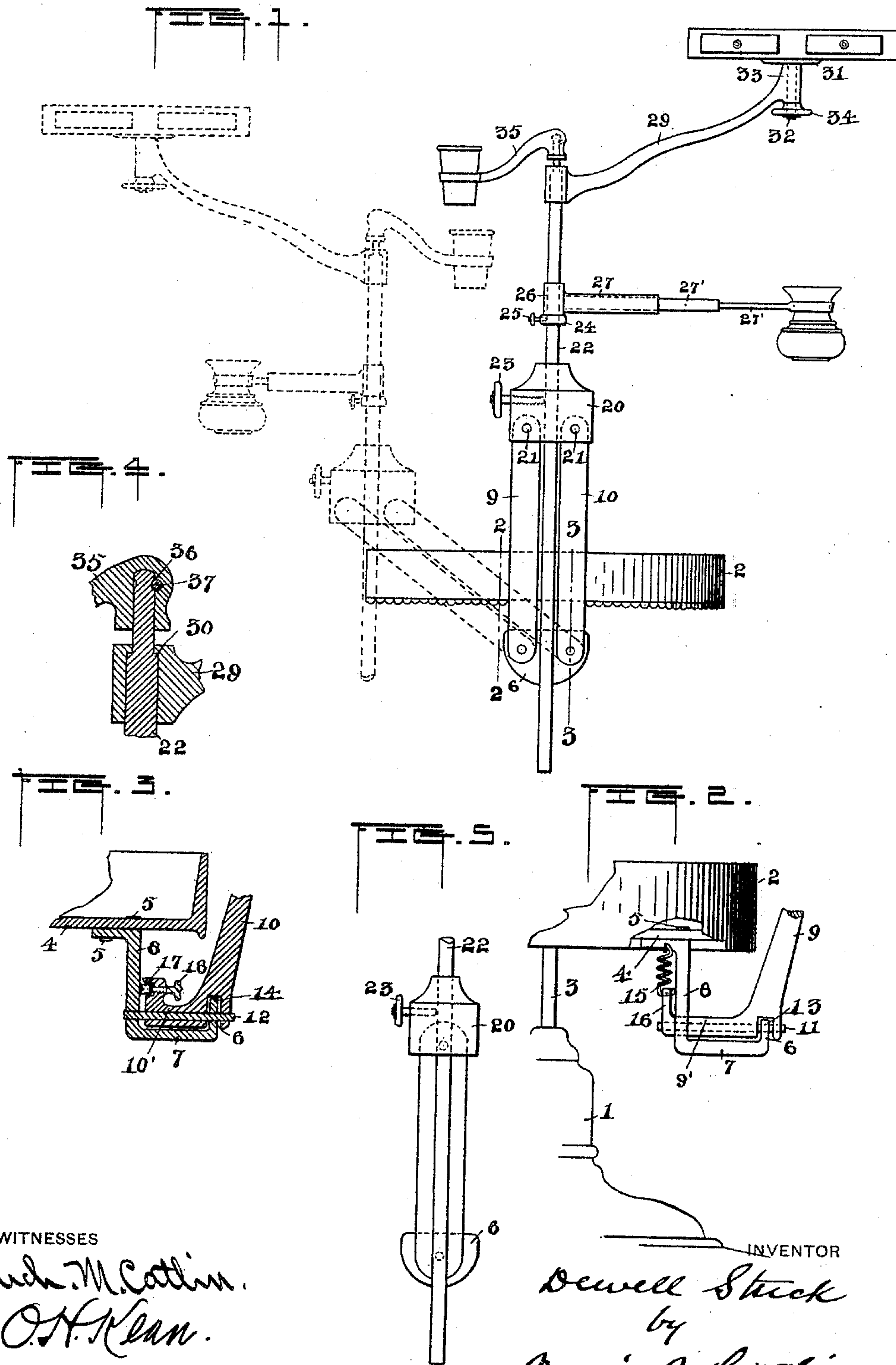


(No Model.)

D. STUCK.
BRACKET FOR DENTAL CHAIRS.

No. 491,610

Patented Feb. 14, 1893.



WITNESSES

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BRACKET FOR DENTAL CHAIRS.

SPECIFICATION forming part of Letters Patent No. 491,610, dated February 14, 1893.

Application filed March 19, 1892. Serial No. 425,547. (No model.)

To all whom it may concern:

Be it known that I, DEWELL STUCK, a resident of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Dental Chairs; 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 pertains to make and use the same.

The invention relates to chairs suitable for dentists' use and for like purposes, and means for adjustably supporting various devices in convenient proximity to such chairs; and it consists in the construction hereinafter described and particularly pointed out.

In the accompanying drawings: Figure 1 is a side elevation; Fig. 2 is a front elevation; Fig. 3 is a section on line 3—3 of Fig. 1; Fig. 4 is an enlarged detail; and Fig. 5 is a modified detail.

Numerals 1 denotes a chair base, 2 a seat frame and 3 an intermediate seat supporting pedestal or plunger. 4 indicates a transverse bar upon which is pivotally supported the seat frame and which is itself sustained by the pedestal or plunger 3. To the left end of the bar 4, having reference to the occupant of the seat, is fixed by screws 5 or by other suitable means a bent hanger having a main portion 8 a horizontal part 7 and an upturned end 6. Two frames 9 and 10 are pivotally supported in this hanger by means of pivots 11 and 12, which are secured in the vertical parts 6 and 8 of the hanger. These frames are bent in form similar to the hanger and are slotted at 13 and 14 to embrace the upturned rounded end of the hanger. By means of the slots which embrace the upturned part 6 of the bracket, the frames 9 and 10 are guided in a constant plane and their pivots 11 and 12 are so arranged that said plane shall be near and always parallel to the side of the chair. Furthermore the frames are supported upon said part 6 in manner to partially relieve the pivots which latter are made of considerable length and have bearings in one case in the bracket on each side of the horizontal part 10' of the frame, which bearings are several inches apart to insure greater steadiness of movement, the horizontal part 7 of the bracket being made long enough to admit the parts 9'

and 10' as indicated. The horizontal part 9' of the frame 9 extends to the rear of the hanger and its rear upturned end 16 is provided with a spring or springs 15, which connect it with the hanger near the chair seat frame. These springs may have an equivalent connection directly with the seat frame or bar. The rear of the frame 10 is bent up in front of the hanger and provided with a friction block 17.

18 is a set screw for forcing the block against the hanger when desired.

The spring 15 is at rest when the frames are vertical but is put under tension by any movement thereof, about their pivotal supports and thus is adapted to aid in holding them at any desired angle, which holding action may be supplemented by the set screw. They also aid in returning the frames to the vertical position.

The frames 9 and 10 at their upper ends are made to support a block 20 by means of pivots 21.

22 is a rod or bar vertically adjustable in an opening through the block and adapted to be secured by a set screw 23. A smaller block 24 having a similar opening to receive the rod is adapted to be fixed thereon by a set screw 25.

26 is a sleeve supported on the rod by block 24 and having a tubular arm 27. Telescoping extensions are denoted by 27' the outer one of which is adapted to receive and sustain a spittoon or other article.

29 denotes a table supporting arm having a sleeve connection with the rod 22. The rod is provided with a shoulder 30 and the upper end of the opening through the sleeve is constructed to form a shoulder which rests upon said shoulder 30. The table which may be provided with drawers is preferably provided with a plate 31 to which is secured a screw 32 which passes through a sleeve 33 on the outer end of arm 29.

34 is a set screw for securing the table on the arm.

35 denotes a glass supporting arm provided with a socket to receive the upper end of rod 22 which is circumferentially grooved at 36.

37 is a pin which being passed through the arm engages the groove as shown and locks it on the rod in manner to permit its free rota-

tion about said rod. It also serves indirectly to retain the table arm on the rod.

The rod and its several arms and the various devices supported thereon are movable back and forth at the side of the chair by means of the frames which can be suitably turned about their pivots as indicated in dotted lines in Fig. 1. The springs counter-balance the weight of these parts when they are moved to one side and aid in returning them to a vertical position. The friction block and its set screw can be used to secure the parts in any desired position, though the spring will ordinarily sustain the frame and rod in any position to which they are moved and on either side of the vertical position. The friction of the block may be varied by the screw to secure this result. The spittoon can be adjusted vertically on the rod and the spittoon, table and glass holder can be moved about it and the rod itself can be adjusted vertically and together with its attachments, can be moved to various positions parallel with the side of the chair and either to the front or to the rear thereof, in one plane.

Instead of using the two grooves 9 and 10 a single frame could be employed the counter-balancing spring or springs and the clamping friction block being connected with said single frame substantially as indicated in Fig. 5. This and other variations may be employed provided substantially the mechanical construction and principles of operation are preserved.

It is important that the rod which supports the several arms be held under all adjustments near the side of the chair and the present improvement provides for moving and holding said rod in a plane parallel to a vertical plane passing from front to rear through the seat. Heretofore such rods have been held upon horizontally swinging supports which in operation occupy more space than necessary and require too large a movement to secure a change of position from front to rear or vice versa.

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

1. In a chair the combination of a frame pivoted to a hanger attached to the seat frame approximately midway the side of the chair

and movable in a plane parallel with said side and at a constant distance therefrom toward either the front or rear from its intermediate vertical position and also pivoted to a rod-supporting block, said rod and block, the rod being adapted to be constantly and automatically supported in a vertical plane at the intermediate position and on either side thereof an article-supporting arm secured to the rod and a friction block interposed between the frame and hanger; substantially as set forth.

2. In a chair the combination of a frame pivoted to a hanger attached to the seat frame, approximately midway the side of the chair and movable parallel with said side toward either front or rear from its intermediate vertical position, and also pivoted to a rod-supporting block, said rod and block, an article-supporting arm secured to the rod, a friction block situated between the hanger and frame, and a set screw bearing on said friction block and adapted to vary the amount of friction and also to fasten the frame to the hanger; substantially as set forth.

3. In a dental chair the seat frame, the hanger secured thereto at its side having an upturned end 6, the frames 9 and 10 pivotally connected to said hanger and to a rod-supporting block, each frame being slotted to receive said upturned end of the hanger, the said block and the rod adjustably supported in the block, and means for counter-balancing the frame on either side of the vertical position; substantially as set forth.

4. In a chair the seat frame, the hanger secured thereto having an upturned end 6, the frames 9 and 10 pivotally connected to said hanger and to a rod-supporting block, each frame being slotted to receive said upturned end of the hanger the counter-balancing spring and the friction block; substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

DEWELL STUCK.

Witnesses:

F. B. HUTCHINSON,
L. K. NASH.