

No. 609,860.

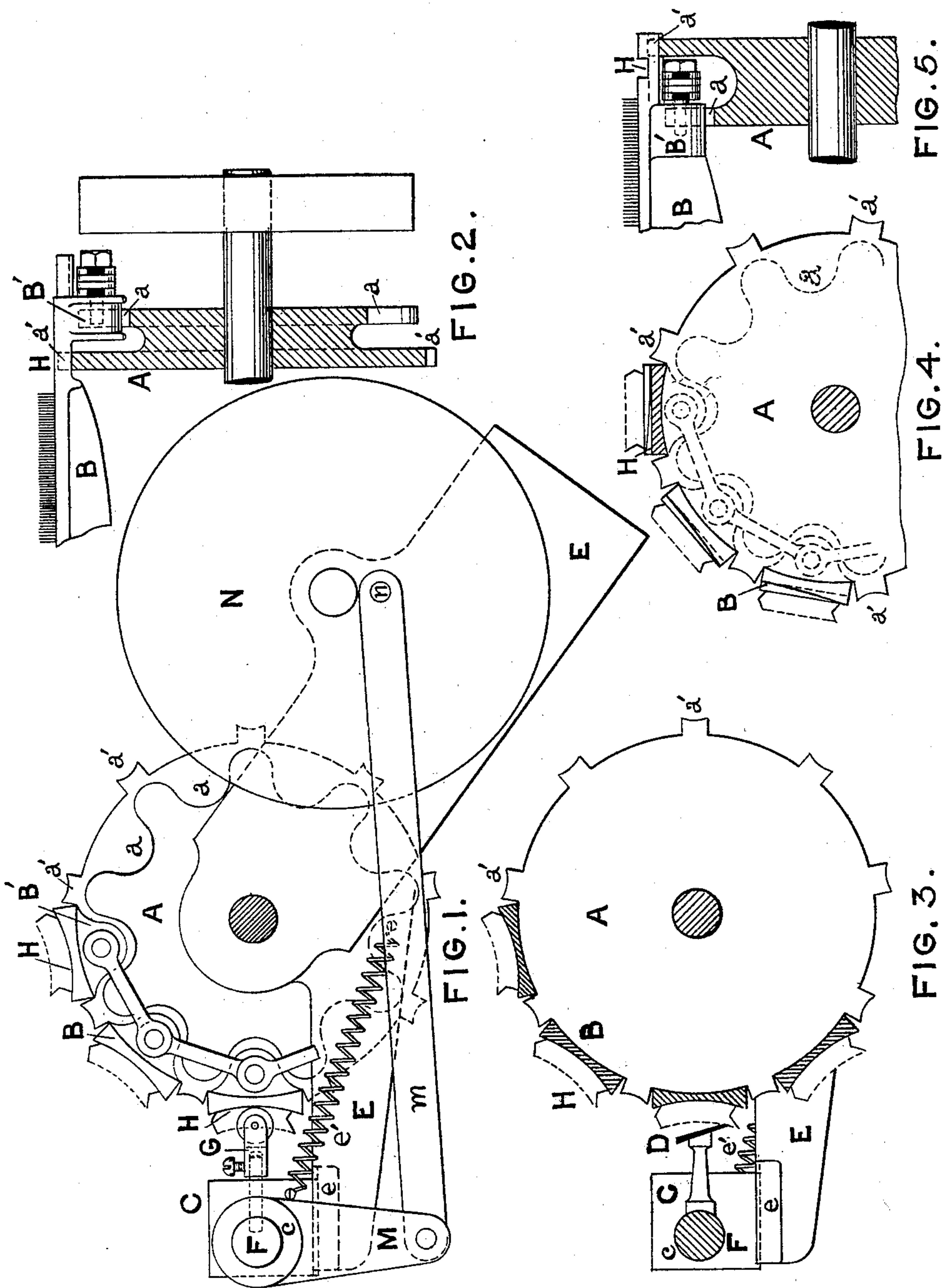
Patented Aug. 30, 1898.

J. WILLIAMS.

APPARATUS FOR STRIPPING FLATS OF CARDING ENGINES.

(Application filed Dec. 10, 1897.)

(No Model.)



WITNESSES.

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# UNITED STATES PATENT OFFICE.

JAMES WILLIAMS, OF SALFORD, ENGLAND.

## APPARATUS FOR STRIPPING FLATS OF CARDING-ENGINES.

SPECIFICATION forming part of Letters Patent No. 609,860, dated August 30, 1898.

Application filed December 10, 1897. Serial No. 661,444. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES WILLIAMS, machinist, a subject of the Queen of Great Britain, residing at Springfield Works, Springfield Lane, Salford, in the county of Lancaster, England, have invented certain new and useful Improvements in Apparatus for Stripping the Flats of Carding-Engines, of which the following is a specification.

10 This invention relates to improvements in apparatus for stripping the waste from the revolving flats of carding-engines such as described in the specification of my companion application, Serial No. 661,443.

15 It consists, essentially, in mounting the oscillating bar of the stripping-comb in brackets capable of moving to and from the flats and resting upon a fixed arm or bracket, in conjunction with special surfaces formed upon the flats parallel with the face of the wire, against which a projecting screw on the sliding bracket bears, and a special form of disk or pulley by which the flats are revolved, constructed with projections between each flat, upon which the projecting screw bears to prevent it falling between the flats.

25 It will be fully described with reference to the accompanying drawings, in which sufficient of a carding-engine is shown to illustrate the invention.

30 Figure 1 is a side elevation. Fig. 2 is a front elevation, partly in section. Fig. 3 is a side elevation, partly in section. Fig. 4 is a side elevation, partly in section, showing the invention applied to a flat of different shape. Fig. 5 is a front elevation, partly in section, of same.

35 The disk or pulley A, over which the flats B revolve, is constructed with recesses *a* at one side, with which the rounded backs or pivots *B'* of the flats engage, and on the periphery with projecting lugs or teeth *a'*, which fit between each flat and raise the periphery of the pulley between each flat nearly to the height or level of the flats.

40 The comb-bar F of the stripping-comb D is mounted at either end in bearings *c* in brackets C, mounted on slides *e* on fixed or stationary arms E. The brackets C are capable of moving or sliding to and fro on the slide *e* of the arm E and are drawn toward the flats by the spiral spring *e'* or other suitable spring

or weight, or the arm E may be inclined and the brackets C moved toward the flats of their own gravity. To each of the brackets C, in 55 which the oscillating comb-bar F is journaled, is affixed an adjustable device G, such as a screw or bracket, which serves to regulate or adjust the position of the comb.

Each of the flats is provided with a surface 60 at H at each end parallel with the face of the wires against which the end of the screw G bears, and the space between the flats is made up by the indented projections or teeth *a'* on the wheel or pulley A. As the flats B travel 65 along and each successively comes into position to be stripped the screws G in the brackets C bear against the prepared surface H on the flats and, as the flats pass on, against the indented projections or teeth *a'* of the pulley A. 70 The height of these projections is made sufficient to prevent the screw-head jamming between the flats and at the same time permit of the comb D stripping the spaces between flats. 75

In Figs. 4 and 5 the surface H is cut in the form of a groove through the inclined working surface of the flat.

The desired oscillating movement is imparted to the comb-bar F and comb D by a 80 crank M, affixed to one end of the bar, which is connected to a rotating crank or crank-pin *n* on a wheel or disk N by a connecting rod or link *m*.

What I claim as my invention, and desire 85 to protect by Letters Patent, is—

1. In apparatus for stripping the flats of revolving carding-engines the combination with the stripping-comb D and guide G thereon and the flats B having surfaces H thereon 90 parallel with the face of the wires on the flats of the pulley A provided with recesses at one side to engage with the backs of the flats and projections on the periphery to raise it at intervals to the level of the surface on the flats, 95 substantially as described.

2. In apparatus for stripping the flats of revolving carding-engines the combination with the comb D and comb-bar F of sliding brackets C in which the comb-bar is pivoted, capable of being moved to and from the flats the 100 guiding projections G projecting from the sliding brackets, the flats B constructed with surfaces H parallel with the surface of the wires

and against which the guiding projections G bear, and the pulleys A constructed to fill up the spaces between the flats, substantially as described.

5 3. In apparatus for stripping the flats of revolving carding-engines the combination of the pulleys A upon which the flats revolve constructed to fill up the space between the flats; the flats B provided with surfaces H parallel with the face of the wires, the stripping-  
10 comb D for removing waste from the wire, the comb-bar F to which the comb is affixed, the sliding brackets C in which the comb-bar is pivoted, the fixed arms E upon which the

brackets slide the springs e for drawing the 15 brackets toward the flats, and the adjustable guiding projections G bearing against the surfaces H on the flats and the projections a' on pulleys A for determining the relative position of the comb to the flats when working, 20 substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES WILLIAMS.

Witnesses:

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R. OVENDALE.