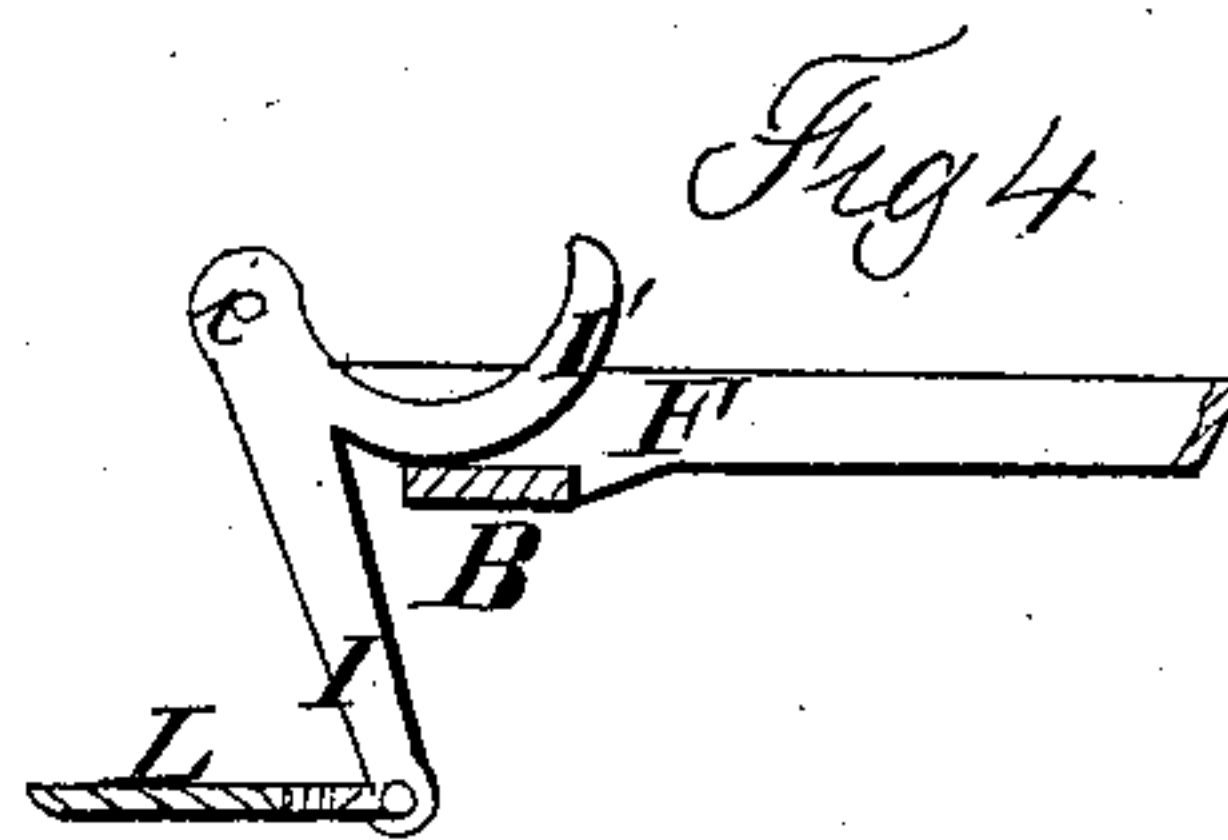
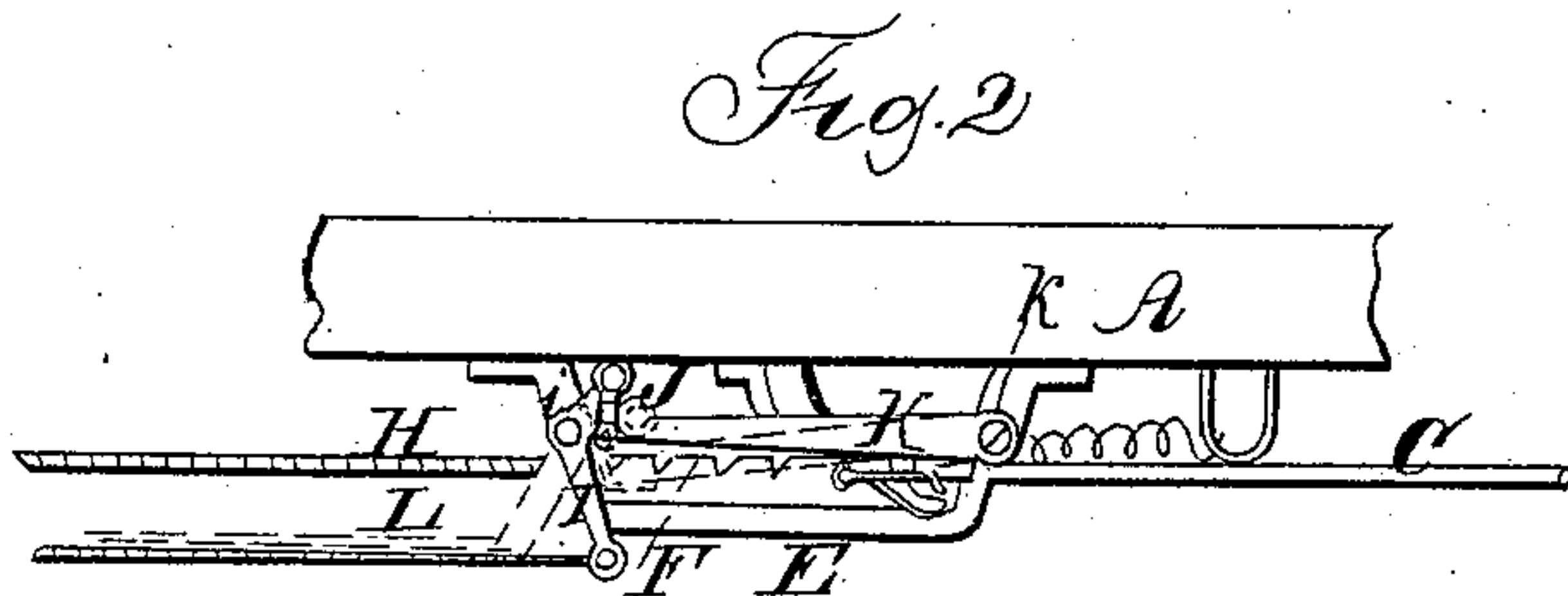
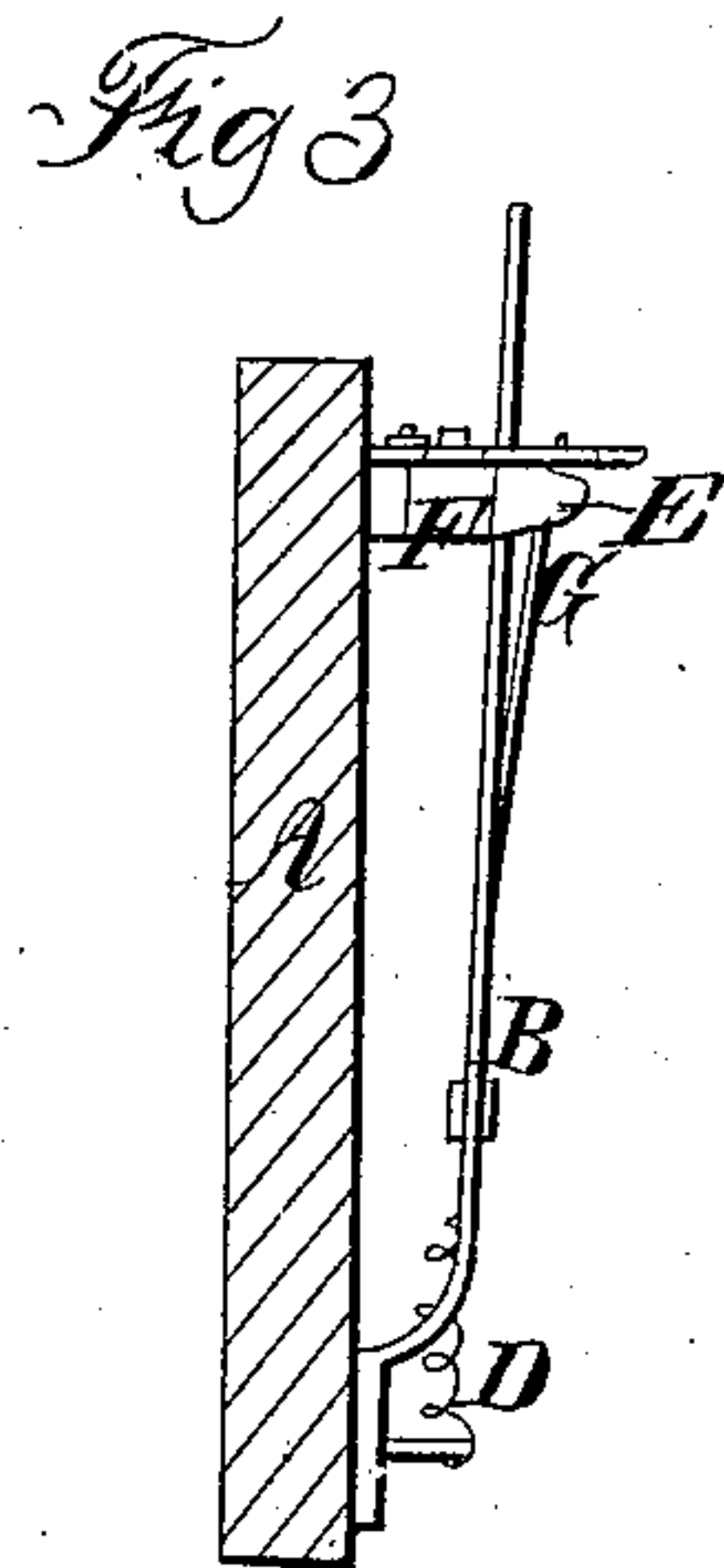
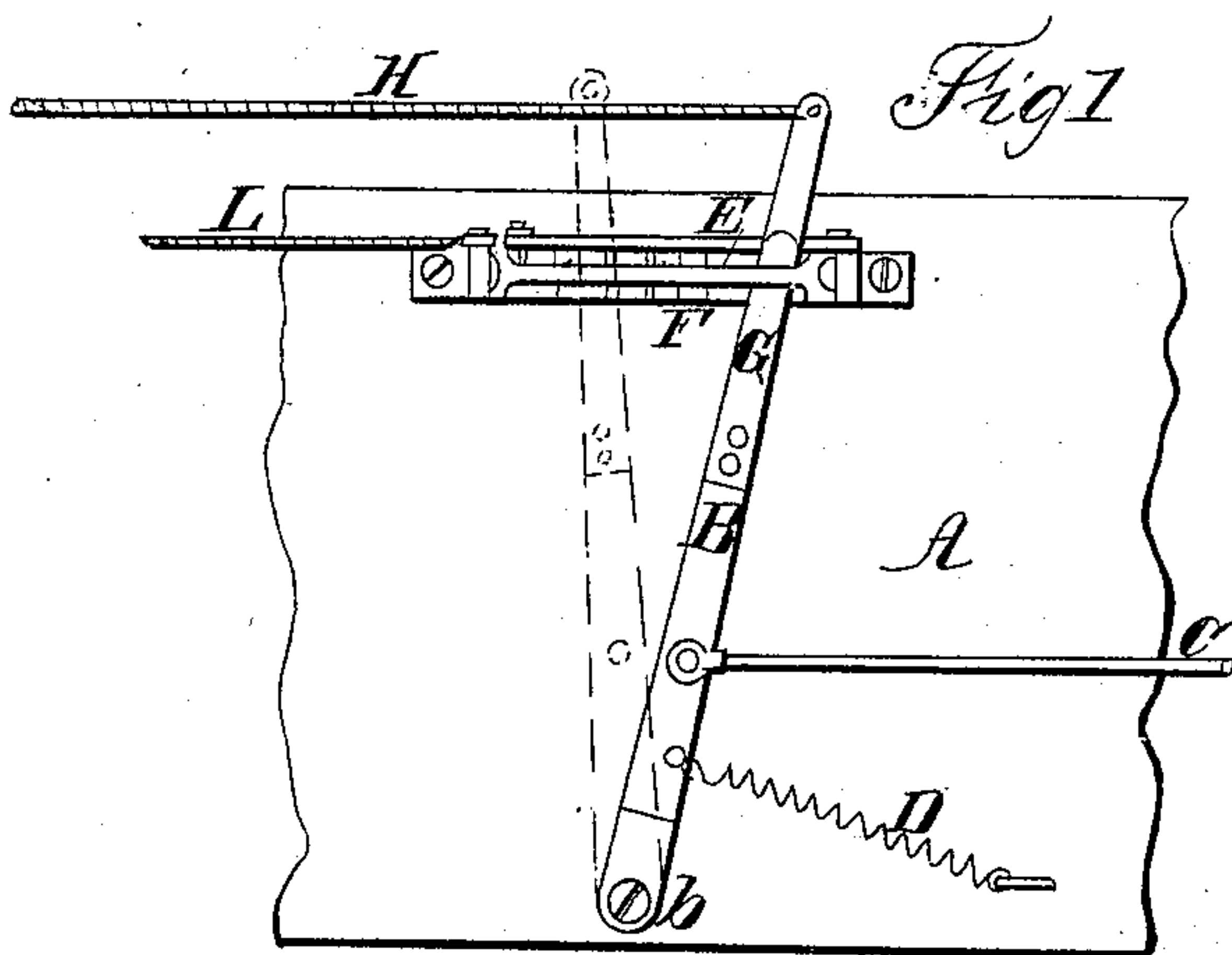


J. H. LEE.
Wagon-Brake.

No. 40,759.

Patented Dec. 1, 1853.



Witnesses
Octavius Knight
Charles Du Bois

Inventor;
J. H. Lee

UNITED STATES PATENT OFFICE.

JAMES H. LEE, OF LEAVENWORTH, KANSAS.

IMPROVEMENT IN OPERATING WAGON-BRAKES.

Specification forming part of Letters Patent No. 40,759, dated December 1, 1863.

To all whom it may concern:

Be it known that I, JAMES H. LEE, of the city and county of Leavenworth, in the State of Kansas, have invented a new and Improved Device for Operating Wagon-Brakes; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 represents a side elevation of a portion of a wagon-top with my device applied. Fig. 2 is a plan of the same. Fig. 3 is a front view thereof. Fig. 4 is a plan illustrating a modification of the releasing device.

Similar letters of reference indicate corresponding parts in the several views.

The object of my present invention is to provide a device whereby the lever of a wagon-brake can be readily placed in operation and released by the driver or attendant while seated upon his horse or walking beside the team, without the necessity of approaching and taking direct hold of the said lever.

In order that others skilled in the art to which my invention appertains may be enabled to fully understand and use the same, I will proceed to describe its construction and operation.

In the accompanying drawings, A may represent a part of the side of a wagon-box to which at *b* the brake-lever B is pivoted.

C represents a rod communicating from the lever B to a brake or locking device of any suitable form.

D represents a spring employed to retract the lever when released from its rack, as hereinafter explained. The lever B works at its upper end in a yoke, E, and is formed with a small projecting blade adapted to take into a ratchet-rack, F, in customary manner.

G is a spring confined within the yoke E and acting to press the lever B against the rack F, so that the said lever will catch in the rack and be held thereby when drawn forward by a cord, H, or by other means, without the necessity of applying side pressure by the hand.

I represents a compound lever, fulcrumed at *i* and connected at its short end by a link,

J, to the forward end of a lever, K, which is fulcrumed at its rear end at *k*.

L represents a cord for drawing the lever I.

In Fig. 4 the lever I is formed with a curved extension or cam-surface, I', adapted to act directly on the lever B, and thus dispense with the use of the secondary lever K.

Operation: The cord H may be attached to any part of the harness within convenient reach of the hand of the teamster and the cord L may be attached to one of his stirrups. If it be necessary to apply the brake, this may be effected (without leaving his seat on the horse) by simply drawing the cord H. This places the lever B in its forward position, as shown in red in Fig. 1, and it is retained wherever placed by the spring G forcing it into a tooth of the rack F. When it is desired to release the brake it is only necessary to draw the cord L, attached to the lever I, and this, acting through the medium of the lever K, cam I', or any other suitable contrivance, throws the lever B out of the rack F, when it is instantly retracted by the spring D, and the brake thereby thrown off the wheels.

If the rack F have a series of teeth, as illustrated in Figs. 1 and 2, instead of but one, as shown in Fig. 4, I prefer to use the releasing device as first described and as represented in the first two figures of the drawings, because the lever K, when thrown to its outer position, as shown in red in Fig. 2, and so held for an instant by means of the lever I, not only ejects the lever B from the teeth of the rack, but prevents any danger of its again catching therein as it is drawn back by the spring D. Directly the cord L is slackened, the spring G pressing the lever B inward against the lever K, restores it to its normal position, (represented in black in Fig. 2,) so that it will offer no impediment to the lever B catching in the rack F when again drawn forward.

From the foregoing description it will be understood that by means of my invention the entire working of the brake may be effected by the teamster without leaving his position upon his horse or beside his team.

The invention may be applied to brakes of common form or to my improved automatic

lock patented August 18, 1863, or to any other to which it may be found adapted.

I do not limit myself to the precise form of the springs D and G, herein represented, but propose to vary the same as experience may prove to be desirable.

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

1. The combination, with the brake-lever B,

of a spring, G, to throw the said lever into the rack F automatically when drawn forward.

2. The combination of the lever I, spring D, and lever K, or cam I', operating to release the brake-lever B and retract the brake, substantially in the manner described.

Witnesses:

J. H. LEE.

OCTAVIUS KNIGHT,
CHARLES DU BOIS.