J. HIBBERT.

Doffer-Comb for Carding-Engines.

No. 208,598. Patented Oct. 1, 1878.

FIG 1

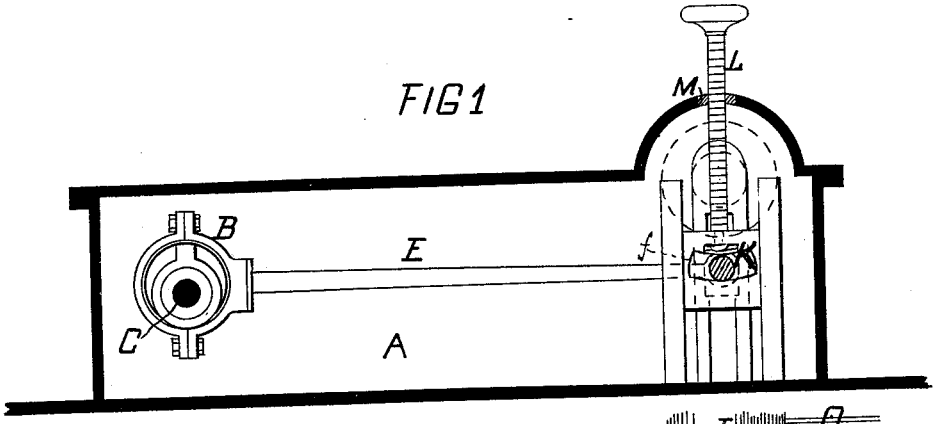


FIG 2

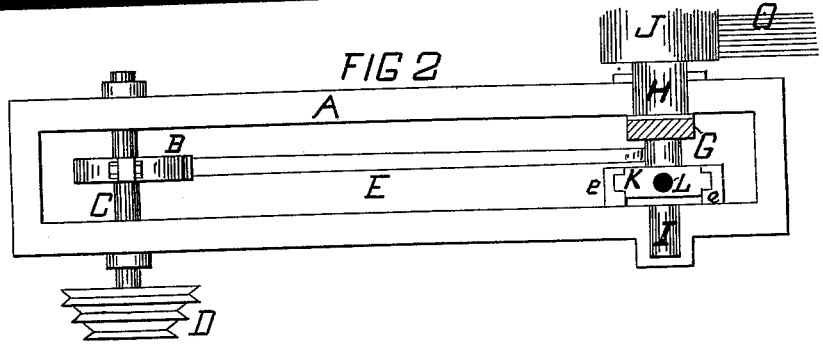


FIG 4

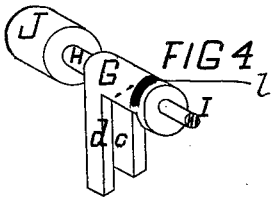
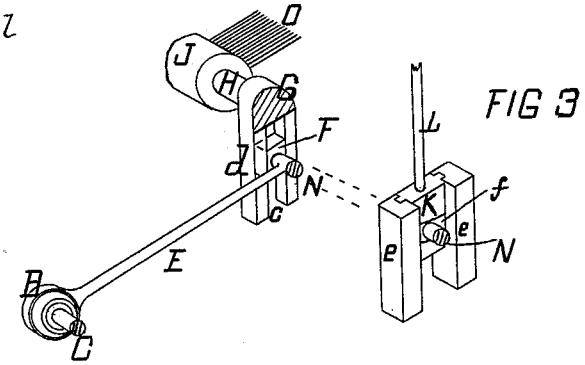


FIG 3



WITNESSES:

Robt. Carr

A. F. Walker

John Hibbert INVENTOR

by Francis D. Pastorius ATTORNEY

UNITED STATES PATENT OFFICE.

JOHN HIBBERT, OF CAMDEN, NEW JERSEY, ASSIGNOR TO HIMSELF, JOSEPH PLANT, AND WILLIAM H. BESWICK.

IMPROVEMENT IN DOFFER-COMBS FOR CARDING-ENGINES.

Specification forming part of Letters Patent No. **208,598**, dated October 1, 1878; application filed July 23, 1877.

To all whom it may concern:

Be it known that I, JOHN HIBBERT, of Camden, in the county of Camden and State of New Jersey, have invented a new and useful Improvement in the Comb Mechanism of Carding-Engines, of which improvement the following is a specification, reference being had to the accompanying drawings, forming a part hereof.

This invention is designed to effect the adjustment of the throw or stroke of the comb with ease and facility while the engine is in operation.

In the drawings, Figure 1 is a sectional side elevation of the machinery constituting my invention. Fig. 2 is a plan view, showing the interior parts thereof. Figs. 3 and 4 are perspective views of detached portions of the machine, as hereinafter described.

Similar letters of reference indicate similar parts of the invention in the several views.

A is a box or case, which supports the comb-shaft and comb-operating mechanism. C is a shaft, carrying an eccentric and strap, B, E being the eccentric-rod. The comb-shaft J is provided with a rocker, G, depending therefrom, and journals H and I. At one of the inner sides of said casing are secured guides *e*, in which the frame K is adapted to slide, having a vertical movement therein. The frame K is provided with an arc-shaped slot, *f*. A block, F, is fitted to the space or slot *c*, formed in the depending rocker G, between the arms *d* thereof, one end of a pin, N, resting in said block, while the other rests in the arc-shaped slot *f* of the frame K. The pin N is connected to the eccentric-rod E, and the movement of said rod causes the vibration of the rocker G, and consequently the movement of the comb-shaft and comb O. A screw, L, having a nut, M, on the casing A, serves to elevate and depress the frame K, the screw being attached to the frame in a manner enabling it to turn freely. By revolving the screw to the right or left the frame K and block F, with the pin N, are elevated or depressed, and the stroke of the comb O is regulated proportionately with the distance the pin N is brought from the center of the comb and rocker-shaft. The screw L passes through a slot, *l*, cut in said shaft, which slot allows the shaft to move freely past the screw.

Fig. 3 is a perspective view of the mechanism removed from the case, the rocker G and frame K being spread apart for the better showing of the parts. Fig. 4 is a perspective view of the rocker and its adjacent parts.

By means of this invention the throw of the comb can be regulated with the greatest nicety without stopping the machine.

Having described my invention, what I claim as new, and wish to secure by Letters Patent of the United States, is—

The case A and comb-shaft, having the depending rocker G, combined with the ways *e*, vertically-adjustable frame K, block F, and pin N, operated by an eccentric and rod, substantially as specified.

In testimony whereof I hereunto sign my name in presence of two subscribing witnesses.

JOHN HIBBERT.

Witnesses:

FRANCIS D. PASTORIUS,

JOSEPH PLANT.