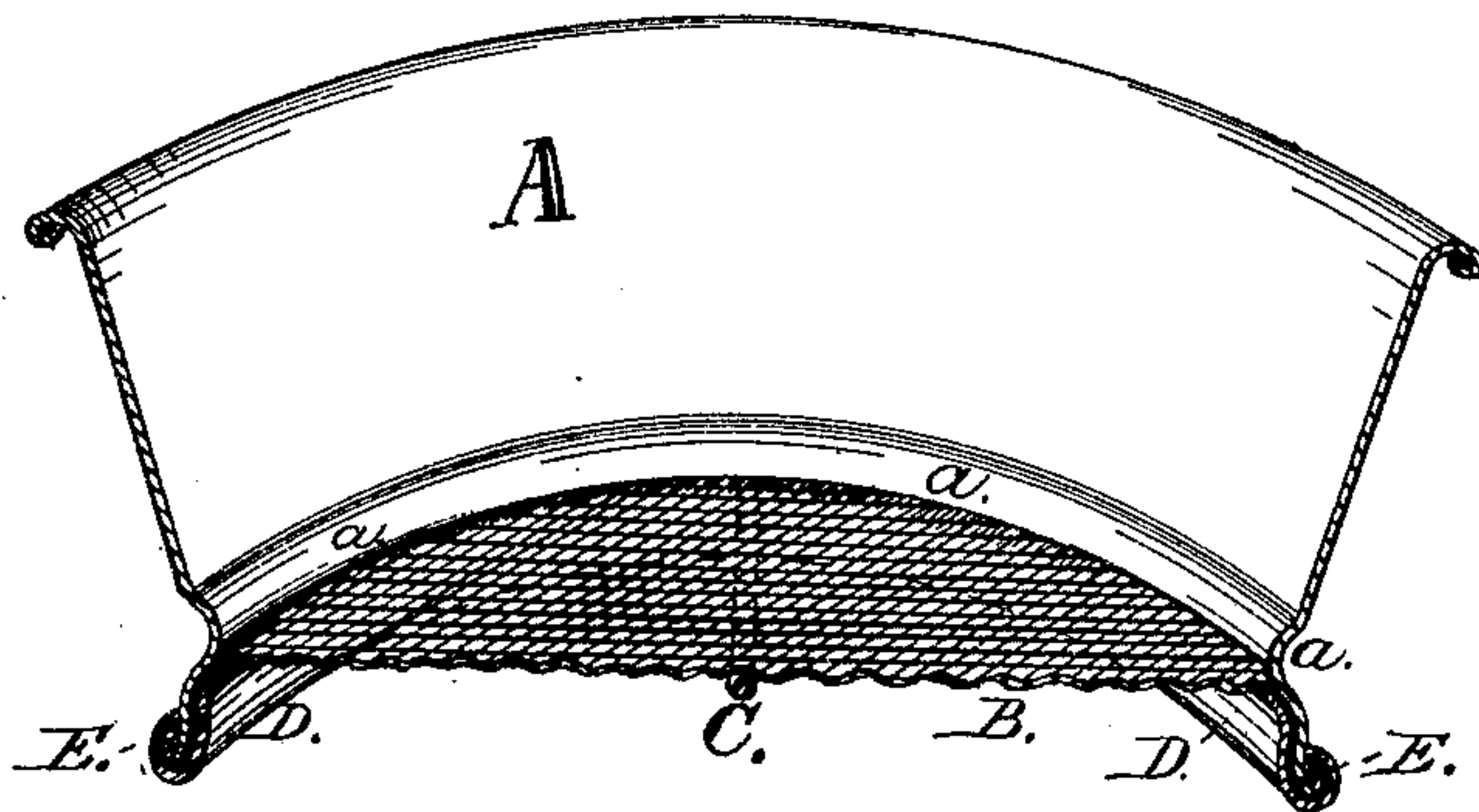


G. W. KETCHAM.  
Sieve.

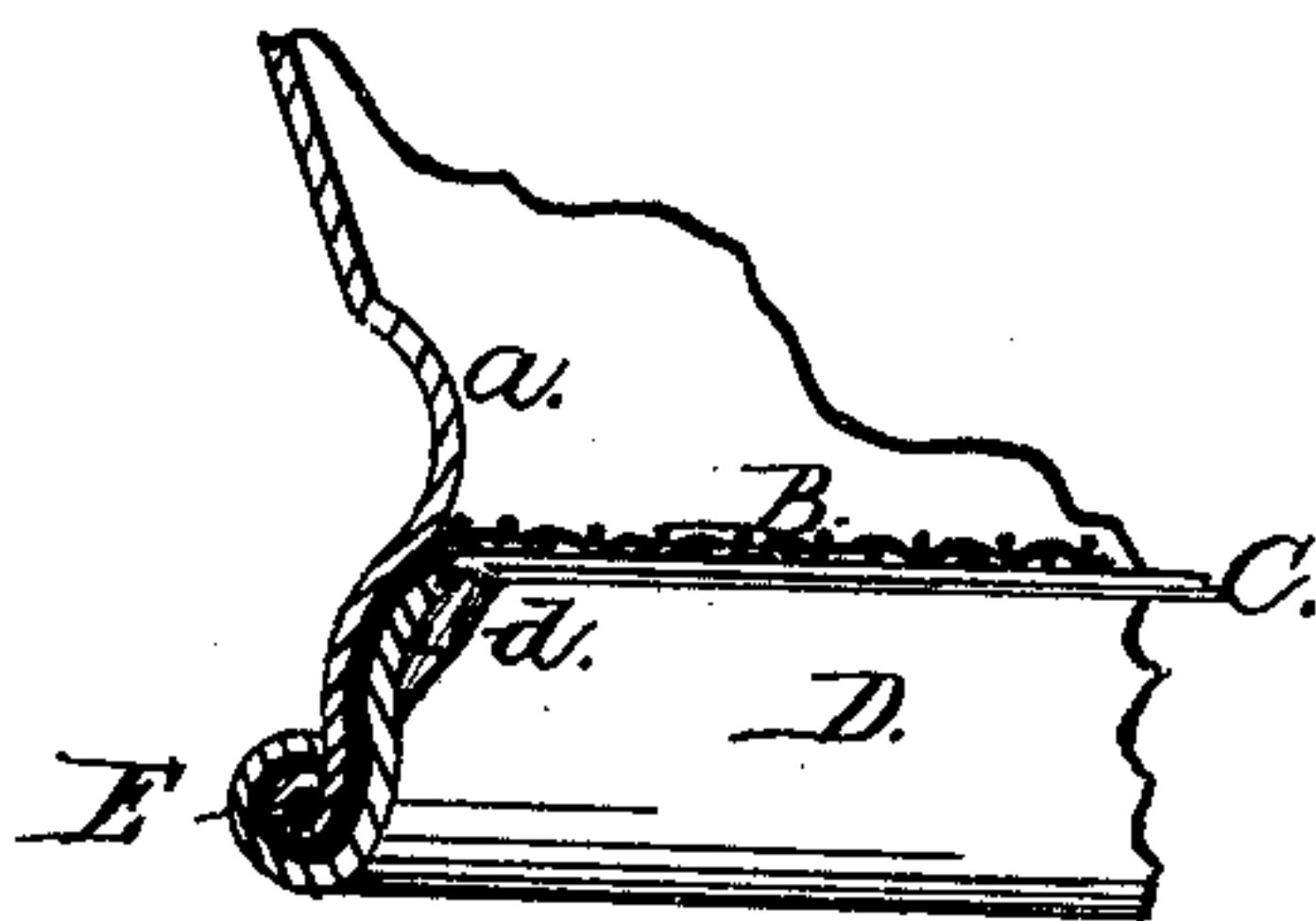
**No. 196,584**

Patented Oct. 30, 1877.

*Fig. 1.*



*Fig. 2.*



Witnesses:

Wm. H. Voss  
Ranken H. Street, Jr.

Inventor:

George. W. Ketchum  
by his Attorney  
J. D. Lane Jr.



# UNITED STATES PATENT OFFICE.

GEORGE W. KETCHAM, OF NEWARK, NEW JERSEY.

## IMPROVEMENT IN SIEVES.

Specification forming part of Letters Patent No. **196,584**, dated October 30, 1877; application filed June 1, 1877.

*To all whom it may concern:*

Be it known that I, GEORGE W. KETCHAM, of the city of Newark, Essex county, in the State of New Jersey, have invented certain new and useful Improvements in the Manufacture of Sieves; and I do hereby declare that the following specification, taken in connection with the drawings furnished, is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same.

My improvement in sieves consists in the manner of uniting the several parts together, which parts consist of an outer base-hoop, an inner base-hoop, and the depending flange of the gauze bottom folded or rolled together as a unit in one direction; also, in the manner of securing the wires in position for supporting the perforated bottom, whereby soldering and riveting may be avoided.

Referring to the drawing, Figure 1 represents a sectional view of a sieve exhibiting the several parts united in position embodying my invention. Fig. 2 is a section, showing manner of attaching the supporting-wires.

A represents the hoops which form the sides of the receptacle part of the sieve, represented as formed from a single piece of metal, without seams, with an annular depression formed around its exterior, (represented at *a*,) against which depression the material which is to serve as the screen or strainer part is intended to rest, as will be hereinafter explained.

B represents the perforated or open-woven material; C, wire braces; D, an annular hoop or ring, to which and by which braces are held and secured in position. E represents the several parts rolled together, by which means a re-enforce is formed, which not only serves to strengthen the base, and thereby the whole utensil, but holds and incloses the ends of the wire braces from view without the aid of other means.

I prepare the hoops which form the body part of suitable metal, by the process of striking or drawing up in manner familiar to all. I adopt any of the many and well-known materials for the sieves or strainer part of the utensil, the size of which will be governed by the inner diameter of the base part, with which it is to connect. (See Fig. 1.)

The inner or base hoop D is formed by itself, and then inserted into position in such a manner as to extend upward against the strainer-bottom, by which means the latter is com-

pressed between the edge of the former and the indent formed upon or within the rim or body proper, as shown in the drawings, the surplus edge of the strainer material extending downward between the base of the outer hoop and the inner rim, so that the three parts may be folded together as a unit, by which means the several parts are firmly united without solder or rivet. The pockets for the reception of the ends of the supporting-wires beneath the strainer material are formed by deflecting the upper edge of the inner hoop sufficiently to receive the ends of the wires, as shown at *d*. By this means riveting or soldering, or both, are avoided. Thus a smooth surface is secured throughout the entire utensil, there being no unsightly projections, as is the case when the wires are made to project through the base, or are soldered into position. Again, the "indent" formed near the base of the main hoop, which projects inwardly, serves to cover the edge or bend of the wire-cloth, so as to entirely close the seam, and thereby prevent the material which is being sifted from getting into the space between the main and inner hoop, which, as a consequence, makes it a comparatively easy task to keep the vessel clean.

Having thus set forth my invention, what I claim as new, and desire to secure by Letters Patent of the United States of America, is—

1. In a metallic sieve, the combination of an outer base-hoop, a separate inner base-hoop, and the depending flange of the gauze bottom, arranged parallel with each other, the said parts being bent or folded together as a unit in the same direction, substantially as set forth.

2. In a metallic sieve, the combination of an outer base-hoop, a separate inner base-hoop, the latter being provided with indents, serving as pockets for supporting the ends of the cross-wires, the depending flange of the gauze bottom, when the said hoops and flanges are bent or folded together as a unit in one direction, substantially as set forth.

In testimony that I claim the foregoing I have hereto signed my name in the presence of two witnesses, whose names hereunder appear.

GEORGE W. KETCHAM.

Witnesses:

JOHN DANE, Jr.,  
THOS. SCOTT.