

ink were used, it would pull lint from the soft paper which would fill in the fine work of the plates. For this reason, web press inks are made mainly from light mineral oils, color, and a small amount of a viscous varnish to hold the color in suspension.

Similar to news inks, there are inks for burlap and cotton hags, fruit-wrappers, etc., all of which require a rapidly penetrating vehicle. Many inks of this grade, however, contain some oxidizable varnish which hardens after some time so that the ink will not smear or rub.

Litho offset inks are directly opposite from news inks in characteristics. They must be able to resist the water used on the plates to prevent its blank portions from inking up and must dry by oxidation because the paper used does not permit much absorption. They must also distribute evenly in a thin film, printing with a strong color. These requirements are satisfied by the use of strong pigments ground in a polymerized linseed oil of about medium viscosity. Other ingredients are also necessary to satisfy certain specific job conditions. Small percentages of vaseline may be used to shorten the body and cut its stick or tack; waxes to aid in distribution; gum varnishes for gloss or many other chemicals such as solvents, fatty acids or oils to prevent troubles which are far too numerous to discuss.

The ordinary job press inks, including cylinder press inks, are not far different from those for lithography. They are weaker colors with variations in body and tack to suit the conditions.

There are many other kinds of inks which fall under the class of printing, but can't even be mentioned. Many of them are different from those already mentioned because of some particular requirement, such as bread-wrapper inks (paraffin proof), inks for glassine paper, tin foil, cellophane, cartons, posters, tracing paper, and wood printing. Aside from these specialties, there are other general classes among which are plate inks (engraving), mimeograph, stamping, stencil, hectograph, and protectograph inks. In fact, printing ink appears in some form on the covering of almost every commodity sold.

POPULAR PHARMACY

Encouraged by the stimulus which interest in chemistry has received from the publication of "Chemistry in Industry," "Creative Chemistry" and similar books, the American Pharmaceutical Association is considering the preparation of a volume to cover the pharmaceutical field. Thirteen chapter subjects and authors have been tentatively selected. The execution of the project and its cost will depend somewhat upon the potential market. As far as can be estimated at present, the book will contain about two hundred and fifty pages and sell at a price somewhere between two and three dollars. Inquiries and communications should be addressed to J. C. Krantz, Jr., Lombard & Greene Streets, Baltimore, Md.