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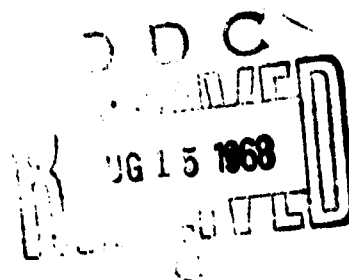
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INSTRUCTIONS FOR USE

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AEROSOL ROOM INHALATION DEVICE NO 999

The Aerosol Room Inhalation Device No 999 is operated with compressed air at a gauge pressure of 3 atmospheres and has a compressed air requirement of approximately 100 liters/minute.

It may be operated

- A. through connection to an available compressed-air source,
- B. through connection to an air-compressor unit,
- C. in special cases through connection to a compressed-air (not oxygen!) cylinder, whereby it must be pointed out that the contents of a 40-liter cylinder suffices only for about 50 minutes' atomization, so that for continuous room inhalation purposes the use of compressed air from cylinders is unrealistic.

- 1) Connection of the Aerosol Room Inhalation Apparatus to an Available Compressed-Air Source

Before connecting the device to an existing compressed-air line the following must be taken into consideration:

- a) For the duration of atomization the possibility of drawing approximately 100 liters compressed air per minute at a pressure of 3 atmospheres gauge must be guaranteed. The pressure of 3 atmospheres gauge must be kept constant by means of a suitable manometer.
- b) Both in the oblong-type air-compressor units (above all in those with air reservoirs) and in longer compressed-air lines dirt will constantly form which easily plugs up the fine orifices of the device. It is therefore necessary to interpose a filter retaining this dirt at a point as near in front of the device as possible.

We furnish such a filter with water separator and manometer on request, so that at the same time the air pressure can be checked also in the vicinity of the device.

2) Getting the Aerosol Room Inhalation Device Ready for Use

The device is shipped in a condition ready for use; all that is necessary after removal of the packing is to connect it by means of a rubber tube suitable for compressed air to the compressed-air source. A rigid connection through a compressed-air pipe is not recommended since it is desirable that the device be readily unscrewed for cleaning purposes.

After the device has been connected to the compressed-air line it is filled with about 2-3 liters of the inhalate (sols, etc) to be atomized; consumption amounts to about one-eighth of a liter per hour, or about one liter per eight hours, so that in the case of expensive inhalation media it is sufficient to fill in daily between 1 1/2 - 2 liters.

The filling is carried out before placement of the cover on the glass bowl.

3) The Carrying Out of the Room Inhalation

As soon as the device has been connected to the air line and filled with the inhalation liquid as per the above instructions, the atomization may begin through the release of the compressed-air supply. The device produces an aerosol = dry mist having a spectrum of between approximately 1.0 μ and 3.0 μ in diameter, which becomes invisible already a short time after leaving the device but nevertheless floats in the air for hours. An extraordinarily intensive deep-inhalation effect is attained by means of this device in rooms up to 25 m³; its performance is still adequate in rooms of 30-40 m³.

4) Control- and Cleaning Measures

- a) In the filter the water collected in the water separator should be drained off once or twice daily after termination of the atomization.
- b) 1. In the device: Daily, after termination of the atomization the non-atomized inhalation liquid should be poured out of the device and the latter operated for a short time with a substance in which the inhalation liquid dissolves (maximum temperature 50°C!!), in order to prevent the plugging up of the fine orifices.

2. Whenever an orifice is plugged up and does not function, a condition recognizable from the cessation of the dropping off of non-atomized inhalate in one of the six bells, the bell located on top of the orifice is to be unscrewed and the clogged orifice cleaned with the enclosed (0.3 diameter) cleaning wire.

Kleemann & Kaysser
Medical Equipment
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