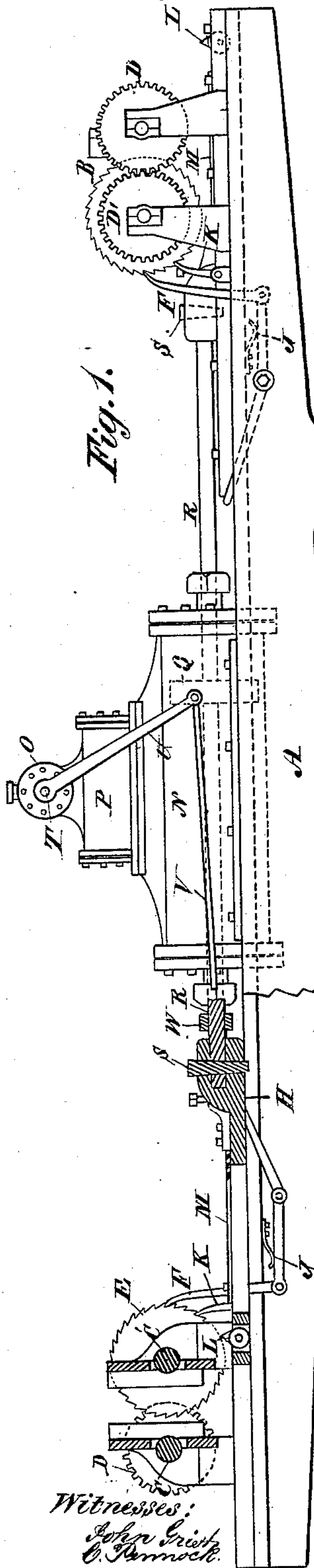


(No Model.)

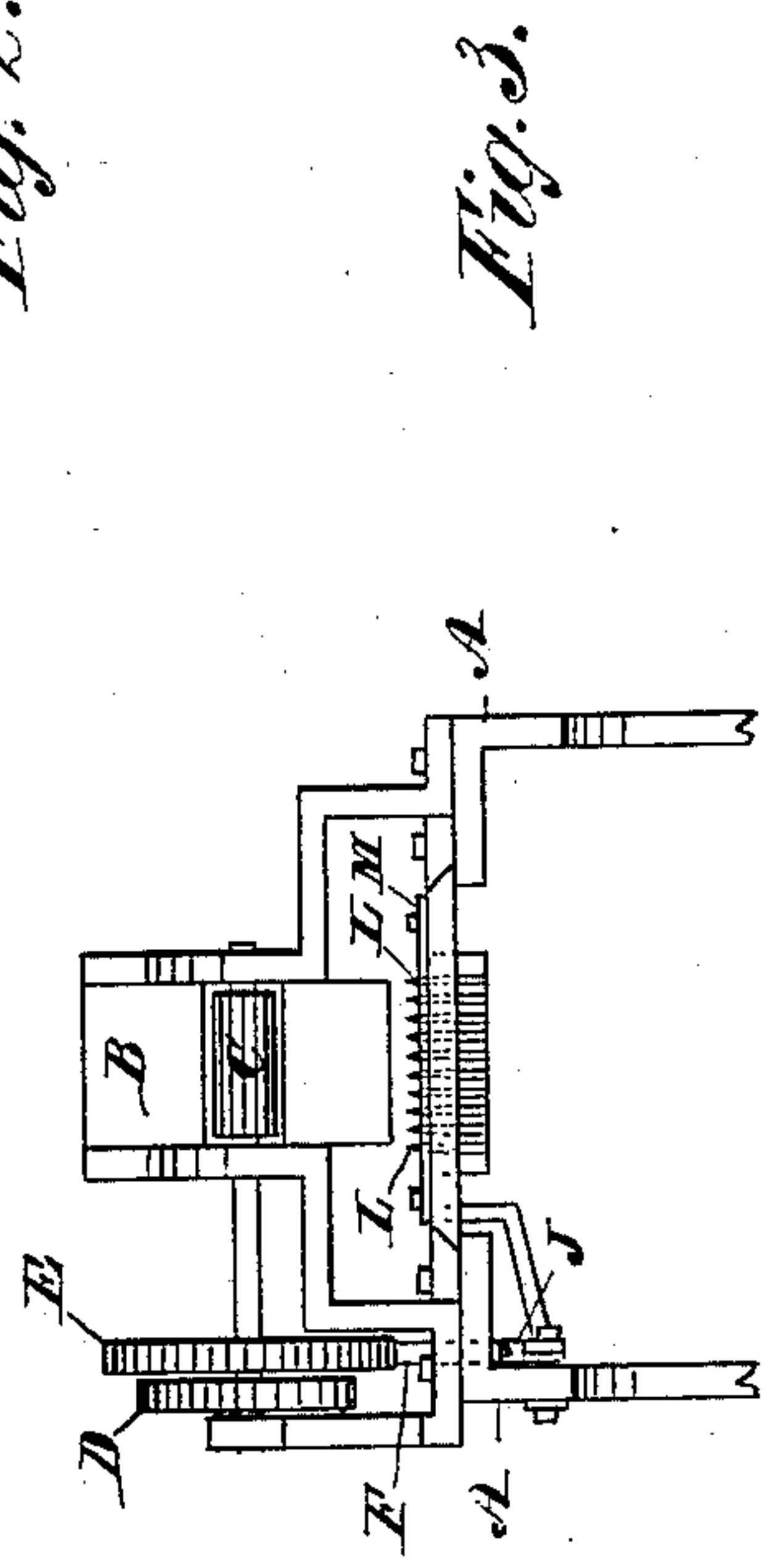
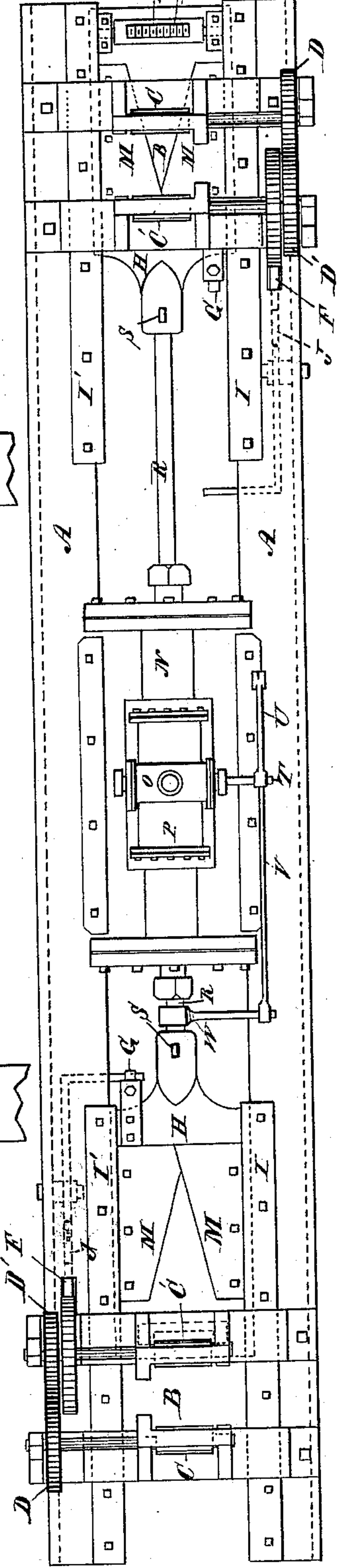
A. G. JONES.  
MATCH SPLINT MACHINE.

No. 304,826.

Patented Sept. 9, 1884.



Witnesses:  
John Grist  
C. Pennock.



Inventor:  
A. G. Jones  
By Henry Grist  
Att'y.



# UNITED STATES PATENT OFFICE.

ALFRED G. JONES, OF ROCHESTERVILLE, ONTARIO, CANADA.

## MATCH-SPLINT MACHINE.

SPECIFICATION forming part of Letters Patent No. 304,826, dated September 9, 1884.

Application filed May 12, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, ALFRED GOULDING JONES, of Rochesterville, in the Province of Ontario, in the Dominion of Canada, have  
5 invented a certain new and useful Improvement in Match-Splint-Cutting Machines; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to that class of splint-cutting machines in which a reciprocating knife scores and slices the splint-block, which is automatically fed to the knife through a hopper or head; and the object of my invention is to utilize motive power by doubling  
10 the capacity of the machine and reciprocating the knives by direct action of a double-ended piston-rod and a cylinder placed between opposite ends of the machine.

My invention consists in the combination,  
20 with the bed of the machine, of a feed-hopper at opposite ends, a knife reciprocating under each hopper to score and cut the splint-blocks, an intermediate steam-cylinder having automatic-acting slide-valves, and a single piston  
25 and double-ended piston-rod connecting directly with the knife-heads, whereby the knives will alternately score and cut a splint-block fed through the hoppers at opposite ends of the machine.

30 Figure 1 is a longitudinal vertical section, partly in elevation, of my machine. Fig. 2 is a top or plan view of the same, and Fig. 3 is an end view.

A is the bed of the machine, having at opposite ends a hopper, B, provided with rollers C C', feeding the splint-blocks automatically to the knives, and which rollers are geared to move uniformly by cog-wheels D D'.

E is a ratchet-wheel keyed to the shaft of  
40 one of the rollers, and operated intermittently by a push-pawl, F, lifted endwise by a cam, G, on the knife-head, H, which reciprocates under the hopper on ways or guides I I' on the bed of the machine.

45 J is a spring to retract the push-pawl after being lifted by the cam, and K is a stop-pawl engaging with the ratchet-wheel to hold it while pawl F is being retracted to a position to be again engaged by cam G.

50 To the knife-heads H are bolted vertical scoring-knives L and horizontal slicing-knives

M, which knives score the splint-blocks and slice off the splints at the forward motion of each knife-head.

To the middle of bed A, intermediate of the  
55 knife-heads, is secured a cylinder, N, taking steam through valve-chests O P, said cylinder having a single piston, Q, and a piston-rod, R, running through both ends of the cylinder, and connecting by a key, S, to the knife-  
60 heads. The valve-chests are provided with any suitably-arranged slide-valve worked by a rock-shaft, T, to one end of which is hung an arm, U, the other end of the arm jointed to one end of a rod, V, and the other end con-  
65 nected to the piston-rod by a collared arm, W, so that by the reciprocation of the piston-rod the valves in chests O and P will be operated to admit steam to the cylinder on opposite sides of the piston alternately, and thus force  
70 the knives to score and slice off each splint-block alternately. The scoring-knives precede the cut of the slicing-knives, the splints falling into a suitable channel or receptacle below the knives. The piston-rod reciprocates in  
75 the same plane as the knives, and hence with a direct motion.

I do not claim the construction of the feeding and cutting mechanism, as it does not practically differ from that now in use, and  
80 the valve-chests may have any suitable acting valves.

I am aware of Patent No. 295,191, granted to G. H. Millen and Edward Mousseau, March 18, 1884, wherein the feed mechanism and the  
85 scoring and cutting knives are constructed substantially as herein shown and described, and to which I make no claim.

What I claim as my invention is—

The combination, in a machine for making  
90 match-splints, of feed-hoppers B B, one at opposite ends of bed A, and each having automatic feed mechanism, as described, knife-heads H H, each having scoring and slicing knives reciprocating under said hoppers, pis-  
95 ton-rod R, connecting said knife-heads, and steam-cylinder N, as set forth.

ALF. G. JONES.

Witnesses:

JOHN GRIST,  
C. PENNOCK.