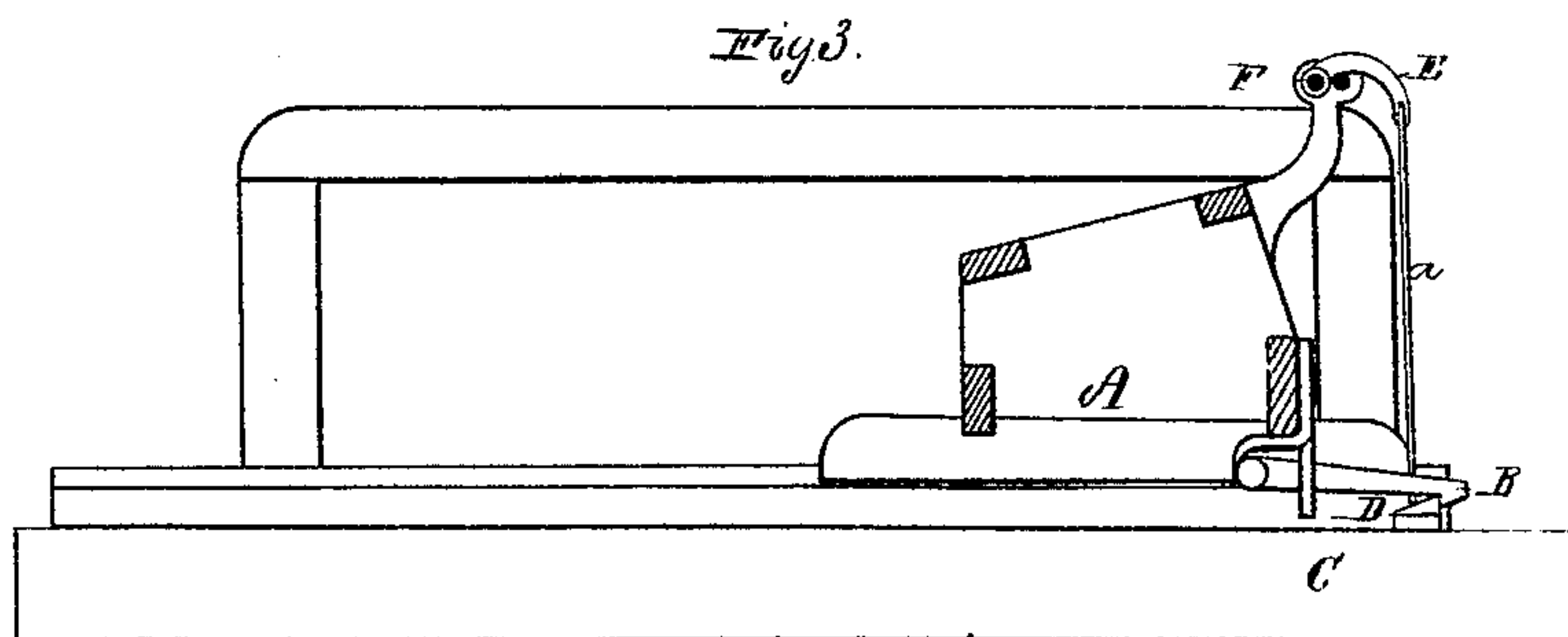
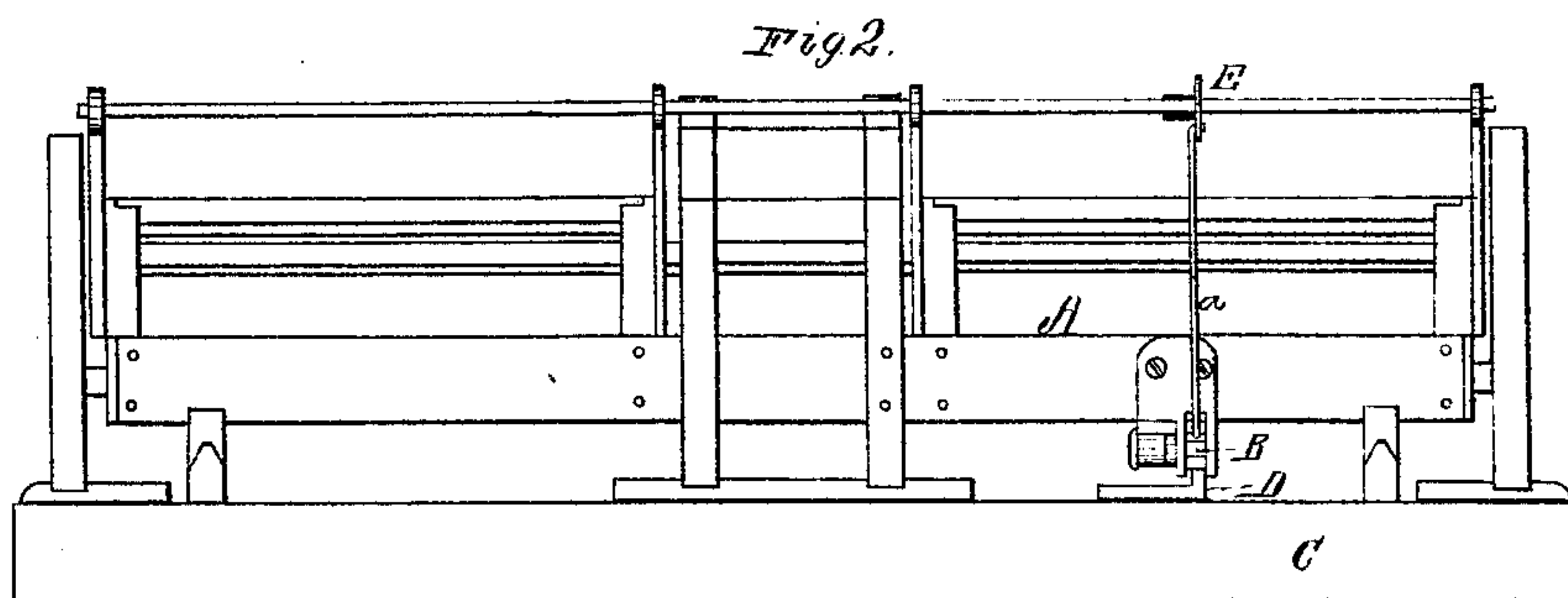
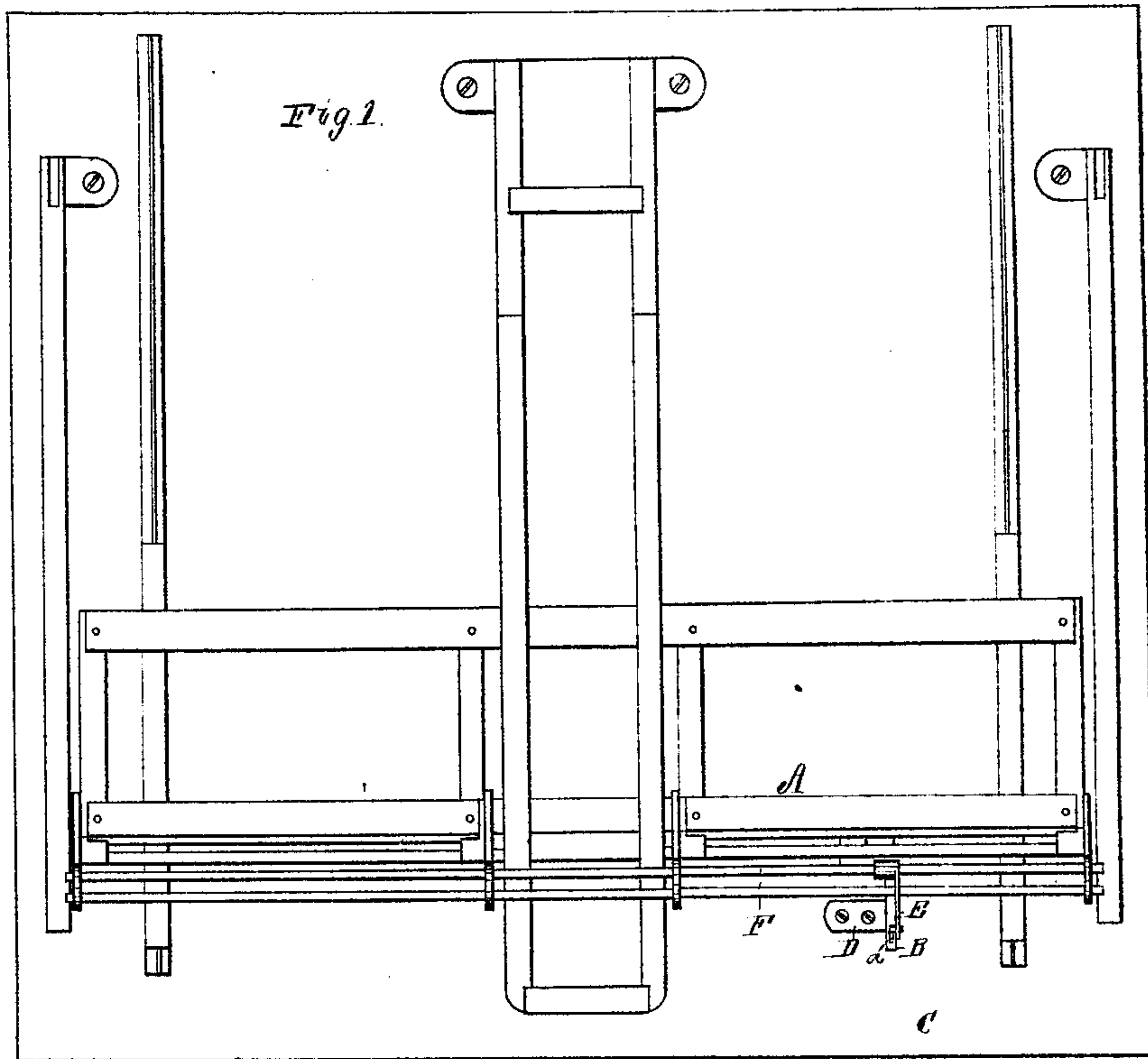


J. BROWN.
SPINNING MULE.

No. 183,747.

Patented Oct. 31, 1876.



Witnesses.
S. W. Piper
L. W. Miller

James Brown.
by his attorney
R. H. Eddy

UNITED STATES PATENT OFFICE.

JAMES BROWN, OF PAWTUCKET, RHODE ISLAND.

IMPROVEMENT IN SPINNING-MULES.

Specification forming part of Letters Patent No. **183,747**, dated October 31, 1876; application filed July 12, 1876.

To all whom it may concern :

Be it known that I, JAMES BROWN, of Pawtucket, of the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Spinning-Machines, usually termed "Mules;" and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a front elevation, and Fig. 3 a vertical section, of a mule-frame carriage and faller-shaft provided with my invention, whose purpose is to prevent the usual rebound of the carriage, and the consequent slackening of the yarns, at the termination of each outward movement of the carriage, and preparatory to the downward movement of the faller upon such yarns, to regulate the winding of them upon the spindles.

It is well known that when a mule-carriage, at the end of its out movement, is brought up by its stops, it is very liable to more or less rebound or start away therefrom, and thereby lessen the tension of the yarns. By preventing such rebound the tension will not be impaired.

In carrying out my invention I pivot to the mule-carriage A a hooked latch, B, which I place between the middle and one end of the carriage, and I fix to the floor C an inclined-plane catch, D, and arrange the latter so that the latch shall take upon it at the moment of

the termination of the out movement of the carriage. By means of a chain or a rod, *a*, I connect such latch with a curved arm, E, projecting from the inner faller-shaft F, the same being so that, on such shaft being turned to depress the faller upon the yarns, the latch shall be lifted out of engagement with the catch, in order to enable the carriage to be "run in."

From the above it will be seen that as the carriage may approach the terminus of its outward movement the latch will rise and hook upon the catch, so as to prevent any rebound of the carriage at the end thereof next to the latch.

I usually apply to the carriage and to the faller-shaft two of such latching and unlatching mechanisms, one being between the middle and one end, and the other being between the middle and the other end, of the carriage.

I therefore claim—

In combination with the mule-carriage A and its faller-shaft F, the arm E, rod *a*, and latch B, applied thereto as set forth, and the catch D, fastened to the floor, all being arranged substantially in manner and to operate as set forth.

JAMES BROWN.

Witnesses:

R. H. EDDY,
J. R. SNOW.