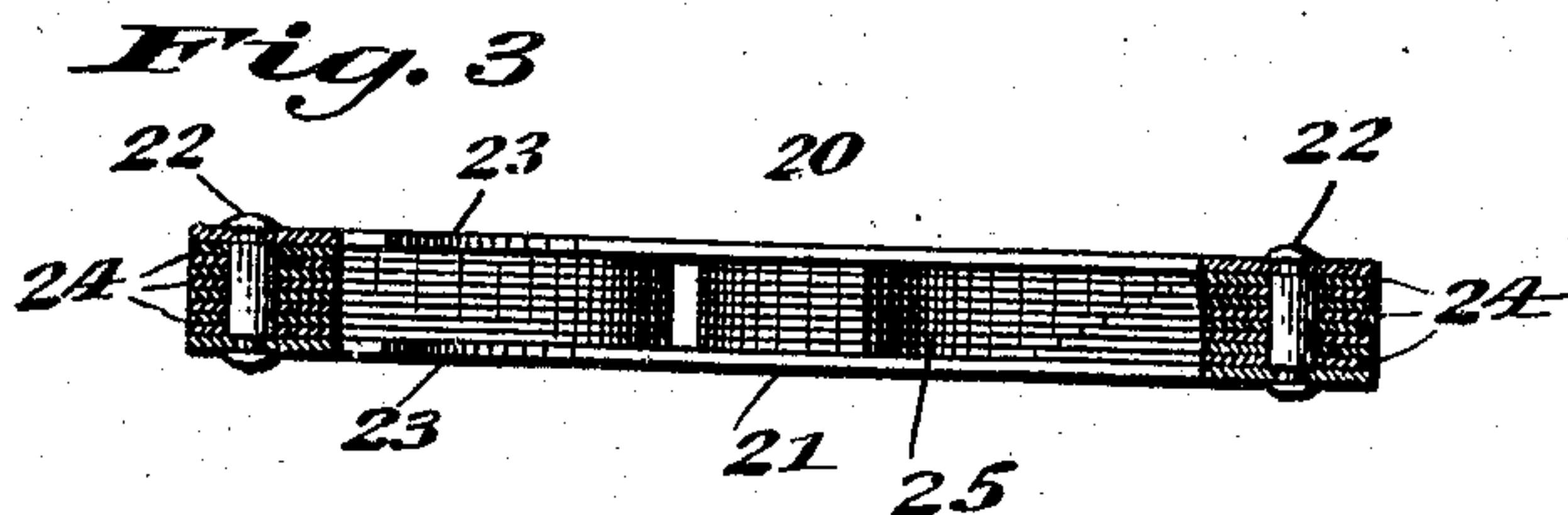
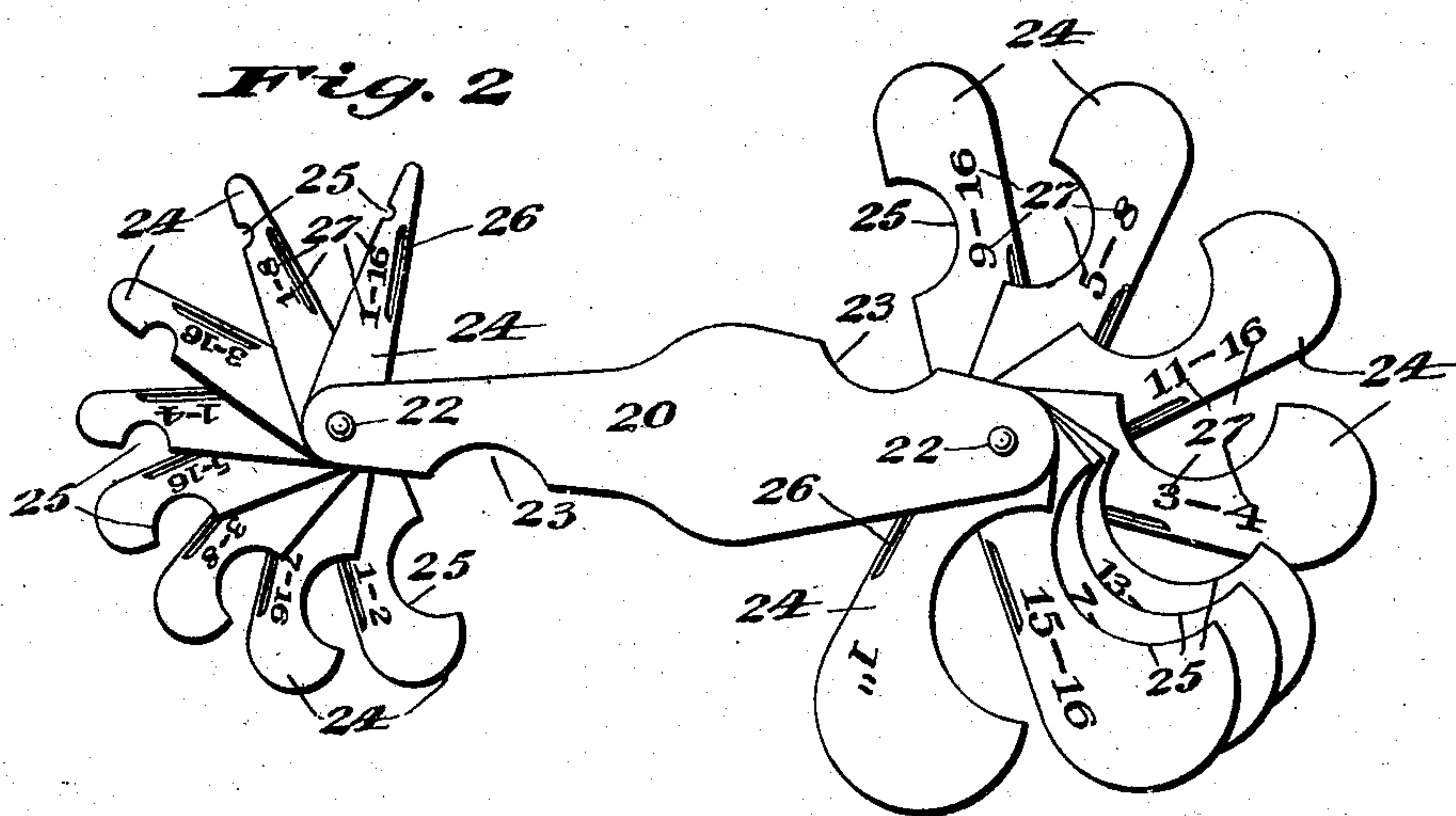
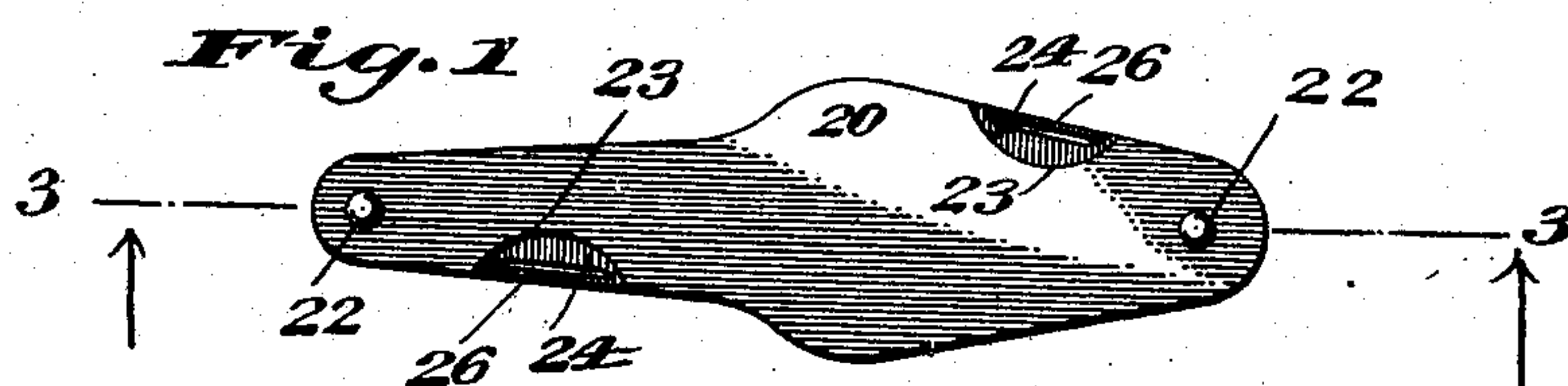


No. 867,011.

PATENTED SEPT. 24, 1907.

W. S. BROMLEY.
TOOL OR GAGE FOR MACHINISTS.
APPLICATION FILED NOV. 5, 1906.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM S. BROMLEY, OF CHICAGO, ILLINOIS.

TOOL OR GAGE FOR MACHINISTS.

No. 867,011.

Specification of Letters Patent.

Patented Sept. 24, 1907.

Application filed November 5, 1906. Serial No. 341,981.

To all whom it may concern:

Be it known that I, WILLIAM S. BROMLEY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain
5 new and useful Improvements in a Tool or Gage for Machinists, of which the following is a specification.

This invention relates to improvements in a tool or gage, which is especially intended for the use of machinists in what is commonly known as "fillet work,"
10 but which is applicable for use by others also, and for various kinds of work where accuracy and precision is required, for instance, in the manufacture of rods, shafting, bearings and the like, or wherever cylindrical, partially cylindrical, or convex or concave elements
15 enter into the composition of the device or machine being manufactured; and it consists in certain peculiarities of the construction, novel arrangement, and operation of the various parts thereof, as will be hereinafter more fully set forth and specifically claimed.

20 The object of the invention is to provide a tool or gage of the above named character, which shall be of a handy and convenient form, simple and inexpensive in construction, strong, durable, efficient and precise or accurate in operation, and so made as to afford
25 means for the graduated gaging of the parts of the work.

Other objects and advantages of the invention will be disclosed in the subjoined description and explanation.

30 In order to enable others skilled in the art to which my invention pertains, to make and use the same, I will now proceed to describe it, referring to the accompanying drawing, in which—

Figure 1 is a face view of a tool embodying my invention, showing the parts thereof folded together, or in their closed positions. Fig. 2 is a similar view, showing the graduated gaging members extended from the handle;—and—Fig. 3 is a view partly in section and
40 partly in elevation taken on line 3, 3 of Fig. 1 looking in the direction indicated by the arrows.

Like numerals of reference, refer to corresponding parts throughout the different views of the drawing.

The reference numerals 20 and 21 designate the sides or face plates of the handle of the tool, which may
45 be made of any suitable size, form and material but preferably of metal, and of substantially the shape as shown in Figs. 1 and 2 of the drawing. These sides or face plates are secured together near each of their ends, yet at suitable distances apart to receive therebetween
50 the gaging members by means of rivets 22, which are shouldered near each of their ends as shown in Fig. 3 of the drawing, to prevent the plates 20 and 21 being clamped too tightly on the gaging members when the

ends of the rivets 22 are upset to hold said plates in place.

As shown in the drawing, one or both of the sides or plates comprising the handle of the tool may be provided on each of its edges with cutaway portions 23, to expose parts of the gaging members so that they may be reached and engaged by the thumb of the user, for the
60 purpose of withdrawing them from between the sides of the handle.

Pivotaly secured on each of the rivets 22 between the sides 20 and 21 of the handle are a number of gaging members 24, which have the edges of their free ends
65 formed semi-circular in shape and graduated in sizes. Each of the members 24 is provided in one of its edges near its free end with a semi-circular recess 25, which recesses are also graduated in sizes. At suitable points on one or both sides thereof, each of the members 24
70 may be provided with a longitudinal groove 26, to be disclosed through the cutaway portions 23 of the sides of the handle, so that the thumb nail of the user may be inserted therein when it is desired to withdraw the members 24 from between the sides of the handle.
75 Each of the gaging members 24 may also be provided on one or both of its sides with indicating marks or numerals 27, to designate in inches or fractional parts thereof the size of the recess 25 and semi-circular free end of said member, so that the member desired to be
80 used may be readily selected from the group of members and left in its extended position, while the other members of said group may be turned on their pivots in such a manner as to be inclosed between the sides of the handle.
85

In the drawing I have illustrated a group of eight (8) gaging members, pivotaly secured between each of the ends of the handle, and shown them as graduated in one-sixteenth ($\frac{1}{16}$) of an inch in size, but I desire it understood that I may employ any number of the gaging members at each or either end of the handle and may form their gaging parts of any suitable size or graduation, that is to say, in sizes less or greater than one-sixteenth ($\frac{1}{16}$) of an inch, without departing from the spirit of my invention.
95

From the foregoing and by reference to the drawing it will be seen and readily understood that by employing a tool embodying my invention, the rounded or convex portion of a piece of work may be readily gaged by placing the recess 25 of the desired size of one of the
100 gaging members on the part or piece of work, and that by placing the semi-circular free end of one of the gaging members 24 of the desired size in the concavity or curved recess of the piece of work, it can be readily gaged, thus ascertaining whether or not the parts are
105 of the proper size.

It is obvious that when the gaging members 24 are not in use, they may be folded between the sides 20 and 21 constituting the handle, thus affording a tool of compact and convenient form, which may be carried in 5 the pocket if so desired.

Having thus fully described my invention, what I claim as new and desire to secure by Letters-Patent, is—

10 In a tool or gage, the combination with a handle consisting of two spaced apart side pieces, of a series of gag-

ing members graduated in size at their free ends and pivotally secured at their other ends between the side pieces of the handle and near each end of said side pieces, each of said gaging members having its free end formed to provide a semi-circular portion and provided in one of its edges 15 near said semi-circular portion with a semi-circular recess, the size of which recess corresponds with that of the semi-circular portion of the member in which it is formed.

WILLIAM S. BROMLEY.

Witnesses:

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