



FIG. 8.15—Diagrammatic section of duct of a printing machine showing ink profile.

diagrammatically a typical duct of a letterpress or offset litho machine. With photogravure and other machines using liquid inks, the duct is just a trough from which the ink is withdrawn by contact, or even pumped on to an intermediate distribution roller feeding the printing surface. Liquid inks are normally of low viscosity and negligible yield value and no elaborate mechanism for film forming and deflocculating is necessary.

Film Reduction by Rollers.—The ink required to print a single sheet, say 40 in. long, emerges from the duct as a film, perhaps 1 in. long and correspondingly thick, *i.e.*, if the final print is to be $2\ \mu$, then the ink film taken