Scientist and Politician as Partners:

The British Parliamentary and Scientific Committee

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SCIENTISTS DO NOT MAKE THE BEST politicians, nor do politicians make the best scientists. Yet science and politics interact one on the other, and there is real need for a common meeting place. In Great Britain, the Parliamentary and Scientific Committee is the means we have found for bringing the two groups together so that the scientist can influence the development of political questions, the politician can advise the scientist on the practical aspects of some of his problems, and the two together, politician and scientist can join in representations to the Government.

The Committee is a nonparty body formed with the object of providing a permanent liaison between scientific bodies and Parliament and serving generally as a center for the consideration and discussion of scientific information bearing on current business in Parliament. Its parliamentary membership is made up of Members of both Houses, Lords and Commons, while its scientific membership consists of representatives of bodies "of a scientific or technical character" who satisfy the Committee that they are "a National Institution or Association of qualified scientists or technologists or a Research Organisation or a body the special position of which in the scientific life of the country makes its membership, in the opinion of the General Committee, desirable in order to advance the agreed objects of the Committee." There are some 200 peers and M.P.s who are members and about 80 scientific bodies. An idea of the range of the latter can be gathered from a representative selection—the British Association for the Advancement of Science, the British Cast Iron Research Association, the Chemical Society, the Pharmaceutical Society of Great Britain, the Institution of Structural Engineers, the Gas Research Board, the Royal Institute of British Architects.

The chairman is a member of the House of Commons belonging to the party in power, and the deputy chairman, a member from the ranks of the Opposition. The full Committee, which meets monthly in a committee room of the House of Commons, has a Parliamentary Action Subcommittee of the Members of the two Houses to handle the exclusively parliamentary aspects of its problems and a Steering Subcommittee, comprising the parliamentary members together with selected nonparliamentary members, "to plan in advance the activities of the General Committee."

The aims and objects of the Committee have been more precisely defined in the following terms:

It is felt that substantial benefits should result if the numerous Societies concerned with scientific activities combine their influence with the object of ensuring that Parliament shall have proper regard for the importance of scientific methods in relation to public affairs.

Steps will be taken by the Committee to enlist the interest and support of as many Scientific Societies as possible so that the influence of Science can be made as effective as possible in the councils of the State.

The Committee will also endeavour amongst other things:

(1) To provide Members of Parliament with authoritative scientific information from time to time in connection with debates.

(2) To bring to the notice of Members of Parliament and Government Departments the results of scientific research and technical development which bear upon questions of current public interest.

(3) To arrange for suitable action through Parliamentary channels whenever necessary to ensure that proper regard is had for the scientific point of view.

(4) To examine all legislation likely to affect the above and take such action as may be suitable.

(5) To watch the financing of Scientific Research.

(6) To provide its members and other approved Subscribers with a regular summary of scientific matters dealt with in Parliament.

A review of some of the "operations" planned and carried through by the Committee will give the best indication of the scope of its work and of the methods it employs.

In the early months of 1945 the Committee prepared a memorandum upon Salaries in the Government Scientific Service. It pointed out that the main requirements were: "(i) improved salaries for the higher directing posts so as to ensure at the head of the Civil Service Scientific Departments no less able men than in similar posts outside the Civil Service; (ii) better pay and prospects for the Civil Service

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scientific staff as a whole so as to bring these more into line with those of the Civil Service Administrative Staff; (iii) simplification of the whole system and elimination as far as possible of the present 'dead-end' posts and pockets."

It was further suggested that salaries in the Government Scientific Service should range from £3,250 a year for a Chief Scientific Adviser to a scale of £1,150–£1,500 for Senior Principal Scientific Officers, while the basic grades should range from £850 to £1,050 for Principal Scientific Officers down to £275–£347 for Junior Scientific Officers.

This memorandum was sent to the Government, which in September 1946 published its own proposals for the reorganization and recruitment of the Scientific Civil Service. These fell short of the goal which the Committee had indicated as desirable, appearing merely to provide for parity of pay between the best scientist and the average administrator. The Committee accordingly sent a deputation to the Financial Secretary to the Treasury—the Minister second-in-command to the Chancellor of the Exchequer—and put its case to him in more detail. This produced a letter from the Government to record that "so far from accepting the view that the scientist is inferior to the Administrative Officer, its aim is to ensure that scientific workers will, man for man and job for job, be in as good position as other staff." The Government also stated that "provision is being made for a 'pool' of senior posts to which individuals may be appointed on their own merits as scientists, and independently of the number of such posts required for the normal work of the Department." The Government has not so far amended the salary scales, and the Committee must continue to press upon it the necessity, first, of paying such salaries to scientific officers as will attract the best men and, second, of enabling those men to reach the highest administrative posts in the Civil Service.

The Committee has studied the extent to which relief from taxation can be used to encourage research in industry. Its recommendations were taken into account by the Government when in 1946 changes in tax law came into effect, allowing exemption from taxation not only for expenditure incurred by a firm on research in its own laboratories, but when such expediture took the shape of grants for research to external agencies, as, for example, universities.

As far back as October 1943 the Committee, looking forward to Britain's postwar problems, issued a report on "Scientific Research and the Universities in Postwar Britain." It recommended an all-around expansion of facilities for scientific education in the universities and colleges of technology with the particular object of increasing the supply of first-class scientific personnel. It urged that a capital sum of at least £10,000,000 should be assigned for buildings and equipment during the first 5 postwar years and that the annual grant to the universities from the Treasury should be trebled. Shortages of men and materials have since prevented the realization of these proposals in full, but at that time the response of the Government to the Committee's report was generous and encouraging. The Chancellor of the Exchequer in February 1945 recorded the recognition by the Government of the needs of the universities for capital development as about £18,750,000 and of the medical schools as an additional £10,000,000.

In 1944 the Committee studied the organization of industrial research and development in British industry and recommended the setting up of a Government inquiry "to consider the lines along which immediate, vigorous and large-scale application of scientific knowledge would be likely to produce the most fruitful results." The first date arranged for a discussion of these proposals with the Government was the day of the death of President Roosevelt, and the conference was postponed. Discussions took place, however, shortly before the General Election of 1945, and the new Government acted upon the advice of the Committee and appointed a commission of leading scientists and others "to consider the policies which should govern the use and development of our scientific manpower and resources in the next ten years."

As an example of another type of investigation by the Committee, reference may be made to the reports of the Subcommittee on Coal Utilization, issued in 1947. The members responsible for it were scientists connected with the coal industry, together with Members of Parliament and Peers, including an ex-Minister of Fuel, having special knowledge of the coal industry. The first report dealt with the urgent problems of coal utilization which had been revealed when fuel shortage stopped factories during the winter of 1947. The Committee urged on the Minister two principles: (1) that each industry should receive an allocation of coal in accordance with a system of priorities worked out in the national interest; and (2) that fuel efficiency should be encouraged and that some reward should be obtained by those firms which utilize their fuel more efficiently than others. The report then surveyed methods of spreading the electricity peak load, the weight of which at that time was causing power cuts and interruption of production. It also examined the possibility of limiting the conversion of coal-burning to oil-burning plant to only those schemes where an advantage could be secured on a long-term program. It had, too, some advice to give on the screening and washing of coal at the pithead. The Minister of Fuel and Power did more than give the

report a courteous acceptance; he put a number of its recommendations into effect that same winter.

Steel shortages were examined by the Committee in the same year. Members of the Committee were anxious that, in the competition for steel, the claims of steel for new machines and other devices that would secure economy should not be overlooked. They urged in a report to the Minister of Supply that "Prime Minister's List" priority, *i.e.* top priority, should be given to steel for plant to secure more efficient utilization of fuel. The steel and fuel industries advised the Committee, and the Committee examined and accepted their advice, that an annual saving of 18,000,000 tons of coal was possible if the steel needed for re-equipping combustion plants could be released. It was estimated that not more than 5 years would suffice to achieve this and that 1 ton of steel could secure a saving of 40 tons of coal annually.

One of the largest pieces of work undertaken recently by the Committee has been a report on the manner in which colleges of technology can assist in increasing the scientific manpower of Great Britain. After a long enquiry and after hearing evidence which included the views of an American educationist, the Committee produced a series of recommendations which have been sent to the Minister of Education, who has met representatives of the Committee to discuss them. Finding that scientific and technical research widely carried out and promptly applied to production is essential to restoring and enhancing the industrial position of the country, the Committee assigned to the major colleges of technology the production of 5,000–7,000 qualified technologists and scientists annually by means of courses in technology of a standard equivalent to that of university courses. It proposed ways and means whereby this might be achieved and the progress of technological education developed. A very short while after the publication of its findings, the Committee was assured by the Minister that development within his Department would be substantially along the lines mapped out by the membership.

The Committee has made it its special business to follow closely the progress of the research program in the Government's own laboratories, especially work on atomic fission. It advised the Government on the organization of national research, and it was in response to a question asked in the House by the Committee's vice-chairman that the Government announced that, in addition to the Defense Research Policy Committee, there was to be set up on the civil side an Advisory Council on Scientific Policy to advise the Government upon the formulation and execution of government scientific policy generally.

Individual Members of Parliament on behalf of the Committee raise innumerable matters at question time in the House, and groups of Members lobby Ministers on subjects of greater importance. The importation of scientific books into Great Britain during the dollar shortage was one of these. On this question a debate was arranged by members of the Committee, and the Parliamentary Secretary to the Board of Trade was compelled to admit, although with ministerial caution, that "there is a case for some slight weighting of the scales on the side of technical works." The Committee then set on foot an enquiry from all scientific bodies affiliated with it to find out how the import restrictions are affecting their members, in order to get a full picture of the handicaps under which British scientists may be suffering. It was also as the result of representations from members of the Committee that the President of the Board of Trade undertook to ensure to journals devoted primarily to original research their full requirements of paper and said that he at least hoped to exempt technical periodicals from the reductions on paper he was imposing on publishers generally.

The British Parliament has been traditionally a place where grievances can be ventilated. The Parliamentary and Scientific Committee has proved to be an admirable forum for this purpose where the "grievance" has a scientific or technological basis. For example, representatives of two great industries—the scientific instrument industry and the fine chemical industry—came to the Committee to express the alarm of those industries at the rehabilitation of the corresponding industries in Germany with apparently little regard on the part of the Government to the effect on British firms. The Committee has shown, too, that it can be a valuable forum for the discussion of major development projects that are still in embryo and need publicizing. The Channel Tunnel between England and France is one of these. Another is the Thames Barrage, to be built in order to hold up the in-sweep of the tide below London and thus keep the river through most of London fresh and unpolluted.

Ministers and others attend and address the Committee and senior civil servants obtain special permision to discuss the work of their departments with it—a concession not readily granted by any Government which in the nature of things feels itself on the defensive in its dealings with Parliament.

A word about the Committee's attitude toward lobbying by industrial or scientific interests will not be out of place. Members of Parliament and Ministers of the Crown are, of course, subjected regularly to the pressure of interested bodies over the whole range of governmental activity. Because of the special authority which the Parliamentary and Scientific Committee has established for itself, it would be a most effective machine for this purpose, and from time to

time it has proved itself to be so. But the price of its authority is the rigorous standards it has set for itself. No industry or group of professional men which may, through one body or another, chance to be represented on the Committee acquires thereby any right to call upon the Committee to sponsor any demands it may have to make upon the Government. It may put its case to the Committee, but that case will be most acutely examined, and it will be only where considerations of scientific or national importance are clearly shown to be involved that the weight of the Committee's support will be given. It is by such selective advocacy that the Committee has developed its authority in the eyes of the Government and its true value to those who support it.

The foregoing account of some of the work of the Committee up to the present time will indicate the lines along which it pursues its aims. It has been greatly encouraged by the creation in Canada of a corresponding body, the Canadian Parliamentary and Scientific Committee, formed at Ottawa on April 25, 1947. That organization is in course of development through an Interim Committee consisting of representatives of the Professional Institute of the Civil Service of Canada, the Engineering Institute of Canada, the Canadian Council of Professional Engineers and Scientists, the Canadian Mathematical Congress, and the Canadian Association of Scientific Workers, together with Members of Parliament representing the four different parties in the Canadian Parliament.

No account of the British Committee would be complete without a reference to its secretarial arrangements. Such a committee cannot flourish, nor can the interest of a couple of hundred busy men be retained, without central organization and direction of high quality. The drafting of reports, the documentation connected with meetings, and the briefing of the parliamentary Members would seem to require an elaborate secretariat. In fact, the Committee has been able to deal successfully with a wide range of problems with the minimum of organization, largely through the energy and ability of its secretary, Cdr. C. Powell, R.N. (ret.), whose office is at 6 Queen Anne's Gate, London, S.W.1.

Great Britain's future is dependent upon the extent to which she can retain and develop her capacity for industrial production and upon her power to foster and exploit scientific research. In these vital fields there is a clear interlocking of science and politics. The task of the Parliamentary and Scientific Committee over the next few years is therefore clear. It is to unite the forces of politics and of science to ensure that government policy is shaped and carried through with these vital objectives constantly in view.

Obituary

Rollin Thomas Chamberlin
1881–1948

Rollin T. Chamberlin, professor emeritus of geology at the University of Chicago, died March 6, 1948, following his third coronary thrombosis within four years. His age was 66. The son of a great geologist, he was great in his own right in the field of earth science. He was internationally known from his writings, and he had acquaintances and friends throughout the world, for he had traveled extensively on all the inhabited continents.

He was born in Beloit, Wisconsin, where his father was professor in Beloit College. As his given names indicate, the long-time association of Thomas C. Chamberlain and Rollin D. Salisbury had already begun. Before his college years arrived, the University of Chicago opened, with his father and Salisbury on the newly recruited staff. Rollin Chamberlin's B.S. and Ph.D., therefore, were from Chicago, although he did some work in the Universities of Zurich and Geneva. His early interests were geochemical, his doctor's thesis being on "The Gases in Rocks."

Later, his chief interest swung to structural and dynamic geology, in which he became an outstanding and widely quoted authority in both laboratory experimentation and broad field investigation. His bibliography shows, however, an exceptionally wide range of investigations and critical studies. He is known among glacialists for his studies of glacial erosion and his field demonstration of the actuality of glacial shearing. From such, in part, flowed his study of glacial ice as a dynamically metamorphosed rock. He was one of the field investigators of the once widely heralded Pleistocene Man of Vero, Florida, and he contributed to the elucidation of the Pleistocene stratigraphy of the north central United States. He also wrote an authoritative paper on the origin of the coral reefs of the South Pacific. His work on gases in coal resulted in the present generally used rock-dust treatment of the entries to reduce the inflammability of