

Some paper-using establishments purchase paper as a raw material from the pulp and paper industry and merely subject it to some form of treatment to fit it for further manufacture in another industry; this occurs in the manufacture of coated, sensitized or corrugated paper. Other firms purchase paper and subject it to treatment to fit it for a definite final use such as in the manufacture of asphalt roofing or waxed wrapping paper. Another large group uses paper and paperboard as a raw material for conversion into paper bags, boxes, envelopes and other commodities.

The manufacture of containers and packages of various kinds has grown very rapidly since ways have been found of converting tough and cheap paper stocks into strongly made boxes which are replacing wooden crates and packing cases. Small attractive paper containers for use in the retail trade are now in common use and their manufacture constitutes an important branch of the paper-using industries. A number of establishments specializing in the production of plastic bags (cellulose, polyethylene, etc.) are included with the paper bag manufacturers.

Composition roofing and sheathing, consisting of paper felt saturated with asphalt or tar and in some cases coated with a mineral surfacing, is being used increasingly as a substitute for metal roofing, wooden shingles and siding materials. Establishments classed as roofing manufacturers also produce a large proportion of the floor tiles manufactured in this country.

Important products manufactured by establishments classed in the miscellaneous paper converters industry are envelopes, waxed paper for packaging, clay coated and enamelled paper and board, aluminum foil laminated with paper or board, paper cups, facial tissues, sanitary napkins, paper towels and napkins, food trays, toilet tissue, etc. Principal statistics of the paper converting industries are given in Chapter XVI on Manufactures.

Printing, Publishing and Allied Industries.—The printing, publishing and allied industries group is made up of six closely related industries: printing and bookbinding, including commercial printers and bookbinders; lithographing, comprised of commercial printing plants using principally the offset printing process; engraving, stereotyping and electrotyping, including photo-engraving; trade composition or type-setting for printers; printing and publishing, comprised of publishers who operate printing plants; and "publishers only", including establishments primarily engaged in publishing and which do no printing.

The revenue resulting from the manufacturing activities of all establishments classed in this group (excluding revenue from auxiliary activities such as trade, etc.) amounted to \$960,525,000 in 1963, an increase of nearly 4 p.c. over 1962. The revenue from commercial and specialty printing was up about 6 p.c. to \$449,012,000 in the same comparison. The important individual revenue items to commercial printers in 1963 were printed advertising (\$103,082,000), the printing of newspapers and periodicals for publishers (\$44,713,000), continuous forms and individual gummed sets (\$44,310,000), printed books and blank books (\$32,467,000), greeting cards (\$21,972,000), and tags, shipping and merchandise (\$20,647,000).

The revenue from publishing (publishing and printing or publishing only) advanced to \$449,839,000 from \$438,672,000 or by 2.5 p.c. The advertising revenue to publishers of newspapers and periodicals of all kinds was \$313,307,000, the net revenue from sales or subscriptions was \$107,092,000, and the revenue from book publishing \$28,157,000, all of which items were substantially higher than in 1962.

Other revenues reported within this group of industries resulted mainly from specialized services such as plate-making, type-setting, etc., and showed little variation in total from the preceding year.