

CHEMISTRY

# New Products Envisioned

**Postwar automobiles may burn gasoline of 150 octane rating. Lighter building materials predicted. Recent advances reported to American Chemical Society.**

➤ THE POSTWAR automobile will burn gasoline of 150 octane rating, and it will never be necessary for the filling station attendant to put more water in the radiator because the cooling system will be permanently sealed. When you get home from your ride, you'll put the car in a garage with plastic-and-plywood walls and a stainless steel roof.

Your house will be built of the same materials, strong yet so light that two men will be able to lift the whole wall of a room as they put it up.

These are items from a vision of the future presented before the meeting of the American Chemical Society at Buffalo, by Dr. Charles M. A. Stine, vice president of E. I. du Pont de Nemours and Company. They aren't just dreams, he explained; the things actually exist now, at least on an experimental basis, but are at present absorbed into the war effort.

Other new accomplishments in scientific technology were listed by Dr. Stine—glass that is unbreakable, glass that will float, wood that won't burn, shoes that contain no leather, window screens without wire, machinery bearings not made of metal.

Post-victory production of consumer's goods will reach heights undreamed of in prewar days, the speaker predicted. We have built an immense industry that turns out more light metal in a year than was formerly produced in a decade, with corresponding volumes in such things as special steels, plastics, synthetic fabrics, fuels.

Having seen how abundantly we can produce for war, the American people will insist on abundance in time of peace, Dr. Stine forecast. Slums must be cleared away, he declared; the space they leave should not be filled with other buildings, but put to use as close-in airfields. Better nutrition for everyone, based on recent researches in food chemistry, is imperative for the maintenance of a population of high industrial productivity.

"No doubt, some will become alarmed over the possible displacement of old materials and old industries," Dr. Stine

admitted. "Changes of a drastic nature are inevitable but they seldom result in the hardships that the timid predict . . . Let our swords be mighty, and mighty indeed will be our plowshares."

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## Flours Help Replace Meat

➤ MEATLESS DAYS, even whole meatless months in an emergency, need have no nutritional terrors, if a supply of soybean, cottonseed or peanut flour is available, the American Chemical Society was told by Dr. Theodore F. Zucker and Dr. Lois Zucker of Columbia University. These flours, which are made from the seeds after the oil has been extracted, are very rich in protein and certain vitamins, so that they should prove

highly valuable as additions to ordinary wheat flour, making bread a more nearly balanced diet.

It is possible to make a meatless sandwich just by buttering two pieces of this mixed-flour bread and slapping them together. The "meat" is invisibly present, incorporated in the bread itself.

Both soybean and cottonseed flours have distinctive (*Turn to Page 170*)

MEDICINE

## Symptoms May Be Wrongly Blamed on Blood Pressure

➤ A GOOD many people afflicted with headaches, nervousness, cold hands and feet, lack of energy and a tired feeling plus a low blood pressure are likely to blame their symptoms on the low blood pressure. In fact, says Dr. Thomas M. Durant of Philadelphia, they often may have been helped to that idea by their physician.

Generally, the patient does not know he has a low blood pressure until he goes to his doctor for relief of his headaches, fatigue and other symptoms.



**STAR MAKER**—Bausch and Lomb has built a new star projector for use by Navy aviators. Men are taught the position and degree of brightness of 145 navigational stars which are projected on the spherical dome. Stars appear realistically in the sky through a period corresponding to a 24-hour cycle, which speeds up instruction. The instrument can be used in the daytime when no stars are visible and can be operated at night when bad weather obscures the stars outside.