

FIG.4. 1.–Schematic illustration of the emergence of the subphotospheric magnetic field from a 2-dimensional viewpoint. The subphotospheric magnetic field begins to rise because of the buoyancy effect (or Parker instability) and eventually emerges on the surface. Then, owing to the rapid decrease of the surrounding gas pressure, it begins to expand outward and finally interacts with the overlying coronal magnetic field.