

H. H. WATERS.
Sieve.

No. 207,633.

Patented Sept. 3, 1878.

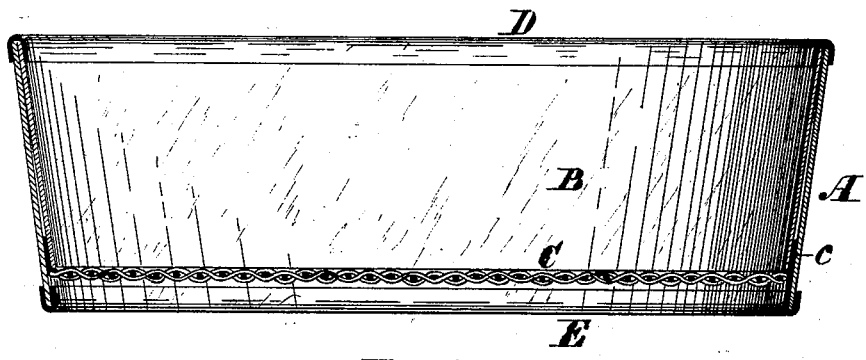


Fig 1

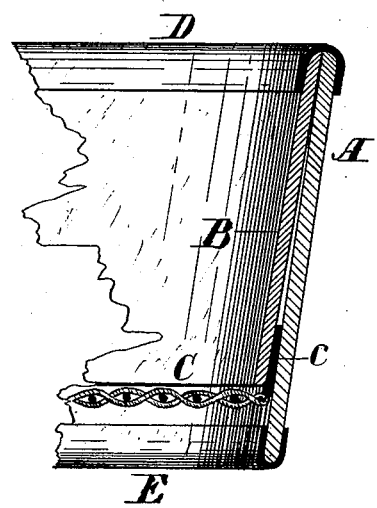


Fig 2

Witnesses

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HORACE H. WATERS, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN SIEVES.

Specification forming part of Letters Patent No. 207,633, dated September 3, 1878; application filed February 21, 1878.

To all whom it may concern:

Be it known that I, HORACE H. WATERS, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Sieves, which is fully described and claimed in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 represents a vertical section of a sieve embodying my improvement, and Fig. 2 a similar sectional view of one side on an enlarged scale.

My invention relates especially to sieves in which the hoops are made of paper, paper-board, or other like material; and the object thereof is to make a strong hoop and provide a cheap and efficient means for securing the sieve-bottom thereto.

The invention consists in a hoop composed of two or more thicknesses of paper-board or other like material, in combination with a sieve-bottom, the edge of which is inserted between the sheets composing the hoop, and secured in place by gluing the parts together.

In the drawings, A represents the outer band or thickness of the sieve-hoop, and it is made of paper, paper-board, or other like material. A second band, B, of similar material, is made of such size as to fit within the former. It is desirable to leave the ends of this inner hoop unfastened until it is inserted within the outer band, and preferably they are chamfered and arranged to lap over each other before fastening, the band being made so large that after it is pressed out to perfectly fit the inside of the outer hoop the ends may still be lapped. The inner band may be completed before being placed within the outer one; but it is then more difficult to adjust it properly. It is a little narrower than the outside one, and is arranged so that the latter will project a little below the lower edge of the former, as shown in the drawings.

The sieve-bottom C is made somewhat larger than the hoop, so that the edge may be turned up all around to form a flange, *c*, which is slipped up under the lower edge of the inside band, B, between it and the outer band, as shown in Fig. 2 of the drawings.

The bent edge of the sieve-cloth and the two bands composing the hoop are glued together. The glue employed should be very

strong in order to hold the sieve-bottom in place with sufficient security, and it may be applied to the parts at any time during the process of putting them together which is most convenient.

A ready method of setting up the sieve is to place the sieve-bottom in position within the completed outer band, A, and then apply the glue, after which the inner band is adjusted in position, glue being also applied to its outer surface, if necessary, and the parts should then be pressed together by any suitable mechanism.

In order to make the hoop strong and firm, the two bands or thicknesses are glued together throughout their entire extent; but it is possible to fasten them together, so that one will support the other, by some other means, such as rivets or nails, the same fastening being also used to secure the wire-cloth between the two thicknesses of the hoop.

It will be seen that with the arrangement described above there is a perfectly smooth finish both inside and outside of the hoop, the lower edge of the inside band coming down and fitting snugly upon the bottom.

The edge of the sieve-bottom might be turned in the other direction—*i. e.*, bent downward—and a narrow band of paper-board placed inside of the outer band below the sieve-cloth, and the parts glued together, as described above; but I prefer the arrangement herein shown and set forth.

The upper and lower edges may be protected by suitable binding, D and E, or left exposed as may be desired. The latter construction will make a good and durable finish if the material is tough and hard.

If desired, more than two bands or thicknesses of material may be used for the hoop.

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

A sieve-hoop composed of the two paper-board bands A and B, arranged one within the other, in combination with the bottom C, the bent edge of which is inserted between the edges of the hoop-bands and fastened thereto with glue, substantially as described.

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