

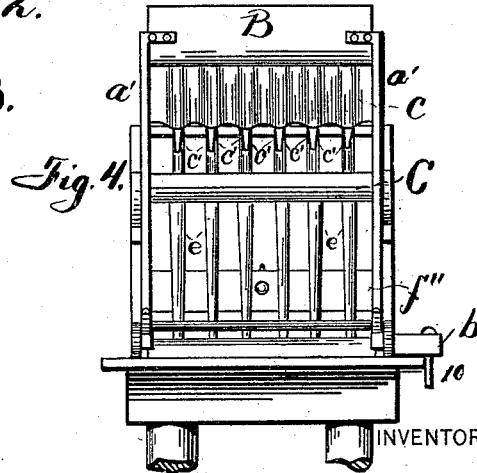
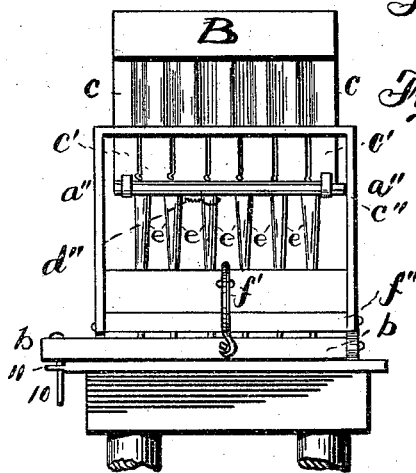
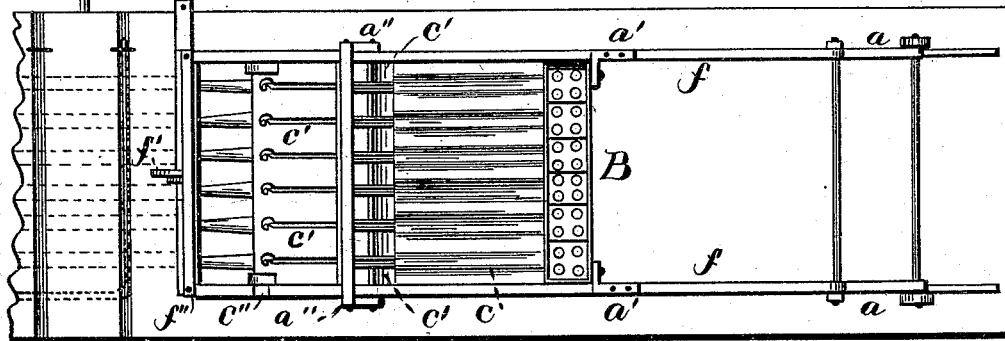
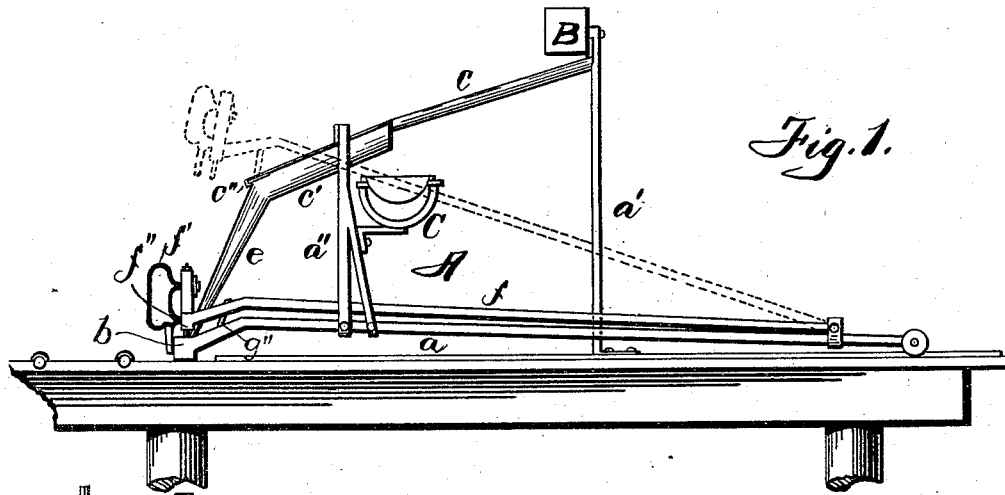
(No Model.)

3 Sheets—Sheet 1.

H. HULL.
LATHING MACHINE.

No. 553,242.

Patented Jan. 21, 1896.



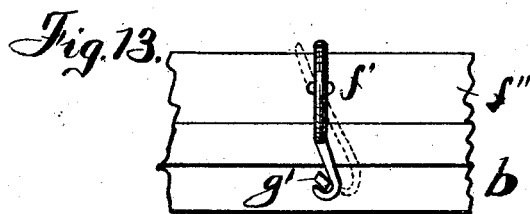
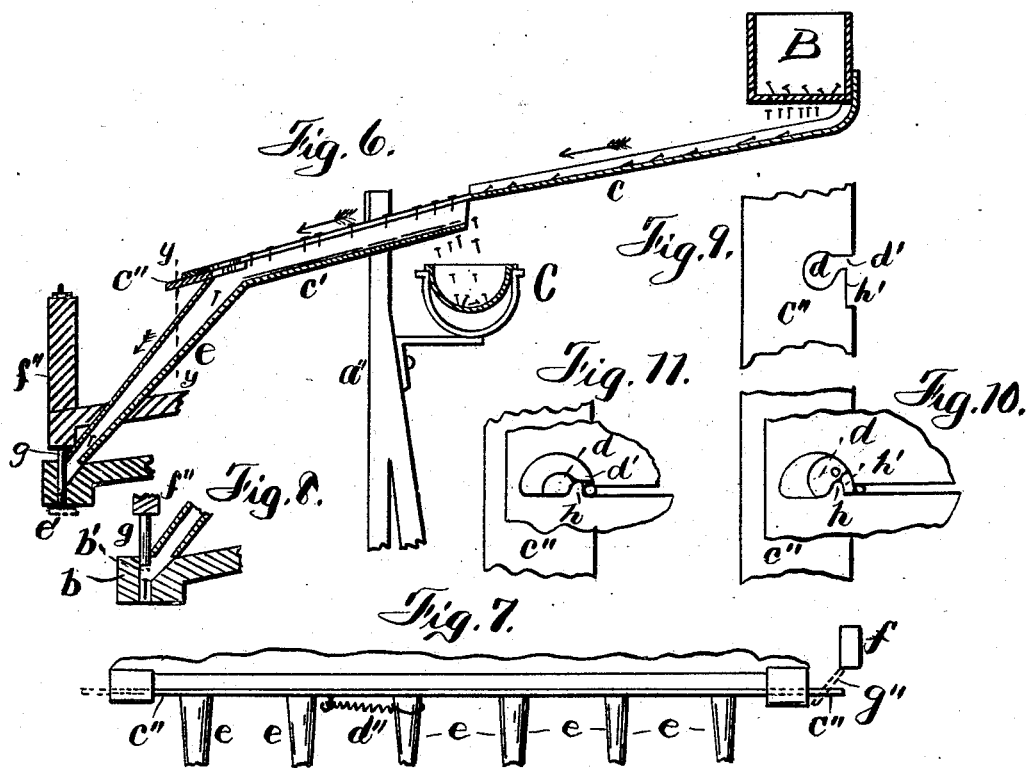
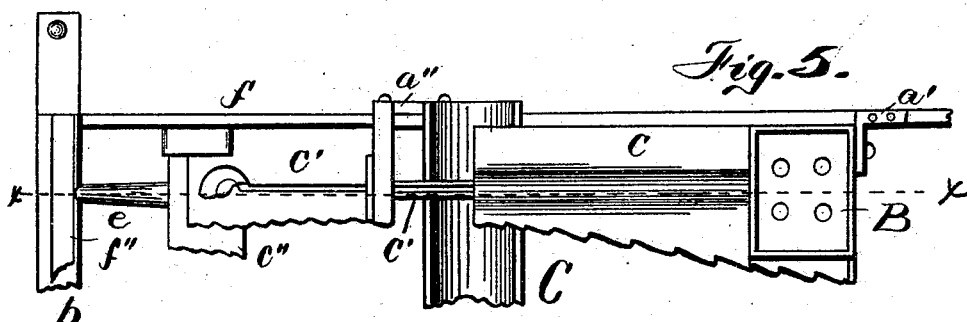
WITNESSES:
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3 Sheets—Sheet 2.

No. 553,242.

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Charles M. Morrin.
Jessie E. Murray

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3 Sheets—Sheet 3.

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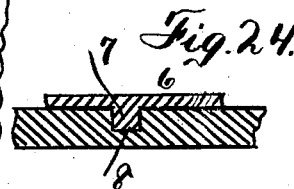
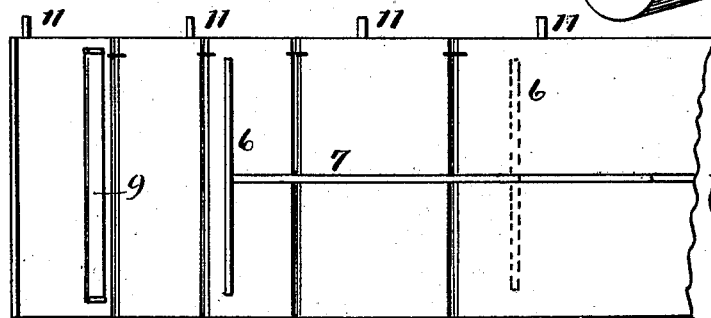
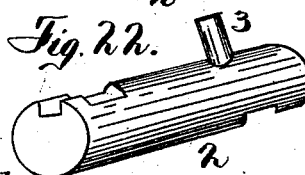
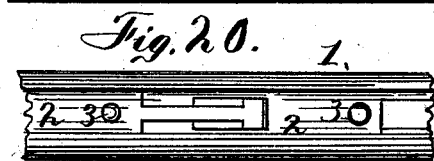
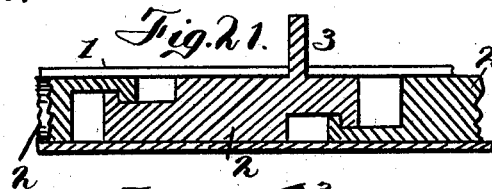
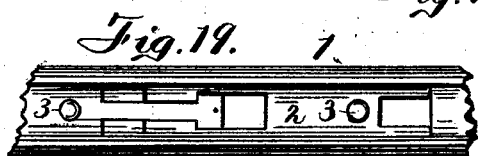
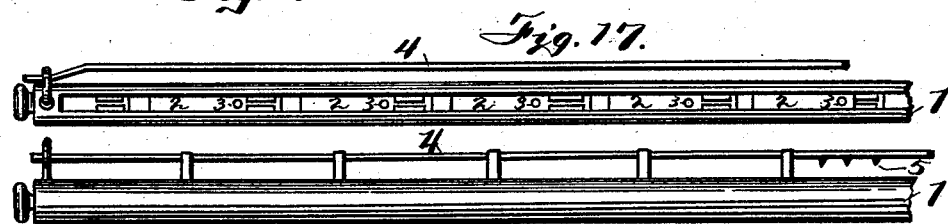
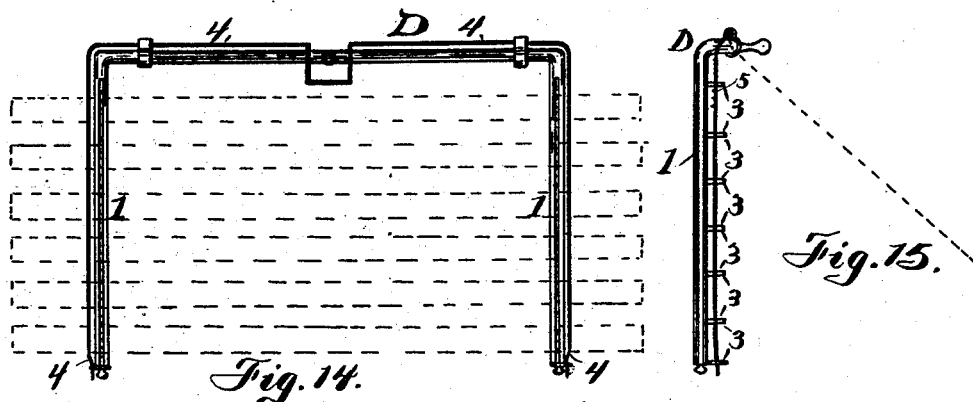


Fig. 16.

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Fig. 23.

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UNITED STATES PATENT OFFICE.

HARVEY HULL, OF WEST BURLINGTON, NEW YORK.

LATHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 553,242, dated January 21, 1896.

Application filed March 20, 1895. Serial No. 542,541. (No model.)

To all whom it may concern:

Be it known that I, HARVEY HULL, of West Burlington, in the county of Otsego, in the State of New York, have invented new and useful Improvements in Lathing-Machines, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to an improvement in lathing-machines; and it consists in the arrangement and combination of parts which will be more fully described hereinafter, whereby the laths are first clamped in position in a holding-frame, and then the nails started ready to be driven into the timbers of the house.

It is constructed as follows, reference being had to the accompanying drawings, in which—

Figure 1 is a side view of the machine complete mounted upon a table and showing the nail-starting device in dotted lines in a raised position. Fig. 2 is a top plan view thereof. Fig. 3 is a front end view. Fig. 4 is a rear end view. Fig. 5 is an enlarged top plan view of a section of the machine, showing the nail-receptacle and chute leading to the laths. Fig. 6 is a vertical section on line *xx* of Fig. 5. Fig. 7 is a front view of the chute and nail-separating device, as shown on line *yy* in Fig. 6. Fig. 8 is an enlarged section of that portion of the chute approaching the lath, showing the nail-starting device in a slightly-raised position. Fig. 9 is a view of a laterally-sliding bar or band mounted over the upper end of one of the series of chutes for the purpose of separating or singling out nails and allowing them to drop one at a time down to a vertical position upon the lath. Fig. 10 shows the chute and slide in a closed position. Fig. 11 is a similar view showing it open. Fig. 12 is a view of one of the arms of the starter, having a lug which operates said laterally-sliding bar. Fig. 13 is a front view showing how the starter and the frame of the device are locked together. Fig. 14 is a top plan view of a lath-holding device, showing the lath thereon in dotted lines. Fig. 15 is an end view thereof, showing the locking-rod in a raised position in dotted lines. Fig. 16 is a top plan view of the table on which the lath-holding device is mounted and showing

various means for sliding the lath along and stops for evening up short laths. Fig. 17 is an enlarged top plan view of one of the laterally-extending arms shown in Fig. 4. Fig. 18 is a side view thereof. Figs. 19 and 20 are enlarged top plan views of sections of said arms open and closed, respectively. Fig. 21 is a longitudinal vertical section of the section shown in Fig. 19. Fig. 22 is one of the cylindrical locking-slides provided with a pin mounted within the cylindrical arm of the lath-holder. Figs. 23 and 24 show detailed mechanisms in the table.

A is the nail-starting device, comprising a frame *a* upon which are mounted standards *a'* and *a''*, the forward end of said frame *a* having a head *b*, vertically perforated, as shown at *b'*, for receiving the lath-nails, as shown in the enlarged detail in Fig. 8.

B is a nail-holding receptacle having perforations in its bottom for allowing the nails to drop out gradually into the incline *c*, from whence they pass down into the chute *c'*, which is constructed on its upper face with a slotway so as to allow the nails to assume an upright position, as shown in Fig. 6, until they reach the laterally-sliding bar *c''*, in which are recesses *d* having a narrow opening *d'*. The laterally-sliding bar *c''* is provided with a spring *d''* having one end secured thereto and the opposite end to one of the chutes for the purpose of producing a tension to at all times keep the bar in the normal position shown in Fig. 7, so as to admit of the nails dropping into the recess *d* one at a time, at the same time retaining the others until this nail has dropped down through the incline *c* until it reaches the opening *b'*, *e'* being the lath located directly under the head *b*.

C is a trough mounted at a point where the incline *c* joins the chute *c'*, so that in case any of the nails drop out they will be caught and may be put back into the receptacle B. *f* is a frame hinged at its rear end to the frame *a* and having on its forward end a handle and latch *f'*, by which it is operated, and a cross bar or head *f''*, which is provided with downwardly-extending pins *g* adapted to pass into the perforations at *b'* and engage with the nails located therein for the purpose of driving them or starting them into the lath. The

outer end of said frame *f* and the head *f''* may be of any weight desired to perform the work in hand.

The handle and latch *f'* are adapted to be turned or operated so as to engage with the lug *g'* upon the frame *f* for the purpose of locking the parts together when it is desired to move the device from one place to another. Upon one side of the frame *f* is a lug *g''* adapted in its upper travel to engage with the bar *c''* for the purpose of forcing it transversely, the spring *d''* being used to return it to its normal position.

It will be observed that when the bar *c''* is in the position shown in Fig. 11 the nail will drop down through the chute onto the lug *h*, then when the lug *h'* upon the bar *c''* passes along it catches the nail and carries it into the recess *d* and closes the opening in the chute so that the other nails are prevented from dropping down. The nail is then allowed to drop through the opening *d* down the incline *e* to its position above the lath. The head of the frame *f* is then brought down into engagement with the tops of the nails and they are forced into the lath.

Figs. 14 to 24, inclusive, illustrate the lath-holding device and comprises a U-shaped frame *D* adapted to rest in the grooves in the table, as shown in section in Fig. 23:

The laterally-extending arms 1 are preferably constructed in tubes and are provided with sectional fillers 2 hinged together in any ordinary manner, each filler having a pin or upwardly-extending lug 3; said fillers being so arranged that they will operate simultaneously to force the laths the proper distance apart. Each filler 2 is formed of a short round piece of metal, loosely connected to the next adjoining one, either as here shown, or in any suitable manner, whereby they can be moved nearer together or farther apart.

4 is a guard or fastener hinged to the top of the frame *D*, adapted to pass down upon the laths after they are placed between the lugs 3; said lath-holding guard 4 being provided with barbs 5, so as to hold the lath from lateral displacement.

When it is desired to use short laths they are placed upon the frame, the cross-bar 6 engaging with one end. The upwardly-extending leaf 9 is then raised to the position shown in Fig. 23 and the laths are forced up against it. The starting device is then placed over them and the nails started in the ordinary way, as above described.

The head *b* is extended at one side and provided with a downwardly-extending arm 10, which is adapted to engage with the lugs 11

upon a table, said lugs being placed at a given distance apart upon the side of the table, so as to always make the distance between the nails equal.

The starting device is pushed along until the arm 10 engages with one of the lugs 11 and the nails then started. The arm 10 is then raised over the lug and shoved along until it engages with the next lug, and so on until all of the nails have been started in the series of laths. The frame containing the laths having the nails thus started is then taken and placed upon the wall and the nails then driven in. After the laths have thus been secured to the wall the guard 4 is raised and the frame removed ready to receive a succeeding series of laths.

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

1. In a lathing machine, the frame *f*, hinged at its rear end to frame *a*, and provided at its front end with a cross bar or head *f''*, having on its under side the pins *g*; the handle and latch *f'*, by which the frame *f* may be raised, or fastened to the frame *a*; and the inclined lug *g''* for operating the bar *c''*; combined with the head *b*, having the lug *g'* and provided with the openings *b'*; combined with the inclines leading from the nail holding receptacle, and the spring actuated endwise moving notched or recessed bar *c''*, substantially as shown.

2. The U shaped metallic frame *D*, provided with laterally extending arms 1, the sectional fillers 2, provided with lugs 3, and loosely connected by having a projection on one end engage with a recess in the end of the next adjoining section; and the guard 4, provided with barbs to keep the laths from lateral displacement, the parts being combined and arranged to operate, substantially as described.

3. The table, provided with grooves, the pivoted leaf 9, placed in a recess in the table, and adapted to be raised into a vertical position; the lugs projecting from the sides of the table, and the cross bar 6, combined with the head *b* provided with downwardly extending arm 10, and the lath holding frame *D*, which is placed upon the table, substantially as shown.

In witness whereof I have hereunto set my hand on this 6th day of March, 1895.

HARVEY HULL.

In presence of—

JESSIE E. MURRAY,
HOWARD P. DENISON.