The political liability inherent in a shelter program that can be interpreted as offering protection for the rich and fallout for the poor has since caused Kennedy to limit his public statements to an emphasis on community facilities. Meanwhile, civil defense officials have no desire to dampen whatever individual efforts may be underway, and from time to time, they publicly state that private shelters have a place, too.

The private effort, despite the noise that accompanies it, has shown no signs to date of providing any significant amount of shelter space. The program for community facilities, however, is moving along at an extremely rapid pace, and it is the one that is going to bring civil defense into American life.

The Pentagon has announced that on the basis of pilot surveys, it expects to have located by next June shelter space in existing structures for some 50 million persons. Not long after that, it plans to have these spaces marked and stocked with rations for 2 weeks. In addition, it is in the process of arranging training for persons who will be assigned to supervise the shelters.

With these shelters providing space for something over 25 percent of the population, the Administration plans to ask Congress next year for funds to help communities build additional shelter space on a matching-fund basis. A program that will further bring civil defense into everyday life calls for providing a 16-hour medical self-help course for at least one member in every family. The course, developed by the Public Health Service in consultation with the American Medical Association, will be offered by committees which the Defense Department says have already been set up in most states.

The current federal budget for civil defense is slightly over $300 million. In the forthcoming Congress, the Defense Department is expected to receive at least double this amount, and it is reported that present plans call for spending a total of $5 billion over the next 5 years.

Confusion and controversy will inevitably accompany the development of the program, but it must be noted that in a remarkably short time civil defense has adopted a workable program, and whatever protection it may offer and whatever effect it may have on the American public, it will soon be here.—D.S.G.

Air Pollution: Auto Industry Bows to Ultimatum

The automobile industry, under pressure from Congress and the Department of Health, Education, and Welfare, last week announced plans to make so-called blow-by devices standard equipment, starting with the 1963 models.

The industry, which has become increasingly sensitive to the attention it is receiving from social critics and public health and safety authorities, came to the decision reluctantly. It had earlier made it clear that it felt it was the victim of some erroneous conclusions about the industry's contribution to air pollution.

The blow-by device is basically a tube which carries unburned hydrocarbons from the crankcase breather back to the intake manifold, where they are reintroduced into the engine and burned. The industry announced 2 years ago that it had found that some 30 percent of automotive pollutants—in the form of unburned gasoline—are emitted into the atmosphere through the crankcase breather. It immediately found itself beset by demands from public health authorities for factory installation of the device. The industry responded that the device would prove useful in California, because of atmospheric conditions there, but rejected demands for standard installation.

Last fall, the Department of Health, Education, and Welfare handed the industry an ultimatum calling for factory installation on all models by 1963. At the same time, warnings were received from Congress that legislation would be introduced making the device mandatory if the industry did not respond voluntarily.

Announcements

Coastal research workers are invited to submit material for inclusion in the recently established **Coastal Research Notes**, an interdisciplinary newsletter covering plans and projects in the field. The series will include items on future research, work in progress, field trips, new instrumentation, and cooperation between scientists in various fields. Deadline for inclusion in the first issue: *1 January 1962*. (William F. Tanner, Geology Department, Florida State University, Tallahassee)

Researchers concerned with **cognition and creativity in children** are invited to submit inquiries to the Galton Institute. The organization is planning research programs to devise suitable instruments for measuring, at the preschool level, those traits most frequently associated with creativity in adults. (Frieda B. Libaw, Galton Institute, 10400 Wilshire Blvd., Los Angeles 24)

A catalog of **alkaloid-bearing plants** has been published by the U.S. Department of Agriculture. The 287-page book (technical bulletin No. 1234) lists the family, genus, and species of all known alkaloid plants; the specific plant part in which the alkaloid exists; and the name of the alkaloids with their chemical formula. (Government Printing Office, Washington 25, D.C. $1)

Grants, Fellowships, and Awards

Grants-in-aid of **scientific research** —including the mathematical, physical, biological, and social sciences—are available from the American Academy of Arts and Sciences. The awards range from $500 to $1500. Deadline: *1 February 1962*. (Chairman, Committees on Research Funds, American Academy of Arts and Sciences, 280 Newton St., Boston 46, Mass.)

Guggenheim fellowships are currently available for graduate study in **rockets, jet propulsion, space flight**, and **flight structures**. Candidates must be residents of the United States or Canada and must plan to follow astronautics, rockets, or flight structures as a career. Recipients will study at the Guggenheim Jet Propulsion Center at the California Institute of Technology, the Guggenheim Laboratories for the Aerospace Propulsion Sciences at Princeton, or the Institute of Flight Structures at Columbia University. Fellowships provide full tuition and stipends up to $2000. Deadline: *1 March 1962*. (Guggenheim Foundation, 120 Broadway, New York 5)

Fellowships, scholarships, and assistantships in **forestry** are available for the 1962–63 academic year at Yale. Fellowships carry stipends up to $2900, scholarships cover tuition costs, and assistantships pay from $840 to $1800. Deadline: *1 February 1962*. (Yale School of Forestry, 205 Prospect St., New Haven 11, Conn.)

Applications are being received for the 1962–63 Sigma Delta Epsilon grant-in-aid to **women in science**. The award, presented by the Graduate Women's Scientific Fraternity, is available to any woman who holds a degree and has demonstrated outstanding ability in one of the mathematical, physical, or biological sciences. Preference will be shown to applicants 35 years of age or older. The $500 stipend may be applied either directly to the research project or to relevant course work. Deadline: *1 February 1962*. (Erma S. Vanderzant, Dept. of Biochemistry and Nutrition, Texas A&M College, College Station)

Applications are being accepted for the Edwin Leigh Newcomb awards in **pharmacognosy**. Three awards of $250 each will be presented, on the basis of essays or published papers, to an undergraduate student; a graduate student; and a teacher, research worker, or industrial scientist. Papers must contain some new information ascertained from studies made by the contestant, and must be principally within the fields of morphologic, taxonomic, physiologic, cytogenetic, or commercial pharmacognosy; or in drug plant cultivation. Phytochemical aspects of the work may be included in conjunction with one or more of the previously mentioned fields. Deadline: *1 February 1962*. (H. W. Youngken, Massachusetts College of Pharmacy, 179 Longwood Ave., Boston 15)

Scientists in the News

Biological Abstracts has announced the following appointments:

Phyllis V. Parkins, assistant director for editorial affairs.

Robert R. Gulick, assistant director for administrative and business affairs.

William C. Hoida, research coordinator.

Recent awards of the American Chemical Society:

J. R. Partington, professor emeritus of Queen Mary College in London, received the 6th annual Dexter award for his work in the history of chemistry.

Melvin Mooney, retired U.S. Rubber Company scientist, will receive the 1962 Charles Goodyear medal for his development of the Mooney viscometer and for his work on the physics of rubber.

Seibert Q. Duntley, research physicist and director of the visibility laboratory of the University of California's Scripps Institution of Oceanography, has received the 1961 Frederic Ives Medal of the Optical Society of America.

Harold Mayfield, of Toledo, Ohio, has received the Brewster memorial award of the American Ornithologists' Union for his 1960 monograph, *The Kirtland's Warbler*.

P. S. Gill, director of the Gulmarg Cosmic Ray Research Laboratory in Kashmir, India, and head of the physics department at the University of Aligarh, has been appointed 1961–62 visiting professor of physics at Washington State University.

Edward L. Criscuolo, a technologist in industrial radiography at the U.S. Naval Ordnance Laboratory, has received the 1961 Coolidge award of the Society of Nondestructive Testing for his work in industrial x-ray.

Lysle H. Peterson, professor of physiology at the University of Pennsylvania School of Medicine, has been named the first director of the university's Bockus Research Institute.

E. F. Knipling, director of the U.S. Department of Agriculture's entomology research division in Beltsville, Md., has won the first distinguished service award of Ford Farming magazine and the 1961 John Scott award of the Entomological Society of America. Knipling shared the Scott award with **R. C. Bushland**, livestock insects investigations leader in the USDA's entomology division at Kerrville, Texas.

Robert H. Luce has resigned after serving 17 years as head of biology at Rensselaer Polytechnic Institute. He will continue as a professor in the department. **Roland Walker**, professor of biology, has been named acting chairman of the department.

Julius London, associate professor of meteorology at New York University, has been named professor of astrogeophysics at the University of Colorado.

Wolf Vishniac, associate professor of microbiology at Yale University, has been appointed professor of biology at the University of Rochester (N.Y.).

Recent Deaths

Charles L. Crockett, 63; chief chemist for the Norfolk and Western Railway since 1946; 28 Nov.

Frederick C. Fishback, 63; surgeon and clinical associate professor of surgery at Georgetown University; 23 Nov.

Walter G. Flood; independent metallurgy consultant in Washington, D.C.; 27 Nov.

George Halperin, 80; physician and editor of the medical abstract section of the *Journal of the American Medical Association*; 7 Nov.

William A. Hamor, 74; retired senior director of research at the Mellon Institute; 23 Nov.

Horace J. Harper, 65; soils specialist at Ataturk University in Erzarum, Turkey, for the International Cooperation Administration, and former professor of soils at Oklahoma State University for 36 years; 8 Nov.

A. Langseth, 66; professor of chemistry at the University of Copenhagen; 20 Oct.

Horace N. Lee, 71; retired research microscopist and wood and paper technologist; 12 Oct.

Peter Payson, 63; assistant director of research for Crucible Steel Company in Pittsburgh, Pa.; 26 Nov.

Francis B. Stewart, 63; chemist with the Chemical Warfare Service in Battle Creek, Mich.; 27 Nov.

Clyde C. Taylor, 49; fishery biologist at the U.S. Bureau of Commercial Fisheries' biological laboratory in La Jolla, Calif.; 9 Nov.

Victor Tinderholt, 39; *Drosophila* geneticist with the City of Hope Medical Center's department of genetics in Duarte, Calif.; 21 Nov.

Joseph E. Willetts, 101; ophthalmologist and founder of the Eye, Ear, Nose, and Throat Hospital in Pittsburgh, Pa.; 27 Nov.

Erratum: In the announcement of the scholarships at German Institutions [*Science* **134**, 462 (18 Aug. 1961)], the address for the Humboldt Foundation was listed incorrectly. The address should have been Alexander von Humboldt Stiftung, Nassestrasse 11a, Bonn, Germany.

Erratum: In the report, "Cytogenetic behavior of a knobbed chromosome 10 in maize," by G. Y. Kikudome [*Science* **134**, 1006 (6 Oct. 1961)], two errors occur in the counts for family 61:36 for the *R:r* ratio in Table 1 (line 2, columns 2 and 4). The number of *R* kernels is 1338, not 1388; the total number of *R* and *r* kernels is 2718, not 2178.

Erratum: In the announcement on iodine-125 [*Science* **134**, 1605 (17 Nov. 1961)], Oak Ridge National Laboratory was erroneously reported to be producing the isotope for $1 per millicurie. The Atomic Energy Commission has not authorized a change in the laboratory's price of iodine-125, which remains at $15 per millicurie.