

the gaseous distension of the stomach is disproportionately greater than that of the intestine. A general inflation of the abdomen with a hyperresonant percussion note (see p. 15), and possibly a displacement upward of the heart and liver, are sufficient to indicate tympanites. The condition is produced by extreme distension of the bowels and stomach, the walls of which may be practically paralysed. It is seen in peritonitis, in typhoid fever, in obstruction of the bowel, in gastro-intestinal disturbances, and in hysteria.

An obstruction to the passage of the fluids and gases of the alimentary tract at any portion of its course causes a remarkable dilatation of the proximal region of the canal. In children a hugely dilated colon may produce an enormous enlargement of the abdomen. **Free gas in the peritoneal cavity** also causes a general enlargement of the abdomen. It results from rupture or perforation of the intestine or stomach (typhoid ulcer, gastric ulcer, duodenal ulcer, tubercular ulcer, violence). It is to be recognized by a consideration of the history of the case, the sudden onset of distension, pain, probably dyspnoea and collapse. The absence of all dulness on percussion (p. 15), even of that due to the liver, is an important corroboration. **Cystic** and occasionally **solid tumours**, especially when combined, as they often are, with ascites, may give rise to considerable general enlargement of the abdomen (see Fig. 3). **Enteroptosis**, an undue mobility and displacement of the intestines and most of the other organs in the abdomen, is found chiefly in women, and is due to a relaxation of all the supporting structures of these organs, that is, weakness of the abdominal walls (after pregnancy, in debilitated states, in old age); the disappearance of subcutaneous and intra-abdominal fat; and the stretching of mesentery and peritoneal ligaments. It is naturally in the upright position that the abnormal condition is best observed. The epigastrium is not distended, but, on the contrary, may be sunken, while the lower part of the abdomen is thrown forward into a pouch, the recti and oblique muscles being stretched and separated from their fellows.

4. Certain abnormalities in the **Movements** of the abdominal wall may be seen:

(a) **Movements of Respiration.**—In children and in men breathing is much more abdominal than in women, in whom thoracic breathing is better marked. **Excessive abdominal respiration** is