their representatives the directors who, in turn, appoint and oversee the managers. In practice, things work differently and General Motors provides what Nader regards as the quintessential example of how they do work. At the end of 1969, GM had more than 285,694,000 shares of common stock outstanding, owned by 1,363,000 shareholders, 79 percent of whom have 100 shares or less. Before each annual meeting proxies are solicited by GM's board of directors, chaired by James M. Roche, the company's chief executive officer (five other GM officers, plus a former GM president and two former chief executive officers and board chairmen sit on the 24-member board). Thus while some 700 persons actually attended GM's annual meeting last May, 845,000 others were represented by proxy-proxies that had been turned over to the board of directors, which, if it is not actually a creature of management, is certainly not independent of it.

Princelings of a Superstate

GM's officers are in truth the princelings of a private superstate. Operating worldwide, GM last year had 794,000 employees and gross revenues of \$24,-300,000,000, a sum greater than the revenues of any government except that of the United States and that of the Soviet Union. In essence, what Campaign GM seeks to do is to call into question the "legitimacy" of management's near-monopoly on corporate power. Although some would regard the campaign as radical in its ultimate aims, Nader says that it is based on such time-honored principles as due process, fairness, free competition, and open and responsive government.

Although an appeal for proxies is being made, the leaders of Campaign GM (who would be dismissed as quixotic if Nader had not in the past been such an accomplished performer in the role of little David) are not trying to win a proxy fight with the GM management. "The purpose of this program in the first round this year is to show what a rigged system the whole GM shareholder situation is," Nader has said.

Campaign GM's candidates for the three new seats which Nader and his associates hope to see created on the company's board of directors obviously have been selected as much for their symbolic value as for their personal merit. They are Betty Furness, who was President Johnson's special assistant for

24 APRIL 1970

consumer affairs; René Dubos, microbiologist at the Rockefeller University and a prominent environmentalist; and the Reverend Channing Phillips, a Negro who at the Democratic National Convention in 1968 was named a candidate for the presidential nomination and who is now Democratic National Committeeman for the District of Columbia.

Nine Campaign GM proposals are to be presented at the stockholders' meeting and the GM management will oppose them all. Besides the proposals to enlarge the board of directors and establish a shareholders' committee, there is one to amend the corporate charter to provide that the company shall carry on no activities detrimental to the public health and welfare or in violation of law. In addition, there are six proposed resolutions calling for a vastly greater commitment by GM to the solution of such problems as air pollution, mass transit, racial discrimination, and the development of a car that can be crash-tested against a solid barrier at 60 m.p.h. without injury to passengers wearing shoulder restraints.

General Motors contends that the purpose underlying Campaign GM is to inject into GM's decision-making persons who have no investment in the company and no direct interest in its financial success. This clearly is the case.

Curbs on 2,4,5-T Use Imposed

The federal government took steps last week to halt the domestic use of the controversial herbicide 2,4,5-T (2,4,5-trichlorophenoxyacetic acid) and ordered the suspension of its use as a defoliant in Vietnam.

The Secretaries of Interior, Agriculture, and Health, Education, and Welfare announced that new information had indicated that 2,4,5-T could produce abnormal development in unborn animals. The first indication of this came in the fall of 1966 from Bionetics Research Laboratories. After review of this data, White House science adviser Lee A. DuBridge announced last October (*Science*, 21 November 1969) that 2,4,5-T usage would be restricted after 1 January. The manufacturers pointed out that the samples of 2,4,5-T used in the studies were contaminated by dioxins at a level of 27 parts per million. Government action was delayed until last week; the delay has been attributed to uncertainty as to what had caused the birth defects—2,4,5-T or the dioxins. Last week, researchers at the National Institute of Environmental Health Sciences were reported to have conducted further experiments on animals which showed that 2,4,5-T alone, as well as dioxin, could cause deformities in mice.

The most controversial use of 2,4,5-T has been as a defoliant in Vietnam. The AAAS has tried, for 3 years, to obtain scientific studies on herbicide use in Vietnam, but the Defense Department has taken no action. Over the past 9 years, an estimated 40 million pounds of the herbicide has been sprayed across at least 5 million acres of Vietnam. DuBridge's announcement last October said also the Defense Department had been directed to restrict its use of 2,4,5-T to "areas remote from population"; the Defense Department said no change would be needed in its policy, because its present policy conformed to this directive. In conjunction with the domestic restrictions announced last week, however, Deputy Secretary of Defense David Packard ordered the immediate suspension of the use of 2,4,5-T "pending a more thorough evaluation of the situation."

In domestic action, the registration of liquid forms of the herbicide was suspended by the Agriculture Department, making interstate sales illegal. Nonliquid forms of the herbicide, not considered imminently harmful, will remain on sale until hearings and possible appeals are completed. The ban does not affect the use of 2,4,5-T for control of weeds and brush on range, forest, pasture, and other nonagricultural land; it does affect its use around the home and on lakes, ponds, and ditch banks. Nonagricultural areas account for most of the use of the herbicide in the United States, however. An estimated 42.5 million pounds of 2,4,5-T was produced in 1968, with sales grossing \$30 million.—NANCY GRUCHOW