J. MASON.

Carding-Machine.

No. 161,252. Patented March 23, 1875.

Fig 1.

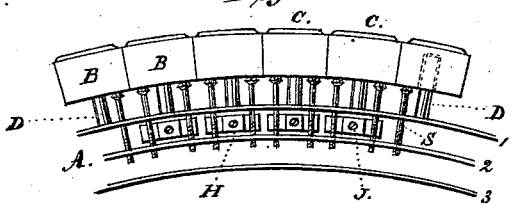


Fig 2.

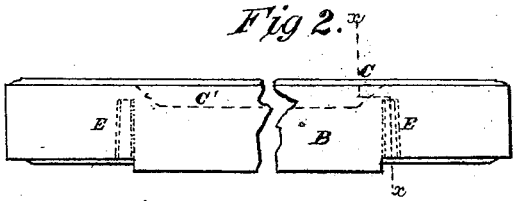
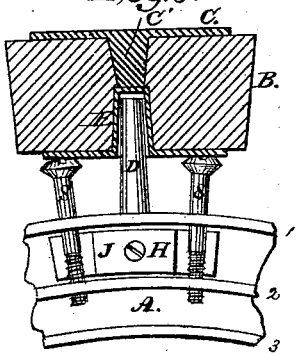


Fig 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

JAPHETH MASON, OF TAUNTON, MASSACHUSETTS.

IMPROVEMENT IN CARDING-MACHINES.

Specification forming part of Letters Patent No. **161,252**, dated March 23, 1875; application filed October 16, 1874.

To all whom it may concern:

Be it known that I, JAPHETH MASON, of Taunton, in the county of Bristol and State of Massachusetts, have invented an Improvement in Carding-Engines, of which the following is a specification:

The object of my invention is to so construct and secure the "flats" of a carding-engine as to obviate the difficulty heretofore experienced from the warping or twisting thereof.

This improvement is shown in detail in the accompanying drawings, in which Figure 1 shows so much of the side of a carding-engine as may be necessary to illustrate this invention; Fig. 2, a side view of one of the flats; and Fig. 3, the "binder," for securing the screws upon which the flats rest, and a cross-section of a flat on the line *x x*, Fig. 2.

A shows the rim of the arch, having the flanges 1, 2, and 3; B, the flat, with its stiffening-iron C; S S, screws upon which the flats B rest, and which govern the distance of the flat from the "clothing" on the cylinder; D, the fingers projecting from the rim, on which the flats are placed to prevent any lateral motion thereof; E, the metal bushing inserted into the flat to reduce the friction of the flat upon the fingers, its outline being shown by the dotted line in Fig. 2; H, the binder; and J the screw, by turning which in the proper direction the binder is brought into action against the screws S S, and thus prevents them from turning and becoming loose by the working of the machine.

It is of the first importance, indeed, actually necessary, that the flat should be always true and even, and it has been found difficult, even at great expense, to accomplish this for any length of time, the flat soon becoming warped or twisted, and requiring to be replaced or repaired.

The flat here described is made of ordinary pine wood and iron, the last being used to obtain the necessary stiffness.

In the drawings accompanying this specification the iron strip C is screwed upon the face of the flat, and has upon its under side a rib or flange, as shown by the open line C′ in Fig. 2. The fingers or spurs D are cast upon the rim, and upon them the flat is placed. In the motion of the "stripper," (which vibrates beneath the arch,) at proper times, these flats are raised a certain distance and then drop back upon the fingers as far as the screws S S will permit. The friction of the iron finger against the wood often prevents the flat from thus dropping back into its place. To avoid this difficulty the flat here shown has inserted into it an iron bushing or casing, E, so that the finger D never touches the wood of the flat, but, coming in contact with the iron bushing only, the friction is but slight, and thus the difficulty is almost entirely overcome.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The flat B, constructed as described, and provided with the metal plate C and the bushing E, as and for the purpose described.

2. In combination with the rim A, and screws S S, the binder H and screw J, substantially as and for the purposes described.

JAPHETH MASON.

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