May 8, 1923.

1,454,782

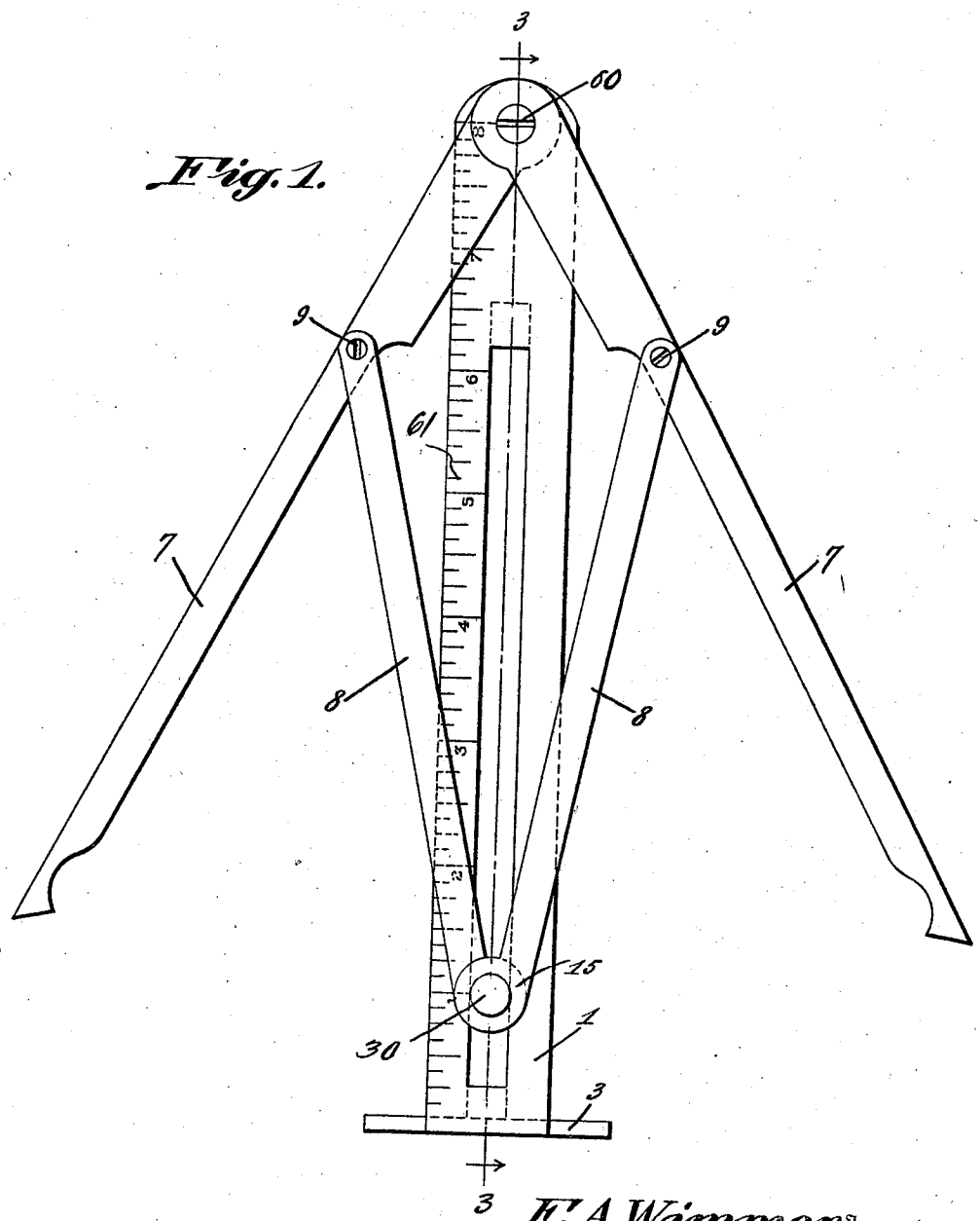
E. A. WIMMER

TOOL

Filed Aug. 10, 1921

2 Sheets-Sheet 1

Fig. 1.



E. A. Wimmer, Inventor

By C. A. Snow & Co.

Attorney

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2 Sheets-Sheet 2

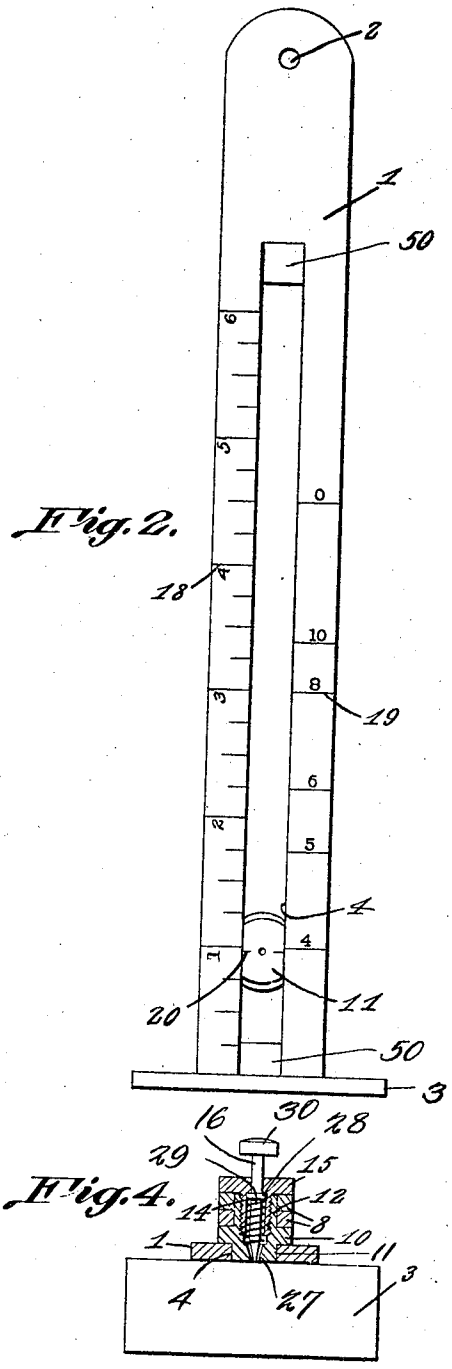

Fig. 2.

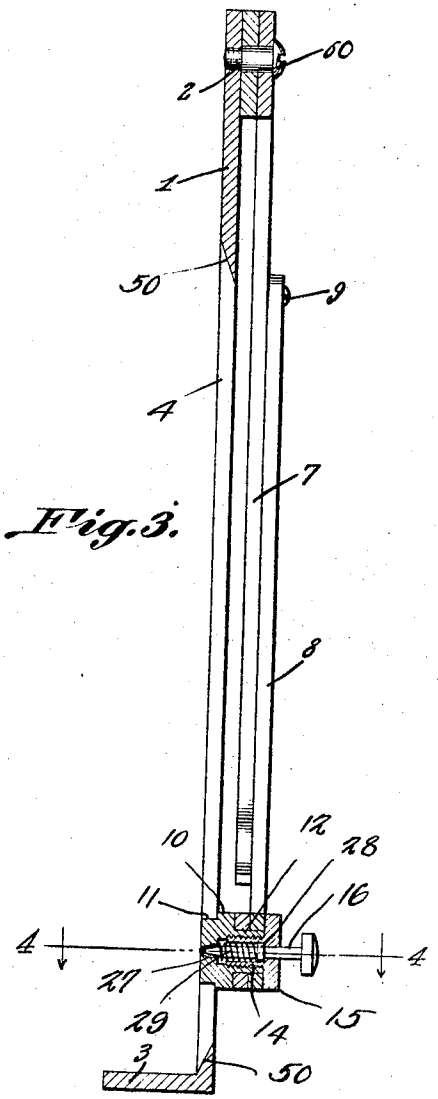

Fig. 3.

Fig. 4.

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Patented May 8, 1923. 1,454,782

UNITED STATES PATENT OFFICE.

EDITH A. WIMMER, OF SALT LAKE CITY, UTAH.

TOOL.

Application filed August 10, 1921. Serial No. 491,246.

To all whom it may concern:

Be it known that I, EDITH A. WIMMER, a citizen of the United States, residing at Salt Lake City, in the county of Salt Lake and State of Utah, have invented a new and useful Tool, of which the following is a specification.

This invention aims to provide a simple tool which will embody the advantages of a try-square, an angle square and a gage. The invention aims to provide, further, novel means for mounting the gage point, and to provide novel means for securing the necessary movements in the parts which form the angle square.

It is within the province of the disclosure to improve generally and to enhance the utility of devices of that type to which the invention appertains.

With the above and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that, within the scope of what is claimed, changes in the precise embodiment of the invention shown can be made without departing from the spirit of the invention.

In the accompanying drawings:—

Figure 1 shows in elevation, a device constructed in accordance with the invention; Figure 2 is an elevation showing the main member of the device; Figure 3 is a section on the line 3—3 of Figure 1; Figure 4 is a section on the line 4—4 of Figure 3.

In carrying out the invention, there is provided a main member 1, supplied in one end with an opening 2, and equipped at its opposite end with a transverse head 3. The main member 1 has a longitudinal slot 4, the member 1 being beveled, as indicated at 50, at the ends of the slot.

A pivot element 60 is mounted in the opening 2 of the main member 1. Arms 7 are mounted to swing on the pivot element 60. Links 8 are provided. The links 8 are united by pivot elements 9, with the arms 7, intermediate the ends of the arms. The numeral 10 denotes a rider mounted to reciprocate on the main member 1 and provided with a projection 11 slidably positioned in the slot 4. The rider 10 has a neck 12 whereon the links 8 are mounted to swing. A tubular nut 14 is threaded into the neck 12 of the rider 10 and includes a head 15 overlapping one of the links 8 and serving to hold the links together, for pivotal movement, on the neck.

The numeral 16 denotes a center point mounted to reciprocate in the head 15 of the nut 14, the projection 11 of the rider 10 carrying a reduced opening 27 through which the extreme point of the member 16 may be advanced. The center point 16 has an abutment 28. A compression spring 29 surrounds the center point 16 and is located within the neck 12, one end of the spring 29 engaging the abutment 28, and the other end of the spring engaging the rider 10 at the inner end of the reduced opening 27.

The main member 1 is provided at one side of the slot with a scale 18 which may be marked off into inches or other units, the scale being used in connection with the center point 16 and the head 3. On the opposite side of the slot there is a scale 19 which is used in connection with the arms 7, the part 11 of the rider 10 having indices 20, shown in Figure 2 and adapted to cooperate with the scales 18 and 19.

One of these indices 20, coacting with the scale 19, serves to advise the operator when certain arbitrary pitch angles, and the like, are formed by the arms 7.

When one edge of an object is placed against the head 3, the main member 1 and the head 3 will form a try-square. By shifting the rider 10, any desired angle may be measured, as defined by the arms 7, one of the indices 20 cooperating with the scale 19 as above stated.

The center point 16 normally is retracted by the action of the spring 29. The center point 16 terminates in a button 30, and by means of the button, the center point may be advanced so that the extremity thereof will project beyond the lower surface of the main member 1. The distance between the center point 16 and the head 3 may be determined by one of the indices 20 and the scale 18. If the head 3 is placed in engagement with a board or like object, and if the tool be slipped along the board, the center point 16 will leave a mark, parallel to said edge. The main member 1 may be provided on its side opposite to scales 18 and 19, with a scale 61, cooperating with the head 3 and having the function of the ordinary scale on a try-square.

What is claimed is:—

1. In a device of the class described,

a main member provided at one end with a transverse head; arms pivoted to the main member; links pivoted to the arms intermediate the ends of the arms; a rider mounted to reciprocate on the main member, the links being pivoted to the rider; a center point mounted to reciprocate in the rider and cooperating with the head; and spring means housed within the rider for retracting the center point.

2. In a device of the class described, a main member provided at one end with a transverse head extended laterally beyond said member and of sufficient length to maintain said member at right angles to the work, when the head is slid along an edge of the work; a rider mounted to reciprocate on the main member; a center point carried by the rider and cooperating with the head to draw a line on the work, parallel to the head; arms pivoted at one end to the main member, and links pivoted to the intermediate portions of the arms and to the rider, the arms constituting levers whereby motion may be transmitted to the rider through the instrumentality of the links.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

EDITH A. WIMMER.

Witnesses:
ROSE A. HAAS,
W. S. EVANS.