

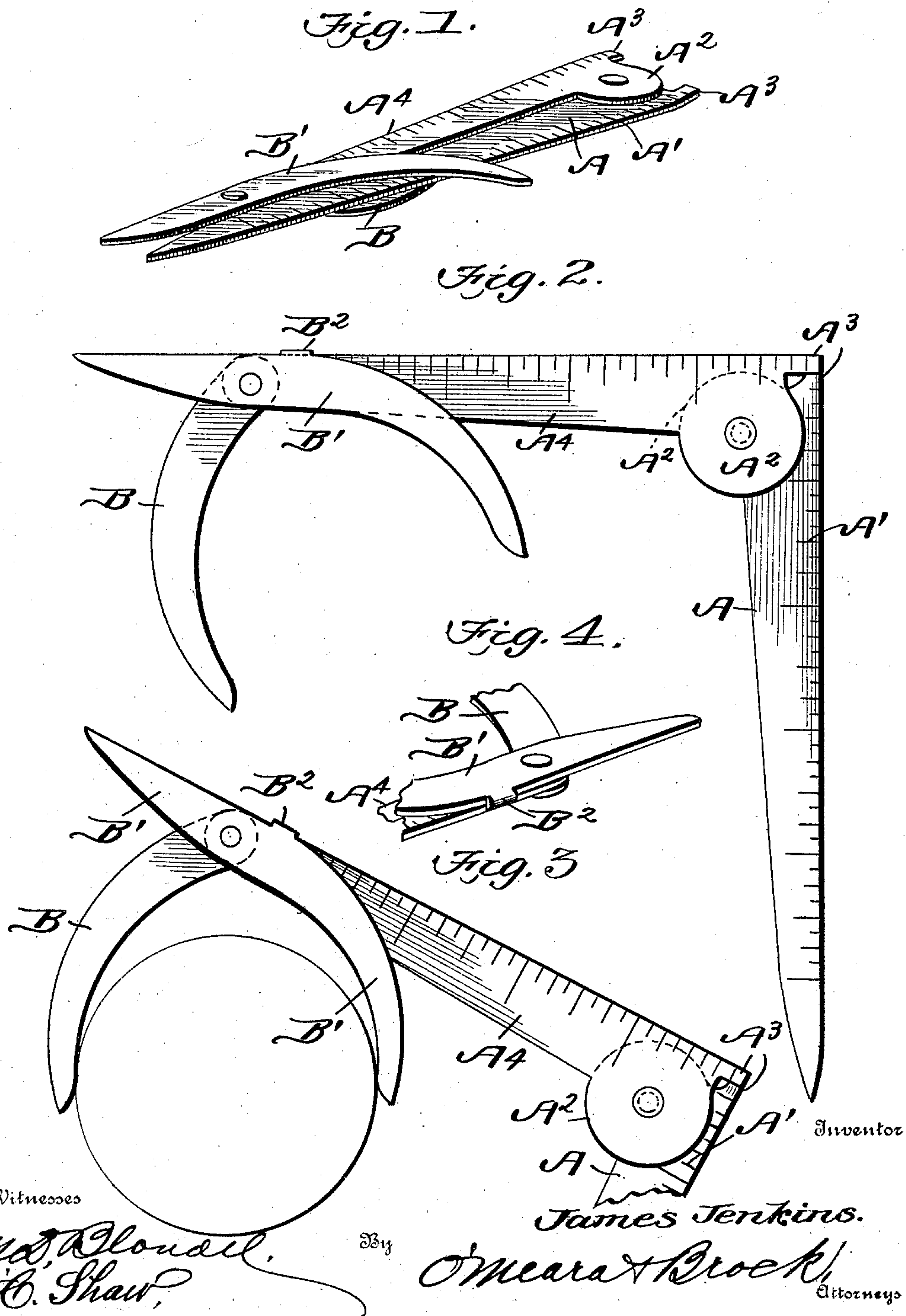
No. 750,284.

PATENTED JAN. 26, 1904.

J. JENKINS.
COMBINATION TOOL.

APPLICATION FILED JUNE 6, 1903.

NO MODEL.



UNITED STATES PATENT OFFICE.

JAMES JENKINS, OF BUCKLEY, WASHINGTON.

COMBINATION-TOOL.

SPECIFICATION forming part of Letters Patent No. 750,284, dated January 26, 1904.

Application filed June 6, 1903. Serial No. 160,370. (No model.)

To all whom it may concern:

Be it known that I, JAMES JENKINS, a citizen of the United States, residing at Buckley, in the county of Pierce and State of Washington, have invented a new and useful Combination-Tool, of which the following is a specification.

My invention is an improvement in combination-tools, and relates especially to measuring and drafting instruments, and has for its object the combination in one tool, with as few parts as possible, of compasses, dividers, calipers, and a square.

My invention consists of the novel features of construction and combination of parts described hereinafter, particularly pointed out in the claims, and shown in the accompanying drawings, in which—

Figure 1 is a perspective view of my device, the parts being shown as folded. Fig. 2 is a plan view showing the device opened out for use as a square. Fig. 3 is a view showing the device used as calipers. Fig. 4 is a perspective view illustrating a detail of construction.

In the drawings, A represents a leg of a pair of dividers, the said leg being beveled to a point at one end and having a straight edge on which is marked a scale A'. The non-pointed end of this leg terminates in a circular lug A², to one side of which projects a squared lug A³. The other leg of the divider A⁴ is shorter than the leg A and has no integral point. It terminates at one end, however, in a circular lug A², which rests on the similar lug of the leg A, the two lugs being centrally pivoted together. A second squared lug A³ extends from the pivoted end of the leg A⁴, the two lugs A³ being slightly bent out of the plane of the dividers and toward each other and so arranged that when the dividers are opened at a right angle the lugs will contact and prevent further separation of the dividers, which thus constitute a square, it being understood that the scale A' is continued along the straight edge of the leg A⁴.

Pivoted to the leg A⁴ adjacent its free end is an inwardly-curved arm B. Pivoted at the

same point, but to the opposite side of the leg, is an arm B', having a straight portion in advance of the pivotal point and beveled on one edge to a point, the said arm B' being curved to the rear of the pivotal point in an opposite direction to the curve of the arm B. Immediately to the rear of the pivotal point of the arm B' a lug B² is formed thereon, which lug is bent back upon itself and engages the straight edge of the leg A⁴ when the straight portion of the arm is in alinement with said leg, as is clearly shown in Fig. 4.

When opened out, as shown in Fig. 2, my device can be used as a square. By bending inward the arm B, leaving the arm B' in the position shown in Fig. 2, the instrument can be used as a pair of dividers. When the arm B is drawn out, the instrument can be used for ascertaining the exterior diameter of pipes, shafts, &c., as illustrated in Fig. 3, and when not in use can be folded, as shown in Fig. 1. It will be seen, therefore, that I have a handy and compact instrument of this kind.

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

1. A pair of dividers having one leg shorter than the other, an arm pivoted to the free end of the shorter leg, said arm having a pointed, straight portion in advance of the pivotal point and curved in the rear of said point, and a second arm pivoted to the said end of the shorter leg and curved inwardly.

2. A pair of dividers having one leg shorter than the other, an arm pivoted to the free end of the shorter leg, said arm having a curved portion, and a flat, tapering portion adapted to be brought into alinement with the leg, a lug formed on said arm and bent back upon itself and adapted to engage an edge of the shorter leg, and a second arm pivoted adjacent the first arm and curved in a direction, opposite the curve of the first arm.

3. A pair of dividers having flat legs formed with a straight edge, a scale marked on said edges, lugs projecting from said legs adjacent their pivotal point and adapted to contact and

limit the outward movement of the legs when
the latter are at right angles to each other, a
flat arm pivoted to the free end of said legs
and having a curved portion to the rear of its
5 pivotal point and a tapering portion having a
straight edge adapted to form a continuation
of the straight edge of the arm, and a shorter

curved arm pivoted to the said leg on the side
opposite the first-mentioned arm.

JAMES JENKINS.

Witnesses:

JAMES MCNEELY,
CHAS. L. KETTRING.