March 25, 1958 T. C. WARD 2,827,896

HEAD HALTER

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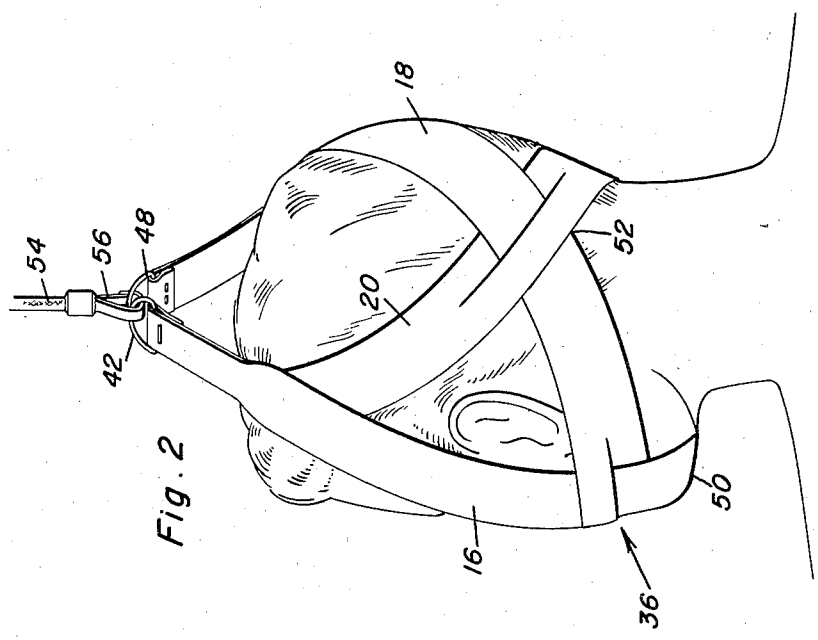


Fig. 2

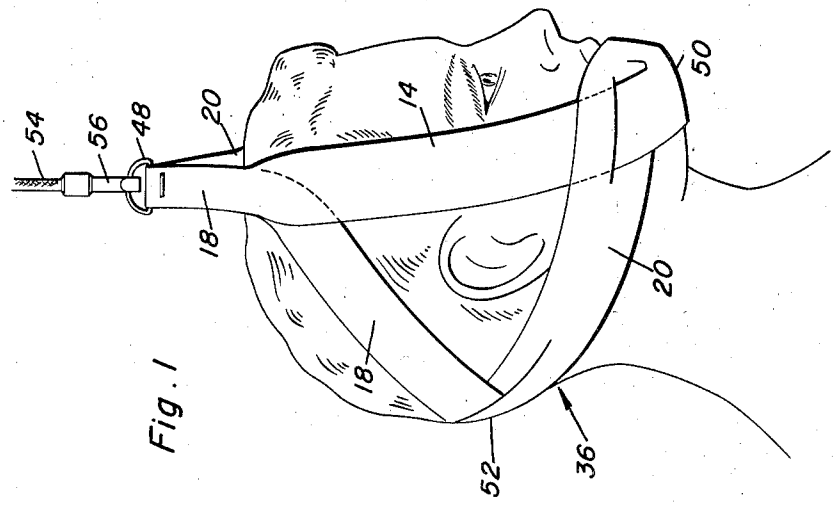


Fig. 1

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Fig. 3

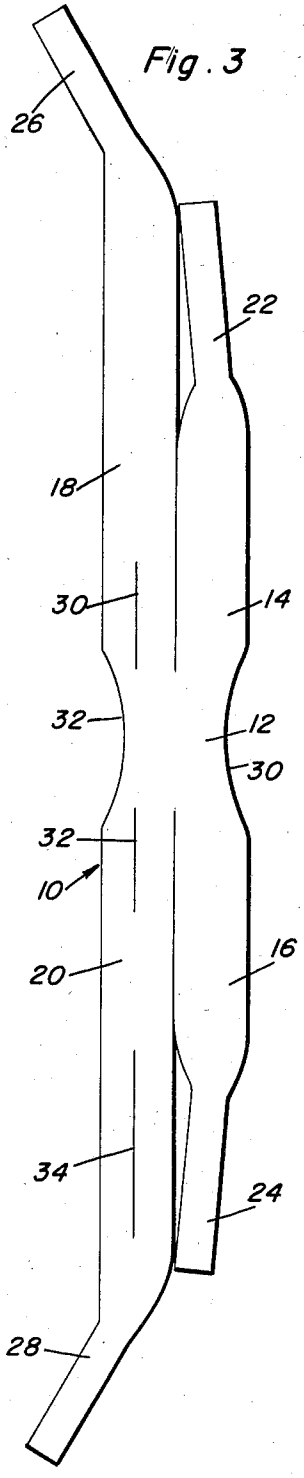


Fig. 4

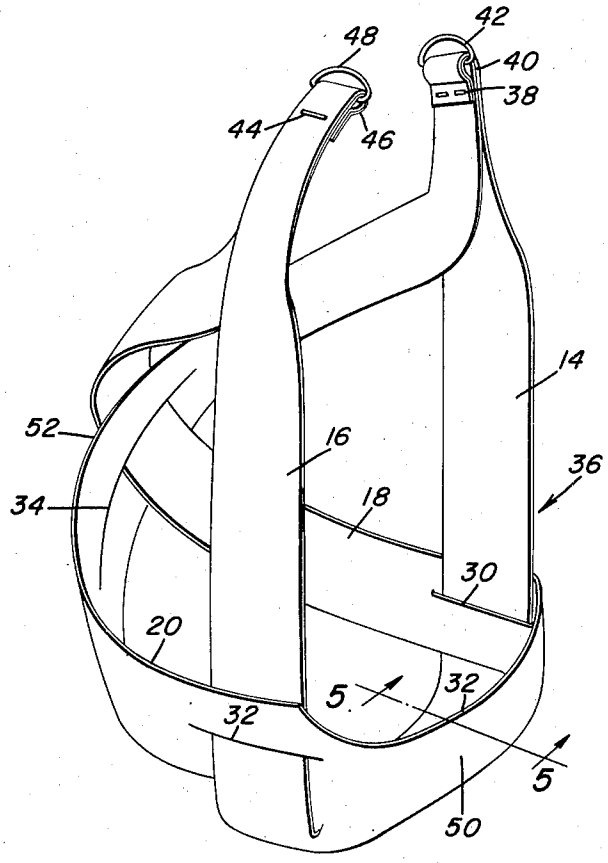
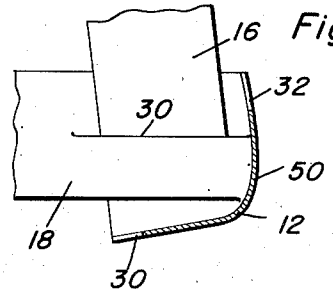


Fig. 5



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HEAD HALTER

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4 Claims. (Cl. 128—75)

This invention relates in general to new and useful improvements in traction devices, and more particularly to a head bandage for cervical traction.

The primary object of this invention is to provide an improved head halter for cervical traction, the head halter being so constructed whereby it is self-adjusting as to front and rear tension when a traction applying force is placed thereon.

Another object of this invention is to provide an improved head halter, the head halter being of an extremely simple construction and formed of a one-piece of material.

Still another object of this invention is to provide an improved head halter which is so constructed whereby the manufacturing cost thereof is extremely low so as to be economically feasible and at the same time may be readily applied to one's head with a minimum of time and effort.

A further object of this invention is to provide an improved head halter for cervical traction, the head halter being formed of a single piece of material having strap portions, the strap portions being so interlocked whereby they provide a chin cup and a brace for the rear of the head so that the head is properly supported by the head halter during the traction operation.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a side elevational view of a patient whose head is positioned in the head halter for cervical traction, the head halter having connected to the upper part thereof a traction line;

Figure 2 is a partial rear view of the patient of Figure 1 showing further the relative position of the head halter with respect to the patient's head;

Figure 3 is a plan view of the blank from which the head halter is formed showing the one-piece construction thereof;

Figure 4 is a front perspective view of the head halter removed from the patient and showing the specific details thereof; and

Figure 5 is an enlarged fragmentary sectional view taken substantially upon the plane indicated by the section line 5—5 of Figure 4 and shows the specific construction of the chin cup.

Referring now to the drawings in particular, it will be seen that there is illustrated in Figure 3 a blank **10** from which the head halter is formed. The blank **10** is in the form of a single piece of material, preferably a woven cloth, and includes a central portion **12** from which straps **14**, **16**, **18** and **20** extend. The straps **14** and **16** are identical and form a first pair of straps, the straps **14** and **16** extending in opposite directions of the central portion **12**. The straps **18** and **20** are identical and form a second pair of straps, the straps **18** and **20** also extending in opposite directions from the central portion

12. It is to be noted that the straps **14**, **16**, **18** and **20** are disposed generally parallel to each other.

The straps **14** and **16** terminate in reduced end portions **22** and **24**, respectively, which are disposed at a slight angle to the longitudnal axis of the straps **14** and **16**. The straps **18** and **20** terminate in reduced end portions **26** and **28**, respectively, the end portions **26** and **28** being disposed at a relatively great angle to the longitudinal axis of the straps **18** and **20**. In order to provide for a suitable interlocking of the straps, the strap **18** is provided adjacent the central portion **12** with a longitudinally extending slot **30**. A similar slot **32** is formed in the strap **20**. The central part of the strap **20** is also provided with an elongated slot **34**.

In order to provide clearance for the mouth and throat, there is provided in opposite sides of the central portion **12** recesses **30** and **32**.

In order that the head halter, which is referred to by the reference numeral **36**, may be formed, the strap **14** is passed through the slot **30** and the strap **16** is passed through the slot **32**. Further, the strap **18** is passed through the slot **34** so that the straps **14**, **16**, **18** and **20** are arranged as is best illustrated in Figure 4.

After the straps **14**, **16**, **18** and **20** have been interlocked, the end portions **22** and **28** are connected together by suitable stitching **38** and a loop **40** is formed. Positioned in the loop **40** is a ring **42**. Also, the end portions **24** and **26** are secured together by suitable stitching **44** to form a loop portion **46**. Positioned in the loop portion **46** is a suitable ring **48**.

It is to be noted that when the straps **14**, **16**, **18** and **20** are interlocked, the central portion **12** is folded longitudinally thereof so as to be of a generally L-shape, as is best illustrated in Figure 5. Thus the central portion **12** and the straps **14**, **16**, **18** and **20** define a chin strap **50**. Also, the crossing of the straps **18** and **20** forms a suitable base **52** for the back of the patient's head.

Referring now to Figures 1 and 2 in particular, it will be seen that when the head halter **36** is properly positioned on a patient's head, the chin cup **50** engages the chin of the patient and the straps **14** and **16** extend upwardly along the sides of the patient's head at the front thereof for firm support. The straps **18** and **20** pass under the patient's ears and around the back of the patient's head with the brace **52** firmly bracing the back of the patient's head immediately above the area of the neck.

In order that the necessary traction may be applied, there is provided the customary traction line **54**. The traction line **54** is provided at the lower end thereof with a snap fastener **56** which engages the rings **42** and **48** for releasably connecting the head halter **36** to the traction line **54**. The necessary tension is placed on the traction line **54** in the conventional manner.

Because the individual straps **14**, **16**, **18** and **20** are slidably interlockingly engaged, it will be readily apparent that as tension is applied to the upper ends of the straps **14**, **16** and **20**, they will slide with respect to each other so that they adjust to fit the patient's head. Thus the patient's head will be firmly grasped by the head halter **36** at all times and properly supported for cervical traction.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A head halter for cervical traction, said head halter comprising a single piece of material including a wide central portion and divided end portions, said divided end portions forming four separate straps, said straps including first and second straps disposed at opposite ends of said central portion, each of said first straps overlapping and interlocking a corresponding one of said second straps immediately adjacent said central portion to define a chin cup, said second straps being disposed in crossed relation to form a base for the back of the head, remote ends of said straps being connected together in pairs, a traction line attaching ring carried by each of said pairs.

2. A head halter for cervical traction, said head halter comprising a single piece of material including a wide central portion and divided end portions, said divided end portions forming four separate straps, said straps including first and second straps disposed at opposite ends of said central portion, each of said first straps overlapping and interlocking a corresponding one of said second straps immediately adjacent said central portion to define a chin cup, said second straps being disposed in crossed relation to form a base for the back of the head, remote ends of said straps being connected together in pairs, a traction line attaching ring carried by each of said pairs, at the juncture of said straps of said pairs.

3. A head halter for cervical traction, said head halter comprising a single piece of material including a wide central portion and divided end portions, said divided end portions forming four separate straps, said straps including first and second straps disposed at opposite ends of said central portion, each of said first straps overlapping and interlocking a corresponding one of said second straps immediately adjacent said central portion to define a chin cup, said second straps being disposed in crossed relation to form a base for the back of the head, remote ends of said first straps being connected to a remote end of an opposite one of said second straps, a traction line attaching ring carried by each pair of straps at said remote ends.

4. A head halter for cervical traction, said head halter comprising a single piece of material including a wide central portion and divided end portions, said divided end portions forming four separate straps, said straps including first and second straps disposed at opposite ends of said central portion, each of said first straps overlapping and interlocking a corresponding one of said second straps immediately adjacent said central portion to define a chin cup, said second straps being disposed in crossed relation to form a base for the back of the head, remote ends of said straps being connected together in pairs, a traction line attaching ring carried by each of said pairs, said second straps being interlocked at their point of crossing.

References Cited in the file of this patent

UNITED STATES PATENTS

892,560	Smith	July 7, 1908
1,110,772	Gunderman	Sept. 15, 1914
2,642,864	Ward	June 23, 1953