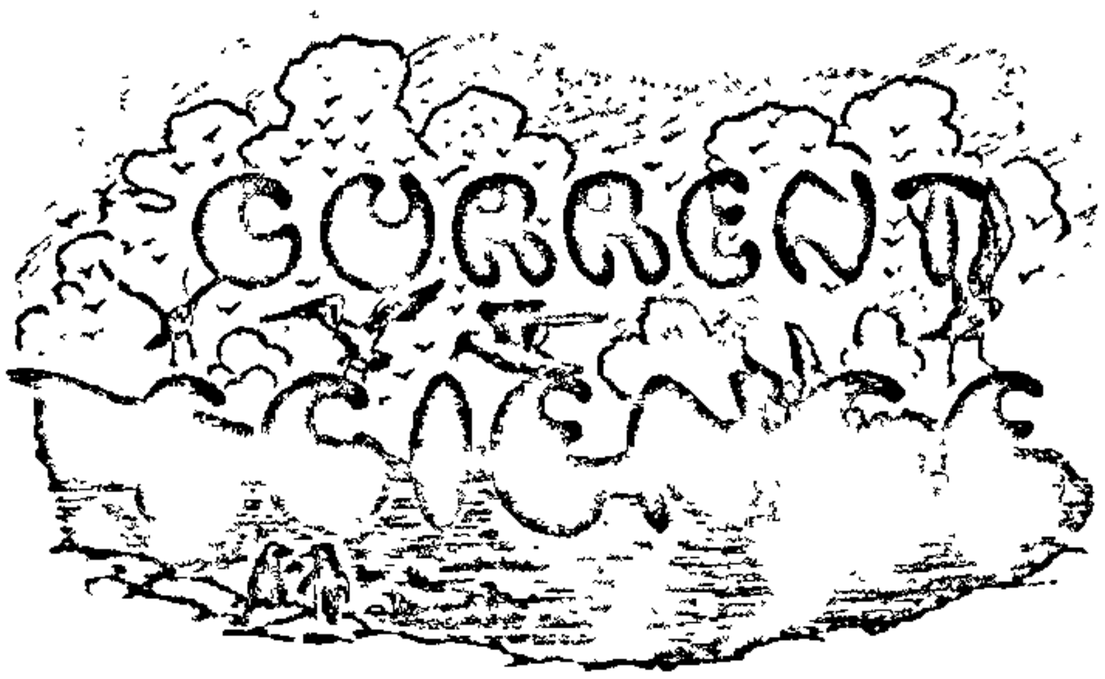
CURRENT SCIENCE—50 YEARS AGO



Vol. III] OCTOBER 1934 [p. 131

Science and Happiness.

FROM a human standpoint, the concluding portion of Sir James Jeans' presidential address to the British Association is perhaps the most interesting. Within recent times there has been quite a volume of indiscriminate criticism about the benefits of science, and almost all the travail from which the world is suffering is attributed by a section of public opinion to the progress of scientific knowledge in its applications to the practical problems of life. Assuming that there is an element of truth in such an accusation, we are unable to discover a means of escape. Scientific knowledge has now become an integral part of modern culture, and its advancement is bound to be rapid in view of the assured provision for its encouragement, and few can control its direction and output. It is practically useless to suggest the abolition of scientific inventions or to stop scientific researches in any one country, without other countries undertaking similar obligations. Even if such a proposal were feasible, the net result would be to petrify society, but the hopes of restoring to man his happiness and peace the loss of which he is generally in the habit of laying at the door of science, would be as far from realisation as ever. Science has widened our outlook and augmented our store of knowledge; but it has also failed to enrich our moral endowment. It is equally true that scientific industrial planning will displace more labour than it can absorb, and all efforts to establish a balance between labour-saving devices and unemployment are bound to be futile.

We cannot ignore the innate tendency of man to press every kind of knowledge into his service, no matter to what branch of science and art it may belong. To acquire control over the forces of Nature or to perfect the methods of investigating the facts and phenomena of objective reality, is not in itself fatal to the well-being of man; but the end which he uses the scientific knowledge to achieve, makes a wide difference. Knowledge is neither moral nor immoral. It places in our hands the power of dignifying and saving human life; it also puts at our disposal the weapons of destroying it on a scale to which history scarcely furnishes a parallel. If in the past the Church and the State complacently permitted religious differences to lead to bloodshed, the highly organised modern society need not be shocked when national rivalries, stress of over-population, economic competition and tariff barriers occasionally result in the outbreak of hostilities. The conditions of international relations which generally precede conflicts are the product of scientific development, and the operations on the field when it is taken, pass under scientific management.

* * * * *

There is a great deal of truth in what Sir Alfred Ewing said two years ago as the President of the British Association, *viz.*, "Science has given man control over nature before he has gained control over himself". The function of science in any civilised community is obviously two-fold. It furnishes those who pursue its path with a picture of the physical phenomena of Nature, and the laws under which they manifest themselves, and the direction and extent of their practical service to man. A scientific mind is purely intellectual and virtually ignores the value of other types of experience. The second function of science is to provide helpful guidance to society for consolidating its forces for advancing its higher destiny.

* * * * *

Science in the pursuit of her enquiry is generally intolerant of sanctity and traditional authority, and she reorganises her statistical and comparative method as the only approach to Truth. This is permissible in respect of values which science discusses objectively, without actually experiencing. But the business of life is higher; it prescribes standards of

values which it experiences in its relations towards the universe; the experience is a complex of emotions which does not obey the laws and discipline imposed by the physical sciences. For the advancement of material progress, scientific investigations are indispensable, but for certain other aspects of social life, religious approach is the more important. Human experiences, requirements and ideals can be viewed and interpreted not only from the standpoint of objective sciences but also from that of religion. Their functions are complemental, and the seeming opposition between the two modes of approach to life is due to want of mutual understanding of the deeper significance and purpose of human existence. In a lower sense civilisation is material and in building it, scientific results lend themselves to be used as the means for accomplishing selfish gains, and for destroying and constructing the external embellishments of social life. In its higher aspects, civilisation connotes the enrichment of the moral and spiritual endowments of man, involving a radical transformation of his mental attitude towards his fellow-beings. Theology undid what religion attempted to achieve in this direction; but science in giving us a deeper insight into man's relation to his environment and knowledge of his origin and nature, may still become the friend of religion to assist in the achievement of man's highest destiny. The divorce of religion from science has delayed the process of humanising the mind and should account for the numerous woes from which man suffers. In order that religion, whose progress has been retarded by theological doctrines and ecclesiastical superstitions, might overtake science, the latter is not required to suspend its activities, but to hasten slowly. Their co-operation must result eventually in humanising the mind; and the attainment of this object offers the hope of establishing universal concord and happiness.

It is true that civilisation is a term too elastic and impalpable to be defined, but as we understand it, it is synonymous with industrial progress, expansion of trade, multiplication of wants, speedy locomotion, over-population, unemployment problems and fears of invasion. It is pertinent to ask whether this civilisation has tended to enhance our respect for the sanctity of human life and for the rights of personal property; or has it tended to enable those that can afford to provide themselves with material comforts, to enjoy them in peace and security? The gifts of science turn into blessings or curses, in proportion to the humanisation of the mind, dealing with them. The humanised mind intuitively acts upon the standard of absolute values set up by science and religion, for constantly checking the estimates of good and evil in our own nature. The impulses and motives which guide human actions in a world of material civilisation are, with honourable exceptions, dominantly personal, but under the combined influence of science and religion, they are expected to promote universal happiness. This fundamental transformation of the human mind is civilisation in its true and higher sense, and it is a consummation in the attainment of which science and religion have to co-operate for centuries.

* * * * *

The new forces of the twentieth century have no relation to the noble traditions of the great historical civilisations. We assume that the multiplication of schools tends to the general refinement of mind, and the increased output of industrial products, to the promotion of happiness. We further assume that ability to invent delicate instruments for scientific research has raised the stature of scientific genius. Science has its own limitations, but in collaboration with humanism, it may some day succeed in producing a combination of circumstances favouring the appearance of new human chromosomes and genes transmitting to the successive generations, those worthy qualities which adorn life and make it happy. This is not a meditation. The scientific humanism about which we read so frequently in current literature envisages a new civilisation, in which the arts and sciences will be studied "with a genuine devotion to the Good, the True and the Beautiful" and in which the qualitative values of human life and its ideals will not be distorted by industrial progress. Science and human nature are essentially reconcilable. Scientific civilisation ought to produce a change in the attitude and temper of mind radically different from what at the present moment are the dominating motives of individual and corporate action. Human nature being what it is, its transformation must occupy time not easily calculated, but in the meantime the question proposed by Sir James Jeans has to be answered. He asks, "Is it not better to press on in our efforts to secure more wealth and leisure and dignity of life for our own and future generations, even though we risk a glorious failure, rather than accept inglorious failure by perpetuating our present conditions, in which these advantages are the exception rather than the rule?" To strive to enrich the gifts of science is worthy, but to spread their beneficence for the uplift of human nature is nobler.