

T. P. TIVY.
COMBINATION TOOL.
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953,806.

Patented Apr. 5, 1910.

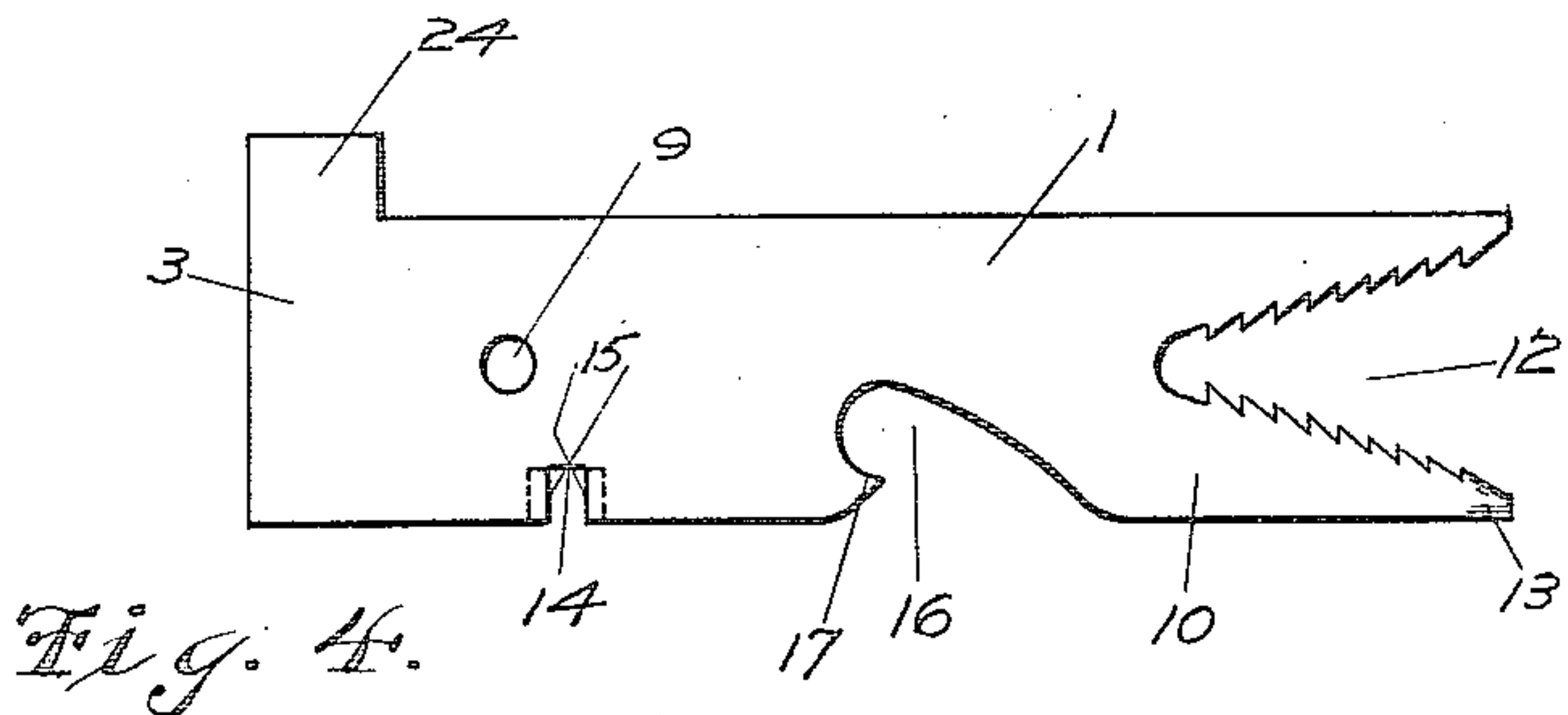


Fig. 4.

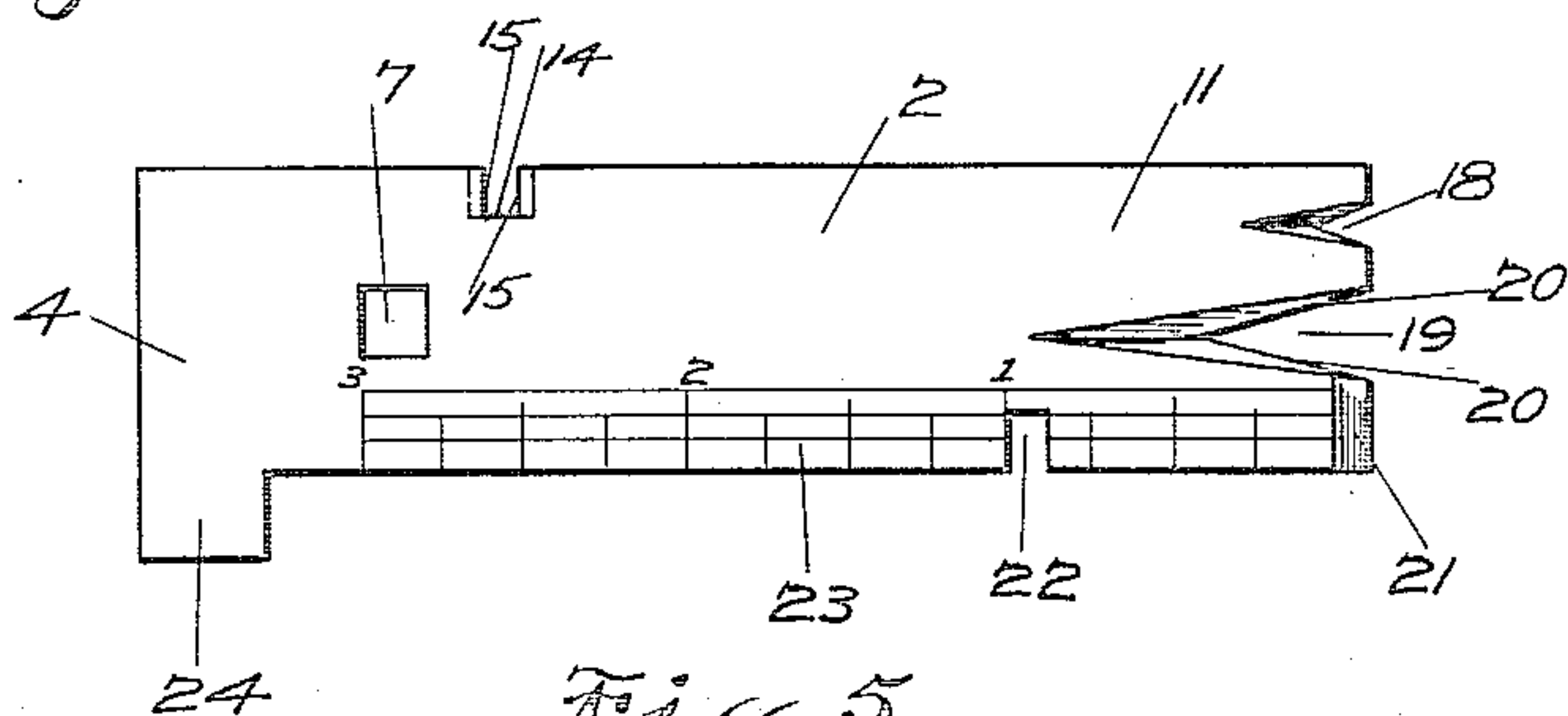


Fig. 5.

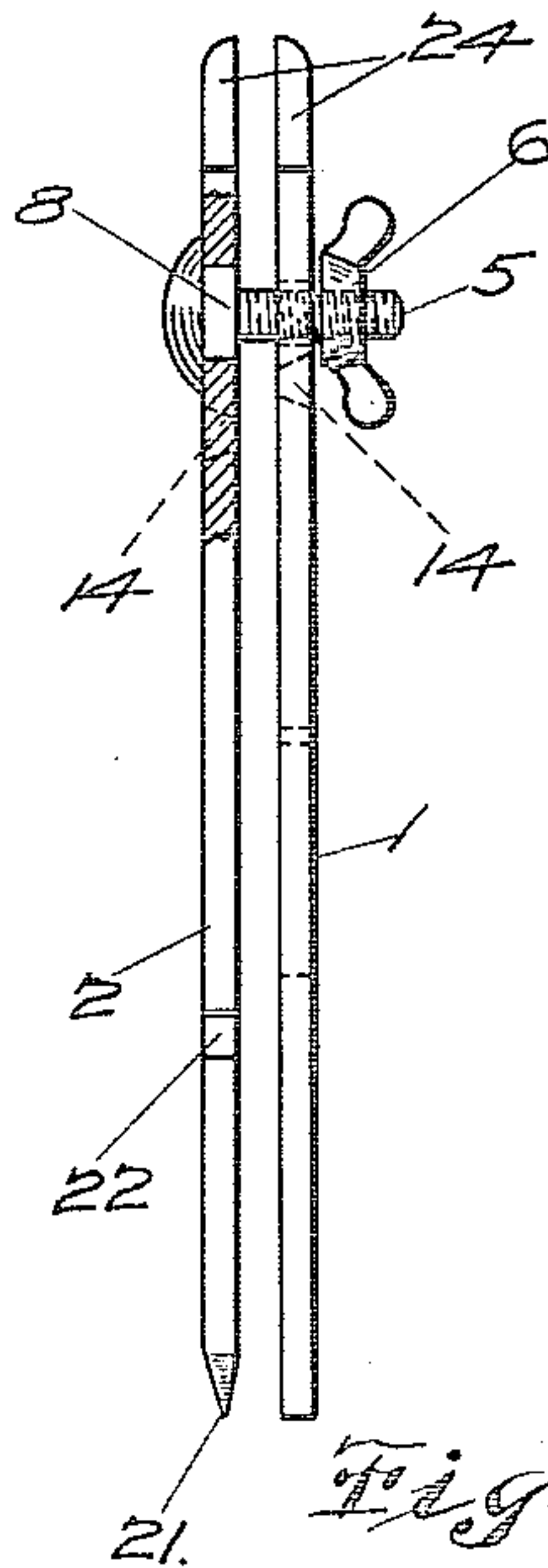


Fig. 3.

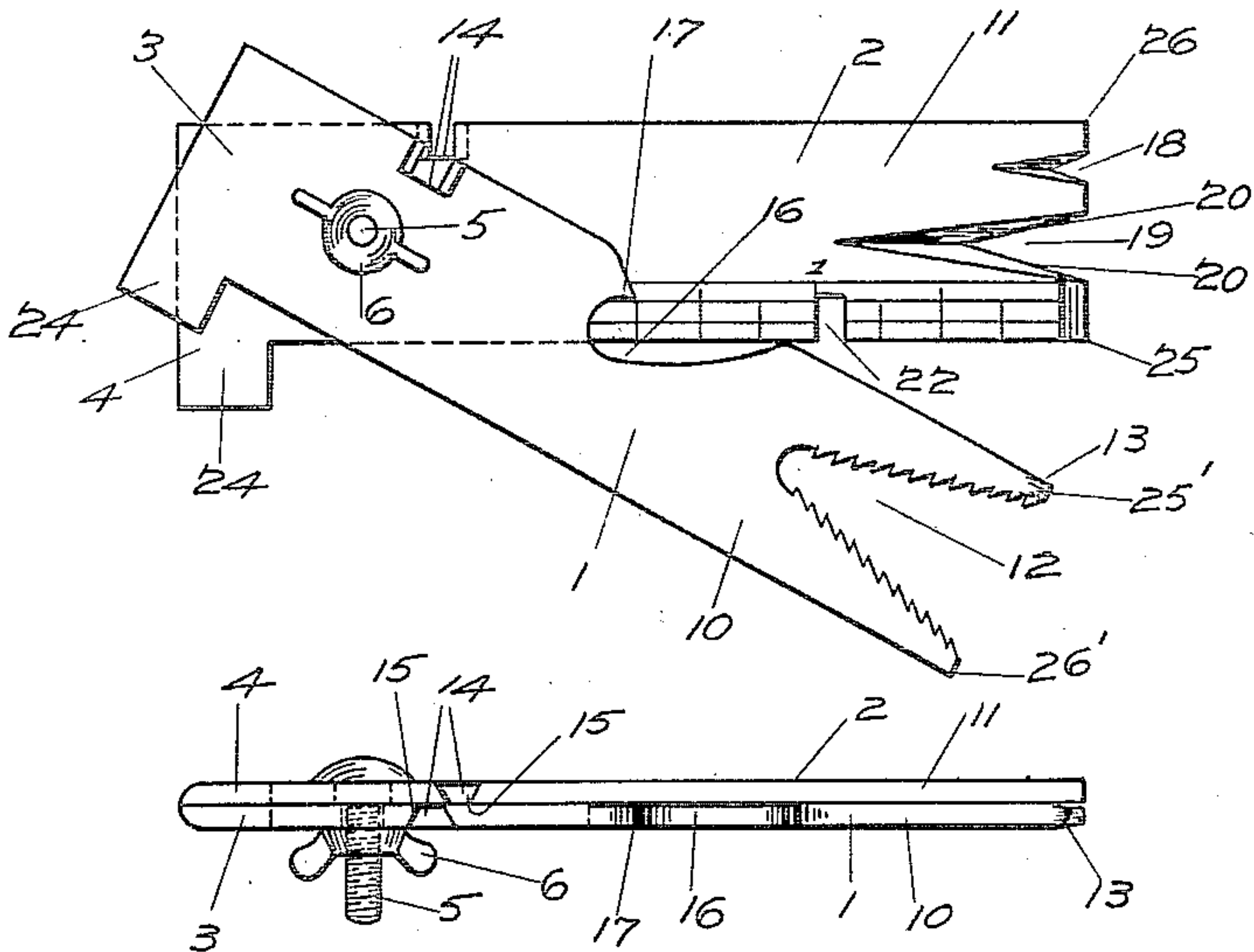


Fig. 1.

Fig. 2.

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UNITED STATES PATENT OFFICE.

THOMAS P. TIVY, OF ST. LOUIS, MISSOURI.

COMBINATION-TOOL.

953,806.

Specification of Letters Patent.

Patented Apr. 5, 1910.

Application filed March 11, 1909. Serial No. 482,839.

To all whom it may concern:

Be it known that I, THOMAS P. TIVY, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Combination-Tools, of which the following is a specification.

My invention relates to tools designed so as to be adapted to be used for a variety of different purposes, such being commonly known as combination tools.

The object of my invention is to provide a device of the character mentioned which will be of such design as to be adapted to efficiently serve in the capacity of a large number of different tools, and one which will be strong, durable and extremely simple of construction, hence of low cost to manufacture.

Other objects will appear hereinafter.

With these objects in view my invention consists in a device characterized as above mentioned and in certain details of construction and arrangement of parts all as will be hereinafter fully described and particularly pointed out in the claims.

My invention will be more readily understood by reference to the accompanying drawings forming a part of this specification, and in which,

Figure 1 is a side elevation of the preferred form of embodiment of my invention, the arms thereof being shown in slightly opened position, Fig. 2 is a top plan view, the arms thereof being shown in closed position, Fig. 3 is a bottom plan view, a portion of one of the arms being broken away to better illustrate its construction, and Figs. 4 and 5 are side elevations of the respective arms of the device, showing the same disconnected.

Referring now to the drawings 1 and 2 indicate the substantially rectangularly formed arms of my device the same being pivotally secured at their end portions 3 and 4 respectively by means of a bolt 5 and a thumb nut 6 threaded upon said bolt. In order to effect the locking of said bolt against relative rotary movement thereof in said arms, for obvious reasons, I preferably provide the arm 2 with a square slot 7 which is adapted to snugly receive the squared portion 8 of said bolt, the opposite end portion of the latter passing through a circular slot 9 provided in the member 1. The slot 9 is preferably of a diameter slightly greater

than that of said bolt, thereby permitting of a slight longitudinal rocking of the member 1. By such construction it is evident that, if desired, the device may be used as a hand vise or clamp, in which event the arm end portions 3 and 4 may form the vise jaws and the opposite end portions 10 and 11 respectively of said arms the vise handle. The extremity of the end portion 10 of the member 1 is provided with a V-shaped slot 12 the edges of which are toothed as shown, such provision obviously adapting my device for employment as a pipe or alligator wrench. The extremity 13 of the member 1 is rounded and tapering as shown adapting the same for use as a nail set. Provided in corresponding edges of the arms 1 and 2 are similar coacting slots 14 the contiguous extremities 15 of the sides of which are knife edged in construction, thereby adapting the device to serve in the capacity of a wire cutter or nipper. Provided in one edge of the member 1 is an irregular slot 16 forming a hook 17, the latter being adapted to serve as a crown-seal opener for bottles.

The extremity of the end portion 11 of the arm 2 is provided with V-shaped recesses 18 and 19, the former thereof being adapted to serve in the capacity of a tack puller or remover. The recess 19 is of comparatively great depth the same being bounded by knife edges 20. The latter recess is adapted to serve as a knife or scissors blade sharpener, the sharpening of the latter being effected by drawing the same transversely through said recess in forced contact with the edges of the latter. The portion 21 of the extremity of the end portion 11 is beveled, as shown in Fig. 3, adapting the same to serve in the capacity of a screw-driver. A rectangular notch 22 formed in one of the longitudinal edges of said member 2 is adapted to receive the edge of a plate of glass of ordinary thickness, such notch serving as a means of separating portions of glass after the latter has been scored or cut by a glass cutter. One of the sides of the member 2 at one of the longitudinal edges thereof is graduated as at 23 adapting the same to serve as a measuring rule.

The end portions 3 and 4 of the members 1 and 2 are provided at corresponding edges thereof with laterally projecting portions 24, the same being adapted, when the arms

1 and 2 are in closed or registering position, to serve as a hammer head.

By positioning the arms 1 and 2 at right angles to each other the device may evidently
5 act as a square, and further the same is applicable as a compass, in which event the arm end portions 10 and 11 serve as the compass legs and the corners 25—25' or 26—26' thereof as the compass points.

10 While I have shown what I deem to be the preferable form of my device, I do not wish to be limited thereto, as there might be various changes made in the details of construction without departing from the spirit
15 of my invention comprehended within the scope of the appended claims. And while I have enumerated and described the different purposes for which my device may be used, it is understood that the same may
20 be employed for any other purpose to which it is applicable.

Having described my invention what I

claim as new and desire to secure by Letters Patent is:

A device of the class described, comprising 25 two flat and substantially similar rectangularly shaped special tool bars, a transverse rivet pivotally connecting said bars, and said bars being provided at their sides at one end with registering projections in 30 a plane with the bars and having flat aligning end faces in a plane parallel with said rivet adapted to serve conjointly as a hammer head, and with registering notches adapted to serve as wire nippers, substan- 35 tially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS P. TIVY.

Witnesses:

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HELEN F. LILLIS.