# Convocation Addresses.

### University of Nagpur.

SIR S. RADHAKRISHNAN'S address to the graduates of Nagpur University presents a vivid picture of current social, economic and political problems which are reviewed with a sympathy and breadth of vision which characterise an eminent philosopher. The new spirit and temper animating the minds of young men is due to the emphasis on the application of science to the practical problems of human affairs and to the consciousness of social solidarity. Reference is made to Mr. Lakaminarayan's munificent bequest of forty lakhs of rupees, but the terms of the bequest and the scheme for its utilization are, in our opinion, to be carefully examined before adopting them, for there is a great deal of false glamour about starting technological institutes in the Universities for the purpose of training young men for commercial and industrial careers. Sir Radhakrishnan hopes that the proposals of the committee appointed by the University to devise schemes for the proper utilization of the donation, will give a fresh impetus to the industries of the country. We have no copy of the report at our disposal and we can only trust that the committee has not embraced the common error of suggesting technological courses being associated with a purely academic training such as a University can impart. The preparation of young men for practical careers implies training in workshops, business methods, the art of salesmanship, management of concerns large or small, skill in advertisement, marketting the productions, trade relations, foreign currency and exchange and quite a host of other matters which will make the careers profitable. Sir Radhakrishnan points out that the chief cause of unemployment in India is due to a want of application of scientific methods to agriculture and industries. The greater part of the address is devoted to an examination of the unemployment problem in India which is expected to be solved to some extent by the Government pursuing a policy of progressive industrialization. A brief summary of the statistics dealing with the percentage of population depending on agriculture and industries in the different countries is given to show that the dependence of Indians on the precarious produce from the land accounts for the greater part of the unemployment of her people. There seems to be

a little fallacy in arguments based on a comparative study of statistics. Have countries like Britain and the United States which are industrialized almost to the teeth, solved their own unemployment problem? What is the percentage of the unemployed to the total population in these countries? Is it quite clear that agricultural pursuits lead directly to unemployment? The employment of machinery on a progressive scale must necessarily diminish the employment in the number of human hands in industrial organizations and if we add to this, mass production, and increasing birthrate, we have the correct picture of the problem. The theory that industrialization of a country will safeguard it against unemployment has to be examined closely with reference to other contributory causes. Speaking about the progress of civilization, Sir Radhakrishnan is reported to have said that the possibilities of the abuse of science are great and may not add to its enrichment; and "the inspiring vision of the reign of justice and fairplay on earth" such as poets and philosophers are capable of dreaming are also dreamt of by the scientists. One of the functions of science is to discover the properties of matter and the power of using or abusing them is not the attribute of the scientist. Recent advances in nuclear physics and experimental biology have given us new qualitative values which, with those derived from researches in philosophy, ought to make definite contributions to the progress of humanity. Dealing with other topics of current interest Sir Radhakrishnan points out that political emancipation alone is powerless to eradicate the many social evils from which India suffers and lays emphasis on what he calls "mental freedom" to be placed within the reach of those who are affected by social injustice. Political equality as a working hypothesis can be sustained only if opportunities for selfimprovement exist in the whole community. He mentions that religion is opposed to freedom of enquiry and entrenching behind authority which is not to be questioned, it has produced misfortunes for humanity. Religion is alleged to be opposed to "Eugenic sterilization" and the practice of contraceptive methods and "social hygiene" and the removal of untouchability. We conceive the true function of religion to be to provide for the human mind a discipline of truth and to

establish an eternal communion between man and his Maker. It is essentially an affair of the heart and not of the head. Troubles arise where the latter is involved. Referring to the troubles of the present time, he is of the opinion that the greatest need is a radical readjustment of fundamental ideas, and he further points out that we have to imbibe the spirit and methods of Western scientific research and not necessarily, its results. This is a subject which requires a very careful examination especially in view of the fact that the results of the modern scientific investigations have affected every detail of our daily existence. We have no hesitation in saying that this thoughtful address provides a most useful and stimulating reading.

A.N.R.

### Agra University.

In the federal type of the University of Agra, Sir Sitharam sees a great advantage of providing for a large body of poor young men aspiring for the humanising and vitalising influences of higher learning which on account of distance and other reasons will be otherwise denied to them. Judging from the number of graduates and under-graduates in the Universities of the United Provinces. he makes out a strong case for the establishment of new Universities and the consolidation of the existing ones. He pleads for the establishment of tutorial system in the Universities and his suggestions deserve careful and immediate consideration of the authorities. Most Universities have taken steps to provide for the periodical inspection of the residential quarters of their students not living in the University or College Hostels and for a general sort of supervision over their work and other activities. But this procedure requires to be systematised into a regular feature of tutorial control as an indispensable part of University work.

L.S.R.

#### Andhra University.

Dewan Bahadur M. Ramachandra Rao alludes in his address to the institution of the University Training Corps for Andhra Desha. We recognize the need of military training for our young men provided the necessary funds for its organization in the University should be forthcoming. Few will question the excellent educational

results, such as, cheerfulness of obedience, a sense of stern discipline, a strong spirit of comradeship, resourcefulness, teamwork and self-sacrifice which a camp life will promote. Nothing is better calculated to foster the excellent qualities of true citizenship.

L.S.R.

### Allahabad University.

The retiring Vice-Chancellor, Dr. Ganganath Jha, dealt in his address with the curtailment of Government grants which must necessarily impose serious handicap on the continuance of existing arrangements and their expansions in the University. It is true that more money is required for the diffusion of Elementary and High School Education in the country, but this money is not to be obtained by pinching the University grants. If we expand the lower grades of instruction, it follows that the University education also should keep pace with it. India needs every form and grade of education in a far greater measure than has been possible for the Government and the people to provide for her. His ideal of higher learning is unimpeachable. He says, "Our function mainly is to provide the country with a set of highly cultured young men who will go forth into the world and improve the level of society. Our ideal, so far, has been high culture and not money-making."

L.S.R.

#### Lucknow University.

Perhaps the most important portion of Mr. C. Y. Chintamani's address is that which relates to discipline, a subject which is in need, to-day, of some emphasis. He sums up the lesson of discipline in these words, the message of which is important both to the elderly citizens and the youth of the country. "Consciousness of one's limitations and of the necessity of constant self-examination and of learning from others, obedience and loyalty to the leaders, discrimination between judgment and conscience so that deference may be paid to the views of more experienced men instead of an ignorant conception of 'conscience' being made the excuse for thoughtless action based on wrong judgment, the preservation of our heritage of humility and reverence without prejudice to our readiness to act boldly on our own responsibility even if everyone

go against us when our conception of duty dictates such a course—in my humble view all these qualities are connoted by and included in the single yet comprehensive word 'discipline'." No harm is done if a few more substantives like 'self-sacrifice', 'service', 'tolerance' and so forth are thrown in to make the definition applicable to every form of human emotions and will. Mr. Chintamani is not satisfied with the qualities possessed by the graduates of our Universities. He says that when a graduate of average ability goes forth into the world the public have a right to expect that he possesses a certain amount of knowledge and a few other qualities without which one can do no satisfactory work in any line. He asks if this expectation is fulfilled and requires an answer from the University. From the way he puts his question, one will not be wrong in inferring that Mr. Chintamani suspects that the expectation is belied and this is a terrible indictment of the work of the Universities.

M.S.M.

### Patna University.

Sir Courtney Torrel in his address to the graduates complains against the introspective character of the Indian mind which needs correction by a wider and deeper infusion of objective sciences than is attempted in the Universities at present. "The Indian mind must no longer be directed inwards to

contemplate the soul alone, but outwards to observe and react to the external world." There is a great deal of philosophical abstraction about the Indian mind which delights in logical sophistry and this is due to the spiritual ideals which dominate the Indian life. A corrective is necessary and we must say that the Indian student of average intellect will readily adapt himself and profit by scientific training. are not quite convinced if the exhortation of Sir Courtney Torrel to subject all favourite theory and beliefs to the ruthless test of practical experiment is at all a practicable and desirable suggestion. If some of the more valued spiritual possessions of our race were subjected to the stern experimental tests of science,—they may not be amenable to them,—what will be the repercussions on our social systems and ethical code, if the conclusions of such scientific enquiry were to prove that the articles of faith now held by mankind have no scientific sanction. We do not believe that it was the intention of His Lordship to suggest to the young men of Patna that they should re-examine and analyse the fundamental concepts of right and wrong by the application of scientific methods; rather we take it that it was an advice on the lines of St. Paul "Prove all things and hold fast to that which is good," and a plea for the cultivation of the faculty of observation.

M.S.M.

## Science News.

GOOD Tibetan Dictionary, embodying the results of modern researches in the fields of Tibetan linguistics and philology, has long been a great desideratum. Such a Dictionary has now been undertaken by the Himalayan Research Institute of Roerich Museum. The new Dictionary includes, besides the material found in the already existing Tibetan Dictionaries, published in European languages, the rich material found in numerous lexicographical works issued in Tibet, China and Mongolia, and up to now unexplored by Western Science. Besides the above printed material, the compilers will add a vast material collected by them in the course of their researches, and which will be published here for the first time. The Dictionary will contain the Sanskrit equivalents of important terms: loan-words, which will be traced to their origins wherever possible, and an extensive material from the colloquial language, and the various living dialects of Tibet. It is hoped to bring the Dictionary to completion towards 1934.

The following papers were read or taken as read at a meeting of the U.P. Academy of Sciences, held on October 28th, 1932:—

"On Two Species of the Genus Cephalogonimus Poirier from Water-Tortoises of Allahabad with remarks on the family Cephalogonimidæ Nicoll." By Bindeshri Prasad Pande, Esq., M.Sc., Zoology Department, Allahabad University.

"A Note on the Expanding Universe." By Prof. A. C. Banerji, M.A., M.Sc., F.R.A.S., I.E.S., Mathematics Department, Allahabad University.

"On Some Experiments with Iodine Vapour."
By G. R. Toshniwal, Esq., M.Sc., Physics
Department, Allahabad University.

"Ageing of Ferric Phosphate and Vanadium pentoxide Sols at various Temperatures." By Dr. Satyeshwar Ohosh, D.Sc., and Mr. S. N. Banerji, Chemistry Department, Allahabad University.

"On the Absorption Spectra of Alkyl Halides." By Prabhat Kumar Sen Gupta,