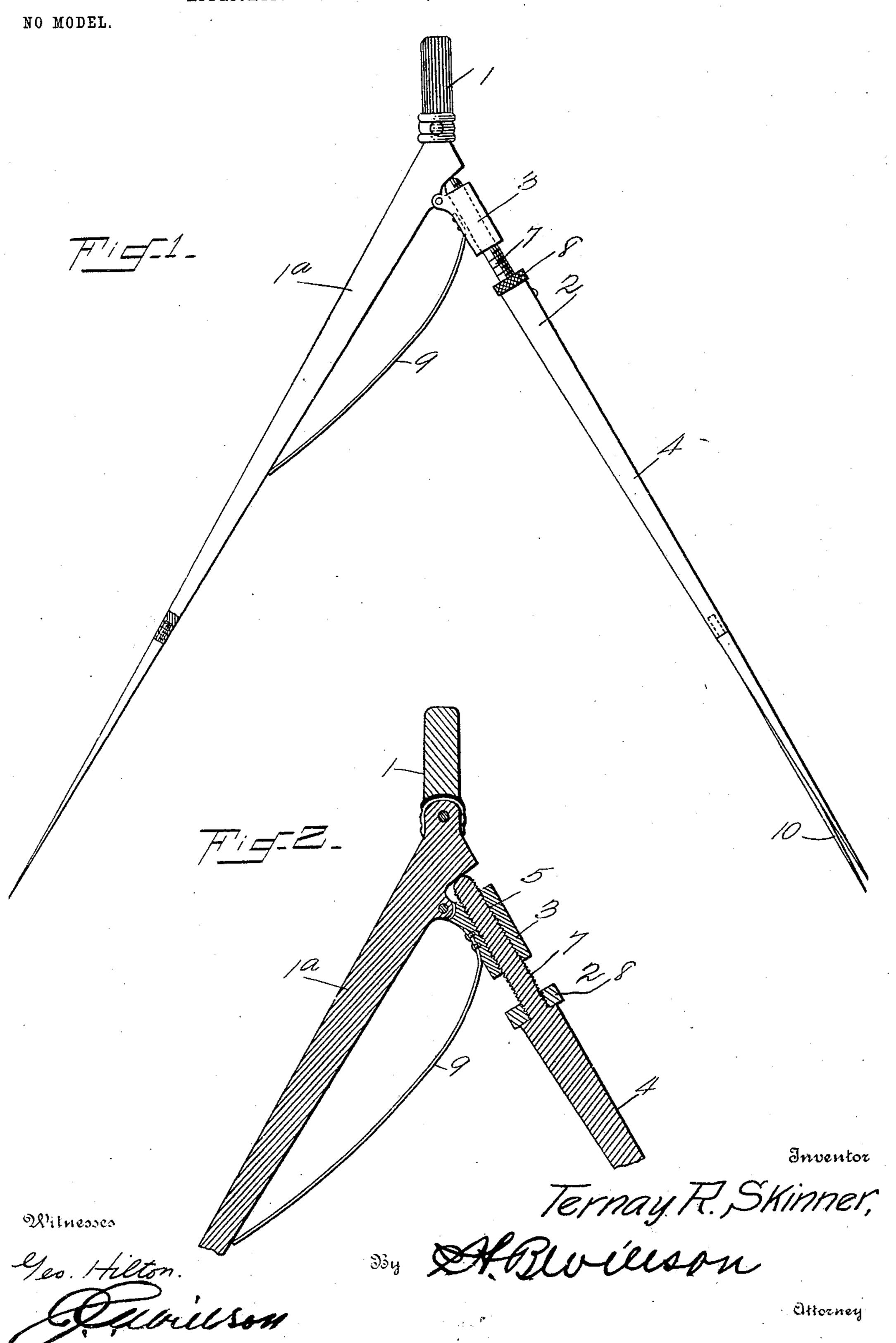
T. R. SKINNER. DIVIDERS.

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United States Patent Office.

TERNAY ROBINSON SKINNER, OF DUBOIS, PENNSYLVANIA.

DIVIDERS.

SPECIFICATION forming part of Letters Patent No. 754,906, dated March 15, 1904.

Application filed March 12, 1903. Renewed February 8, 1904. Serial No. 192,714. (No model.)

To all whom it may concern:

Be it known that I, Ternay Robinson Skinner, a citizen of the United States, residing at Dubois, in the county of Clearfield and State of Pennsylvania, have invented certain new and useful Improvements in Dividers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in dividers.

The object of the invention is to provide an improved means for automatically adjusting the legs of the same to enable the instrument to be used for drawing volutes, a further object being to produce an instrument of this character which will be simple in construction, inexpensive, and well adapted to the use for which it is designed.

With these and other objects in view the invention consists in the construction, combination, and arrangement of the parts, as will hereinafter be more fully described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of a pair of dividers embodying my invention. Fig. 2 is a vertical sectional view through the head and upper portion of the same on an enlarged scale.

In the drawings, 1 denotes the pivoted head, and 1° denotes the integral leg member of the dividers. 2 denotes the adjustable leg mem35 ber of the same, and in the lower ends of said legs are formed screw-threaded sockets for the reception of the threaded shanks of different forms of points.

The movable leg 2 is formed in two sec-40 tions—a short upper section 3, which is hinged at its upper inner edge to the leg 1°, as shown, and a lower longer section 4. The section 3 is provided with a longitudinal opening or bore 5, which is threaded throughout its length, 45 thus forming a nut.

The upper end 7 of the leg 2 is formed into a screw member, which is adapted to be screwed into and through the upper section 3. The upper end of said screw member is adapted to bear against the inner side of the upper end

of the leg 1^a, the said upper end being beveled or inclined, as shown.

The screw member 7 is provided with a milled nut 8, which is adapted to be screwed up against the part 3 of the leg 2 and lock said 55 parts together.

9 denotes a flat leaf-spring, the upper end of which is fixed to the inner side of the nut 3, and the lower end is adapted to bear against the inner side of the leg member 1°, as shown, 60 the tendency of the spring being to normally force the lower ends of the leg members 1° and 2 apart.

Upon the lower end of the leg 2 is attached a double point 10, the office of the same being 65 to hold the lower section 4 of the leg 2 fixedly upon the drawing-paper or surface, so that as the head 1, the nut 3 of the leg 2, and leg 1^a are rotated the nut 3 will be screwed off of the screw member 7 of the section 4, thereby permitting the spring 9 to force the legs apart and gradually increase the radius of the curve described by the leg 1^a, thus forming a volute or spiral line upon the paper or drawing-surface.

When it is desired to use the instrument as an ordinary pair of spring-dividers, the double point 10 is removed and a pen, pencil, or other desired point may be substituted, and after the parts have been adjusted to the desired 80 radius the nut 8 is screwed up and jammed against the lower end of the nut 3, thereby holding the parts in this position.

While I have shown and described a flat leaf-spring for forcing the leg members apart, 85 a coiled spring may be substituted therefor to serve the same purpose.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the prin- 95 ciple or sacrificing any of the advantages of this invention.

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

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1. An instrument of the class described, comprising a leg, a nut pivoted thereto, and a leg having a screw member engaging the nut and bearing against the first-mentioned leg, to move the legs angularly when the nut is revolved on the screw member, substantially as described.

2. An instrument of the class described, comprising a leg, a nut pivoted thereto, and a leg having a screw member engaging the nut and bearing against the first-mentioned leg, to move the legs angularly toward each other when the nut is revolved on the screw member, in one direction, and a spring coacting with the nut and screw member, to spread the legs apart when the nut is revolved in the reverse direction, substantially as described.

3. An instrument of the class described, comprising a leg, a nut pivoted thereto, and a leg having a screw member engaging the nut and bearing against the first-mentioned leg, substantially as described.

4. An instrument of the class described,

comprising a leg, a nut pivoted thereto, a leg having a screw member engaging the nut and 25 bearing against the first-mentioned leg, and a spring to spread the legs apart, substantially as described.

5. An instrument of the class described, comprising a leg, a nut pivoted thereto, a 3° spring bearing between said nut and leg, and a leg having a screw member engaging the nut and bearing against the first-mentioned

leg, substantially as described.

6. An instrument of the class described, 35 comprising a leg, a nut pivoted thereto, a leg having a screw member engaging the nut and bearing against the first-mentioned leg, and a lock-nut 8 on said screw member, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

TERNAY ROBINSON SKINNER.

Witnesses:

JET KEARNS, M. O. SKINNER.