

a 10-year span at a basic interest rate of 5.5 percent. The amount lent was reported to have topped \$6 million, and though a spokesman for A.M.A. was quoted as saying the loan fund "would not do the whole job," it was cited as evidence that a big new federal loan program is not needed.

It is worth noting that A.M.A. opposition to the federal loan program seemed relatively perfunctory as compared to its campaign against medical care for the aged. There was no upsurge of congressional mail from back home of the kind that reached flood stage when Medicare was under consideration last year.

The question of whether or not a bill will pass is usually settled before it comes to the floor, but the quality of the management of the debate often influences a bill's final form, particularly when, as in the case of H.R. 12, the measure comes out under an open rule permitting unlimited amendment. Harris, who managed the debate on his own bill, is one of a group of experienced, informed, and unflamboyant southerners who, as chairmen of committees or important subcommittees, have the prestige and practice in the House to keep things under control.

The crucial moment in the debate on H.R. 12 came on a vote to recommit the bill to committee with instructions to delete the student loan provision. When the motion was defeated 239 to 171, it was apparent that the bill was headed for final passage. On final passage the bill carried, 288 to 122.

Although the loan program was the most stiffly opposed feature of the bill, several speakers during the debate expressed forebodings that the "bricks and mortar" section, too, might open the way to federal control of medical schools, and thereby breach the defenses of the medical profession against government interference.

The question of need for more medical, dental, and health personnel was a central one in both the hearings and the debate, and the result, as is often the case with manpower data, was interesting but inconclusive.

While the number of physicians per capita seems to have increased slightly—from 135 per 100,000 population in 1940 to 137 per 100,000 today—the effects of specialization and of the concentration of physicians in the cities have complicated the picture. Fourteen states, for example, are said to have fewer than 100 doctors per 100,000 population, while four states have 160

or more per 100,000. The Congressmen showed special concern over the effects of the influx of foreign physicians and over the growing scarcity of "family doctors," defined as general practitioners, internists, and pediatricians.

Although the debate centered on the education of physicians, the bill would also help to provide teaching facilities, although not loans, for allied health professions.

In final form the bill authorized \$175 million in construction grants over 3 years. Of this, \$105 million is to be used for matching grants for teaching facilities to train physicians, pharmacists, optometrists, podiatrists, nurses, or public health workers; \$35 million, for dental schools; and \$35 million, for the replacement or rehabilitation of existing medical, dental, and health teaching facilities.

Under the student loan program, \$30.7 million is provided for the first 3 years for loans to students of medicine, osteopathy, and dentistry, together with sums necessary (an estimated \$30.7 million more) to enable students receiving these loans to continue their training after 1966.

The measure now moves to the Senate, where hearings have been promised but not scheduled in the busy Labor and Public Welfare Committee. The Senators are expected to give the proposal a friendly reception, and the odds seem to favor the administration's getting its first fruits, after 2 years of frustration, in the field of education legislation.

Certainly, in giving priority to the Harris bill and steering it along, the administration has followed a strategy of compromise.

The economy bloc in the House was placated by a reduction in the scale of the bill from the \$800-million, 10-year version which the committee reported last year in response to the President's request.

A scholarship program which had provoked the opposition of a sizable antischolarship coalition in the House and raised the choler of the A.M.A. was replaced by the loan feature. And the bill was given precedence by the administration and the leadership and became the first major new measure of the 88th Congress to reach the floor of the House.

The cooperation of the House Rules Committee in allowing the measure to come to the floor was temporarily withheld by Chairman Howard Smith of Virginia, who regarded H.R. 12 as an

education bill and said he wished to wait to see what else would be forthcoming in the way of education legislation.

H.R. 12's most obvious competition came from a bill under consideration in the House Education and Labor Committee's subcommittee which handles legislation on higher education, a bill sponsored by the chairman of that subcommittee, Edith Green (D.-Ore.).

The Green bill provides for grants and loans for academic facilities and expansion of the NDEA loan program and would include medical and dental schools and their students in its benefits.

The Green subcommittee was on the verge of reporting the bill when a White House meeting on education legislation was convened. Immediately afterwards the Green bill was side-tracked, the Rules Committee voted out the Harris bill, and the leadership scheduled action on it to follow the recess.

The administration denies any "deal" with the Rules Committee, but presumably the administration was not eager to see a higher education bill come out of committee, since the Education and Labor Committee is now considering an omnibus education bill [*Science* 139, 474 (1963)] which includes proposals on higher education among its two dozen sections.

During the debate Mrs. Green quelled whatever jurisdictional resentments she may have felt and confined herself to contributing significantly to successful efforts to affix key amendments to the bill. Earlier, however, in a Rules Committee hearing on the Harris bill, she expressed a nagging feeling of futility common to congressional proponents of education legislation when she said, "If legislation is to be passed, we should introduce a bill to build schools and call it the educational public works bill or turn education over to the Defense Department."

—JOHN WALSH

Growing Old in America: Frauds, Quackery, Swindle the Aged and Compound their Troubles

Few, one suspects, of America's aging citizens share the sanguine view Browning's Rabbi Ben Ezra held of the process: 'Grow old along with me. The best is yet to be/the last of life for which the first is made. . . .' Statistics, corroborated by daily impressions, suggest that in America the "last of life"

is not the best of times but the worst.

In general, our 17½ million people over 65 live wretched lives. Three-fourths of them have incomes averaging under \$2000 a year, and half, under \$1000. More than a fifth live in housing judged "substandard"—lacking private bath, toilet, or running water. Eighty out of each 100 suffer a chronic ailment, yet only half have any kind of health insurance. One out of eight is on relief.

Further, the number of people living through these "sunset years" is steadily increasing: 1000 people turn 65 every day (by 1980 there will be 25 million), and there are already 10,000 Americans over 100. The proportion of age to youth is changing, too: the number of people over 65 has increased six-fold since 1900, while the population as a whole has grown by a factor of 2½.

The numbers and the miseries add up to one thing: another failure of social ingenuity to keep up with scientific change. What we have done, mainly, is to lengthen life in relation to retirement age, and to curb diseases of youth without curing those of age, thereby insuring that our aged will be not only bored and alienated but poor and ailing as well.

If the aged are victimized in general, they are also victimized in particular. Their illness, loneliness, and terrors make the aged easy prey to a growing army of charlatans in whom their vulnerability arouses instincts not of sympathy but of greed.

An ingenious array of frauds, from quack medicines to uninhabitable homesites, and from dancing lessons to fake furnace repairs—was revealed last January at hearings held by the Senate's Special Committee on Aging (Frauds and Quackery Affecting the Older Citizen). As the committee cast about for ways to curb the abuses, two things became clear. Until the aged are better protected—until their pains are relieved, their energies are usefully employed, and their loneliness is alleviated and their safety is ensured through suitable housing—they will continue to be gulled. And until the regulatory agencies whose difficult job it is to keep us honest can be strengthened, the hucksters will have an easy time.

Regulation will not come easily, since the corrupt are often protected by the antiregulation sentiments of powerful interests. In testimony before the committee, the American Medical As-

sociation and the National Better Business Bureau exhibited detailed familiarity with the abuses but refused to lend their weight to proposals for legislative reform. Periodic self-purgings, they think, will do the trick, skimming the thin layer of fraud from predominantly legitimate industries and professions. But the regulatory problem is more delicate than that, since the borderline between the legitimate and the fraudulent is often thin—another reason why the industries and professions fight regulation.

Take the quack medicines and health foods, for example, on which Americans spend an estimated \$1 billion yearly (a major part of this is spent by older people who can ill afford it). Thanks, grimly, to thalidomide, the Food and Drug Administration must now test new drugs for efficacy as well as safety, but most over-the-counter drugs and therapeutic devices and the pseudo-clinics that promote them are still beyond the reach of the efficacy requirement. Your chances of being killed, in other words, are reasonably small—but so are your chances of being cured.

Medicine has made such great advances recently that the claims made for quack cures are often no more surprising than those made for the genuine article. And since the same advertising techniques are employed by both (where does the "honest hard sell" become dishonest misrepresentation?), it is no wonder that people, especially if they are in pain, are fooled.

FDA procedures are out of date and inadequate to cope with the growing volume of medicines and devices. (Approximately 500 new drugs enter the market each year.) When a fraud is uncovered, particularly if it is a dangerous one, the agency may act quickly. Last spring, for example, it quickly countered an article that appeared in *Look* magazine, promoting a lethal "cure" for arthritis called "Liefcort," with notices and warnings. FDA's circulation cannot match *Look*'s, however, and most "cures" have massive publicity behind them. In the case of Nutrio-Bio, a vitamin supplement sold door-to-door for such varied ills as cancer, flu, and high blood pressure, 50 tons of promotion material was destroyed in Chicago alone after FDA charged the company with making false claims.

FDA penalties are weak, too, leaning to administrative rebuke rather than criminal action. In the 18-month period

ending December 1962, the agency took 169 administrative actions but only six criminal ones—inconveniencing, no doubt, a great many crooks, but putting very few permanently out of business.

The same administrative enfeeblement leaves a free field to those engaged in land swindles—a \$700 million (a year) business that, again, affects the aged most of all. "The pitiful part of it," Arizona's Real Estate Commissioner told the Senate Committee, "is that when retiring people move to their 'land of milk and honey' and find that their lot is not a homesite with utilities but only a barren lot . . . they are too proud or too poor to go back home. Many become sick and are becoming welfare cases."

Both the Post Office and the Federal Trade Commission would like greater powers to deal with the deceptive advertising that is the backbone of this swindle. The mail fraud law has been a flexible tool (used to convict such disparate offenders as Al Capone and Billie Sol Estes), but, like other measures, it leaves a gap between discovery and prosecution, during which people continue to be fleeced. It is not always applicable in any case. These agencies are unlikely to get enhanced powers to issue "cease and desist" orders without a serious struggle. As an FTC witness told the committee: "all the bars are lined up against this, the NAM, the chambers of commerce, everybody is against us having this power."

The tales go on and on of money made from the loneliness and insecurity of the elderly. A 68-year-old woman signed promissory notes for over \$15,000 for 4000 hours of dancing lessons—and later, seeking to recover, told a court she had been coerced, flattered, and otherwise induced to sign. An 80-year-old man gave an alleged termite control firm \$1790 dollars for ridding his house of termites that were never there. The company was never there either, it turned out, when police tried to investigate. One elderly widow was persuaded twice within 3 years that her furnace was dangerous—at a cost of \$3847.

Laws, that we may someday get, to control or punish these things, will help. But the frauds are symptoms of the maladies of the aged in America, not causes, and until we can influence the causes, the symptoms will linger. A start has been made in a rash of official solicitude for the aged. The

President sent a special message to Congress last February on "Aiding our Senior Citizens," but not all of his suggestions have been followed up with concrete legislative proposals. A President's Council on Aging has been established under the Secretary of Health, Education, and Welfare, to coordinate the activities of the several government departments with programs affecting the aged. The Senate transformed its subcommittee on aging, formerly under the Labor and Public Welfare Committee, into a special, 21-member standing committee. The committee staff has done some excellent field reporting on problems of the elderly, but it may now be affected by the replacement of Senator McNamara (D.-Mich.) by Senator Smathers (D.-Fla.) as chairman, since Smathers is less of a crusader and more averse to federal action in general. (He voted against Medicare last year.) Voluntary groups, such as the National Council of Senior Citizens, formed mainly to support the drive for Medicare, are now turning their attention to other problems as well. One can hope, at least, that out of all these efforts will come ways to make old age in America more bearable.—ELINOR LANGER

Announcements

Newspaper and magazine articles on the natural sciences and their engineering and technological applications are eligible for the **1963 AAAS-Westinghouse Science Writing Awards**. Entries must have appeared in a U.S. publication between 1 October 1962 and 30 September 1963. They will be judged for "initiative, originality, scientific accuracy, clarity of interpretation, and value in promoting a better understanding of science by the lay public."

Newspaper entries may be a single article or a series, or a group of three unrelated articles, editorials, or columns. Entries from magazines, including trade and professional journals, may be single articles or a series. Persons other than the author may nominate the articles, and up to three separate entries may be submitted in each category.

The awards include two \$1000 cash prizes and citations to the winners' newspaper or magazine. The judges include Allen V. Astin, director of the National Bureau of Standards; Laura

Fermi, wife of the late Enrico Fermi; Harold Hayes, managing editor of *Esquire*; Norval N. Luxon, dean of the University of North Carolina journalism school; Morris Meister, president of Bronx Community College; and J. Russell Wiggins, executive editor of the *Washington Post*.

The awards are made possible through a grant from the Westinghouse Educational Foundation. Deadline for submission of entries: *10 October*. (E. G. Sherburne, Jr., AAAS, 1515 Massachusetts Ave., NW, Washington 5)

Scientists in the News

Five scientists have been selected by the Atomic Energy Commission to receive the 1963 Ernest O. Lawrence memorial award for contributions to atomic energy. The awards consist of a medal, citation, and \$5000 honorarium. The scientists include:

Herbert J. C. Kouts, associate director in the reactor physics division, Brookhaven National Laboratory;

L. James Rainwater, director, Nevis Cyclotron Laboratories, and professor of physics, Columbia University;

James M. Taub, group leader in the chemistry and metallurgy division, Los Alamos Scientific Laboratory;

Cornelius A. Tobias, professor of medical physics, Donner Laboratory, University of California, Berkeley;

Louis Rosen, alternate leader, physics division of Los Alamos Scientific Laboratory.

The Research Corporation Award this year has been presented to **Bernd T. Matthias**, scientist at Bell Telephone Laboratories and physics professor at the University of California, San Diego. He was cited for "his discovery of new and unexpected superconductors and ferroelectrics and for his far-reaching and stimulating investigations."

Alan Pifer, executive associate at Carnegie Corporation, has been named vice president of the organization, effective 1 July. He succeeds **James A. Perkins**, who has been named president of Cornell University.

Robert R. Gilruth, director of the NASA Manned Spacecraft Center, Houston, Tex., has been named visiting professor of aerospace engineering at Texas A&M College.

Morton Hamermesh, director of Argonne National Laboratory's physics division, has been named associate director of the laboratory. He is succeeded by **Lowell M. Bollinger**, who has spent a 2-year leave of absence from Argonne at Harwell, a British research facility.

This year's Alfred P. Sloan Foundation awards in **cancer research** were presented recently to scientists at the Sloan-Kettering Cancer Center. The \$10,000 awards will enable the recipients to spend 1 year in research at another cancer research institute. Prizes were presented to:

John W. Berg, for work in the clinical pathology of cancer.

Joseph H. Burchenal, for leukemia research, especially on acute leukemia of childhood.

Joseph G. Fortner, for his work in developing transplantable tumor lines.

Mary L. Petermann, for contributions to the biochemistry of cancer.

Recent Deaths

Leslie H. Backus, 60; plastic surgeon and recently elected secretary general of the Third International Congress of Plastic Surgeons; 7 April.

Harry M. Hines, 70; professor emeritus of physiology at State University of Iowa; 1 April.

Donovan C. Moffett, 62; president of the State University College, Cortland, N.Y.; 16 April.

Ezra H. Moss, 70; professor emeritus of botany, University of Alberta, Canada; 8 Feb.

Joseph L. Rosenholtz, 63; head of Rensselaer Polytechnic Institute's department of geology; 21 March.

Wilbert E. Stevenson, 63; board chairman at Machlett Laboratories, Springdale, Conn.; 6 March.

Otto Struve, 65; first director of the National Radio Astronomy Observatory, Green Bank, W.Va.; 6 April.

Frank W. Weymouth, 78; professor emeritus of physiology at Stanford University; 19 March.

Allen O. Whipple, 82; past president of the American Surgical Association and of the New York Surgical Association; 16 April.

Milton C. Whitaker, 92; retired vice president of American Cyanamid Co. and founder and former head of the Columbia University chemical engineering department; 3 April.