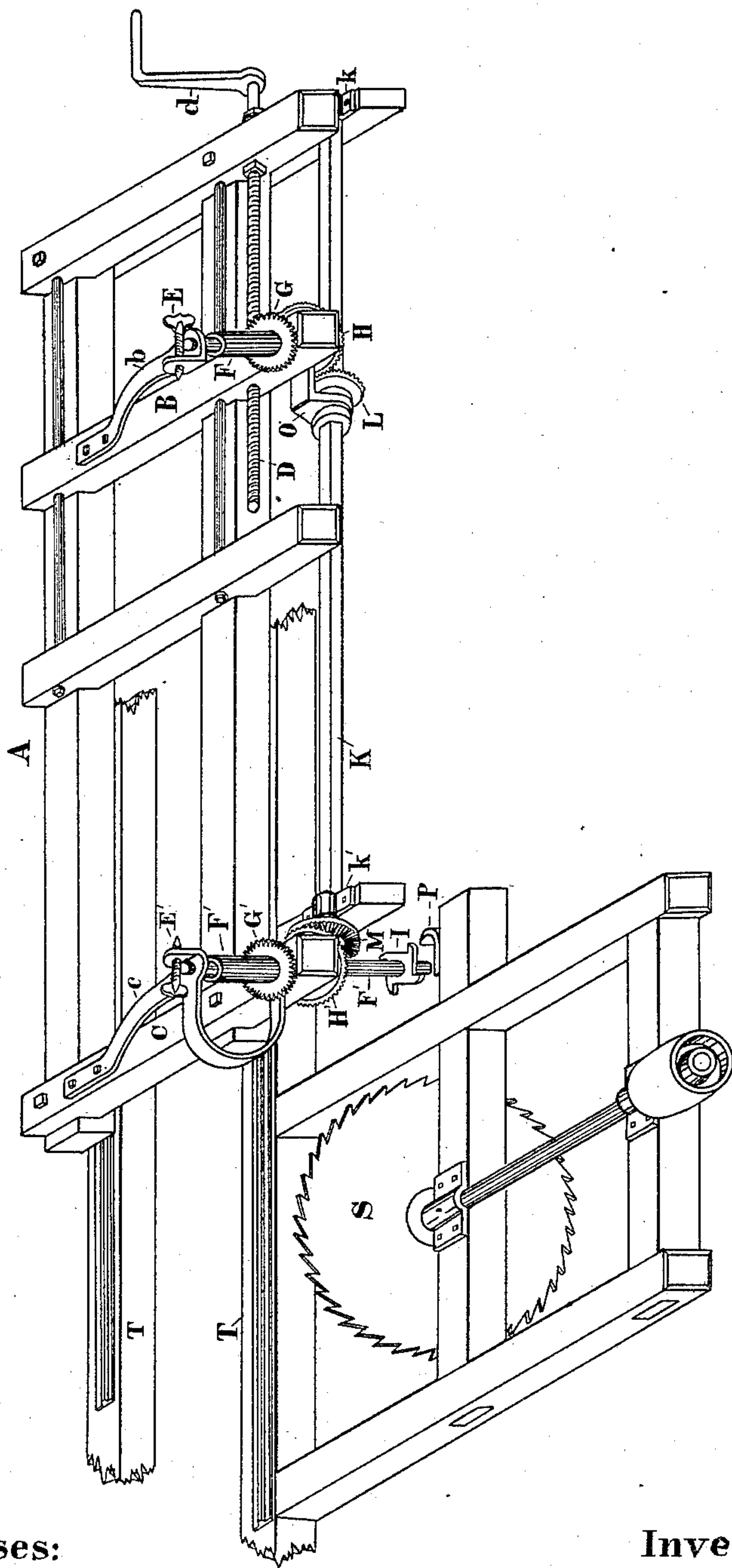


(No Model.)

S. L. INGALLS.
CLAPBOARD MACHINE.

No. 468,495.

Patented Feb. 9, 1892.



Witnesses:

G. M. McAlister
T. O. Hardwell

Inventor.

Sumner L. Ingalls
By John R. Mason
Atty

UNITED STATES PATENT OFFICE.

SUMNER L. INGALLS, OF MILFORD, MAINE, ASSIGNOR OF ONE-HALF TO
MELLEN A. AUSTIN, OF SAME PLACE.

CLAPBOARD-MACHINE.

SPECIFICATION forming part of Letters Patent No. 468,495, dated February 9, 1892.

Application filed March 23, 1891. Serial No. 385,997. (No model.)

To all whom it may concern:

Be it known that I, SUMNER L. INGALLS, a citizen of the United States, residing at Milford, in the county of Penobscot and State of Maine, have invented certain new and useful Improvements in Clapboard-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention consists of an improved machine for sawing clapboards, and is illustrated in the accompanying drawing, which shows an isometric view.

The clapboard-machines in common use are all designed to saw round bolts, cutting the wedge-shaped clapboards from the surface nearly to the center of the bolt and leaving a core, the bolt being dogged in the line of its central longitudinal axis.

My device is so constructed as that the bolt may be dogged from its upper edge, and admits of the use of small bolts, substantially one-half the size of the bolts as now used, thus making possible the utilization of much material now going to waste.

I provide a carriage A, of ordinary construction and traveling on tracks T, as commonly, with adjustable head-block B, moving lengthwise of said frame and operated by screw D, having crank d.

Upon the head-block B and the tail-block C of the carriage are brackets b c, carrying dogs E E'.

A shaft F is vertically projected through the head-block B and, turning in a bearing in said head-block, has its upper end supported in the bracket b.

Upon the shaft F, above the head-block and underneath the dog E, a fixed spur-wheel G is mounted, and underneath said head-block upon said shaft is a fixed bevel-gear H. Similarly a shaft F' is projected vertically through the tail-block C, and, turning in a bearing in C, has its upper end supported in the bracket c.

Upon the shaft F', above the tail-block and underneath the dog E' and in line with the spur-wheel G, is mounted another fixed spur-wheel G', while below its bearing the shaft carries the fixed bevel-gear H' and a ratchet-wheel I.

A shaft K is mounted in bearings k k' in the cross-pieces of the frame of the carriage A and carries the fixed bevel-gear M, placed to mesh with the bevel-gear H', and also carries the fixed bevel-gear L, sliding longitudinally upon said shaft with the head-block B as the latter moves upon the frame of the carriage, this lateral movement of the gear being obtained by a bracket O, connecting said gear with said head-block. The gear L is so placed upon the shaft K as to mesh with the beveled gear H and is retained in position by the bracket O.

Upon some convenient portion of the bed-frame of the machine is pivoted a spring-pawl P, so located as to engage with one of the teeth of the ratchet-wheel I as the carriage A moves backward.

A circular saw S is vertically set and arbored in the machine-frame in front of the shaft K, as shown.

In operation the bolt is set in position for sawing and secured by the dogs E E' from its upper edge, its lower edge being held by the spur-wheels G G'. As the carriage A, carrying the bolt, moves forward, a wedge-shaped slab or clapboard is sawed off and the spring-pawl passes over the first tooth of the ratchet-wheel I. As the carriage runs back, a tooth of the ratchet-wheel I engages with the pawl P and the shaft F' is turned sufficiently to allow the pawl to pass the tooth of the ratchet. As the shaft F' turns, it carries the spur-wheel G', and by means of the beveled gears H' and H, shaft K, and beveled gears M L operates the shaft F, carrying the spur-wheel G, which thus moves simultaneously and equally with the spur-wheel G', and the spur-wheels thus turn the bottom of the bolt forward. The amount of the turn is regulated by the position and size of the teeth of the ratchet-wheel I, which are so arranged as to give any required thickness of the wide edge of the clapboard. The adjustable head-block B permits the sawing of bolts of various lengths, but is not essential where the bolts are of the same length, in which case a stationary head-block could of course be used as well.

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

1. The combination of a carriage traveling
past the saw and having head and tail blocks,
a shaft projecting vertically through and turn-
ing in the tail-block and carrying a fixed spur-
5 wheel above said tail-block, a shaft project-
ing through and turning in said head-block
and carrying a fixed spur-wheel above said
head-block, a geared connection between said
shafts, a ratchet-wheel upon said first-named
10 shaft, a spring-pawl so placed upon the ma-
chine or saw frame as to engage with said
ratchet-wheel and turn said shafts and spur-
wheels during the backward movement of the
carriage away from the saw, and devices for
15 dogging the clapboard-bolt above said spur-
wheels.

2. The combination of a carriage traveling
past the saw and having a tail-block and an

adjustable head-block, a shaft projecting ver-
tically through and turning in the tail-block 20
and carrying a fixed spur-wheel above said tail-
block, a shaft projecting vertically through
and turning in said adjustable head-block and
carrying a fixed spur-wheel above said head-
block, a geared connection between said shafts, 25
a ratchet-wheel upon said first-named shaft,
a spring-pawl so placed upon the machine or
saw frame as to engage with said ratchet-
wheel and turn said shafts and spur-wheels
during the backward movement of the car- 30
riage away from the saw, and devices for dog-
ging the bolt above said spur-wheels.

SUMNER L. INGALLS.

Witnesses:

J. F. GOULD,

M. A. AUSTIN.