

PATENT SPECIFICATION

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(54) A MOBILE WORK STATION FOR AN ANAESTHETIST

(71) I, ROLAND DROH, a citizen of the Federal Republic of Germany residing at Hardenbergstrasse 14, 5880, Ludenscheid, Federal Republic of Germany, do hereby 5 declare the invention for which I pray that a patent may be granted to me and the method by which it is to be performed to be particularly described in and by the following statement:—
 The invention relates to a mobile work 10 station for an anaesthetist.

Instrument carriers are known in the sense that an anaesthesia device is itself mobilely supported, the supporting surface of the mobile instrument carrier, formed by the wheels, being 15 adapted substantially to the base determined by the vertical projection of the anaesthesia device, in order, on the one hand to render possible adequate stability, and on the other hand to take up little floor space. Other treatment and 20 measuring instruments used in an operating theatre are similarly supported so that difficulties frequently arise in arranging and placing these devices together with their cables and conduits in a space-saving manner, which is neat and 25 at the same time easy and quick to handle.

The present invention provides a mobile work station for an anaesthetist comprising a wheeled structure including a seat and a foot board, a support for an anaesthesia device disposed at one 30 side of the foot board, at least one further support to receive measuring and treatment instruments disposed at the other side of the foot board and a duct for housing a bundle of cables and conduits.

35 Using a work station in accordance with the invention, it is thus possible to dispose other measuring and treatment instruments, apart from the anaesthesia device, particularly the instruments which are essential to an anaesthetist at his working position, on the mobile work station with their cables and conduits bundled and confined, and so to render possible an appropriate, neat and easily and reliably handled arrangement of instruments. With the work station according to the invention, it is then possible to move the anaesthesia device together with a plurality of instruments used for treatment to the place of treatment as well as to move it away from this if necessary or to park 50 it as a whole.

Further features and advantages of the inven-

tion are apparent from the claims and the following description of specific examples of instrument carriers in accordance with the invention, reference being made to the accompanying drawings in which:-

55 Figure 1 shows a perspective view of one instrument carrier;

60 Figure 2 shows a perspective partial view of a further instrument carrier; and

65 Figure 3 shows a further perspective partial view of the instrument carrier of Figure 2.

With reference to the accompanying drawings, Figure 1 shows an instrument carrier, designated as a whole by 1, with a wheeled structure 2 consisting of a rectangular frame 3 and two wheel arms 4 and 5 extending obliquely outwards from the corners of the rectangular frame 3 in the region of a narrow side. Tubes of rectangular section, welded together, form the frame 3. Caster wheels 6, 7 and 8 are mounted under the free ends of the wheel arms 4 and 5 and under the middle of the opposite narrow side of the rectangular frame 3 in such a manner that, in order to achieve a positive caster, they are additionally rotatable, in known manner, about a vertical pivot axis which does not intersect the wheel axis, so as to be able to displace and turn the frame carrier in any direction on the floor.

70 The wheel arm 5 carries a support 9 for an anaesthesia device 11 which, for reasons of clarity is not illustrated in detail but is merely indicated by an outline 10. Furthermore, a drip stand 12 is secured to the lower portion of the support 9 by means of a bearing arrangement 13 permitting swivelling in relation to the frame 2. The support 9 further carries a writing and work 75 surface 14 preferably in an arrangement which is adjustable in height and can be swivelled.

80 Disposed on the wheel arm 4 is a support 15 to receive measuring and treatment instruments. At the top, the support 15 comprises a substantially rectangular supporting frame 16 on which measuring and treatment instruments 17, 18 can be placed. If necessary, the supporting frame 16 may be provided with a support plate which can be superimposed on, or inserted in, the frame.

85 Adjacent to the narrow side remote from the wheel arms 4 and 5, the surface of the rectangular frame 3 is covered by a container fix-

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ture 19 and also by a foot board 20. The container fixture 19 comprises drawers 21 to receive, in particular, relatively small items such as treatment means, instruments, accessories and spare parts, but also artificial respiration equipment, electro-surgical equipment and recording units. The surface of the container fixture 19 is at about seating height above the rectangular frame 3 and is constructed in the form of a seat 23 using a cushion 22. In addition, reserve gas cylinders for laughing gas, oxygen etc., can be secured to the back and be connected to the seat by a back rest.

Furthermore, the complicated and hampering laying of cables and conduits, flexible pipes and the like in conventional arrangements is simplified by bundling and location, for which purpose a tube 25 is provided which is disposed under the rectangular frame 3 and which receives the conduits for electric current, gaseous or liquid media, pressure media etc., to be connected to sockets, measuring installations and other equipment. If necessary, the tube can be divided or slit in known manner and be detachably mounted so as to facilitate alterations to the bundle of conduits. Additional sockets, connection couplings and the like can be provided on the instrument carrier.

Altogether, there results a working position for an anaesthetist which is compact in construction, appropriate and neat. The anaesthetist can occupy the seat 23 and then finds his measuring and treatment instruments disposed within reach. The working position thus formed by the instrument carrier 1 can be moved as a whole unit, as required, so that the difficulties and uncertainties with regard to accessibility, neatness and completeness which exist with the conventional individual arrangement of the instruments, as well as complicated performance in the preparation can be avoided.

It will be understood that the instrument carrier can easily be equipped with a plurality of further holders and containers. A cylinder holder 24 is shown on the wheel arm 5 only by way of example.

In another embodiment as shown in the partial illustrations in Figures 2 and 3, an instrument carrier 30 comprises a wheeled structure made up of a rectangular foot board 31 of steel which is supported in relation to the floor by four caster wheels 32 at the corners. Detachably secured to the foot board 31 is a container fixture 33 having a cushion 34. Alternative fixing positions for the container may be provided permitting a change of its position in relation to the foot board 31 - for example, along attachment slots or by means of a pattern of mounting holes.

Connected to the foot board 31 is a one-piece continuous tubular frame 35 which bears with a U-shaped centre portion against the foot board 31. In the example illustrated, the central portion extends above the foot board, following its rear edge and part of the lateral edges at both sides, but it may also be fitted below the board. At the ends, the arms of the U-shaped centre portion merge, each with a 90° bend upwards, into supports 36 and 37 for instruments and working devices of the kind mentioned by way of example in connection with the embodiment of Figure 1. The tubular frame thus formed serves to stiffen the foot board 31, forms part of the instrument supports and at the same time provides a continuous passage for conduits and cables. The tubular frame 35 is provided with suitable openings for taking cables and conduits in and out.

In Figure 3, the bearing arrangement for the supports of equipment members of the instrument carrier 30 is illustrated with reference to the example of a writing and work surface 38 with a pigeon hole 40, which is rigidly connected to an angled arm 39 which engages with a downwardly directed tubular portion for rotation and vertical displacement in the portion of the tubular frame constructed in the form of a support 37. The rotational movement can be improved by a swivel rolling bearing between the arm 39 and the support 37. A pneumatic or hydraulic device may likewise be disposed in the support 37 to facilitate or render possible the adjustment in height. Furthermore, detent or locating devices may be provided to secure a specific swivel or height position for the work surface. Such devices for the easy adjustment in angle and height can be provided on both supports 36, 37 and for the support of any instruments and the like.

The supports for an anaesthesia device described may serve instead as supports for an analgesia device.

WHAT I CLAIM IS:-

1. A mobile work station for an anaesthetist comprising a wheeled structure including a seat and a foot board, a support for an anaesthesia device disposed at one side of the foot board, at least one further support to receive measuring and treatment instruments disposed at the other side of the foot board and a duct for housing a bundle of cables and conduits.
2. A mobile work station as claimed in Claim 1 wherein a drip stand is mounted on the wheeled structure for swivelling movement in relation to the wheeled structure.
3. A mobile work station as claimed in Claim 1 or 2 wherein the seat is formed as a cabinet-like container fixture.
4. A mobile work station as claimed in any preceding claim wherein a writing and work surface is disposed on the wheeled structure within reach of, and at a proper working height in relation to, the seat.
5. A mobile work station as claimed in any preceding claim wherein the wheeled structure comprises a frame having a tubular, U-shaped portion disposed in a horizontal plane and upwardly directed tubular portions at the two ends of the U-shaped portion respectively form said

support for an anaesthesia device and said further support to receive measuring and treatment instruments.

6. A mobile work station as claimed in any preceding claim wherein the support and the further support comprises a swivel rolling bearing.

7. A mobile work station as claimed in any preceding claim wherein a hydraulic or pneumatic device is disposed in the support and the further support for adjusting the height of equipment supported by the support.

8. A mobile work station substantially as hereinbefore described with reference to Figure 1 of the accompanying drawings.

9. A mobile work station substantially as hereinbefore described with reference to Figures 2 and 3 of the accompanying drawings.

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1 SHEET

COMPLETE SPECIFICATION

This drawing is a reproduction of
the Original on a reduced scale

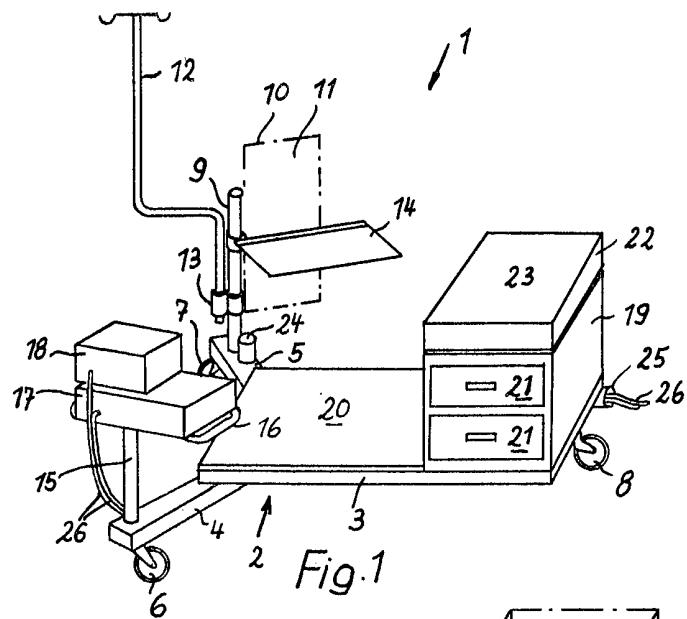


Fig. 1

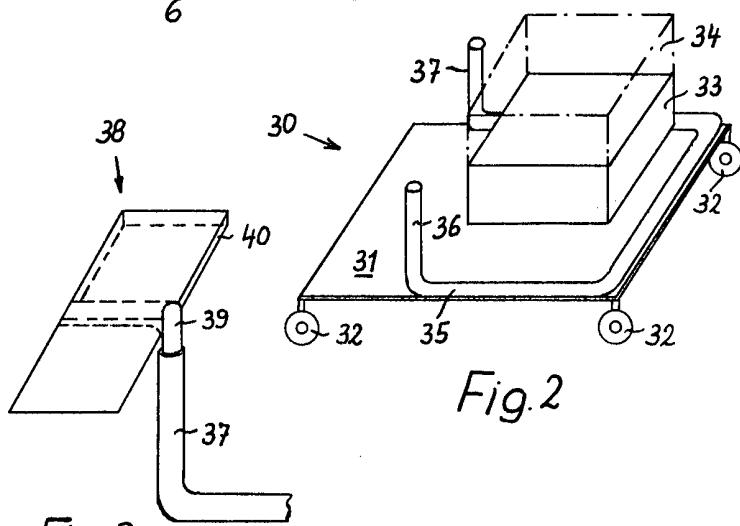


Fig. 2

Fig. 3