

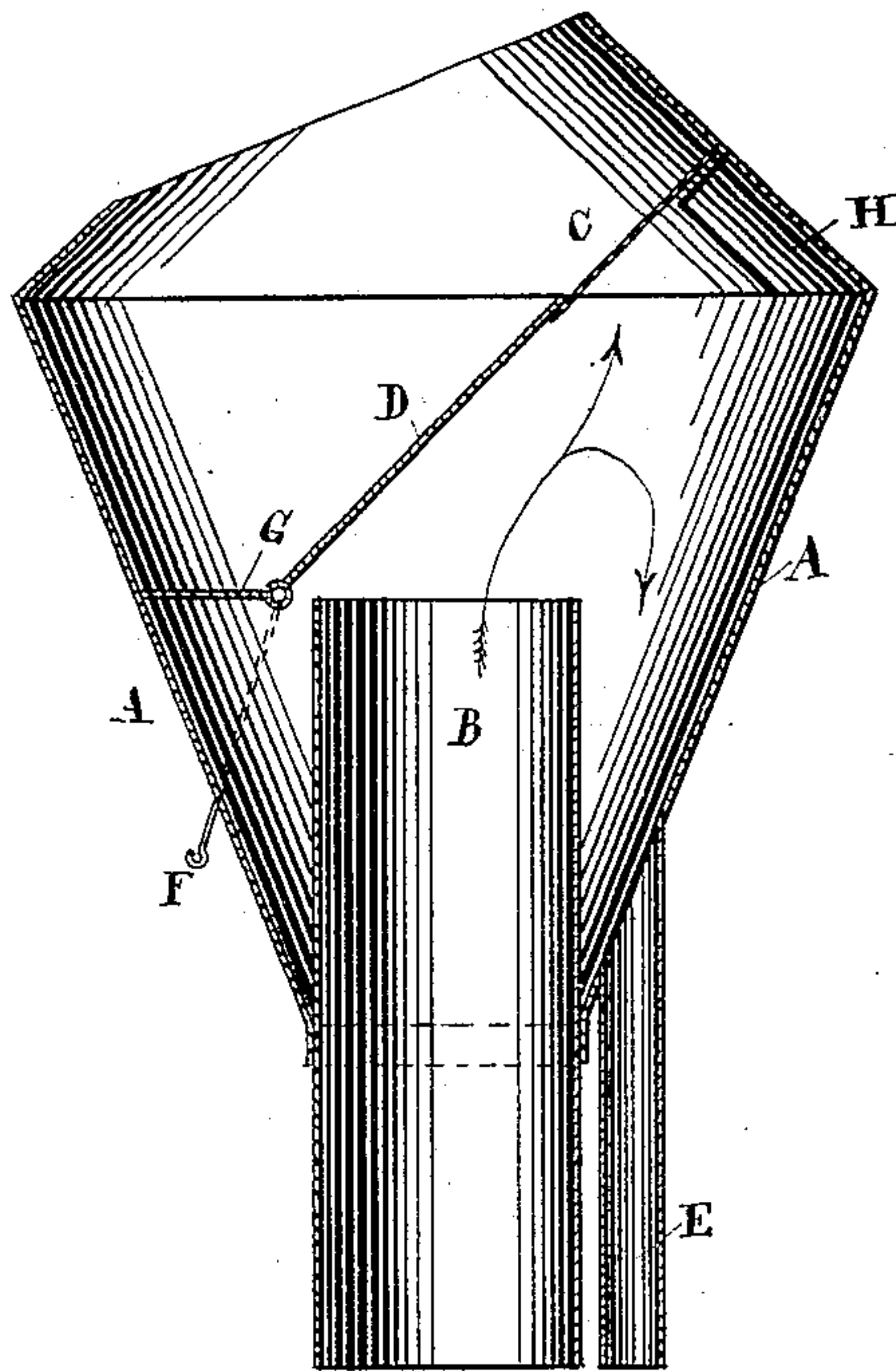
(No Model.)

L. C. SPARKS.  
SPARK ARRESTER.

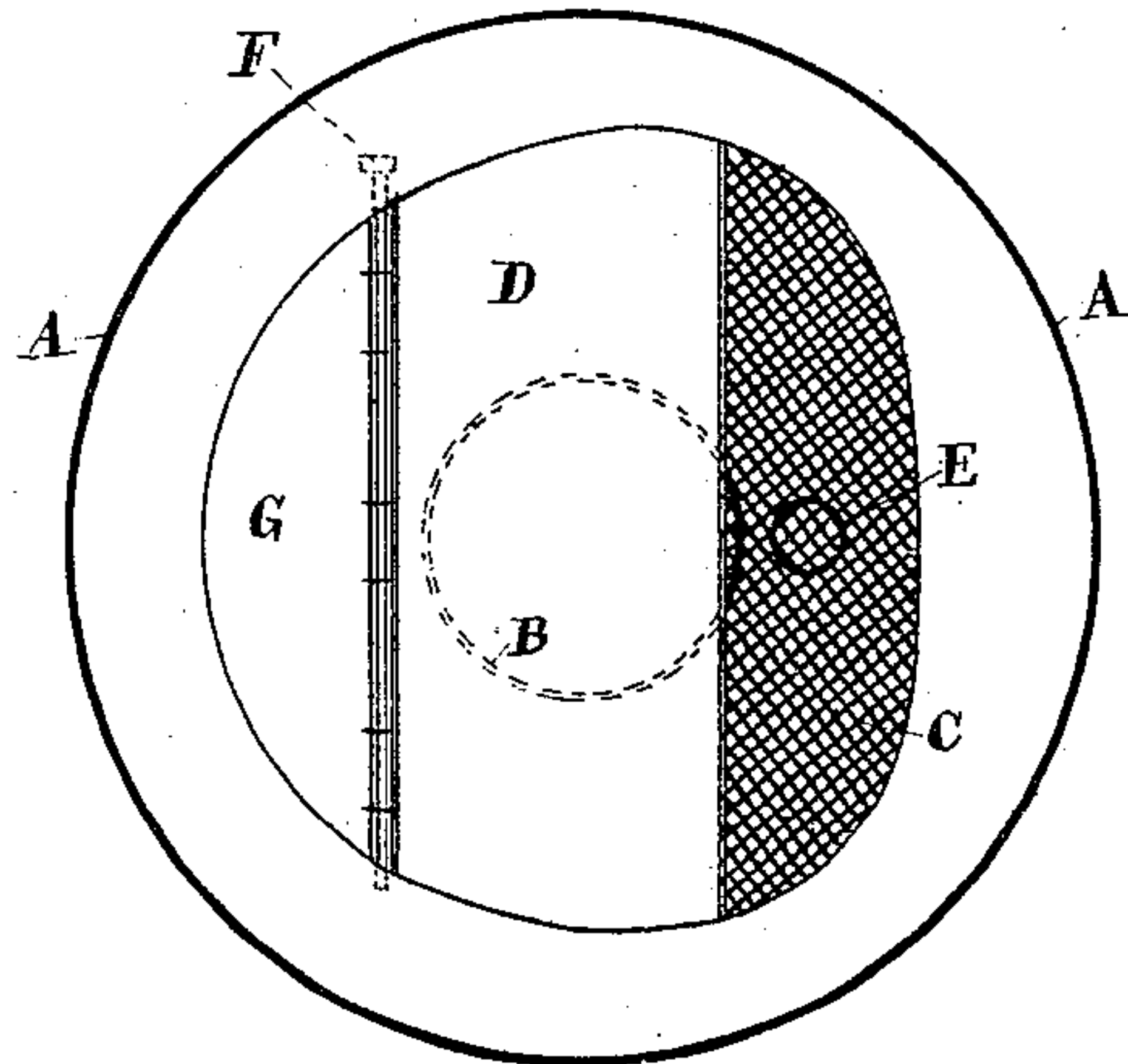
No. 265,343.

Patented Oct. 3, 1882.

*Fig. 1.*



*Fig. 2.*



*Attests.*  
*Charles Fane*  
*Harry Walton*

*Inventor.*  
*Lewis C. Sparks*

# UNITED STATES PATENT OFFICE.

LEWIS C. SPARKS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO  
HIMSELF AND CHARLES ZANE AND ANDREW ZANE, JR.

## SPARK-ARRESTER.

SPECIFICATION forming part of Letters Patent No. 265,343, dated October 3, 1882.

Application filed May 10, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, LEWIS C. SPARKS, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Spark-Arrester to be used principally in locomotive-stacks, of which the following is a specification.

My invention relates to two deflecting metal plates, a sieve, a flue, and a lever arranged in a locomotive-stack for the purpose of arresting sparks and allowing the exhaust-steam and smoke to escape into the open air, while at the same time the sparks are caught and either deposited upon the track or into a box, where they may be emptied at leisure for the purpose aforesaid, as will be hereinafter specifically described, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical section of a smoke-stack of a locomotive illustrating my invention. B is the flue, which leads the smoke and cinders into the main body of the chimney. D is a deflecting-plate, which (on account of its angle) has a tendency to deflect the cinders toward plate H, which in turn deflects said cinders toward the mouth of the small flue E,

near the bottom of the smoke-stack A, from which they may fall either upon the track or may be caught in a box arranged for that purpose. C is a sieve, which allows the exhaust-steam and smoke to escape into the open air. F is a lever rigidly attached to the deflecting-plate D, so as to allow the engineer to raise the plate for the purpose of making more draft in the stack, and for the purpose of repairing the internal plate.

Fig. 2 is a plan view of the smoke-stack with the top part removed, showing the internal arrangement of the stack to better advantage in conjunction with the sectional elevation, Fig. 1.

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

In a spark-arrester, the deflecting-plate D, the lever F, the sieve C, the deflecting-plate H, the flue E, and the pipe B, all arranged and constructed substantially as described.

LEWIS C. SPARKS.

Witnesses:

CHARLES ZANE,  
E. E. VENABLE.