No. 878,348. PATENTED FEB. 4, 1908.

C. A. COBBETT.

CARDING MACHINE CYLINDER AND CLOTHING THEREFOR.

APPLICATION FILED MAR. 5, 1906.

FIG. 1

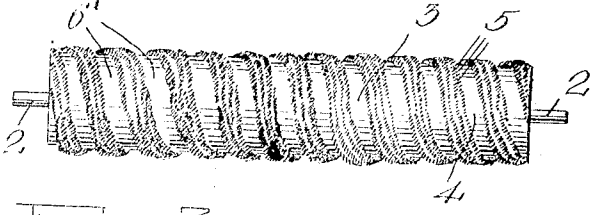


FIG. 2

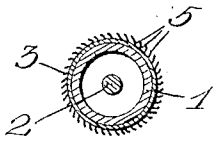


FIG. 3

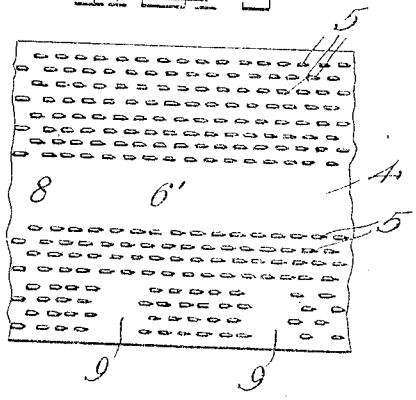


FIG. 5

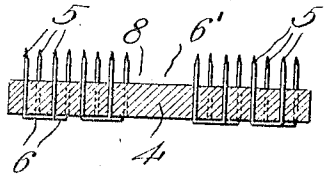


FIG. 4

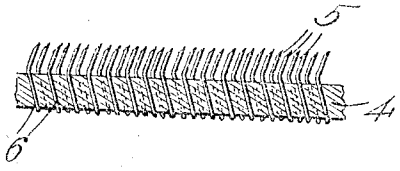


FIG. 7

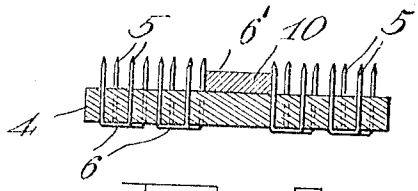


FIG. 6

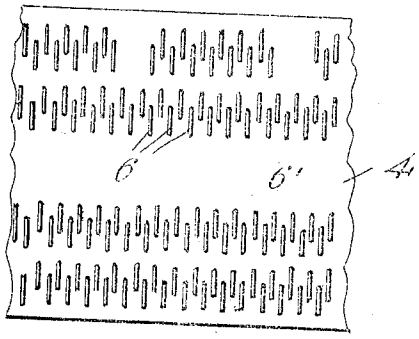
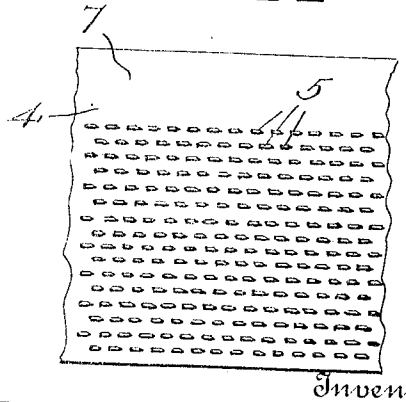


FIG. 8



Witnesses

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UNITED STATES PATENT OFFICE.

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CARDING-MACHINE CYLINDER AND CLOTHING THEREFOR.

No. 878,348. Specification of Letters Patent. Patented Feb. 4, 1908.

Application filed March 5, 1906. Serial No. 304,408.

To all whom it may concern:

Be it known that I, CHARLES A. COBBETT, a citizen of the United States, residing at Newton, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Carding-Machine Cylinders and Clothing Therefor; and I do 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.

My invention relates to improvements in carding machines, and more particularly to the leader-in cylinders thereof and the card clothing for such cylinders.

The object of the invention is to provide a cylinder of this character with card clothing which will take the stock in evenly and without bunches, and which will be much more durable than the clothing now commonly used.

With the above and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts, as will be hereinafter described and claimed.

In the accompanying drawings:—Figure 1 is a side elevation of the leader-in cylinder of a carding machine having my improved card clothing thereon; Fig. 2 is a transverse sectional view through the cylinder; Fig. 3 is a plan view of the outer face of the improved card clothing; Fig. 4 is a longitudinal sectional view through the same; Fig. 5 is a transverse sectional view through the same; Fig. 6 is a plan view of the bottom or under face of the same; Fig. 7 is a transverse sectional view similar to Fig. 5, showing the blank portion or space partially filled in with a strip of leather or the like to adapt the clothing for handling cotton and other fine material; and Fig. 8 is a plan view of a slightly modified form of my improved card clothing.

Referring to the drawings by numeral, 1 denotes the leader-in or taker-in cylinder of a carding machine or the like, which cylinder is mounted upon a shaft 2 and may be solid or hollow and of wood, metal or any other material.

My improved card clothing 3 is formed in the usual manner from a strip or strips 4 of leather or other suitable material, in which are provided rows of teeth 5 formed by the projecting end of U-shaped pins or staples 6 which are, as shown, of the usual form and construction, but which may be of any other suitable or preferred form.

My invention consists in leaving one or more portions or spaces 6′ of the outer face of the strip 4 blank or without the rows of teeth, so that when the clothing is wound spirally upon the cylinder in the usual manner and secured thereto, the teeth 5 will not cover the entire surface of the cylinder. I preferably arrange these blank spaces or portions 6′ longitudinally at one or the other of the edges of the strip, as shown at 7 in Fig. 8 of the drawings, or at the center or other intermediate portions of the strip of leather, as shown at 8, in Fig. 3, so as to provide groups of rows of the teeth; but the blank spaces may also be in the form of small rectangular or other shaped portions 9 arranged transversely or otherwise, as shown in Fig. 3 of the drawings. When these blank spaces extend longitudinally of the strip it will be seen that they will form a spiral space or channel around the cylinder when the clothing is applied thereto and the teeth will also be arranged in spiral rows or groups, as will be noted upon reference to Fig. 1 of the drawings. This construction will cause the wool, cotton or other material to be fed more evenly from the hopper or the like into the machine, and will prevent the bunching of the material. The spiral rows of teeth will draw the material in strings or strands and the blank spaces or portions coming successively across the material being fed by the cylinder, will cause the latter to release or partially release the material to prevent large bunches of the same being pulled into the machine as is now the case where the teeth cover the entire surface of the cylinder. The provision of the blank spaces in the card clothing also increases the life of the same, since the machine will not become readily choked with large bunches and hence the teeth will not be mashed down or bent. In Fig. 7 of the drawings, I have the longitudinally extending blank space partially filled with a strip 10 of leather or other suitable material which is wound around the cylinder in said space and removably secured therein. This filling strip 10 is provided to adapt the cylinder for handling cotton or other light material, and it may be readily removed when the cylinder is to be used for handling wool, shoddy and other heavy material.

From the foregoing description, taken in

connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention, as defined by the appended claims.

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

A carding machine cylinder presenting on its periphery spiral toothed lines and alternately disposed space lines, each toothed line being composed of a plurality of rows of teeth spaced apart and disposed in staggered relation, the space lines being each of greater width than the spaces between the contiguous teeth in the toothed lines, and a detachable filling strip arranged in the space lines and having its outer surface disposed in a plane below that of the outer ends of the teeth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHARLES A. COBBETT.

Witnesses:
A. ALLFIELD,
ROBT. A. RAY.