of SiF2, however, appears unique among these divalent species. Thus, silicon difluoride opens up new possibilities for syntheses of previously known silicon-fluorine compounds and, in addition, leads to several novel types of organic and inorganic species not predicted from fluorocarbon chemistry or from the known chemistry of the other divalent silylenes.

#### References and Notes

- D. C. Pease, U.S. patent 2,840,588 assigned to DuPont Co., Wilmington, Delaware. 24 June 1958.
   D. C. Pease, U.S. Patent 3,026,173 assigned to DuPont Co., Wilmington, Delaware, 20
- March 1962.
- 3. M. Schmeisser and K. P. Ehlers, Angew. Chem. 76, 781 (1962).

- J. W. C. Johns, A. W. Chantry, R. F. Barrow Trans. Faraday Soc. 54, 1580 (1958);
   D. R. Rao and P. Venkateswarlu, J. Mol.
- Spectr. 7, 287 (1961).
   A. S. Kana'an, D. C. Pease, J. L. Margrave, J. Phys. Chem. 66, 1200 (1962); A. S. Kan'an and J. L. Margrave, *Inorg. Chem.* 3, 1037 (1964).
  T. C. Ehlert and J. L. Margrave, *J. Chem.*
- The Common Phys. 41, 1066 (1964); J. D. McDonald, C. H. Williams, J. C. Thompson, J. L. Margrave, Abstracts of 152nd Meeting of the American Chemical Society, New York, American Cher September 1966.
- 7. P. L. Timms, R. A. Kent, T. C. Ehlert, J. L. Margrave, J. Amer. Chem. Soc. 87, 2824

- Margrave, J. Amer. Chem. Soc. 81, 2624 (1965).
   G. E. Besenbruch, personal communication.
   For example CF<sub>2</sub> was studied by F. W. Dalby, J. Chem. Phys. 41, 2297 (1964).
   P. L. Timms, T. C. Ehlert, J. L. Margrave, Nature 207, 187 (1965).
   V. M. Rao, R. F. Curl, P. L. Timms, J. L. Margrave, J. Chem. Phys. 43, 2557 (1965);
   V. M. Rao and R. F. Curl, ibid. 45, 2032 (1966).
- 12. V. Khanna, G. Besenbruch, J. L. Margrave, to be published, ibid, (1967).

- 13. J. M. Bassler, P. L. Timms, J. L. Mar-
- grave, *Inorg. Chem.* 5, 729 (1966).

  14. P. L. Timms and C. S. G. Phillips, *ibid.* 3, 606 (1964).
- 606 (1964).
   P. L. Timms, T. C. Ehlert, F. Brinckman, T. C. Farrar, T. P. Coyle, J. L. Margrave, J. Amer. Chem. Soc. 87, 3819 (1965).
   P. L. Timms, Chem. Eng. News 44, 50 (1966).
   P. L. Timms, D. D. Stump, R. A. Kent, J. L. Margrave, J. Amer. Chem. Soc. 88, 940 (1966).
- J. C. Thompson, J. L. Margrave, P. L. Timms, Chem. Commun. 566, (1966).
- 19. ——, in preparation.
  20. H. Schafer and B. Morcher. Z. Anorg. All-
- H. Schater and B. Morcher. Z. Anorg. Allgem. Chem. 290, 279 (1957); M. Schmeisser and P. Voss, ibid. 334, 50 (1964); P. W. Schenk and H. Bloching, ibid., p. 57; M. Schmeisser and K. Friedrich, Agnew. Chem. 76, 782 (1964).
  P. S. Skell and E. J. Goldstein, J. Amer. Chem. Soc. 86, 1442 (1964); D. M. Nefedov and M. N. Manakov, Angew. Chem. Intern. Ed. 3, 226 (1964).

- Manakov, Angew. Chem. Intern. Ed. 3, 226 (1964).
   W. C. Schumb and E. L. Gamble, J. Amer. Chem. Soc. 53, 3191 (1931).
   J. Becker, P. L. Timms, D. D. Stump J. L. Margrave, unpublished work (1965).

## **NEWS AND COMMENT**

# **Medicine and Politics: A Fresh Look** at the British Experience

London. Although few pieces of American social legislation have stirred more controversy before they became law, Medicare has been having a relatively quiet first year. In Britain, where health and hospital care has been nationalized for 20 years, controversy seems continuous. And a recently published book by a former Minister of Health, Enoch Powell, has added fuel to the fire.

A New Look at Medical Education\* was written for a series of books planned primarily for the medical profession, and Powell takes an appropriately clinical tone. Powell, a Conservative, does not prescribe any sweeping changes of the National Health Service; rather, he sets out to explain it. In doing so he has a number of things to say about relations between politicians and professionals which extend to science and education as well as medicine and, in fact, have transatlantic application.

The analogy with the United States cannot be pushed too far. Under Medicare, the U.S. government acts essentially as paymaster and the organization of medicine has not been seriously affected. This differs, of course, from the situation in Britain, where,

\* Pitman Medical Publishers, London.

under the National Health Service, the government, on the one hand, operates the hospitals and employs hospital doctors and nurses and, on the other, controls the conditions of general practice through contracts with the overwhelming majority of G.P.'s.

Governmental responsibility is also divided differently in the two countries. In the United States legislative and executive powers are constitutionally separated, while in Britain the governing party's members in Parliament also hold the equivalent of American Cabinet and sub-Cabinet posts. These differences certainly cannot be discounted, but Powell makes several provocative general comments, which, if valid at all, are valid where representative government prevails, and Americans should find them worth considering.

Powell, for example, questions the assumption that a seat in the Cabinet gives a minister greater bargaining power in behalf of his department. Not so, says Powell: "The idea that members of a government extort by their weight and personal influence a larger or smaller share of national resources for their respective charges is grotesquely unreal. The complex balance of pressures-electoral, social, practical-that determine the rate at which a branch of public expenditure grows are little accessible to individual sway; and even if one individual could, by force of personality and advocacy, present the claims of his department to his colleagues with more emphasis and advocacy than another, that result would still not depend on whether he was 'called in' to Cabinet for the items in question or sat there as of right throughout."

Civil servants like to have their minister in the Cabinet because it elevates their own status and may, in fact, make some things easier for them. On the other hand, says Powell, the Cabinet member must devote much time to matters outside the concern of his own department, and this inevitably detracts from his performance of ministerial duties.

In the United States the histories of independent agencies such as the Atomic Energy Commission, the National Science Foundation, and especially the National Aeronautics and Space Administration show little to indicate that a place at the Cabinet table would have materially affected their fortunes. Advocates of giving the agencies which administer federal education and science programs Cabinet status, separately or in combination, might well consider Powell's pros and cons.

Powell also says that the belief that a government administrator should have a deep knowledge of the subject matter with which his department deals is a "popular fallacy," and is based on a misunderstanding of the function of the politician who heads a government department. "His job," says Powell, "as his description denotes, is

politics. Placed in charge of a service or department, he will make it his duty, and often find it some satisfaction, to administer it efficiently and well, even in those aspects in which no element of politics enter into the decisions. But his specific function is to handle the issues, be they major or minute, that are political in character, where the management of public opinion and the interpretations of actions and events in a political sense is involved. These issues he handles as his peculiar province, and his skill or lack of it, his seriousness or levity-in short his qualities as a politician-will be in evidence whether the subject matter is pensions or prisoners or practitioners."

If the chief is a specialist in the business of his department, he comes into the job with fixed ideas which may interfere with his ability to make the political assessments which are the essence of the job. In the same vein Powell argues that, after a period of service, a department head's usefulness begins to decline. He should stay long enough to master his job and remain while his effectiveness is high. Powell estimates that, in the more specialized or less important jobs, this may amount to something like a minimum term of 18 months and a maximum of 3 years. (Powell was Minister of Health for about 3 years.) Higher up the scale of responsibility, Powell seems to think, the limit may be much less definite.

## **Changing Policies**

Powell's reasoning seems to be that a minister is brought in to meet a challenge or make a change. If he stays too long he becomes identified with the status quo and it is impossible for him to take drastic measures without appearing to repudiate his own policies and actions.

Powell's analysis here is probably more relevant to the British than to the American system. For a British parliamentary politician, the path to success leads upward through a series of ministerial posts of ascending importance, with the Prime Minister's job at the pinnacle. Often a politician will be handed an unpleasant and unpopular job to do. The good politician will do the job, learn more about his craft, and live to fight again another day. In America the ground rules are different, but there are times when, to change a policy, it is necessary to change a Cabinet officer.

The most quoted sentence in Powell's

book is this: "The unnerving discovery that every Minister of Health makes at or near the outset of his term is that the only subject he is ever likely to discuss with the medical profession is money." This is not an expression of cynicism or exasperation on Powell's part, although he obviously enjoys the role of rampant realist. What Powell is saying is that the design of the National Health Service inevitably makes money the nexus between the government and the profession. In the United States, congressional hearings on education and science, for example, conducted on no matter how high a plane, just as inevitably boil down to discussions of money.

What Powell is getting at is his interpretation of the psychology of public expenditure. "From the point of view of its recipients," says Powell, "Exchequer money is for all practical purposes unlimited. The consequences elsewhere of an increase in a particular expenditure are infinitely remote and no sense of responsibility for justifying even the present level of expenditure is felt by those concerned."

Powell draws an unfavorable picture of morale and attitudes in government-financed medical organizations as compared with that in local health agencies and private research institutions and then goes on to make his major point, that the inadequacies in the government-financed health service are always blamed on the minister and the sole cure ever recommended is more money.

"A corollary and concomitant of the assumption in an Exchequer-financed service that improvement and progress depend on the Exchequer providing more money is the tendency to neglect or depreciate other sources of betterment. In fact, the diversion of proportionately more effort and resources to an activity is rarely observed to have been a cause of improvement in standards of efficiency, though it not infrequently has been a result. The necessity which is the mother of invention is least fecund when she is represented in the guise of H.M. Treasury. In every inadequacy the obligation of the government to provide is a continuous alibi: one does not have to do something about it oneself if it is the business of the Minister and the Chancellor [of the Exchequer] to put it right."

As it stands, this analysis reads like the classic conservative's indictment of the defects—inherent defects—of a centralized, government-financed pro-

gram involving the employment of professionals on a large scale. It could apply to education or scientific research as well as to the NHS. The effect is caused, in part at least, by the brevity of the book and in part by Powell's taste for iconoclasm. He has the conservative's reserved opinion of human nature, but he does not subscribe to the view that individual responsibility, even morals, is vitiated by access to government money. Or, at any rate, in accepting the NHS he puts it this way: "Without entering into the difficult question, whether the charitable motives of persons acting voluntarily, as individuals or groups, can be transferred to the state using its powers of compulsion, the general public interest in seeing that medical care is provided for the members of society in a great range of situations is not open to dispute and has been long recognized."

### Rationing of Services

The real point of Powell's critique is the trained economist's complaint that there is no market price for professional service in British medicine and no substitute for a market-price mechanism. In effect, however, there is an unlimited demand for medical services. Powell is at his most candid in discussing some of the ways in which services are rationed (long waiting lists, and so on) even though rationing is not publicly acknowledged.

In the United States, a marketprice mechanism dominates and rationing of medical services is accomplished through costs or, in some instances, unavailability. The widely anticipated effect on the structure of American medicine of the advent of governmentfinanced medical care for the aged and indigent appears to have been, at least, delayed. Diversion of funds and attention to the Vietnam war on the one hand and the difficulties of implementing noble ideals on the other has caused one of those cyclical ebbs in emphasis on social legislation. Had the poverty program retained its high priority and had concern over health care for the poor continued to grow, the debate about medical education and the organization of medical services which is now simmering within the medical establishment might have reached a public boil. Now it appears likely that this will wait, perhaps until the next incarnation of the Great Society. Meanwhile, many of the questions Powell raises could be pondered with profit.