

cartilage, the next midway between that point and the umbilicus, and the lowest at the level of the umbilicus, all three being horizontal.

Four **artificial lines**, two vertical and two horizontal, divide the abdomen into nine regions (see Fig. 1). The vertical lines are drawn from the mid-point of Poupart's ligament; the upper of the two horizontal lines extends between the lowest part of one tenth rib and its fellow on the opposite side; the lower joins the two anterior superior spines of the ilia. The regions so formed are: in the middle from above downward, epigastric, umbilical, and hypogastric; on each side a hypochondriac, a lumbar, and an iliac. The hypochondriac regions are bounded above by the lower border of the 'pulmonary region' (see Thorax, p. 451); internally by the costal margin of its own side, as far as the point where the vertical line meets the ribs, thence by that line as far as the upper horizontal line.

By referring to one or other of these regions, or by stating the distance in inches from any of the fixed points at which the object is observed, a sufficiently accurate record can be made.

Abnormalities in the aspect, shape, size and movements of the abdomen are detected on examination, by inspection, palpation, and mensuration. The patient is best examined as a rule in the recumbent position, face upward, the abdominal walls being relaxed as much as possible, with which object the knees may be drawn well up. Inspection in a good light from the front, sides, and (the legs being extended) from the foot of the bed, is of the utmost importance. Palpation is best carried out with the whole palmar surface of the hand, its ulnar edge being toward the pubes; that is, if standing on the patient's right side, the observer uses his right hand, and *vice versa*. The abdominal muscles by their voluntary or involuntary contraction form a great obstacle to an efficient examination. The patient must be encouraged to maintain the body in as relaxed a condition as possible; the head and shoulders may have to be slightly elevated by a single pillow, the mouth being kept open, and the patient breathing easily. A cold hand or sudden pressure of the finger-tips will cause a defensive contraction of the recti and other muscles; it is therefore advisable to commence the palpation with a warm hand laid gently and flat upon the surface. Pressure may be increased when the abdomen has grown accustomed to the touch. By increasing the force of pressure at the end of each expiration, when the muscles involun-