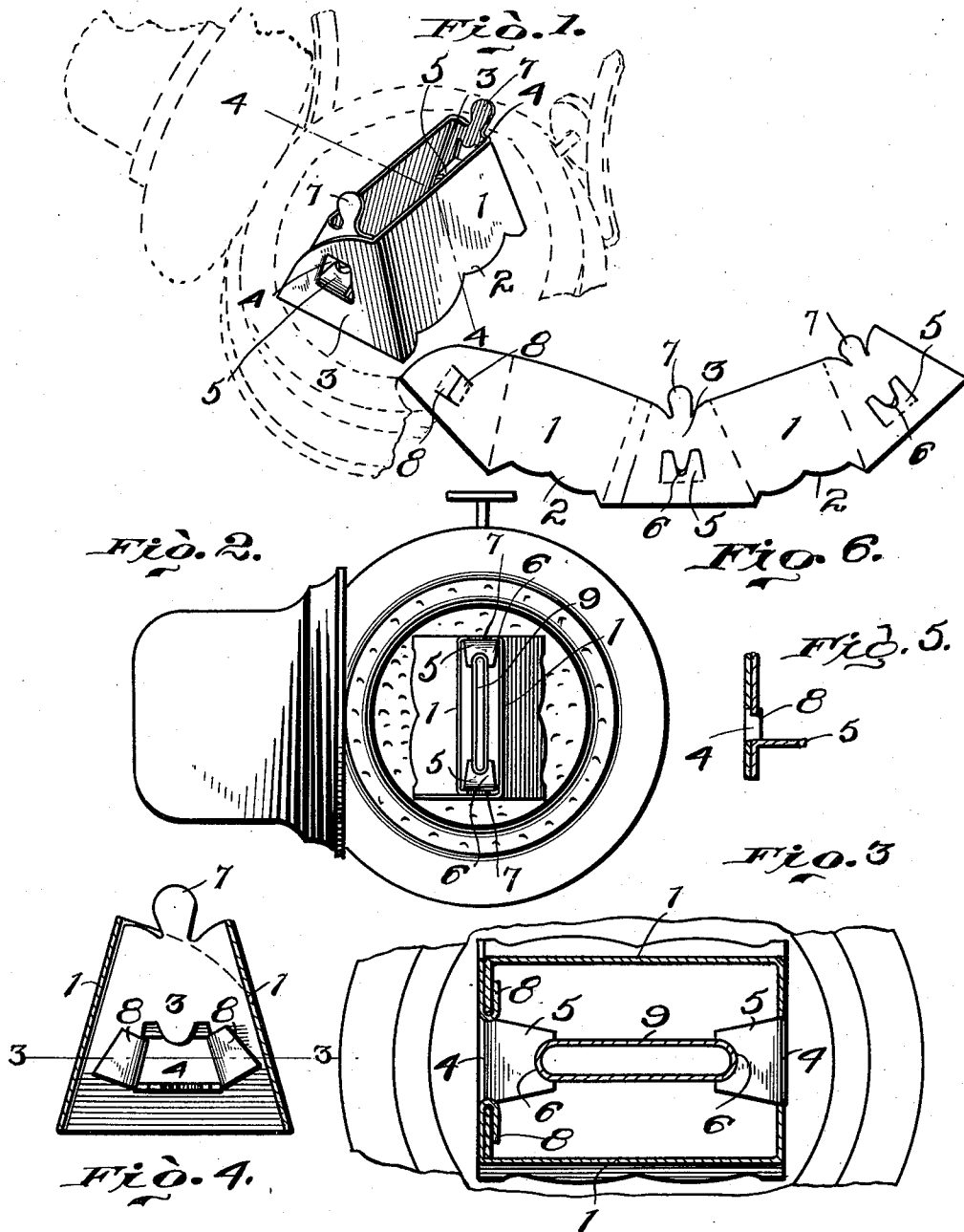


S. S. RUSSELL.
AIR DEFLECTOR.
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1,014,523.

Patented Jan. 9, 1912.



Witnesses
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UNITED STATES PATENT OFFICE.

SIDNEY S. RUSSELL, OF MEMPHIS, TENNESSEE.

AIR-DEFLECTOR.

1,014,523.

Specification of Letters Patent.

Patented Jan. 9, 1912.

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To all whom it may concern:

Be it known that I, SIDNEY S. RUSSELL, a citizen of the United States of America, residing at Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Air-Deflectors, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to air deflector to be used in connection with burners of lamps and the like, and the principal object of the same is to provide a device of the character described that can be removably fitted over the wick tube of a lamp to provide a combustion chamber therefor so that the fuel will be entirely consumed and the flame produced thereby will be exceptionally brilliant.

In carrying out the objects of the invention generally stated above it will be understood, of course that the essential features thereof are necessarily susceptible of changes in details and structural arrangements, one preferred and practical embodiment of which is shown in the accompanying drawings, wherein:—

Figure 1 is a perspective view of the improved air deflector, dotted lines being used to show the application of the same to a lamp burner. Fig. 2 is a top plan view of a lamp burner showing the air deflector applied thereto. Fig. 3 is a horizontal sectional view of the structure shown in Fig. 2. Fig. 4 is a transverse vertical sectional view taken on the line 4—4, Fig. 1. Fig. 5 is a fragmentary sectional view showing the manner of connecting the ends of the air deflector. Fig. 6 is a plan view of the blank from which the air deflector is formed.

Referring to the accompanying drawings by numerals, it will be seen that the improved generator is preferably formed of a single length of sheet material that is shaped to provide an elongated casing having a wide open bottom and a contracted open top, such being provided by arranging the sides 1 on an incline. The bottom edges 2 of the sides 1 are suitably cut or scalloped to permit air to pass between the same and the base of the burner upon which said edges rest. The ends 3 of the casing are provided with central openings 4 which also admit air to the casing, each opening hav-

ing a lug 5 projecting at right angles therefrom toward the center of the casing, the inner end of each lug provided with a notch 6. An air deflector 7 projects from the top edge of each end.

In Fig. 6 a blank has been shown from which the improved air deflector can be readily made. Said blank is of resilient material and is produced by a single operation of a suitable punching or shaping machine. The central portion of the blank forms one end of the finished air deflector, the opening therein being an air inlet, the material forced therefrom providing the lug 5. The intermediate portions form the sides 1 of the air deflector, and the ends of the blank form the other end of the air deflector. One end of the blank is punched to provide an opening and a lug 5, the other end is provided with an opening and fastening ears 8. When the blank is bent to the shape of the air deflector, the ends thereof overlap, and the openings thereof are alined. The lug 5 is forced through said openings, and the ears 8 of one end are forced through the opening of the lug and bent over the side edges thereof to rigidly but detachably hold the said ends in overlapping relation.

In use, the air deflector is placed upon the base of a burner and incloses the wick tube 9 thereof, the notched ends 6 of the lugs 5 engaging the sides of said tube to prevent accidental displacement of said air deflector.

It will be understood from the foregoing the air deflector surrounds the wick tube in spaced relation and form an air chamber therefor, the air being admitted to said chamber through the ends and beneath the sides thereof. Said air chamber provides means whereby a constant and uniform supply of air is provided for the burner so that a complete combustion of the fuel is assured. And as the deflectors are integral with the casing, it will be obvious that they can be bent over the top of the wick to deflect or spread the flame as desired.

What I claim as my invention is:—

1. An air deflector for burners formed of a single sheet of material shaped to provide a casing having a contracted open top and a wide open bottom, the bottom edges of the sides of said casing being cut away to provide air inlets, said casing also provided with end openings for admitting air and

from which wick tube lugs project, said ends also provided with upper flame deflectors.

2. An air deflector for burners comprising a casing formed of a single sheet of material shaped to provide a substantially rectangular casing having a contracted open top and a wide open bottom, the meeting ends of said casing being overlapped and

provided with openings and ears for interlocking engagement, said casing having air admitting means in the ends and sides.

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

SIDNEY S. RUSSELL.

Witnesses:

G. T. PARKISON,
W. S. SCOTT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."