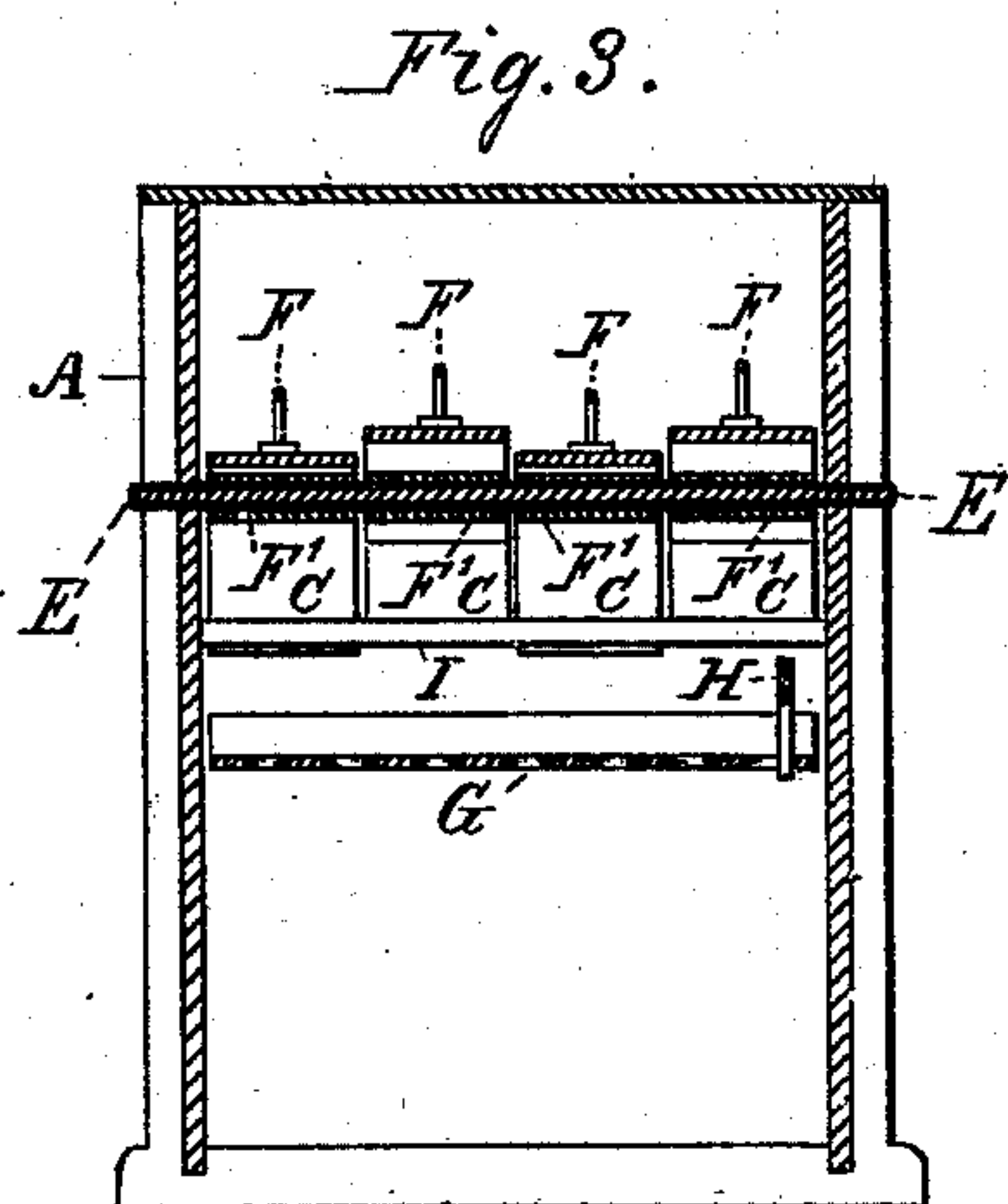
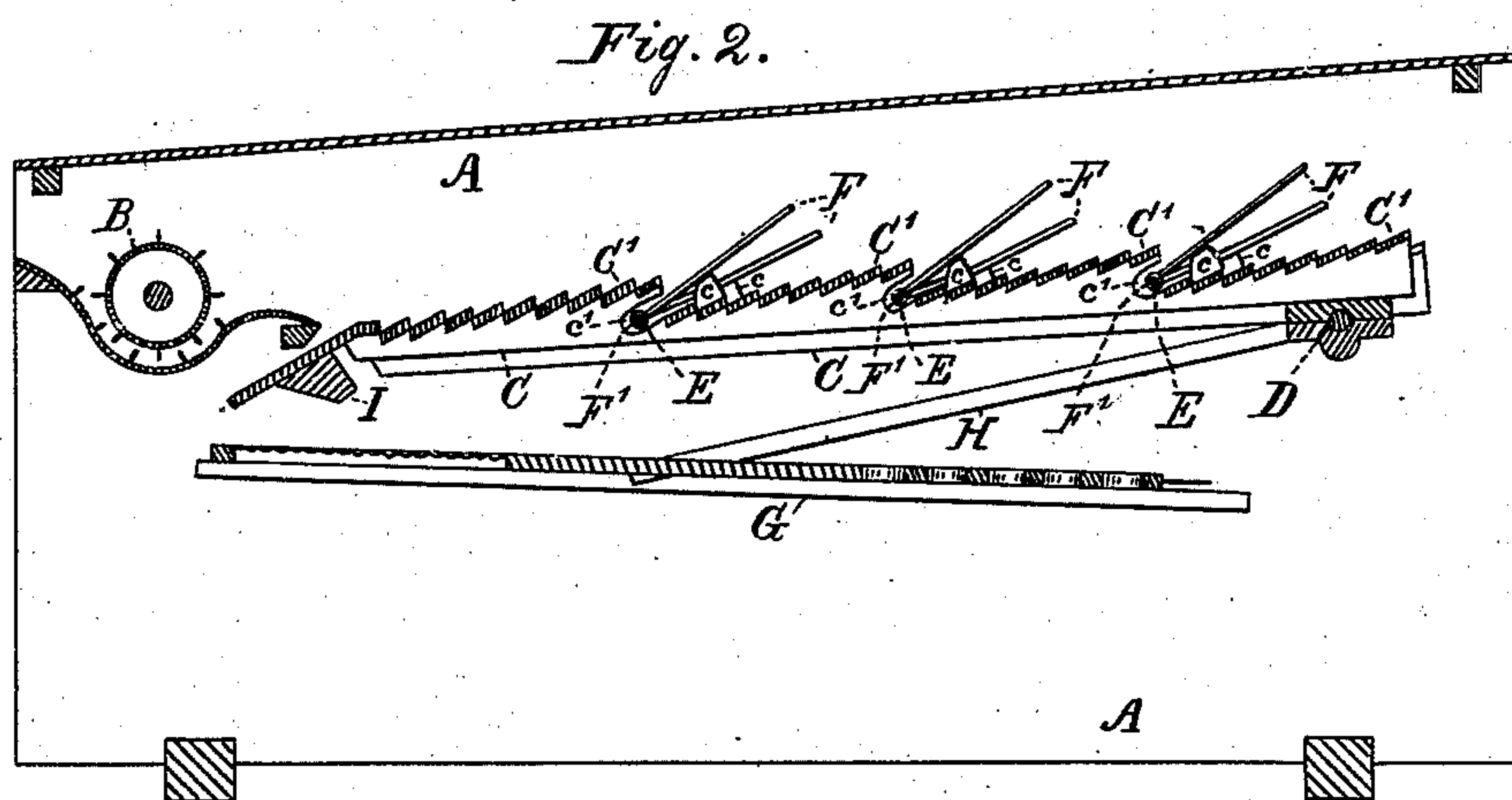
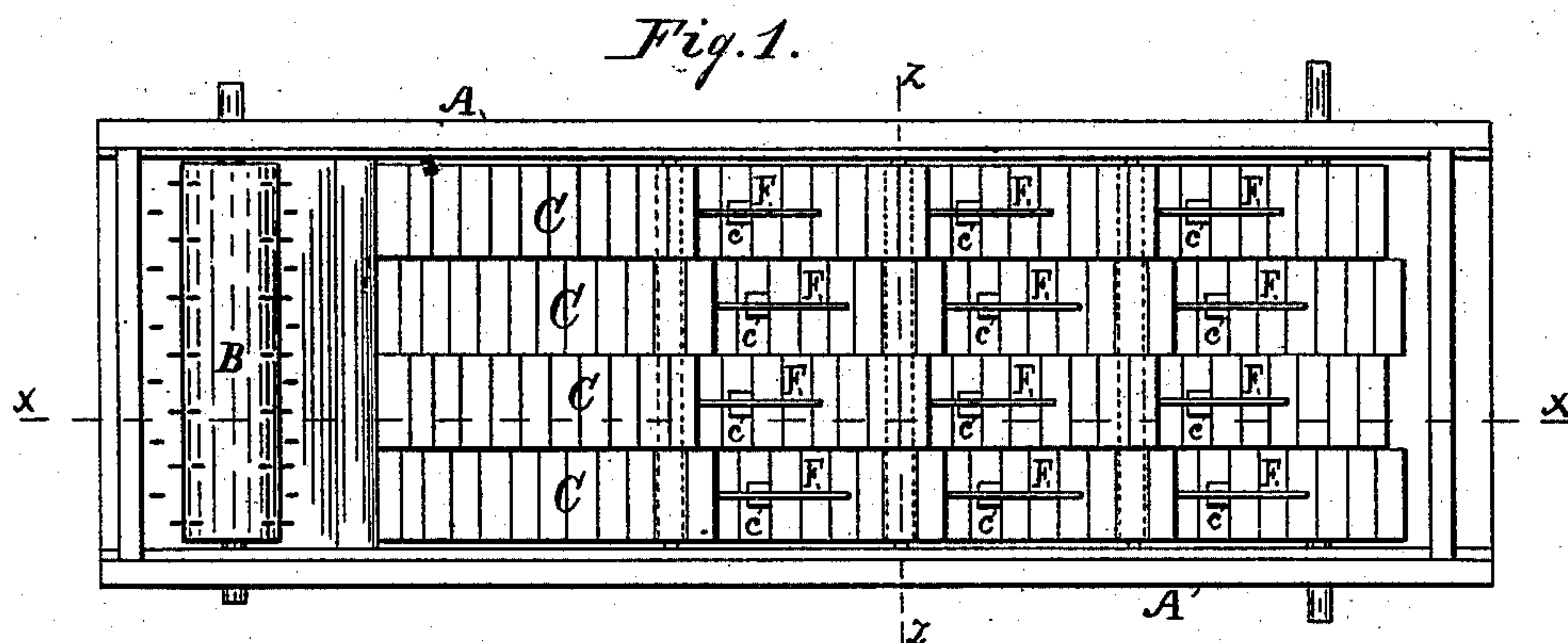


J. B. SUITT.
Grain-Separator.

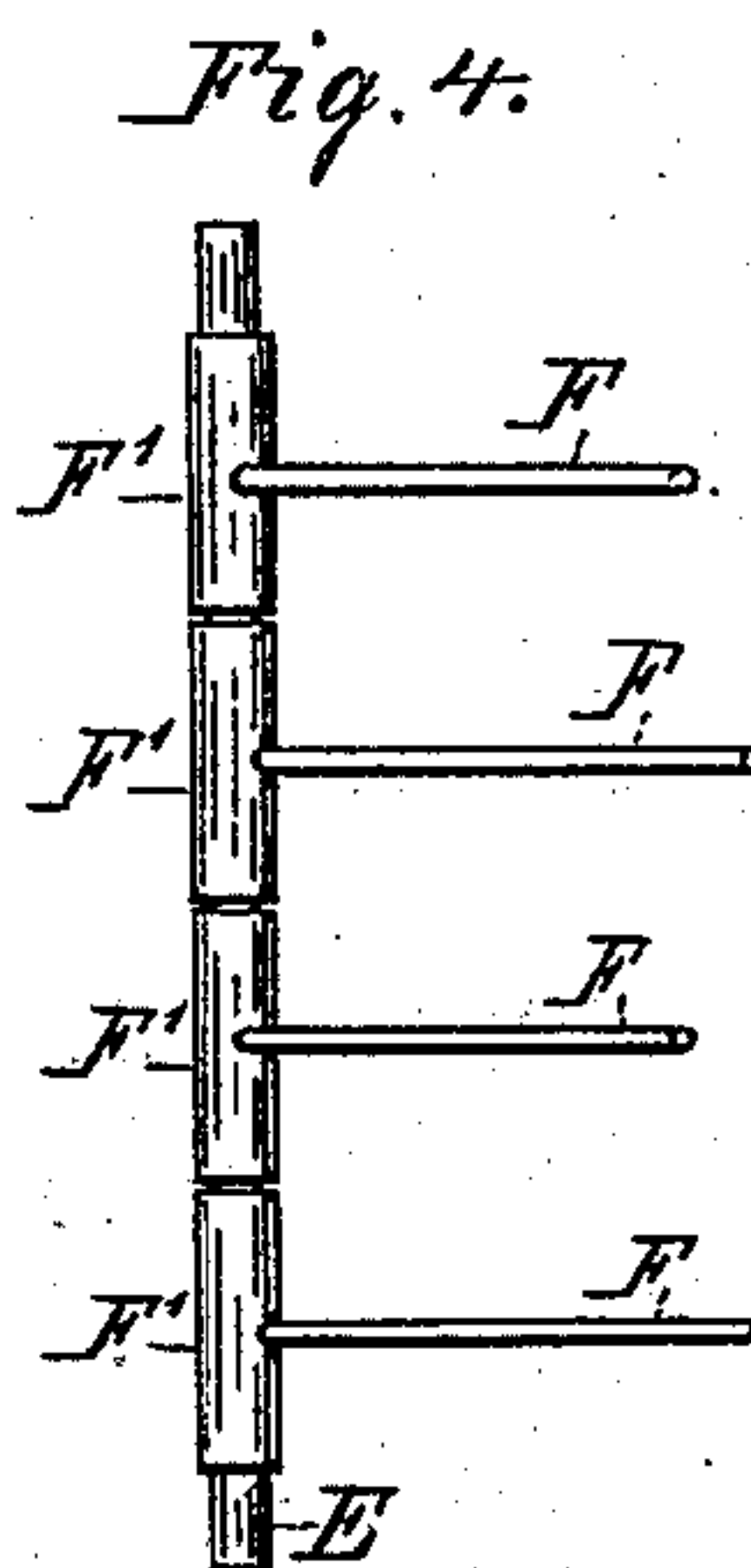
No. 224,801.

Patented Feb. 24, 1880.



WITNESSES.

James B. Liguus.
R. P. Daggett.



INVENTOR.

James B. Sutt,
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UNITED STATES PATENT OFFICE.

JAMES B. SUITT, OF INDIANAPOLIS, INDIANA.

GRAIN-SEPARATOR.

SPECIFICATION forming part of Letters Patent No. 224,801, dated February 24, 1880.

Application filed September 15, 1879.

To all whom it may concern:

Be it known that I, JAMES B. SUITT, of the city of Indianapolis, county of Marion, and State of Indiana, have invented certain new and useful Improvements in Grain-Separators, of which the following is a specification, reference being had to the accompanying drawings, which are made part hereof, and on which similar letters of reference indicate similar parts.

Figure 1 is a plan view of the interior of a thrashing-machine embodying my invention. Fig. 2 is a longitudinal vertical section thereof on the dotted line *x x*, Fig. 1. Fig. 3 is a transverse vertical section on the dotted line *z z*, Fig. 1. Fig. 4 is a plan view of one set of the lifting-fingers and their shaft detached from the machine.

In said drawings, the portions marked A represent the frame-work and sides of the machine; B, the thrasher cylinder or beater; C, the floor-sections, composed of the inclines *C' C'*, and, when lifting-fingers are used, having the projections *c c*, to operate said fingers, and usually, also, the recesses *c' c'*, to receive the finger-shafts; D, the crank-shaft, which drives the floor; E, the rods which bear the lifting-fingers; F, the lifting-fingers, having pipe-like bearings *F'*; G, a grain-carrier floor; H, a connecting-rod, connecting said floor to the crank-shaft D, and I the bar or rod supporting the front end of the floor-sections.

The general object of inventions of this class is to provide means to thoroughly agitate the straw in its passage through the machine, and thus dislodge all grain therein, so that no waste shall occur.

My improvement mainly consists in mounting the lifting-fingers separately upon tubular bases, which, in turn, are mounted upon rods running through the machine, and ordinarily rigidly attached to the sides thereof. Each finger is thus independent of the others, and rises and falls in unison with the section of floor over which it is located. As the floor-sections move alternately the fingers also have an alternate motion, which is much more effective in shaking up and separating the straw than the uniform movement which fingers have which are rigidly attached to their shaft.

Another improvement in this connection is the location of the finger-shaft in relation to the floor. Ordinarily such shafts have been run across the top of the floor or below the floor, with the fingers bent and passing through slots cut through the sections. In one case the stationary shaft has seriously impeded the passage of the straw, while in the other the large slots necessary to allow the proper working of the fingers have been undesirable. I have devised a system of recesses, *c'*, in the form shown, to receive the finger-shafts E, whereby they are entirely out of the way of the passing straw, and the cutting of holes through the floor is rendered unnecessary.

The fingers in my invention are actuated by upwardly-projecting pieces *c* upon the floor-sections immediately beneath said fingers, and lift them, as the floor-sections make their forward movement, and allow them to fall as they move backward.

The construction and arrangement of parts herein shown and described is exceedingly efficient in attaining the object hereinbefore stated.

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

1. In combination with a straw-carrier floor composed of alternately-reciprocating sections, lifting-fingers independently mounted and each actuated independently of the others, substantially as herein set forth.

2. In combination with the alternately-reciprocating sections of the straw-carrier floor of a thrashing-machine, lifting-fingers operated independently of each other by suitable projections attached to the sections upon which said fingers rest, substantially as shown and specified.

In witness whereof I have hereunto set my hand and seal at Indianapolis, Indiana, this 11th day of September, A. D. 1879.

JAMES B. SUITT. [L. S.]

In presence of—

C. BRADFORD,
A. B. GILLET.