

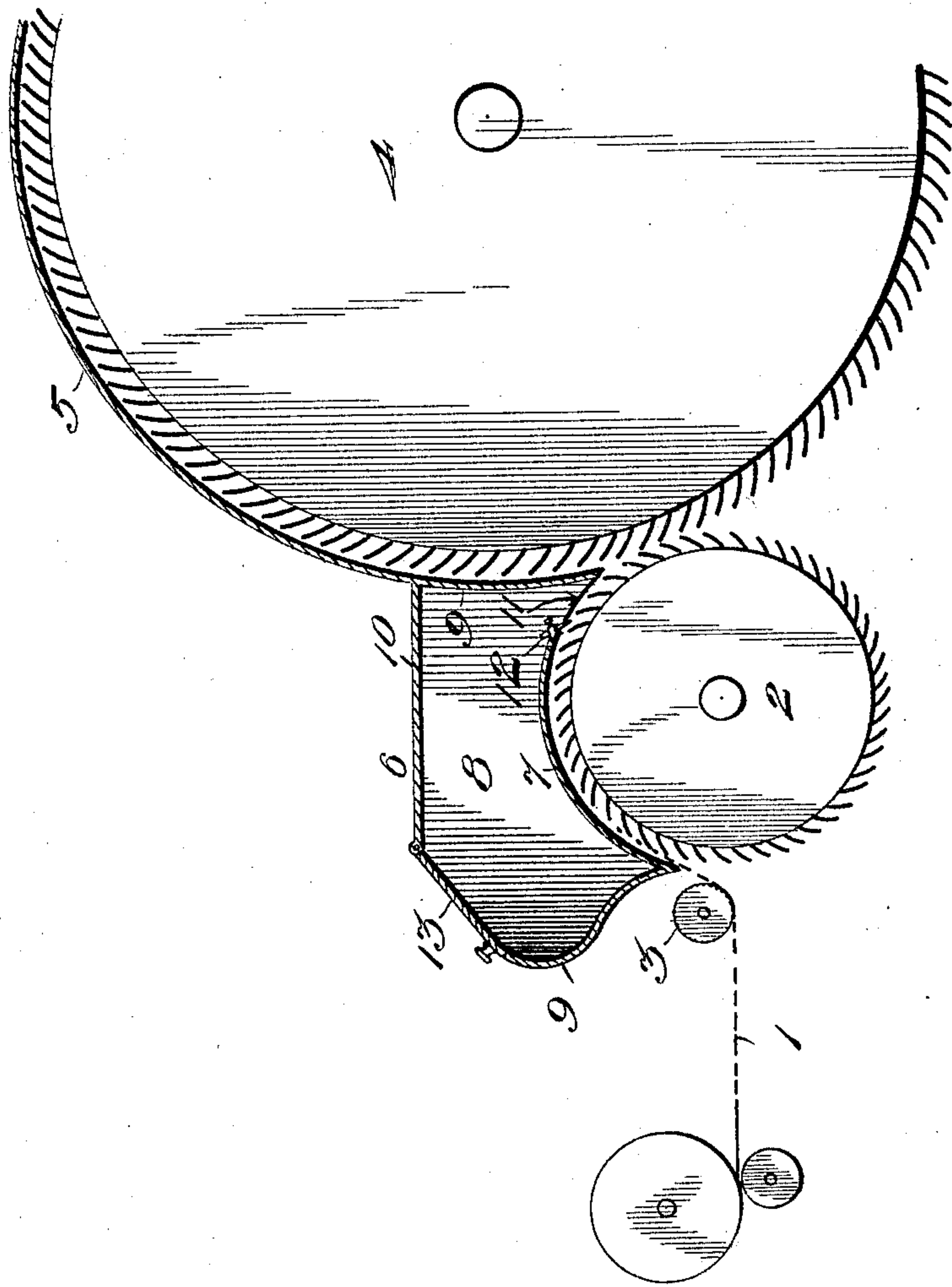
No. 695,834.

Patented Mar. 18, 1902.

C. H. POTTER.  
CARDING MACHINE.

(Application filed Apr. 5, 1900. Renewed Dec. 16, 1901.)

(No Model.)



Charles H. Potter,  
Inventor

Witnesses  
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# UNITED STATES PATENT OFFICE.

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## CARDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 695,834, dated March 18, 1902.

Application filed April 5, 1900. Renewed December 16, 1901. Serial No. 86,108. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES H. POTTER, a citizen of the United States, residing at New Bedford, in the county of Bristol and State of Massachusetts, have invented new and useful Improvements in Carding-Machines, of which the following is a specification.

This invention relates to carding-machines, and has for its object to provide a collector receptacle or box so positioned adjacent to the licker-in as to remove all particles of extraneous matter therefrom, which may have adhered thereto after the "lap" has been fed to the main cylinder, and thereby keep the said licker-in free from dirt, motes, leaf, seed, and other foreign substances, so that it can more effectually perform its work than it would be possible were its teeth encumbered by these impediments.

Another object is to so construct the collector integral with the top plate of the main cylinder that the bottom of said box will act as a cover or protector for the licker-in and its engaging teeth.

Having these objects in view, my invention consists in the parts and peculiar construction of collector box or receptacle, as will be fully described hereinafter, and defined in the appended claim.

The figure in the drawing is a side elevation of the feed-roll, licker-in, and the main cylinder of a carding-machine, the top plate of the main cylinder and the collector-box being shown in section.

1 designates the lap or roll of cotton which is fed onto the licker-in 2 by a corrugated feed-roll 3 and is then carried around to the main cylinder 4 after passing through a series of knives (not shown) to remove the foreign substances therefrom, such as seed, leaf, motes, &c. In actual practice it has been found that the main cylinder does not clear the licker-in of all matter, but, to the contrary, leaves a large amount of short fiber, seed, leaf, and other foreign matter thereon, which is not removed by the knives above referred to and which is continually worked over and as it becomes finer will impair the quality of the carding unless removed. It is the purpose of my invention to obviate this

evil, as I accomplish the desired result in the following manner:

To the top plate 5 of the main roll or cylinder 4 I secure a collector box or receptacle 6, which can be shaped up integral therewith out of sheet metal, if desired. This collector-box 6 consists of a curved bottom plate 7, extending from the bottom edge of the plate 5 and on a greater area, but parallel with teeth of the licker-in 3 and having side walls 8 and end 9 and top 10, whereby a substantially rectangular hollow receptacle is formed.

Transversely of the bottom plate 7 of the receptacle 6 and adjacent to its juncture with the top plate 5 I provide a suitable opening or slot 11, and on the outer edge of the slot is arranged one or more adjustable cleaning-knives 12, adapted to remove all foreign matter from the teeth of the licker-in during the course of its revolution.

A door 13 is provided at the top of the receptacle 6 for the purpose of gaining access to the collector, whereby the matter therein may be removed.

The operation of the device is as follows: As the lap is fed on to the licker-in it is carried around to the main cylinder, and as the licker-in revolves at a rapid rate (from three hundred and seventy-five to four hundred revolutions per minute) the centrifugal action will cause most of the foreign matter which has not been removed by the main cylinder to be deposited into the collector through the slot 11. In order to prevent the short fiber, &c., from remaining upon the teeth of the licker-in, I provide the vertical adjustable knife or knives 12, which just clear the teeth as they revolve, but effectually remove any matter adhering thereto.

From the foregoing it will be readily seen that I have provided a cheap, simple, durable, and efficient collector and one which is well adapted to perform the function for which it is intended.

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

In a machine of the character described, the combination with the top plate of the main cylinder, the lower edge of which extends



down between the main cylinder and the  
licker-in, of a receptacle arranged adjacent to  
the licker-in and formed integral with said  
top plate, said receptacle comprising a sub-  
5 stantially closed hollow box having a curved  
bottom plate conforming to the contour of the  
licker-in and formed with a transverse slot  
in its bottom above the licker-in teeth and  
adjacent to the lower edge of the top plate  
10 whereby foreign substance may be deposited  
into the receptacle by the licker-in during its

revolution, and a knife or knives carried by  
the bottom of said box adjacent to the edge  
of the slot and adapted to contact with the  
licker-in teeth.

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

CHARLES H. POTTER.

Witnesses:

JOHN B. BOLTON,  
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