

Oct. 1, 1968

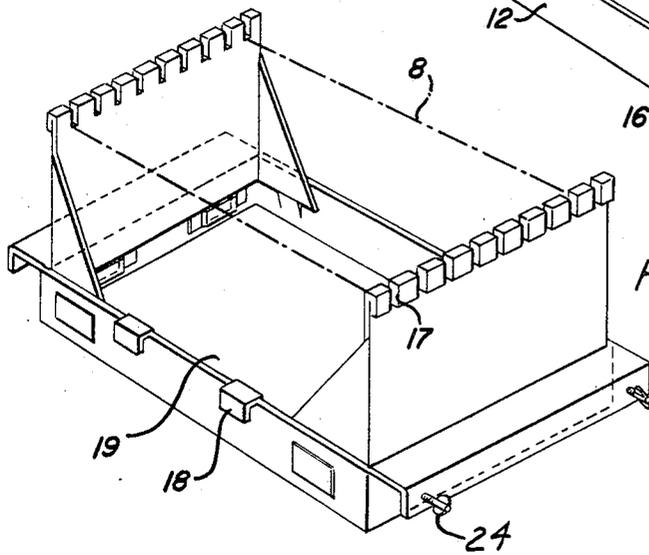
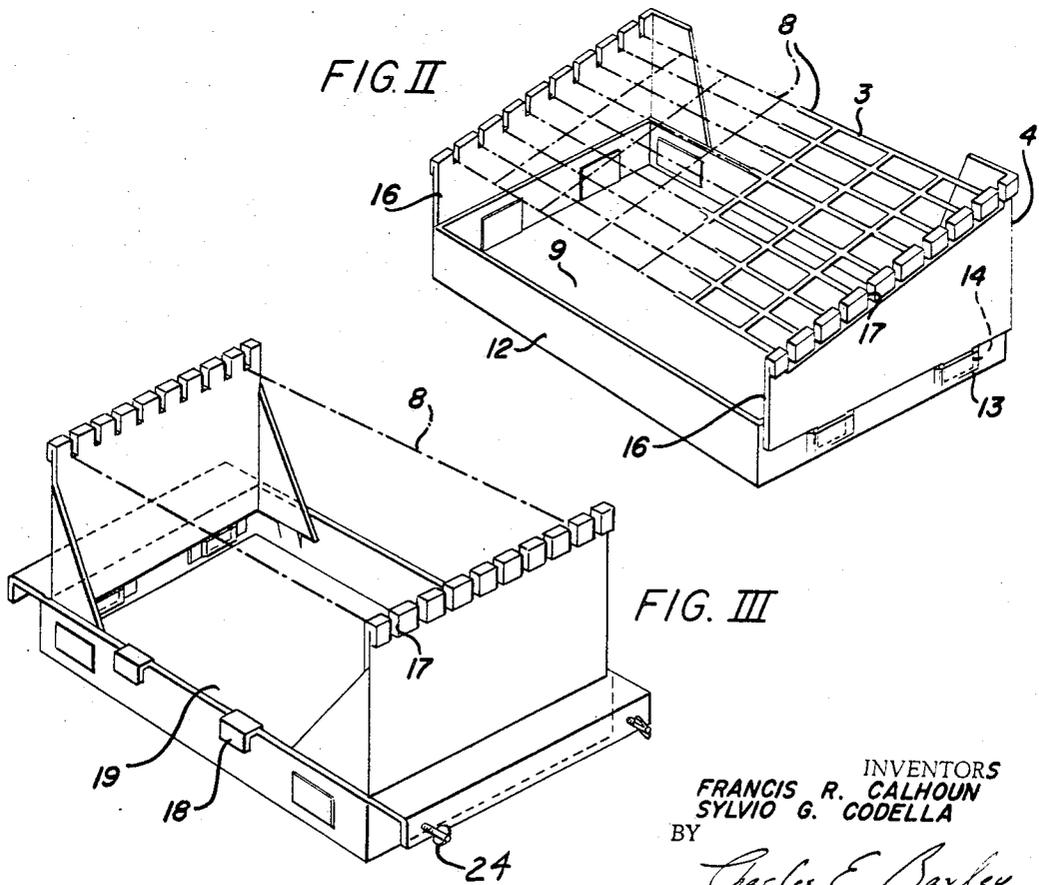
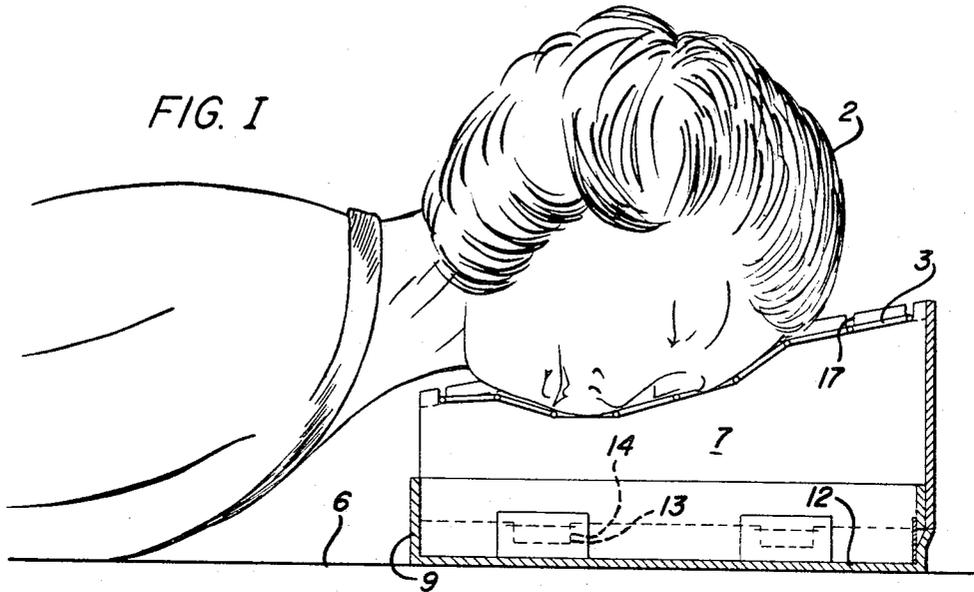
F. R. CALHOUN ET AL

3,403,413

HEAD AND BODY SUPPORTING APPARATUS

Filed Oct. 21, 1966

2 Sheets-Sheet 1



INVENTORS
FRANCIS R. CALHOUN
SYLVIO G. CODELLA

BY

Charles E. Baxley

ATTORNEY

Oct. 1, 1968

F. R. CALHOUN ET AL

3,403,413

HEAD AND BODY SUPPORTING APPARATUS

Filed Oct. 21, 1966

2 Sheets-Sheet 2

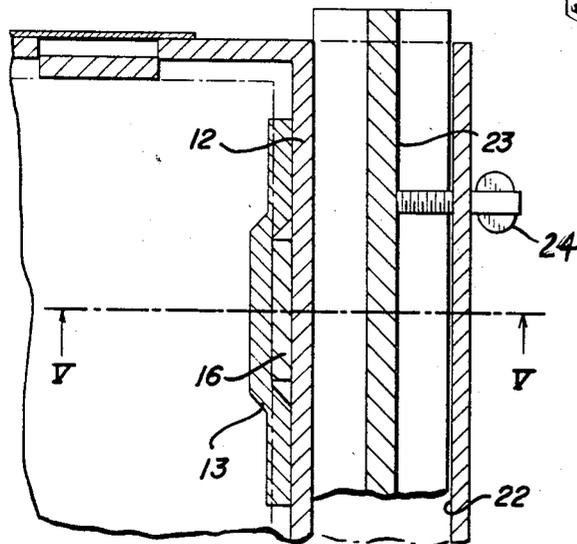
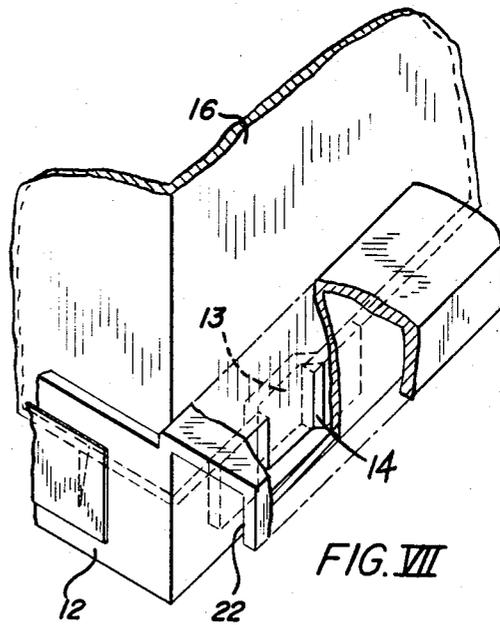
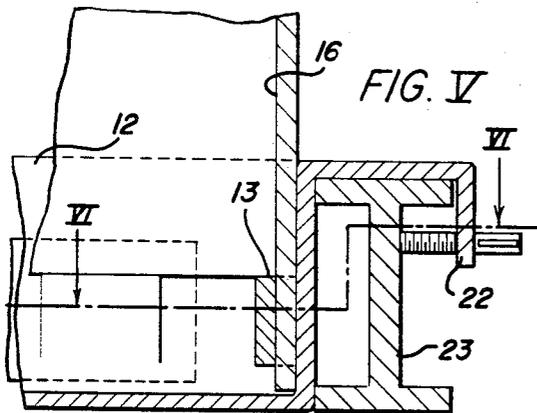
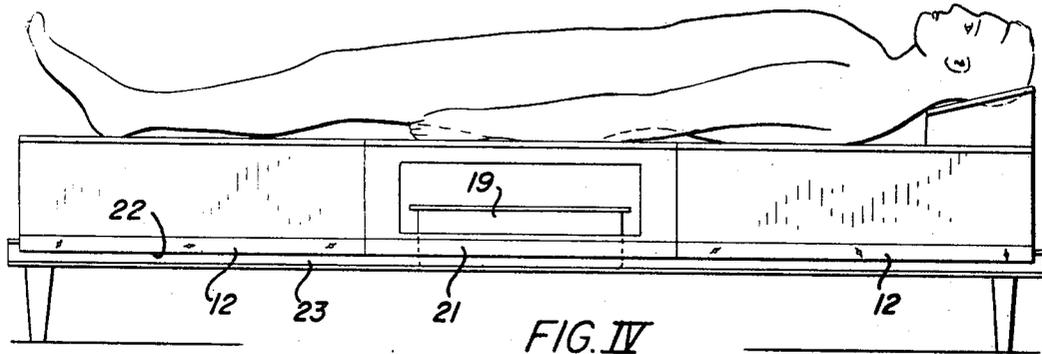


FIG. VI

INVENTOR.
FRANCIS R. CALHOUN
SYLVIO G. CODELLA

BY

Charles E. Baxley

ATTORNEY

1

2

3,403,413

HEAD AND BODY SUPPORTING APPARATUS

Francis R. Calhoun, 27 Johnson Ave., and Sylvio G. Codella, 130 Merkel Drive, both of Bloomfield, N.J. 07003

Filed Oct. 21, 1966, Ser. No. 588,401

4 Claims. (Cl. 5—338)

ABSTRACT OF THE DISCLOSURE

This disclosure teaches an apparatus for use with a bed to support the head of a patient who is reclining on the bed. A pillow-like frame includes a base and a pair of laterally spaced sides depending upward therefrom. A soft plastic net spans the sides to support the patient's head above the base. An upward-opening pan is defined by the base to accept fluids from the mouth or other head opening of the patient. This apparatus may likewise be extended in rail mounted segments to support the patient's torso and legs.

This invention relates to a device for supporting a person's head while that person is reclining. The device is particularly useful in place of a pillow with beds (as well as stretchers, litters and the like) for patients requiring drainage of the mouth, nose, ear, eye or head. These patients are usually positioned face down. This device can be applied with comparable utility in permitting a woman to sleep with no disturbance of her hairdo. It will also be seen that this device can be extended to support the patient's entire body.

In the transportation and bed repose of patients suffering from various conditions (such as heart seizures and asthma) a danger arises in that blood, vomit and/or mucus may clog the patient's trachea. This problem also presents itself, and is especially critical, with patients after surgery as they emerge from an anesthetic. Applicants cope with this problem by assuring oral drainage in a novel and facile way. A pillow-like frame is formed with an open, relatively soft net means for suspending the patient's head—thereby providing for his comfort. The patient's head is spaced above the bed to allow collection of fluids emitted from the patient's mouth in a basin-like arrangement. For nose, ear, eye or head drainage; fluids are similarly collected. Materials are selected for ease of cleaning.

Another advantage of the head rest embodiment of this invention is that it allows a woman to sleep with no disturbance to her hairdo. Social schedules, particularly those complicated by travel, frequently separate a woman from her hairdresser at times when she wants to look her best. She can overcome these adverse logistics by sleeping on this head rest in the same manner she normally sleeps (with no restriction to position), thereby preserving her coiffeur. Placement of the soft net means lends itself to curl and roller placement.

The device is not limited to the patient's head. One or more mattress-like segments, either with or without portions of conventional mattresses, can also be arranged to support the trunk and legs of the patient by suspension on soft net means. This extension of the invention is most useful for bed ridden patients, because it vastly reduces both the incidence and severity of bed sores. A mattress-like segment below the patient's posterior can be formed as a bed pan. Alternately a conventional bed pan can be inserted below the patient's posterior and removed via an opening defined in the side of the mattress-like segment. Drainage incident to postoperative care can also be provided for trunk and limb surgery by means of one or more mattress-like segment.

These and other features will appear more fully from the accompanying drawings wherein:

FIGURE I illustrates a woman on a bed with her head supported by a pillow-like frame according to this invention.

FIGURE II is an isometric view of the head rest.

FIGURE III is an isometric view showing one of a plurality of mattress-like segments according to this invention, which can be joined to support a patient's entire body.

FIGURE IV shows a hospital bed formed of mattress-like segments and with a removable bed pan positioned below the patient's posterior.

FIGURE V is an enlarged detail taken along line V—V of FIGURE VI and illustrating a downward-opening channel for mounting the mattress-like segments on rails.

FIGURE VI is an enlarged detail taken along line VI—VI of FIGURE V and showing a transverse section of the downward opening channel.

FIGURE VII is an enlarged detail depicting the tongue and groove connection of the base and sides.

As best seen in FIGURE I when a patient is to be afforded oral drainage or a woman is to sleep while preserving her hairdo, she rests her head 2 on net means 3 of frame 4 spaced from bed 6 by gap 7. Net means 3 is made of a relatively soft material such as polyethylene or polypropylene to give strength while accommodating the patient's comfort. Net means 3 can either comprise individual strands of plastic as shown in FIGURE III or it can be stamped from a plastic sheet as shown in FIGURE II. Net means 3 can also be formed by other well-known techniques.

Drainage of the patient's mouth, nose, ear, eye or head is a key objective of this teaching. Pan 9 is disposed below net means 3 to accept fluids emitted from mouth 11 of the patient. Pan 9 is defined by base 12.

It is preferred to have frame 4 compact for convenience of shipment and storage. Toward this objective, as best seen in FIGURES II and VII, base 12 defines grooves 13 which receive tongues 14 therein to support laterally spaced sides 16 upward from base 12. As best seen in FIGURE II, the preferred embodiment of net means 3 is a soft plastic grid with strands 8 accepted in slots 17 defined by sides 16 for support.

When applicants' teaching is extended to provide a bed, as best seen in FIGURES III through VII, clips 18 join adjacent mattress-like segments. Bed pan 19 can either be formed from base 21 situated below the patient's posterior or else a conventional bed pan may be positioned (as shown in FIGURE IV) so that the patient can void therein. To support the mattress-like segments, downward opening channels 22 receive rails 23 therein. Wing screws 24 hold the segments in place.

It will be understood by those familiar with this art that wide deviations can be made from the shown embodiment without departing from the main theme of invention set forth in the claims.

What is claimed is:

1. An apparatus for use with a bed to support the head of a patient who is reclining thereon and comprising a pillow-like frame which includes a base and a pair of laterally-spaced sides depending upward from the base, net means connected between the sides and arranged for supporting the patient's head spaced above the base, the net means made of a relatively soft material for the patient's comfort, the net means organized to receive the patient's head in a substantially face-down position, the base provided with an upward-opening pan dis-

3

posed below the patient's mouth to accept fluids emitted therefrom.

2. The apparatus of claim 1 with the net means comprising a plurality of soft plastic strands.

3. The apparatus of claim 1 with the net means comprising an open soft-plastic grid. 5

4. A bed to support a patient reclining thereon and comprising 10
a plurality of mattress-like segments which each include a base and a pair of laterally-spaced sides depending upward from the base,
net means for each segment connected between the sides thereof and organized for supporting the patient spaced above the base of that segment,
the net means made of relatively soft material for the patient's comfort, 15
each of the mattress-like segments having a plurality of downward opening channels laterally disposed at each of its sides,
a pair of rails disposed laterally relative the bed and 20

4

each arranged to be received in at least two downward opening channels of each of the segments to provide support for the segments.

References Cited

UNITED STATES PATENTS

324,785	8/1885	Pitney	5-337
366,000	7/1887	Holladay	5-91
504,443	9/1893	Staab	5-91
630,111	8/1899	Roels	5-90
1,276,361	8/1918	Hobert	5-322 XR
1,377,683	5/1921	Henes	5-91
2,548,547	4/1951	Melrose	5-357
2,924,832	2/1960	Knowles	5-90
3,263,246	8/1966	Towery	5-337

BOBBY R. GAY, *Primary Examiner.*

ANDREW CALVERT, *Assistant Examiner.*