

The transfer curve of Figure 8.20, which is generally similar to that described in Tech. Repts. Nos. 5 and 11 of 1952 and 1953 of the American Newspaper Publishers Assn., can be expressed by the equation:—

$$y = (1 - e^{-kx})[b(1 - e^{-x/b}) + f(x - b)(1 - e^{-x/b})]$$

$k$  being the paper smoothness factor. In the region of full contact between ink and paper, this equation reduces to  $Y = b + f(x - b)$ , from which the constants may be evaluated. The amount of ink transferred to the paper increases with increasing pressure, and decreasing speed as would be expected.

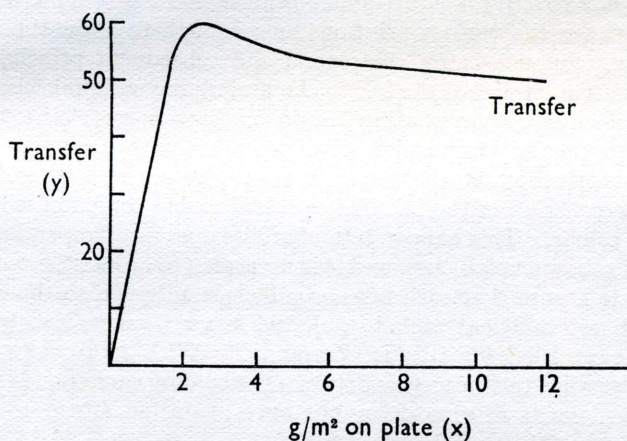


Fig. 8.20—Ink transfer (after Fetsko and Walker).