lyst, the only one that inhibits sulfuric acid production. If the tight NO_x standard of 0.41 is enforced, they will have to jump to the dual catalyst, the only one that now promises to reduce NO_x that far.

There is, of course, another way out: drastic reduction in automobile weight and engine size. This would automatically reduce emissions and improve mileage. It would also permit introduction of the stratified charge engine, which is now generally regarded as suitable only for small cars. The stratified charge engine was invented in the United States and developed by Honda of Japan. This is a lean-burning engine (that is, one using a high air to fuel ratio that permits oxidation of HC and CO), and Honda says it can meet all the U.S. statutory standards right now. A NO_x catalyst might be needed, which would involve some fuel penalty. But there are countless measures to offset that—improved design to reduce aerodynamic drag, radial tires, better carburetion, electronic ignition, fuel injection, and so forth.

Auto makers are busy developing these measures, but they have been having a very hard time thinking themselves into smaller cars. They have long argued that they make big cars because people want them. This is true, but it may not be as inalienable a right as the people in Detroit make it out to be. Besides, they complain about the costs and inefficiency of catalysts while continuing to build costly and frivolous "options" such as push-button windows, vinyl roofs, and air conditioning into many of their models.

Economy vs. Environment

The Clean Air Act was fashioned with public health and environmental protection as the prime considerations. Now that fuel economy has taken on almost equal importance, auto makers are saying that one objective can only be achieved at the expense of the other. As has been indicated, many observers think this is a phony argument. Chief among them are officials involved with environmental protection in metropolitan areas. The feeling expressed at the hearings by these individuals was that auto makers were getting the breaks, and that cities would have to pay the price to get ambient air standards within levels prescribed by law. Robert Low, head of New York City's Environmental Protection Administration, said it looked to him like a "double standard"—cities had to keep up with timetables but auto makers were being permitted repeated delays.

(It might be remarked here that a precipitous drop in auto sales resulting from rampant price increases certainly wouldn't do air quality any good. The turnover of vehicles now on the road is estimated at 10 percent annually, so theoretically it will be a decade before virtually all auto emissions are controlled. A reduction of that percentage means that inefficient fume-belching models will continue to be operated long after owners would normally have turned them in.)

While EPA is agonizing over the recommendations it will make to Congress, a staff member of the Muskie subcommittee observes that Congress is pretty used to making up its own mind when it comes to decisions affecting the Clean Air Act. Congressional response to the presidential proposal, even if it is endorsed by Train, is likely to be cool. The staffer says that even the "Neanderthals" on Capitol Hill recognize that a lengthy freeze on emission standards in exchange for a "pledge" of increased fuel economy is a pretty bad bargain. For one thing, Detroit doesn't have a history of doing such things voluntarily; for another, most of the 40 percent improvement has already been effected in the 1975 models and evidence is that the goal —which would only attain an across the board average of 18.7 miles to the gallon—could be achieved without stalling any more on standards enforcement.

The Clean Air Act is scheduled for thorough retuning and overhaul this year. At present a drastic relaxation in the auto emissions standards seems unlikely. The basic purpose of the act was and is to protect public health. There will be particular pressure to raise the 0.41 NO_x standard but, according to the committee staff member, there is not as yet any evidence to justify that action. As for technological considerations, the staffer observes that "the technology-forcing aspect of the Clean Air Act was a key part of it," so if auto makers don't think they can achieve the standards they will have to make a very strong case indeed.

Perhaps the worst effect of a 1-year suspension would be a psychological one. Repeated delays may just delay awareness on the part of manufacturers that the private automobile may not always remain a symbol of the American way of life and that, with the development of mass transit, autos may indeed play a smaller part in America's future than they do in its present. Certainly Chrysler Corporation has not picked up on the notion. In its report announcing a stunning $73.5 million loss in the last quarter of 1974 it managed to make a chipper conclusion, to wit:

"The increase in the number of new drivers each year and the development of suburban areas that rely heavily on motor vehicle transportation will continue to support the long-term growth of the automobile market."

—CONSTANCE HOLDEN

APPOINTMENTS

Thomas C. Chalmers, director, Clinical Center, National Institutes of Health, to president and dean, Mount Sinai School of Medicine, City University of New York. . . . **John I. Sandson**, associate dean for health services, Albert Einstein College of Medicine, to dean, Boston University School of Medicine. . . . **William B. Boyd**, president, Central Michigan University, to president, University of Oregon. . . . **John G. Barker**, president, Marshall University, to president, Midwestern University. . . . **John K. Major**, professor of physics, New York University, to vice president for academic affairs, Northeastern Illinois University. . . . **Alexander L. Clark**, acting dean, School of Public Affairs, University of Texas, Austin, to vice president for academic affairs, University of Texas, Dallas. . . . **Samuel R. Powers, Jr.**, professor of surgery, Albany Medical College, to chairman, surgery department, Albany Medical Center. . . . **John T. Wilson, Jr.**, chairman, community health practices department. Howard University College of Medicine, to chairman, environmental health department, School of Public Health and Community Medicine, University of Washington. . . . **Jerome A. Feldman**, associate professor of computer science, Stanford University, to chairman, computer science department, University of Rochester. . . . **Peter B. Kahn**, professor of physics, State University of New York, Stony Brook, to chairman, physics department at the university. . . . **Grant Gross**, head, oceanography section, environmental sciences division, National Science Foundation, to director, Chesapeake Bay Institute, Johns Hopkins University.