It is hoped that India would emulate the illustrious example set by England in this respect and would soon take steps for the establishment of an organisation on the lines of the E.R.A. which would be extremely valuable in post-war development.

H. N. RAMACHANDRA RAO.

Survey of India, Geodetic Report, 1940. Price Rs. 2 or 3 *sh.*

This volume has been compiled by the War Survey Research Institute, which was formed in August 1943 and has been responsible for geodetic matters. It contains the results of investigations carried out by the Survey of India.

High precision levelling was carried out in certain portions in Orissa, C.P., and Madras. Discrepancies between the old and new heights of bench marks are given.

Both components of the deviation of the vertical were measured in 98 stations in the Punjab, Baluchistan and N.W.F.P., the object of the programme being to provide a map of the *Geoid in* N.W. India.

Gravity observations were made at fifteen stations in South Burma and one station in Andaman Islands. The total number of gravity stations in India has been increased to 564. Anomalies in gravity due to different causes are considered. Crustul structure lines have been drawn in the light of these results. It is inferred that the downwarp lies over the Andaman Islands and extends to Sumatra.

Of special interest is the study of the variation of latitude observations at Agra during the years 1937-40. The results show an unusually large amplitude of about one second as found at Dehra Dun during 1930-33.

Detailed discussions on various heads could not obviously be given on account of the limited time at the disposal of those in charge of the publication. The Geodetic Branch must be congratulated on the large amount of useful information collected during 1939-40 and published in this Report.

S. R. R.

Race and Cultures in India. By D. N. Majumdar. (Kitabistan, Allahabad), 1945. Pp. 299. Price *Rs.* 5-4-0.

Dr. Majumdar's industry and enthusiasm are both praiseworthy. In this book which, I think, is his first effort in popular writing, he maintains his liveliness and command of facts of tribal life. The benefits to the nation from a wider appreciation of some commonplaces of anthropology will indeed be out of all proportion to the cost in money and effort required in getting this knowledge transmitted to the public. I am in entire agreement with Dr. Majumdar in believing that several of our communal and regional jealousies will automatically vanish if the leaders of factions, and through them the masses, can be made to understand the meaning and implications of race and culture (language being part of culture in its wider sense). The anthropologist is not alone in putting forth this view—for he would then be denigrated as trying to sell his own wares; fortunately for the country, administrators, such as Sir Theodore Tasker who invited Dr. Majumdar to deliver a course of lectures in anthropology to the I.C.S. probationers and minor chiefs at the Dehra Dun camp, and several social workers and publicists who met recently to discuss the problems of the aborigines, are beginning to realise the value of anthropology in the administration of backward areas. This popular work of Dr. Majumdar's will give the busy man of affairs an idea of the problems facing the tribal and exterior sections of our population and, at the same time, help him to get an insight into their culture from which the so-called higher cultures of our land have developed. The book is a mine of information which the reader is not likely to come across in the usual course.

A. AIYAPPAN.

SCIENCE NOTES AND NEWS

Supply of "H.S." and "Specpure" Substances

The use of the spectrograph for the detection and determination of metallic elements in all kinds of materials has increased considerably in recent years. This has necessitated a demand for extremely pure elements, oxides and salts to serve as standards. Messrs. Adam Hilger, Ltd., London, have been largely responsible for the supply of such standards. About 1922, they started supplying "H.S." substances, the preparation and analysis being in the able hands of their consultant, Dr. S. Judd Lewis. In 1932, with the help again of Dr. Lewis, they introduced the "Specpure" series of "ratio powders", "ratio solutions" and pure salts. From a communication sent to us by Messrs. Adam Hilger, Ltd., we understand that, to cope with the growing demand for such substances, they have entered into an agreement with Messrs. Johnson, Matthey and Co., Ltd. Dr. S. Judd Lewis has been engaged as consultant by the latter. The agreement provides that future sales of spectroscopically standardized substances shall be made only by Messrs. Johnson, Matthey and Co., Ltd., from their Head Office at 73/83, Hatton Garden, London, E.C. 1.

In a recent article in the *Indian Medical Association Journal* ((37, 344), Chen, *et al.*, reports the successful treatment of fourteen instances of cyanide poisoning as a result of the use of combined treatment. The procedure consisted of the following three steps: (1) inhalation of amyl nitrite for 15 to 30 seconds each minute while steps (2) and (3) are being prepared; (2) injection of 10 c.c. of 3 per cent. sodium nitrite solution, intravenously, at the rate of 2·5 to 5 c.c. per minute; (3) using the same needle in the same or another vein, if

desired, inject 50 c.c. of 25 per cent. sodium thiosulphate solution. If the symptoms of cyanide poisoning return, steps 2 and 3 should be repeated, reducing the dose of each solution to one-half the stated amount. Speed in treatment is paramount, and artificial respiration should be administered, if indicated, to restore breathing. If the cyanide has been ingested, gastric lavage should be performed. The authors suggest that a treatment kit, containing proper-gauge needles and ampoules with the solutions be kept in readiness at all times wherever these hazardous substances are employed.

—(*Merck Report, April* 1945)

The recent decision of the British Empire Leprosy Relief Association to collect £210,000 "for use in the plan to exterminate leprosy within the British Empire" is laudable. For, in the British Empire there are 2,000,000 lepers!—more than half the world population of such unfortunates. It appears as if the leper problem is at last getting the attention it deserves (*cf. Curr. Sci.*, June 1945).

From time immemorial the leper has been an outcast and the fight against the scourge was half-hearted owing to the firm belief that the disease was incurable. Dr. Muir now holds out the hope of a cure if the disease is diagnosed sufficiently early and treated in time. The ancient Atreyan remedy, Hydnocarpus oil is now administered intra-muscularly as sodium-hydnocarpate and it is claimed that it destroys the lepra bacilli.

Experience has proved that compulsory isolation is impracticable and hence more stress is now laid on voluntary admissions to sanatoria where the patients are enabled to lead a normal life with their families. It appears as if this changed outlook has infused some confidence into the lepers themselves, for it is stated: "For the last ten years, more than fifty per cent. of the patients from the model leprosy sanatorium at Ngomahuru in Southern Rhodesia, have been discharged yearly as cured, and this percentage is steadily rising; more patients are being discharged than taken in."

"Leprosy is not as contagious as is generally believed. Only about one in four lepers is in that condition, and the danger is small provided certain precautionary measures are taken. *The real danger of contagion is from those who seek to hide their disease.*"

M. K. S.

The Academic Press Inc., of New York, U.S.A., will be soon publishing a *Journal of Colloid Science*, and the first issue of the Journal is expected to come out in January 1946. The following aspects of colloid science will be dealt with:—

I. *Fundamentals*: Physics, Physical Chemistry and Chemistry of Colloids and Surfaces. II. *Applications*: (1) Industry, *e.g.*, Plastics, Soaps, Photography, Food and Flotations, Emulsions. (2) Biology, Protoplasma, Cell-structure.

The Journal will be issued under the auspices of a distinguished Editorial Board and a Consultative Committee, both international in character.

Papers from India may be sent for consideration to Prof. J. N. Mukherjee, C.B.E., D.Sc., University College of Science and Technology, 92, Upper Circular Road, Calcutta.

MAGNETIC NOTES

Magnetic conditions during April 1945 were slightly more disturbed than in the previous month. There were 14 *quiet* days, 14 days of *slight* disturbance and 2 days of *moderate* disturbance as against 12 quiet days, 17 days of slight disturbance and 1 of great disturbance during the same month last year.

The quietest day during April 1945 was the 27th and the day of the largest disturbance the 11th.

The individual days during the month were classified as shown below:—

Quiet days	Disturbed days	
	Slight	Moderate
3, 9, 10, 16–18. 21–23, 25–29	2, 4–8, 12–15, 19, 20, 24, 30	1, 11

No magnetic storms were recorded during April 1945 while one disturbance of moderate intensity was recorded during the month last year.

Mean character figure for April 1945 was 0·60 as against 0·63 for April 1944.

M. R. RANGASWAMI.

Magnetic conditions during May 1945 were far less disturbed than in the previous month. There were 20 *quiet* days and 11 days of *slight* disturbance as against identical numbers of quiet days and slightly disturbed days in May 1944.

The quietest day during the month was the 22nd and the day of the largest disturbance the 11th.

The individual days during the month were classified as shown below:—

Quiet days	Disturbed days
	Slight
1–8, 13, 15, 19–24. 26, 28, 29, 31.	9–12, 14, 16–18, 25, 27, 30.

No magnetic storm occurred during May 1944 or 1945.

The mean character figure for May 1945 was 0·35 as against 0·26 for May 1944.

M. R. RANGASWAMI.

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