UNITED STATES PATENT OFFICE.

STEWART DIXON McKELVEY, OF CANTON, OHIO, ASSIGNOR TO FRANK E. CASE, OF SAME PLACE.

HEAD-REST PAD.


Application filed October 10, 1894. Serial No. 522,527. (No model.)

To all whom it may concern:

Be it known that I, STEWART DIXON McKELVEY, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented new and useful Improvements in Head-Rest Pads or Cushions, as described and claimed in the following specification and claim.

My invention relates to pads or cushions for head- rests of dental, surgical, and other chairs, and has for its object to improve the construction thereof, as hereinafter described.

The invention consists in the novel features pointed out in the claim appended to this specification.

In the accompanying drawings, Figure 1 is a view in perspective of a yielding pad embodying my invention. Fig. 2 is a similar view showing the pad reversed in position, the bottom or under side being uppermost. Fig. 3 is a vertical section showing the interior construction of the pad and illustrating a method of inflating and sealing the same. Fig. 4 is a detail view showing a part of the removable pad-covering and its draw-string.

The reference-numeral 1 indicates a hollow pad which is preferably made of molded rubber and of oblong or oval shape. The upper side 2 is depressed at the center, as at 3, to adapt it to the shape of the head of the patient, and the under side 3 may be similarly depressed, as at 4, to facilitate the attachment of the pad to any suitable support. The two sides 2 and 3 of the pad are connected by a bridge 4, the ends of which are joined in the process of molding to the portions 2 and 3, as shown in Fig. 3. The office of this bridge 4 is to secure the sides of the pad in their depressed positions for inflation and also to render the pad less elastic or yielding at its central portion.

The bridge 4 may be of cylindrical or any other desired form and may be made of rubber hose cut to the required length and molded in place. When thus made, the bridge should be transversely perforated, as indicated at 5, to permit the air to enter the interior of the bridge and thus equalize the air-pressure on the inner and outer sides of the bridge. I form an annular groove 6 on the under side of the pad near its outer edge to receive the gathered or plaited edge of a removable cover 7. This cover may be of plush, leather, silk, or other fabric, and is cut of substantially circular form, so that when its edge is plaited or gathered it will overlap the annular groove 6 and be retained by a stout cord or draw-string 8, which adapts itself to the groove 6 and lies therein after its ends 9 are tied or knotted.

It will be apparent that any suitable pneumatic devices might serve the purpose of inflating and permanently sealing the hollow pad, but the method which I will now describe for inflating and sealing the pad when necessary I have found especially well adapted for the purpose.

In the process of molding the pad and before it is permanently closed a small piece of uncurved rubber 10 or equivalent material is attached at any convenient point to the inner wall of the pad. To fill the pad with air, I employ a syringe-bulb 10, provided with a conducting-tube 11, having a small hypodermic needle 12 attached to its outer end, as shown in Fig. 3. The bulb 10 is provided with an air-check valve 13. The needle 12 is then inserted through the wall of the pad so that it will pass through the piece of uncurved rubber 14, and by squeezing the bulb 10 the pad is inflated to the required degree of firmness, after which the needle is withdrawn, and simultaneously the piece of soft rubber 14 is firmly squeezed by the fingers, thus closing the needle-opening therein and tightly sealing the pad.

Under some circumstances it may be preferable to substitute water or other fluid as the inflating agent for the pad in lieu of air. It is obvious that such a substitution would fall within the scope of my invention.

The yielding pad as thus described is adapted for use with any suitable supporting arm, to which it may be secured in any suitable manner.

What I claim is—

An inflated and sealed pad formed on its
upper side with a central depression, and an
annular groove, in combination with an in-
teriorly-arranged bridge secured to and re-
taining the depressed portion in position, and
5 a removable cover having a drawing-cord
lying in the annular groove, substantially as
described.

In testimony whereof I have hereunto set
my hand in the presence of two subscribing
witnesses.

STEWARD DIXON McKELVEY.
Witnesses:
F. B. HENDERSON,
F. A. ZIMMER,