(No Model.) 3 Sheets—Sheet 1.

F. H. HALEY.

COMBINATION STAND.

No. 575,711. Patented Jan. 26, 1897.

Fig. 6.

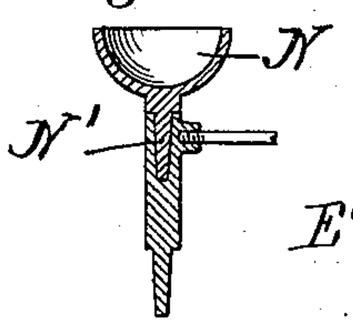

Fig. 1.

Fig. 7.

Fig. 8.

Witnesses,
E. T. Wray.
Jean Elliott

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(No Model.)

3 Sheets—Sheet 2.

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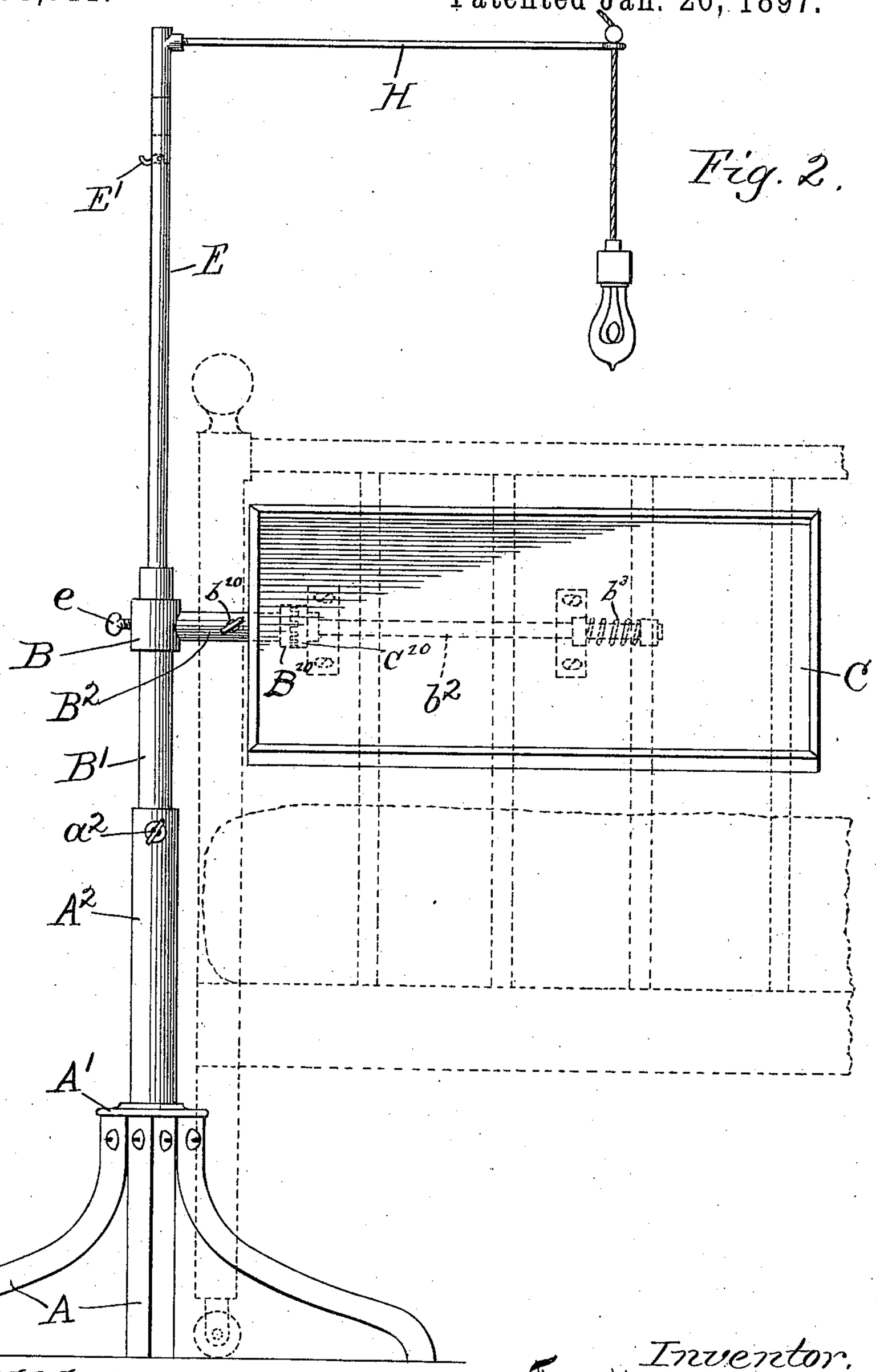

Fig. 2.

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F. H. HALEY.

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Fig. 3.

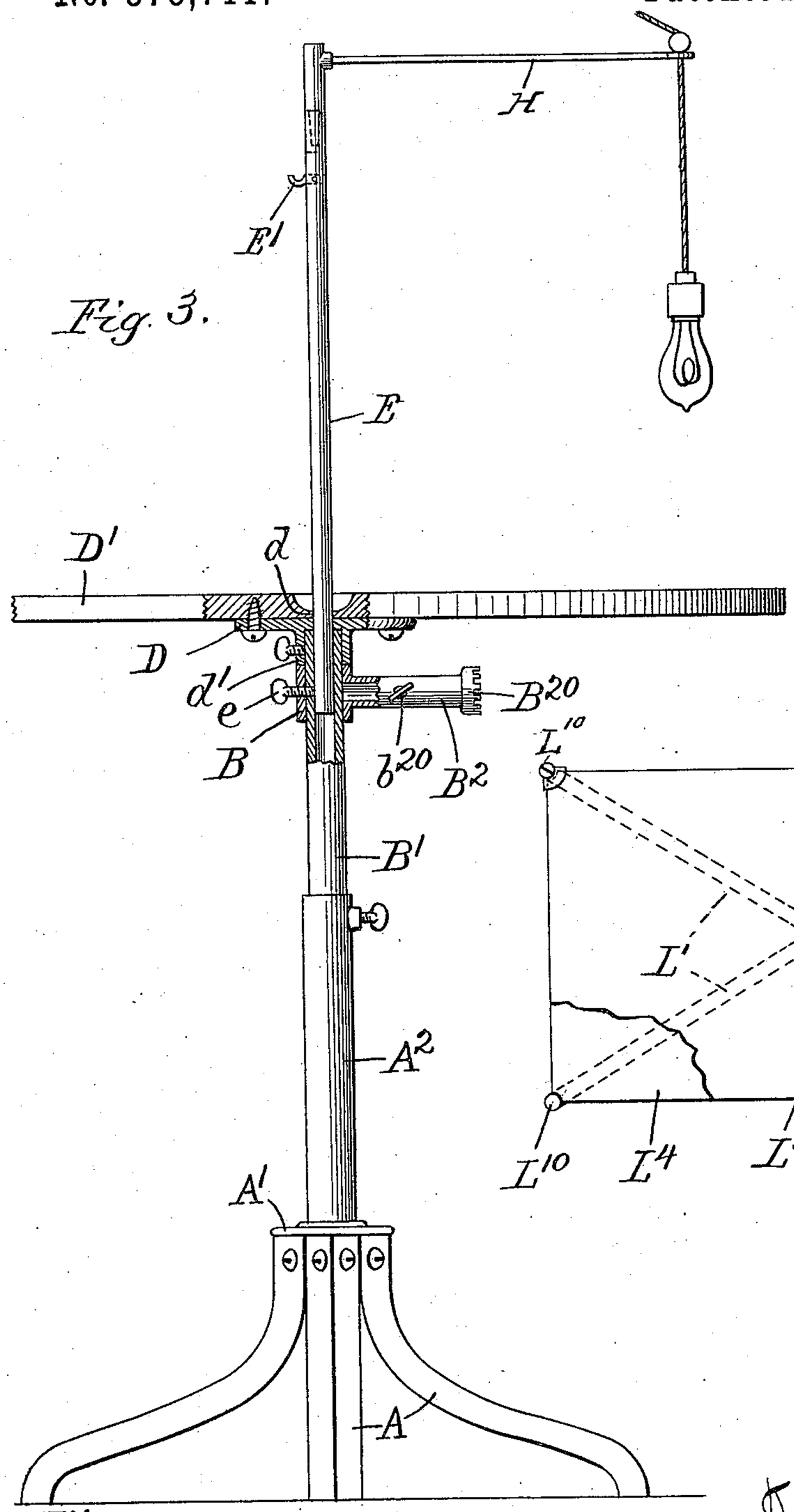


Fig. 4.

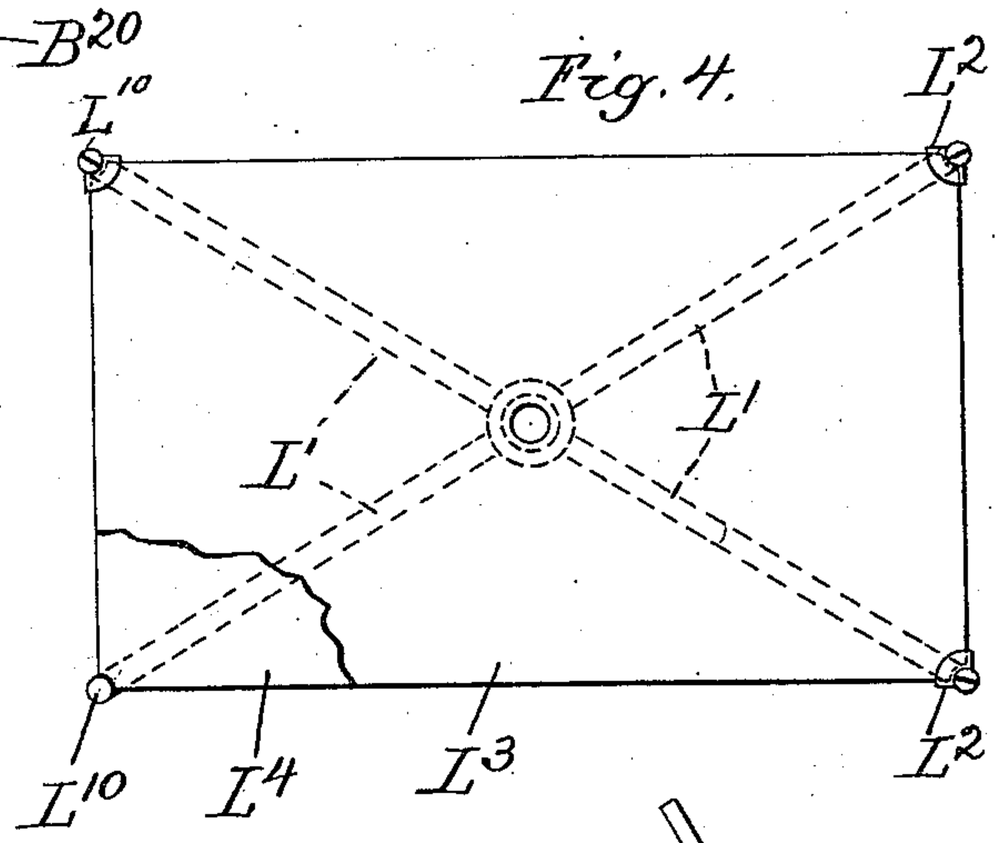
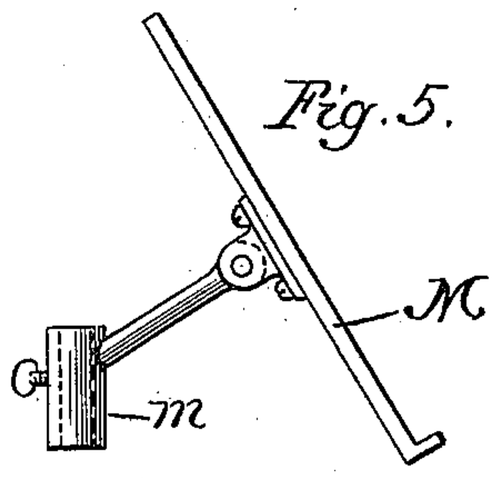


Fig. 5.



Witnesses,
E. T. Wray.
Jean Elliott.

Inventor.
Fred H. Haley
by Burton & Burton
his attys.

UNITED STATES PATENT OFFICE.

FRED H. HALEY, OF BATAVIA, ILLINOIS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE COMBINATION STAND COMPANY, OF SAME PLACE.

COMBINATION-STAND.

SPECIFICATION forming part of Letters Patent No. 575,711, dated January 26, 1897.

Application filed February 28, 1896. Serial No. 581,219. (No model.)

To all whom it may concern:

Be it known that I, FRED H. HALEY, a citizen of the United States, residing at Batavia, county of Kane, and State of Illinois, have invented certain new and useful Improvements in a Combination-Stand, which are fully set forth in the following specification, reference being had to the accompanying drawings, forming a part thereof.

This invention is a stand and interchangeable appliances adapted to be associated therewith in several combinations, whereby the entire outfit is adapted for two general classes of use, the first and primary use being as a hospital or sick-room appliance and surgeon's or physician's table, and the second being made for orchestra use as a music-holder.

The invention consists in the details of construction by which the device is adapted to be adjusted and the several appliances interchangeably assembled for the several purposes for which it is intended, as specifically set out in the claims.

In the drawings, Figure 1 is a sectional elevation showing my improved stand with the several hospital appliances for which it is designed assembled together in certain positions for use, certain parts being shown in section at the axis of the stand. Fig. 2 is an elevation showing the standard with an invalid's table and light in position overhanging a bed, which is shown in dotted line, the other appliances being removed. Fig. 3 is a similar view, partly sectional, at the axis of the standard, showing a plain round table supported on the standard, the invalid's table being detached. Fig. 4 is a plan of the surgeons' shelves or platens and their support, which is shown in position on their standard in Fig. 1. Fig. 5 is a side elevation showing a music-desk adapted to be substituted for certain of the surgical appliances. Fig. 6 is a partly-sectional elevation of a sponge-cup or vase or lamp holder which may be substituted for or mounted above the light-supporting crane shown in Figs. 1, 2, and 3. Fig. 7 is a plan of the slop-jar holder. Fig. 8 is a face elevation of the clutch provided for adjustment of the inclination of the invalid's table.

My improved stand comprises a base having legs A A, spreading from a central hub A′, which is preferably angular, the legs being made in form to clasp the angles and adapted to be secured thereto. One purpose of the device being to support a table to overhang a bed the legs are made in form to pass under the bed, and for that purpose droop quickly from the central hub and have their length mainly quite low or close to the floor, so that they will extend under a low bed and allow the standard to approach quite near to the side of the bed. From the hub A′ a tubular post or standard A^2 extends upward and receives the telescoping stem B′ of a bracket which comprises a horizontal arm B^2, which is also tubular, to adapt it to receive a telescoping horizontal arm b^2, on which a table C is pivotally supported and adapted to rock over such support. The pivotal connection between the table and the arm b^2 is made by suitable brackets C′ and C^2, the latter of which has a notched disk C^{20}, which is a counterpart of a similar notched disk B^{20}, which terminates the end of the bracket B^2. On the end of the arm b^2 a stop-nut b^{20} is screwed, a coiled spring b^3 being interposed between the nut and the bracket C′, tending to force the table C inward on the arm and thereby to force the notched disk C^{20} of the bracket C^2 into engagement with the counterpart notched disk B^{20} on the arm B^2.

The number of notches in the disks C^{20} and B^{20} is sufficient to permit the adjustment of the table C to all desired angles from horizontal, face upward, to horizontal, face downward. I have shown adjustment at intervals of thirty degrees, which adapts the table to be used horizontal for eating, at thirty degrees inclination for writing, at sixty degrees inclination for reading when the patient is able to recline, at vertical position for reading when the patient is unable to raise the head far enough to use the table at sixty degrees, and even to position facing downward at an inclination thirty degrees from vertical, which may be sometimes found a practicable position to permit the patient lying flat on his back to read a paper or book secured to the table so inclined. The tension of the spring b^3 is produced by inserting the arm b^2

to the necessary depth in the socket of the bracket-arm B^2, and a thumb-screw b^{20} serves to secure it. A thumb-screw a^2, set through the post A^2, secures the spindle or stem B′ in the tubular post A^2 at any depth to which it may be telescoped, according to the height at which it is desired to adjust the table C, and at any position to which it may be adjusted by rotating at the telescoping joint thus formed between the two parts.

D is a flange whose hub d' is bored to fit onto a suitably-turned seat provided for it at the upper end of the hub B of the bracket-stem B′. This flange is intended to hold a circular table D′, which is secured to its upper face and may overhang the inner end of the table C when both are in position at the same time, but which will sometimes be removed when the table C is to be used, especially if the latter is to be used at considerable inclination.

By removing the table C and its supporting-arm b^2 the stand, with the table D, becomes an ordinary round table or center table with a rotatable top adapted for any use to which such a table may be applied, and one feature of my invention consists in the convertibility of the appliance from the hospital or sick-room table to the ordinary center table in this manner. The table D has a central aperture d, through which a rod E may extend, said rod passing down through the center of the hub B of the bracket-arm B^2 and on down through the tubular stem B′, a thumb-screw e being provided, set into the hub B, to secure the rod adjusted to any desired elevation, the rod being adapted, however, to be dropped out of sight or flush with the top of the table D′. The purpose of this rod E is to sustain, adjustably as to height, any one or more of several appliances adapted to be used in conjunction with either of the tables C or D or in conjunction with the basin-holder hereinafter described.

In Fig. 1 I have shown three separate devices supported on the rod E. Of these F is the fountain-bag of a fountain-syringe, the elevation of which affords the force by which the syringe is supplied. For the purpose of supporting this syringe-fountain the rod E is provided with a hook E′. This hook, in order to permit the rod to be dropped through the table out of sight when it is not required for use, is arranged to fold up into a slot e' in the rod, being stopped at the lower end of the slot when it is dropped down in position for use. Another of the appliances supported on the rod is a fountain or head-water supply G of a hot-water-circulating apparatus. The fountain G has a laterally-projecting stem terminating in a vertically-apertured cross-head or stem g, which fits about the rod or stem E, and is provided with a clamp-screw g' to secure it thereto.

The hot-water-circulating apparatus comprises the heater G′, designed to stand upon either of the tables, and the pad G^4, adapted to be applied to the patient. These pads, as is well understood, are made in various forms, according to the specific use for which they are designed.

I have represented one of the simplest forms—a plain circular pad, such as might be used as a hot application to any part of the body. From the fountain G the cold-water pipe G^2 leads to the heater G′, entering at the bottom of the water-chamber, from the upper part of which the hot-water pipe G^3 leads to the coil G^{40} in the pad G^4, from which the return-pipe G^5 leads back to the fountain, which it enters at or below the water-line.

G^{20} is a check-valve for the pipe G^2, permitting the flow of water from the fountain to the heater and preventing flow in the reverse direction. This appliance, other than as to the means for supporting the several parts, I do not claim as a part of the present invention, but since the rapidity of flow, with a given difference of temperature in the two parts of the circulating system between which the heater is located, is affected by the elevation of the fountain above the level of the heater, and since it is often desirable to regulate the flow according to the temperature which it is desired to maintain at the pad, or for other reasons, the adjustability of the support for the fountain relatively to the support for the heater and the convenience of having at hand the proper supports for both gives importance to this feature of my invention.

The third device supported upon the rod E is a swinging crane H, having at the extremity a suitable eye or other device for holding an electric lamp, which may be pendent from above the table and which it may be desirable to adjust and hold in some special relation to any of the other parts of the device which may be in use. For example, if the patient is using the table C for reading or writing the crane H may be adjusted for holding the lamp in proper relation to the table. If the attendant is using the fountain-syringe, or the surgeon is making use of hereinafter-described features of the device in performing some surgical operation, the light may be adjusted to proper position to facilitate such process.

K is a bracket-arm adapted to be removably and adjustably secured to the post A^2 below the table, the securing device consisting of a two-part hinged clamp K′ K^2, having suitable latch K^{20} to lock the two parts together about the post. This bracket-arm terminates in a loop K^3, intended to support a slop or waste basin K^4, the margin of which has one or more notches K^{40}, adapted for hooking onto it the discharge-nozzle of the waste-pipe $F^\times$ from the syringe or other device which may be used in connection with the fountain F.

To adapt the device especially for use in case of surgical operations, I provide a holder for surgeons' shelves or platens to be substi-

tuted for the round table D. This device is represented in place in Fig. 1. It consists of a spider (seen in Figs. 1 and 4) comprising a hub L and arms L′ L′ L′ L′, extending horizontally from the hub and bent upward at their outer extremities at equal distances from the hub to form the uprights L^{10} L^{10}, which terminate in a manner adapting them to be secured to the corner-clips L^2 L^2, which are secured in a manner familiar to those acquainted with the art to the corners of the glass shelf or platen L^3.

L^4 is a metal shelf or platen adapted to lie on the arms L′ L′ and is notched at its corners to receive the uprights L^{10} L^{10}, which prevent its escape after it has been placed in position, which may be done by entering it diagonally, as shown in dotted line in Fig. 1, and then dropping it to horizontal position on the arms. The hub L corresponds in form to the hub *d′* of the flange D and is designed to be substituted for the latter when the table D′ is removed. Both the glass shelf or platen L^3 and the metal shelf or platen L^4 are apertured at the center to admit the rod E, so that it may be employed with the auxiliaries which it is intended to support, or such of them as may be required simultaneously with the surgeons' shelves.

N is a cup or holder of the general form of such devices, having the spindle N′, which may be inserted in the upper end of the rod E, in the same place as the light-crane when that is removed, or in the similar socket *h* on the stem of the light-crane. It is designed to be used as a sponge-cup or in any other manner for holding a disinfectant, or as a vase or a lamp holder, or for any other purpose consistent with its position with respect to the remainder of the apparatus.

This same stand is useful for orchestral purposes to afford supports for the music of different performers, some of whom perform sitting, while others stand. Thus, for example, the table C may be adjusted to a suitable height and inclination to accommodate the music of a seated performer, while the rod E may support at its upper end in the same position in which it holds at other times the fountain G any familiar form of reading-desk M, which is represented in Fig. 5 with its socket *m* of the form of the socket *g* of the fountain G.

I claim—

1. In combination with the standard, the bracket rotatably mounted thereon; the horizontally-extended single arm b^2, adapted to be rigid with the bracket, and the table C supported and adapted to slide on and to rock over said arm; a spring stopped on said arm and reacting against a stop on the table tending to set the table inward on the arm, one of the pivotal supports of the table on the arm constituting one part and the end of the bracket B^2 constituting the counterpart of a two-part clutch adapted to be engaged by the inward tendency given to the table by the spring, said two parts of said clutch being engageable at a plurality of positions and disengageable by sliding the table outward on the arm against the tension of the spring.

2. In combination with the standard, the bracket-arm B^2, rotatably mounted thereon and having a horizontal socket; the single arm b^2 detachably secured in said socket; the table having brackets by which it is supported and adapted to slide on and to rock over said arm b^2; a spring stopped on the arm and reacting against one of the table-brackets tending to set the table inward on the arm toward the end of the socketed arm B^2, the innermost of said table-brackets and said arm B^2, being at their proximate faces correspondingly notched and adapted to be held in engagement by the inward tendency given by the spring and to be disengaged to permit the table to be rocked on the arm by sliding the table outward on the latter against the tension of the spring.

3. In combination with the standard and the table supported thereby, the rod E telescoping within the standard down past the level of the point of support of the table on the latter and extending above the level of the table, a detachable fountain supported at the upper end of the telescoping rod, and the basin having its holder K removably attached to the standard below the table.

4. In combination with the standard, a table having a tubular spindle or stem telescoping within the standard and having its tubular aperture extending from its upper end down past the level of the upper end of the standard when the stem is telescoped therein; the stem or rod E telescoping within said tubular stem down past the level of the attachment of the table thereto; a fountain supported at the upper end of said stem or rod, and a basin-holder K, removably and adjustably attached to the standard below the table.

5. In combination with the standard, a stem or spindle vertically adjustable with respect to the standard; a table supported thereby, said stem or spindle being tubular, and a rod or stem E telescoping within the same and adapted to be depressed down past the level of the connection of the table to said stem and without limit by reason of such connection, and adapted normally to extend above the level of said table, said rod or stem having the slot *e′* and the hook E′ pivoted to the rod and adapted to fold up into said slot and to be stopped at the lower end of the slot when it is thrown outward: substantially as set forth.

6. In combination with the standard, the table-supporting bracket having a spindle or stem telescoping within the standard, and a rod E telescoping within said spindle or stem down past the level of the table-supporting device, and the light-crane rotatably connected to said rod at the upper end thereof, and suitable means for connecting said parts in adjustment with respect to each other.

7. In combination with the standard, a table rotatably supported thereby; the rod E vertically adjustable penetrating the table-supporting device on the standard at the upper end in axial line with the standard, and adapted to telescope therethrough and within the standard, and the light-supporting crane rotatably supported on said rod.

8. In combination with the standard, a table supported thereby, the rod E telescoped within the standard extending above the level of the table; a fountain carried by the rod and vertically adjustable therewith; a water-heater adapted to be supported on the table; a surgical pad having its coil suitably connected to the heater and to the fountain, and a flexible pipe connection between the fountain and the heater: substantially as set forth.

9. A combination-stand for hospital and surgical use comprising the standard, the table C and its supporting-bracket rotatably and vertically adjustable with respect to the standard; the surgeons' platens supported on the bracket centrally with respect to the table and with respect to the standard and rotatable at such support; the rod E telescoping within the bracket-stem and standard and extending through the platens and provided with means for supporting the syringe-fountain and the water-circulating fountain; and the light-crane pivotally supported at the extremity of the rod, and the slop-basin holder adjustably and detachably secured to the exterior of the standard below the table C, all substantially as set forth.

10. In combination with the standard, a spider having the hub L, the arms L'; the corner-posts L^{10}; in combination with the metal shelf adapted to be lodged on the spider-arms and retained between the corner-posts, and the glass shelf having clips adapted to be secured to the corner-posts respectively, substantially as set forth.

Chicago, February 24, 1896.

FRED H. HALEY.

In presence of—

CHAS. S. BURTON,

JEAN ELLIOTT.