

(No Model.)

G. D. UMLAND.  
COMBINED RULE AND SQUARE.

No. 303,077.

Patented Aug. 5, 1884.

Fig. 1.

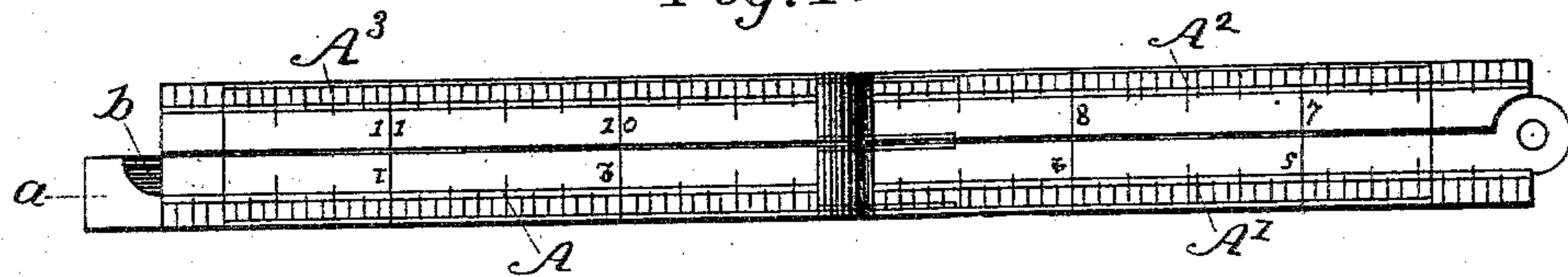


Fig. 2.

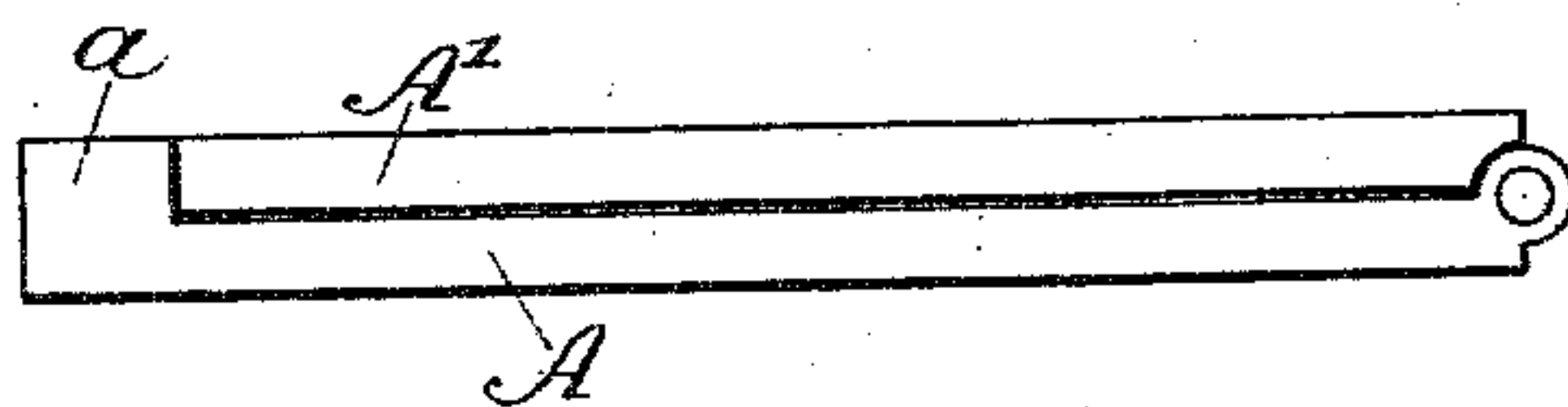


Fig. 3.

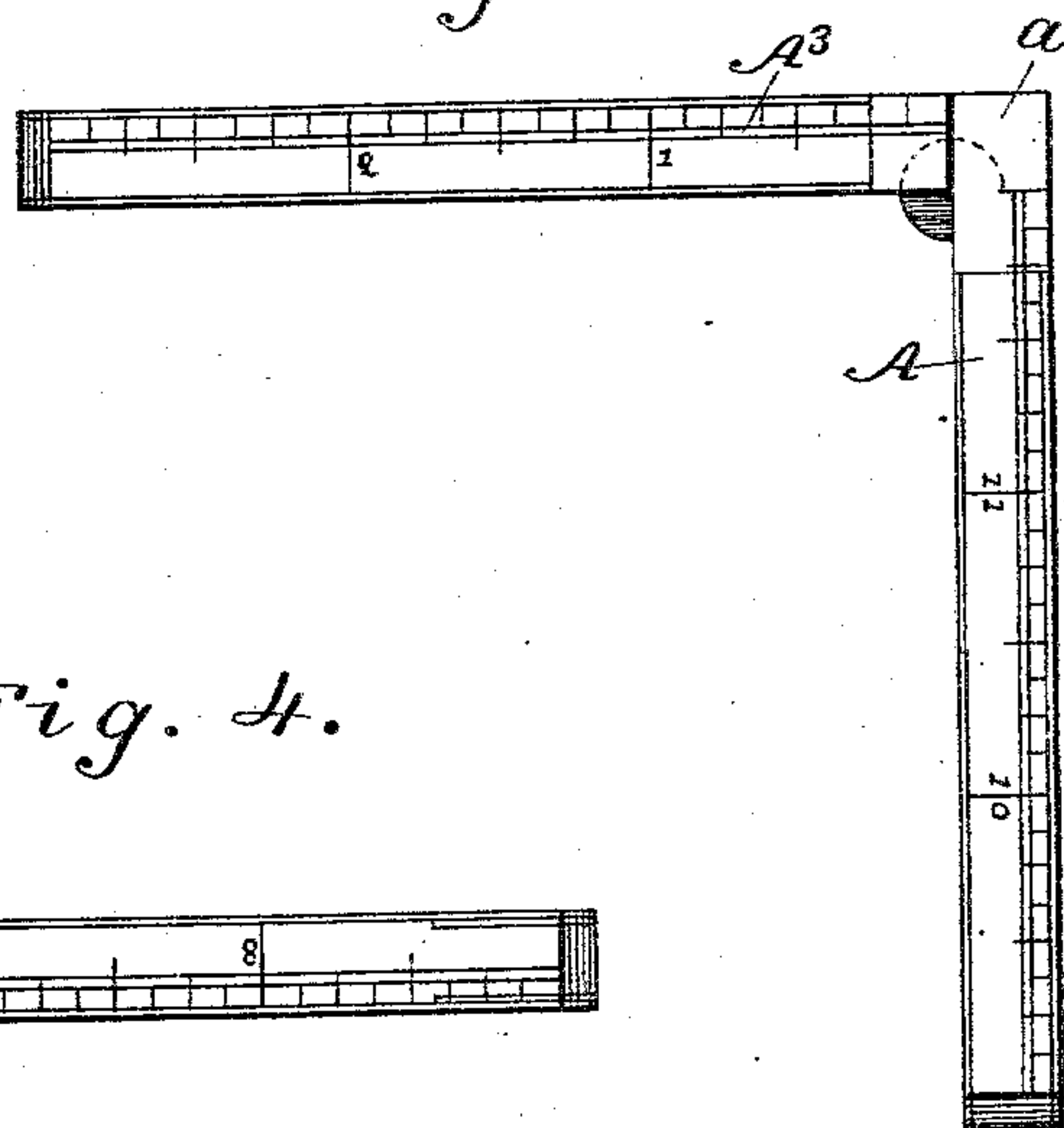
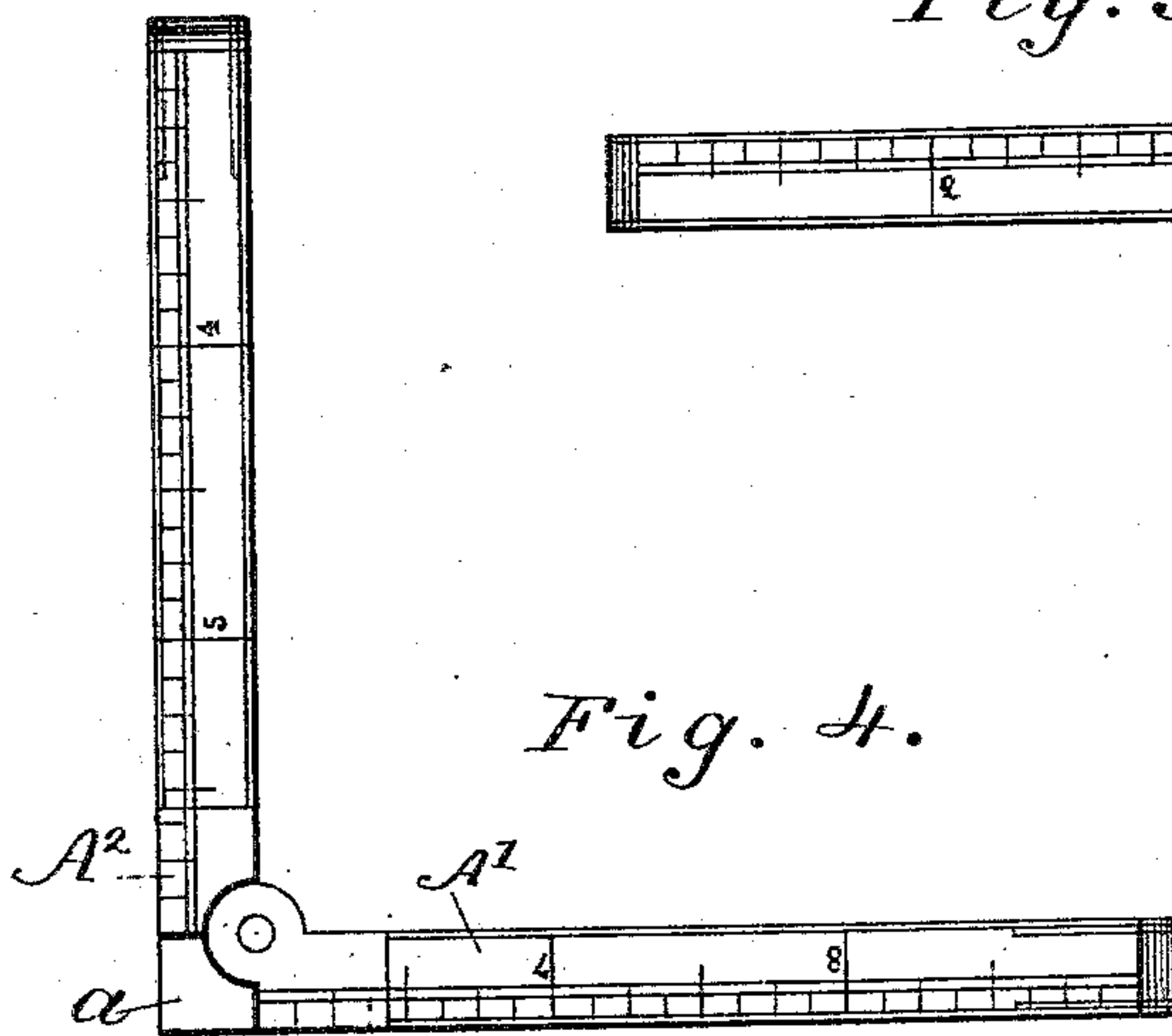


Fig. 4.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

GEORGE D. UMLAND, OF OSCEOLA MILLS, WISCONSIN.

## COMBINED RULE AND SQUARE.

SPECIFICATION forming part of Letters Patent No. 303,077, dated August 5, 1884.

Application filed April 26, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE D. UMLAND, a citizen of the United States, residing at Osceola Mills, in the county of Polk and State of Wisconsin, have invented certain new and useful Improvements in Combined Rules and Squares, of which the following is a description.

Figure 1 is a view of a one-foot rule folded at the middle joint. Fig. 2 is an edge view of Fig. 1, with the right-hand portion folded over the left-hand portion, completely closing the rule. Figs. 3 and 4 are views of the rule from opposite sides when disposed for use as a try-square.

My invention is designed to provide a combined rule and square which, while fulfilling all the functions of a folding pocket-rule, shall also serve as a try-square; and it consists in attaching to or forming on the extreme end of the outer section of the jointed rule a metallic abutment-block, which, when said outer section is folded inward, laps over the knuckle-joint at the middle of the rule, and forms a stop, against which the other section of the rule abuts when it is exactly at right angles or at ninety degrees to the other main section.

In the drawings,  $A A' A^2 A^3$  represent the four sections of an ordinary one-foot (or two-foot) pocket-rule. On the extremity of one of the outer sections,  $A$  or  $A^3$ , is formed or attached a solid and permanent metal block,  $a$ , which is just equal in width to the width of the rule-sections, and in thickness is equal to the thickness of the two rule-sections laid together. Ordinarily the outer end of the outer rule-section, when folded in toward the joint, termi-

nates at the center of said joint. With the attached block  $a$ , however, this rule-section is lengthened out the width of a rule-section farther, so that when the sections  $A A'$  are disposed at right angles to  $A^2 A^3$ , and  $A$  is folded inwardly upon  $A'$ , the extreme end of this block  $a$  is in a line with the outer edge of the other rule-sections,  $A^2 A^3$ , and the sections  $A^2 A^3$ , when disposed at right angles to  $A$  and  $A'$ , the inner end of  $A^2$  abuts against the block  $a$ , and defines the position of the two sides of the angle of ninety degrees. In order to allow the block  $a$  to fit around the rounded portion of the knuckle-joint, said block has a recess,  $b$ , at its corner.

By means of my invention as thus described, the folding pocket-rule is just as convenient and useful as before, and yet it is made also to serve as a reliable try-square in the absence of other tools, thus giving an extended range of use to the rule, and making a portable pocket-tool.

Having thus described my invention, what I claim as new is—

1. A pocket-rule having hinged sections, with an integral block on the end of its outer section of greater thickness than the rule-section, and adapted to form an abutment for the other hinged section, to define an angle of ninety degrees and form a try-square, as described.

2. The pocket-rule having integral block  $a$ , with curved recess  $b$  at one end, as described.

GEORGE D. UMLAND.

Witnesses:

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