



FIG.4. 5.—Schematic illustration of the plasmoid eruption. At first, a sheared magnetic arcade having the spacial variation along its neutral line appears on the surface, which is probably formed by the emergence of a twisted magnetic-flux tube described in § 4. 1. Then, a current sheet is formed within the arcade probably through some ideal MHD processes. Later the resistive process begins to run in the sheet, which eventually leads to the fast-magnetic-reconnection stage, in which the violent energy release occurs. This corresponds to the impulsive phase of solar flares (or rise phase of the LDE flares). Finally, there are formed the postflare loops on the surface of the sun, while a plasmoid of helical structure is ejected upward with its footpoints fixed on the surface.