

No. 730,488.

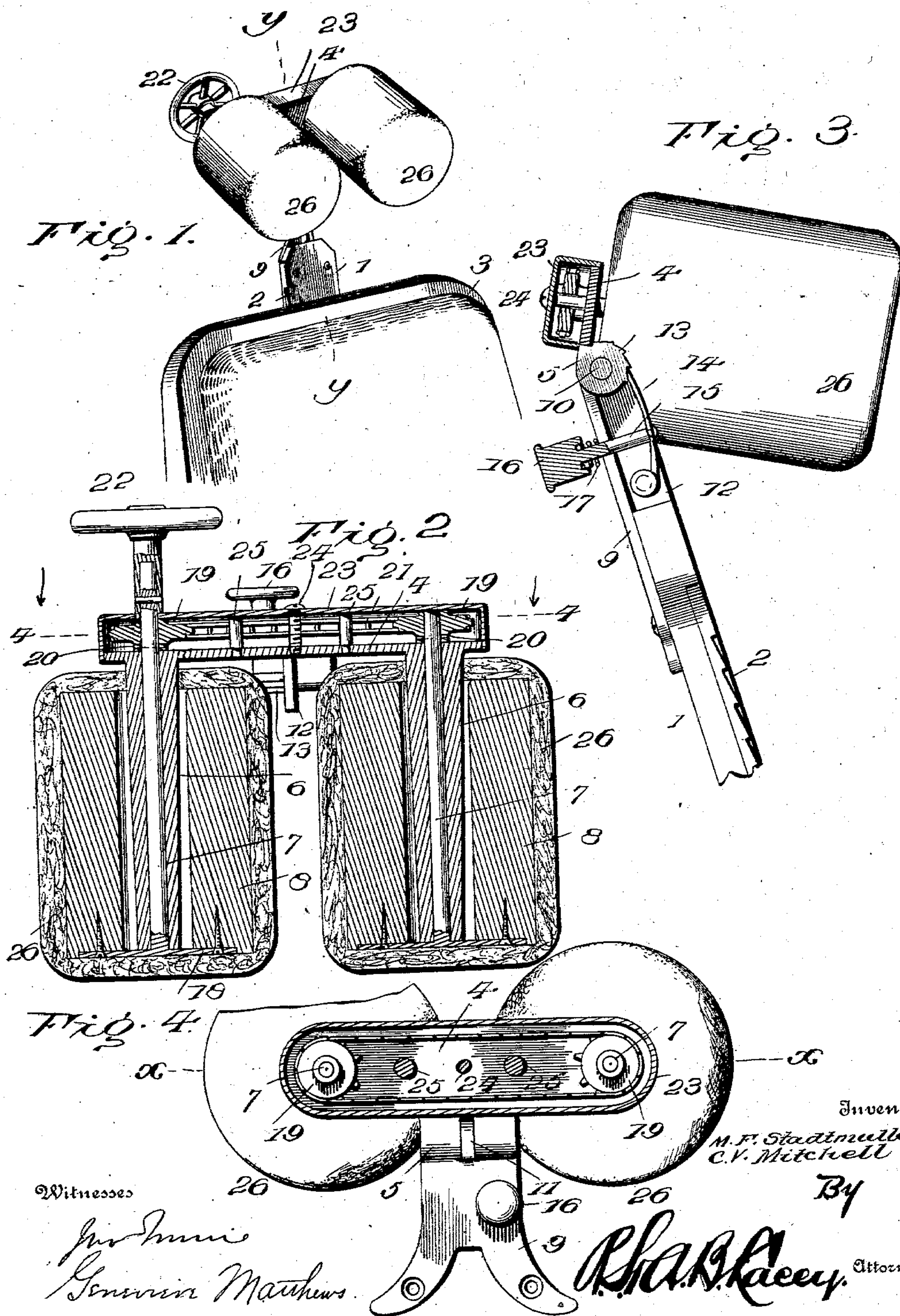
PATENTED JUNE 9, 1903.

M. F. STADTMULLER & C. V. MITCHELL.

HEAD REST.

APPLICATION FILED AUG. 21, 1902.

NO MODEL.



UNITED STATES PATENT OFFICE.

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HEAD-REST.

SPECIFICATION forming part of Letters Patent No. 730,488, dated June 9, 1903.

Application filed August 21, 1902. Serial No. 120,530. (No model.)

To all whom it may concern:

Be it known that we, MAX F. STADTMULLER and CHARLES V. MITCHELL, citizens of the United States, residing at Pomeroy, in the county of Calhoun and State of Iowa, have invented certain new and useful Improvements in Head-Rests, of which the following is a specification.

This invention has relation to head-rests for barbers' and dentists' chairs, and has for its object the provision of novel instrumentalities for turning the head of the person either to the right or to the left without any effort on the part of the person occupying the chair.

In its organization the head-rest comprises two rollers arranged to form a support for the head, operating means for rotating the rollers simultaneously in the required direction, and novel supporting means for the said rollers and operating mechanism.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and drawings hereto attached.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a head-rest embodying the invention, showing it applied to the back of a chair. Fig. 2 is a plan section on the line X X of Fig. 4. Fig. 3 is a vertical transverse section about on the line Y Y of Fig. 1. Fig. 4 is a section on the line 4 4 of Fig. 2 looking in the direction of the arrows.

Corresponding and like parts are referred to in the following description, and indicated in all the views of the drawings by the same reference characters.

The head-rest comprises a standard 1, which may be of wood or metal and vertically adjustable with reference to the chair to which the device may be applied, so as to adapt the appliance to the elevation of the head. The standard is provided with ratchet-teeth 2 for cooperation with the usual detent mechanism applied to the back 3 of the chair, so as to hold the head-rest at the required elevation.

The teeth 2 and standard 1 may be separate parts or formed together, as found most advantageous.

The frame or head of the device comprises a cross-piece 4, having knuckles 5 and provided with bearings 6, of tubular form, in which are rotatably mounted spindles 7, securely attached to the rollers 8, arranged in parallel relation and adapted to receive the head of the person to be supported. The cross-piece 4, knuckles 5, and bearing 6 are preferably of integral formation, although this is not essential within the purview of the invention. A plate 9 is hinged to the cross-piece 4 by a pin 10, passing through the knuckles 5, and a lug 11, extended from the upper end of the plate 9, the latter being firmly attached to the standard 1. The plate 9 is strengthened by a rib 12, the upper end of which is extended and transversely pierced to form the lug 11, which is fitted in the space formed between the lugs 5. One of the knuckles 5 is formed with a series of ratchet-teeth 13 for cooperation with a pawl 14 to hold the cross-piece 4 at any angular adjustment to suit the convenience of the person whose head may be resting upon the rollers 8. The pawl 14 is pivoted to one side of the rib 12, and a pin 15, loosely mounted in the plate 9, is connected by a swivel-joint with the pawl 14, and its outer end terminates in a finger-piece 16, adapted to be pressed upon when it is required to disengage the pawl 14 from the teeth 13 to admit of adjusting the rollers in one direction. A coil-spring 17 surrounds the outer end of the pin 15 and is confined between the finger-piece 16 and plate 9 and normally exerts an outward pressure upon the teeth, so as to hold the pawl 14 in engagement with the teeth 13.

The spindles 7 are provided at their outer ends with plates 18, which are firmly attached to the outer ends of the rollers 8, said spindles being mounted in the bearings 6 and having their inner ends projected beyond the cross-piece 4 a distance to receive sprocket-pinions 19, which are secured thereto by pins 20, passed through openings in the extended ends of the spindles and in hubs of the sprocket-pinions. A sprocket-chain 21 connects the sprocket-pinions 19 so as to cause the rollers 8 to rotate synchronously upon turning one or the other of the spindles by means of a

hand-wheel 22, secured to an extended end of a spindle. The sprocket-pinions and sprocket-chain are housed and protected by means of a cap-plate 23, fitted thereover and secured to the cross-piece 4 by a screw or fastening 24, serving to hold the cap-plate in place. Pins 25, attached to the cap-plate 23, have their outer ends reduced and adapted to enter openings in the cross-piece 4, so as to limit the inward movement of the cap-plate and prevent binding of the sprocket-wheels 19 and sprocket-chain 21. This is shown most clearly in Fig. 2.

The rollers 8 are preferably of wood, although they may be formed of any material, and are comparatively large, so as to form a comfortable support for the head. The rollers are longitudinally bored to receive the bearing 6, and the plates 18 of the spindles 7 are let into the outer ends of the rollers so as to come flush therewith. The rollers are cushioned, padded, or upholstered, as shown at 26, to provide a comfortable rest for the head. The upholstering 26 may be of any variety according to the cost and finish of the device.

The head-rest is fitted to the back of a chair in the well-known manner and is adapted to be raised and lowered and is secured in the adjusted position by the usual means cooperating with the teeth 2. The rollers forming the rest or support proper for the head are adapted to be adjusted to any angular position by turning the cross-piece 4 upon its pivot or hinge connection with the plate 9, the rollers being held in the adjusted position by engagement of the pawl 14 with one of the teeth 13. The rollers may be elevated at their outer ends without requiring disengagement of the pawl 14 from the teeth 13, since said pawl will ride upon the teeth in the upward adjustment of the rollers; but when it is required to lower the outer ends of the rollers it is necessary to press upon the pin 13 in order to disengage the pawl 14 from the teeth 13. When the pin 15 is released from pressure, the spring 17 will hold the pawl 14 in engagement with a tooth 13, thereby fixing

the position of the rollers, and turning of the hand-wheel 22 either to the right or to the left affords a corresponding movement of the rollers, thereby causing the head of the person resting upon the rollers to be turned either to the right or to the left, as may be desired.

Having thus described the invention, what is claimed as new is—

1. In a head-rest, a cross-piece, bearings projected from the cross-piece, rollers longitudinally bored to receive the said bearings, spindles mounted in said bearings and secured at one end to the rollers and having their opposite ends extended beyond the cross-piece, and operating means applied to the extended ends of the spindles, substantially as set forth.

2. In a head-rest, the combination of a cross-piece, bearings projected from the cross-piece, rollers longitudinally bored to receive said bearings, spindles mounted in the bearings and secured at one end to the rollers and having their opposite ends extended beyond the cross-piece, sprocket-wheels secured to the extended ends of the spindles and adapted to hold the rollers in place, and means connecting the sprocket-wheels to cause the rollers to turn in unison, substantially as described.

3. In a head-rest, a cross-piece having integral bearings projected therefrom, rollers mounted upon said bearings, spindles also mounted in same and secured at one end to the rollers and having their opposite ends extended and operatively connected for simultaneous rotation, and means applied to the extended portion of one of the spindles for actuating the rollers, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

MAX F. STADTMULLER. [L. S.]
CHAS. V. MITCHELL. [L. S.]

Witnesses:

A. B. NIXON,
G. C. PIERCE.