

of thundershowers would extend from NE India even into the U.P. and these would be more marked in the eastern districts.

A weather forecaster is very much interested in the time sequence between the starting of SE-ly components in upper winds at places east of Long. 78° E. and along N. Madras coast and the subsequent weather in the east U.P. I have been unable to collect statistics. The changing of the wind directions to SE-ly on the east coast of India, the weather in the east U.P. and Chota Nagpur may be contemporary happenings of the weather pattern. It may not be logical to count the time interval after the setting in of the SE-lies. The pressure departure chart may be a better indicator. When a wave of a negative pressure departure passes eastwards across the country, this may be taken as an indicator of the passage of the low pressure area of the western disturbance. This low would some times induce the SE-lies. However, an interval of 24 to 36 hours can be assumed to be the approximate time between the starting of SE-ly upper winds at lower levels east of Long. 78° E. and weather in the east U.P.

A comparison of the periphery of the rain belt with the free line curves drawn in Fig. 1 is quite close. Such instances can be easily multiplied. It is hard to determine theoretically the fanning out of the moist stream by orography of the central parts of the country. It should be possible, however, to carry out a model experiment in a tank or in a wind tunnel.

**Squalls near Jubbulpore.** Jubbulpore is situated at the crossing of two valleys formed by 0.5 km. contours (SW to NE and nearly SE to NW). The moist feed is directed along either of the valleys to the south of the place. When a 'cold front' of a low pressure area of a western disturbance passes to the north it brings in westerly or northwesterly winds. Owing to a sort of funnel effect of the valleys, more moist and more cold air are put into juxtaposition and produce thunderstorms of more than usual intensity in the neighbourhood. The squalls produced in the pre-monsoon months at Jubbulpore are more severe than in many places in the Central Province; and tornadoes also occur occasionally (*vide* May 1936).

1, 2 and 3. Malurkar, "Forecasting Weather In and Near India," 1945, Bangalore, p. 102; Malurkar, Technical Note No. 1, p. 3. *Ind. Met. Dept.; Curr. Sci.*, 1947, 16, 139, and 1948, 17, 112, and under 1 see also Mal and Desai, *Technical Note No. 25. Ind. Met. Dept.*, 1947. 4. Malurkar, *Curr. Sci.*, 1947, 16, 139. 5. —, *Proc. Ind. Acad. Sci. (Bangalore)*, Sec. A 1943, 18, 20, and 23. 6. —, "Forecasting weather etc." *loc. cit.*, p. 112.

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## UNIVERSITY INTERCHANGE BETWEEN U. K. AND INDIA

**TO** facilitate interchange between the universities of the United Kingdom and those of India, Britain is arranging for a number of travel grants.

The awards will be made on the recommendation of a Committee composed of representatives of the Association of Universities of the British Commonwealth, of the Committee of Vice-Chancellors and Principals of the U.K., and of the Universities Advisory Committee of the British Council.

Recipients will fall under three categories: distinguished scholars and scientists invited by universities for visits of at least 6 weeks' duration to enable them to meet fellow specialists and to mix with rising young workers in their own fields; university teachers on recognised study leave; and post-graduate research workers holding research grants. The latter two categories must undertake to spend at least 6 months of the academic session at the university where they propose to work.

Conditions for eligibility for university teachers and post-graduate research workers include suitable academic qualifications and experience, and a definite programme of work. The university named by the applicant as his proposed place of study must also be willing to receive him.

### APPLICATIONS

Applications are to be sponsored by the applicant's own university, and, in the case of university teachers, backed by the necessary

finances—not less than 6 months' leave of absence on full pay. Post-graduate research workers are required to maintain themselves fully, while distinguished visiting scholars and scientists receive the necessary hospitality and costs of travel within the country from the inviting universities.

Grants are equivalent to the average cost of a return sea passage. For scholars and scientists invited by universities, passage may be arranged by air, depending on circumstances. Grants are normally paid in the U.K. in sterling, but in cases of necessity special arrangements may be made to pay part of the grant before sailing.

Particulars of visits which it is desired to arrange for distinguished scholars and scientists are to be sent by the inviting university to the Secretary, Committee for Commonwealth University Interchange, c/o The British Council, 3, Hanover Street, London, W.1. Persons in the other two categories are to send three copies of their application to the Vice-Chancellor or Principal of their own university for forwarding. January 31, 1949, has been fixed as the last date for the guaranteed consideration of applications, and the announcement of awards is expected to be about the end of March.

The most important thing is that this scheme provides for two-way traffic: facilities are provided both for Indians to visit the United Kingdom and for British scholars to undertake research and meet their colleagues in India.