

sistance welding because many new and special alloys have been brought into common use and because welding must be done by comparatively unskilled men and women.

"Conventional alternating current resistance welding control has been expanded to meet the exacting requirements of welding the many new alloys made available for war use," Mr. Pal-

mer said. "A current regulator has been developed that will maintain constant current. Special sequence controls are available to meet any cycle of power applications found necessary to weld and heat treat the material to be fabricated."

Science News Letter, April 24, 1943

Sugar beets produced about one-fourth of the sugar used in the United States before the war.

"Fabrication is intimately related to gluing operations and until the aircraft manufacturers solve their gluing problems they will always have fabrication problems," declared Mr. Peterson. Most glue manufacturers supply users of their products with general instructions on gluing temperatures, pressures, and assembly periods which the aircraft manufacturers are advised to follow. Supplementary instructions were given by the speaker.

Above-normal temperatures have been recommended to reduce the period required for pressing for cold-press glues.

Science News Letter, April 24, 1943

CHEMISTRY

Gas Attacks Expected

If Hitler's bombers make raids on American cities, they can be counted on to drop poison gases in bombs or sprays, official declares.

► **HITLER'S BOMBERS**, if they make their expected raids on American cities, can be counted on to drop poison gases in bombs or sprays, Col. A. Gibson of the Chemical Warfare Service declared in Detroit.

Col. Gibson, who is chief of the inspection section, Office of Civilian Defense, took part in a special symposium on civilian preparedness at the meeting of the American Chemical Society.

Gas will be used in raids on civilian populations whenever Axis war planners think it will be advantageous to them to do so, the Colonel asserted, and he added that a gas attack on an industrial area is capable of doing us a good deal of mischief because of the necessity to stop work in all places affected until they have been thoroughly decontaminated.

He disagreed with the widely accepted doctrine that civilians can avoid danger during a gas attack by going to the second story or higher and closing all windows tightly. Shutting the windows will do no good, he pointed out, because the enemy can be counted on to drop high explosive bombs along with the gas, and these will shatter the windows.

Neither can the heavy poison gases be expected to settle to the ground at once, Col. Gibson added. In chemical warfare demonstrations over New York City, in which harmless white smoke was used, the fumes piled up as high as the tallest skyscrapers; and at least some concentration of poison gases could be expected to do the same kind of thing.

In Germany, where civilians also expect to be gassed, basement air raid shelters are given gas protection, so that the same refuge can be used in

either high-explosive or gas bombardment or (what is much more likely eventually to happen) in a mixture of both.

Science News Letter, April 24, 1943

Panic Is Feared

► **PANIC IS FEARED** even more than poison gas by those charged with the defense of the civil population against possible chemical attacks, Prof. Chauncey D. Leake of the University of Texas stated. People do not know about war gases, and they are afraid of them; but "Tell the people the truth about war gases and they will probably respect them more and fear them less," he said.

Some fumes that arise in certain types of fires may be mistaken for poison gases spread by the enemy, Prof. Leake pointed out, and this can give rise to reports of chemical attacks that have not actually taken place.

Science News Letter, April 24, 1943

AERONAUTICS

Mass Production of Wood Planes Means Good Glues

► **EFFORTS** to turn out wood aircraft in mass-production quantities and at the same time take full advantage of recent developments in glues, design and fabrication techniques, are problems facing the manufacturers of wood airplanes. These were discussed by Ivar C. Peterson at the National Aeronautical meeting of the Society of Automotive Engineers in New York. Mr. Peterson, an aeronautical engineer, is with the U. S. Civil Aeronautics Administration in Washington.

PHYSIOLOGY

High Blood Pressure After 40 Not Abnormal

► **SLIGHT** and moderate degrees of high blood pressure, as represented by readings around 150 systolic and 90 diastolic, in persons 40 years old and older are not abnormal. Probably half the population over 40 has such blood pressure readings.

These opinions, based on careful studies of 14,849 persons over age 40 from all walks of life, are reported by Commander A. M. Master, U.S.N.R., and H. H. Marks, of the Naval Medical School at Bethesda, Md. and Capt. Simon Dack, M.C., A.U.S. (*Journal, American Medical Association*, April 17). Part of the work was done at Mount Sinai Hospital, New York, and the Metropolitan Life Insurance Company before the scientists entered the services.

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