

G. W. LANE.
Sieve.

No. 220,391.

Patented Oct. 7, 1879.

Fig 1.

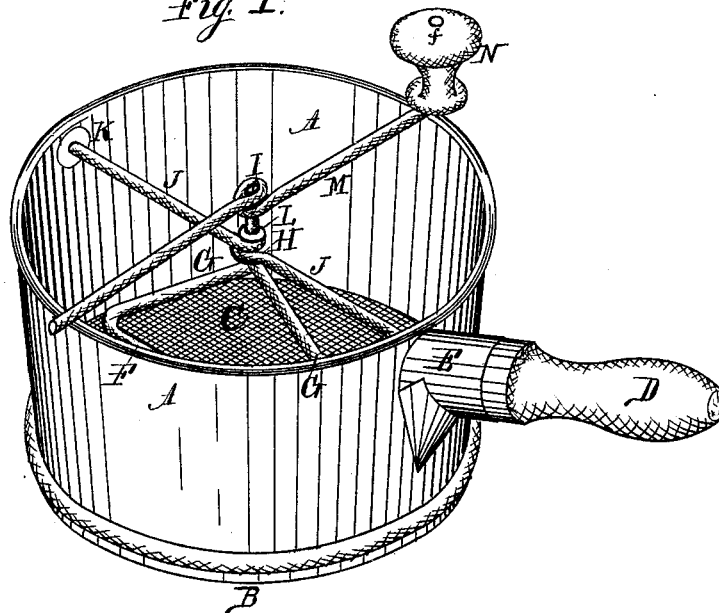
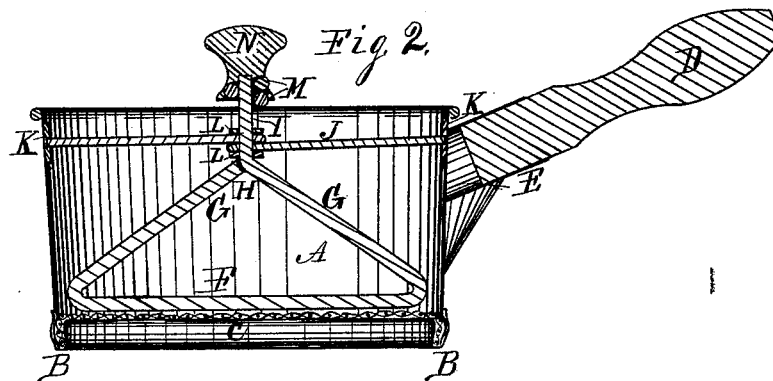


Fig 2.



Witnesses.
A. O. Behel
H. O. Smith

Inventor
George W. Lane.
Per. Jacob Behel
Att'y

UNITED STATES PATENT OFFICE

GEORGE W. LANE, OF ROCKFORD, ILLINOIS.

IMPROVEMENT IN SIEVES.

Specification forming part of Letters Patent No. **220,391**, dated October 7, 1879; application filed March 31, 1879.

To all whom it may concern:

Be it known that I, GEORGE W. LANE, of the city of Rockford, in the county of Winnebago and State of Illinois, have invented a new and useful Improvement in Sieves, of which the following is a specification.

This invention relates to that class of sieves mainly employed for the purpose of sifting flour to separate the adhering particles preparatory to its use for domestic purposes, but is also applicable for other domestic purposes for which a sieve of its class is required.

The object of this invention is to provide a sieve capable of use for a flour-sieve and other like purposes, and which may be employed as a scoop in domestic practice.

To this end I have designed and constructed the sieve represented in the accompanying drawings, in which—

Figure 1 is an isometrical representation of a sieve embodying my invention, of which Fig. 2 is a vertical central section.

In the figures, A represents a sieve-rim, in this instance made from tin-plate in cup form, having a wire formed in its upper edge to produce a rounded edge and give the rim form and firmness.

B represents a two-ply ring made from plate-tin, which is produced from a strip of tin-plate cut to proper width and folded throughout its length near the middle of its width. This folded strip is then made in ring form, having its narrowest portion inward, and is of proper size to receive the lower edge of the rim A between its folds.

C represents a wire-gauze constructed of suitable wire in web form, with meshes of proper size for the purpose intended, and it is cut to proper size for the sieve. Its outer edge is then inserted between the folds of the two-ply ring B, and the ring, with the webbing in place, is then applied to the lower end of the sieve-rim A in such a manner as to receive the sieve-rim between the two portions of the two-ply ring B on the outside of the wire-gauze C. These parts are then forced together until the sieve-rim A reaches the bottom of the groove formed between the two portions of the ring B. These parts are then passed through what is known in the art of the tinner as a "beading or grooving machine," by which the several parts—to

wit, the two portions of the two-ply ring B, the wire-gauze C, and the lower portion of the sieve-rim A—are pressed firmly together and curved, as represented in the drawings, which serves to fix the several parts securely in place. These parts are clearly shown in section at Figs. 2 and 4.

D represents a handle, fixed to the sieve-rim by means of a tin-plate socket, E, soldered to the rim. These parts form a sieve capable of use as such for many purposes, and is also well adapted for the purposes of a scoop. This sieve is provided with a removable reel of the form represented in Figs. 1 and 2, and is made from suitable wire of one piece bent into the form of a triangle, the longest side of which, as at F, forms the base, of such length as to freely enter the sieve-rim, and the other two sides, G, rise to meet in the vertical center of the sieve a little below the upper surface of the sieve-rim, as at H, at which point they are soldered to each other. From this point the end portion of one of the inclined arms, as at I, rises in a vertical position and forms a central shaft of the reel.

J represents a transverse bar made from a suitable wire coiled in its center, forming a bearing to receive the center vertical shaft, I, of the reel to permit it to revolve therein. This transverse bar J is placed centrally crosswise of the sieve rim A near its upper surface, having its ends removably supported in plate-washers K, fixed to the inner surface of the sieve-rim A, near its upper edge, on opposite sides. L are collars fixed to the vertical shaft I above and below the transverse bar J.

M represents the crank-arm, which is made from a suitable wire coiled centrally to receive the upper portion of the vertical shaft I, to which it is firmly fixed, and is of such length as to rest on the upper edge of the rim A on opposite sides in such a manner as to hold the reel F G suspended in the sieve-rim A. One end of this arm M is bent upward, forming a crank, and is fitted with the crank-handle N, by means of which the reel may be rotated in the sieve.

By this construction I produce a sieve capable of many uses in domestic practice, but is especially adapted for use as a flour-sieve, in which application the flour to be sieved can be scooped from the vessel containing it with

the reel in place. It can then be held over the proper place where the sifted flour is wanted, and by means of the crank-arm M the reel can be made to revolve in the sieve-rim A to pass the separated flour through the sieve-cloth C until the quantity required is sieved without the usual shaking of the sieve, which tends to throw and spread the flour, causing a wasteful dust to arise therefrom.

When my improved sieve is required for the purpose of a scoop the reel F G may be readily removed by pressing inward the sides of the rim A farthest from the supports of the transverse bar J, which will cause the rim A

to lengthen in the lengthwise direction of the bar to free it from its connection therewith.

I claim as my invention—

The combination, with a reel fitted to revolve in a sieve, of a transverse bar rigidly fixed to the vertical shaft of the reel, and its outer ends supported on the sieve-rim to hold the reel in a vertical position in its revolutions in the sieve, substantially as hereinbefore set forth.

GEORGE W. LANE.

Witnesses:

J. H. KIRTON,

A. O. BEHEL.