



FIG.4. 3.—Schematic illustration of the emergence of the subphotospheric magnetic field from a 3-dimensional viewpoint. In that case, the subphotospheric magnetic field has not only the poloidal component but also toroidal one. The behavior of the poloidal field can be understood from a 2-dimensional viewpoint, though the toroidal field brings about new effects, such as the twisted structure of the emerging magnetic field and the formation of a sheared magnetic arcade on the solar surface. The relation between a 2-dimensional viewpoint and a 3-dimensional viewpoint is also indicated in this figure.