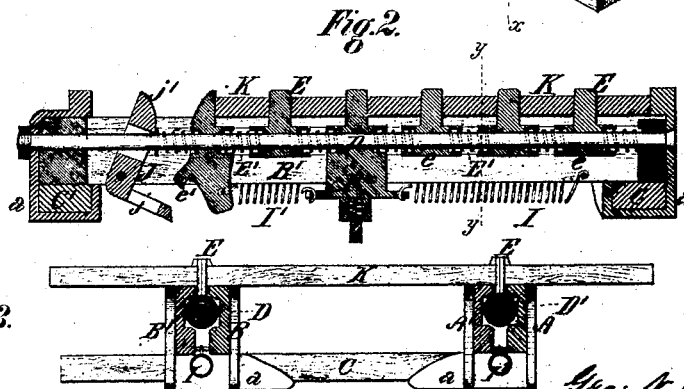
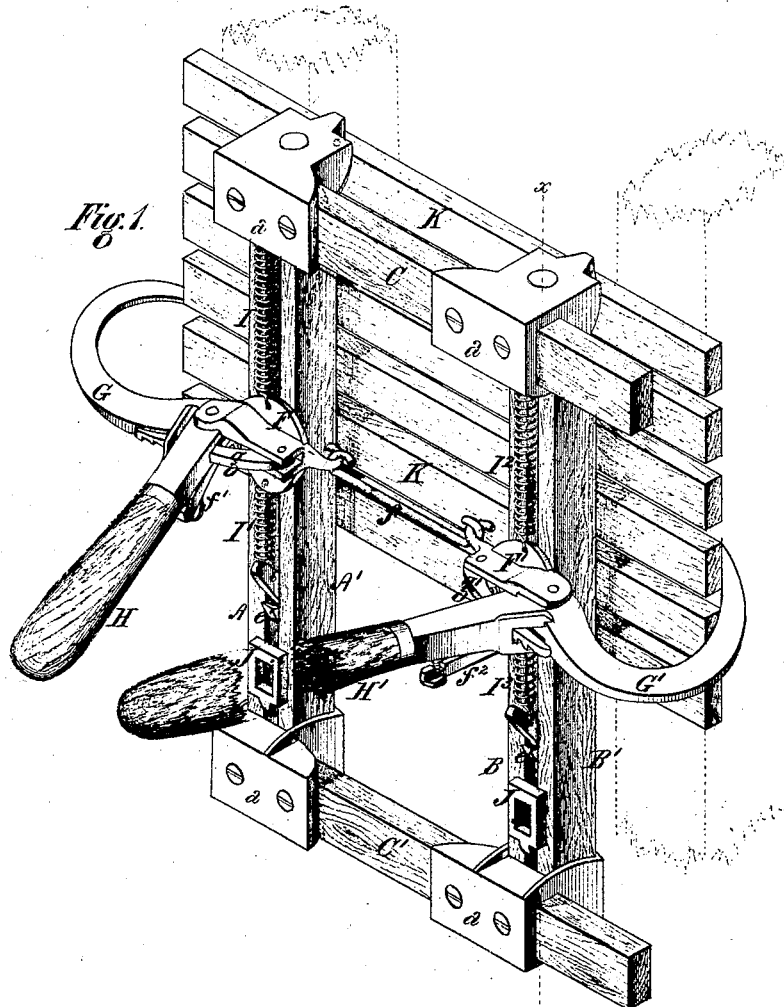


G. M. Creamer,
Lathing Machine.
No. 109391. Patented Nov. 22, 1870.



J. Snowden Bell.
Wm. B. Dayton } *Witnesses.*

Geo. M. Creamer
by his Attorney
Henry Palmer.

United States Patent Office.

GEORGE N. CREAMER, OF TRENTON, NEW JERSEY.

Letters Patent No. 109,391, dated November 22, 1870.

IMPROVEMENT IN LATHING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, GEORGE N. CREAMER, of Trenton, in the county of Mercer and State of New Jersey, have invented certain new and useful Improvements in Lathing-Machines, of which the following is a specification, reference being had to the accompanying drawing, in which—

Figure 1 is a view, in perspective, of a lathing-machine embodying my improvements;

Figure 2, a longitudinal section through the same, at the line *z z* of fig. 1; and

Figure 3, a transverse section through the same, at the line *g g* of fig. 2.

It is the object of my invention to provide simple and convenient means of clamping a series of laths in a frame, in which they are held while being nailed to the joists or studding of a building, as well as to afford improved means of affixing the frame thereto; and

My invention consists in certain improvements in the construction and application of the lathing-machine for which Letters Patent of the United States were heretofore granted to me, numbered 95,435, and bearing date October 5, 1869.

The first part of my invention relates to the means for holding the laths in place in the frame; and

My improvement consists in combining with a frame, the members of which are stationary with respect to each other, a series of clamping-teeth, between which the laths are placed, a series of springs, by which the laths are clamped when in position, and devices by which the clamping-springs are released when the frame is to be refitted.

The second part of my invention relates to the means for clamping the frame to and detaching it from the studding or joists; and

My improvement consists in the combination, with the frame, of hook-levers, handles, and spring-pawls and ratchets, operating so as to attach the machine to or remove it from the joists, and being adaptable to the same whether set at equal or different distances apart.

In the accompanying drawing a frame is shown, composed of side pieces *A A' B B'*, arranged in pairs, and united, at their respective ends, by castings *a*, to cross-pieces *C C'*.

In contradistinction from my patented machine hereinbefore mentioned, in which I employed a stationary and a movable frame, the entire frame, in this instance, is stationary, and corresponding lightness and simplicity of construction are thereby afforded.

With the exception of the end pieces *C C'*, no cross-bars are required.

The side pieces *A A' B B'* are parallel with each other, and the members of each pair are set at such distance apart as to provide spaces, in which are se-

cured rods *D D'*, respectively, on each side of the machine, (see figs. 2 and 3.)

A series of clamping-teeth, *E*, formed in a piece with thimbles *e*, is mounted so as to slide freely upon the rods *D D'*.

Spiral springs *E'* encircle the rods between the thimbles, and bear against shoulders therein, by which means the spaces between the teeth may be adjusted to suit the width of the laths used.

Clamping-teeth, one on each side of the frame, and at or near the center thereof, are connected to or formed in a piece with bearing-pieces *F F'*, to which bearing-pieces hook-levers *G G'*, provided with handles *H H'*, are pivoted, for a purpose presently to be described.

The bearing-pieces *F F'* are connected by a swiveling link, *f*.

Spring-pawls *g g'* upon the hook-levers engage in ratchets *f' f''* upon the bearing-pieces, to hold the handles apart when moved away from each other.

A tension-spring, *I*, is connected, at one end, to the bearing-piece *F*, and at the other end to a pin, bolt, or staple, which is secured to the side pieces *A A'*, near the cross-piece *C*; and another tension-spring, *I'*, connects the bearing-piece *F'* with an eye formed upon a prolongation of the clamping-tooth on that side of the frame nearest its lower end.

Springs *I I'* are similarly connected to the opposite bearing-piece *F'*.

Dogs *e'* are formed, respectively, upon the lowest clamping-tooth on each side of the frame, which, when engaged in slots *j*, formed in tripping-levers *J J'*, pivoted to the side pieces *A A' B B'*, near their lower ends, extend the tension-springs *I I' I I'*, and thereby relieve the clamping-teeth from the tension thereof.

By pressing upon thumb-pieces *j'* on the tripping-levers *J J'*, the dogs *e'* are released therefrom, and the tension of the springs *I I' I I'* draws and holds the clamping-teeth closely together, so as to hold the laths, which is done, whether the laths are of equal or different widths, by reason of the adjustment afforded by the springs *E'*.

In using the machine, the tension-springs are first extended by engaging the dogs *e'* with the tripping-levers *J J'*. The clamping-teeth are then loose longitudinally upon the rods *D D'*, and free to move a sufficient distance thereon to allow of the insertion of the laths *K* between them, their range of motion depending, as before stated, upon the previous adjustment of the springs *E'*. The spaces between the teeth being filled with laths, the dogs *e'* are then released by pressing upon the thumb-pieces *j'*, when the tension of the springs *I I' I I'* holds the clamping-teeth *E* and laths *K* firmly together. The frame is then applied to the joists or studding, and the hook-levers *G*

G' are inserted into the outside of two adjacent joists by means of the handles H H', and held in position thereon by the spring-pawls g g' and ratchets f' f'. The laths are then nailed to the joists. The clamping-teeth may then be loosened by engaging the dogs in the tripping-levers, the hook-levers are released from the joists, and the machine removed, to be refilled for another operation.

I do not broadly claim sliding teeth held in a clamping-frame irrespective of the combination and construction.

I claim as my invention—

1. The combination of the slotted frame-pieces, the rod inclosed in said frame-pieces, the clamping-teeth movable freely endwise on said rod, the springs interposed between said clamping-teeth, and the tension-springs which press the clamping-teeth together to hold the laths, all these parts being constructed to operate in combination, substantially as hereinbefore set forth.

2. The combination of the frame, the clamping-teeth, the springs interposed between the clamping-teeth, the tension-springs, and the tripping-levers piv-

oted on the frame and engaging one of the clamping-teeth, all these parts being constructed to operate in combination, substantially as hereinbefore set forth.

3. The combination of the slotted frame, the rod, the clamping-teeth constructed with projecting thimbles, and springs interposed between the clamping-teeth and inclosed within the thimbles, the shoulders of which thimbles act as stops to limit the approximation of the clamping-teeth, as hereinbefore set forth.

4. The combination of the central clamping-tooth, provided with the bearing-piece F, the end tooth E', its dog e, the tripping-lever, and the tension-springs, all these parts being constructed to operate in combination, as hereinbefore set forth.

5. The combination of the frame, the central clamping-teeth, the tension-springs, the hooks, levers, their holding-pawls, and ratchets, all these parts being constructed to operate in combination, as set forth.

G. N. CREAMER.

Witnesses:

S. LINDSLY,

C. C. BURROUGHS.