

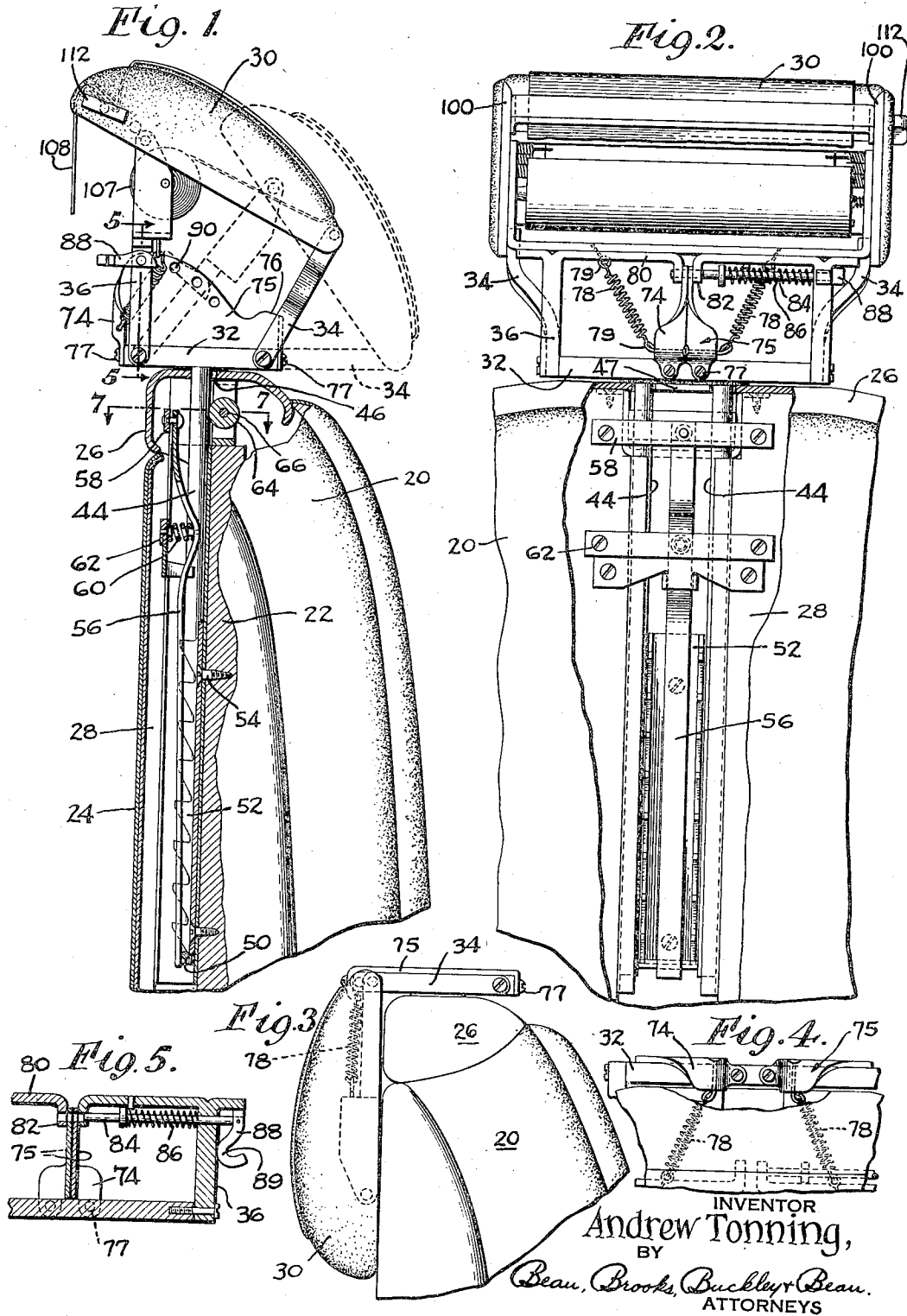
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BARBER CHAIR HEADREST

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BARBER CHAIR HEADREST

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3 Claims. (Cl. 155—177)

This invention relates to barber or dental chairs, or the like, and has particular reference to head rests for chairs of this character.

One object of the invention is to provide an improved head rest for barber's chairs which may be folded down behind the body of the chair into a position where it cannot interfere with the barber's work about the customer's neck and head during such operations as hair cutting, shampooing, etc.

Another object of the invention is to provide improved means for mounting a head rest for vertical adjustment relative to the main body of the chair.

Another object of the invention is to provide an improved lateral adjustment and supporting means for the head rest.

In the drawing:

Fig. 1 is a fragmentary view partly in elevation and partly in section of a portion of a chair equipped with the invention;

Fig. 2 is a fragmentary rear elevation, with portions broken away, of a chair, similar to Fig. 1;

Fig. 3 is a fragmentary side elevation showing the head rest in a lowered and folded back position;

Figs. 4 and 5 are fragmentary detailed views of portions of the head rest adjustment mechanism;

Figs. 9 and 10 are fragmentary sectional views through the head rest portion of the structure showing the renewable covering holding mechanism thereof in different positions of operation;

Fig. 11 is a transverse section taken substantially along line 11—11 of Fig. 9; and

Fig. 12 is a fragmentary section through the head rest portion of the structure taken substantially along line 12—12 of Fig. 9 and showing portions of the renewable covering gripping mechanism thereof in plan view, the covering material being removed therefrom.

In practicing the invention a conventional type chair 20 is shown as comprising a frame member 22, a rear covering or casing 24 and a top edge molding 26, thus providing an elongate chamber 28 within the chair back and adjacent its upper rear edge.

A head rest 30, of the conventional pillow type, is pivotally supported by means of link members upon a base plate 32. The link members comprise two groups, a front pair 34 and a rear pair 36, the links being arranged in substantially upright position when the head rest 30 is in an upright position, as illustrated in solid lines in Figures 1 and 6. The base plate 32 thus provides a support for the head rest, and in turn is adapted

to be supported by means of a pair of downwardly extending shafts 44 which extend through openings 46 in the top edge molding 26 of the chair back, and downwardly into the chamber 28. Shafts 44 are connected at their lower end by a transverse bar 50 which is adapted to engage a toothed rack 52 which is rigidly fastened to the frame 22 as at 54. Thus the head rest 30 is adapted to be supported in various positions of vertical adjustment relative to the chair back 20. A tongue 56, suspended at its upper end from the chair frame 22 by means of a bracket 58, is arranged to be pressed against the bar 50 by means of a spring 60 at all positions of the head rest to resiliently maintain the bar 50 in supported engagement with the teeth of the rack 52. The openings 46 in the top edge molding 26 are slightly elongated in a fore and aft direction to permit a limited fore and aft rocking motion of the shafts 44 therein. A roller 64 is pivotally mounted upon the frame 22 as at 66, and at a position spaced below the openings 46 in the top edge molding. Thus, the operator of the device may press against the rear edge of the base plate 32 and cause the head rest to move forwardly to a limited extent with a pivotal action about the roller 64 as a fulcrum, regardless of the vertical position of the head rest relative to the chair. This forward motion of the head rest causes the lower ends of the shafts 44 to move rearwardly, and thus to carry the bar 50 laterally out of engagement with the teeth of the rack 52, and in this position the head rest may be elevated or lowered by the operator to any desired position of vertical adjustment relative to the chair. When the head rest is allowed to move rearwardly again under the force of the spring the bar 50 engages teeth of the rack bar and thus the head rest is supported again in its adjusted position.

Similarly, forward motion of the head rest releasing the bar 50 from engagement with the rack 52 permits the complete head rest unit to be moved up and completely removed from the chair in a manner similar to the removal of conventional type head rests. However, one of the most important features of the present invention is the provision of folding means whereby the head rest may be folded down behind the chair to a position wherein it does not interfere with the barber's working about his customer's neck and head, and it is therefore not necessary that the barber remove the head rest from the chair as is required in other types. Between the openings 46, is a communicating slot 47 to permit movement therethrough of the bar 50 and the complete

removal of the head rest unit from the chair. While the rack 52 is illustrated as comprising a pair of parallel opposed toothed flange portions, it is contemplated that a single toothed bar or any other equivalent means could be utilized for the purpose.

The links supporting the head rest pillow 30 upon the base plate 32 are of the parallel motion type although their points of pivotal connection to the pillow are spaced at a greater distance apart than are their points of pivotal connection to the base plate, thus enabling the operator to provide a large variety of adjusted positions and angular relations of the pillow 30 relative to the head of the customer. A locking mechanism for maintaining the pillow 30 in various adjusted positions is provided and comprises a pair of wing plates 75 which are pivotally mounted upon the base plate by pivot pins 77 mounted in the forward and rearward edges of the base plate 32. The wing plates 75 are adapted to recline against the top surface of the base plate 32 in close fitting relation thereon when the head rest is folded back and down, as shown in Figures 3 and 4. The wing plates 75 are each provided with a pair of spaced end flanges 74 to stiffen the plate laterally without interfering with the reclining of the plates in snugly fitting relation against the upper surface of the base plate, as shown in Fig. 3. Thus the head rest and its associated mechanism may be moved to the position below the rear top edge of the main chair, as shown in Figure 3, where the barber's work about the customer's neck and head will be unobstructed. A pair of springs 78 are utilized to connect the head rest with each of the rear of said wing plate flanges 74 through means of swivel pins 79 (Fig. 2). The springs 78 are thus arranged in diagonal extending relation between the parts and in such manner that when the head rest is moved to an upright position as illustrated in Figures 1 and 2 the springs draw the wing plates 75 to upstanding positions and in abutting relation against each other, thus providing a truss-like supporting structure. The links 36 carry therebetween a cross bar 80 having intermediate depending flanges 82, the upper edge portions of the wing plates 75 being disposed therebetween when in their upstanding position. The flanges 82 are perforated to receive therein a latch bar 84 (Fig. 5) which is rotatably carried in one of the link members 36 and is provided at its outer extending end with a handle 88 rigid therewith. The handle 88 is formed with a cam section 89 adapted to bear against the side of the link 36 to urge the bar 84 outwardly from engagement with the wing plates 75. A spring 86 about the bar 84 tends to urge the bar into engagement with any one of a series of corresponding perforations 90 formed in the upper edge portions of the wing plates 75 for locking the head rest in various positions of lateral adjustment relative to the chair. Thus it will be seen that rotation of the handle 88 downwardly (Fig. 5) until the cam portion 89 bears against the link 36 moves the bar 84 out of engagement with the wing plates 75 so that the head rest may be moved forwardly or rearwardly about its pivotal connections to the base plate 32. Then, in any position of desired adjustment, the handle may be turned sidewise until the cam portion 89 avoids contact with the link 36, and the spring 86 then moves the bar 84 into engagement with the openings 92 in the wing plates. The springs 78 are adapted to move the wing plates 75 upwardly for latching engagement to hold the head rest in an upright position, or to

move the wing plates downwardly and flatly against the upper surface of the base plate 32 when the head rest is folded back and down behind the chair. The wing plates 75 are provided with extending portions 76 which are adapted to act as stop members to cooperate with the cross bar 80 to limit the forward and downward movement of the pillow member relative to the base plate.

The head rest pillow member comprises a pair of spaced side plates 100 to which the link members 34 and 36 are pivotally connected at their upper ends. Spacer rods 102 extend between the side plates 100 and are rigidly connected thereto to complete a unitary rectangular frame-like structure upon which is mounted a head pad 104, which may be in the form of an upholstered pad supported by means of an arrangement of transverse springs.

Although only one form of the invention has been shown and described in detail it will be apparent to those skilled in the art that the invention is not so limited but that various changes can be made therein without departing from the spirit of the invention or from the scope of the appended claims.

I claim:

1. In a head rest for barber's chairs a base plate, a pillow member supported above said base plate by means of two pairs of substantially upright links pivotally connected to said base plate and said pillow member whereby said pillow member may be moved about the pivotal connections of said link members to said base plate to various positions of lateral and inclined adjustment, and means for detachably locking said pillow member in said various positions of adjustment comprising a pair of wing plates pivoted to said base plate and adapted to recline snugly against said base plate or to pivot upwardly to upstanding positions in back-to-back relation, and springs connecting said pillow member and each of said wing plates and extending therebetween in inclined relation whereby movement of said pillow member to a position down and behind said base plate pulls said springs downwardly and forces said wing plates to a reclined position against the upper surface of said base plate and movement of said pillow member to an upright position above said base plate causes said springs to draw said wing plates to an upstanding back-to-back position, and a locking bolt carried by one of said links and adapted to cooperate with perforations in said wing plates to hold said pillow member in various adjusted upright positions, and a spring mounted upon said bolt and bearing against said one of said links and tending to urge said bolt into the planes of said wing plates and into respective registering aperture thereof to a position of engagement with said wing plates to lock said head rest against forward or rearward movement relative to said base plate, and a cam shaped handle rigidly extending from said locking bolt and adapted to bear against said link with a camming action upon rotation thereof to move said locking bolt relative to said link and to cause withdrawal of the locking bolt from engagement with the wing plates to release the head rest for movement to adjusted positions relative to said base plate.

2. A head rest for barber's chairs comprising a base plate and a pillow member supported by links upon said base plate, a pair of wing plates pivoted to said base plate and adapted to move

from a reclining position against said base plate to upstanding positions in back-to-back relation, a cross bar extending rigidly between two opposed of said links, means upon said cross bar adapted for detachable interengagement with means in said wing plates to maintain said pillow member in various positions of adjustment relative to said base plate, and stop means on said wing plates adapted to cooperate with said cross bar to positively limit the movement of said pillow member relative to said base plate in one direction of movement.

3. In a head rest for barber's chairs a base plate, a pillow member pivotally supported upon said base plate by means of a link mechanism for movement in an arc-like path extending from above said base plate to a position below and be-

hind said base plate, and means for detachably locking said pillow member in various positions along said arc-like path comprising a pair of wing plates pivotally mounted upon said base plate and connected with said pillow member by tension exerting means whereby movement of said pillow member to a position below and behind said base plate moves said wing plates to snugly recline in parallel relation against said base plate, and movement of said pillow member to positions above said base plate causes the wing plates to be moved to transverse positions relative to said base plate, and latch means carried by said link mechanism for detachable engagement with cooperating means on said wing plates.

ANDREW TONNING.

CERTIFICATE OF CORRECTION.

Patent No. 2,154,017.

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It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows: Page 1, first column, line 29, beginning with "Figs. 9 and 10 are" strike out all to and including the word and period "therefrom." in line 40; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 16th day of May, A. D. 1939.

(Seal)

Henry Van Arsdale
Acting Commissioner of Patents.