many times more expensive than the Stanford estimate to manufacture. How many times? "That's proprietary information." He also says that he has "hundreds of satisfied customers all over the world." Sales have been made through foreign agents to buyers in Panama, Chile, France, Spain, Mexico, and the Philippines, Fiedler says. Asked for examples within the United States, he cited the Los Angeles Rat Control Program, where four units "were objectively tested and found effective." Indeed, a letter from the program administrator says just that.

Reached by phone, however, the administrator, Edward S. Sharpe, tells the story a little differently: "We sent those blasted things back to him because they're not worth the blasted metal they're made of." The letter of recommendation was written from information supplied him by an assistant, Sharpe says. The assistant, both he and Fiedler agree, is now a full-time Fiedler employee. "I've had calls from Italy and Japan about that letter," Sharpe says. "It's haunted me ever since it went out."

> "... elastic expansion and capacitance in relation to space ..."

Another reference supplied by Fiedler was also a bit more underwhelmed than he first seemed. According to a letter written in February 1978 by Andreas Reising of Reising's Sunrise Bakery in New Orleans, installation of a Nature Shield almost completely eliminated their rodent problem. Now, Reising says, "I'm not as much on cloud nine as when I wrote that letter. I've had to resort to chemicals and baiting in addition to the Shield." Similar tales are told by two other references, the Port of New Orleans and the Norfolk Shipbuilding and Drydock Corporation.

"In order to understand this thing," says Rex Marsh, a University of California scientist who tested the Nature Shield for EPA, "you have to realize that people are so desperate to solve their pest problems that they are gullible enough to believe in almost any product." The real explanation, however, may lie in a statement by Reising. Asked why he purchased the device and kept it on hand despite some dissatisfaction, Reising paused and then replied, "I just wouldn't want to be without it."

—R. JEFFREY SMITH

U.S. Scientists Say World Dominance Is Over

A loud but somewhat confusing appeal for more basic research support has been issued by Derek Bok and David Saxon, presidents of Harvard and the University of California, respectively, and three biomedical researchers. The quintet, speaking for 21 organizations, asked Congress to "support the principles of stable, balanced and controlled investment in basic research" as reflected in the President's fiscal year 1980 budget, except—the clarion call continued—for the NIH budget to which some $200 million should be added.

"It is clear that we have been remiss in trying to explain how basic research is important to the country," Bok announced at a press conference held in Washington, D.C., on 17 April. Bok revealed in challenging the figure supplied by a questioner, however, that he himself did not know how much money the federal government spends in support of basic research. Asked how much money he thought the government should be spending, Bok was obliged to say that "That is a question for which there is no clear answer. No one can say how much basic research is the right figure." The Administration and Congress, however, have to decide just that.

Saxon observed that "We had a great flowering of science and technology in this country following the Second World War, and we are now facing a change. It fills me with foreboding. There are clear indicators that some things have gone wrong. In automobiles, steel, electronics, we are losing our leadership." But Saxon offered no specific remedy other than asking that Congress approve the President's budget.

A similar lament of national decline was offered by James Watson of Cold Spring Harbor: "For better or worse, our scientific dominance in the world is declining. Western Europe is ahead in areas such as high-energy physics." But biologist Watson did suggest a remedy: "There is a demoralization in the academic scientific community. Their salaries are lousy. If you are a policeman you get paid more than our younger scientists."

Mahlon Hoagland, of the Worcester Foundation for Experimental Biology, said that the proposed NIH budget would result in a 50 percent cut in the number of new basic research awards: "The effect of this cut would be disastrous—it will require dismantling our labs and turning away young people."

The Administration's argument for giving NIH a more or less stationary budget amid a generally upward budget for basic research is that NIH has fared well in the past and its turn has come for a smaller share of the increases.

Kennedy Leaves FDA for Stanford

Donald Kennedy is returning to Stanford University after 2 years as commissioner of the Food and Drug Administration. He had intended to stay longer, but the position as provost and vice president for academic affairs at Stanford would not wait.

"It goes without saying, I hope," Kennedy wrote in a 12 April letter of resignation to his boss, HEW secretary Joseph Califano, "that the timing is not what I would have wished; and as you well know, the decision was determined by circumstances there and not here."

Califano in reply praised Kennedy as a "superb public servant," and called his tenure of the FDA "a remarkable demonstration of the effect that an individual with great talent and commitment can have on an organization."

Kennedy had been at Stanford for 20 years and was head of its human biology program before joining the FDA in March 1977. Stanford has accumulated a variety of headaches (*Science*, 12 January 1979) and it was felt that Kennedy, as deputy to president Richard Lyman, was the man to address them.

Kennedy says the things he feels most positive about having done at the FDA include opening up the agency, encouraging consumer involvement in the regulatory process, and healing some old wounds left by a legacy of personnel disputes. His major disappointment has been the failure so far to get drug reform legislation through the Congress.

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The saccharin ban, a decision Kennedy inherited and supported, probably occasioned most public attention during his time at the FDA, followed closely by the furor over Laetrile. Issues of more lasting importance include Kennedy's promotion of the lower priced generic drugs, and his advocacy of giving consumers more information through food and drug labeling.

Dynamite Prizes

When Alfred Nobel bequeathed the proceeds of his dynamite and detonator sales to the endowment of his eponymous prizes, he picked only chemistry, physics, and medicine among scientific disciplines as the recipients of his largess. As the prizes grew in prestige, other disciplines felt left out and wanted their Nobel prize too.

Cancer researchers are one group that has felt neglected. The medicine prize has seldom been given explicitly for cancer research. One reason for the Nobel committee's wariness may be their error in awarding the prize of 1926 to Johannes Fibiger for what turned out to be a false discovery about the propagation of malignant tumors.

To fill the gap, General Motors has set up a foundation to award three prizes a year for cancer research. Like the Nobel prizes, they are international in scope and carry a large cash award—$100,000 each in the case of the GM awards; last year's Nobel awards were each worth $165,000, but each award could be divided three ways.

The General Motors Cancer Research Foundation set up an international committee and received more than 600 nominations from 17 countries. The first winners, announced on 12 April, are Henry S. Kaplan of Stanford University, cited for his leadership in developing a therapeutic program for Hodgkin's disease; Richard Doll of Oxford University, for developing knowledge about the environmental causes of cancer; George Klein of the Karolinska Institute, for his work on the interrelation of cancer and the immune system.

The purpose of the prize is increased recognition for cancer research. "I think that unfortunately recognition, in terms of Nobel prizes, has not been enough for cancer researchers," observes Joseph Fortner, president of the foundation. Aren't the three winners already well recognized? Fortner notes that an award can be a stimulus to those who work with the prizewinner as well. "There is a need for reassurance, stimulation, acceptance by peers. It is hard to crystallize that. But I believe that the kind of recognition that comes from the GM prizes can be really important for a person's efforts," Fortner says.

General Motors has endowed the foundation with $2 million, which will suffice for 5 years of prizes. The company has a long-standing interest in the support of cancer research and treatment; two of its executives founded the Sloan-Kettering Institute for Cancer Research in 1945.

Two other large cash award prizes for cancer research have also come into being. The Bristol-Myers cancer research prize, for $25,000, was established last year. Another large award, to start this fall, has been sponsored by philanthropist Lita Annenberg Hazen; $50,000 will go to a clinical researcher and another $50,000 to his school and colleagues for continued work.

Since hope of winning large cash sums is not usually reckoned high among a researcher's motivations, the influence of this type of prize on scientific research must necessarily be indirect. The formal currency of the prizes is prestige; presumably the cash is a necessary means of attracting public and media attention to an award, thus building up its image among both the public and scientists.

To Accept Is to Reject: The Publishing Paradox

The scientific journal has its faults as an instrument of communication, but the basic formula is hard to alter. The fact which even the most liberal editor must eventually face is that some papers have to be rejected, and that the criterion of rejection might just as well be the opinion of independent and knowledgeable referees.

This is, of course, the rule by which most established scientific journals live. William M. Honig believes that the formula has done to death the many infant new ideas which are too revolutionary to be acceptable to establishment thought. A year ago he founded a new journal, *Speculations in Science and Technology*, designed to rescue new concepts from infanticidal referees and bring them to the light of day.

The plan struck a resonance in the hearts of authors throughout the world who had been seared by pain of rejection slips. Foundling ideas by the hundred were deposited on Honig's doorstep at the Western Australian Institute of Technology. The problems of success began.

In a recent editorial Honig complained that many of the papers submitted to him had grievous faults. Some were too long, some glossed over problems the author was well aware of, some were not up to date with the current literature. With the concurrence of his editorial board, Honig had had to go so far as to issue rejection slips. "We take this hard line with authors," Honig explained, "because science is a serious business and changing the prevailing ideas in science is difficult enough without engendering arguments unrelated directly to the ideas involved."

Doubtless because they had higher expectations, some authors did not take kindly to this rough handling. One author, asked merely to shorten his paper, responded with a blast that the journal should change its name to "Proposals for Addition to Establishment Dogma."

Honig is frank about his dilemma. Some people have urged that only "well founded" and "informed" papers should reach print. Others "have argued that the requirements are too stringent, and that much more informal, unrigorous, and 'less currently informed' submissions should be permitted." The issue, Honig rightly observes in an editorial marking the first anniversary of *Speculations*, "is a serious one, and adhering to either point of view will cause much dissatisfaction by one of these groups."

The problem is that if editor Honig is too unselective, his journal will be cluttered with worthless material, but if he leans too far in the other direction, he may be in danger of reinventing that ancient wheel, the refereed scientific journal.

Nicholas Wade