pulsation transmitted through the liver from the heart or the aorta. The liver pulse may be venous or arterial. In venous hepatic pulsation the wave is originated in the dilated and hypertrophied right ventricle, in cases of mitral disease; is transmitted thence through the tricuspid valve, which under these conditions must be incompetent; it then travels against the languid venous current, and is perceived in the liver. In such cases the larger tributaries of the superior vena cava will also exhibit pulsation, which is plainly seen in the veins of the neck. Arterial hepatic pulsation may on rare occasions be found in cases where the pulsations of the arteries generally are exaggerated. This is almost exclusively in cases of aortic incompetence. In the latter condition the wave starts, of course, from the left ventricle, passing through the aorta to the hepatic artery. See Liver, pulsating, p. 189.

(*c*) Movements transmitted to the abdominal walls from the **muscular contractions of the viscera** may be seen at times. It is usually possible to distinguish the peristaltic movements of the stomach from those of the intestines. The former, when visible, may be observed to traverse the abdomen from left to right; the wave forms a wider and more projecting mass than that of the intestine, which commonly passes from right to left. In order that these movements may become visible, two conditions are necessary—viz., the abdominal walls must be thin, and the visceral contractions must be fairly active. In the case of the stomach these conditions are usually fulfilled when the pylorus is stenosed; whether this be due to cancer or to cicatricial contraction, the patient will probably be wasted and the stomach will be dilated, and to some extent also hypertrophied, in consequence of the difficulty it has had in evacuating its contents. It may be said as a rule, to which the exceptions are few, that visible peristalsis of the stomach signifies pyloric obstruction. Visible intestinal peristalsis is of more frequent occurrence than that of the stomach, and may be seen after careful observation in most cases where the walls of the abdomen are thin; it is most active, like that of the stomach, where the bowel has some difficulty in passing on its contents. When, therefore, the movements are vigorous, one suspects an obstruction of the intestine.

(*d*) Movements transmitted to the abdominal wall from **movable tumours**. The mobility of a tumour is examined by palpating its form, then directing the patient to draw full breaths, when its