench attachment, the combination
40 of a serrated slide mounted on the movable jaw of the wrench, and means for moving said slide transversely of said movable jaw upon operating the latter, comprising a spring-bow, engaging said slide and wrench-shank.

7. In a wrench attachment, the combination
45 of a serrated slide, mounted on the movable jaw of the wrench, and means for moving said slide transversely of said movable jaw upon operating the latter, comprising a spring-bow in engagement with said slide and having longitudinally-adjustable arms provided with
50 gripping-lugs, adapted to engage the wrench-shank.

8. In a wrench attachment, the combination
55 with a serrated block, of a spring-bow for retaining said block on one of the jaws of the wrench, comprising a substantially U-shaped member, and screw-threaded arms, provided with gripping-lugs, engaging said U-shaped
60 member.

In testimony whereof I affix my signature in presence of two witnesses.

PHILIP RAYSON.

Witnesses:

W. H. CUBLEY,
G. G. TURRI.