journalists before on the issue of the public's right to know. Four years ago, reporters demanded to know how identical-twin fertility experts. Drs. Stewart and Cyril Marcus, attending physicians at New York Hospital, came to die together of acute barbiturate withdrawal. Journalists insisted that, in view of reports of covered-up incidents in the operating room and elsewhere involving the obstetricians-gynecologists, there was a legitimate need for the public to know whether New York Hospital was protecting their interest by controlling impaired physicians. Thompson's response was similar to his current stance. He invoked the canon of confidentiality. But in that case he only stonewalled for 5 weeks. Then, under great pressure, he issued a full, detailed statement-confidentiality notwithstanding.

Two days after the Shah departed for Texas, Osborne and Thompson issued a statement saying that the Shah had instructed them to say no more, and the hospital was bound by doctor-patient confidentiality. But they disassociated the hospital from Kean's trips to Mexico, saying he had made the distant house calls on his own, and he was still on his own if he wanted to talk.

Privately, doctors at the hospital, both those involved in the case and otherwise, were disturbed at what they believe to be physicians letting the time-honored tradition of doctor-patient confidentiality become perverted for political purposes. None would go so far as to advocate that New York Hospital violate confidentiality, but most felt the hospital allowed itself to be used by the Shah-for whatever purposes the Shah may have had. There was a strong feeling that the hospital and the State Department, in view of the sensitivity of the Shah's admission to the country, should have made the Shah's agreement to full medical disclosure a precondition.

Confidentiality is between doctor and patient, and it belongs to the patient. The patient may violate it, not the doctor. The patient may order the doctor to say he has the grippe when, in fact, it is the mumps. A doctor may refuse to lie overtly, but he is duty-bound to keep silent about the truth if the patient insists. However, in the case of the Shah, doctors at New York Hospital were told to tell some of the truth some of the time to some of the people.

At one point, New York Hospital doctors reported their finding that the Shah was suffering from an advanced form of diffuse histiocytic lymphoma. But then, when they realized the lymphoma wasn't

## Diesel Makers Win Waiver from EPA

The dieselization of the American automobile came a step closer to reality in December as the result of a decision made by the Environmental Protection Agency (EPA).

General Motors and two foreign manufacturers won partial waivers of clean air rules from the EPA, allowing them to install slightly substandard diesel engines in 1981 and 1982 model cars. As anticipated, the EPA justified the small tactical concession on the grounds that it would strengthen its long-term strategy for diesels and demonstrate that the government has not taken an inflexible attitude (*Science*, 21 December 1979).

The issue arose because the Clean Air Act requires that 1981 autos emit no more than 1 gram of nitrogen oxide pollutants  $(NO_x)$  per vehicle mile (gpm). This improvement over the 1980 standard of 2 grams per mile will be difficult to achieve, particularly for diesels. For this reason, the law allows the administrator of EPA to grant waivers of up to 4 years from the  $NO_x$ standard for diesel engines emitting no more than 1.5 gpm. Five manufacturers asked for waivers on nearly a score of engines. Three (GM, Daimler-Benz, and Volvo) won waivers, but only for four engines and only for 2 vears

EPA Administrator Douglas Costle explained himself as follows: "My decision to waive the NO<sub>x</sub> standard for diesels in 1981-1982 represents a balancing of risks between a more gradual decline in NO, emission reductions if I grant the waivers, and the possible increase in particulate emissions if I deny." EPA officials said that this meant the agency is more concerned about particulate pollution than NO<sub>x</sub>, and is mustering its heavy guns for a later battle. The technology now in use to control NO<sub>x</sub> actually increases particulate emissions when applied to diesel engines. Particulate pollution is considered a serious threat to public health, and tests of carcinogenicity are now in progress. The EPA did not want to take any action that might later compromise its hard line on particulates.

There are methods for reducing NO<sub>x</sub> and particulate emissions simul-

taneously, but they have not been developed into marketable technologies. By giving the car manufacturers an additional 2 years to refine these techniques, the EPA will be in a stronger position to argue in 1983—when strict particulate limits are scheduled to go into effect—that it has dealt fairly with the industry.

The auto companies are eager to produce diesels because they are more efficient than gasoline engines of similar power. Thus they will make it easier for the companies to meet the government's mileage standards without major changes in auto design. Many of today's gas guzzlers are about to become diesel guzzlers. GM says that the engine for which it received a waiver is a V-8 model, developed for use in Cadillacs, Oldsmobiles, big Chevrolet station wagons, and other heavy cars.

Robert Rauch, an attorney for the Environmental Defense Fund who lobbied against the grant of waivers, said he was unhappy with the decision but did not plan to file a lawsuit challenging it. He thought the agency had abandoned a point of principle in granting an exemption for diesel production before the question of safety has been settled. The auto makers, he said, "essentially got what they wanted—a foot in the door for whole-sale dieselization."

## A Clinical Trial for Laetrile This Spring?

Laetrile, the ever popular but unproved cancer medicine, will be given a full clinical trial this year by the National Cancer Institute (NCI), provided it passes a preliminary screening required by the Food and Drug Administration (FDA). Laetrile advocates have been pushing for such a test for years. The NCI agreed to conduct tests on humans in December 1978, pending FDA approval of the protocols. Now the final FDA clearance is in sight.

The cancer institute will test Laetrile as a new drug, even though all previous animal experiments had found it ineffective in treating tumors. According to Lorraine Kershner of the NCI, "We would not normally apply for [clinical trials] given that background,

but because there was such widespread public interest in Laetrile we decided we would go ahead." The FDA has required that the drug be screened first for purity and toxicity a formality, Kershner said, which may be completed as early as this spring.

Kershner described the formal procedure as a "phase II trial" which will involve 200 to 300 patients in at least four cancer centers: the Mayo Clinic in Minnesota, the University of California at Los Angeles, the University of Arizona at Tucson, and the Memorial Sloan-Kettering Cancer Center in New York. The volunteers will be cancer patients who have exhausted all conventional means of therapy. They will be given a "metabolic diet" which the NCI has developed in consultation with Laetrile advocates—a vegetarian cuisine supplemented by vitamins and Laetrile. The test will last a year. The drug will be judged efficacious if it succeeds in shrinking the size of tumors by 50 percent or more.

The FDA, which has been battling the claims of Laetrile promoters in the courts for several years, had little to say about its change of policy. However, Commissioner Jere Goyan did issue a terse statement noting that "all the data" suggest Laetrile is ineffective: "I caution cancer patients not to delay or abandon conventional cancer therapies by turning to Laetrile as an alternative."

## Engineers Form a New National Association

A new scientific foundation was born on 3 January with the formal inauguration of the American Association of Engineering Societies (AAES) at a dinner in Washington, D.C. The AAES describes itself as an umbrella organization that will shelter more than 35 engineering societies and speak out on occasion for more than one million members. It succeeds the Engineering Joint Council, now defunct after 25 years of operation, and is seen by its creators as being broader and more ambitious than its predecessor. The chairman, founder, and acting president of the AAES is Kenneth Roe, chairman of the engineering firm Burns & Roe.

According to a spokesman, the society will remain for the time being at the United Engineering Center in New York, and will move to Washington when its structure has been more fully developed. Roe envisions a fulltime executive staff of 25 to 30, and has described the society as being "like a holding company" for the member societies, which will do the bulk of the AAES's work. The acting executive director is Carl Frey, former director of the Engineering Joint Council. The AAES plans to make its first major decisions on staffing and structure at a meeting to be held from 9 to 12 March at Kiawa Island, South Carolina.

Spokesmen for member societies of the AAES said they hoped that the new organization would overcome the fragmented quality of the engineering community in the past and become a strong voice in Washington on subjects that concern engineers: energy production, government regulation, transfer of technology, and nuclear power.

## Western Efficiency Not Welcome in Boston

Some innovations clearly do flow from west to east, as Californians are wont to argue. The latest evidence comes from the bastion of easternism—Massachusetts—the last state in the union to adopt the "western rule" of efficient traffic management.

According to this rule, traffic laws should be designed for the convenience of drivers to the greatest extent possible. Specifically, right turns on red lights should be the rule, not the exception.

On 1 January, Massachusetts became the 50th state to conform to this principle, one which was first applied on a large scale on the West Coast in the 1940's and 1950's. The transition has not been graceful, however. Massachusetts did not join the national trend until after the federal government used its subtle powers of persuasion to goad the state legislature. The Department of Energy informed the state that if it did not authorize right-turn-on-red—as the Energy Act of 1975 required—it stood to lose \$1.4 million worth of federal energy-related

grants. At that point, the wheels of local government began to turn, and in 1979, the legislature voted to go west ern in 1980.

In addition to being a time-saver, the western rule is promoted as a modest aid to conservation. A study done by the city of Memphis concluded that the new rule would save about 65,000 gallons of fuel each year, and another study based on traffic in Washington, D.C., concluded that it would make possible an average fuel saving of 2.6 percent for all vehicles. The Federal Highway Administration estimated in 1976 that switching to the western rule at every intersection in the country might save 136 to 187 million gallons of fuel a yearequivalent to one-fifth of the amount of oil consumed in the United States in a day. The same study concluded that accidents arising from right turns made on red lights are statistically insignificant when compared with the total number of intersection accidents. At the most, it said, they amount to 3 percent of the total.

Boston was not won over, however. In carrying out the federal mandate, state and city officials have taken an extremely cautious approach, according to Robert Conner, chief of the traffic control systems division at the Federal Highway Administration. He said the state maintains an "all-pedestrian phase" at 85 percent of its intersections, meaning that traffic coming from every direction is made to halt at pedestrian crosswalks. Boston simply put no-right-turn-on-red signs at every one of these intersections. Thus, it cost the state about \$360,000 to buy 11,500 no-turn signs, which now alert citizens to the fact that the western rule does not apply at most of the intersections in Massachusetts. Washington, D.C., and Connecticut have made a similar accommodation with the western rule. They typically prohibit right-turn-on-red at 80 percent or more of the intersections, the reverse of the progressive western pattern, Conner said. Los Angeles prohibits right turns at only 1 percent of its intersections; Dallas, at 9 percent; and Denver, at 7 percent.

With Boston's conversion, all the big cities have adjusted to the new style, except one: New York. Its thousands of intersections are still bound by eastern customs, and there is no plan to liberate them.

.Eliot Marshall -