1964, \$175 million would assist communities and nonprofit institutions in modifying their existing capacities to create more shelter space. With only minor construction—thickening masonry, blocking off ground-area windows, providing additional ventilation—approximately 10 million more spaces could be added next year. The government would pay up to \$25 per shelter space added under this incentive system, and would also pay about 60 percent of the cost of adding shelter facilities to buildings under construction.

Although Pittman described the program as one that, while providing federal leadership, "defers for one year the decisions on a full shelter program," in fact it is not quite that, and the Armed Services Committee knows it. As Kelleher pointed out, "approval of the bill or any variation of it would very probably constitute the taking of an irretraceable step." The program has in fact been designed to slide easily into the larger one of providing shelter for everyone—at an estimated cost to the government of \$2.1 billion over the next 5 years. Altogether, the Administration's proposal, if followed through, would produce an estimated 240 million fallout shelter spaces by 1968: 95 million from the new developmentincentive program and another 5 million through the bill's provision for adding shelters to federal civilian and military constructions; 90 million from the current survey program; and 50 million unsubsidized privately built shelters. The current proposal is thus a classic instance of the camel's-nose theory of politics.

## Other Alternatives

The Administration had considered asking for the whole camel this year before settling for the nose. It also considered other alternatives. One was to end the civil defense program altogether, except for such scattered activities as existed in the past; another was to continue the program at its present level, marking new spaces as they became available and spending about \$100 million a year in support of civil defense activities. "This is where we stand today," Pittman told the committee, but he rejected the alternative as a "half-shelter" system that distributes protection inequitably throughout the population and leads to "confusion, anxiety and lack of confidence in local civil defense plans." The other alternatives were the more costly ones of combining full fallout shelter protection with, in one case, some blast protection in likely target areas and, in the other, an antiballistic missile system.

The crude terms to which the government is reduced in calculating alternatives probably adds little to the warmth of congressional response. Cost-benefit analysis may be useful for selecting hardware, but its application appears callous when the items weighed are human lives, on the one hand, and money on the other. Nonetheless, the figures Pittman gave the committee are interesting, and go a long way to explain why the Administration has settled on fallout, rather than blast, protection. Full fallout protection-the ultimate object of H.R. 3516-would cost \$12 per person and an estimated \$45 per life saved. Blast protection would cost \$90 per person and \$240 per life saved. For each dollar expended, Pittman explained, "the potential in lives saved would be lower than for fallout protection." The difference over the next 5 to 7 years would be about \$18 billion.

If the Armed Services Committee rejects the Administration's bill—and the chances are high that it will—the reason will be not only that the costs are high but that the benefits seem so uncertain. Congress may agree instead to continue civil defense spending at the present levels, but its apathy—combined with the initiatives in Oregon—suggest that civil defense will enter into a slow decline.—ELINOR LANGER

## Announcements

The first patients were admitted last week to a new psychiatric treatment research center in New York City. The facility, located in Kings County Hospital, is a cooperative effort of the State University of New York's Downstate Medical Center and the city-owned hospital. It is supported by a U.S. Public Health Service grant and has a professional staff of 25. Harley Shands, a psychiatry professor at the Downstate Medical Center, is its director.

The center is designed to study advantages and limitations of processes now used in treating severely ill psychiatric patients, and to develop new techniques. A maximum of 20 persons will be treated at a time; these will be drawn from patients at Kings County Hospital who volunteer for the project and whose cases suit the center's research needs.

## Scientists in the News

Thomas F. Frawley, professor of medicine and chairman of the subdepartment of endocrinology and metabolism at Union University's Albany Medical College, Albany, N.Y., has been named professor and director of the department of internal medicine at the St. Louis University medical school.

The University of Michigan has named John E. Powers professor of chemical engineering, effective with the fall semester. He is now professor and chairman of the chemical engineering department at the University of Oklahoma.

Peter J. Morgane has been named chairman of the neurology division at the Communication Research Institute, Miami, Florida.

Charles F. Jones, general manager of the central region, Humble Oil and Refining Co., has been elected president of Esso Research and Engineering Co.

Andreas Acrivos, formerly associate professor of chemical engineering at the University of California, has become professor of chemical engineering, Stanford University.

Carl F. Schmidt, research director of the Aviation Medical Acceleration Laboratory, U.S. Naval Air Development Center, Johnsville, Pa., has received the Schmiedeberg-Plakette of the German Pharmacological Society. He was cited for "contributions to . . . pharmacology, and in recognition of his spirit of magnanimity and great humanity."

At the Academy of Natural Sciences, Philadelphia, Harold J. Grant, Jr., has been appointed chairman and associate curator of the entomology department, and Alfred E. Schuyler has become chairman of the botany department.

Joseph C. J. Finney, formerly associate professor of psychology at the University of Hawaii, has been appointed associate professor in the psychiatry department of the University of Kentucky Medical Center.

Erratum: in the report "Carbon-isotope composition and the origin of calcareous coal balls," by J. N. Weber and M. L. Keith [Science 138, 900 (1962)], the heading of column 3, Table 1, should have been  $\delta$ O<sup>15</sup> rather than  $\delta$ O<sup>17</sup>. The units in columns 2 and 3 should have been per millage rather than percentage.