

No. 751,766.

PATENTED FEB. 9, 1904.

H. W. WEBB.
GAS BURNER.

APPLICATION FILED MAR. 24, 1903.

NO MODEL.

Fig. 1.

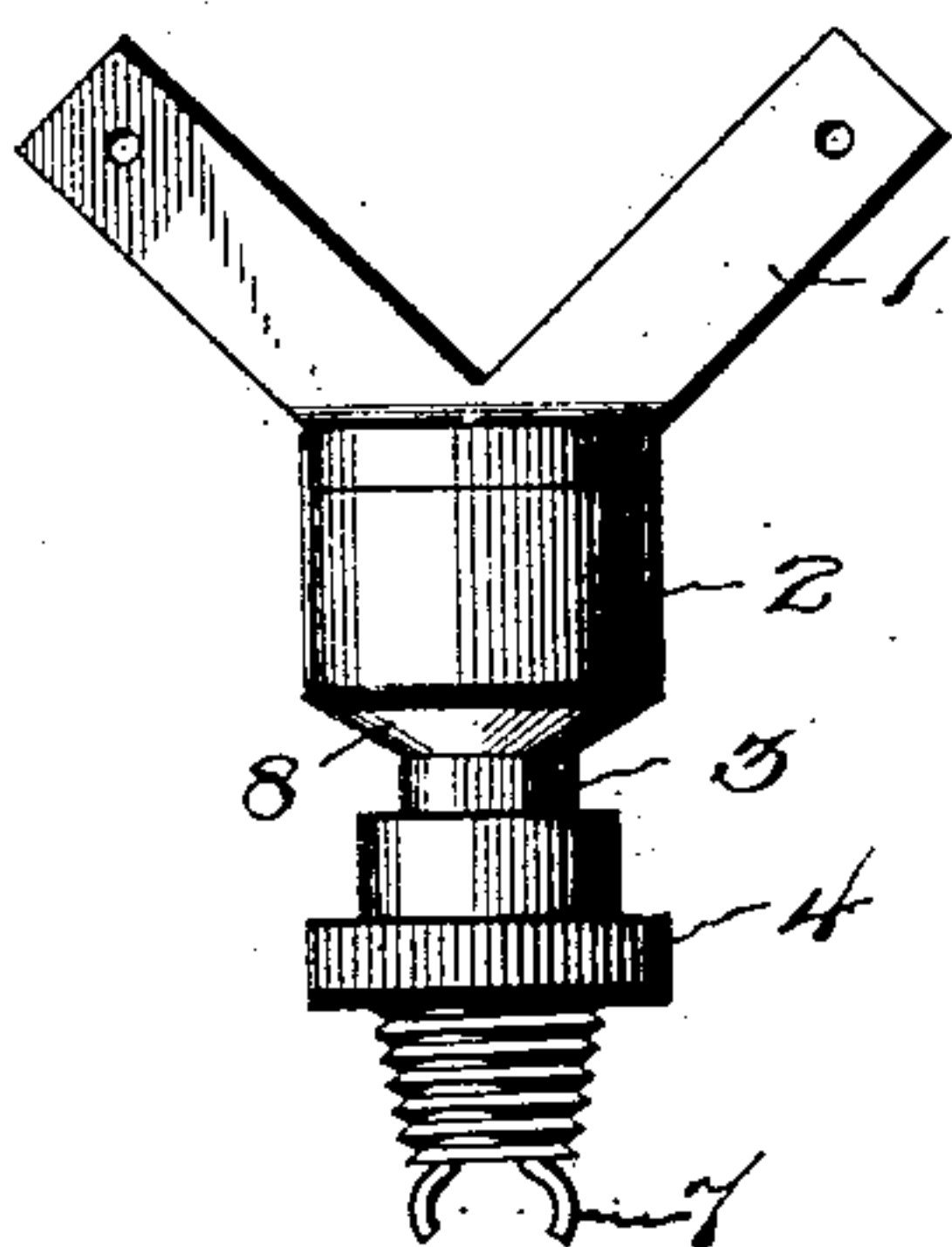


Fig. 2.

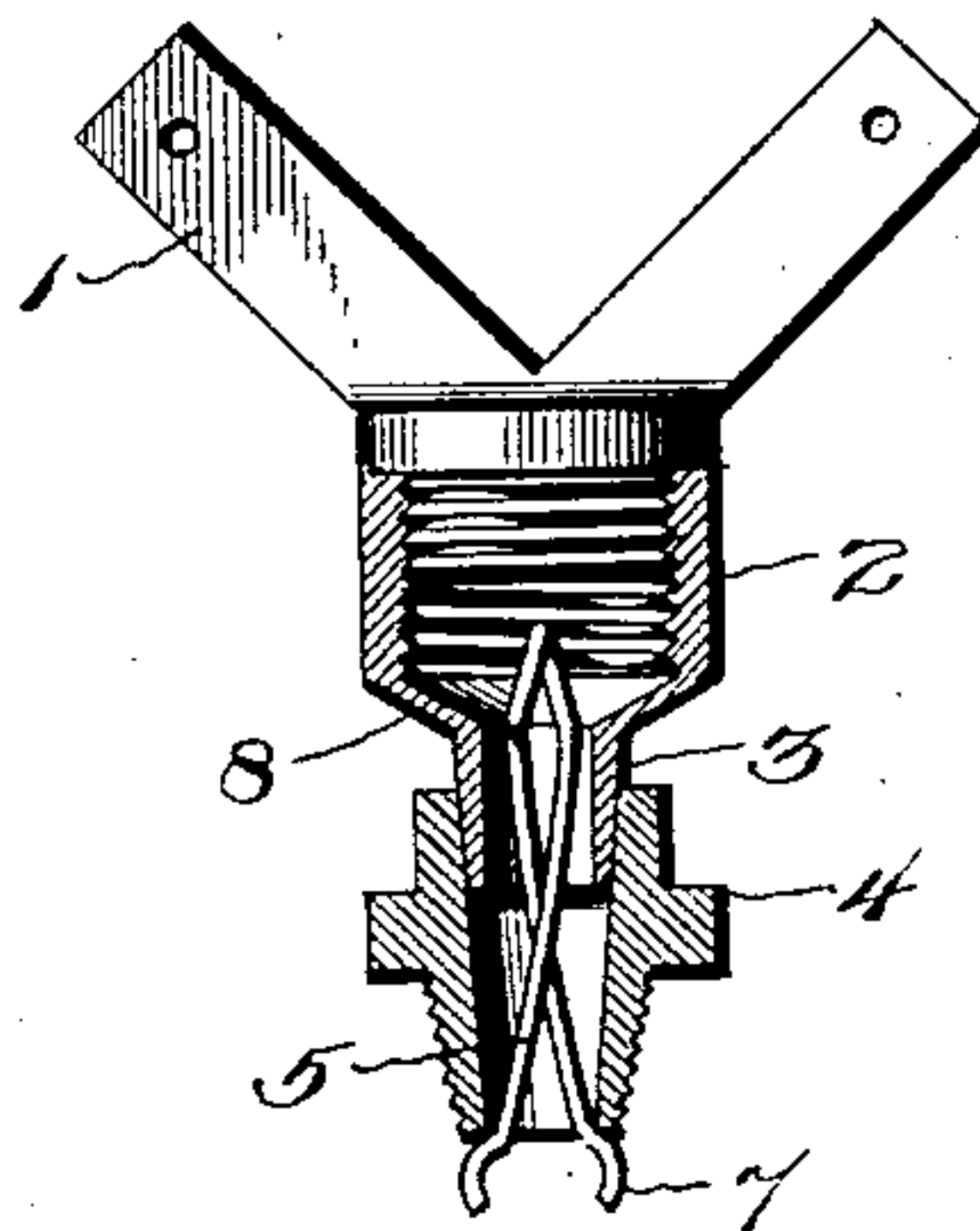


Fig. 3.

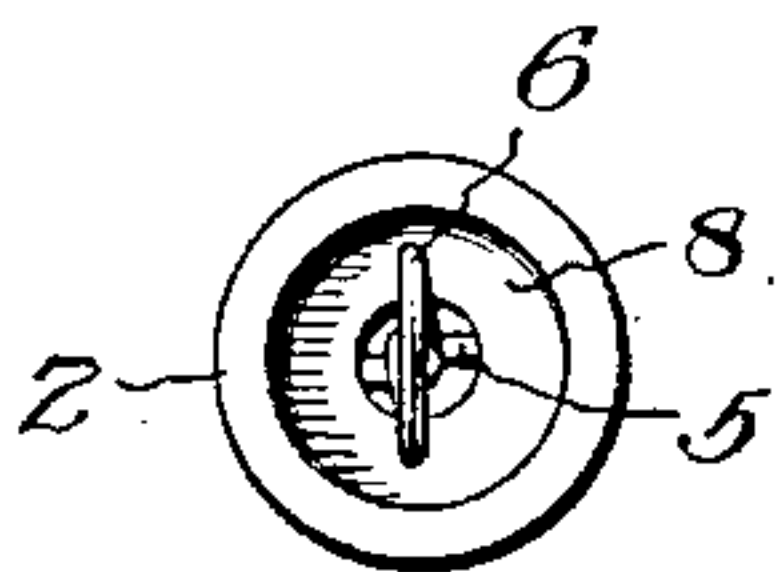
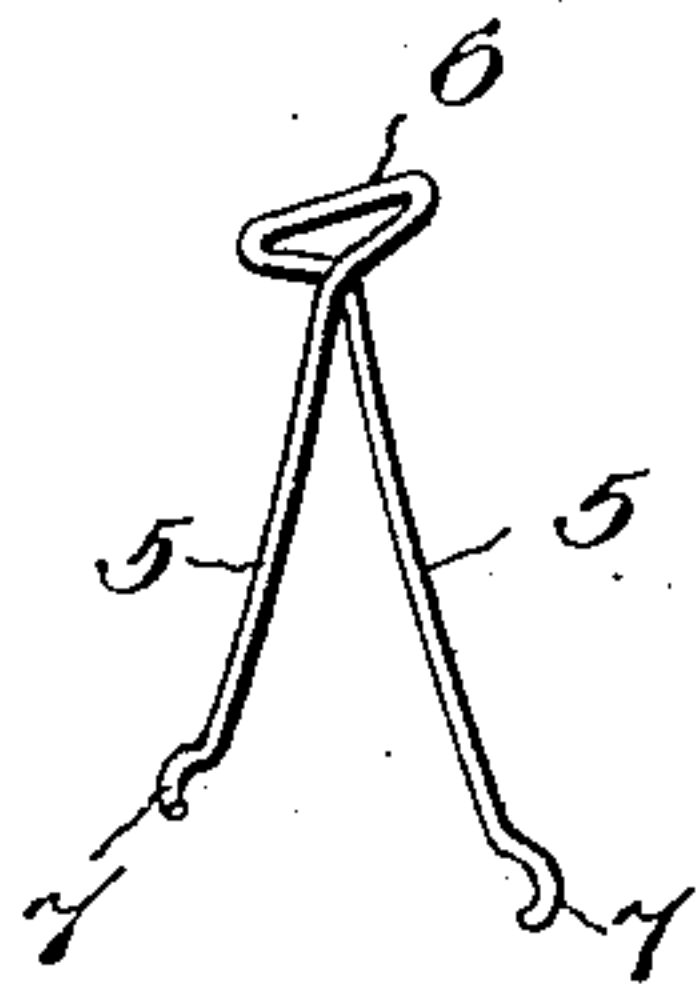


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

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GAS-BURNER.

SPECIFICATION forming part of Letters Patent No. 751,766, dated February 9, 1904.

Application filed March 24, 1903. Serial No. 149,293. (No model.)

To all whom it may concern:

Be it known that I, HARTWELL W. WEBB, a citizen of the United States, residing at New York, borough of Manhattan, in the county of New York and State of New York, have invented certain new and useful Improvements in Gas-Burners; and I do hereby 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.

My invention relates to gas-burners.

I have illustrated a burner which is adapted to be applied to acetylene-lamps, though it will be understood that it may be used in any form of burner. Its object is to secure the parts of a burner together separably and movably and yet firmly.

To this end it comprises, essentially, a burner-tube in two sections, which, as placed in the drawings, may for convenience be termed "upper" and "lower," and a tip and core fitting in the upper section of the tube, the parts being held together by a snap-spring fastening.

In the accompanying drawings, Figure 1 is a side elevation of the burner with the parts assembled. Fig. 2 is a central vertical section. Fig. 3 is a plan view with the burner-tip removed, and Fig. 4 is a detail view of the spring-fastening.

In the drawings, 1 is the tip—in this case a branch tip, such as is used in the burning of acetylene gas. The tip 1 screws into the upper section 2, which has a sleeve or neck 3 fitting the lower section 4, which is in turn screw-threaded to fit into the lamp-socket and carries the usual thumb-screw.

5 represents the branches of a bent spring having a head 6, formed, for example, by twisting a wire upon itself, and curved bent ends or feet 7. The head 6 fits into a cup 8, formed in the bottom of the upper tube-section. The spring is bent about itself, so that the two arms play in different planes, passing each other freely. As will be observed, the spring is arranged axially in the bore of the burner-sections and is substantially inclosed.

When it is desired to remove the burner, the curved ends 7 are pressed in and the burner-tip and upper tube-section drawn up with the spring attached. To replace the parts, the

feet of the spring are pressed in and inserted in the core and pushed home, springing out at the bottom, so that the curved ends firmly engage the bottom of the lower tube-section and securely hold the parts together. The pressure of the branching springs against the reduced lower end of the upper section of the burner tube prevents it from being forced up when the spring is being pushed down into position.

By this device I dispense with threaded attaching devices and at the same time secure adjustability of the burner to any desired focus and the ability to readily remove and replace the burner-tips at any time, features especially desirable, for example, in vehicle-lamps. It will be found also that with a spring thus applied the two burner-sections are held so securely as to prevent any leaking.

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

1. A burner comprising tube-sections and an unattached spring detachably securing the sections together.
2. A burner comprising tube-sections and a spring securing the sections together, but permitting them to be respectively revoluble.
3. In a burner, comprising separable tube-sections, an axial spring inclosed by the bore of the tube-sections and securing them together.
4. In a burner, the combination of upper and lower sections of a burner-tube, of a branching spring having its head in the upper section and its feet extending on opposite sides of the end of the lower section.
5. In a burner, the combination of an upper section of the burner-tube, and a lower section of the burner-tube, with a piece of spring metal bent to form a head and feet, longer than the bore of the tube-sections.
6. In a burner comprising a burner-tube in sections, a spring twisted to form a head, branches playing in different planes, and bent outward to form feet.

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

HARTWELL W. WEBB.

Witnesses:

OSCAR WARNER,
THEODORE GOETZE.