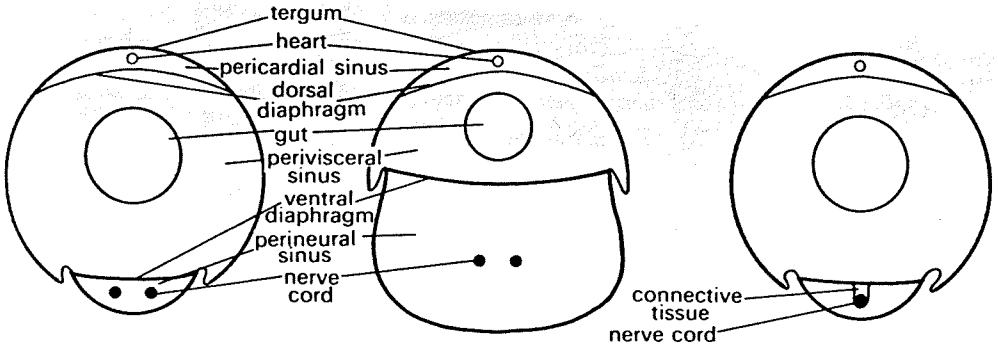

Fig. 450. Diagrammatic cross-sections of various insects showing the main sinuses of the haemocoel and the positions of heart, alimentary canal and nerve cord (after Richards, 1963).

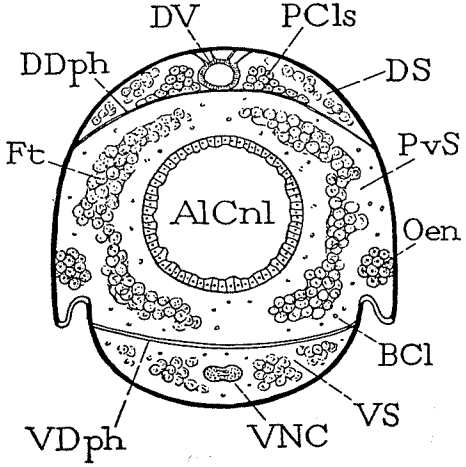

FIG. 212.—Diagrammatic cross section showing subdivisions of the body cavity. *AlCnl*, alimentary canal; *BCl*, blood cell; *DDph*, dorsal diaphragm; *DS*, dorsal sinus; *DV*, dorsal blood vessel; *Ft*, fat tissue; *Oen*, oenocytes; *PCls*, pericardial nephrocytes; *PvS*, perivisceral sinus; *VDph*, ventral diaphragm; *VNC*, ventral nerve cord; *VS*, ventral sinus

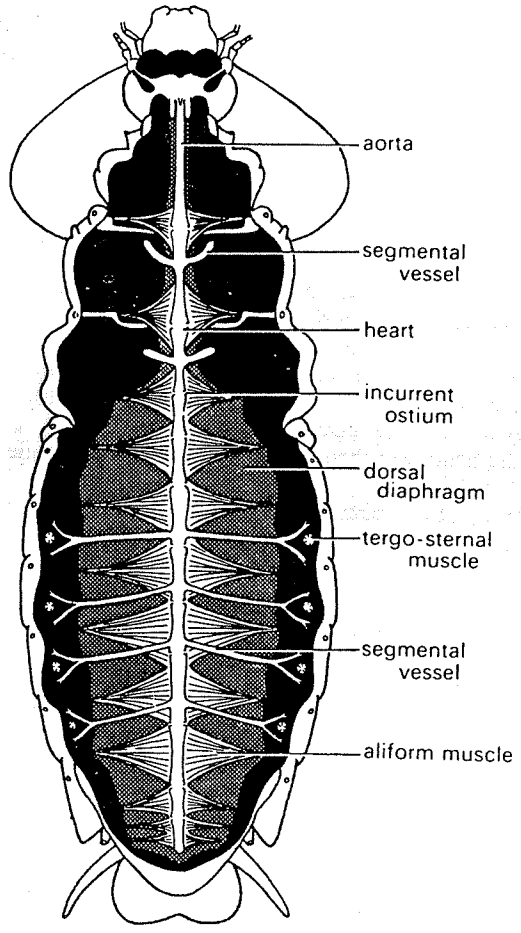

Fig. 451. Ventral dissection of *Blaberus* to show the dorsal and segmental vessels. The dorsal diaphragm and aliform muscles are continuous over the ventral wall of the heart and vessels, but are omitted from the diagram for clarity (after Nutting, 1951).

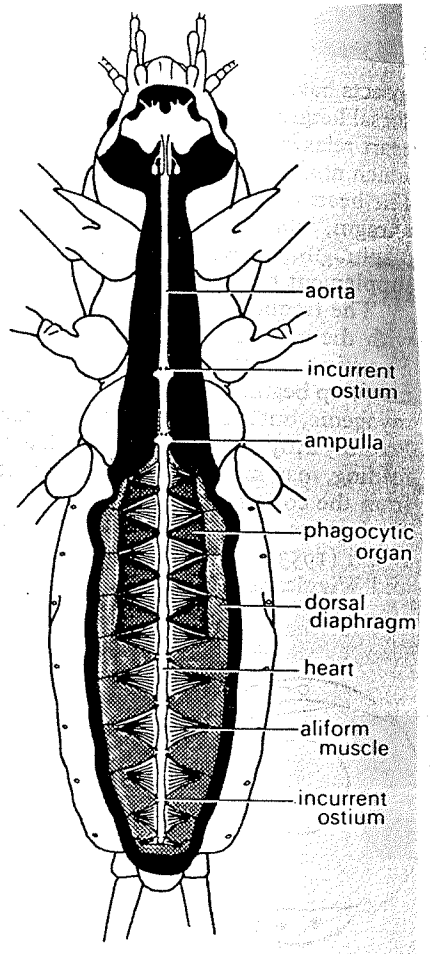

Fig. 452. Ventral dissection of *Gryllotalpa* to show the dorsal vessel and phagocytic organs. The dorsal diaphragm is continuous over the ventral wall of the heart, but is omitted in the diagram for clarity (after Nutting, 1951).

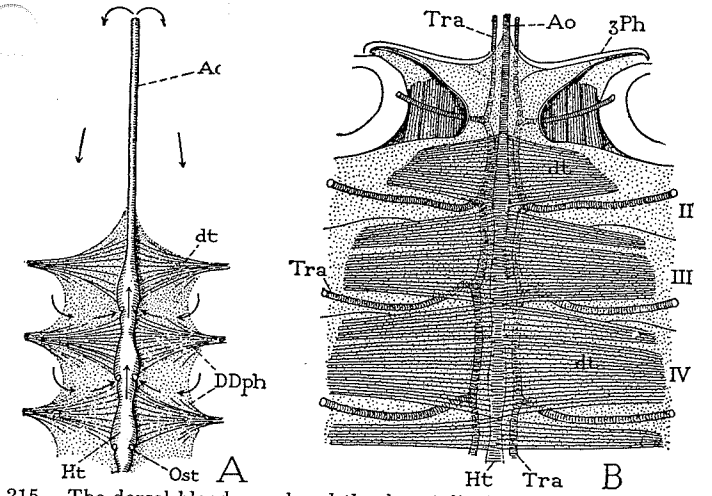

FIG. 215.—The dorsal blood vessel and the dorsal diaphragm. A, diagram of aorta and three chambers of the heart with corresponding part of the dorsal diaphragm, dorsal view, arrows suggesting the course of blood circulation. B, dorsal vessel and dorsal diaphragm of *Dissosteira carolina* from metathorax to fifth abdominal segment, ventral view.

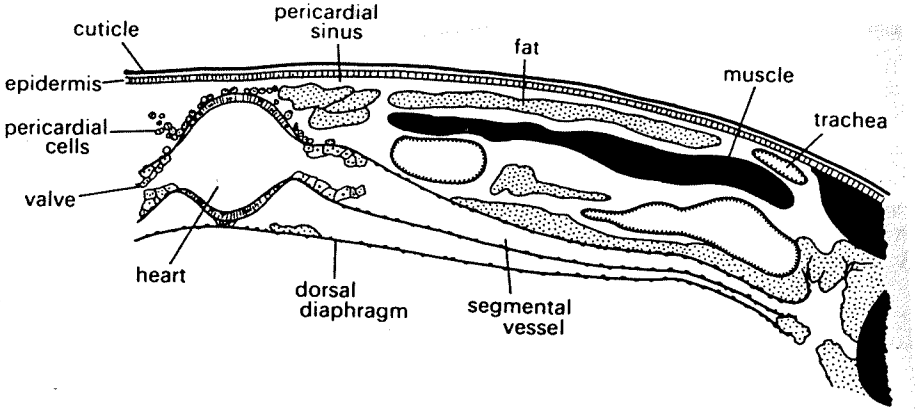

Fig. 456. Transverse section through the pericardial sinus in the abdomen of *Blaberus* showing a segmental vessel arising from the heart and discharging into fatty tissue distally (after Nutting, 1951).

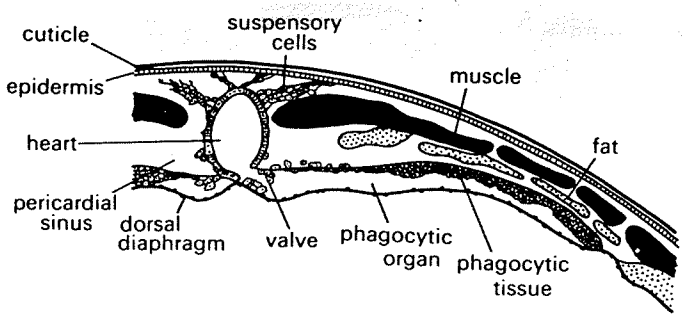

Fig. 457. Transverse section through the pericardial sinus in the abdomen of *Gryllotalpa* showing a phagocytic organ and phagocytic tissue. Pericardial cells form supporting elements (suspensory cells) for the heart dorsally (after Nutting, 1951).

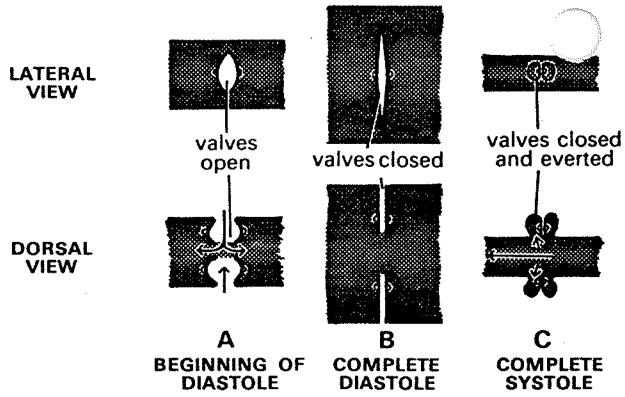

Fig. 453. Incurrent ostial valves in the larva of *Chaoborus* at different phases of the heartbeat. Lateral view above, dorsal below. Arrows indicate the directions of blood flow (from Wigglesworth, 1965).

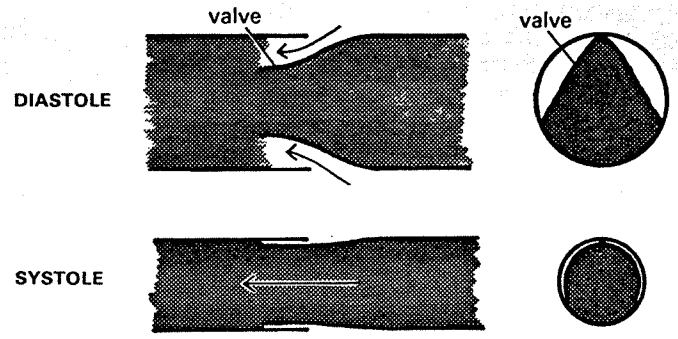

Fig. 454. Diagrammatic representation of the incurrent ostial valves as found in *Bombyx* seen in horizontal (left) and transverse (right) sections of the heart. Arrows indicate the direction of blood flow.

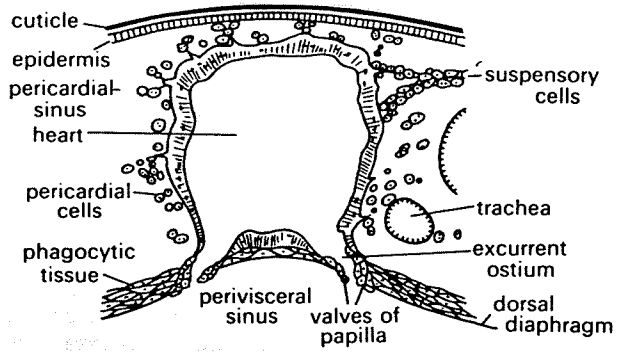

Fig. 455. Transverse section of the heart of *Taeniopoda* showing the excurrent ostia opening directly to the perivisceral sinus (after Nutting, 1951).

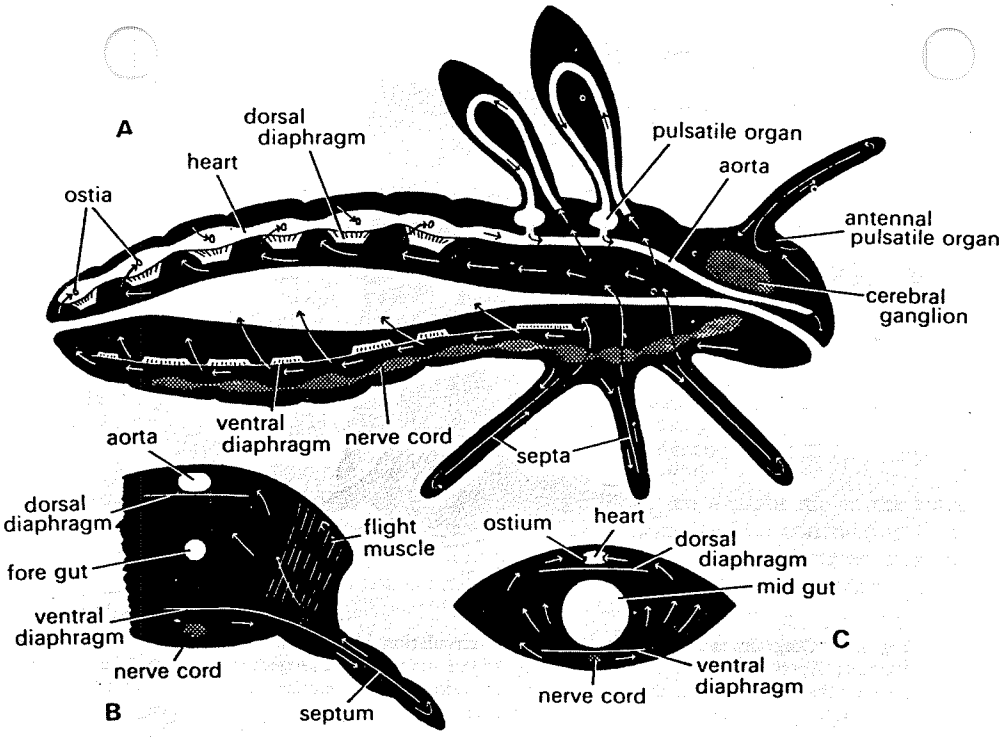

Fig. 461. Diagrammatic representation of the blood circulation in an insect with a fully developed circulatory system. Arrows indicate the course of circulation. A. Longitudinal section. B. Transverse section of thorax. C. Transverse section of abdomen (from Wigglesworth, 1965).

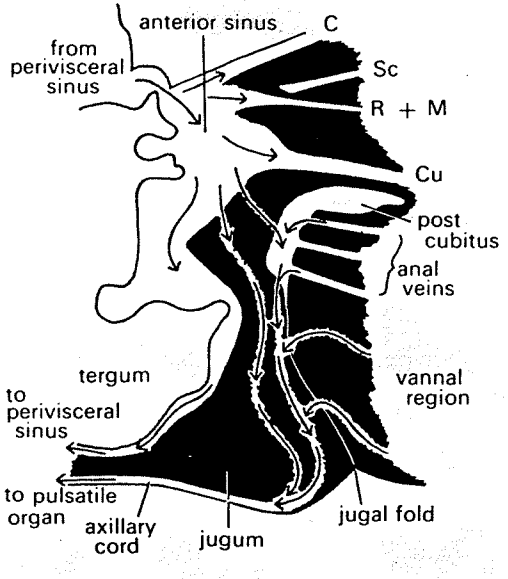

Fig. 462. Diagrammatic representation of the circulation in the base of the fore wing of *Blattella*. Areas in which the two membranes of the wing are fused together are black. Well-defined channels between the membranes, *e.g.* veins, have a regular outline, less definite channels have an irregular outline. Axillary sclerites are omitted (after Clare and Tauber, 1942)

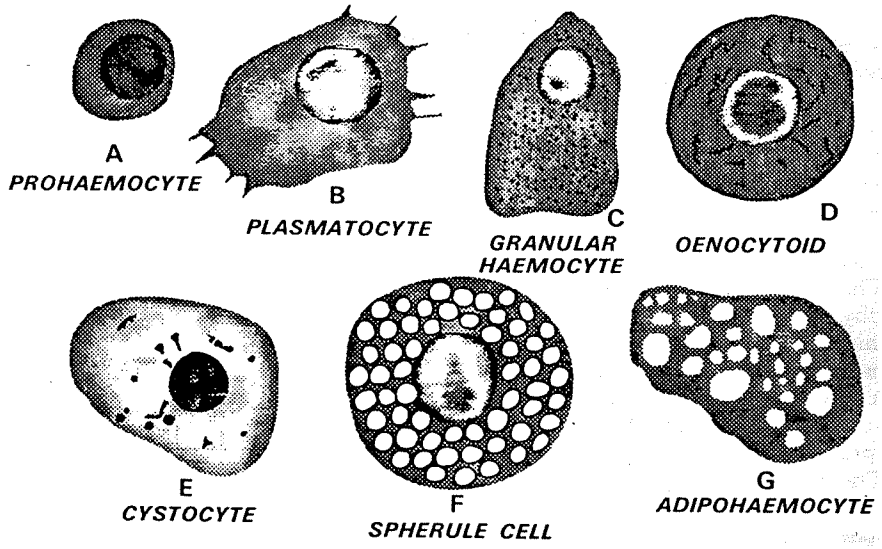

Fig. 466. Diagrammatic representation of various types of haemocyte as seen under phase contrast. All approx. × 2000. (A, D and G after Rizki, 1953; B after Jones, 1954b; C and F after Jones, 1956; E after Grégoire, 1951).

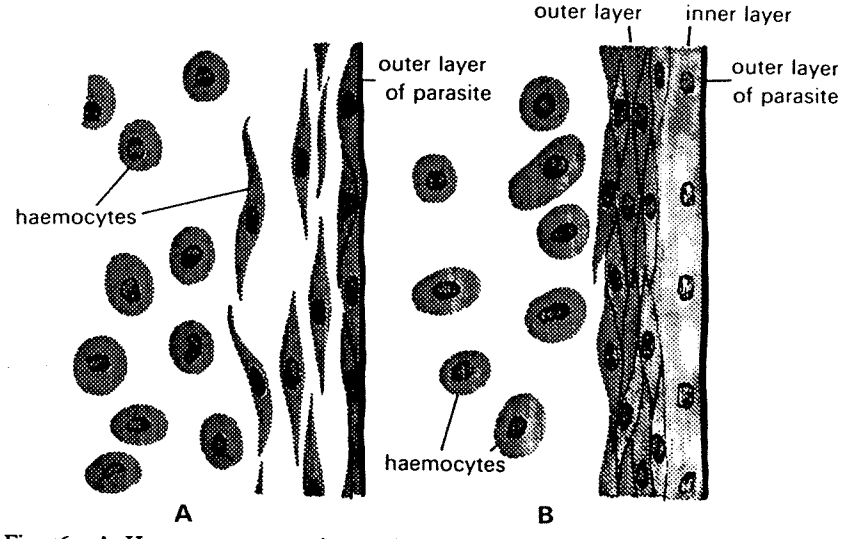

Fig. 467. A. Haemocytes aggregating on the outside of a parasite. B. Later stage with the inner layer of the enclosing capsule differentiated, but the cells of the outer layer retaining their identities (after Salt, 1963).