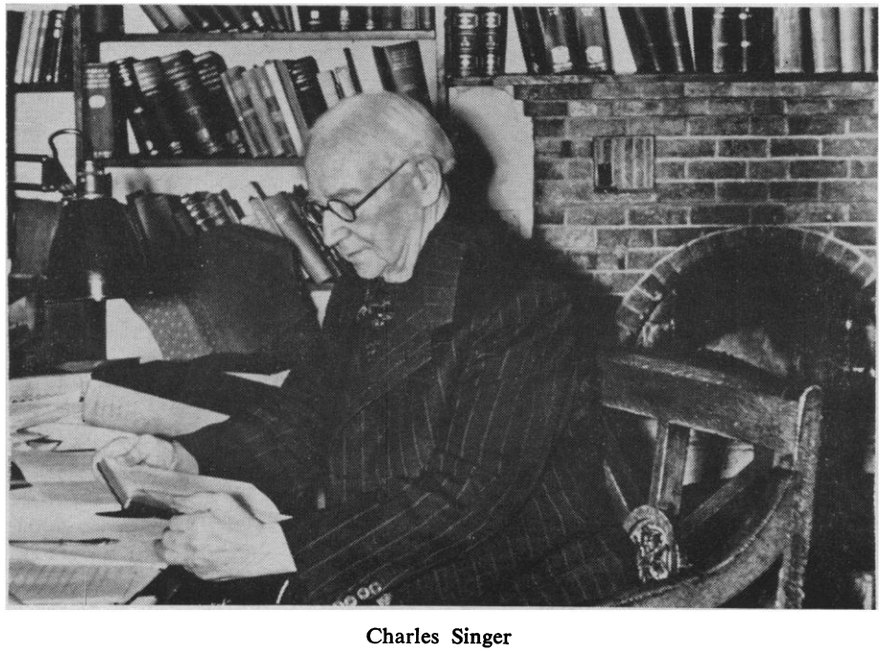
Charles Singer, Historian of Medicine, Science, Technology

In a long life in which he remained enviably active until the end, Charles Singer (1876–1960) found time for virtually three careers. As a young man he went up to Oxford as a scholar of Magdalen College and qualified in medicine in 1905; at once he embarked on extensive travels to enrich his medical experience. He went to Ethiopia, as medical officer to a surveying expedition, and to Singapore, Egypt, Greece, and Italy. After four years he settled in London to undertake pathological research and to build up a consulting practice, working at the Research Institute of the Cancer Hospital and at the Dreadnought Hospital for seamen. Not until just before the first World War did his attention turn seriously to the field in which he was later to establish an international reputation for scholarship, namely the history of science and medicine. An earlier interest in this was crystallized into a resolve to make it a full-time study by his marriage in 1910 to Dorothea Waley Cohen, herself an acknowledged scholar in this field. Thus began both a remarkable—indeed almost unique—husband-and-wife partnership and a second phase in Singer's career.

Circumstances made the early years of the partnership difficult. The couple went first to Heidelberg to extend their knowledge and experience and then, at Osler's invitation, settled in Oxford, where they became the center of a small but able group of scholars interested in the history of science. As an exceptional concession by Bodley's librarian, a room was set aside for them in the Radcliffe Camera. They had scarcely organized their lives for these new tasks, however, when the first World War broke out and Singer went back to orthodox medical practice, this time with the Royal Army Medical Corps. Posted to Salonika, he promptly availed himself of the opportunity to learn modern Greek. Equally characteristically, when his military service later took him to Malta he found time for archeological and anthropological research. Meanwhile, at home his wife was busy with her *Catalogue of Greek Alchemical Manuscripts in the British Isles*, which appeared in 1921. At the same time she was able to keep her husband supplied with books and papers so that despite the war and his service abroad he published the first volume of his *Studies in the History and Methods of Science* in 1917; the second volume appeared three years later.



Charles Singer

Singer returned to Oxford to a position more formal than he had had when he left, for he was appointed lecturer in the history of the biological sciences. His stay was short, however, for he soon moved on to University College, London, as lecturer in the history of medicine. There he remained until his retirement, his status being raised to that of professor in 1931. Retirement, however, marked not the closing of his career but the opening of a third phase in it. For reasons of health he elected to settle in the west of England. At his home at Par, in Cornwall, with its splendid view over St. Austell Bay, he established and extended his fine library and continued to work with undiminished vigor; to this period belong some of his major works. Such are, for example, *The Earliest Chemical Industry* (1948), *Vesalius on the Human Brain* (1952), *and A Short History of Scientific Ideas* (1959). The first of these, a history of the manufacture of alum, represented entry into a new field of learning—the history of technology—which firmly captured his imagination. Not long afterwards he initiated and was a joint editor of the *History of Technology*, of which the fifth and final volume appeared in 1958. Although the completion of this task was largely the work of younger colleagues, he maintained the closest interest in it to the end and, indeed, always looked upon it as one of the great achievements of his life. It was at Par that he died, still full of plans for new works, in his 84th year.

Such, in briefest outline, was Singer's career, but it does less than justice to his immense output of scholarly writing: even to list this here would require more space than is available. His nimble and inquiring mind ranged widely, and the subjects of his books include Anglo-Saxon magic (to which his *Early English Magic and Medicine* was a major contribution); the influence of Israel on the modern world; the evolution of anatomy (on which he gave a course of lectures at the Royal College of Physicians); and early herbals. Besides this, he contributed widely to the learned journals relating to his chosen sphere.

He was ever ready to support organizations devoted to the history of medicine and science. In the years of his retirement he was president of the British Society for the History of Science (1946–49) and of the International Society for the History of Science (1947–1950). The pursuit of his studies brought him many opportunities for travel. In the 1930's he lectured at Johns Hopkins—where he was later offered, but declined, the professorship of the history of medicine—and Philadelphia, and was for a year visiting professor at the University of California. A distinction that gave him particular pleasure was the honorary D.Sc. confered upon him by the University of Oxford in 1957. In 1953 his colleagues combined to honor him with a two-volume collection of historical essays—*Science, Medicine and History*.

Such were the outward manifestations of his erudition and experience, but what of the nature of the man himself? Of this it is difficult to write, for one of the penalties of living to an advanced age is that few, if any, contemporaries survive to recall one's early years. In character as well as in learning he was a man of parts, but the quality that many of his friends will best remember is his sense of humor, gentle and never malicious. Gentleness was, indeed, a quality that one quickly recognized, though one soon found it was a mistake to confuse this with lack of determination. He was, as he liked to proclaim, a man of peace, but if he set his heart on something he was always ready to try a different approach if the first one failed. More often than not his persuasiveness and tenacity carried the day. Again, behind a scholarly detachment from the mundane routine of daily life there lurked a mind astute enough where it had to deal with larger practical problems; one felt that while perhaps he could not boil an egg yet he was alive enough to the realities of any project of scholarship on which he had set his heart, whether on his own account or—more often—that of others. He was, indeed, always ready to help others, especially younger men, both in professional advancement or personal problems. This side of his character found many opportunities for expression during the German persecution of Jewish scholars in the 1930's. Himself the son of the rabbi of the West End Synagogue in London, his sympathy was at once aroused by the plight of refugees. Those of his coreligionists who escaped from the terror and made their way to England found him ever helpful to those shocked and bereaved by the foul excesses of the Nazi regime; to those whose interests lay within his own field he offered practical aid in rebuilding shattered careers. He played an important part in founding the Society for the Protection of Science and Learning.

Although his main interest was in the history of science, medicine, and technology his erudition extended far beyond this. He had a particular interest in the history of the Jewish race and religion and the relationship of the latter to Christianity. The *Legacy of Israel*, of which he was joint editor with E. R. Bevan in 1927, was an important, practical manifestation of this interest. He had a lifelong interest in biology and during the last war set up a teaching laboratory in his house at Par for the benefit of schools that had been evacuated to the West of England. In conversation there were few subjects to which he could not contribute something, always modestly, whatever the company. One had to be nimble-witted indeed to keep up with him even when he was in his eighties; as a young man he must have been formidable indeed. The world of learning is the poorer for his passing; one can only be thankful that he was spared for so long to make his outstanding contribution to it.

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Science in the News

Nixon and Kennedy on the Geneva Test Ban Talks, Disarmament; Conferees Await Election Outcome

The Geneva test ban negotiations became front-page political news last week. The negotiations did not immediately become a campaign issue, much to the relief of official Washington, but nevertheless the seeds of controversy were planted, and the situation may be quite different by the time this appears.

The Vice President announced that if elected he would move immediately to bring the two-year-old talks to a climax. In a speech he said had the approval of the White House, Nixon said that the day after the election he would ask President Eisenhower to send Henry Cabot Lodge to Geneva "with a view to resolving this question by February 1." "I would have Mr. Khrushchev understand that if, at the end of the 80-day period—by February 1—there is no progress, the United States will be prepared to detonate atomic devices necessary to advance our peaceful technology. . . . Further, I would have him understand that if an agreement is not signed within a reasonable period after February 1, the United States will have no alternative but to resume underground testing of atomic weapons."

Nixon said that if an agreement was in sight by 1 February (presumably if substantial agreement had been reached on the critical question of inspection rights) he would meet with Khrushchev and Macmillan "to make the final agreement at the summit." He said that he had no intention of breaking off the negotiations themselves, but that the unpoliced moratorium on testing that has been in force since the negotiations began in 1958 could not be continued much longer "without seriously jeopardizing the very objective towards which we hoped the Geneva negotiations would point—peace and human survival."

Nixon said that we have no assurance that the Russians have been obey-