
CURRENT SCIENCE—50 YEARS AGO

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Concluding paras of the Sri Krishnarajendra Silver Jubilee Lecture entitled "History of Science as related to Civilisation" delivered by Sir Martin Forster, F.R.S. (Former Director, Indian Institute of Science) on 2 September, 1933.

ENOUGH has now been said to demonstrate the very direct bearing on our individual modes of living effected in recent years by scientific discovery and invention; and to show that in many cases this may be recognised and traced by the normal citizen untrained in scientific practice. Many other examples will occur to your minds, such as line and wireless telegraphy and telephony, motion-pictures, hydro-electric power generation and non-ferrous metallurgy. A distinct, but very important section of science-history lies in the realm of ideas as a stimulus to experiment. This may be illustrated by the theory of evolution as taught by Darwin and his followers; the cell-theory as developed by Schleiden for plants (1838) and by Schwann for animal tissue (1839); and finally, the conception of the atom as formulated by Dalton and replaced in very recent years by the captivating theories of Rutherford and Bohr.

The conclusion that I now submit is this. If civilisation be defined as reclamation from barbarism, as a process of developing the arts and refinements of life, no century in the world's history has been more fruitful in civilising agency than the last hundred years. In that period have been recorded unhappily the average number of human conflicts, political and martial differing only in their weapons and their staging from the ceaseless human discords common to general history. On this murky background, however, has been painted with radiant brush the promise of a colourful

era which the nations may enter when they unite in recognising political quarrels to be less advantageous than the co-operative harvesting of Nature's gifts as a consequence to elucidation of natural laws. This desirable step towards popular enlightenment would be hastened if the more fundamental of these laws, and the history of their application to modern progress, were allowed increasingly to replace general history in the school curricula, so that the changes now rapidly transforming the art of living may be brought into proper perspective and healthily developed.

Prominent in the study of these changes must be the life-history of the people most concerned in them. The lesson from all these lives, for all of us, is their thoroughness and beneficence. If half the attention of schools, colleges and mature citizens that has been given to Alexander, Caesar and Napoleon had been devoted to Faraday, Pasteur, Lister and Bessemer, the world would be a different and a better world to-day. Because, not only were these men remarkable discoveries, to whom we owe far greater security and amenity of life than our forefathers could enjoy, but their methods of work and their outlook towards their fellow-beings display just those qualities most needed for smooth and continued progress of civilisation; patience, honesty and thoroughness in their labour combined with inexhaustible goodwill towards mankind.
