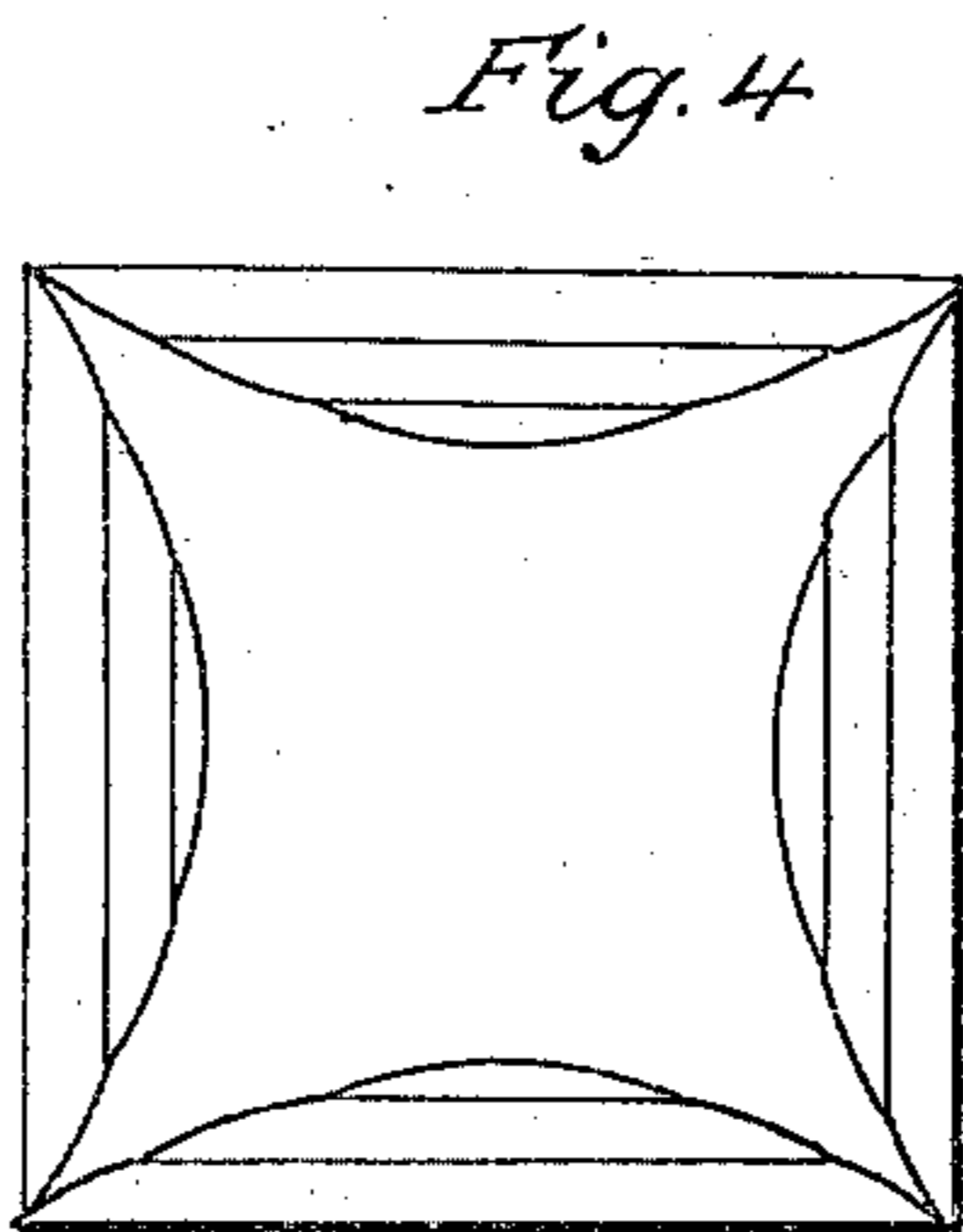
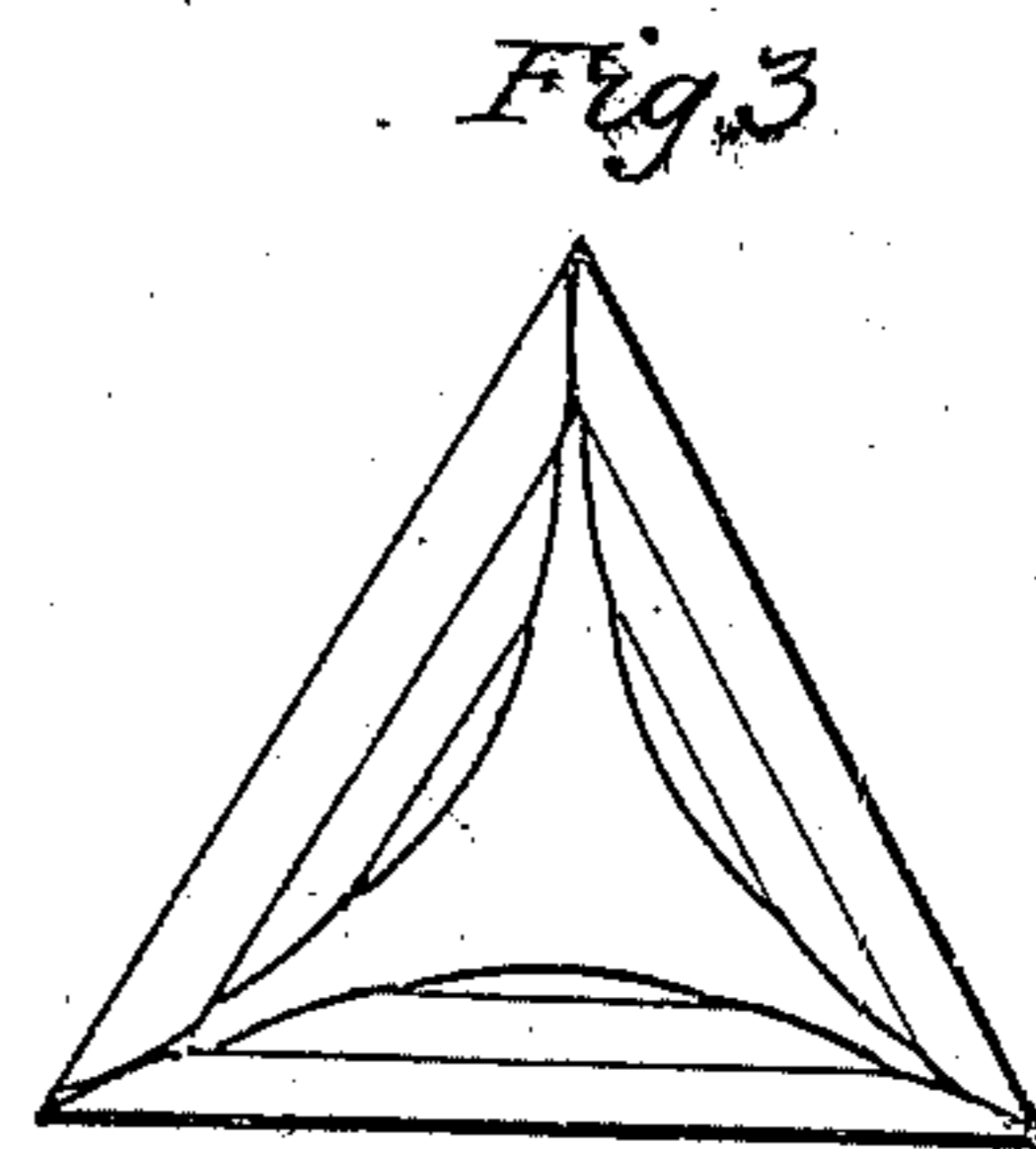
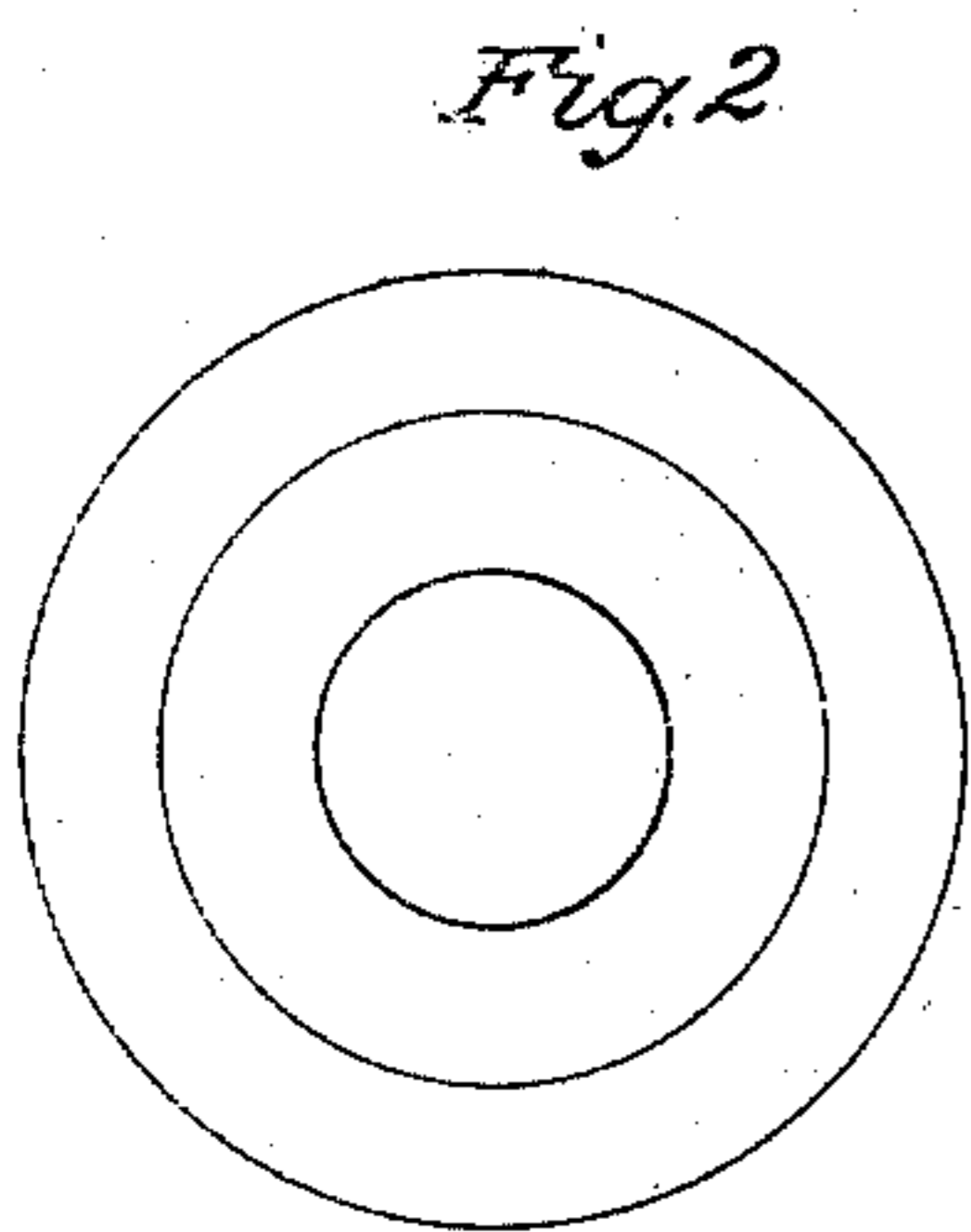
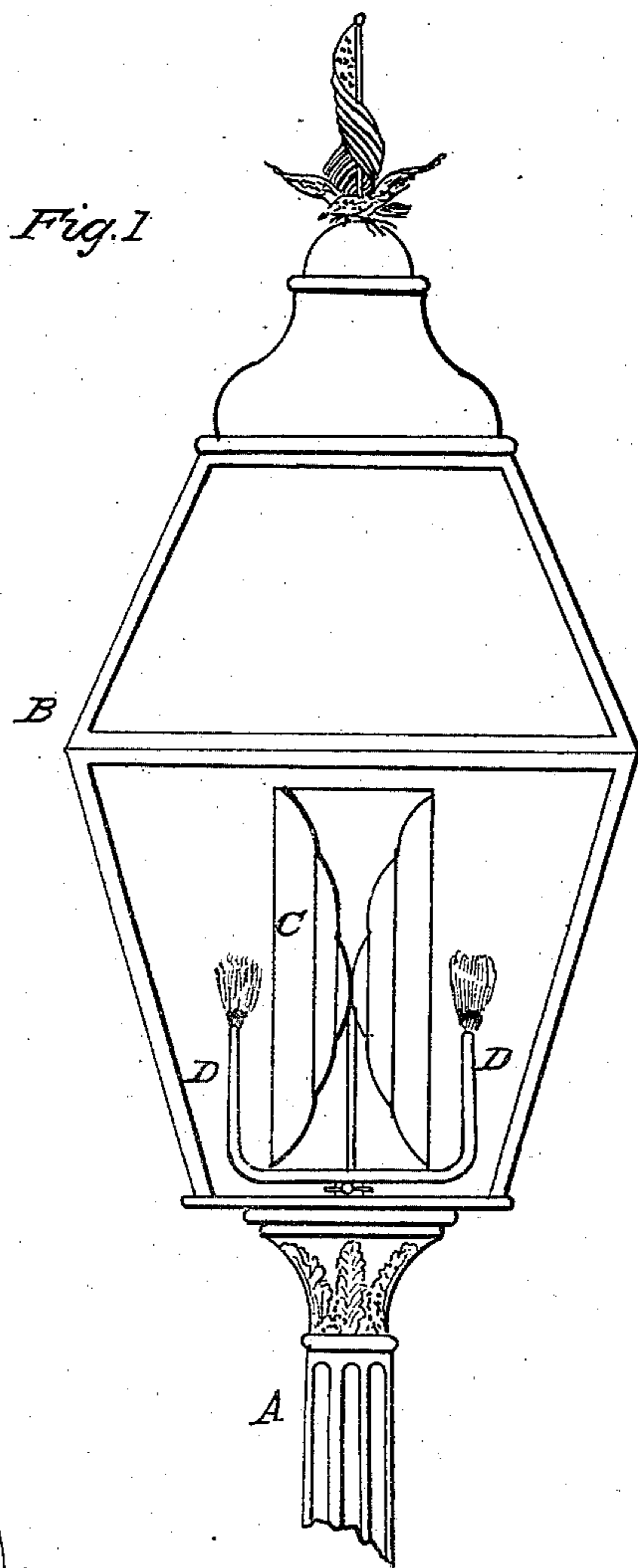


H. & J. SANGSTER.
Street Lamp.

No. 7,904.

Patented Jan'y 14, 1851.



UNITED STATES PATENT OFFICE.

HUGH SANGSTER AND JAMES SANGSTER, OF BUFFALO, NEW YORK.

REFLECTOR FOR STREET-LAMPS.

Specification of Letters Patent No. 7,904, dated January 14, 1851.

To all whom it may concern:

Be it known that we, HUGH SANGSTER and JAMES SANGSTER, of Buffalo, in the county of Erie and State of New York, have invented a new and Improved Street-Lamp; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

Our invention consists in a lamp which is provided with a double, triple, or quadruple concave reflector, placed between two or more burners, the number of burners corresponding with the number of faces of the reflector; and in making each face of the reflector of a number of concave rings concentric in outline as hereinafter described and shown.

Figure 1 is a side elevation of the lamp showing the construction and arrangement of the parts, the reflector being shown in vertical section. Fig. 2 shows one of the faces of the reflector, and Figs. 3 and 4 show horizontal sections of the triple and quadruple reflectors, all the sections being made by a plane passing through the center of each face.

A, (Fig. 1) is the upper part of the lamp post, and B, is the outside frame which are made in the usual form.

C is a vertical section of the reflector which may be made of tin plate, or tinned

copper or any other substance which can be formed with facility and is otherwise suitable for reflectors.

The general form of the faces of this reflector is a concave, but the concavity of the radiating surface, and consequently the effect of the light is increased by making the faces in concave rings in the manner shown in the drawings, to which reference is had for the form of the faces of the reflector. This form of reflector secures nearly or quite all the advantages peculiar to reflectors with concave indentations in the face, while at the same time they can be made much cheaper and can be cleaned with greater facility by turning them in a lathe.

The faces of the reflector are fastened to each other by a metallic rim and the reflector is supported on a rod *n*, and the burners D, D, are so made as to bring the light of each opposite the center of that face of the reflector to which it belongs.

What we claim as our invention and desire to secure by Letters Patent is—

Making the faces of the reflector in concave rings substantially in the manner and for the purposes herein set forth.

HUGH SANGSTER.
JAMES SANGSTER.

Witnesses:

THOMAS P. HOW,
HENRY F. WILLSON.