E. O. OLDS.

SPINAL RELAXER.

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1,234,793. Patented July 31, 1917.

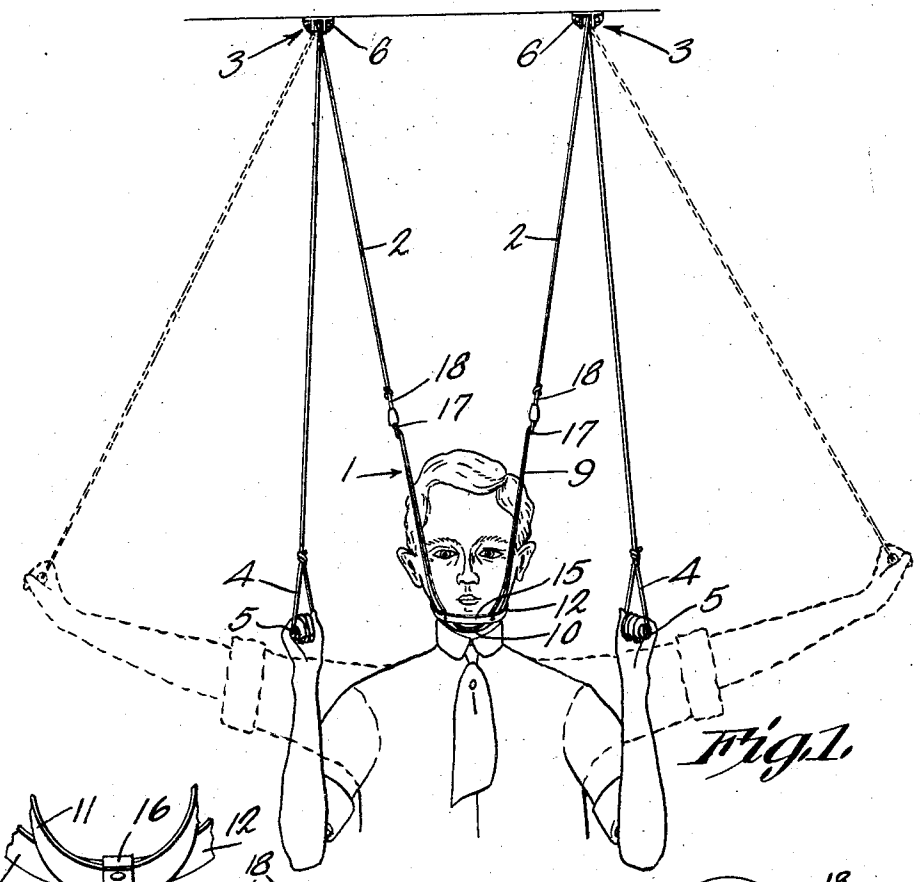


Fig. 1.

Fig. 4.

Fig. 2.

Fig. 5.

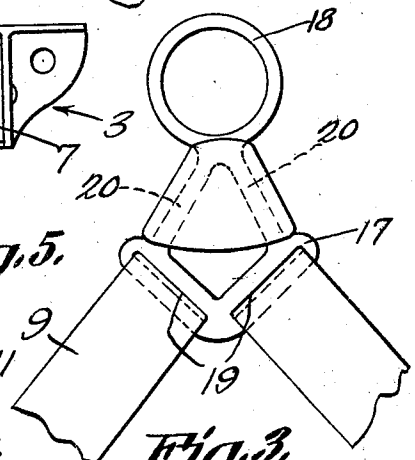


Fig. 3.

Witnesses

J. R. Fanning

C. R. L. Parker.

Eugene O. Olds, Inventor

by C. A. Snow & Co.

Attorneys

UNITED STATES PATENT OFFICE.

EUGENE O. OLDS, OF WASHINGTON, PENNSYLVANIA.

SPINAL RELAXER.

1,234,793. Specification of Letters Patent. Patented July 31, 1917.

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To all whom it may concern:

Be it known that I, EUGENE O. OLDS, a citizen of the United States, residing at Washington, in the county of Washington and State of Pennsylvania, have invented a new and useful Spinal Relaxer, of which the following is a specification.

The present invention appertains to an apparatus for relaxing and adjusting the subluxation in the cervical and upper dorsal regions of the spinal column, and it is the object of the invention to provide a novel and improved apparatus for relaxing and adjusting certain subluxations which occur between the occiput and atlas and also in the cervical and upper dorsal regions of the spinal column, for the purpose of relieving impinged nerves and thus removing the cause of certain diseases of the head and upper extremities in accordance with the chiropractic idea of the cause of disease.

Another object of the invention is the provision of a novel head piece or sling applicable to the head, whereby the head can be comfortably supported in the sling or head piece from the suspension cords.

It is also the object of the invention to provide an appliance of the nature indicated which is comparatively simple and inexpensive in construction, and which is practical, convenient and efficacious in use.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

The invention is illustrated in the accompanying drawing, wherein:—

Figure 1 is a front view of the appliance as in use.

Fig. 2 is a side elevation of the head piece or sling, portions being broken away.

Fig. 3 is an enlarged inside view of one of the suspending and coupling members of the head piece or sling.

Fig. 4 is a fragmental rear view of the head piece or sling.

Fig. 5 is an enlarged elevation of one of the lock or binding pulley blocks.

In carrying out the invention, there is provided a head piece or sling 1 in which the head is slung or suspended when the apparatus is in use, as seen in Fig. 1, and this head piece is suspended by a pair of suspension cords or flexible elements 2 which are passed over pulley blocks 3, the free terminals of the cords 2 being provided with loops 4 upon which handles 5 are mounted to be grapsed by the hands. Each of the pulley blocks 3 embodies a casting or frame 6 adapted to be secured by screws or otherwise to the lintel of a door frame, ceiling of a room, or other overhead support, and a pulley wheel 7 is mounted for rotation within the frame 6 and has spirally extending grooves 8, whereby when the cord 2 is swung sufficiently toward one side, the cord in being passed over the pulley wheel will bind or lock. Pulley blocks of this character are not new *per se*, so that a further detailed description thereof is hardly necessary. The pulley blocks are preferably disposed with their axes substantially in alinement, whereby when the free terminals of the cords are moved away from one another, as seen in dotted lines in Fig. 1, the cords in being pulled over the pulley wheels by the weight of the patient, will cause the cords to bind or lock, and the handles 5 can then be released without letting the head piece or sling down.

The head piece or sling embodies an endless strap 9 constructed of suitable fabric or other material, and held in such shape as to provide inverted V-shaped side members whose forward portions provide a loop 10 to extend under the chin of the patient, whereby the chin is slung and supported in the loop 10. The rear portion of the strap 9 provides a loop 11 in which the anterior of the head is seated or slung comfortably, and the loops 10 and 11 are held in position on the head by means of a band or strap 12, preferably of the same material as the strap 9, and having its ends adjust-

ably connected by a buckle 13. Said strap extends around the lower portion of the head and can be adjusted to snugly embrace the head, the band 12 being secured, by means of rivets 14 or otherwise, to the loop 10 near the bend thereof. The forward portion of the band 12 provides a chin piece 15 to extend in front of the chin, whereby the chin seats comfortably in the socket formed by the bend of the loop 10 and the portion 15. The band 12 also prevents the loops 10 and 11 from separating or slipping out of engagement with the head. Secured in any suitable manner to the bend of the loop 11 is a guide loop 16 slidably receiving the rear portion of the band 12 whereby said band holds the loop 11 in place, but the band or strap 12 is slidable through the loop 16 for purpose of adjusting it.

The upper portions of the strap 9 are held in inverted V-shape by means of suspending and coupling members 17, which may be cast from metal or otherwise constructed, and which are provided at their upper ends with rings 18 to which the respective ends of the cords 2 are tied or fastened. Each member 17 is provided at its lower end with upwardly diverging slots 19 and above said slots with upwardly converging portions 20 extending to the ring 18. The strap 9 extends in an inclined position through one slot 19 of each member 17 then diagonally across one side of said member between said slot 19 and the opposite inclined portion 20, then partially around said portion and horizontally across the other side of the member 17, then partially around the other inclined portion 20, and then diagonally across the first mentioned side of the member 17 and through the other slot 19 in an oppositely inclined position. The members 17 provide convenient and effective means for coupling the strap 9 with the cords 2, and for holding the said strap 9 with its side portions in proper shape. The forward and rear portions of the strap 9 which diverge downwardly provide sling loops in which the head is slung, and the band or strap 12 holds said loops in proper position, thus providing comfortable and convenient means for suspending the body by the head, with the head in such position, that the pull on the spine is anatomically correct. The head piece or sling is adjustable to various persons, regardless of the size or shape of the head and neck, or the weight of the person.

In use, after the head piece or sling has been applied to the head with the patient seated on the floor or stool, the patient pulls himself upward by the head, by moving the hands downwardly while grasping the handles 5, and then by moving the hands toward or away from one another to bring the free terminals of the cords 2 to an angular position, and then letting the cords move slightly over the pulley wheels, the cords will lock, and the patient may then let go of the handles, and relax his muscles. This will suspend the body from the head thereby to stretch the spine and produce the results desired. When the cords are thus locked, the operation of the appliance is static instead of dynamic. By pulling on the handles 5, the cords can be released after the patient has been subjected to the treatment. The device can also be used when the patient is in a standing position, so that after the cords are locked or gripped by the pulley wheels, the patient can bend his knees to suspend some or all of his weight from the head.

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

1. A spinal relaxer embodying a head piece, a cord for suspending it, and a locking pulley over which said cord is extended and adapted to bind the cord for supporting the head piece when it is raised.

2. A spinal relaxer embodying a head piece, cords connected thereto and having free terminals, and locking pulleys over which said cords are passed for suspending them and adapted to bind said cords when the free terminals thereof are swung to certain positions.

3. A spinal relaxer embodying a sling for the head, suspension cords connected thereto and having handles at their free ends, and locking pulley blocks over which said cords are passed and adapted to bind said cords when the handles are moved to certain positions.

4. A spinal relaxer embodying a head sling having forward and rear sling loops for the chin and anterior of the head, and an adjustable band to pass around the head secured to the forward loop, the forward portion of said band being secured to and coöperating with the bend of the forward loop to provide a pocket for the chin, and the rear loop having means through which the band is slidable.

5. A spinal relaxer embodying a pair of suspending members, and a strap having downwardly diverging forward and rear sling loops for the head, said members having means through which the upper portions of said strap are passed between said loops for holding the strap in position.

6. A spinal relaxer embodying a pair of suspending members, a strap having downwardly diverging forward and rear sling loops for the head, said members having slots through which the strap is passed and having portions above said slots around which the upper portions of the strap are wrapped.

7. A spinal relaxer embodying a pair of

suspending members having upwardly diverging slots and upwardly converging portions above said slots, and a strap extending through the slots of each of said members and around said upwardly converging portions, whereby to provide inverted V-shaped side members and forward and rear sling loops.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

EUGENE O. OLDS.

Witnesses:
GEO. R. MOSLEY,
E. E. CUMMINS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."