Aug. 3, 1926. 1,594,409

J. R. EMMERT

CHAIR HEADREST

Original Filed May 20, 1921

Fig. 1.

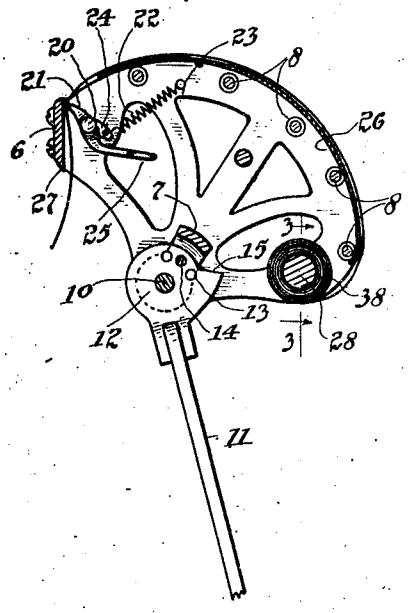


Fig. 2

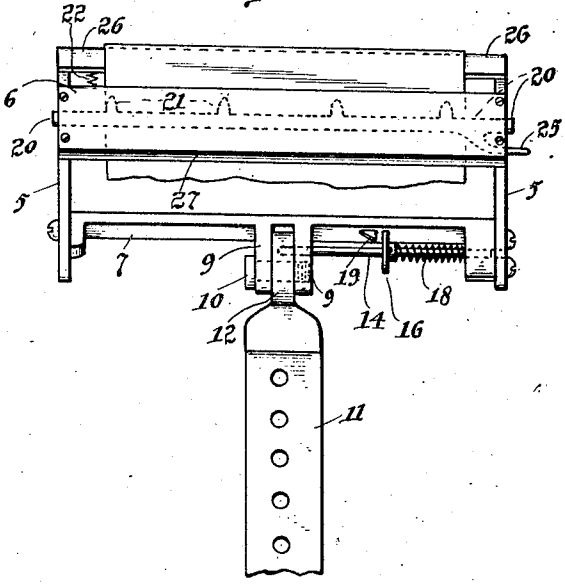
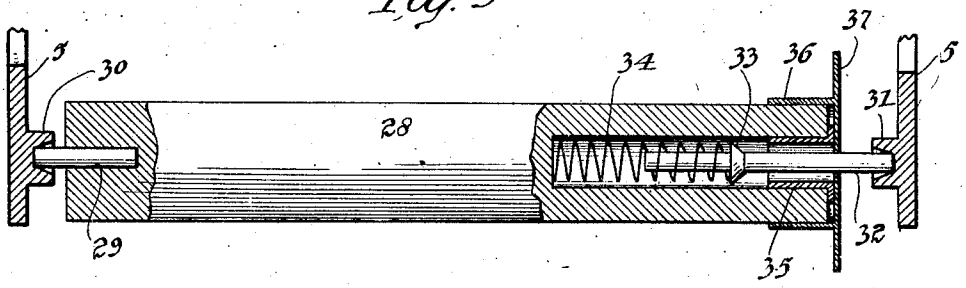


Fig. 3



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Patented Aug. 3, 1926. 1,594,409

UNITED STATES PATENT OFFICE.

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CHAIR HEADREST.

Original application filed May 20, 1921, Serial No. 471,178. Divided and this application filed October 9, 1922. Serial No. 593,239.

This invention relates to improvements in adjustable head rests for chairs, and particularly for use in connection with barber's chairs, heretofore provided with locking means for their adjustment on a horizontal axis, and with a detachable roller for the use of paper for sanitary purposes, and means for clamping the free end of the strip of paper in its operative position to the head rest.

The object of my invention is to dispense with the thumb-screw heretofore used for detachably securing the paper roller in its operative position, and to provide a simple and effective means permanently secured to the paper roller for yieldingly detachably maintaining the roller in its operative position and the roll of paper from endwise movement thereon, and this particularly when connecting the roller with the head rest.

A further object of my invention is a simple and effective means readily convenient of access for detachably securing the free end of the paper in its operative position and for removing the used portion thereof in its operative position and severing such used portion from the adjacent portion of the strip of paper which is unused.

With these ends in view, my invention finds embodiment in certain features of novelty in the construction, combination and arrangement of parts by which the said objects are attained, all as hereinafter fully described with reference to the accompanying drawings and more particularly pointed out in the claims.

In said drawings,—

Fig. 1 illustrates in transverse section a head rest in which my invention finds its embodiment.

Fig. 2 is a rear side elevation thereof.

Fig. 3 is an enlarged section taken on the line 3—3 of Fig. 1.

As illustrated in the drawings, the open-like opposing brackets or end plates 5—5 for the head rest, the flat bar 6, the angular bar 7 and the coiled spring indicated at 8, connecting the end plates 5—5, are constructed and located, as heretofore, in head rests for barbers' chairs, as are also the parallel lugs 9—9, projecting from the bar 7, and the pintle 10, connecting the head rest with the upright shank 11 for its perpendicular adjustment, and the hub 12 provided with perforations 13 adapted to cooperate with a locking bolt 14 for detachably locking the head rest in its horizontal adjustment.

As a convenient means, however, for limiting the movement of the head rest on its horizontal axis, but which forms no part of my present invention, the hub 12 is provided with a lug 15 adapted to engage the bar 7, so that when the head rest is swung forwardly and downwardly on its horizontal axis, the lug 15 will engage the bar 7 and thereby stop the further downward movement of the head rest as soon as the perforation 13 adjacent the lug is moved to register with the bolt 14.

Bolt 14 has rigidly secured thereto, intermediate its ends, a finger-piece or washer 16, by means of a pin or screw 17, between which plate and the downwardly projecting angular end of the bar 7 is confined the coiled spring 18, normally operating to thrust the bar through any one of the perforations 13 in register with the bearing of the bolt 14 in the lug 9 adjacent thereto, this end-thrust of the bolt being limited by the engagement of the finger-piece or washer 16 with a lug 19, projecting downwardly from the bar 7.

In providing the bolt 14 with a finger-piece located in the position shown in the drawings, my invention not only provides for dispensing with a projection of the bolt through a side bar of the head rest for retracting it from its locking position by means of a thumb-operated cam on the outer end thereof, but for more convenient access to the bolt for its retraction, while at the same time removing from the head rest a heretofore projection, not infrequently engaging with and tearing the garment of the operator.

It is now to be observed that flat bar 6 is immovably secured to the opposing end plates of the head rest and is inwardly longitudinally opposed by a shaft 20 parallel thereto and having its end bearings in plates 5, which shaft is provided at intervals of its length with teeth 21 and is actuated by a coiled spring 22. One end of the spring 22 is secured to a perforated lug 23 on an end plate 5, the other end of the spring being attached to a perforated lug 24 project-

ing rearwardly from the shaft 20, and whereby the spring 22 normally operates to project the teeth 21 on the shaft to contact with the end of a strip of paper passed between the teeth and the bar 6 for detachably clamping the paper against the bar.

The paper clamping shaft 20 is provided with a handle 25 projecting through one of the openings formed in the end plate 5 for releasing the paper from the grip of the teeth 21 of the shaft 20, as may be, by pressing the handle downwardly against the resistance of the spring, the downward movement of the handle being stopped by the opposing wall of the slot.

The construction above described provides for rigidly connecting and spacing the end plates of a head rest by means of the perfectly flat bar 6, which may be beveled at its lower edge, as indicated at 27, to provide a severing edge for the paper and at the same time a fixed jaw for teeth mounted upon a shaft automatically actuated to clamp the free end of a strip of paper overlying the usual spring-actuated leather or textile cover 26 commonly applied to head rests of this character, the paper for which purpose is supported by a roller 28, as indicated in Fig. 1.

This roller is provided at one end with a fixed pin 29 adapted to have its bearing in a boss 30 formed on one of the end plates 5, and for the purpose of its connection with and bearing in a boss 31 on the other plate 5 is bored out to receive a pintle 32, provided intermediate its ends with a fixed collar 33, against which and against the closed end of the bored-out portion abuts a compression coiled spring 34, the outward movement of the pintle 32 being limited by the end edge of a flanged eyelet 35. The outer flanged end of the eyelet 35 is enclosed by a cap 36 circumferentially surrounding the roller and in which the pintle 32 has its bearing, which cap plate is provided with a circular flange 37, preferably formed integrally therewith for opposing the adjacent end of a roll of paper 38 sleeved upon the roller and forming a stop, preventing an endwise movement of the roll of paper when inserting the roller to its operative position.

By reference to Fig. 3, it will now be understood that when the roller is disconnected from its end bearings, the spring 34 will force the pintle 32 outwardly and its collar 33 against the end of the flanged eyelet 35, and that for inserting the roller in its operative position, after sleeving a roll of paper thereon, followed by placing the end of the pintle 32 in its bearing 31, and then taking hold of the paper roll and pulling it forcibly against the flange, the spring will be compressed by the collar sufficiently for fixing pin 29 to pass across its bearing and enter the same upon releasing the paper roll, while in the meantime the flange 37 provides a stop preventing the paper roll, when grasped and pushed away from the fixed pintle, for endwise movement on the roller, when inserting and removing the roller from its bearing, from movement on the roller.

The essential function of the cap 36 is to support the flange 37 for the end of the roll and not necessarily to provide a bearing for the pintle 32, for the reason that such a bearing might be formed in the outer end of the eyelet 35, the important function of which is to provide a stop limiting the outward thrust of the pintle.

A paper-supporting roller, constructed as above described, for use in connection with an adjustable head rest, is an important feature of my invention in that it is yieldingly adjustable in its bearings; that it may be conveniently and quickly inserted and secured in its operative position, without the employment of any devices projecting outwardly from the end plates 5 of a head rest, as, for example, when one of its end bearings is internally screw-threaded to receive a thumb-screw passing through the end plate, requiring, as it does, considerable time and patience for registering the thumb-screw with the screw-threads in the roller, and, besides, which thumb-screw furthermore mars the appearance of the head rest, renders the bearing of the roller unyielding, and, besides, projecting, as it does, outwardly beyond the surface of the end plate, has a tendency to obstruct the movement of the operator of a barber's chair while shaving the occupant.

It is essential, for rapid and effective work, by a barber, a dentist and a surgeon operating upon the face or head of the occupant of a chair, that the devices for adjusting the head rest therefor shall be free from any projections tending to obstruct the movement of either the body or hands of the occupant; that the devices for operating the several adjustments of a head rest shall be conveniently and quickly accessible; that they shall not present projections tending or liable to obstruct the movement of either the body or the hands of the operator, and that the applied force for their operation shall be reduced to a minimum. It will now be apparent that it is to securing these several advantages that my invention is directed.

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

1. A head rest, provided with end plates one of which has an opening therethrough, in combination with a fixed clamping jaw secured to and rigidly connecting said end plates, a movable jaw provided at intervals

of its length with non-perforating teeth opposed to the face of said fixed jaw, a spring for normally maintaining the movable jaw in its clamping position, and an operating handle secured to the movable jaw, which handle terminates in substantially the plane of the outer surface of said plate and is accessible through the opening therein.

2. A head rest provided with end plates, one of which has an opening therethrough, in combination with a fixed clamping jaw secured to and rigidly connecting said end plates, an oscillating jaw provided at intervals of its length with nonperforating teeth opposed to the surface of said fixed jaw, a spring connecting the oscillating jaw with one of said plates for normally maintaining said jaw in its clamping position, and an operating handle secured to the oscillating jaw projecting through said opening with its outer end terminating in a plane adjacent that of the outer surface of said end plate.

3. A head rest, provided with end plates one of which has an opening therethrough, in combination with a fixed clamping jaw consisting of a flat bar the ends of which are secured to and rigidly connect the said plates, an oscillating jaw provided at intervals of its length with teeth opposed to the flat surface of the fixed jaw, a spring adapted to normally yieldingly maintain the teeth of the oscillating jaw in a clamping position opposed to the flat surface of the fixed jaw, and an operating handle secured to the oscillating jaw projecting through the opening with its free end terminating adjacent the outer surface of said plate.

4. The combination with a head rest, having end bracket plates adapted for supporting a paper roll sleeved thereon, provided at one end with a fixed pintle and at its opposite end with a longitudinal chamber, a movable pintle located in said chamber, provided intermediate its ends with a collar fixed thereto, a coiled spring surrounding said pintle abutting against the collar and the end wall of said chamber, and a flanged eyelet projecting into said chamber and against the end of the roller, adapted to provide internally of the roller a stop for limiting the outward movement of the movable pintle.

5. The combination with a head rest, having end plates provided with closed bearings, a roller adapted to support a roll of paper sleeved thereon, a fixed pintle for one end of said roller and a movable pintle projecting into the other end thereof, a collar fixed to the movable pintle intermediate its ends, a spring surrounding said pintle abutting at its ends respectively against said collar and the roller, a circular flange mounted upon the roller adjacent the movable pintle forming a stop limiting the longitudinal movement of the paper on the roll, whereby on grasping and pushing the paper roll towards the bearing of the movable pintle, the fixed pintle may be detached from its bearing.

6. The combination with a head rest having end plates provided with closed bearings, of a roller adapted to support a roll of paper sleeved thereon, provided with a fixed pintle at one end and a movable pintle at its other end adapted to be projected into said bearings, a collar secured to the movable pintle intermediate its ends, a spring abutting at one end against said collar and at its opposite end against the roller and surrounding said pintle, and a stop adapted to be engaged by the collar for limiting the outward thrust of the movable pintle, a circular flange mounted upon the end of the roller adjacent the movable pintle for limiting the end thrust of the paper roll whereby the paper roll is utilized for inserting the movable pintle in its bearing and compressing the spring for the insertion of the fixed pintle in its bearing.

In witness whereof, I have hereunto set my hand this 5th day of October, 1922.

J. RUSSELL EMMERT.