training at duPont's cellophane plant. The Olin entry into the cellophane manufacturing field was as a licensee of duPont, closely related in all aspects of construction and machinery erection, organizational structure and operating procedures. First production of the sparkling clear film at Pisgah Forest was in 1951, when the first of nine casting machines went into operation. The cellophane plant, immaculately clean and atmospherically controlled to assure uniformity and and purity of film, was an addition fully in accord with principles of the quest for quality that led the Ecusta founders to Pisgah Forest.

The Ecusta investment was in the neighborhood of $20,000,000 when Olin Industries, Inc. of East Alton, Illinois, announced that it would invest $10-20,000,000 in order to make cellophane at Pisgah Forest. Also, according to the November 1949 newspaper account, the new plant would add 500 persons to the 1,300-employee payroll.

John Olin, then president of Olin Industries, was quoted as saying that acquisition of the Ecusta facilities, rather than construction of a totally new plant, would hasten the manufacture of cellophane by four to six months. Although numerous other cities had bid for Olin's cellophane plant, he stated that Ecusta already had sufficient capacity for supplying treated water, steam and most of the power; and that Ecusta provided a nucleus of trained personnel.

Olin Cellophane was produced on a trial basis in June 1951, and by fall of that year anticipated an annual production rate of 33,000,000 pounds.

The Film Division added polyethylene to its product line in 1954 and for the next several years extruded the clear and black films at the Pisgah Forest plant. A second cellophane plant, also part of the Film Division, began production at Covington, Indiana, in 1956. It is a fully integrated plant with eight casting machines.

Product diversification has been characteristic of the Film Division from the beginning. Development of surface coatings has opened the way to many expanded uses of cellophane. Facilities have been added from time to time to enable specialized treatment and processing. Today's Film Division products include a variety of specialty packaging films, such as nitrocellulose-coated and polymer-coated cellophane, and the new line of reinforced (RC) films which are combinations of cellophane and other materials such as foil, to combine the best properties of each.

Present day Olin cellophane performs two principal functions: protection of products and assistance in merchandising. With protection against moisture, gas, dust and infestation, cellophane enables the marketer to distribute moist products in dry climates and dry products in humid areas. Delicate flavors are retained within the package, which is a barrier also against exterior odors. The sparkle and transparency of cellophane, and its excellent surface for printing, offer significant advantages in the merchandising of products. Cellophanes are tailored to meet particular packaging needs for such end uses as baked goods, meats, produce, candies, snack items, tobacco products, and many others. Some of the items in the food and tobacco industries require specific technical properties, which are incorporated according to need.

A quality of environmental importance is cellophane's biodegradability, a characteristic that allows it to decompose naturally over a period of time.

Unlike the Ecusta Paper Division, which had its marketing and research organizations at Pisgah Forest from the beginning, the Film Division Marketing Department originally was located in New York City. Its Research and Development Department was at Olin's central research facility at New Haven, Connecticut. Both organizations relocated to Pisgah Forest after completion of new research, sales and administration facilities in August 1964, a move which further enhanced the area payroll by adding 225 members of management, technical staffs and services to the Pisgah Forest operation.

The Ecusta Paper Division likewise continued its pattern of growth that was established as soon as first production of flax cigarette paper began in 1939. The original four paper machines had been joined by five other cigarette making machines before Ecusta was acquired by Olin Industries. Meanwhile, product development was already in progress toward diversification. Specialty papers joined those manufactured for the tobacco industry, with printing papers to follow. These developments prepared the way for growth in other directions.

Beginning in the late 1950's expansion saw installation of three of the world's largest Fourdrinier paper machines for the manufacture of lightweight paper, and the addition of much converting equipment. Although the step into the printing paper industry was somewhat uncertain, by the 1960's the high quality lightweight papers had been found to be one answer to spiraling distribution costs. Ecusta, a pioneer in the field that became a new dimension of the printing industry, underwent rapid growth to keep pace with demands.

The lightweight, opaque papers are used extensively in the publication of Bibles, dictionaries and other premium volumes. Excellent bulk characteristics make the papers ideal for printing and mailing stock and insurance circulars, quarterly and annual reports, and the like. They represent diversification at a plant that continues as a major world producer of products for the

Note the glistening transparency of cellophane. Cellophanes are produced to certain customer specifications because of particular packaging needs. The film is used for baked goods, meats, produce, candies, snack items and others. Cellophane provides an excellent surface for printing. Here, Roy Millwood of the Slitting Section in the Finishing Department is running a set-up of film.