D. T. Gage,
Carding Machine.

No. 41,462. Patented Feb. 2, 1864.

FIG. 2

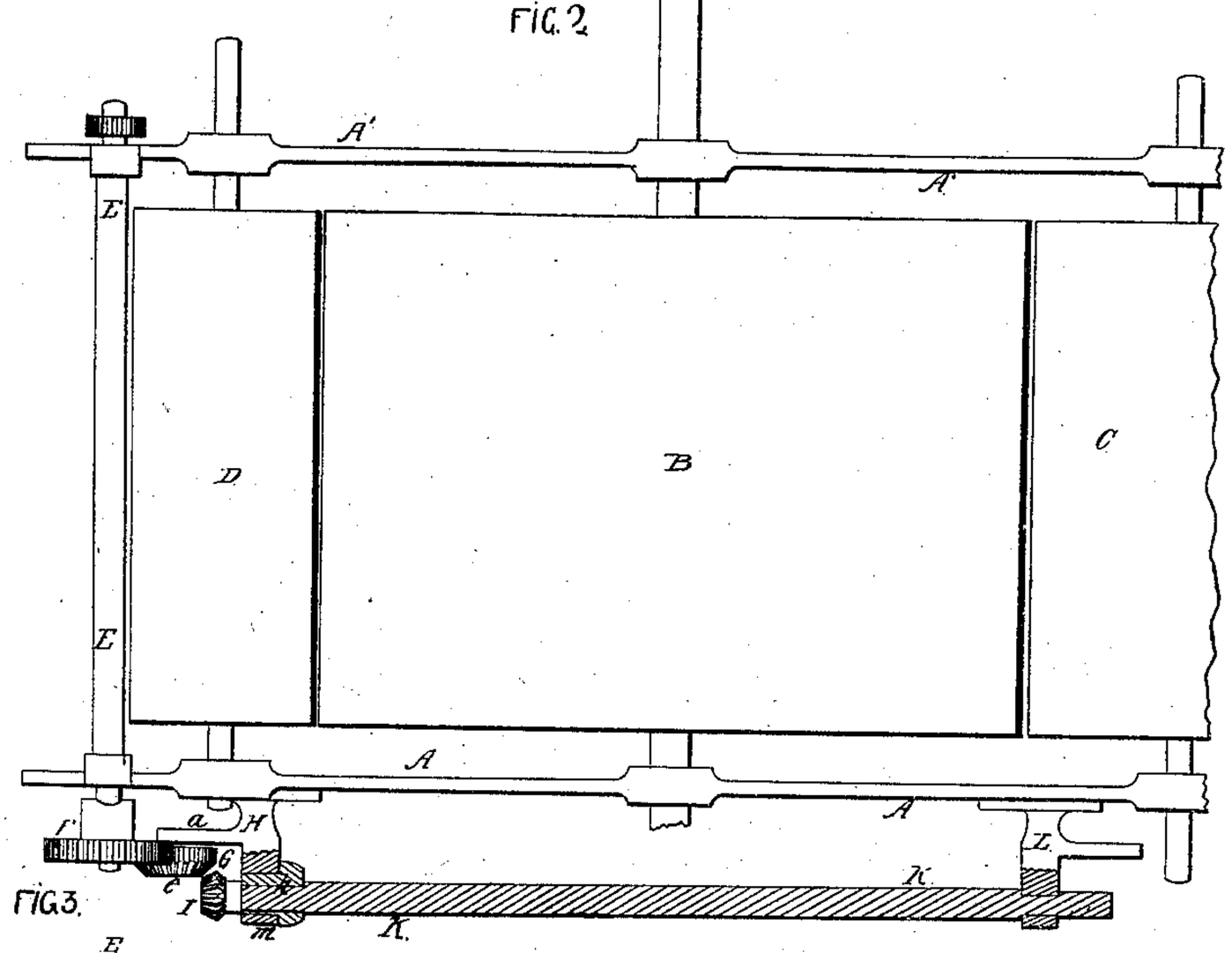

FIG 3.

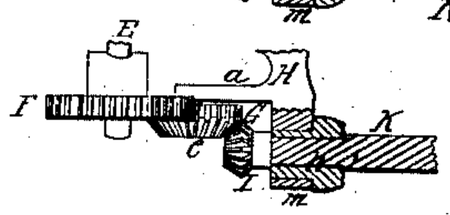

FIG. 1.

Witnesses:

H. Albert Shull

Edwin E. Foster

Inventor:

Henry Howson

Atty's for Fairbank & Gage

UNITED STATES PATENT OFFICE.

D. T. GAGE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND M. A. FURBUSH, OF SAME PLACE.

IMPROVEMENT IN CARDING-ENGINES.

Specification forming part of Letters Patent No. **41,462**, dated February 2, 1864.

To all whom it may concern:

Be it known that I, D. T. GAGE, of Philadelphia, Pennsylvania, have invented an Improvement in Carding-Engines; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention consists of a device, fully described hereinafter, for stopping and starting the feed-rolls of carding-engines.

In order to enable others familiar with machinery of this class to make and apply my invention, I will now proceed to describe its construction and operation.

On reference to the accompanying drawings, which form a part of this specification, Figure 1 is a side view of sufficient of a carding-engine to illustrate my improvement; Fig. 2, a plan view of Fig. 1, and Fig. 3 a detached sectional view of portions of my improvement.

Similar letters refer to similar parts throughout the several views.

A and A′ are portions of the two side frames of a carding-engine. B is the usual main card-cylinder; C, the doffing-cylinder; D, the cylinder which is technically termed the "licker-in," and E are the feed-rolls.

The above-named parts are common to ordinary carding-engines, and are too well known to those familiar with machines of that class to need description.

To one end of one of the feed-rolls E is secured a cog-wheel, F, the teeth of which gear into those of the pinion G, which runs loosely on a pin secured to the projection *a* of the bracket H. On the pinion G are inclined teeth, forming a bevel-wheel, *e*, which gears into the beveled pinion I on the end of a shaft, K, the latter having its bearing in the hub or sleeve *h*, which is provided with a handle, *i*, and which is arranged to turn in the projection *m* of the bracket H. The opposite end of this shaft K turns in a bracket, L, secured to the side frame, A, of the machine, and derives its motion from the shaft of the doffing-roller through the medium of suitable bevel-wheels; or the shaft K may be driven by any suitable system of gearing from any working part of the machine. It will be seen that the portion of the sleeve *h* which turns in the bracket H is eccentric with the portion of the shaft which turns in the sleeve, and that on turning the sleeve in one direction by means of the handle *i* the pinion I will be thrown out of gear with the wheel G, as seen in Fig. 2, while on turning the handle in a contrary direction the pinion I will be thrown into gear with the wheel G, as seen in Fig. 3

In operating with carding-engines it is of the utmost importance that every facility should be afforded to the attendant for stopping the movement of the feed-rolls and of arresting the progress of the "lap" toward the licker-in. It will be seen without further description that the desired facility for accomplishing this object is afforded by the device described above, the handle *i* being in a proper position to be readily seized by the attendant.

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

The eccentric sleeve *h*, with its handle *i* and the shaft K, the whole being arranged and operating substantially as set forth, in conjunction with the system of gearing herein described, or any equivalent to the same, for stopping and starting the feed-rolls of carding-engines.

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

D. T. GAGE.

Witnesses:

HENRY HOWSON,

CHAS. WELDING.