

PLASTIC PIPE—Used in a pipeline more than nine miles long near Poplar, Mont., one length of plastic pipe, held here by 14-year-old Richard Thomas, weighs only 13 pounds as compared to a comparable length of steel pipe, which would weigh 153 pounds.

MEDICINE

Asthma and Allergies

➤ A BETTER deal for the nation's six to seven million asthma and allergy sufferers can be expected from the formation of a new organization, the American Foundation for Allergic Diseases, in New York.

This is a national, voluntarily supported, non-profit foundation organized by the American Academy of Allergy and the American College of Allergists.

Officers of the new organization are: Dr. Horace S. Baldwin, New York, president; Dr. J. Warrick Thomas, Richmond, Va., vice president; Dr. Bret Ratner, New York, secretary, and Dr. Theodore L. Squier, Milwaukee, Wis., treasurer.

By terms of its charter, the foundation is to promote through public education an accurate understanding of the problems of allergic disease; to inform and educate the medical profession in the problems of allergy; to cooperate with medical institutions, hospitals and other organizations in the development of facilities for the treatment and prevention of allergic diseases; and to finance facilities for research in the field of allergic diseases, including fellowships and residences.

Pointing to the need for the foundation, Dr. Baldwin said that asthma alone is a leading factor in over 10,000 deaths in the United States each year, yet it is difficult for the average asthma patient of moderate means to get adequate treatment.

"It is common experience that most gen-

eral hospitals will not accept such patients because of the prolonged period of intensive medical and nursing care required. Hospitals treating acute diseases are reluctant to admit asthma patients because of the chronicity and the probable long-term stay, and the institutions for chronic care are poorly equipped to treat asthma. There is also a deficiency in the number of allergy clinics.

"Organized research on any sizable scale is likewise lacking. Some promising discoveries have been made recently in the mechanisms and therapy of allergic diseases, but these are often the accomplishment of individual workers and practitioners, operating in their spare time and with limited facilities," Dr. Baldwin said.

"Trained investigators, who can give full time," Dr. Baldwin said, "are being attracted into other fields. Furthermore, the research that is being done under present conditions is frequently duplicated in several clinics and laboratories at the same time, resulting in inefficient efforts and wasted opportunities.

"The teaching of allergy in the medical schools is haphazard and inadequate. In some medical schools, allergy is neglected entirely. Due to the lack of hospital and clinic services, interns and residents have few opportunities for observation of patients. As a result there is a dearth of well trained young specialists."

Science News Letter, November 7, 1953

Blood Expander Tool To Study Mold Remedies

➤ A NEW tool for testing antibiotics, the so-called mold remedies, has apparently been found in one form of the blood plasma expander, dextran.

Studies suggesting this are reported by Drs. M. Shilo, D. Feingold and Shlomo Hestrin of Hadassah Medical School, Jerusalem, in Nature (Oct. 24).

The form of dextran and another polysaccharide, levan, they studied is not the same as the form of dextran used as a plasma expander or substitute. Dr. Shilo and associates worked with "native" dextran and levan, which have entirely different molecular weights from the dextran given to patients in shock if plasma is not available.

The native dextran, they find, can promote germ infection in mice. In this it is like mucin from hogs' stomachs. If the native dextran is injected into the vein of a mouse and germs of an intestinal infection injected into the mouse's belly, the infection is strongly promoted, with more than 70% of mice dying compared to less than 5% dying from the same germs without the native dextran injection.

Since the native dextran injected into a vein can promote infection elsewhere in the body than the blood stream, the infection develops where its responses to an antibiotic can be readily tested, Dr. Shilo and associates suggest.

They think the infection-promoting action of the native dextran and levan results because they modify the inflammatory process rather than because they suppress the germ-engulfing activity of the white blood cells.

Science News Letter, November 7, 1953

NUTRITION

Grandma's Diet Affects Third Generation

► GRANDMOTHER'S DIET affects not only her own offspring but the survival of her offspring's young.

Discovery of this third generation effect

of diet, which holds for laboratory rats at least, is announced by Dr. M. O. Schultze of the University of Minnesota in a report to the Journal of Nutrition.

At the same time Dr. Schultze reports discovery of what may be a new vitamin, called a lactation factor. This substance exists in a protein preparation from defatted brain and spinal cord and is not the same as any of the known vitamins. It cured failure of milk for the young in rats on diets containing purified soybean proteins.

This same purified diet was the one

which showed the third generation effect. If grandmother rats were on this diet, their daughters could not produce milk for the young and there was a high mortality among the grandchildren.

Science News Letter, November 7, 1953