

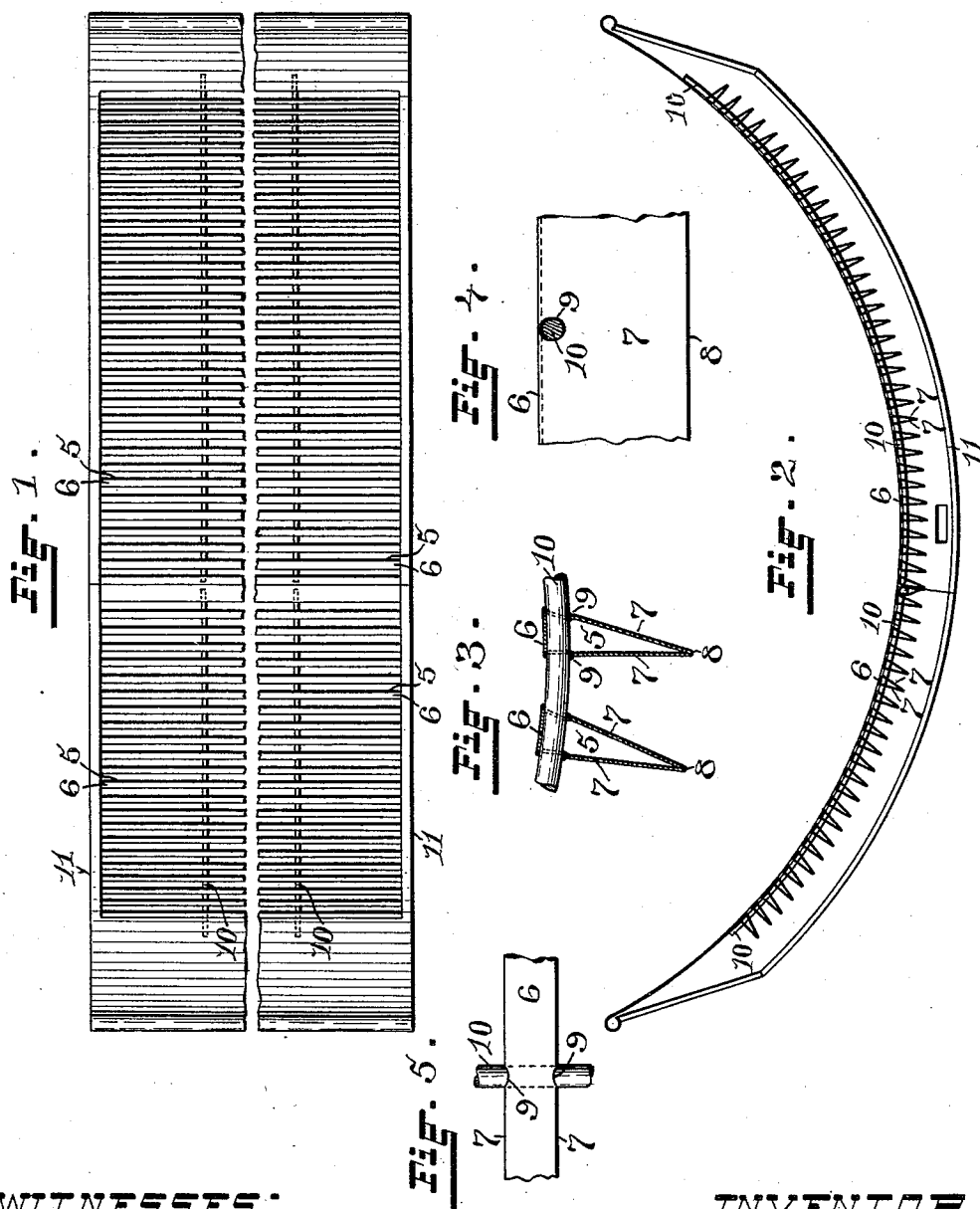
(No Model.)

L. RASCOE.

CLEARER SCREEN FOR CARDING ENGINES.

No. 538,200.

Patented Apr. 23, 1895.



WITNESSES:

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UNITED STATES PATENT OFFICE.

LEVI RASCOE, OF WHITINSVILLE, MASSACHUSETTS, ASSIGNOR TO THE
WHITIN MACHINE WORKS, OF SAME PLACE.

CLEARER-SCREEN FOR CARDING-ENGINES.

SPECIFICATION forming part of Letters Patent No. 538,200, dated April 23, 1895.

Application filed August 17, 1894. Serial No. 520,569. (No model.)

To all whom it may concern:

Be it known that I, LEVI RASCOE, of Whitinsville, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Clearer-Screens for Carding-Engines; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention has reference to improvements in clearer screens for carding machines.

The object of the invention is to so construct a clearer screen that the bars of the same will be securely braced intermediate their ends without materially obstructing the passage of impurities between the bars.

Another object of the invention is to provide a stronger and more durable clearer screen than those heretofore constructed.

The invention consists in a clearer-screen formed of a series of sheet metal bars having an inverted, elongated, triangular cross-section, the metal forming the sides of the bars being perforated close to the base of the triangle forming the tops of the bars so that portions of these tops are cut away by the perforations to form recesses, and rods or wires having a circular cross-section extending through said perforations in contact with the top plates of the bars and secured to the bars by solder located in the recesses of the tops formed by the cutaway portions.

Figure 1 represents a top view of the end portions of a clearer-screen showing the improved construction, the central portion of the screen being broken away. Fig. 2 represents a cross sectional view of the screen. Fig. 3 represents an enlarged cross sectional view of a portion of the screen showing the bars secured on the bracing rod. Fig. 4 represents a side view of a portion of one of the screen bars with the bracing rod in section. Fig. 5 represents an enlarged plan view of one of the bars showing the perforations for the bracing rod extending into the top surface of the bar to provide receptacles for the solder.

Similar numbers of reference designate corresponding parts throughout.

The bars, of which the screen, or apron, is

constructed, are formed from sheet metal bent to a triangular cross sectional shape, the base of the triangle forming the upper surface of the bar when secured in the screen, while the two edges of the sides are joined together to form the apex of the angle.

In carrying my invention into practice I first ascertain the lines at which the metal should be bent from the base to form the sides and on these lines I perforate the metal so that the edges of the perforations will be slightly within the line, the number of perforations in the length of the metal depending on the number of bracing bars to be used. When, therefore, the sides are bent into shape and secured, they will be perforated immediately below the top, while portions of the top will be cut away above the perforations. I now pass a rod, or wire, of a cross sectional size and shape, corresponding to that of the perforations, through the requisite number of bars and secure the bars at intervals on the rods by soldering the rods to the bars in the cut away portion of the tops, thus securing the same together. It is, however, evident that the bars may first be secured to the ordinary end plates and the bracing rods then passed through the perforations and soldered.

In the drawings, 5—5 indicate the screen bars which have the tops 6 and the sides 7—7 bent from the metal of the tops and secured together by solder at 8. The sides 7—7 are furnished with perforations 9—9 immediately below the tops 6 and cutting into the tops so that the rods 10—10 passing through the perforations will be in contact with the lower surface of the metal forming the tops and will support the same, while the extension of the perforations into the top surfaces will provide receptacles for the solder readily accessible when all the bars are mounted on the bracing rods. The ends of the bars 5—5 are secured to the usual end plates 11 and the ordinary shape of the screen is maintained.

I prefer to use bracing rods of a circular cross section as the rounded surface does not materially obstruct the passage of the impurities between the bars, but rods of any cross sectional shape may be used.

Having thus described my invention, I

claim as new and desire to secure by Letters Patent—

1. In a clearer screen, the combination with
a series of sheet metal bars having an in-
5 verted triangular cross-section, the sides of
the bars being perforated close to that por-
tion of the triangle forming the tops of the
bars, said tops being also partially cut away
to form openings to receive solder, and a rod
10 extending through the perforations and se-
cured by solder held in the openings.

2. In a clearer screen, the combination with
a series of sheet metal screen bars of triangu-
lar cross-section having the tops 6 and the
15 sides 7—7, said sides being perforated as at

9—9 so that portions of the perforations ex-
tend into the tops 6 and form openings to re-
ceive solder, of the end-plates 11—11 secured
to the ends of the bars, and a rod 10 extend-
ing through the perforations 9—9 and secured 20
to the tops 6—6 by solder applied to the bars
in the portions of said perforations which ex-
tend into the tops.

In witness whereof I have hereunto set my
hand.

LEVI RASCOE.

Witnesses:

R. K. BROWN,
A. A. SIMMONS.