

(No Model.)

J. LEWIS.
Metallic Sieve.

No. 237,297.

Patented Feb. 1, 1881.

Fig 1.

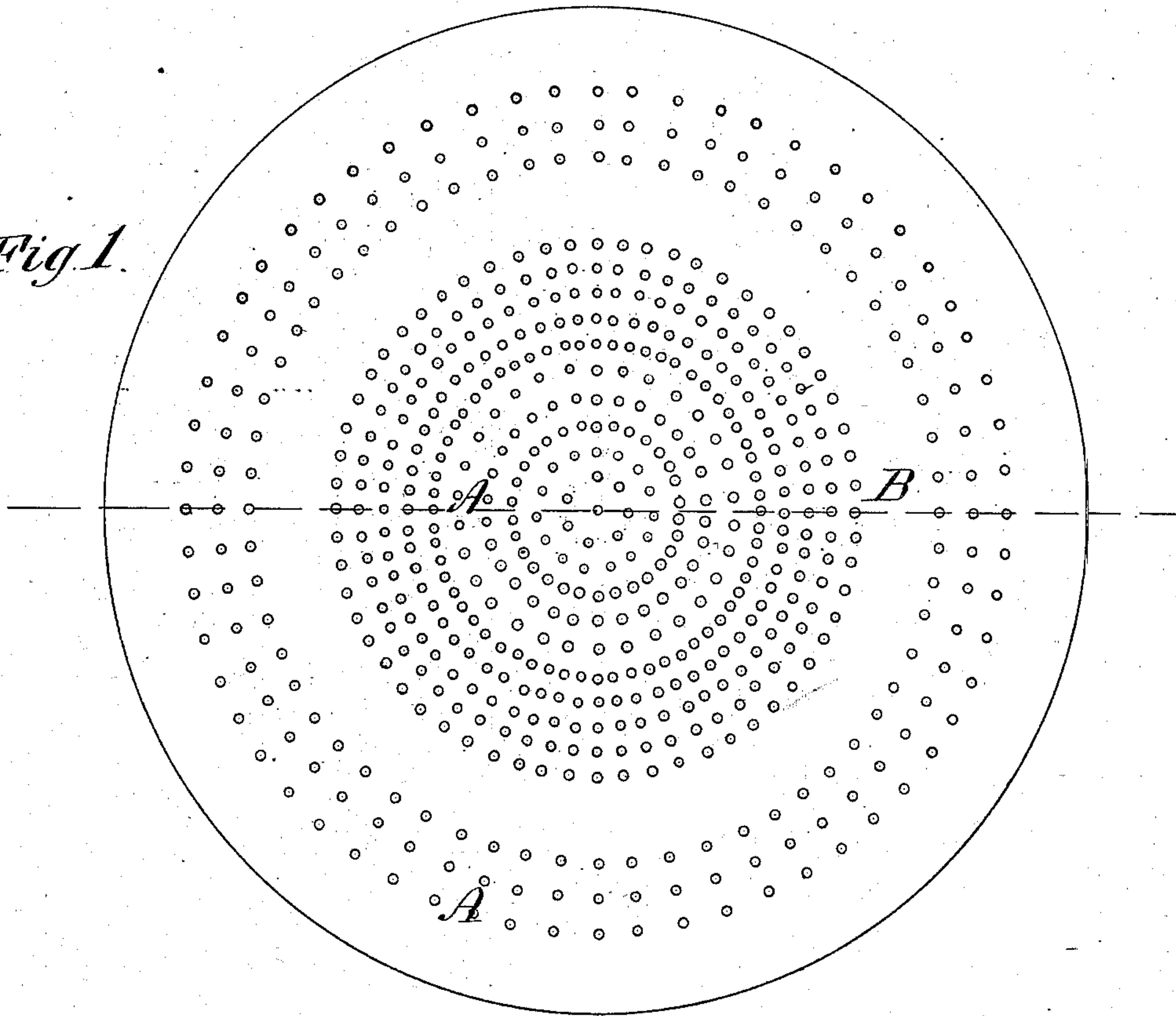


Fig. 2.

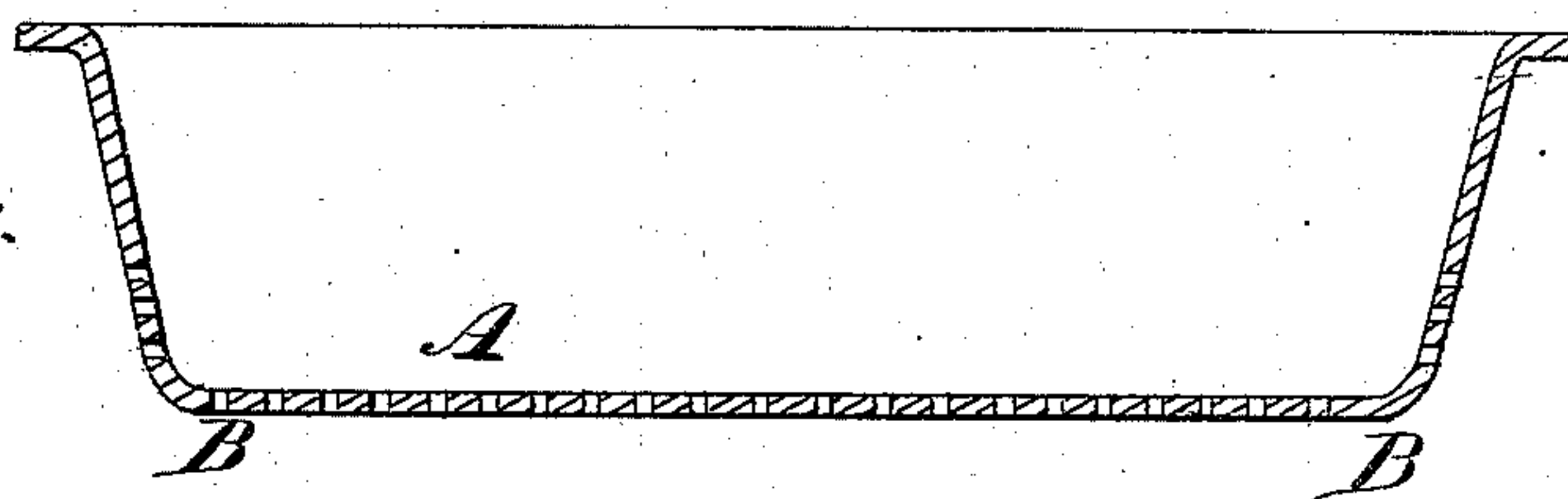
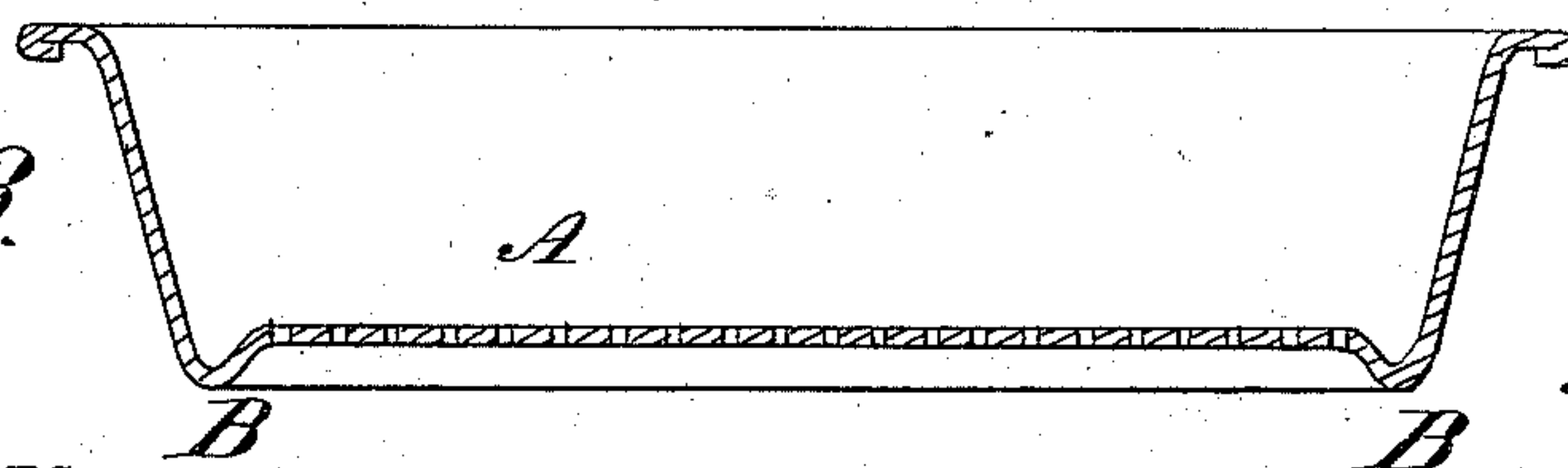


Fig 3.



WITNESSES

M. Connolly
A. Connolly

By his Attorneys

Connolly Bros

John Lewis
INVENTOR

UNITED STATES PATENT OFFICE.

JOHN LEWIS, OF BROOKLYN, NEW YORK.

METALLIC SIEVE.

SPECIFICATION forming part of Letters Patent No. 237,297, dated February 1, 1881.

Application filed September 17, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOHN LEWIS, of the city of Brooklyn, Kings county, and State of New York, have invented a new and Improved Metallic Sieve, of which the following is a specification.

The object of my invention consists in a metallic sieve combining the following peculiar and essential features: A sieve formed up out of a single sheet of metal, with smooth sides and bottom, with proper perforations in the same or in either, at option, and a continuous rim or collar of the same material, to serve as a foot, or non-continuous, to serve as feet to the sieve, and such foot to be formed in the bottom at the junction of the bottom and the sides, in a zone of the metal, left in such place unperforated for that purpose; or the said foot or feet, at option, may be formed in the bottom by indentations therein, or said continuous or non-continuous rim may be formed in any other portion or portions of the said bottom, the metal being left unperforated in that part, or in such parts where it is intended that the same are to be formed; or, if desired, the rim or foot may be perforated also, the foot or feet, however formed, being to prevent the perforated metal bottom or sieving-holes from coming in contact with or abrasion by the surface on which the sieve may chance to stand, and also prevent the admixture of the dust or dirt of such surface with the contents of the sieve, and also prevent the fouling of the sieving-holes.

In addition to the features herein named, chief among which are the smooth surface from a single sheet of metal and the rim or foot formed of the same material, my improved sieve possesses the advantage of packing or nesting more closely than any sieve now in use. This is a great saving in bulk and gives me an opportunity of transporting at a very low rate and classification of freight.

I will now describe the method of manufacturing my sieve:

A circle of sheet metal of a size sufficient to form the entire sieve is first perforated with the proper sieving-holes in such part as that when such sheet is formed up into a pan such sieving-holes shall fall in their selected places in the sides, or bottom, or both, or either, at op-

tion. The parts of said circle or blank in which it is intended to form the rim or foot or indentations are left unperforated and solid, although, if preferred, such rim or foot or indentations could as easily be swaged, turned, or stamped in a perforated pattern. Being properly perforated, the sheet is then drawn up into a pan and then placed in a lathe or under a drop-press, and preferably in the bottom, at the junction of the sides and bottom. In the metal left unperforated at such place for such purpose is formed the continuous rim or collar, to serve as a foot on which such sieve may stand; or in place of such continuous rim may be formed a non-continuous rim or indentations, to serve as feet in the same place as indicated for the continuous rim; or the same continuous or non-continuous rim or indentations for the use of a foot or feet may be formed by similar means in any other part of the bottom of the sieve that may be left blank or unperforated for that purpose.

The following is a literal description of the drawings annexed:

Figure 1 represents the blank of metal, in which A A represent the perforated portions, as described, and B the non-perforated portion or portions. Fig. 2 represents the blank of metal formed up in a pan, in which A A represent the perforated portion, and B the non-perforated portion left for the foot. Fig. 3 represents the pan with the rim or foot formed therein, in which A represents the perforated portion, and B B the rim or foot in the unperforated portion.

I disclaim perforated metal in lieu of wire-cloth for straining or sifting, the same having been used for that and similar purposes.

I am aware that various small articles have been formed up for sifting or straining, but in these wire-cloth was inserted at the bottom. I am also aware that the principle of first perforating a flat sheet or circle and then forming the same into a vessel is old, having been in constant use for a great many years. I also know that metallic sieves have been furnished with rims or feet, these all being soldered or joined in some way to the body of the sieve.

I do not claim anything of these; but What I do claim, and desire to secure by Letters Patent, is—

1. In the manufacture of sheet-metal sieves, the method of constructing a seamless sieve or strainer by first perforating a suitable sheet-metal blank so as to leave an unperforated zone
5 or annular space, B, and then pressing or bending the blank into the required shape without soldering or seaming, substantially as set forth.

2. As a new article of manufacture, a seamless sieve or strainer having a perforated bot-
10 tom, an unperforated zone or space between

the sides and bottom, and a flange or feet swaged or otherwise formed in said unperforated zone, substantially as set forth.

3. In a seamless sieve or strainer, the combination of the sides and perforated base or
15 bottom, formed in one piece.

JOHN LEWIS.

Witnesses:

WILLIAM B. LEWIS,
WILLIAM EGGINTON.