most by those interested in applied acoustics, several important general works published since 1925 might with advantage be included in the bibliography. The six books given are scarcely representative, sources in English being represented solely by the Physical Society's discussion on audition. A list of more than two hundred periodicals which are to be searched for the bibliography is given as a supplement. The address of publication is Les Presses Universitaires de France, 47 Boulevard Saint-Michel, Paris 5e.

## Vocational Tests for School Children

THE City of Birmingham Education Committee has published the results of an investigation by E. Patricia Allen and Percival Smith into the value of vocational tests as aids to choice of employment (Treasurer's Department, Council House, Birmingham. 1s. net). Every child leaving school in Birmingham is carefully advised as to his future occupation, but it was felt that vocational tests might give the employment conferences more adequate data on which to base their suggestions. For the purpose of this experiment, the children leaving three schools were divided into two groups : one group was treated in the usual way, while the other was examined by special tests for manual, mechanical, and clerical ability, dress-making, and intelligence, and studies were added of social, medical, and temperamental conditions. The advice given was then based on the results. When the children had obtained work, there would be four categories, namely, the tested children who did and did not follow the advice, and the controls who did and did not. Evidence as to the progress of these groups in their industrial careers was then compiled over a period of two years. Although the report makes no extravagant claims, yet the general tendency was for the tested children, who were placed in accordance with the advice given, to be more satisfactorily placed than those in the other three categories. The writers report that a surprisingly large number of the parents had no ideas for their children, nor did the children as a rule know what they would like to do. The report is excellent, sufficient details being given, with the exception of the testing for temperament, to enable other workers to follow this up and use it for comparison. The results are in agreement with the previous London research.

## Tung Oil in the United States

THE establishment of the tung oil industry in the United States has been so successful during the last few years that a move is now being made to expand it on such a scale that America will cease to be dependent on China for even small quantities of this commodity. Dr. H. A. Gardner has recently described the position in a paper before the American Chemical Society (Science Service, Washington). Tung oil is essentially an oriental product, used through the ages by the Chinese for making native lacquer and ink. It is manufactured from the seeds of a deciduous tree, *Aleurites*, native to China, on much the same principle as peanut oil is produced by milling from peanuts

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in that country. Seeds were first introduced into America through the agency of the U.S. Department of Agriculture in 1905, and planted at the Government Experimental Station then at Chico, California. Extensive plantings, however, were not made until some eight years ago in the southern States, which were so successful that already 25,000 acres of land have been given over to the industry. The American Paint and Varnish Association is particularly concerned with this venture, as the oil is a valuable ingredient of varnishes and varnish paints. Apart from these uses, the American industries have extended considerably the application of tung oil, and it is now employed in the manufacture of insulating compounds, brake linings, linoleum, waterproofing fabrics, as a binder for wall board and plastic synthetic lumber, primers, synthetic resins, battery jar compounds, aeroplane tubing fillers, and so on.

## American Institute of Physics

For several years, a movement has been on foot in the United States to bring about co-operation between the several American societies devoted to physics and its more immediate branches. This has recently had its culmination in the formation of the American Institute of Physics, comprising the American Physical Society, the Optical Society of America, the Acoustical Society of America, the Society of Rheology, and the American Association of Physics Teachers. The purposes of the Institute are subject, of course, to natural development in accordance with the future needs of its founder societies. For the present, its principal activity is the publication of journals. The societies are delegating to the Institute the responsibility for publishing the journals which they have in the past sponsored themselves. The reason for this course of action is the promotion of economy and efficiency. The list of the journals includes the Physical Review, Physics, Reviews of Modern Physics, Journal of the Optical Society of America, the Review of Scientific Instruments, Journal of the Acoustical Society of America, and Journal of Rheology. The scientific editing of the journals remains the duty of the societies, while all the details in the handling of proofs, subscription records, book-keeping, and the like are undertaken by the Institute. Two important other functions have been assigned to the Institute, namely, the further co-operation with societies and agencies outside the founding group, and the extension of an information service to the Press. The central office of the American Institute of Physics is at 11 East 38th Street, New York City.

## Manufacture of Insulators

THE Vista is a periodical published by the British Porcelain Co., Ltd., London, S.W.1, and deals mainly with subjects of interest to the electric power industry. In the May number it concludes a series of articles on insulator manufacture. Each piece of electrical porcelain is carefully inspected by factory inspectors immediately after removal from the kiln, and all pieces failing to pass this inspection are destroyed. To find the porosity, fragments of the porcelain are