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[No. 9

	PAGE		PAGE
<i>Sir M. Visvesvaraya</i>	389	<i>Research Workers and the Patent System.</i>	
<i>Palæobotany in India</i>	392	II. <i>What is Patentable?</i> BY P. K. KAPRE	401
<i>A Hypothesis as to the Origin of Cosmic Rays and the Experimental Testing of it in India and Elsewhere.</i> BY R. A. MILLIKAN, H. V. NEHER AND W. H. PICKERING	393	<i>Letters to the Editor</i>	404
<i>On the Origin and Development of Silver Coinage in India.</i> BY D. D. KOSAMBI ..	395	<i>Reviews</i>	415
		<i>Centenaries—</i>	
		<i>Paracelsus (1490–1541)</i>	418
		<i>De Candolle, Augustin Pyramus (1778–1841)</i>	418
		<i>Science Notes and News</i>	419
		<i>Academies and Societies</i>	423

SIR M. VISVESVARAYA

IT is but fitting that a Journal devoted to the cause of science should join in the country-wide celebrations that have taken place this month, of the 81st birthday of one of the most active and effective promoters of the cause of science in India, SIR MOKSHAGUNDAM VISVESVARAYA. His status as an engineer has long been a fact within international cognizance. But more than his acknowledged eminence in that profession, which is undoubtedly the handiwork as well as the handmaid of science, is the urge of the modern progressivist philosophy that has permeated his outlook and activity for half a century and made him a pioneer and an exemplar to administrators and leaders of the public. His extensive travels in Europe and America as well as in Japan enabled him to acquire a first-hand knowledge of the miracles which modern science, and particularly science in the field of engineering, has wrought in the life of man, helping him

to raise two ears of corn where only one grew before, to reduce his burden of brute labour, to increase the means of material welfare for all and to bring to every one more leisure, more health and more zest for the pursuit of those cultural and spiritual ideals which make human life a thing worth while. This inspiration was noticeably at work in Sir M. Visvesvaraya over thirty years ago. A high officer of the Bombay Department of Public Works at that time, he had become aware of the noble scientific-industrial idealism of Jamshedji Nusservanji Tata and the project of an all-India institution for scientific research in which that idealism was seeking to express itself; and as a patriotic son of Mysore, Sir Mokshagundam was naturally anxious that his natal State should take a hand in giving concrete shape to that project. Sir M. Visvesvaraya's voice was among the most potent of the influences which worked for the founding of the Indian

Institute of Science in Bangalore. Later on, as the Dewan of Mysore (10th November 1912 to 9th December 1918) it was given to him to give a magnificent impetus to the study and utilization of science in the service of the State. He belongs to that gifted and truly distinguished type of administrator—not too common in any country and very rare indeed in ours—who comes to office borne by the sense of an exalted mission and with a definite programme already waiting in his pocket to be taken out and put into action the moment opportunity arrives. In point of fact, the Mysore Economic Conference, which was a remarkable creation of Sir M. Visvesvaraya's dreams for the country's regeneration through the application of science to agriculture and industry and trade, had been brought into



being, mainly as a result of his insistent pleading, when he was the Chief Engineer of the State and had not yet been called to the office of Dewan. The many speeches and statements he made to that organization, and the work of its numerous committees and officers under his guidance, made an impressive contribution to the general awakening of the public as also to the preparing of several important schemes of business enterprise and industrial development. The Krishnaraja Sagara, the Bhadravati Iron Works, the Sandal Oil Factory,

the Soap Factory, the Silk Filatures and the University of Mysore,—to mention just a few at random out of a score or more items,—are a standing testimony to the faith of this great man in the beneficent possibilities of science as applied to the problems of human existence. It needed no ordinary amount of courage and firmness on his part to take up the responsibility of setting afoot in those days so many projects involving financial outlay on a scale to which the State had not been accustomed and affecting interests which mere prudence would rather have left unprovoked.

After his retirement from Mysore, he has kept himself incessantly at work to secure the adoption of the help of science to the solution of India's vast economic and social problems. Even a bare enumeration* of his more important reports,

pamphlets and speeches will, we have no doubt, suffice to convey an idea of the volume and significance of the work done by Sir M. Visvesvaraya for translating into practical form his deep and unwavering faith in the regenerative and humanitarian office of science. Now at eighty, we find him busy promoting the scheme of an automobile factory, which has been a pet child of his

* 1 "Reconstructing India" (1910).

2 "Technical and Industrial Education in the Bombay Presidency" (1923).

3 "Presidential Address to the 10th Session of the Indian Science Congress, Lucknow" (1923).

for some years, and persuading the Indian Institute of Science, as Chairman of its Court, to adopt a plan of larger and better organised scientific research.

The pages of this Journal are not the place for an examination of the reasons for the comparative unsuccess of some of the causes espoused by Sir M. Visvesvaraya. Such an examination must necessarily take us to fields far beyond the limits we have set to ourselves. But we may just indicate what his own explanation is likely to be. Speaking at a public meeting in Poona in October 1931, Sir M. Visvesvaraya said:—

“In 1919, in the course of my travels in Japan and the United States of America, I discussed the sterling exchange position in India with recognised financial experts whom I met. The Governor of the Bank of Japan said that the gold standard was the best for this country and he, for one, had no misgivings on the point.

“I pursued my investigation in the United States of America, and it will interest you if I recall a striking incident connected with a visit I paid to a financier and banking expert of repute, Mr. Jacobson by name, who was associated with the Federal Reserve Board at Washington. I went to him with a letter of introduction and had a companion with me who was a New Yorker and a Freemason. I asked the expert what he thought of the sterling

exchange position in India and what, in his view, was the best way of placing the currency policy of this country on a sound basis and preventing the losses to which it was being subjected from time to time. He was evidently unwilling, possibly on account of his official position, to speak out his mind, and began to say that India was a distant country, he had not seen it and knew little of its real position and wants. I showed some impatience at this answer, remarking that an expert of his standing could not possibly be so ignorant as he professed himself to be. He thereupon beckoned to my companion into an adjoining room and said: ‘Tell this man to go back to his country, change the system of government there and come to me again for advice. I will then be able to help him’. He meant, of course, that the sterling exchange was an adjunct of a *Dependency form of government* and that no advice of his would avail unless the people in India had the power to implement their own policies. The issue of one currency ordinance on 21st September last (1931) and of another three days later to repeal the same has brought home to us, as nothing else could have done, the disabilities under which we labour by being under a *Dependency form of government*.”

Sir M. Visvesvaraya is a man of great courage and strength of will, and never shrinks from the duty of speaking the needed word of truth and justice, whatever the reception it is likely to have from men in power or mere men. The true spirit of science characterises his views on all social questions. Friends of backward and depressed classes in Mysore thankfully acknowledge the help and encouragement he gave to the cause they hold as their own.

A most remarkable trait of his, rather disconcerting to the curious, is his complete avoidance of autobiography. He is not of the sort that wears the heart upon the sleeve. What can be seen of him by us is the man absorbed every moment of his waking hours

⁴ “Presidential Address to the Indian Economic Conference, Bombay” (1924).

⁵ “Indian Economic Enquiry Committee Report” (1925).

⁶ “Vission of a Prosperous Mysore” (1927).

⁷ “All-India Swadeshi Exhibition Inaugural Address, Madras” (1931).

⁸ “Convocation Address to the Andhra University” (1931).

⁹ “Unemployment in India” (1932).

¹⁰ “Rural Reconstruction in India” (1935).

¹¹ “Planned Economy for India—Popalar Edition” (1936).

¹² “Industrializing India” (1937).

¹³ “Nation Building” (1937).

¹⁴ “District Development Scheme” (1940).

in thinking and feeling and working for the public. Of the personal side of his life and experience, of his trials and struggles and disappointments with men, we get no revelation. He is a generous friend and a delightful host. A convinced supporter of clubs and corporations as nurseries of personal friendships and social felicities and disseminators of new enlightenment and new social and economic programmes, he yet has the art of keeping his soul untouched, "like a star", and "dwelling apart".

Alert in body as in mind, charming in manner, with a lively sparkle in the eyes and a friendly smile always playing round the lips, keenly interested in the affairs of the world, with faith still undiminished in the value of human striving, quick in understanding and stimulating in talk, this veteran patriot embodies in himself the generous dreams and manful aspirations of modern India. Flawless in dress, punctual

in keeping engagements, a stickler for method and system in all things, uncompromising in matters of principle, but scrupulously particular not to say or do a thing likely to harm a reputation or wound a susceptibility, he is the very soul of honour and gentlemanliness. It is impossible for any one who has spent a few minutes with him not to come away infected by his enthusiasm for what he considers to be the three basic needs of India—Education, Science and Industry. He who preaches such a gospel and promotes it in all ways open to him is surely entitled to the gratitude of the scientist; and we sincerely tender our cordial and respectful felicitations to Sir M. Visvesvaraya and wish him many many years of strength and happiness for the continued service of science, and through it, of India and humanity.

(Contributed)

PALÆOBOTANY IN INDIA

WE have recently received a copy of the Second Annual Report for the year 1940 on the progress of palæobotanical research in India published in Lucknow under the editorship of Prof. Birbal Sahni, and a perusal of its contents reveals the increasingly large volume of work being done in different parts of India in the field of palæobotany. As one would expect, most of this work is carried out in Lucknow, where an enthusiastic band of workers under the inspiring leadership of Prof. Sahni have been making most valuable contributions to our knowledge of Indian fossil floras. Of these special mention may be made of the paper by Mrs. Jacob (formerly Miss C. Virkki) on the "Spores from the Lower Gondwanas of India and Australia" which is a comprehensive work throwing light not only on the climatic relations of the early Glossopteris flora, but also on the possible use of these spores in Gondwana strati-

graphy. Among the other subjects investigated in Lucknow may be noted (i) the Triassic flora from the Salt Range, and the Jurassic plants from Afghan-Turkistan by Mr. R. V. Sitholey, (ii) the Rajamahal flora by Dr. K. Jacob and Dr. A. R. Rao, (iii) the flora of the Deccan inter-trappean series in the Nagpur-Chhindwara area by Professor Sahni and Dr. H. S. Rao, and (iv) the fossil plants from the upper Karewas (Pleistocene) of Kashmir, by Mr. G. S. Puri.

The study of fossil algae from the Cretaceous and Eocene rocks of India is being pursued in Bangalore where Messrs. S. R. Narayana Rao and K. Sripada Rao have been making important contributions to our knowledge of the algal flora in these beds from Rajahmundry, N.-W. Frontier Province, Sind and Surat.

Annual reports of the kind now under review are sure to be of great value in directing and stimulating further research.