

M. KENNEDY.
Paper Hoop-Sieve.

No. 210,259.

Patented Nov. 26, 1878.

Fig 1

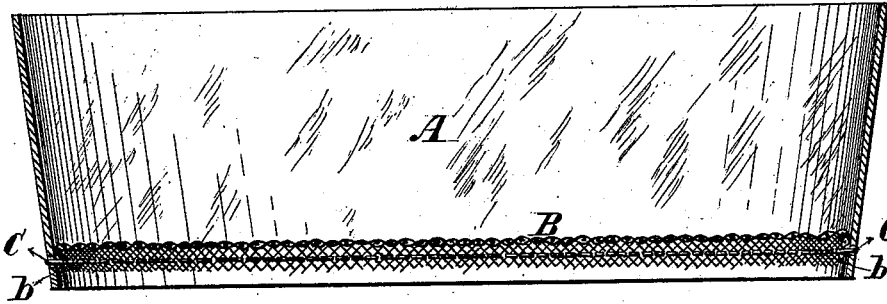


Fig. 2.

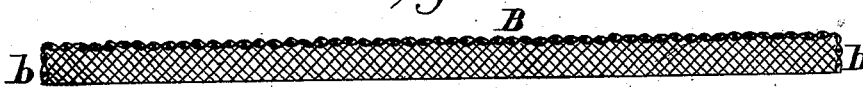


Fig. 5.

Fig 4

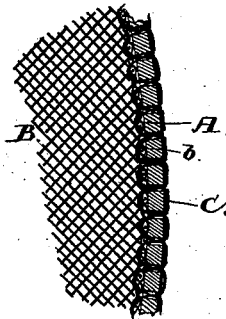
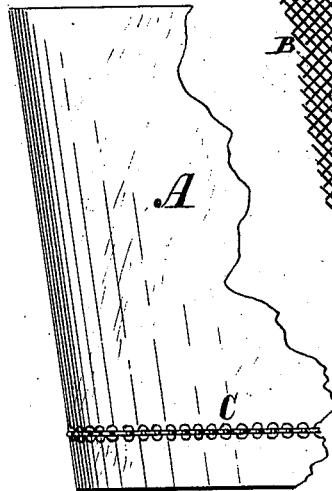
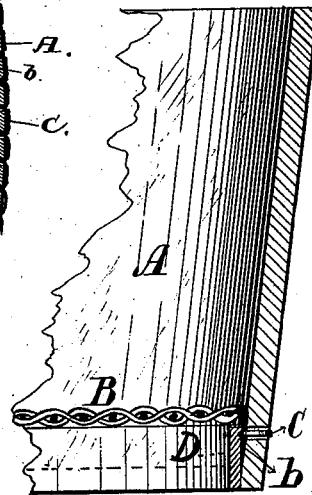


Fig 3



Witnesses,

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UNITED STATES PATENT OFFICE.

MICHAEL KENNEDY, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN PAPER-HOOP SIEVES.

Specification forming part of Letters Patent No. **210,259**, dated November 26, 1878; application filed October 25, 1877.

To all whom it may concern:

Be it known that I, MICHAEL KENNEDY, of Chicago, county of Cook, and State of Illinois, have invented a new and useful Improvement in Paper-Hoop Sieves, which is fully described in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 represents a vertical section of a sieve embodying my invention; Fig. 2, a similar section of the sieve-cloth bent before insertion in the hoop; Fig. 3, a detail sectional view on an enlarged scale, and Fig. 4 a similar detail side elevation of the same.

The object of my invention is to obtain a light, cheap, and durable sieve; and the improvement relates to the mode of attaching the sieve-cloth to the hoop.

The invention consists in the combination of a sieve hoop or rim of paper-board and a sieve-cloth secured thereto, whereby an improved method of fastening the two together may be employed.

The invention also consists in securing the sieve-cloth to a paper hoop by means of stitching the former to the latter, as will be hereinafter more fully set forth.

In the drawings, A represents the sieve-hoop, which is made of paper material, a thick straw-board being preferable, so that but one thickness of the board will be required. The strip composing the hoop is fastened together at the ends to form the latter by any suitable means, although I find a strong glue or cement well adapted to this purpose. The hoop is made slightly flaring from bottom to top, (clearly shown in the drawings,) which construction answers the purpose to be mentioned presently.

The sieve-cloth B, which is preferably of wire, is bent over all around at the edge, so as to form a protecting-flange, *b*, as shown in Fig. 2 of the drawings. The size of the cloth should be such that when bent in this form it will just fit the smaller end or bottom of the hoop A. The sieve-cloth or wire bottom B is inserted in this end of the hoop, with the flange or bent edge *b* projecting downward or outward, as shown in Fig. 1 of the drawings. The sieve-cloth and hoop are then sewed or stitched together, the stitching or sewing being

done through the turned edge *b* and the paper hoop A.

The stitching C should be through the bent edge, as near as possible to the body of the wire bottom B. It will be seen that when the wire bottom is first put in the hoop there will be a slightly wedge-shaped space all around between the turned edge and the side of the hoop, owing to the flaring of the latter. In the process of sewing the two together the stitches are drawn up tight, thereby drawing up the bent edge close to the side of the hoop, as shown in Fig. 1 of the drawings. By this operation the sieve-bottom is strained so as to be perfectly taut, and it is secured to the hoop in a very firm and substantial manner.

The stitching may be done with a strong thread or cord, a small flexible wire, or any other suitable material. The material of the hoop permits the sewing to be done readily, and it may be accomplished by hand or with a proper construction and arrangement of devices by sewing-machine.

It is not absolutely necessary to make the hoop flaring; but this form is desirable, as the sieve-bottom can thereby be more readily made taut.

It is also evident that the bent edge of the sieve-cloth may extend up into the hoop above the bottom instead of below it, as shown in the drawings; but the arrangement described and shown is preferable, for the reason that if the turned edge projected above the bottom it would be in the way, and cause a lodgment of more or less of the material placed within the hoop to be sifted, although this could be obviated by putting a second thin band within the hoop extending down and over the turned-up edge of the bottom. The lower edge of the hoop projects slightly below the sieve-bottom, so that the latter will be supported somewhat above any surface on which the sieve may be placed; and, if desired, a thin band, D, of paper or any other suitable material, may be placed within the lower end of the hoop, to cover turned edge of the wire-cloth, and the stitching passed through it as well as the sieve-cloth, so as to secure both to the hoop, as shown in Fig. 3 of the drawings.

A binding of metal or any other material

adapted to this purpose may be put upon the upper or lower edges, either or both, of the paper hoop, to save the wearing of the latter and give to the article a little higher finish; but it is not essential, as a plain hoop will stand the wear of ordinary usage, and can be made very ornamental.

The use of paper-board for the sieve-hoop enables me to attach the sieve-bottom directly thereto by cheap and durable means which have never been used in sieves before, and which cannot be employed with the hoops heretofore in use. I have shown and described one device for this purpose; but there are several others which may be adopted if the hoop is made of paper, and therefore I do not limit my invention to the stitching alone.

I am aware that wire-cloth has been attached to a metallic sieve-hoop by swaging, as in the patent of R. J. Mann, August 8, 1871, and also to a fly-trap hoop by struck-up points bent over the wire, as in patent of S. M. Cook, February 12, 1878; and I disclaim both of these methods, which are not adapted to paper

hoops, and limit my invention to such methods of attaching the sieve-bottom to the hoop as are especially adapted to the particular material which I employ for the hoop.

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

1. In a sieve, a hoop of paper-board, in combination with the sieve-bottom secured directly thereto, substantially as described.

2. A paper hoop, A, in combination with the sieve-bottom B, secured to the hoop by sewing or stitching thereto, substantially as described.

3. The paper hoop A, having its sides flaring from the bottom, in combination with the sieve-bottom B, having its edge turned over to form a flange, *b*, and stitching C, whereby the hoop and bottom are fastened together and the bottom drawn taut, substantially as described.

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