

H. CARLON.

STOP-MOTION FOR LOOMS.

No. 182,887.

Patented Oct. 3, 1876.

Fig. 1.

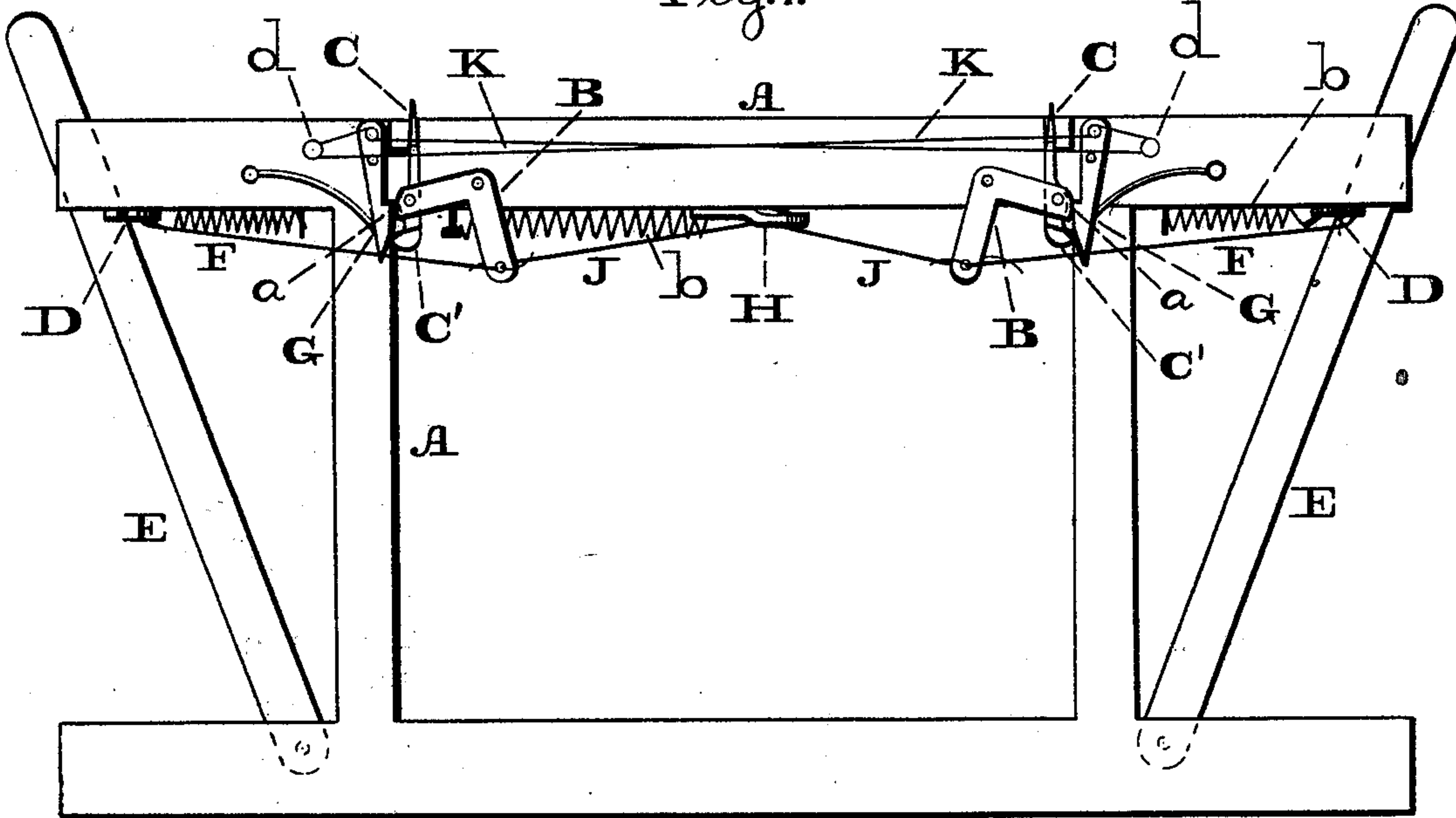


Fig. 2.

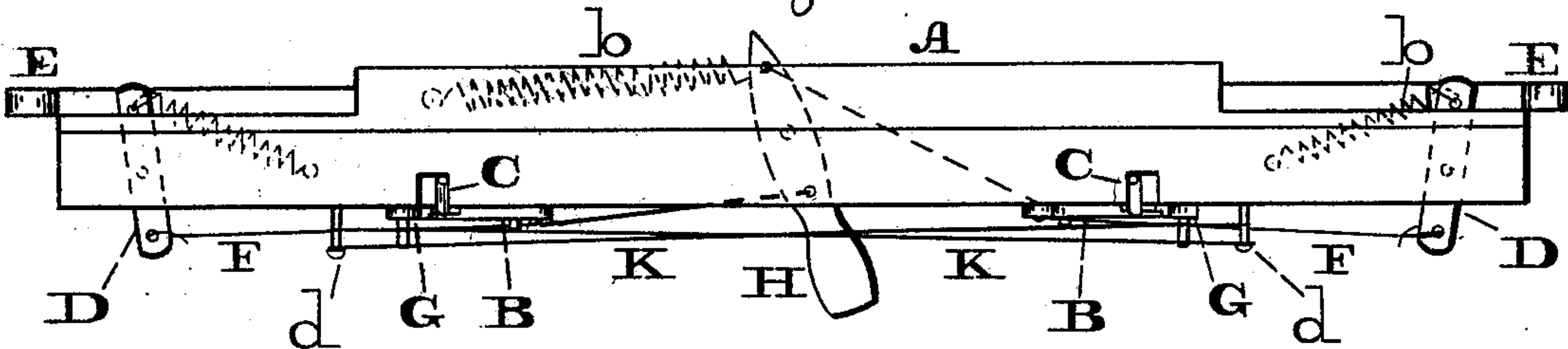


Fig. 3.

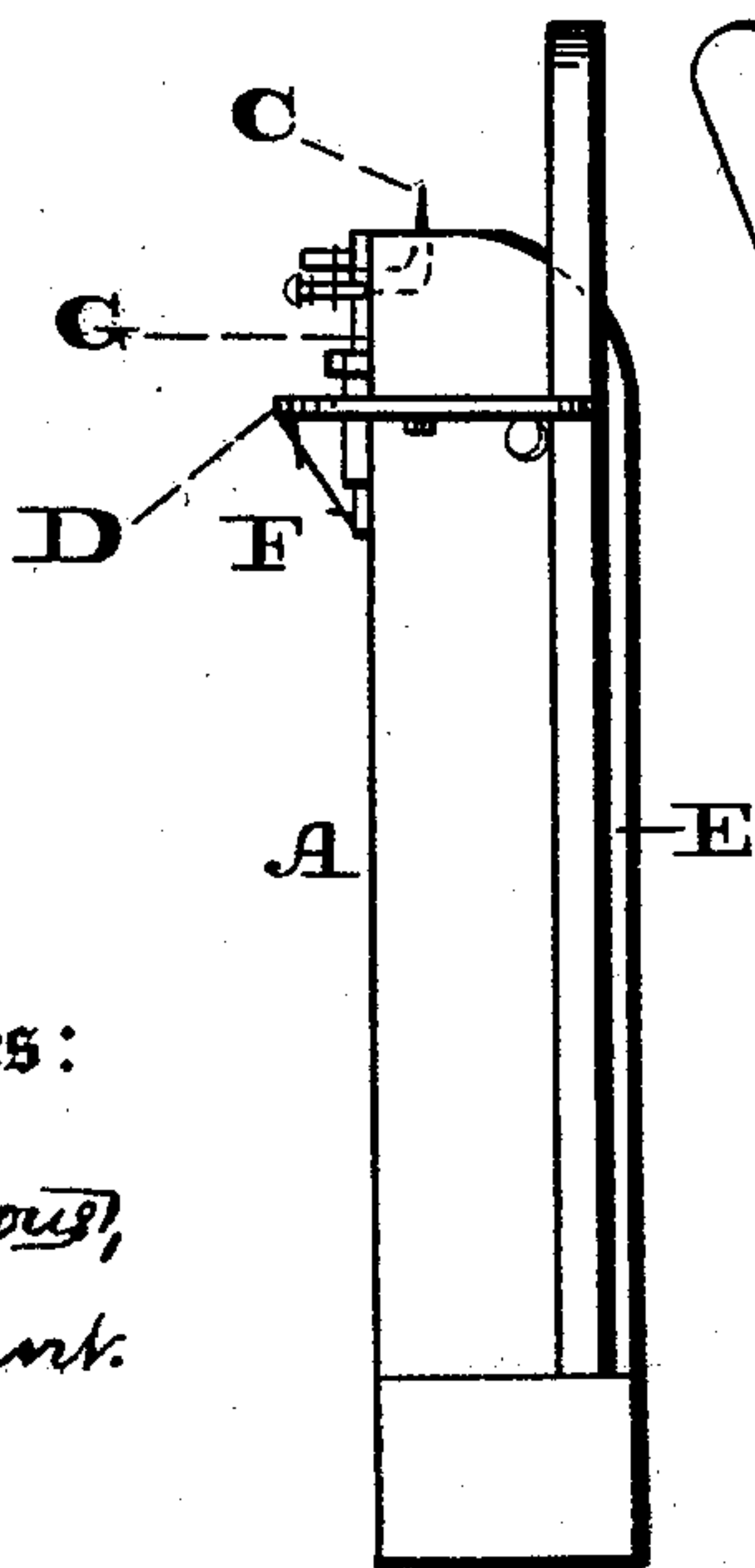
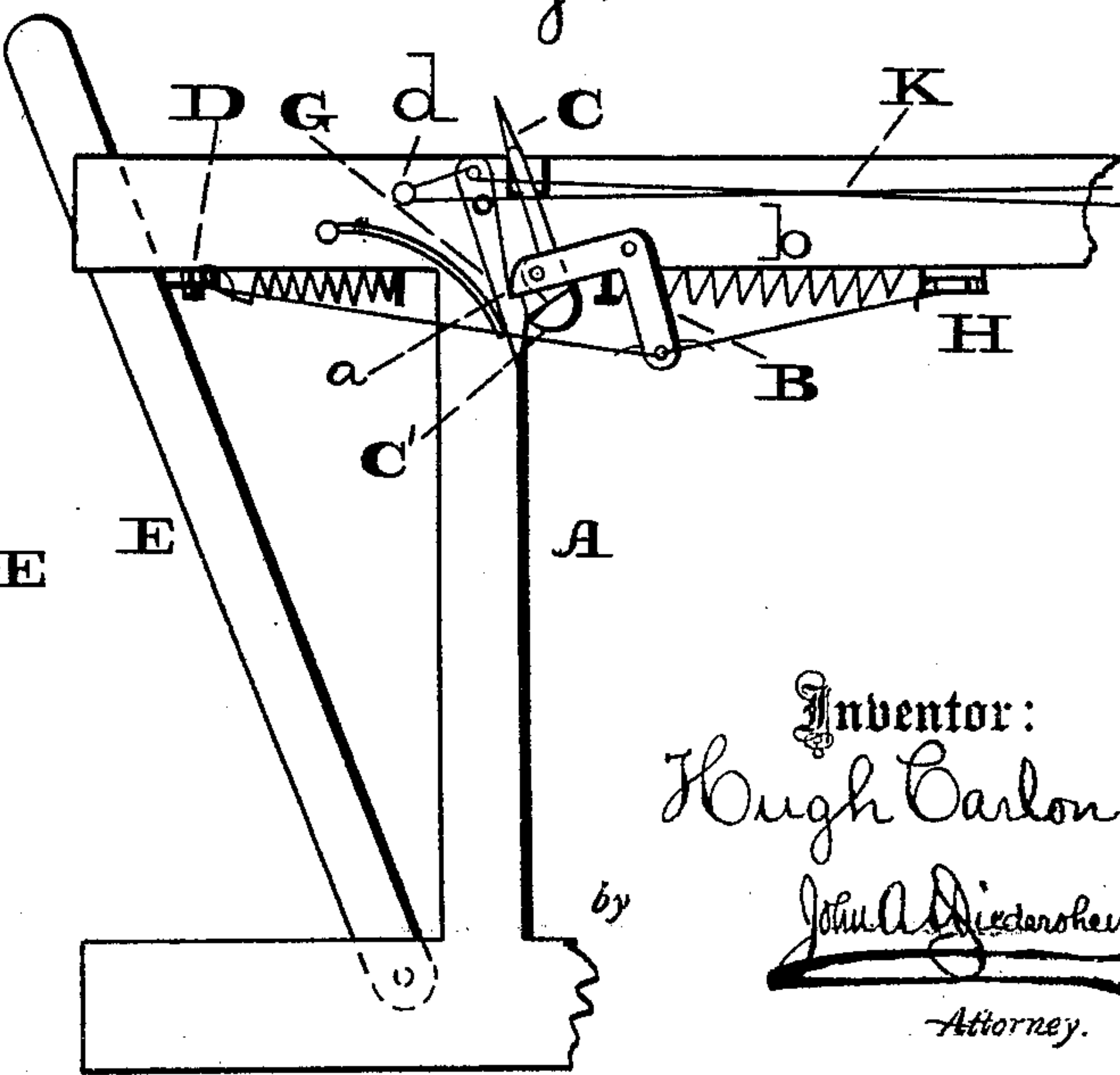


Fig. 4.



Witnesses:
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UNITED STATES PATENT OFFICE.

HUGH CARLON, OF CHESTER, PENNSYLVANIA, ASSIGNOR TO G. P. DENIS,
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IMPROVEMENT IN STOP-MOTIONS FOR LOOMS.

Specification forming part of Letters Patent No. **182,887**, dated October 3, 1876; application filed
August 10, 1876.

To all whom it may concern:

Be it known that I, HUGH CARLON, of Chester, in the county of Delaware and State of Pennsylvania, have invented a new and useful Improvement in Stop-Motion of Looms; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a front view of the device embodying my invention. Fig. 2 is a top or plan view thereof. Fig. 3 is a side view thereof. Fig. 4 is a view of a portion of Fig. 1, the parts being in a different position.

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

My invention consists of mechanism arranged for operation in an ordinary loom, or in a pick and pick-loom, whereby, when the threads break, the loom will be stopped.

Referring to the drawings, A represents the lathe, to which is pivoted an elbow-lever, B, having jointed to one limb a needle, C, which projects upwardly beyond the lathe, and has its lower end formed with a head, C'. D represents a horizontally-extending bar, which is pivoted to the under side of the lathe at its outer end, and projecting so as to be engaged by the picking-arm E, which is operated in any well-known manner. To the bar D is connected a rod, F, which is also connected to the lower limb of the elbow-lever B. G represents a dog, which is pivoted to the front of the lathe A, and adapted to engage with the nose *a* of the elbow-lever B. To the lathe there is also pivoted a horizontally-arranged arm, H, which is connected to the elbow-lever B by a rod, J, and has lateral-swinging motions. If desired, the several parts, excepting the swinging arm H, may be duplicated, so that there is one set for each side; and in order that they shall operate simultaneously a rod or chain, K, may be connected to the dogs G and passed around pins *d*, so that the dogs will have common motion.

The operation is as follows: The parts being in position as shown in Fig. 1, the picking-arm moves forward, strikes the arm D, and draws the elbow-lever so that its nose *a* engages with the dog G, and its lower arm is placed in a vertical position, thereby, through the rod J, setting the arm or dagger H. The shuttles run on the top of the lathe in the rear of the needles, and the filling-yarn loops around one of the needles, which draws the needle toward the center of the loom, and causes the head to disengage the elbow-lever and dog, and, owing to the spring *b*, the swinging arm H passes the center or to the side, and thus is cleared of knock-off of the loom. Furthermore, the needle is lowered, so that looped yarn thereof passes off. Should, however, the filling break, and thus not loop on the needle, the dog is not unlocked, and the needle will remain in its elevated position, thereby causing the arm or dagger H to remain in front or at a right angle to the lathe, and in such position that it will strike the knock-off, and thus stop the loom. The picking-arm returns to its first position, pressing past the arm D without other action, and on its next forward motion the elbow is again raised and locked with the dog, to repeat the operations above stated.

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

1. The dog G, in combination with the needle C and elbow-lever B, and with the bar D, arm or dagger H, connecting-rods F J, and spring *b*, substantially as and for the purpose set forth.

2. The needle C with head C', and elbow-lever B with nose *a*, in combination with the dog G, pivoted bar D, and pick-arm E, and with the swinging arm or dagger H, substantially as and for the purpose set forth.

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Witnesses:

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