for the August–September planting and if the tubers have to show signs of sprouting before preparing the ‘chips’, it is possible that an early variety of potato might be most suitable. For the later plantings, mid-season or main crop types would probably succeed. These and other details afford a fruitful field for future investigation.

Meanwhile it is hoped that it will be possible to send out small trial consignments of ‘chips’ to these Colonies by air or fast ship transport during the present autumn. The chief advantage of the system seems to be in the great saving in transport space and weight, and it would seem therefore to be specially applicable to the large and increasing trade in certified seed potatoes with the overseas markets.

¹ Information supplied by the Ministry of Information from collected reports from Russian sources.

² Copisarow, Maurice, *NATURE*, 151 (1943).

³ Polunin, Gard, *Chron.*, (January 23, 1943).

⁴ *Amer. Potato J.*, 14, 23 (1937).

SOME ASPECTS OF SOCIAL BIOLOGY*

By SIR WALTER LANGDON-BROWN

IT requires all one's power of sympathetic imagination to penetrate the intellectual and spiritual twilight amid which Henry VI lighted twin lamps of learning at Eton and King's College, Cambridge, following the example of William of Wykeham at Winchester and Oxford. The bright dawn of the passionate desire for learning that lighted the end of the twelfth century had faded away, the land had been devastated by the Black Death and the nation was being exhausted both materially and physically by the Hundred Years War. For nearly a century no new college had been founded at Cambridge, and Oxford was in a decline. The efforts of this saintly weakling, Henry VI, have thus proved more enduring than his father's victories and more significant than all the internecine struggles of Yorkists and Lancastrians. It is his imperishable glory to have proved the superiority of things of the mind and spirit over the clamour of battle. Well did Wordsworth say of him

“Tax not the Royal Saint with vain expense”.

There is another aspect of his times which is germane to the subject of social biology. The human mind is too apt to prefer revolution to evolution. So much so that well into the nineteenth century men believed the world to have been constructed by a series of geological catastrophes. It required the labours of many geologists to prove that the principal agencies were the same as those peacefully at work to-day. Slow erosion and steady deposition of stratum after stratum have wrought more than all the volcanoes and earthquakes. Yet man still tragically retains his belief in methods of violence. But when we come to closer examination we find that, as Thomas Mann pointed out soon after the War of 1914–18, revolutions often really conceal reaction. His essay does not appear to have excited much interest at the time, but it was so prophetic in tone and so penetrating a study of German mentality that it gains fresh interest at the present juncture.

He starts by adopting Nietzsche's view that the

latter part of the nineteenth century was characterized by two leading motifs—reaction masquerading as progress, and subservience of reason to emotion. Though not confined to Germany they were specially potent there. He elaborates this by maintaining under the first heading that reformations by their very nature may have little to do with progress, since they tend to re-establish the old in an extremely conservative sense, and that at a time when the new is already known, while the second arouses sympathy with the chthonic and dæmonic, with night and death—in short, with a primeval and earth-born religion. This recognition of the feeble control exerted by the reason and intellect, and of their incapacity to condition life, has led to scorn being poured on reason as an unfruitful illusion, and to the reinstatement of the irrational and instinctive. When reaction disguises itself as revolution, it succeeds best with youth, which not being fortified by experience against such tricks, can be beguiled into accepting the most outworn devices as promising novelties. The revolutionary freshness of youth has impressed upon it the “principle of mindless nature, the folk soul, hatred, war . . . the great retreat dressed out in the uniform of the advance guard . . . Is youth really going to fall victim to this crude abuse of the new knowledge? . . . We are no longer strangers to the disheartening sight of youthful bodies in gay quickstep, songs arising from young life, arms flung in a Roman salute, wasting the fine flight of their youth upon hoary ideas.” Since he wrote those words, history has answered his questions. As Kerr Clarkson expressed it in his “Europe in Eclipse”, Hitler's “Youth Movement was his method of harnessing the challenging demands of puberty to the service of the State”, while Howard Smith in his vivid “Last Train from Berlin” concluded from study on the spot that the Nazi “Ship of State has ridden the waves, not of the future, but of the blackest past”. Hitler has completed what Wagner began—the exploitation of the myth.

The recent arrest of the veteran physiologist, Prof. Lapicque, in Paris and the suppression of the *Presse Medicale* are typical of much. Science, literature and art are to be tolerated only in so far as they are within the comprehension of the autocrat. Any higher values are met with the retort of Goethe's Mephistopheles: “I am the spirit that denies”.

Indeed, we must admit that a reactionary element is not uncommon in revolutions. The lictors' rods are suitable symbols for Fascism, for the Romans have been the most persistent *laudatores temporis acti* in all history, even in the moments of their greatest conquests. The renaissance of Irish nationalism gained force from the Celtic twilight, represented poetically by W. B. Yeats and pictorially by his brother.

One of the most striking forms which this reaction has taken is a denial of the advantages of liberty—and that underlies much of the planning so fashionable even in Great Britain, while the other is the conception of the State as the supreme force. In my youth the State in England was on the whole benevolent to the individual, though like a rather inquisitive Auntie about our pocket money. It was not until I began to travel abroad that I realized that on the Continent the State was in the main hostile to the individual. Totalitarianism is no new idea, and when it is adopted, the deification of the State, the divine right of kings revived in a still more absolute form, is not far off. Indeed, Hegel proclaimed the State as the “divine idea

* Substance of the opening address to the British Social Hygiene Council's Summer School held at Eton College during August.

as it existed on earth". But when the State becomes God, it soon declares itself as indeed a Moloch, passing its own children and those of others through the fire. As social biologists we are naturally concerned to discover how things have come to such a pass, and it is somewhat disquieting to find that science has unfortunately played its part, not merely by placing powerful weapons of destruction in hands unfitted to use them, but more subtly by promulgating as facts, views of heredity which are merely theories. In the hands of pseudo-scientists this has wrought much damage.

Instances which will occur to anyone are the perverted use made of Darwin's phrase "natural selection" and Herbert Spencer's "Survival of the Fittest". No one stopped to inquire "fittest for what?" and I regret that Sir Arthur Keith permitted himself to utter the palpable error that the "pruning hook of war" exemplified natural selection. At any rate, neither Darwin nor Herbert Spencer ever ruled out the idea of progress. That was left to Weismann, the Calvinist of biology as I have often called him, with his rigid delimitation between the soma and germ plasma. This denied the possibility of the inheritance of acquired characters, which Darwin to the end of his days was never dogmatic about. Hope stirred once more when mutations were discovered, only to be dashed again when it was found that the great majority of mutations were unfavourable to survival.

Meanwhile the study of variation, for which Darwin had never been able to account, underwent complete re-orientation when the Abbé Mendel's forty-year old work was rescued from oblivion. Genetics became an exact science, and it was found that man was a very variable animal. Only 9 per cent of us are obliging enough to have our greater splanchnic nerve as figured in the anatomical text-books, and it has been laid down that nothing should be labelled as an abnormality unless it occurs in less than 4.5 per cent of individuals. A 'normal' man is merely an intellectual concept; we are of an infinite variety. Moreover, to these structural variations the chemical embryologist has added many functional ones.

The time is ripe, therefore, for a full inquiry as to the inheritance of acquired characters. To do so is, of course, rank heresy, which is usually rewarded with excommunication by accredited men of science. I am therefore rejoiced to find that Prof. Wood-Jones in his little book "Habit and Heritage" has courageously dared this: first, because biologists of the past have been too exclusively interested in structure to the neglect of the moulding force of function, and secondly, because the social applications of biology have foundered on this rock more than any other. As Prof. Wood-Jones says "it is a patent fact that there has been a lowering of standards and a shrinkage of human spiritual ideals". The grafting of ridiculous claims for the application of the term 'fittest' to a certain section of the community on to the Darwinian survival thesis has gone far towards producing the sinister theories which have let loose the present demons of bloodshed and destruction. These terms, employed in the first place as purely scientific expressions, have become converted into the slogans of propaganda for acts of unthinkable brutality on a vast scale. Loud voices acclaim that it matters not if we live good lives or bad for, apart from direct disease or social degradation, we cannot hand on to our descendants any virtue or vice, any talents or degeneracies that we may have acquired

during our lifetime. Consequently there was no prospect that we shall ever be able to bring about a permanent elevation of the human race by means of education and practice.

Science has broadcast the doctrine of the survival of the fittest; pseudo-science has grafted on to this pronouncement the implication that the fittest are those most red in tooth and claw. Science has broadcast the doctrine of the non-inheritance of acquired characters; pseudo-science would translate this doctrine into a thesis of racialism more cruel, more destructive of hopes of human betterment and of the attainment of international amenities than any of the other bastard slogans of our times. Therefore man inquires into the basis of the theory of such non-inheritance and finds it lacking. On the other hand, he brings forward evidence that germ cells do not possess that developmental, anatomical and physiological isolation from body cells demanded by Weismann's theory. The recent advances in chemical embryology support this proposition. The earlier stages of development are extraordinarily plastic prior to the appearance of any germ cells. This strikes at the root of Weismann's theories. But the inheritance of acquired characters in any event could only be in a very gradual process, and cannot yet be regarded as proved.

It would not be just to ascribe all the disastrous deterioration in moral values to mishandling of the biological theories. Certain philosophers and especially Hegel must take their share of the blame. When we inquire into the validity of the claim for "the biological necessity of war", it is interesting to learn what light the newer psychology has to throw on the subject. We shall at once be told that aggressiveness is deeply inherent in human nature, but it is repressed by society until it becomes so intense that it can find an outlet only in warfare. But when we ask what is the origin of this aggressiveness we are given two diametrically opposite answers.

Thus Freud attributed it to the persistence of childish hatred against parents, brothers and sisters which he regarded as our most fundamental impulse. He maintained that social feelings arise as a superstructure founded on these jealousies and rivalries, and thus the hatred we repress with difficulty remains the mainspring of our corporate life. His own feelings are displayed in his statement that "the masses are both lazy and stupid, and their ingrained laziness will not be removed by kindness but only by leadership prepared to use appalling force . . . One cannot deny the grandeur of this project". Well, his nation have experienced this since those words were written, but "the grandeur of the project" is perhaps beginning to lose its appeal.

On the other hand, Ian Suttie, who was trained in the Freudian School and used its methods for years, concluded that aggressiveness originated from the thwarting of primary natural love. Dr. Ranyard West in his interesting study of "Conscience and Society" says that Suttie puts forward the biological and individual role of the nourishing and protective mother and the sociological reactions which may result from her place in life as opposed to those of Freud's threatening father. Thus for Suttie the germ of society is a band of brothers and sisters gathered under a mother, as opposed to Freud's brothers banded in hostility against a father. I might interpolate here that it is, of course, quite possible for a matriarch to imitate Freud's conception of a father. I recently read Harold Nicholson's "Life of Hamilton

Rowan", whose dominating mother was the mainspring of his rebelliousness throughout his life, despite his frequently expressed desire to please. West goes on to say that the reactions of Suttie's patients were different from those of Freud because the personalities, the mental adherences and the faiths of the two analysts diverged.

Now if two astronomers working with similar telescopes at Greenwich and in Cape Town gave different times for the rising and setting of the moon they can both be right, the difference being due to their different positions on the globe. But psychologists are not observing through telescopes; they are observing human beings through their own minds which are deeply coloured by their own experiences. In the same way, a portrait, unlike a photograph, tells us much about the man who painted it.

Now this divergence between philosophers is no new thing. Nor is totalitarianism a new idea. It was first proclaimed by Thomas Hobbes in the seventeenth century. Although he was born in the year of the Armada and lived nearly up to the time of our Revolution in 1688, thus seeing great changes, he never altered his view that men were all selfish and aggressive, each against his fellows in a life that was "nasty, brutish and short". "So in the nature of man," said he, "we find three principal causes of quarrel—competition, diffidence and glory. The first maketh a man to invade for gain, the second for safety and the third for reputation". Thus war was the natural state of mankind and "force and fraud are in war the two cardinal virtues . . . Covenants without swords are but words and of no strength to secure a man at all." In that last respect he would find more to agree with him now than in the nineteenth century!

Yet the physician-philosopher, John Locke, who lived through the most disturbed part of the same century (as he said "I no sooner found myself in this world than I found myself in a storm") differed from Hobbes in precisely the same way that Suttie differed from Freud. He believed that a demand for social love and approval from his fellows was the primary emotion in man. He averred that he who "declares himself to live by another rule than that of reason and common equity [committed] a trespass against the whole species". Ranyard West's comment is "in contrast with Hobbes, Locke's state of nature is in fact a state of good nature . . . Where Hobbes sees anarchy unless men give up self-government, Locke sees a natural community which will improve its condition by careful self-government and run no risk in the process". To-day it is of special interest to read of this controversy of nearly three centuries ago between two opinions which hold the field to-day.

Now it is significant that Hobbes had a violent father and Locke had not. Hobbes' mother had such a dread of the Spanish Armada that he was born prematurely. As he put it long afterwards, "She brought forth twins—myself and fear". A brutal father and a terrified mother bred in the son a gloomy totalitarian philosophy which had an unfortunately wide influence.

Indeed, in view of the tremendous influence of our early upbringing, it is not surprising how frequently philosophers and psychologists who regard hate as the strongest motive had unkind or even brutal fathers, while those who put love in the first place had affectionate mothers.

What is true of these learned men is of general application. It adds new force to the recognized

vital importance of the home; it adds tremendously to the responsibility of parenthood. It is well known what a large proportion of neurotics and criminals come from 'broken homes'. There are plenty of instances of totalitarian leaders having an unhappy childhood.

The fatal flaw in Hobbes' premises was that he regarded human beings as isolated individuals *in vacuo*, whereas inescapably the earliest social group is the family, and the reaction of the individual to that group determines much of his future outlook on the whole of his subsequent life. As a medical man I am profoundly impressed with the truth of this. Let me take what may seem a trivial illustration: the myth of Santa Claus. Here is a boy who determines to find out about it and soon discovers who plays the part of that Christmas visitor. He is not capable of realizing that this is merely the mythical expression of an encompassing parental love, and later on may reject the symbolism of the Book of Genesis—at least until he is over forty. His sister may suspect the identity of Santa Claus, but may close her eyes to it, clinging longingly to the idea of the nocturnal visitant with his reindeer sledge. Later on she will be equally ready to close her eyes to anything which she fears might shake her rather timorous faith.

I have on a previous occasion urged the importance of a boy's reaction to his first realization that his hitherto thoughtless cruelty is wrong. I am sure from the histories I have often obtained that this is an almost universal and dramatic experience. It has been beautifully related by Frank Kendon in his delightful book "The Small Years". If cruelty is persisted in after that, what has been almost natural behaviour assumes a new significance, and the seeds of sadism are sown. "For without the law sin was dead, . . . but when the commandments came, sin revived".

Of the tragic results of both bad heredity and bad early environment in exalted circles, one could scarcely find a more striking example than the founder of Eton College. Henry VI succeeded his father when only nine months old. Henry V was no mere swashbuckler; he had a strong sense of justice and was fond of music and literature. So far so good, but his mother's stock was bad. With such heredity and an unfavourable environment it is not surprising that he had a complete mental and physical breakdown when he was thirty-two. The loving meticulous care he devoted to his two foundations, which he initiated when only eighteen, gave promise of a happier career had he not been doomed from the cradle by a thoroughly evil family environment.

It has been well said that heredity determines what we can do and environment what we do do. The trouble with eugenists is that they are not always clear what their aim is—whether for brain or brawn. Certain it is that a biological inferiority may be consistent with genius. Turner's defective eyesight was utilized by him to create gorgeous visions, many immortal works have been produced by the tuberculous, and Beethoven's hereditary otosclerosis did not prevent his reaching supreme heights in musical composition.

Carr-Saunders has recently reminded us that we find it more attractive to think of mastering our surroundings than of mastering ourselves. The pioneer efforts of Galton in the latter direction were weakened by his conventional class consciousness and lack of appreciation of social problems; still truer was this of some of his disciples. Consequently professional biologists stood rather aloof, and indeed

until the re-discovery of Mendel's work lay bare the mechanism of inheritance, eugenics could scarcely claim to be a science. The obstacles in the way of making a genetic analysis of man are immense, but apparently the results obtained so far do not clash seriously with Galton's intuitive conclusions. We must remember that inheritance merely means that offspring get their genes from their parents, while environment includes for man not only physical factors, as for all animals, but also the provision of opportunities for learning.

The object of social organization is not standardization, but the creation of conditions under which genetically unique individuals (which we all are) can best fulfil the promise that is in them. Unfortunately there is reason to suspect that the genetic material in a civilized society deteriorates slowly, but almost certainly, for harmful mutations are preserved which would perish under cruder conditions. True, they are compensated for, but that is not cure, and their persistence must be injurious to the common stock. There are always some people of subnormal mentality and physique who cannot hold their own in the circle in which they were brought up and who therefore tend to sink. The damage is enhanced by the inverse relation which exists between social class and fertility, even though this is now on the wane, except in the lowest group of all. In the other strata the average of intelligence does not vary greatly. But the danger of unfavourable mutations occurring and being encouraged to persist Carr-Saunders regards as insidious, for there is a not inconsiderable element in the population which by reason of inferior hereditary endowment cannot take advantage of a good environment.

Biology can be a useful corrective to the machine-minded planners who are running riot to-day, for man is not a robot. We start with the initial advantage that children are all intensely interested in the manifestations and origins of life—sometimes to the confusion of their more conventionally minded elders. Though of recent years motor-cars, aeroplanes and radio have claimed an increasing amount of their attention, there are few who do not, if they can, keep some kind of domestic pet, occasionally of a somewhat exotic type. It would be a real disaster if education were so directed as to suppress this interest in living things instead of using it as the basis for learning something about man's place in the universe among other forms of life.

On one hand it seems illogical to separate scientific questions from their application to human affairs, while on the other hand it is absolutely essential that there should be complete freedom in scientific research. Yet at the moment there is a decided movement to place research under State control. Liberty seems to be a demodé ideal. We may legitimately inquire how it can be determined at the outset of a research what its practical benefits will be. What we do know is that most of the great scientific discoveries have been made by men actuated simply by a thirst for knowledge. As Prof. Starling said, all knowledge faithfully pursued for its own sake ultimately yields useful results. Thus one of my teachers, W. H. Gaskell, researched on the rhythm of the heart and on the sympathetic nervous system without any thought or even interest in possible clinical applications. It was not until several years later that this work became the basis of newer conceptions of heart disease and of the effect of the emotions on the state of the viscera.

Biology can bring valuable information and advice to the statesman, if the evidence is objectively criticized by those scientifically trained, but if controlled by politicians it rapidly deteriorates into a fallacious guide; a blind leader of the blind. Indeed, we know that with the best will in the world it is extraordinarily difficult to remain sufficiently objective if we start a research for the purpose of establishing a preconceived hypothesis. I gave up laboratory research myself partly because I felt that difficulty was too great for me. The goal of clinical research, on the other hand, is pre-ordained—the healing of the patient. Politics, being in its essence tendentious, cannot control objective science without disaster. The converse aid which biology can render to statesmanship is admirably indicated in Dr. K. E. Barlow's admirable little book "The Discipline of Peace". He bases his appeal on the broadest biological grounds. He insists on the inexorable interdependence of soil, vegetation and animal life, pointing out in no uncertain tones the failure of the industrial age to observe it and the grave consequences thereof. In an interesting way we are led from a consideration of the building up of fertile soil by vegetable life to the building up of potential energy through photosynthesis by plants, which provides for the kinetic activities of animals, combined with the reverse process by which animal and vegetable waste products are utilized. The facts are well known, though not, as he shows, always acted upon. But the point he emphasizes is that each of these entities is obliged to follow its own discipline, and that interference by man can and does disastrously upset the balance. Deforestation, often merely to supply newsprint, and agriculture pursued to yield immediate returns regardless of the future, are rapidly reducing large areas of previously fertile land to dustbowls or swamps. Industrialization has led to excessive raids upon Nature to supply the machine, and the products of those machines have in turn to be bartered for yet more products of the soil. Moreover, it has led to aggregation of population into towns, thus simultaneously increasing the demands on Nature while diminishing its yield. Man must cease to be a bandit of the soil and in turn observe his own discipline, which he can do only by the free exercise of his intelligence. If we want to build a world in which men can live at peace, we have no choice but to pass to a new era in which man must concern himself with the balance and harmony of life. The whole thesis is convincingly worked out to show that while physics may increase our material comforts (or we might add, pave the way to new disasters), only biology can be the scientific guide to a true way of life.

In conclusion, may I suggest that all of us as teachers can gain inspiration and refreshment from Sir Charles Sherrington's short book on "Life's Unfolding", traced from the synthesis of the protein molecule, through the microscopic cell, on to an "organized life-system centred upon itself". Here it is interpreted by a master of science who also has the mind of a philosopher and a poet. He reminds us that wonder commonly vanishes with childhood. The wonderful is taken for granted, so as to enable us to get on with life. Much later, when life's pace is slackened, wonder may return. Wonder, then, is the mood in which he invites us to approach his subject; and it is indeed a wonderful re-telling of the story, vivid and yet accurate in its details. One is reminded of a picture which, having become dulled in colour, is restored to its pristine freshness by a

skilful hand. Take, for example, the description of the great adventure by which marine animals adapted themselves to a terrestrial existence and yet still carry the salt of the archaic sea in their internal economy. Avoiding anthropomorphism in his discussion of 'higher and lower' forms of life, he still claims that range of dominance of the environment is a feature to which the term 'higher' can be accorded. Since mind is one of the great keys to this dominance, the term is almost graded by degrees of mind. At the present time, man is, as regards conquest of his surroundings, the most successful of all living forms. On that ground we can acclaim him the highest of all living forms.

It is towards greater control over that environment, which also involves greater control over ourselves, that the lessons of biology and all its application should lead. For in the wise words of Plato, "Civilisation is the victory of persuasion over force".

HENRY TRIMEN, F.R.S. (1843-96)

By T. E. T. BOND

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HENRY TRIMEN was born in Paddington, London, on October 26, 1843. He received his education at King's College School (then in the Strand) and even as a schoolboy showed an ardent liking for natural history, beginning to form a herbarium and frequently visiting the Botanical Department of the British Museum to determine his collections. As with so many others of those days, he found his best opportunity of receiving further biological training lay in the study of medicine, and from school he entered the Medical College at King's in 1860, graduating M.B. with honours in 1865. After graduation he held for a short time an appointment as medical officer during a cholera epidemic in the Strand. But already it was clear that his main interest lay in the field of systematic botany. For this subject he was exceptionally well endowed with a natural ability for thorough and accurate observation and with a strong interest in historical studies, while his work throughout was characterized by a breadth of outlook to which his medical background made no small contribution.

As an amateur botanist, Trimen had already made a name for himself by adding to the British flora our smallest known flowering plant—the duckweed *Wolffia arrhiza*—and he had also taken an active part in the proceedings of such bodies as the Society of Amateur Botanists (now defunct) and the Botanical Exchange Club. Official recognition soon followed in his appointment, in 1867, as lecturer in botany at St. Mary's Hospital Medical School and, two years later, as assistant in the Department of Botany at the British Museum. His position now gave full scope to his abilities and he applied himself actively to his chosen fields of interest. In systematic and topographical botany, his best-known early work was the "Flora of Middlesex", projected as a joint publication with his former school-fellow Dyer (afterwards Sir W. T. Thiselton-Dyer) and completed in 1869. Several other papers followed, including critical studies of British species of *Polygonum*, *Rumex*, etc. His work in the interests of the botanical community in general was of no less importance and included the arduous task of editing the *Journal of Botany* for nearly ten years. He took an active part also on the

council of the Linnean Society of London, of which he had been a fellow since 1869. Finally, mention must be made of the notable series on "Medicinal Plants", undertaken in collaboration with Prof. Bentley, and published in instalments from 1875 onwards. Trimen's contributions to British botany were brought to a close in 1879, on his departure for Ceylon to become director of the Royal Botanic Gardens, Peradeniya.

In Ceylon, Trimen will always be remembered as the author of the monumental "Handbook to the Flora of Ceylon". This work, dealing with nearly 2,800 species of flowering plants in more than a thousand genera, was planned on a generous scale following the arrangement of the "Flora of British India". It was the result of much preliminary research into the Island's flora and the history of its investigation, from the work of Hermann in the seventeenth century and the publication of Linnaeus's "Flora Zeylanica" in 1747, to the appearance of Thwaites' "Enumeratio" in 1864. The first volume of the "Handbook" appeared in 1893 and the author himself completed two more volumes in his life-time, covering the dicotyledons from the families Ranunculaceae to Balanophoraceae, inclusive. The remaining families of dicotyledons, with the monocotyledons and cycads, were covered in two more volumes by Sir J. D. Hooker, working in part from Trimen's notes. The Flora, thus completed in five volumes by 1900, was revised and extended in A. H. G. Alston's supplementary volume issued in the same format in 1931.

Trimen's work for Ceylon botany in its widest aspects was not confined to the systematic examination of the country's flora: his labours are also commemorated to no small extent in the comprehensive collections and spacious arrangement of the world-famous Gardens of which he was the director. In his official capacity he also took a prominent part in developing the Island's important tea and rubber planting industries, and in introducing many of its fruits and other exotic agricultural products. He retained all his old interest and pleasure in the society of other botanists, and from time to time welcomed to Peradeniya such eminent visitors as F. O. Bower, K. Goebel, G. Haberlandt, M. C. Potter, J. B. Farmer, F. W. Keeble, and others. In fact, while on leave in England in 1886, he was in part instrumental in obtaining from the British Association a grant towards equipping a laboratory at Peradeniya at which British and other visiting botanists were provided with facilities for their work.

Trimen died on October 16, 1896, having returned to Ceylon from leave in the previous year, against the entreaties of all his friends. He had by then become totally deaf and was also paralysed in one leg. He died, as he had lived, in single-hearted devotion to his work, almost his last moments of consciousness being occupied with attempts to write a few notes in continuance of his "Flora". His end has been most movingly described in the memoir by James Britten in the *Journal of Botany* for that year. In the country of his adoption, Trimen's early death was felt alike as a great loss to tropical botany and as the passing of a friend to all sections of the Ceylon public. Of him it could be said, in the words of the writer of a later commemorative article published in the *Ceylon Tropical Agriculturist*, that "a more obliging official, more attentive correspondent, or more pleasant friend and genial man than Dr. Trimen never came to Ceylon".