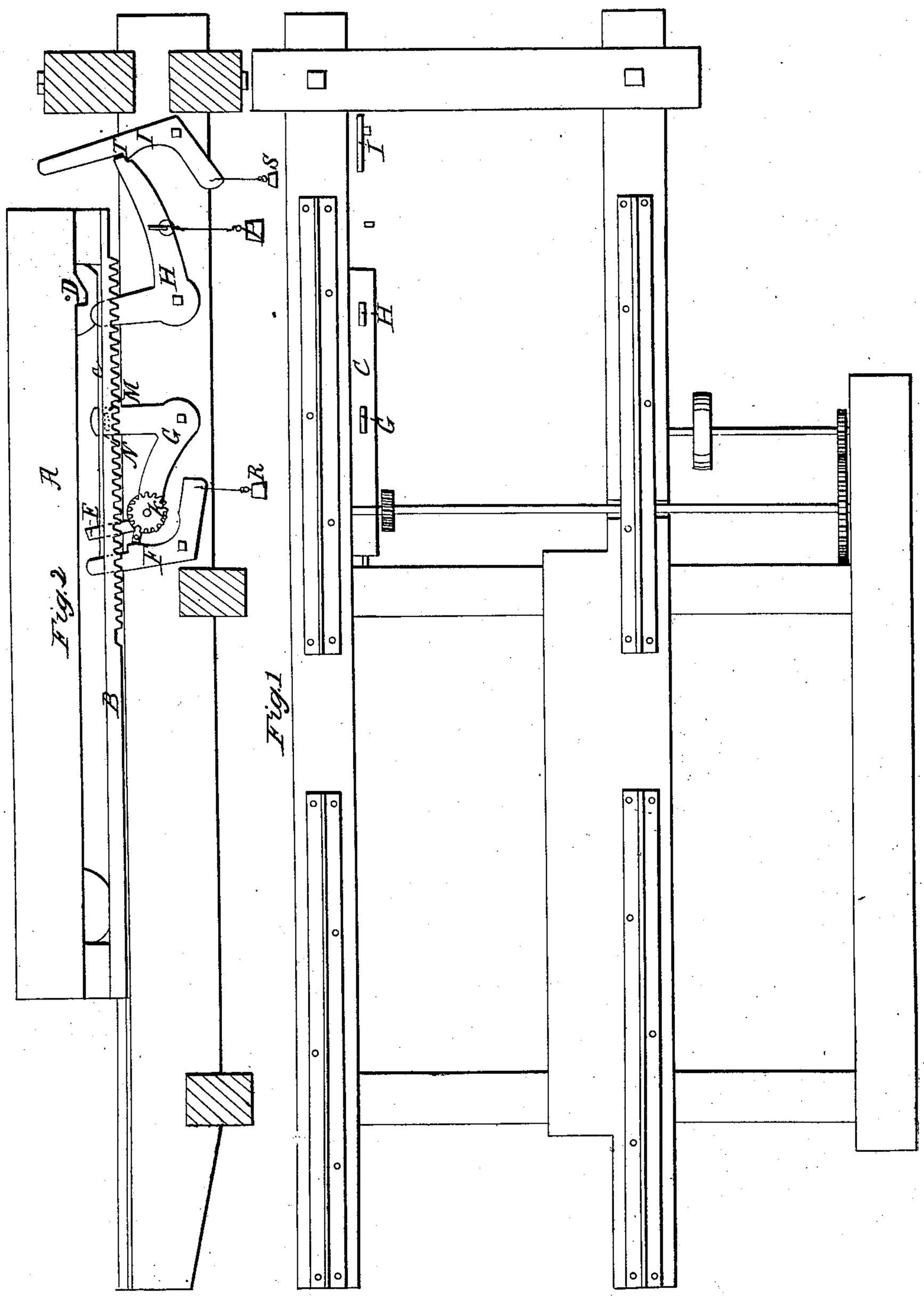
E. Drake,

Saving Shingles,.

No. 20,553, Patented June 15 1858.



UNITED STATES PATENT OFFICE.

E. DRAKE, OF GARDINER, MAINE.

FEED-MOTION OF SHINGLE-MACHINES.

Specification of Letters Patent No. 20,553, dated June 15, 1858.

To all whom it may concern:

Be it known that I, ELBRIDGE DRAKE, of Gardiner, in the county of Kennebec, in the State of Maine, have invented a new and Improved Mode of Feeding the Carriages of Shingle-Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of my invention consists in providing the body of the shingle machine with a knee having a pinion at one extremity which is made to play in and out of gear by an arrangement and connection with a slide and other knees.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

I construct my shingle machine in any of the known forms but in order to obviate the difficulty in feeding the carriage caused by the failure of the pinion to drop entirely out of gear and thereby prevent the carriage running back to set I have applied the knee G which holds the pinion K in the extremity of one arm while the other end is attached to the slide C, by means of the pin M, passing through the slot N. The slide C, is also attached at one end to the knee H as shown in Fig. 2, and the other end to the lever E. There are besides these two other knees F and I, operated upon and kept down by means of the two weights R and S. The pinion R is always running when the machine is in motion.

Now in order to start the carriage it is necessary to detach the two knees H and I from each other when the knee H, will drop down drawing the slide C, along in such a manner as to raise the pinion K into gear with the rack B, by means of the pin M, bearing against the side M of the slot N, the carriage will then move up until the dog D strikes the lever E, when the slide C, will commence moving in the reverse direction drawing the knee H, up until the catch T, of the knee I drops under the end of the knee H. The pin M, is then at the point N of the slot N, and the projection O of the knee G, is resting upon the catch of the knee F, but as the slide C, continues to move along it detaches the knee F from the projection O and lets the pinion K, drop out of gear when the carriage will run back and set again.

What I claim as my invention and for which I desire an exclusive right is—

The application to shingle machines of the knee G, combined with the slide C, in such a manner as will produce the desired effect as herein described.

ELBRIDGE DRAKE.

Witnesses:

I. C. HOLMES,

C. A. ROBBINS.