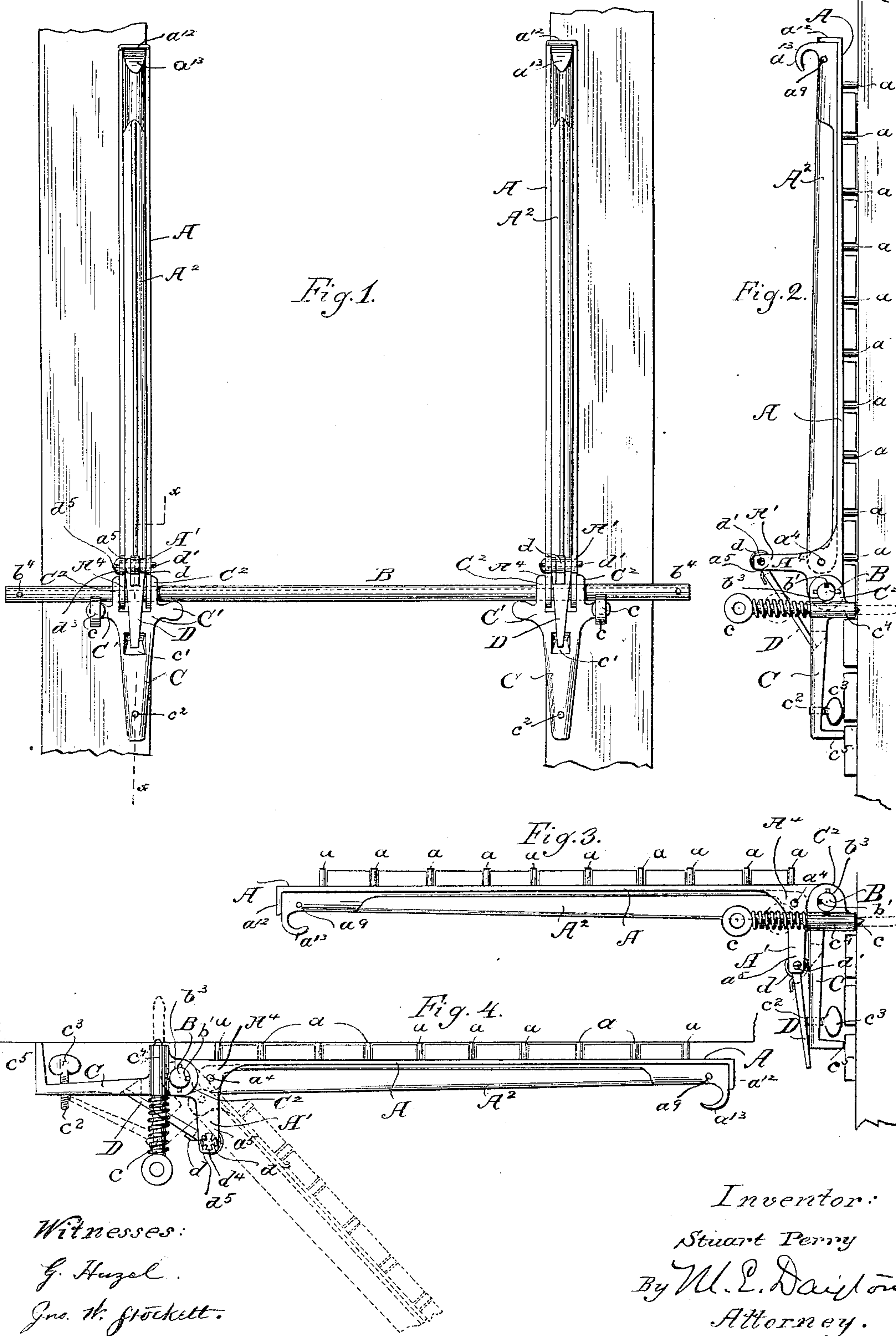


S. PERRY

LATHING APPARATUS.

No. 318,495.

Patented May 26, 1885.

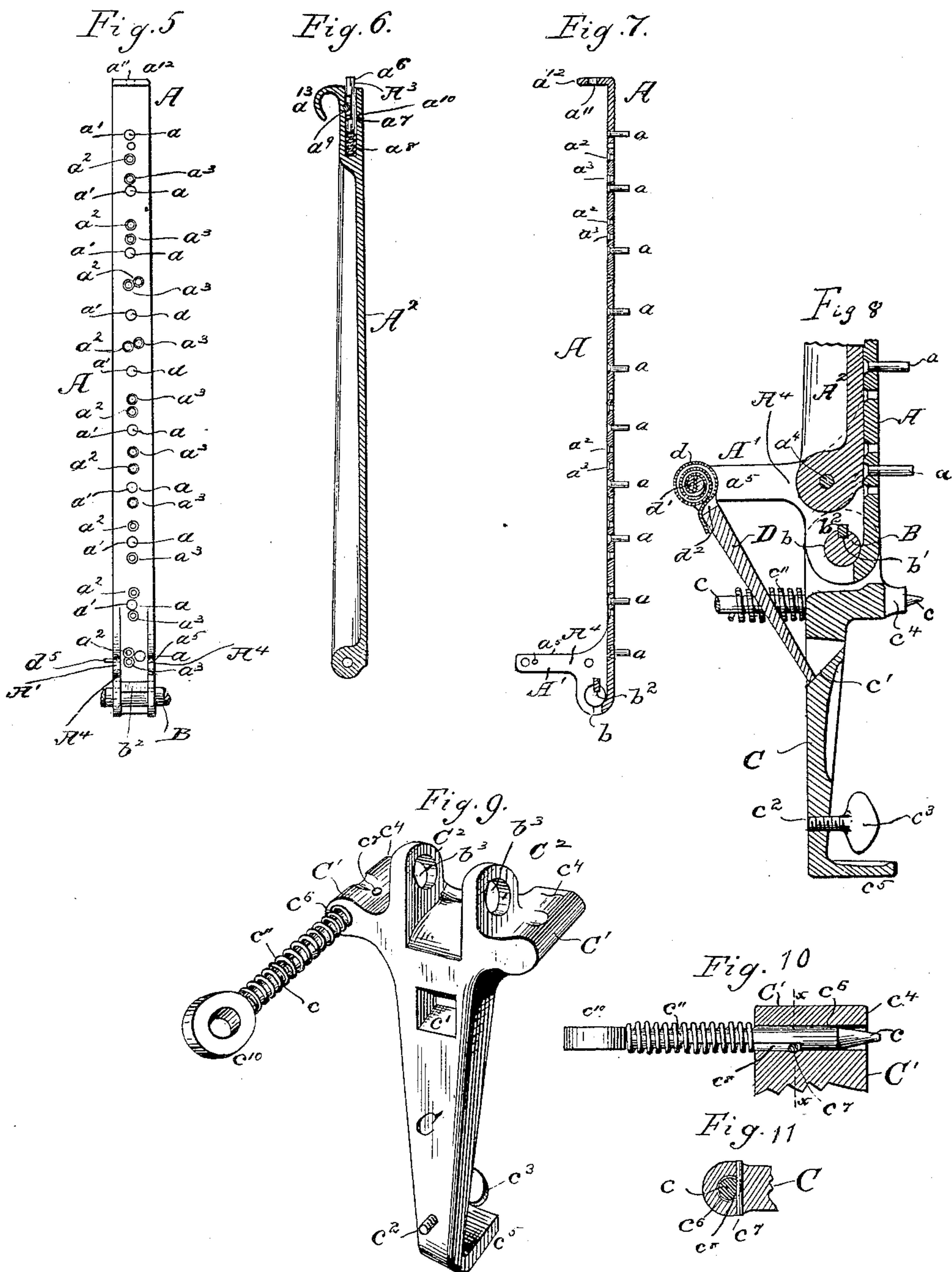


S. PERRY

LATHING APPARATUS.

No. 318,495.

Patented May 26, 1885.



Witnesses:

G. Huzel.

Geo. W. Frockett.

Inventor.

Stuart Perry

By M. E. Dayton
Attorney.

UNITED STATES PATENT OFFICE.

STUART PERRY, OF NEWPORT, NEW YORK.

LATHING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 318,495, dated May 26, 1885.

Application filed October 8, 1884. (No model.)

To all whom it may concern:

Be it known that I, STUART PERRY, of Newport, in the county of Herkimer and State of New York, have invented certain new and useful Improvements in Lathing Apparatus; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to an improvement in devices for holding laths in position to be nailed to walls and ceilings—such, for instance, as are described in Letters Patent No. 270,839, dated January 16, 1883, and also in Letters Patent No. 277,058, dated May 8, 1883, both of which were granted to the present applicant; and it consists in the matters hereinafter described, and pointed out in the claims.

In the patent first above mentioned a lathing device more particularly intended for use in lathing ceilings is shown and described, consisting of two parallel bars, connected at their ends, and provided upon opposite sides with lath-fastenings arranged in groups, the frame thus formed being adapted to have its two faces alternately presented to the surface to be lathed; and in the second patent mentioned a device is shown consisting of two disconnected bars provided with lath-supporting devices upon one side, and more especially designed for use upon side walls, although capable of use on ceilings also.

The apparatus herein illustrated as embodying the present invention embraces improved features of construction whereby the device may be used equally well upon side walls and ceilings, and is at the same time more easy to operate, simple in construction, efficient, and durable.

The invention may be more readily understood by referring to the accompanying drawings, in which—

Figure 1 is a front elevation showing the lathing apparatus fastened to and supported on two studs that form part of a wall or partition, the lath-supporting bars being arranged for holding the laths in position to be nailed to said studs. Fig. 2 is a side elevation of the same. Fig. 3 is a side elevation of the lathing apparatus in position to receive

a supply of laths. Fig. 4 is a side elevation of the same fastened to a ceiling and in position to apply laths thereto, and showing in dotted lines the lath-supporting bars in position to receive a supply of laths. Fig. 5 is an elevation showing the outer side of one of the lath-supporting bars detached from the other parts of the apparatus. Fig. 6 is a longitudinal section of a plate or bar which secures the lath-spacing and lath-holding pins or studs in the arm. Fig. 7 is a longitudinal central section of the bar shown in Fig. 5. Fig. 8 is a detail section taken upon line *xx* of Fig. 1. Fig. 9 is a perspective view of the main part or casting of one of the arms for sustaining the lath-supporting bars. Fig. 10 is a detail section showing the holding-pin illustrated in Fig. 8, taken through the part supporting said holding-pin. Fig. 11 is a section taken upon line *xx* of Fig. 10.

As illustrated in the drawings, A A are two lath-supporting arms or bars, which are provided upon their inner faces with lath-holding devices consisting of a series of pins or studs, *a*, approximately equal in length to the thickness of a lath. The bars A A are connected with each other by a transverse rod, B, engaged with apertures *b* in the lower ends of the bars, and preferably arranged to slide freely in a longitudinal direction, but not to rotate on the said bars. For the purpose last mentioned the rod B is preferably provided with a longitudinal groove, *b'*, engaged by splines *b''* upon the bars A A.

The lath-holding device consisting of the bars A A and the rod B is secured to the studs, joists, or furring of the wall or ceiling to which the laths are to be applied by means of fastening devices, herein shown as consisting of arms C, pivotally connected with the lower ends of the bars, and pins *c*, held in guide-apertures in the upper portions of the arms C, and adapted to be driven into the studs or joists, so as to hold the arms firmly in position upon the latter. The pins *c* are preferably made of conical form or tapering upon their inner ends, so that they may be readily withdrawn from an object into which they are driven.

The bars A A, which, as herein shown, are formed of metal, are provided near their lower

ends and adjacent to their points of connection with the arms C with forwardly extending or projecting arms A', adapted to engage the said arms, so as to support the said bars A in approximately horizontal position when the said arms are attached to a vertical surface, as clearly shown in Fig. 3.

Upon the outer end of each of the arms A' is pivoted a pawl, D, the lower end of which is adapted to engage a stop, c', herein shown as formed by a notch in the arm C. The said stop is arranged in position for engagement with the pawl when the bar A is approximately in alignment with the arm C, and the pawl is held in position to engage the stop by a spring, d, so that when the bar is lifted so as to bring the laths thereon against the surface to be lathed the pawl will automatically engage the stop and lock the bar in the position mentioned.

In the use of the apparatus constructed generally as above described upon a vertical surface—as, for instance, in lathing the walls of a room—the bars A A are first moved upon the rod B until they are the same distance apart as two adjacent studs, and the arms C are then secured to the studs by driving the pins c therein. The bars are then permitted to swing outwardly until supported in a horizontal position by the contact of the arms A' with the said arms C, when the laths are placed upon said bars between the studs a. This may be expeditiously accomplished by grasping a number of laths laid with their flat faces together and drawing them forward over the studs in such a manner as to allow a lath to catch upon and fall behind each stud as the laths are carried forward. After the laths have been placed upon the bars in this manner, the outer ends of the latter are lifted until they have assumed a vertical position, when the lower ends of the pawls D will engage the stops c', and thereby hold the bars with the laths thereon in contact with the studs and in position for nailing. When the several laths held upon the bars have been secured to the studding, the apparatus is removed by withdrawing the pins c, and is again attached above or below the group of laths previously fastened and again manipulated in the same manner in placing the next and succeeding groups.

In the employment of the apparatus for lathing ceilings the arms C are secured to the lower horizontal surface of the joists or furring in the same manner as before described; but the bars A A, instead of being sustained in a position at or nearly at right angles with the said arms C while the laths are being placed thereon, are supported in an inclined position, as indicated in dotted lines in Fig. 4. The bars may be supported in the position mentioned by one hand of the operator, while the other is engaged in placing the laths upon the bars; but preferably each of the arms C C is provided near its lower end with a second stop, c², adapted to engage the lower end of the pawl D when the bars are inclined at an

angle of about forty-five degrees from a horizontal line, as clearly shown in Fig. 4.

In the particular construction of the device herein shown the stop c² is formed by a thumb-screw, c³, inserted from the inner face of the arm C, and adapted to be advanced beyond the face of the arm, so as to engage the pawl D in doing overhead or ceiling work, and to be retracted to let the end of of the pawl pass freely over it when the apparatus is employed upon a vertical or side wall, and the stop is therefore not needed. In the construction herein shown also the arms C are sustained at their upper ends at some distance from the face of the studding by means of projections c⁴ upon the inner faces of the arms adjacent to the pivot-rod B, said projections being adapted to rest against the edge of a base-board or against the adjacent or top lath of a group of previously-applied laths, so as to properly gage the distance between the first or lower lath of the group held in the lath-bars and the said base-board or adjacent lath, as clearly shown in Fig. 2. The arms C are also provided at their lower ends with projections c⁵, adapted to rest against the surface of the studs, furring, base-board, or previously-attached laths, and to thereby afford spaces beneath the arms, within which the head of the thumb-screw c³ may be located. The upper stop, c', for the pawl D is, as before mentioned, formed by a recess in the arm C, and the bearing-surface of the said recess, as clearly shown in Fig. 8, is preferably arranged at an angle to the arm, with its inner portion nearer to the pivotal axis of the pawl than its outer portion, so that the end of the pawl in sliding inward upon said surface will force the upper ends of the bars A inward. By this construction the said bars may be held by the pawls and stops with the laths thereon against the studding or joists, either when the lower ends of the arms C are resting upon a lath, as shown, or upon a base-board of greater thickness than the lath, or upon the surface of the stud or joist to which the laths are applied. The fastening-pin c is, as herein shown, held in an aperture, c⁶, formed in a lateral wing or projection, C', upon the arm C, the said aperture being located below and with its axis at right angles to the pivotal axis of the arm. The pin is adapted to slide freely in the said aperture, and a suitable stop or pin, c⁷, engaged with a slot, c⁸, in the pin, as clearly shown in Figs. 10 and 11, operates to limit the inward and outward longitudinal movement of the pin. The said pin is provided with an enlarged head, c¹⁰, and a spiral spring, c¹¹, is placed around it, between its head and the wing C', to retain it in position for driving. The pin c is arranged at some distance laterally from the arm C and bar A, so that when the pin is driven into the middle of a joist or stud the bar A will not cover the portions of the laths and studs into which the nails are driven. The arms C are usually, for convenience in manufacture, made with two opposite lateral wings

or projections, C' , made continuous with the projections c^4 , before described, the pins c usually being placed in the wings at the outer sides of the arms.

5 In fastening the apparatus to studding or joists the pins c are driven inwardly by a few blows of the hammer until the outer end of the slot c^8 strikes the stop c^7 , when the inner end of the projections c^4 will be held in contact
10 with the stud, and the arm thereby secured firmly in place. The pin may be readily loosened and removed by tapping the outer end of the pin; or the pins may both be withdrawn at once by pulling forcibly outward upon the
15 upper ends of the bars A at the time the latter are held rigid upon the arms C by the engagement of the pawls D therewith.

In order to provide for the spacing of the laths in a more or less open order by varying
20 the distance between the adjacent laths of the series, each bar A is provided with several distinct series of apertures, in which the said studs may be interchangeably secured, the apertures in each series being equidistant
25 from each other, but the distance between any two apertures in any one series being greater or less than the distance between any two adjacent holes in any other series.

In Fig. 5 the lath-bars are shown as provided with three distinct series, a' a^2 a^3 , of
30 apertures, the pins a being represented as inserted in the series marked a' . The studs may be secured in the apertures a^2 a^3 in any well-known or preferred manner—as, for instance,
35 by screw-threading the apertures and the studs. Preferably, however, the studs are provided with heads upon their inner ends, and are inserted through the apertures and held in place by a bar, A^2 , secured to the bar
40 A , upon the outer face of the latter, in contact with the said heads.

In the construction of the device for holding the studs in place herein shown and preferably employed the heads upon the pins are
45 countersunk in the outer face of the bar A , and the bar A^2 is hinged thereto by a pivot-bolt, a^4 , preferably located adjacent to the rod B , and its opposite end is provided with a spring-catch, A^3 , Fig. 6, adapted to engage a
50 suitable aperture in or projection upon the outer end of the bar A and to thereby detachably hold the said bar A^2 in place.

In the particular construction herein shown each of the bars A is provided at its end adjacent to the rod B with two forwardly-projecting side flanges, A^4 , between which the
55 bar A^2 is pivoted by means of the pivot-bolt a^4 , and in which the apertures b for the said rod are formed, the spline b^2 , before mentioned, as more clearly shown in Fig. 8, being
60 secured at its ends in notches in the said flanges.

In the apparatus herein illustrated also the arms C are connected with the rod B by
65 means of two parallel ears or lugs, C^2 , provided with suitable apertures, b^3 , for the rod and located at either side of the flanges A^4 of

the bars A , and the bars and arms are prevented from coming off the ends of the rods by removable pins b^4 , inserted through the
70 said rod near its ends. The arms upon the bars A are desirably formed by means of two parallel parts or projections, a^5 , upon the flanges A^4 , and the pawls D are pivoted to the said arm A' by means of a pivot-pin, d' ,
75 inserted through the said parts a^5 and the said pawls. When this construction of the parts is used, the spring d for holding the pawl in contact with the arm C , is desirably made of spiral form, as shown, and the end of
80 the pawl engaged with the pin is provided with a central notch, d^2 , to receive the spring, which latter is held at its inner end in a longitudinal slot in the pin d and rests at its outer end against the outer surface of the pawl, as
85 more clearly shown in Fig. 8.

To keep the pin d from rotating under the action of the spring, and to enable the tension of the latter to be adjusted, said pin is provided with a head, d^3 , having several
90 notches, d^4 , in its margin, one of which is engaged by a pin, d^5 , in the outer face of one of the parts a^5 of the arms. The pin d may obviously be turned to bring either of the notches
95 d^4 into engagement with the pin d^5 ; and the spring thereby made to act upon the pawl with more or less pressure, as desired.

As illustrated in the accompanying drawings, the spring-catch A^3 , before mentioned, is formed by a bolt, a^6 , fitted to slide in an aperture, a^7 , in the end of the bar A and held
100 outwardly by a spiral spring, a^8 , located in the aperture beneath the bolt. The bolt is held from coming out of the aperture by means of a transverse pin, a^9 , in the bar,
105 which engages a recess, a^{10} , formed in one side of the bolt a^6 , so as both to limit the longitudinal movement of the bolt and to prevent the latter from turning in its seat. The bolt a^6 is preferably constructed to engage an aperture,
110 a^{11} , in an outwardly-turned flange or projection, a^{12} , upon the end of the bar A , the aperture being extended entirely through the flange, so that the bolt may be readily pushed
115 inward to release the bar A^2 by means of a nail or other slender instrument.

The bars A^2 may be desirably provided, as shown, with outwardly curved or hooked projections a^{13} , which serve as handles in manipulating the bars A .

120 Instead of the movable pins a , other well-known means may be used to vary the spacing of the laths upon the bars—as, for instance, separate pieces provided with projections or recesses differing in their distances apart in
125 the different pieces may be interchangeably attached to the said bars; and my invention is not, therefore, as it relates to this feature of the invention, limited to the particular construction herein shown, except in the claim
130 in which such construction is specifically set forth, but is intended to cover, broadly, any device adapted to vary the spacing, substantially in the manner described.

It is obviously practicable to use the lath-holding bars A together with the attaching-arms C connected therewith without the connecting-rod B by fastening the bars separately upon the joists or studding with the axes of hinged joints between the bars and the attaching-arms in alignment with each other, and moving the bars simultaneously with the hands in raising said bars after the laths have been placed thereon.

As far as it relates to features of construction in the lath-bars and the fastening devices for securing them to the surface to be lathed, therefore, my invention is not limited to the use of the said rod in connection with the lath bars. It will also be obvious that it is practicable to use but one lath-holding bar A, having an attaching-arm, C, connected therewith—as, for example, the bar could be widened and the pins or studs *a* made of sufficient width to form broad bearings for the edges of the laths, whereby one bar thus equipped would serve to hold a series of laths at the middle of the latter. The principal object of the rod B is to hold the said lath-bars at the proper distance apart and parallel with each other, and for this purpose it is obviously not necessary that the said rod should be arranged to form the pivotal connection between the said bars and arms, as herein shown, but one or more rods having sliding connection with the lath-bars at any desired point or points, or any other device adapted to hold the said bars parallel with each other and to allow their lateral adjustment, may obviously be used with substantially the same results.

While it is preferable to have both of the lath-holding bars fitted to slide on the rod B, yet, if desired, the rod can be rigid with one bar, and a sliding connection formed only between the rod and the remaining bar. My invention, therefore, as it relates to means for connecting the lath-bars, is not limited to the particular construction herein shown, except in the claims in which such construction is specifically set forth.

Heretofore a lathing-machine has been provided with a lath-supporting frame detachable from a main frame, and having a series of slides between which the laths are placed, springs being arranged between said slides so as to permit them to yield to irregularities of width which may exist in the laths; but in such instance the width or thickness of the slides determines the distance at which the laths are set apart, whereas by my improvement the stops may be positively adjusted or set at will into fixed positions on the lath-holding bars so as to vary the distances of the laths apart as may be desired.

I claim as my invention—

1. The combination, with a lath-holding-bar, of means for supporting said bar, consisting of an arm pivotally connected with the said bar and provided with fastening devices constructed to detachably secure the said arm to the surface to which the laths are applied, and

means, substantially as described, for holding the bar in position with the laths supported thereby against the surface to be lathed, whereby the arm may be lowered to receive the laths and lifted and held with the laths in position for nailing, substantially as described.

2. The combination, with a lath-holding bar, of means for supporting said bar, consisting of an arm pivoted to the bar and provided with fastening devices constructed to detachably secure said arm to the surface to which the laths are applied, and automatically-acting means, substantially as described, for holding the bar in position with the laths thereon against the surface to be lathed, substantially as described.

3. The combination, with a lath-holding bar, of means for supporting said bar, consisting of arms pivoted to the bar and provided with a fastening device for detachably securing said arms to the surfaces to which the laths are applied, and a spring-pawl pivoted upon the bar, said arm being provided with a stop adapted for engagement with said pawl, so as to hold the bar in position with the laths thereon against the surface to be lathed, substantially as described.

4. The combination, with a lath-holding bar, of means for supporting the said bar upon the surface to be lathed, consisting of an arm pivoted to the said bar and provided with a fastening device, substantially as described, the said bar being provided with a projection, A', adapted to engage the arm so as to sustain said bar in position to receive the laths, and means, substantially as described, for holding the bar with the laths held thereon in position for nailing, substantially as and for the purpose set forth.

5. The combination, with a lath-holding bar, of means for supporting said bar upon the surface to be lathed, consisting of an arm pivoted to said bar and provided with a fastening device, substantially as described, a projection, A', upon the bar adapted to support said bar in position for receiving the laths, and a pawl pivoted upon the said projection A', the said arm being provided with a stop adapted to engage the pawl so as to hold said bar against the surface to be lathed, substantially as and for the purpose set forth.

6. The combination, with a lath-holding bar, of means for supporting said bar upon the surface to be lathed, consisting of an arm pivotally connected with said bar and provided with a fastening device, substantially as described, a projection, A', upon the bar adapted to rest against the arm so as to sustain the bar in position for receiving the laths in lathing a vertical surface, and a pawl pivoted upon said projection A', the said arm being provided with a stop adapted to engage the pawl so as to hold the bar with the laths thereon in position for nailing, and also with a stop for engaging the pawl so as to sustain the bars in position to receive the laths in overhead work, substantially as described.

7. The combination, with a lath-bar provided with a suitable lath-holding device, of means for supporting said bar upon the surface to be lathed, consisting of an arm, C, pivotally connected with said bar and provided with a fastening device, substantially as described, a projection, A', upon the bar, and a pawl pivoted upon the said projection A', the said arm being provided with a stop, c', adapted for engagement with the said pawl, and a movable stop, c², adapted to be placed in position for engaging the pawl in overhead work, substantially as described.

8. The combination, with two lath-holding bars, and means for supporting said bars upon the surface to be lathed, consisting of arms pivoted to the bars and provided with attaching devices, substantially as described, of means, substantially as described, for uniting the said bars, substantially as and for the purpose set forth.

9. The combination, with two lath-holding bars, and means for supporting the said bars upon the surface to be lathed, consisting of arms pivoted to the bars and provided with attaching devices, substantially as described, of a rod uniting the said bars and having sliding connection with one or both of the latter, substantially as and for the purpose set forth.

10. The combination, with the lath-holding bars, of arms C, provided with fastening devices whereby said arms may be detachably secured to the surface to be lathed, a grooved rod, B, affording pivotal connection between said bars and arms, the said bars being provided with splines engaged with the groove of the rod, whereby said bars are adapted to slide longitudinally upon the rod and are held parallel with each other, substantially as described.

11. The combination, with a lath-holding bar, of means for supporting said bar upon the surface to be lathed, consisting of an arm, C, pivoted to the said bar and provided with a fastening-pin, c, substantially as and for the purpose set forth.

12. The combination, with a lath-holding bar, of an arm, C, pivoted to said bar, a fastening-pin, c, held in a suitable guide-aperture in the said arm, a stop for limiting the longitudinal movement of the said pin, and a spring applied to retain the pin at the outward limit of its movement, substantially as and for the purpose set forth.

13. The combination, with a lath-bar provided with two or more separate series of apertures, of a series of lath-holding studs adapted for insertion in either of said series of apertures, whereby the widths of the spaces between the said studs may be changed, substantially as and for the purpose set forth.

14. The combination, with a lath-bar pro-

vided with two or more separate series of apertures, of a series of headed lath-holding studs adapted for insertion in either of said series of apertures, and a removable bar attached to the said lath-bars over the heads of the studs, substantially as and for the purpose set forth.

15. The combination, with a lath-bar, A, provided with two or more series of apertures, of a series of headed lath-holding studs adapted for insertion in either of said series of apertures, a bar, A², hinged at one end to the said lath-bar, and a catch for detachably securing the opposite end of the said bar A² to the lath-bar, substantially as and for the purpose set forth.

16. The combination, with a lath-holding bar, of an arm, C, hinged to said bar and provided with a fastening device whereby it may be attached to the surface to be lathed, and with a projection, c⁴, upon its inner face adapted to rest against a base-board or the top lath of a group of previously-attached laths, substantially as and for the purpose set forth.

17. The combination, with a lath-holding bar, of an arm, C, hinged to said bar and provided with a fastening device whereby it may be attached to the surface to be lathed, said arm being provided upon its inner face with a projection, c⁴, adjacent to its points of connection with the lath-bar, and with a projection, c⁵, at its free end, substantially as and for the purpose set forth.

18. The combination, with a lath-holding bar, A, of an arm, C, hinged to said bar and provided upon its inner surface with a projection, c⁴ c⁵, and upon its outer face with a stop, c', a fastening device upon said bar for detachably securing it upon the surface to be lathed, a pawl, D, pivoted to the bar A, and constructed to engage the stop c', and a set-screw, c³, inserted through the arm C and adapted to project from the outer face thereof, so as to form a stop for the pawl D in doing overhead work, substantially as described.

19. The combination, with a lath-holding bar, A, of an arm, C, hinged to said bar, a fastening device for detachably securing said arm upon the surface to be lathed, and a pawl, D, pivoted to the said arm A, said arm C being provided with a stop, c', for the pawl, having an inclined surface operating to force the bar toward the surface to be lathed when the end of the pawl is thrust inwardly thereon, substantially as described.

In testimony that I claim the foregoing as my invention I affix my signature in presence of two witnesses.

STUART PERRY.

Witnesses:

J. T. WOOSTER,

DANIEL P. WOOSTER.