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## Second Part

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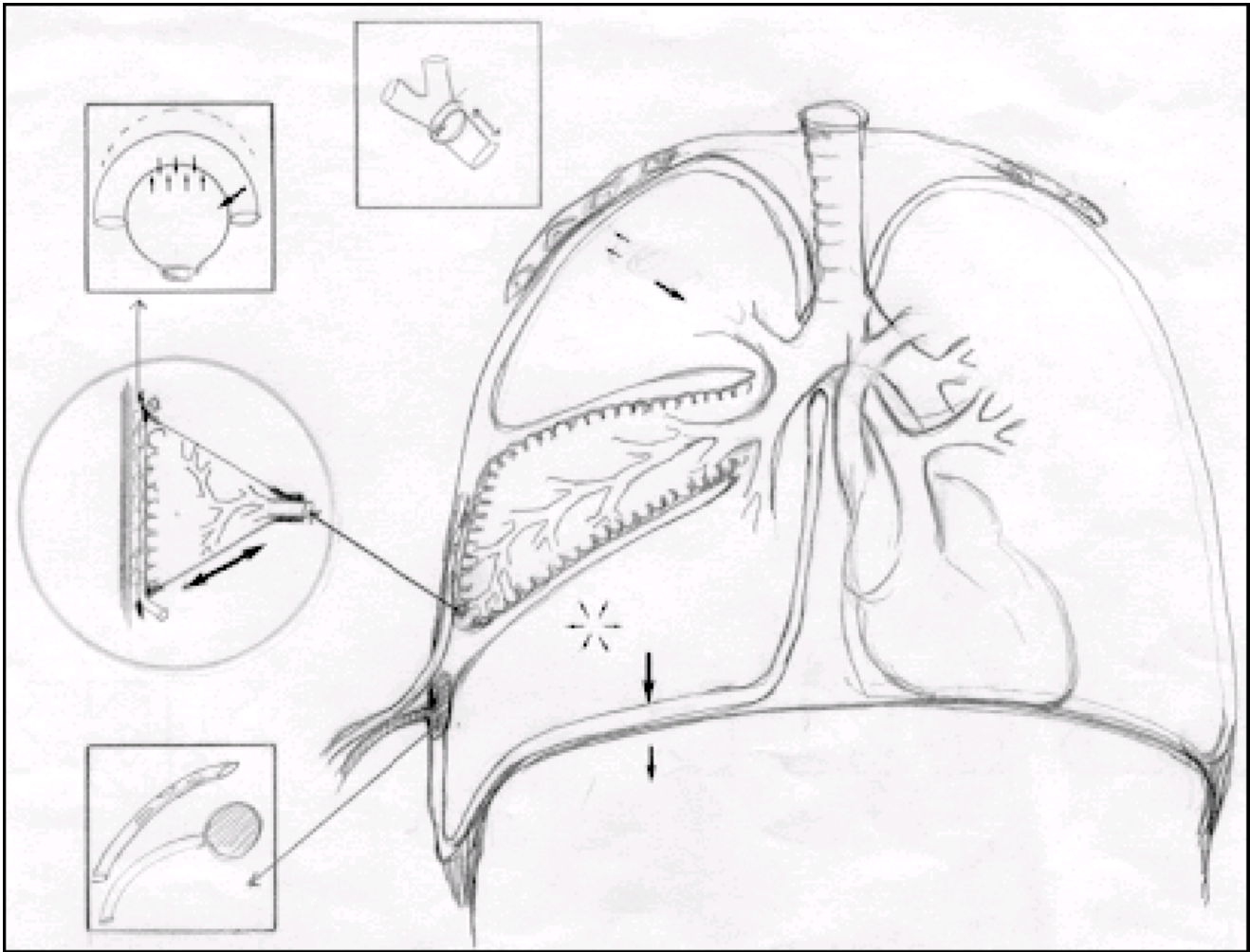
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Sketch showing the common method used in my experiments and some of the working structures leading to respiration. Note the right pulmonary lobes in their thoracic assemblage and their external areas of mechanical potential actions. The medial lobe shows, in its periphery, the lobular units and outside, the schema of a functional mechanical unit, a lobule; above that, the schema of an alveolar-capillary unit; beside which is shown a bronchus, its dichotic division and the sphincter. In the lower corner is shown the artefacts used to detect the cyclic mechanical effects of the Lung dynamics in its surface in the pleural space: 1. The small rubber balloon full of water to detect the Resultant of the pulmonary dynamics on its pleural surface, 2. The narrow tube detects the pressure variations in the intra-pleural content, due to simultaneous pleural lumen variations. See, the left pulmonary lobes, the Heart and great extra pulmonary airways, all enveloped in intimate contact by the union of the pulmonary lobes, for potential balance of the circulation fluids concerned.

All the above said obeys a genetically programmed, integrated, functional design leading to blood and air distribution among the alveolar-capillary units for gas exchange, under Vagus-Sympathetic control and pulmonary command. These integrated visceral functions also need auxiliary somatic structures that support the elastic retraction of the Lung, under pulmonary vagal control via reflexes, the first link of which is pulmo-diaphragmatic. Therefore, the Trunk is the functional central visceral-somatic unit for fluids balanced circulation