waters. This horizontal movement is so slow that it is scarcely measurable unless the observations, if it be possible to make them, be carried on for long periods of time. But, obviously, the movement is sufficient to prevent the waters from becoming excessively charged with dissolved mineral matter, except locally. The principal evidence of this lateral movement is furnished by the fact that the waters remain relatively fresh. There must be a circulation of some kind in order to enable the waters to retain their fresh character, for were they in a static condition mineral matter would be dissolved from the materials with which they would be constantly in contact, and they would soon become charged to their maximum limit with the products of solution. The explanation offered to account for this circulation seems to be the most probable one. As regards its effect upon hydrostatic pressure in wells, the lateral oceanward movement is so small as to be negligible. From a practical standpoint the water may be regarded as a stationary mass under constant hydrostatic pressure, the pressure being due to the fact that a portion of the mass is at higher levels, and is prevented from seeking its level by various confining agents.

Although the mass of water contained within the sediments of the Coastal Plain is, as a whole, under constant hydrostatic pressure, only the more pervious beds will yield their burden of water with sufficient ease to render them of economic use. The less pervious beds serve as confining agents, and localize the hydrostatic pressure along certain lines. Several of the ways in which pressure is thus localized are shown in Fig. 18, p. 346. Letter *c* indicates a porous sand layer between two relatively impervious clay layers in which the downward passage of the water is prevented by the heavier stationary salty water which fills the lower end of the stratum to the level of *b;* letter *d* indicates communicating sand lenses within a body of materials consisting mainly of less pervious, thinly laminated clay and sand layers, in which the downward percolating waters are obstructed by the heavy salty waters filling the mass below; letter *e* indicates a porous sand stratum pinching out between two relatively impervious clay layers which obstruct downward movement; letter *f* indicates a layer of porous sand changing to compact, impervious sand or clay, producing the same result as the preceding; letter *g* indicates a porous sand layer in which the water is cut off in its downward passage by an unconformity and is confined above by a layer of clay; the letter *a* indicates the surficial covering of Pleistocene deposits.

When one of these porous water-bearing beds is penetrated by a well boring, the water immediately rises within the well opening to some height above the bed itself, the amount of rise depending upon the