

(No Model.)

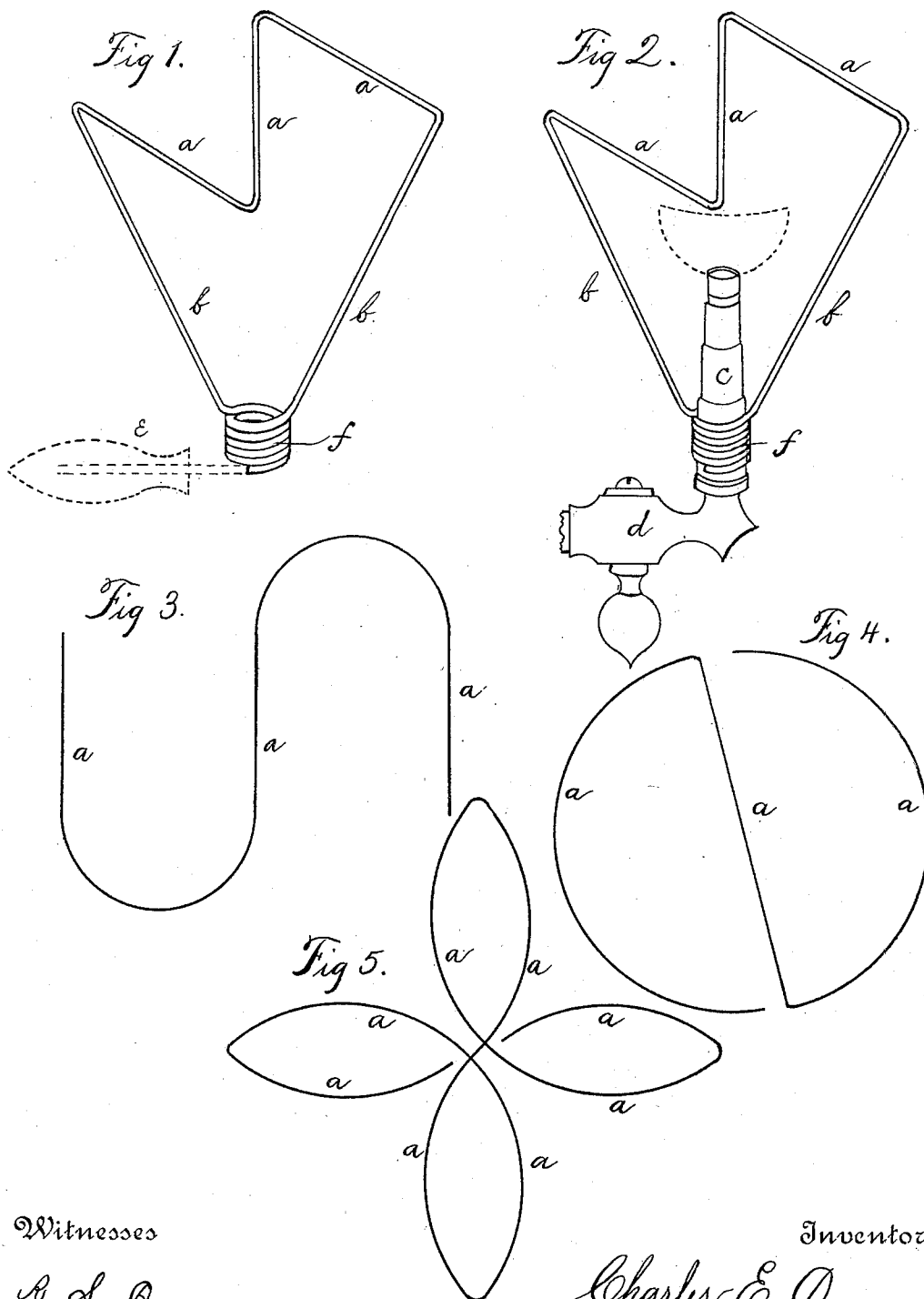
2 Sheets—Sheet 1.

C. E. DURYEA.

HEATING ATTACHMENT FOR GAS BURNERS.

No. 465,623.

Patented Dec. 22, 1891.



Witnesses

A. S. Duryea.
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Inventor

Charles E. Duryea.

(No Model.)

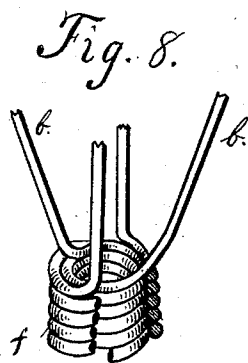
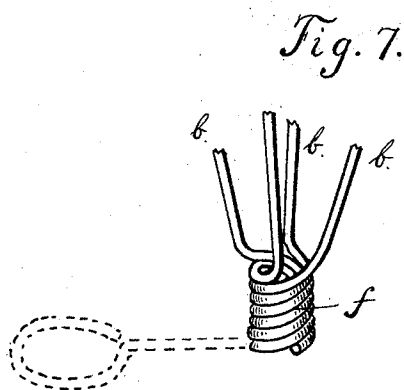
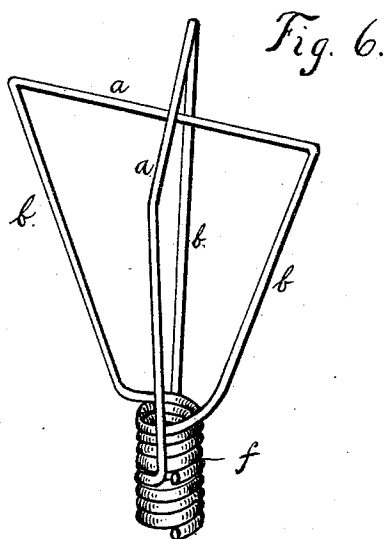
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R. S. Duryea.

Inventor

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UNITED STATES PATENT OFFICE.

CHARLES E. DURYEA, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR
TO EDWIN H. BOND, OF SAME PLACE.

HEATING ATTACHMENT FOR GAS-BURNERS.

SPECIFICATION forming part of Letters Patent No. 465,623, dated December 22, 1891.

Application filed September 22, 1888. Serial No. 286,082. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. DURYEA, of Washington, District of Columbia, have invented certain new and useful Improvements in Heating Attachments for Gas-Burners, of which the following is a specification.

My invention relates to that class of stands which are attached to the ordinary gas-fixture; and the object thereof is to provide a stand that is light, durable, and cheap, that is easily attached to the ordinary gas-fixture, and that will not interfere with the light when in use. I attain this result by the means shown in the accompanying drawings, in which—

Figure 1 represents the complete stand; Fig. 2, the stand as applied to an ordinary gas-fixture; Figs. 3, 4, and 5 are plans showing various shapes into which the wire may be bent to produce a supporting-surface. Fig. 6 shows two stands, one having shorter legs *b b* than the other and both having straight instead of bent horizontal parts placed one within the other, so as to form a double stand of great strength. Figs. 7 and 8 show two other methods of uniting the lower ends of the legs of double stands.

Similar letters represent similar parts.

The stand is formed of one piece of wire so bent that the parts *a a a* form the supporting-surface and lie in a horizontal plane, while the parts *b b* extend downward therefrom and serve as legs. The lower ends of the legs *b b* are brought near to each other and coiled together, the coil being of such size that it will encircle the ordinary burner-cup *c*, Fig. 2, and fit sufficiently close to maintain the stand firmly in an upright position.

The whole stand may be rendered firmer by soldering together the wires which form the coil. If desired, one of the legs *b* may be longer than the other before coiling. Then when coiled alike a portion of the longer leg will be left uncoiled, and may be provided with a handle, as indicated by dotted lines at E, Fig. 1, or may be so shaped as to form a handle, as shown by dotted lines in Fig. 7.

In use the stand is applied to the ordinary burner by placing the coil around the burner-cup, as shown in Fig. 2, and placing the article to be heated thereon. The legs *b b* are long enough to support the article to be heated just above the tip of the flame, so that there is no liability to smoke nor is the light interfered with. As shown in Figs. 1 and 2, a Z-shaped supporting-surface is used because it presents a large surface for the amount of wire required; but other shapes may be used. (See Figs. 3, 4, and 5.)

The stand shown in Fig. 5 is so shaped that the legs *b b* must pass downward from near the center of the supporting-surface instead of from the outside. This is not to be preferred, because it is not so strong and because it brings the legs so near the flame that they carry off the heat therefrom and cause it to smoke. For all ordinary purposes a two-legged stand is strong enough; but greater strength may be had by using two wires instead of one, each having a single straight supporting portion placed at right angles to the other, forming a cross, as shown in Fig. 6, and finished by coiling the ends of all four legs together, as shown in Fig. 7, or coiling the ends of two around the coil formed by the ends of the other two, as shown in Fig. 8, or by making one shorter than the other, so as to bring one coil above the other, as shown in Fig. 6. Of course the lower ends of the legs could be attached to a thimble encircling the burner-cup; but I prefer to coil the said ends so as to form the supporting-thimble. It is deemed important that the ends of the wire, after forming the legs, be closely coiled into a tight coil or thimble *f*, the wire being alternately coiled and in opposite directions, so as to form a rigid thimble of sufficient strength to firmly hold the stand upon the gas-burner and prevent tipping thereof under heavy weight.

I claim—

1. A stand for the purpose described, formed of wire and having horizontal supporting portions *a*, inclined legs *b*, and a thimble *f* at

the terminus of the legs, formed by the ends of the wire being closely coiled, substantially as specified.

2. The stand described, formed of wire with
5 the ends coiled in opposite directions in close contact, forming a thimble of sufficient rigidity to support the stand, and designed to embrace a gas-burner, and having diverging

from the upper portion of the thimble inclined legs, and a plurality of horizontal supports *a*, joined to the thimble of the said legs, substantially as shown and described.

CHARLES E. DURYEA.

Witnesses:

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