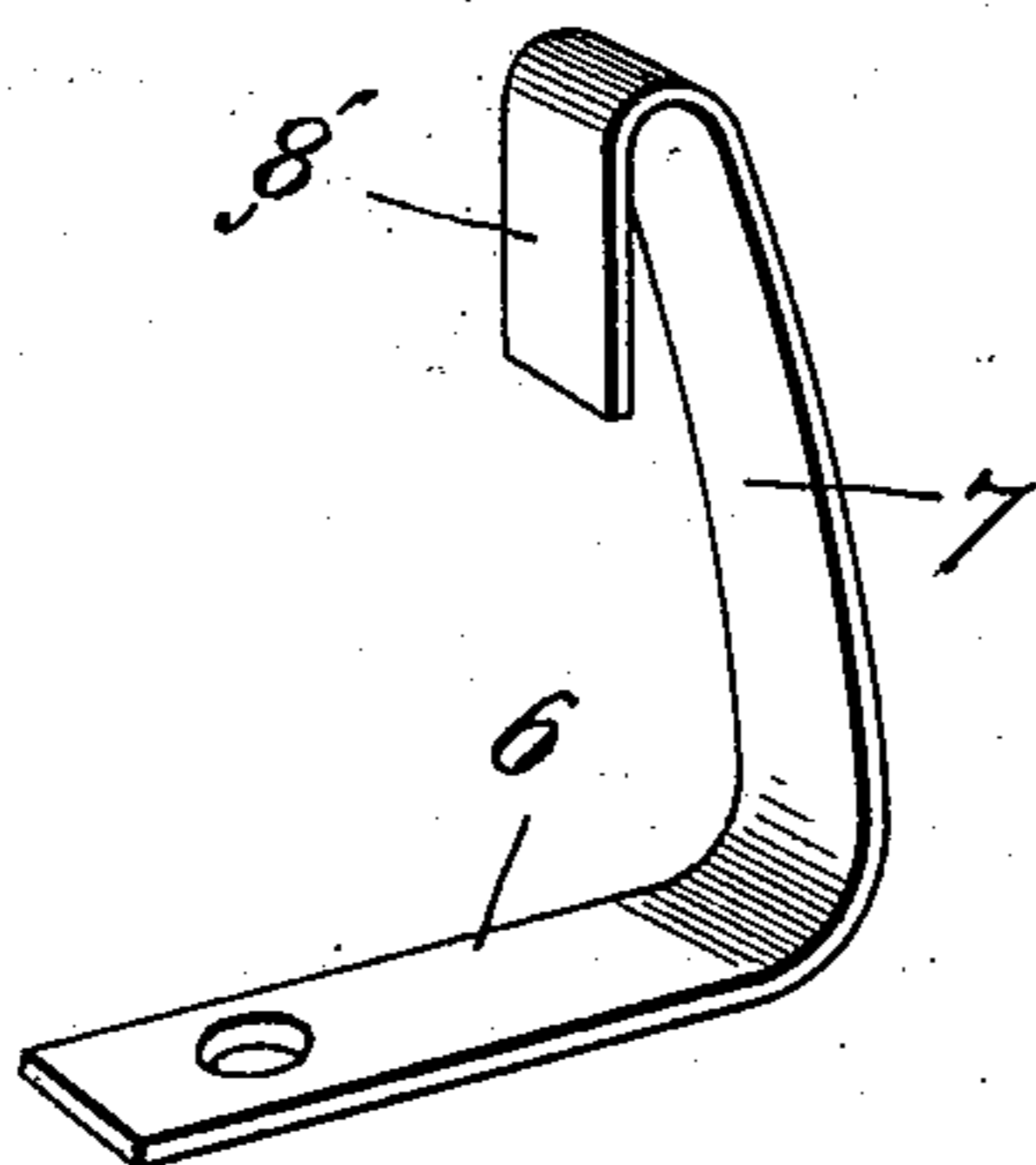
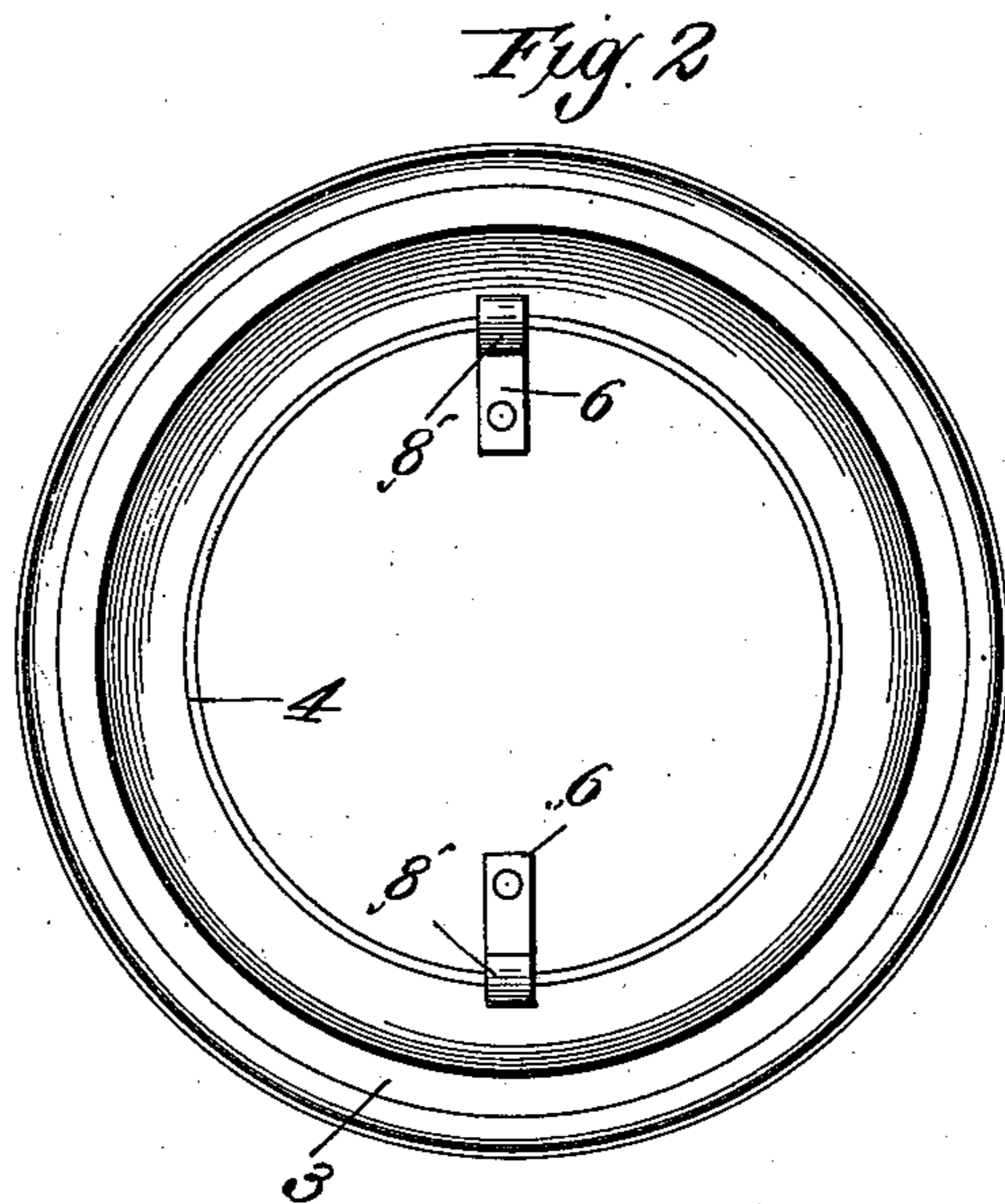
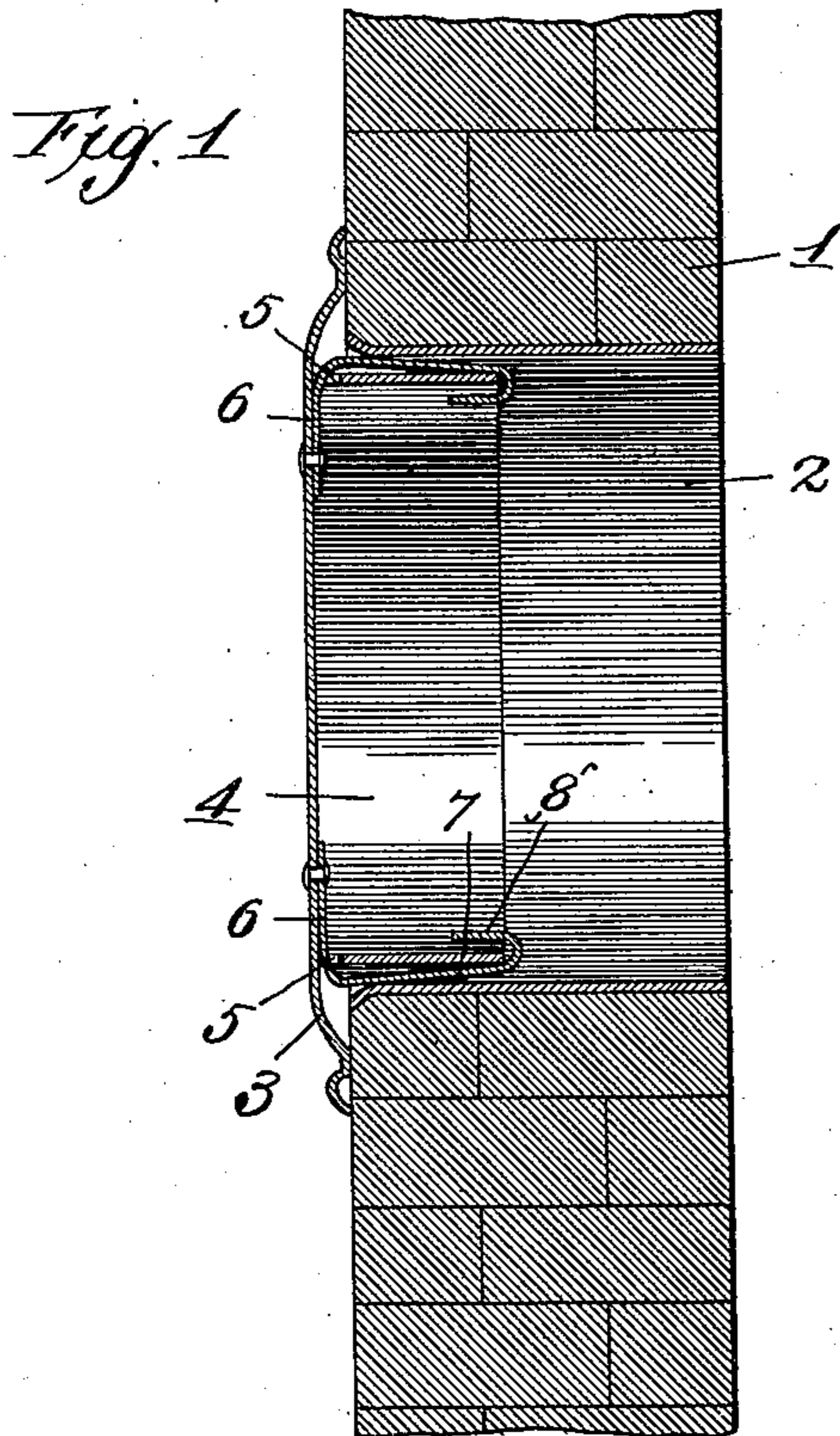


(No Model.)

R. C. SKINNER.  
FLUE STOP.

No. 564,031.

Patented July 14, 1896.



*Fig. 3*

*Attest*  
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# UNITED STATES PATENT OFFICE.

RODNEY C. SKINNER, OF FOREST, ILLINOIS.

## FLUE-STOP.

SPECIFICATION forming part of Letters Patent No. 564,031, dated July 14, 1896.

Application filed September 23, 1895. Serial No. 563,339. (No model.)

*To all whom it may concern:*

Be it known that I, RODNEY C. SKINNER, of the city of Forest, Livingston county, State of Illinois, have invented certain new and useful Improvements in Flue-Stops, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to an improved flue-stop; and it consists in the novel construction, combination, and arrangement of parts hereinafter described and claimed.

In the drawings, Figure 1 is a vertical sectional view of a chimney-wall having my improved flue-stop located therein. Fig. 2 is a rear elevation of the flue-stop. Fig. 3 is a view in perspective of one of a pair of springs of which I make use in carrying out my invention.

Referring by numerals to the accompanying drawings, 1 indicates the chimney-wall, in which is located the usual stovepipe-opening that is incased by the usual thimble 2.

3 indicates a circular face-plate somewhat larger in diameter than is the pipe-opening, and said face-plate may be beaded and ornamented as desired. Arranged upon the rear side of the face-plate 3 is a cylindrical collar 4, slightly smaller in diameter than is the thimble 2, and formed in that edge of the collar 4 that rests upon the rear face of the plate 3 is a pair of oppositely-arranged rectangular notches 5. Fixed to the rear face of the plate 3 by means of rivets or other suitable fastening devices, and at points diametrically opposite one another, are the bases of springs 6, the same being constructed of flat strips of resilient material, preferably steel. Said springs 6 extend outwardly toward the edge of the plate 3, through the rectangular notches 5, and from thence are bent rearwardly toward the outer edge of the collar 4, as indicated by the numeral 7, and from thence are bent inwardly around said outer edge of the collar, as indicated by 8. The portions 7 of the springs 6 do not lie directly against the outside face of the collar 4 when in normal position, and there is a slight space between the inwardly-bent ends and the outer ends of said portions 7. Thus said springs

are allowed slight movement relative the collar 4.

When a flue-stop constructed in accordance with my invention is located in the thimble, the portions 7 of the springs 6 engage and bear against the inner face of the thimble 2 and retain the entire device in a very secure and substantial manner. When the portions 7 engage against the thimble 2, the bent portions 8 will necessarily spring or move inwardly and toward one another. The rectangular notches 5 are necessarily large enough to allow free action and movement of that portion of the springs that passes through them. The function of the ring or collar 4 is to limit the lateral movement of the springs 6.

The flue-stops may be constructed in various sizes to fit the different-sized pipe-openings, and, if desired, the number of springs 6 may be increased above the number shown and described.

A flue-stop constructed in accordance with my invention is simple, inexpensive, composed of a minimum number of parts, and therefore will not easily get out of order, and, owing to the expansive action of the springs 6 against the thimble, said stop is very effectually held in the desired position.

I claim—

1. An improved flue-stop, comprising a face-plate, a collar provided with rectangular notches in one edge, the same arranged upon the rear face of the face-plate, and expansive leaf-springs, the bases of which are riveted to the face-plate and extending from thence outwardly through the rectangular notches and having their opposite ends hooked around the outer edge of the collar.

2. In a flue-stop, an expansive spring, composed of a strip of flat steel comprising the base portion 7 bent approximately at right angles to said base, and a hook 8 formed at the end of the portion 7.

In testimony whereof I affix my signature in presence of two witnesses.

RODNEY C. SKINNER.

Witnesses:

J. W. DONOVAN,  
E. A. PAULEY.