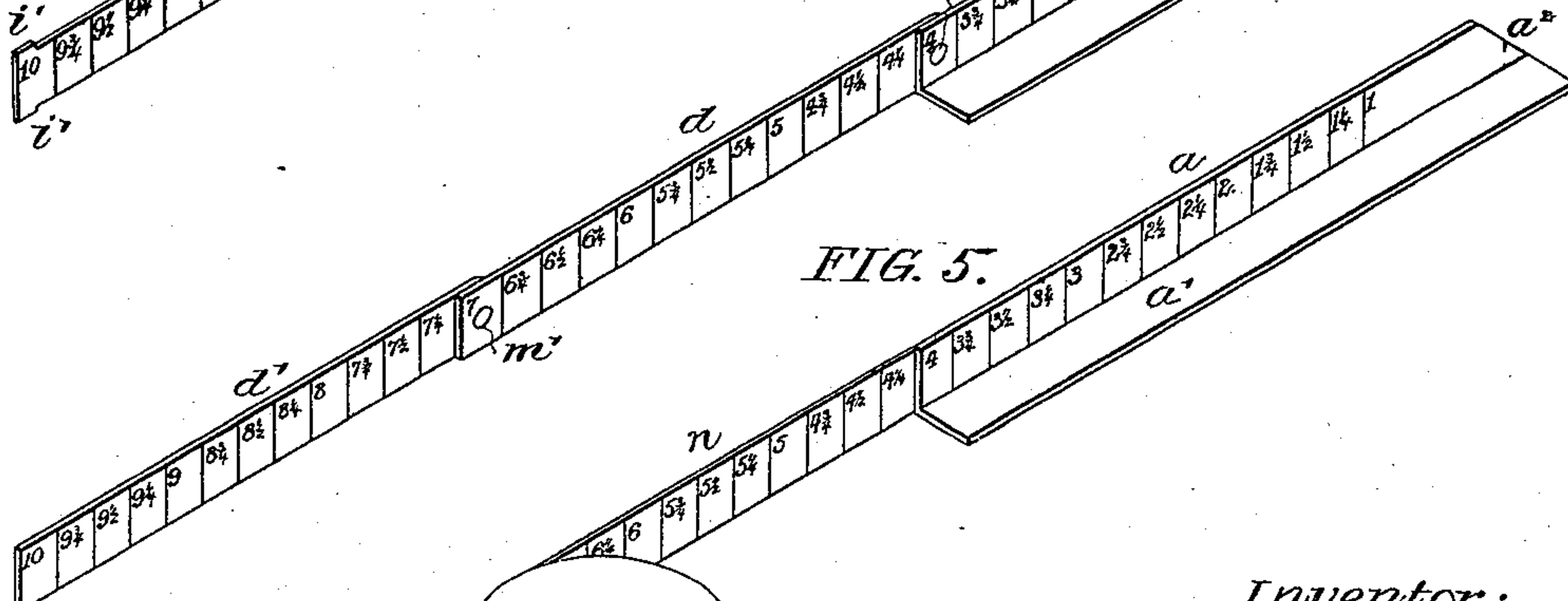
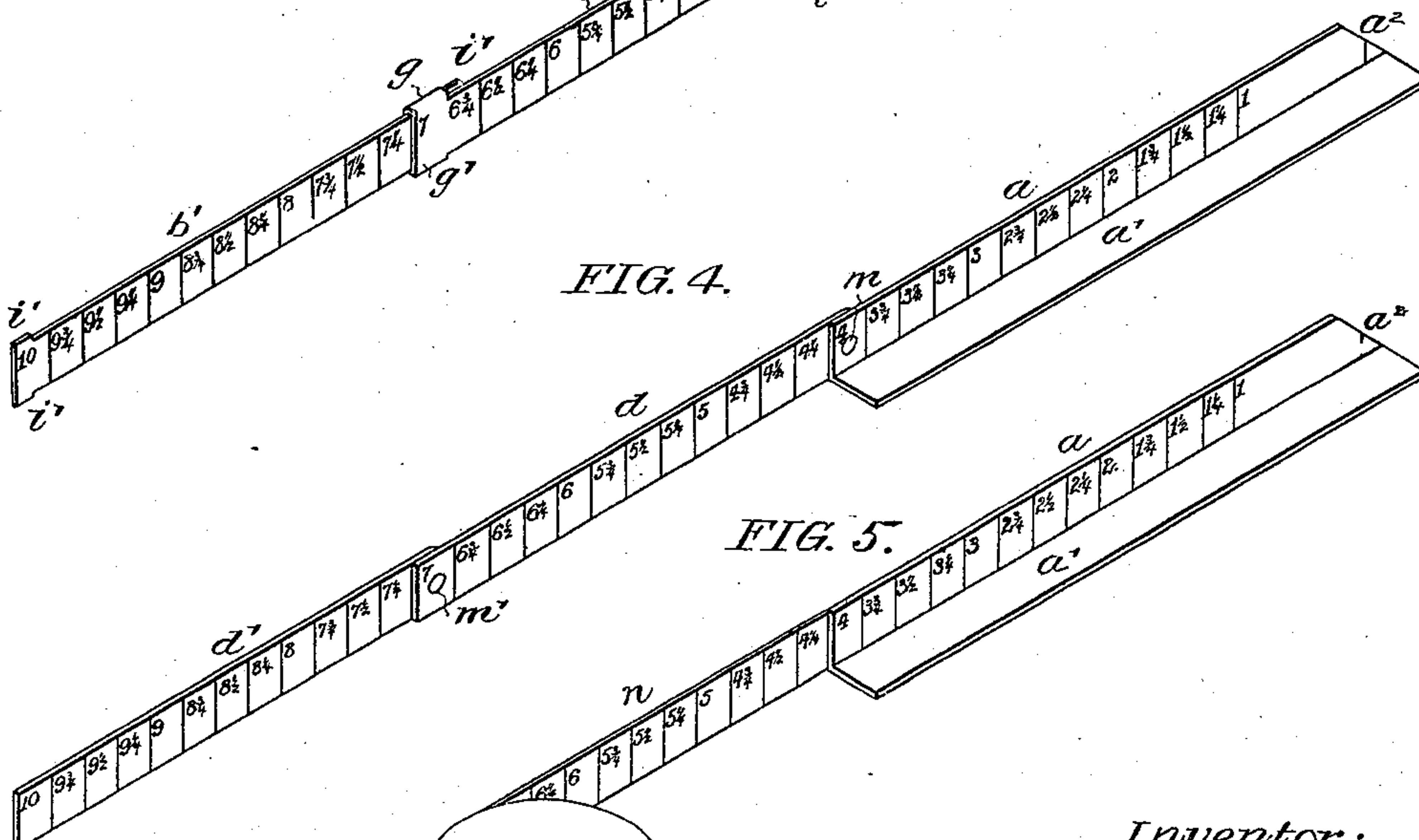
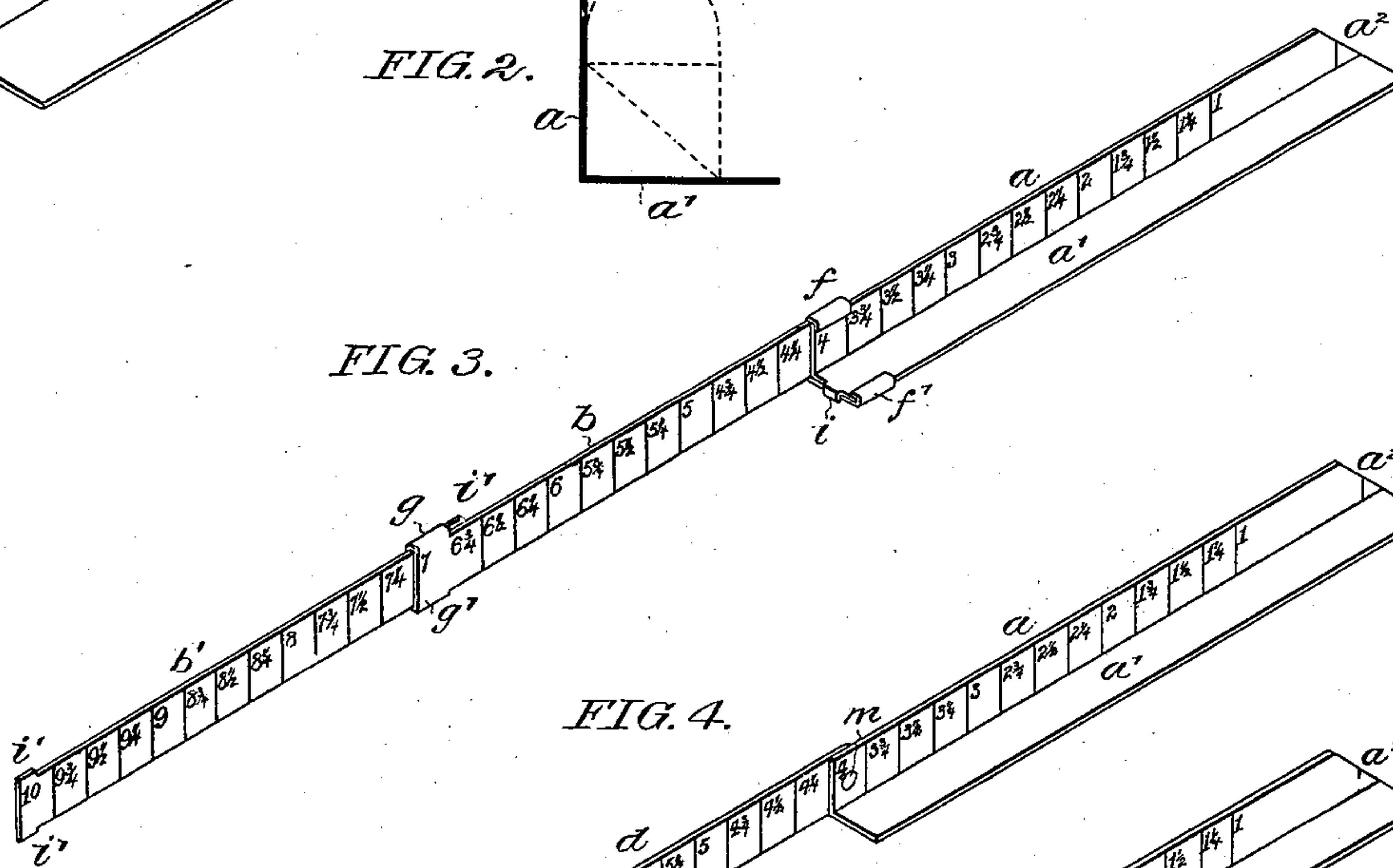
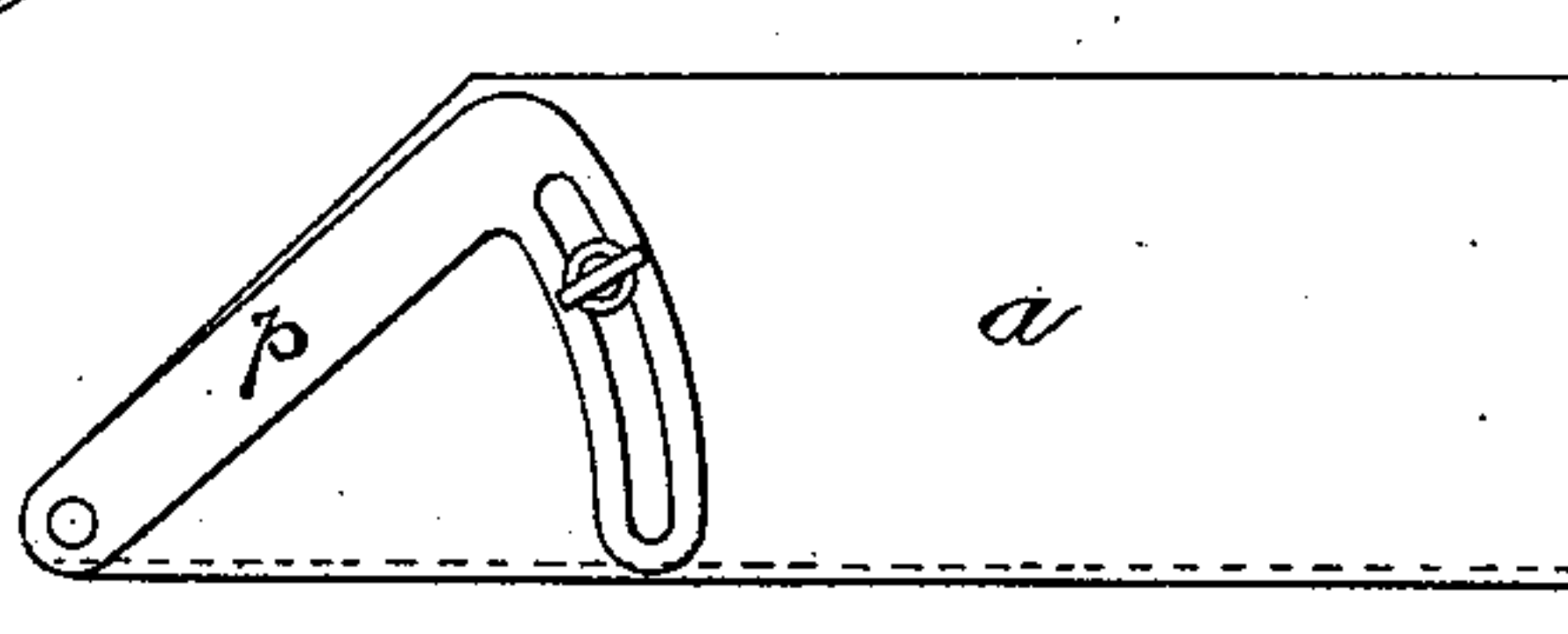
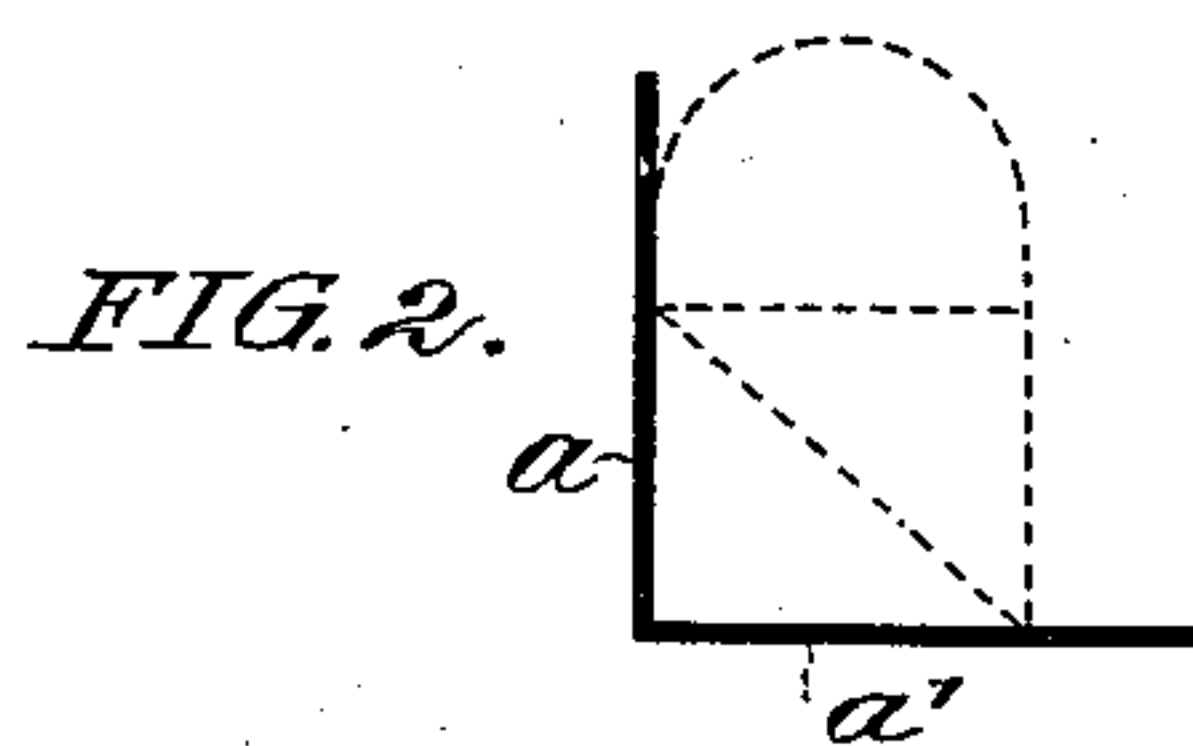
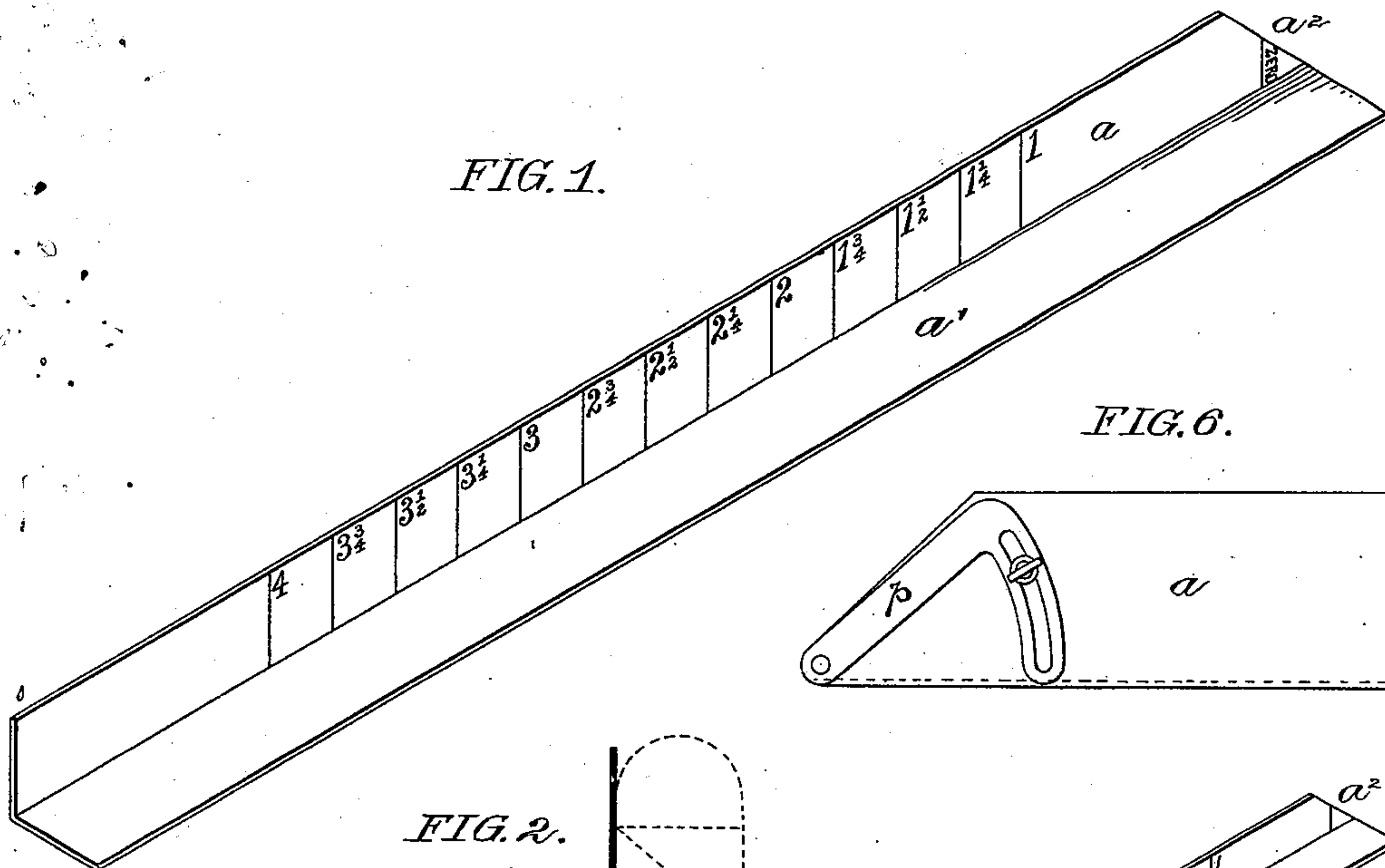


(No Model.)

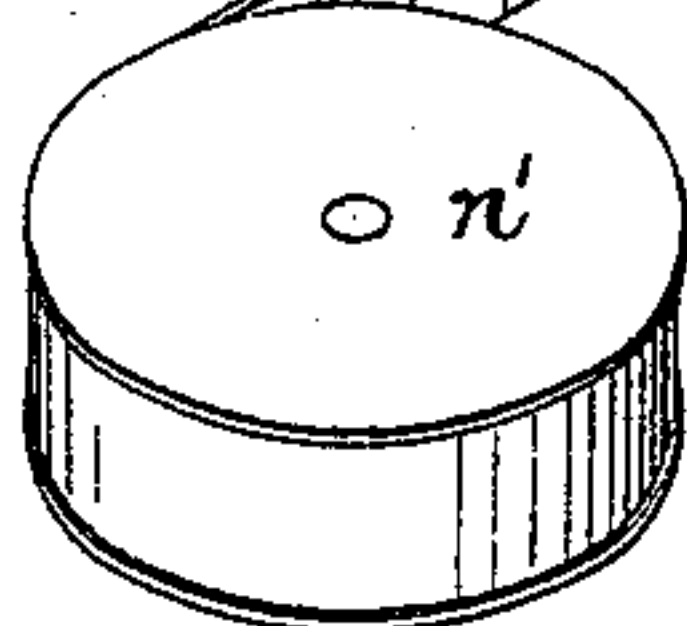
J. J. FEARON.  
CUTTING GAGE FOR PACKING.

No. 563,579.

Patented July 7, 1896.



Inventor:  
Hamilton S. Turner  
Wm. A. Bass.



Inventor:  
James J. Fearon  
by his Attorneys  
Howman & Howman



# UNITED STATES PATENT OFFICE.

JAMES J. FEARON, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO  
CHARLES A. DANIEL, OF SAME PLACE.

## CUTTING-GAGE FOR PACKING.

SPECIFICATION forming part of Letters Patent No. 563,579, dated July 7, 1896.

Application filed June 10, 1895. Serial No. 552,252. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES J. FEARON, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented a Cutting-Gage for Packing, of which the following is a specification.

The object of my invention is to provide a simple and efficient device for facilitating the cutting of strips of packing into proper lengths for application to any desired diameter of rod piston or plunger, an object which I attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a cutting-gage for packing made in accordance with my invention. Fig. 2 is a transverse section of the gage on a larger scale. Figs. 3, 4, and 5 are perspective views on a smaller scale than Fig. 1 and showing extensible gages constructed in accordance with my invention; and Fig. 6 is a rear view of part of the gage, illustrating a means of adjusting the angle of that end of the same which constitutes the cutting-guide.

The device shown in Figs. 1 and 2 consists of a trough-like receptacle having sides  $a a'$  at right angles to each other, one end of the side  $a$  being beveled at an angle of forty-five degrees, as shown at  $a^2$  in Fig. 1. The inner face of one of the sides of the trough, say, for instance, the side  $a$ , is graduated, as shown in Fig. 1, the graduations beginning at some distance from the beveled end of said side  $a$  and being numbered to indicate the diameter of the rod or piston, which will be properly surrounded by a strip of packing of a length equal to the distance between the beveled end of the side  $a$  and the graduation. Thus the scale shown in Fig. 1 is graduated for rods of a diameter of from one to four inches, the successive graduations representing differences of one-fourth of an inch in the diameter of the rod.

It will be understood that the graduations of the scale are 3.1416 times the size of the graduations of an ordinary scale, so as to bear to the latter the same relation that the circumference of a circle bears to its diameter.

The beveled end of the side  $a$  of the trough

constitutes a guide for the knife in cutting the ends of the strip, so as to form a lap-joint when said strip is bent around the rod, the zero-graduation being formed midway of the beveled end of the side  $a$  to indicate the length of strip required when the ends are to abut instead of overlapping.

In Fig. 2 a well-known form of packing is shown by dotted lines applied to the gage in position for being cut.

When the gage is intended for use in preparing packing for rods of large diameter, it is preferable to furnish the trough-shape gage with extension-strips, which may be either sliding strips, such as shown, for instance, at  $b b'$  in Fig. 3, or hinged strips, such as shown, for instance, at  $d d'$  in Fig. 4. The sliding strip  $b$  has ears  $f f'$  embracing the edges of the sides  $a a'$  of the trough-shaped section of the gage, and other ears  $g g'$  embracing the edges of the sliding strip  $b'$ , separation of the strip  $b$  from the section  $a a'$  being prevented by means of a stop-lug  $i$  on the latter, and separation of the strip  $b'$  from the strip  $b$  being prevented by means of a lug or lugs  $i'$ . The strip  $d$  is pivotally connected to the end of the side  $a$  of the trough-shaped section of the gage by means of a pin or rivet  $m$ , and the sections  $d d'$  are likewise pivoted together by means of a pin or rivet  $m'$ . The extension may also, if desired, be in the form of a flexible tape  $n$ , connected to the main gage, and, if desired, mounted on a spring-roller contained in a casing  $n'$  in the ordinary manner, as shown, for instance, in Fig. 5, and a plain flat strip may in some cases be used instead of the trough-shaped strip, although the latter is preferred.

In some cases the gage may have a graduated quadrant pivoted at the end, as shown, for instance, at  $p$  in Fig. 6, this quadrant being slotted and confined by a thumb-screw, so that it can be adjusted to vary the angle of the end of the gage to accord with the desired angle of the lap-joint in the packing.

Having thus described my invention, I claim and desire to secure by Letters Patent—

1. The within-described cutting-gage for packing, said gage consisting of a strip hav-

ing formed thereon graduations bearing the same relation to the graduations of an ordinary measuring-scale as the circumference of a circle bears to its diameter, said strip being  
5 beveled at one end so as to constitute a guide for cutting the end of a strip of packing in order to form a lapped joint when said packing is formed into a ring, substantially as specified.

10 2. The within-described cutting-gage for packing, the same consisting of a strip having thereon graduations bearing the same relation to the graduations of an ordinary meas-

uring-scale as the circumference of a circle bears to its diameter, said strip being beveled 15 at one end and having a graduation midway of said bevel, whereby the strip is adapted for cutting packing with either lapped or butted ends, substantially as specified.

In testimony whereof I have signed my 20 name to this specification in the presence of two subscribing witnesses.

JAMES J. FEARON.

Witnesses:

FRANK E. BECHTOLD,  
JOS. H. KLEIN.