where it terminates in an orifice **27** that opens on the exterior surface of the tube **12**, so that unwanted fluids that may collect above the bag **20** can be removed by suction.

The bag **20** may be provided by a cuff adhered at its ends to the exterior surface of main tube **12** so that the bag is defined by the cuff material and the main tube's exterior surface between the cuffs ends.

Alternatively, the bag **20** may be provided by a balloon of generally toroidal extent encompassing the main tube **12** and having the balloon's radially inner surface adhered to the exterior surface of the main tube **12**.

As stated above, the endotracheal tube device **10** of this embodiment also comprises a second bag **50**. This is located between the first inflatable bag **20** and the proximal end **14** of the main tube **12**, the bag **50** being separately inflatable via a second inflation line **48** and such that the two bags **20,50** (when inflated) are in contact with or very closely approach one another. The second bag **50** is substantially longer than the first, distal bag **20**, typically being about three times its length. The length of the second bag **50** is chosen so that it occupies substantially all of the space between the first bag **20** and the vocal chords **13**, and preferably extends through and above the vocal chords **13** by a short distance when the patient end **16** of the tube is correctly located, just above the patient's carina.

In use, following insertion of the endotracheal tube **10** into the patient's trachea, the first bag **20**—which is located spaced from the patient's vocal chords **13**—is inflated to provide a seal against the trachea **11**, and the second bag **50** is then inflated so as to occupy all or at least the majority of the space or volume between the inflated first bag **20** and the larynx, or vocal chords **13**.

In this way, the bag **50** minimizes the trachea volume available above the bag **20** in which unwanted fluids can collect. It thus prevents or minimizes the quantity of such unwanted fluids that can exist above the bag **20** and that could travel past this bag **20** into the patient's lungs.

When the tube device **10** is to be extubated from the patient, the bag **50** is deflated first and, before deflating the lower bag **20**, any minimal unwanted fluids collecting above bag **20** can (continue to) be removed via suction line **26**.

The embodiment of FIG. **3** provides an endotracheal tube device **30** for insertion, via the nose or mouth, into a human or animal trachea **11**. The endotracheal tube device **30** is similar to that of FIGS. **1** and **2** except that its main tube **12** is encompassed at its distal end **16** by an inflatable bag **40** of different shape from that of the bag **20** in FIGS. **1** and **2**. Instead of being a conventional, wholly ovate bag as shown in FIGS. **1** and **2**, the bag **40** of FIG. **3** has a shape to form (when inflated) a receptacle-like upper surface.

The bag **40** is shaped and/or attached to the outer wall surface of main tube **12**, e.g. by tapes, adhesive, welding or the like, such that part of the inflated bag's exterior surface forms a receptacle **25** that encompasses the main tube **12** and defines therewith a space for the collection of unwanted fluids. This space is akin to a cup-shaped recess or depression formed inwardly of the body of the inflated bag at its end facing the tube's proximal end—as though that end's surface had been depressed inwards of the body of the inflated bag.

Depending on the size and shape of the bag **40**, it is envisaged that the height of that bag's outer surface—which, when inflated, is in sealing contact with the trachea surface **11**—may be approximately 2 cm to 6 cm, whereas the height of that bag's inner surface in contact with the exterior surface of the main tube **12** may be approximately 0.5 cm to 1.5 cm where the bag is a cuff, or substantially more where the bag is a balloon. However, in either case, the depth of the receptacle **25** formed by (and between) the inflated bag's exterior surface and the main tube **12** (i.e. the distance between its mouth and its bottom) may, for example, be 2 to 4 cm.

In use, the endotracheal tube device **30** is inserted into the patient's trachea to locate bag **40** spaced from the patient's larynx **13**. Following insertion the bag **40** is inflated to provide a seal against the trachea **11**, and the second bag **50** of device **30** is then inflated so as to extend from the inflated first bag **40**—into the receptacle **25** of which the lower end of second bag **50** nestingly projects—and occupy the majority of the space or volume between the first inflatable bag **40** and the larynx, or vocal chords **13**. In this way, the bag **50** minimizes the trachea volume available above bag **40** in which unwanted fluids can collect. It thus prevents or minimizes the quantity of such unwanted fluids that can exist above bag **40** and that could travel past the bag **40** into the patient's lungs.

It will be appreciated that with either of the embodiments of FIGS. **1** to **3**, the dimensions of the bag **50** are preferably such that bag **50** encompasses upper regions of the main tube **12** and extends past the vocal chords of the human or animal patient. To avoid damage to the vocal chords and/or undue patient discomfort, the second bag **50** is inflated to a pressure substantially less than that of the lower bag **20** or **40**. For example, the bag **20** or **40** may be inflated to a pressure of water of approximately 15 cm, whereas the second bag **50** may be inflated to a pressure of water of approximately only 2 cm to 5 cm.

The bag **50** may be either a cuff or a balloon that is permanently attached to the main tube **12**. Alternatively, the bag **50** may be a separate balloon that, either after or prior to being fully inflated, is slid down the main tube **12** from the main tube's proximal end **14**, and, the main tube is in position in the trachea with the first bag **20** or **40**, the second bag **50** is then appropriately fully inflated.

Although the above-described and illustrated embodiments of this invention have been endotracheal tubes, the present invention is considered applicable also to other tracheal devices, such as tracheostomy tubes. Furthermore it will be appreciated that other modifications and embodiments of the invention, which will be readily apparent to those skilled in this art, are to be deemed within the ambit and scope of the invention, and the particular embodiments hereinbefore described may be varied in construction and detail, e.g. interchanging (where appropriate or desired) different features of each, without departing from the scope of the patent monopoly hereby sought.

Having thus described our invention, we claim:

1. A tracheal tube device for insertion into a patient's trachea, the device comprising:

a main tube having a distal end and encompassed towards said distal end by a first bag;

an inflation line extending to the interior of said first bag by which the first bag can be inflated to seal with such a patient's trachea around said main tube; and

a second bag, slidable along the main tube after the main tube and the first bag have been inserted into such a patient's trachea, said second bag encompassing said main tube when in use;

the device including a second inflation line by which the second bag can be inflated separately from the first bag to seal with said patient's trachea around said main tube at the same time that said first bag seals with such a patient's trachea around said main tube;