

Fig. 164. Fermi surface of copper.

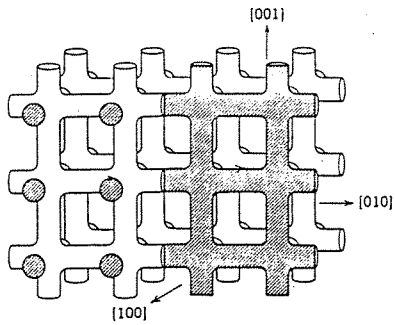


FIG. 8. One possible type of open Fermi surface for a cubic metal, showing two sections of constant  $k_x$  for  $\mathbf{H}$  along [100]. *Left*: electron orbits; *right*: hole orbits. (After R. G. Chambers.)

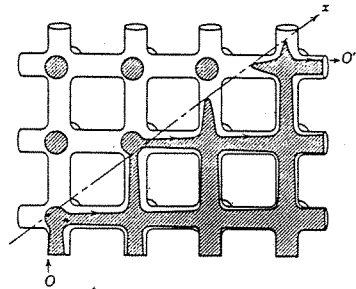


FIG. 10. As in Fig. 9, but with  $\mathbf{H}$  tilted slightly away from [100] in an arbitrary direction. Regions of electron orbits (top left) and hole orbits (bottom right), separated by an aperiodic open orbit  $OO'$ . Direction of open orbit taken as  $z$  axis. (After R. G. Chambers.)

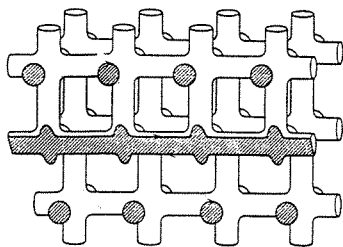


FIG. 9. Section of Fermi surface for  $\mathbf{H}$  in (010) plane, showing the periodic open orbits bounding the central shaded strip. Electron orbits above and below. (After R. G. Chambers.)

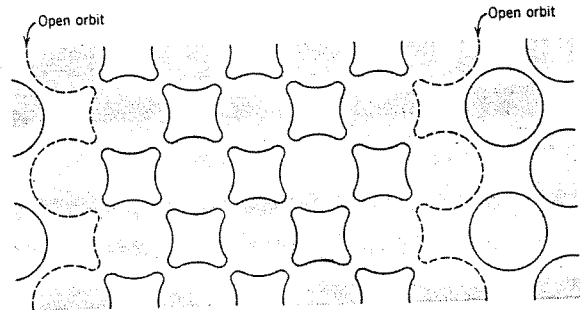


FIG. 11. Periodic open orbits. Slice through extended  $BZ$  scheme of fcc crystal, with  $\mathbf{H}$  tilted in  $yz$  plane slightly from  $z$  direction. (After Pippard.)