W. H. MATTHEW.

DRIER.

APPLICATION FILED SEPT. 10, 1912.

1,073,151.

Patented Sept. 16, 1913.

2 SHEETS—SHEET 1.

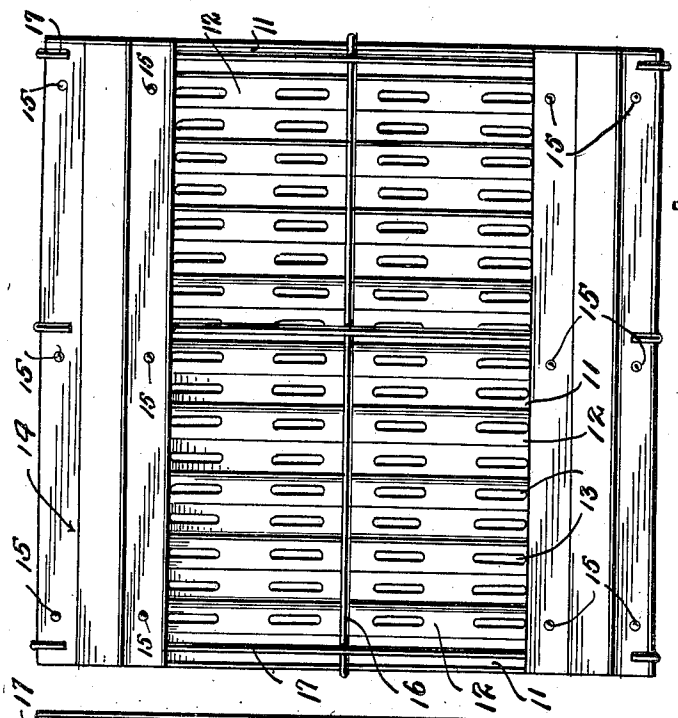


Fig. 4.

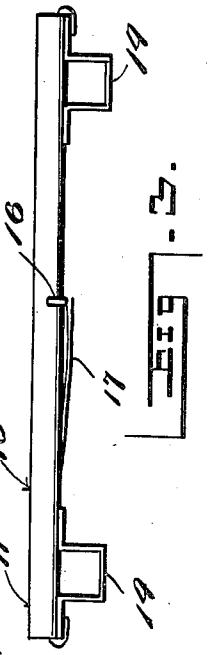


Fig. 2.

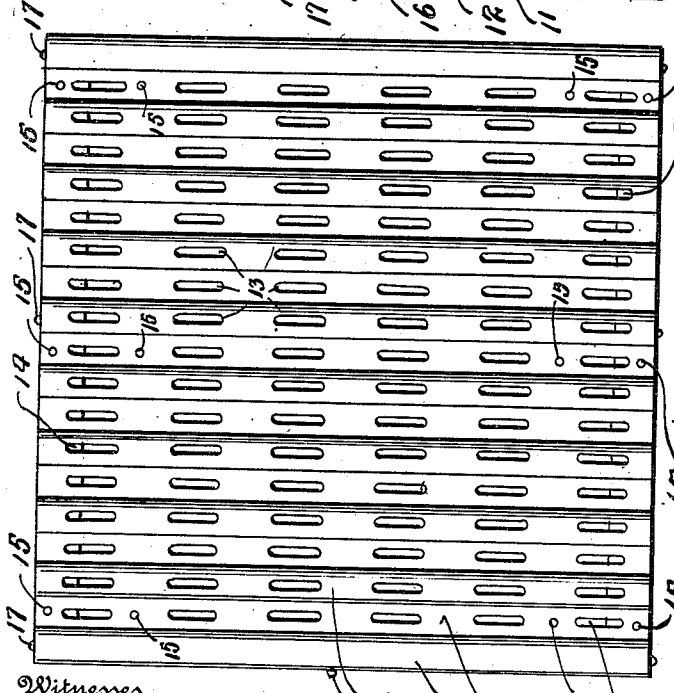


Fig. 1.

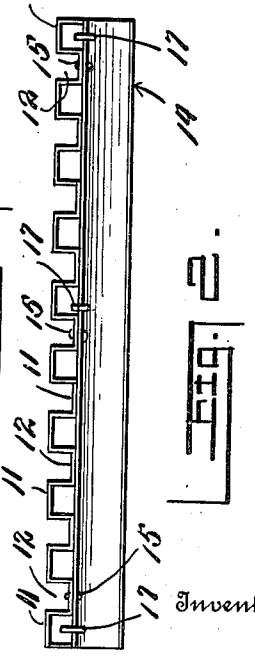


Fig. 3.

Witnesses

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2 SHEETS—SHEET 2.

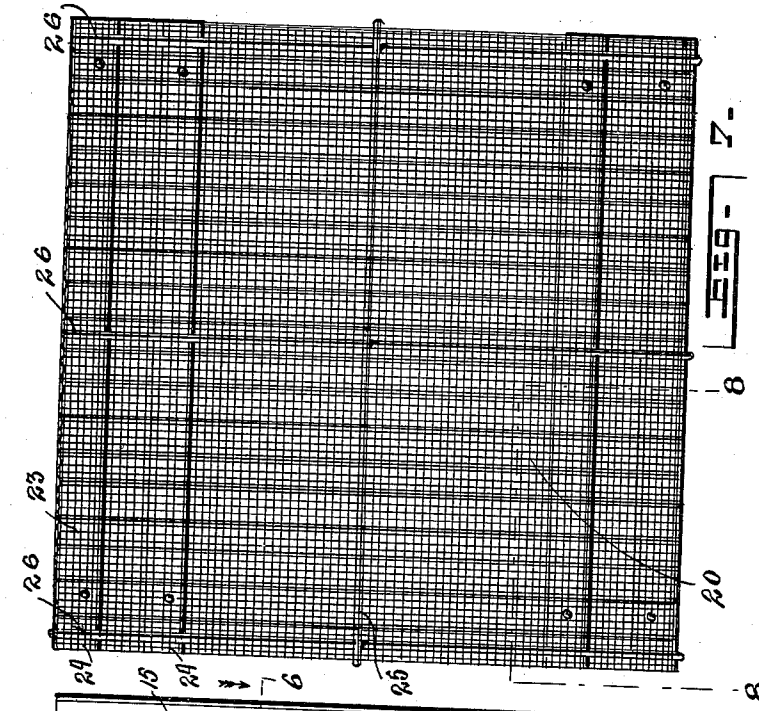


Fig. 7.

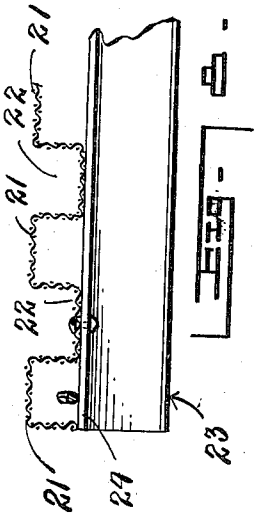


Fig. 4.

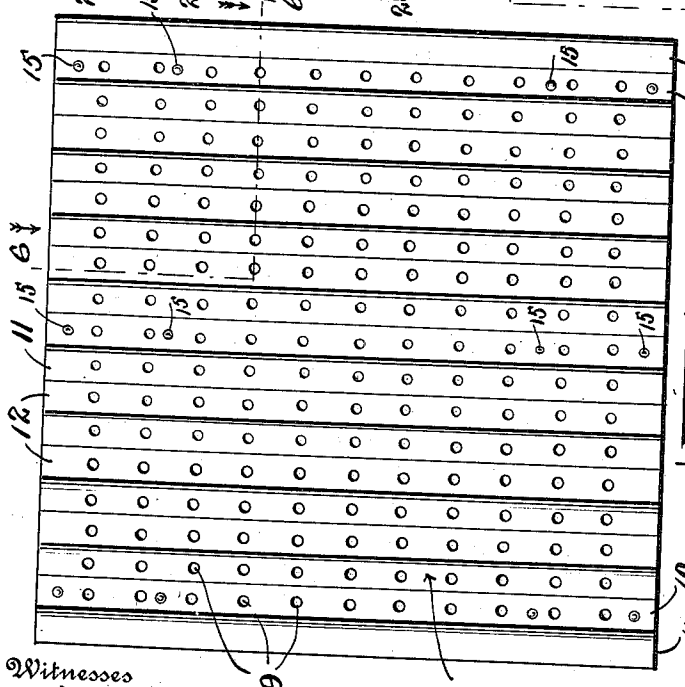


Fig. 5.

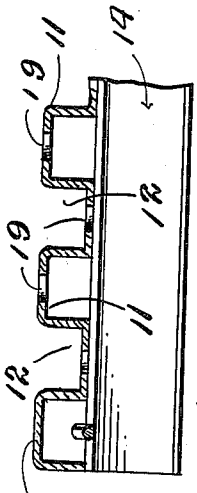


Fig. 6.

Witnesses

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DRIER.

1,073,151. Specification of Letters Patent. Patented Sept. 16, 1913.

Application filed September 10, 1912. Serial No. 719,684.

To all whom it may concern:

Be it known that I, WILLIAM H. MATTHEW, a citizen of the United States, residing at Zanesville, in the county of Muskingum, State of Ohio, have invented certain new and useful Improvements in Driers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in driers and more particularly to drying racks for paper pulp, tiles, etc.

An object of the invention is to provide a drying rack of this character constructed of foraminous material and constructed in such manner that the air may readily circulate around and beneath the material upon the raised portions or ribs of the drier to thoroughly and properly dry said material.

Another object is to construct the drier in such manner that it may be formed of thin material and yet be strong and durable as well as highly effective in use.

Another object is to generally improve and simplify the construction of devices of this character and increase the efficiency and durability thereof.

With these and other objects in view my invention will be more fully described and illustrated in the accompanying drawings attached to and forming a part of this application.

In the drawings: Figure 1 is a top plan view of my device showing the preferred form. Fig. 2 is a side elevation thereof. Fig. 3 is an end elevational view. Fig. 4 is a bottom plan view. Fig. 5 is a view similar to Fig. 1 showing a modified form. Fig. 6 is a fragmentary sectional view on line 6—6 Fig 5. Fig. 7 is a top plan view of a further modified form. Fig. 8 is a detail sectional view on the line 8—8 Fig. 7.

Referring more particularly to the above drawings in which similar reference characters designate corresponding parts throughout, 10 designates the main portion or floor of the drier which is corrugated to form the transverse ribs 11 and channels 12. The floor is constructed of foraminous material, thus providing the elongated openings 13 extending longitudinally in the ribs and channels, as will be clearly seen by referring to Figs. 1 to 4 inclusive. It will also be apparent that in this form, I have used thin sheet metal for said floor.

The channel bars 14 have their opposite edges turned outwardly and secured against the under face of the floor, as shown at 15. The channel bars 14 are positioned along the opposite longitudinal edges of the floor and are of such size that the outer rows of openings 13 are above the central portions of said channel bars, thus permitting proper circulation of air through the channel bars and through the floor thereabove.

The device is properly braced by means of the crossed longitudinal and transverse bars 16 and 17 beneath the floor. The transverse bars 17 have their central portions bearing against the longitudinal brace bar while the ends of the transverse brace bars extend between the floor 10 and the channel bars 14 and have their ends 18 properly bent back to prevent longitudinal movement thereof. The channel bars are formed of suitable metal and the brace rods are preferably formed of brass, in the preferred form.

In the modified form shown in Figs. 5 and 6, I have shown the corrugated floor 10 as being provided with spaced circular openings 19 throughout the length of the ribs 11 and channels 12.

In the further modified forms shown in Figs. 7 and 8, I have shown the floor 20 as being formed of wire screen bent into proper form to produce the transverse ribs 21 and channels 22. The supporting channel bars 23 are secured along the longitudinal edges of the under side of the floor 20, it being understood that the opposite edges 24 of said channel bar are turned outwardly before being secured to the floor. Longitudinal and transverse brace bars 25 and 26 respectively, similar to the brace bars 16 and 17 in the preferred form and the first modification, are employed to properly brace and strengthen the floor 20.

From the foregoing it will be apparent that I have provided a drier upon the floor of which may be spread paper pulp, cardboard or tiles or other material or articles to be dried, the device being of such form that the air may properly circulate therethrough and reach all sides of the material or articles thereupon.

It will also be evident that this device is of extremely simple construction and may be readily and cheaply manufactured. Further, minor changes in the details of con-

struction may be made within the scope of the appended claims without departing from the spirit of my invention.

What is claimed is:

1. A device of the class described comprising a floor having transverse ribs and channels and formed of foraminous material, longitudinal supporting bars secured to the under face of the floor at the opposite edges thereof, and means for bracing the floor.

2. A device of the class described comprising a foraminous floor constructed to form longitudinal ribs and channels, channel bars secured to the under face of the floor, said channel bars having their opposite edges bent outwardly and secured to said floor, longitudinal and transverse brace bars secured against the under face of the floor, and means for preventing longitudinal movement of said brace bars.

3. A device of the class described comprising a floor member formed of a continuous piece and including alternate ribs and channels, each rib and channel being provided with a plurality of spaced elongated openings extending longitudinally thereof, means for supporting the floor in raised position, and longitudinal and transverse crossed brace bars bearing against the under face of the floor, the transverse brace bars having their opposite ends bent around the supporting means to prevent longitudinal movement of said bars.

In testimony whereof, I affix my signature, in presence of two witnesses.

WILLIAM H. MATTHEW.

Witnesses:
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DAISY P. LORIMER.