eminence in English engineering education, but no Colonial representative took part.

Trade Schools and Continuation Schools.

Mr. R. Blair (London Education Officer) read a paper on the recent development of day schools for boys or girls following immediately on the close of the elementary-school career, the schools being so closely associated with the industry for which they are preparing their students that the preparation is a substitute for the earlier years of apprenticeship. He directed attention to the extent and peculiarities of London's needs, and his valuable remarks were supported by a large amount of useful statistics appended to his paper. He selected for detailed description the work of the Brixton School of Building. The paper is one to be read in full and kept for reference; we must content ourselves with noting that Mr. Blair attributes the success of the schools to the thoroughness of the investigation made into the conditions of a trade before establishing a school or class, and to the appointment of a consultative committee of experts. The striking success of the girls' schools was due to the high standard of devotion and enthusiasm of the staff.

Mr. Graham Balfour (Staffordshire) showed how complicated and varied were the difficulties in organising continuation schools, and the need for resourcefulness and

judgment in dealing with each individual locality.

Mr. C. E. Bevan Brown (Christchurch, N.Z.) said that recently an Act had been passed in New Zealand allowing local authorities to make continuation classes compulsory.

A Criticism and a Hope.

Had the papers and discussions been the British part of proceedings to which the Overseas Dominions had contributed a similar share, we should feel that these conferences had made a good beginning. It is to be hoped that when the report of the private sessions appears it will reveal the fact of a useful interchange of experience and ideas between the delegates of the various parts of the Empire. So far as the public sessions are concerned, it cannot be said that a programme consisting solely of contributions from the United Kingdom fulfils even approximately the aspirations with which we regard an Imperial Education Conference. It has been stated in the daily Press that the Colonial Governments were not invited to make suggestions for the business of the conference. In face of the fact that the Board of Education had four years for preparation, this statement appears to us incredible, or, if credible, then discreditable. We hope that one result of the private sessions will be to evolve a method by which the various parts of the Empire can act in concert, so as to carry out in future those aims of the conference which were stated with clear insight by the President of the Board in his opening address. G. F. D.

BIRD NOTES.

TO the April issue of British Birds, Messrs. Witherby and Alexander contribute an account of the visitation of crossbills to the British Isles in 1909. The birds made their appearance on Fair Isle on June 23, and before the end of that month were seen in the Shetlands, Orkneys, Outer Hebrides, Merionethshire, and Durham; while in July they were observed all over England except the extreme south-west, as well as in a number of places in Wales, and a few scattered localities in Ireland. latest record of their being seen at sea was in the Shet-lands early in August. The first nest recorded was taken on January 12, 1910, near Thetford, while the latest nests were seen respectively in Sussex and Kent on May 25, the height of the breeding season being in March and April. Nests were recorded from thirteen English counties. The dates of departure of the birds varied locally; in some districts all had gone by the end of 1909, in others there was little or no diminution in the numbers till well on in the following year, but, as a whole, the records indicate that the main departure took place either in February or in April and May. From a second paper in the same issue, it appears, however, that a few crossbills remained

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to breed in certain localities in the spring of the present year. A note is added in the latter paper on the thinbeaked Scots crossbill (Loxia curvirostra scotica), which breeds regularly over a considerable area in Scotland.

The Irish Times of March 31, as quoted in The Field of April 8, reports an enormous influx of migratory birds into Ireland, especially the south-eastern districts, during the last week of March. In New Ross on the night of March 29 the town was practically invaded by a vast swarm of starlings, while in Kilkenny on the same day the streets were strewn with the dead bodies of various species, including curlew, while much the same thing happened in Carlow on March 30. There can be little doubt that the influx and subsequent destruction were in some way connected with the abnormally cold weather prevalent at the time.

In The Emu for January, Mr. A. J. Cambell describes, under the name of Erythrotriorchis rufotibia, a new species of so-called Australasian goshawk, characterised by the rich rufous or chestnut brown of the shank of the leg. This bird inhabits north-western Australia; the other members of the genus are *E. radiatus* of eastern, northern, and central Australia, and *E. doriae* of south-eastern Papua.

To The Selborne Magazine for April, Mr. A. H. Macpherson contributes notes on London birds in 1910, in which reference is made to the visit of a great crested grebe to the Serpentine on January 29. To illustrate the article on account of this casual visit with a figure of a nesting

grebe, is, perhaps, a little misleading.

Mr. V. Franz gives, in *Himmel und Erde* for March, an illustrated account of the bird-observing station at Rossitten, with figures of the modes of ringing birds' feet, and notes on some of the results which have been obtained by the system of bird-marking.

From a paper by Mr. Grinnell issued in vol. vii., No. 4, of the Zoological Publications of the University of California, it appears that the Californian linnet (Carpodacus frontalis) was introduced into the Hawaiian Islands about forty years ago, and that the males of the race now estab-lished there differ from the normal form of their continental brethren by the replacement of the crimson head and breast colouring by yellow or orange. This pale colouring of the cock Hawaiian linnet is paralleled sporadically by the linnet of the mainland in a wild state, and constantly in birds kept in confinement. As the change in the Hawaiian bird does not appear to be due to differences in temperature or humidity, change of food, or a diminution in the number of foes, it appears to be connected with deep-seated factors, one of which may be insularity of habitat. "A deficiency in capacity, of the germ, for the formation of the appropriate enzyme may have been intensified through close breeding until the condition was reached where the amount of enzyme produced in the feather anlage is insufficient to carry on oxidation of tyrosin beyond the yellow, or, at farthest, the R. L. orange stage.

OPTICALLY ACTIVE ALCOHOLS.

THE January issue of the Chemical Society's Journal contains an important paper by Dr. R. H. Pickard and Mr. J. Kenyon on the "Dependence of Rotatory Power on Chemical Constitution." Hitherto much of the work that has been done in order to find out the influence on optical rotatory power of temperature, solvent, concentration, and chemical constitution has been based upon the observations of complex compounds, such as nicotine and derivatives of various complex acids and bases. substances have the advantage that they can be purchased as natural products in optically active forms, but the complexity of their structure has rendered it almost impossible to draw any general conclusions from the vast array of facts that have now been accumulated. In the research now described the authors have endeavoured to reduce the problem to its simplest possible form by studying the properties of the series of secondary alcohols, R, HOH.R₂, of which the simplest member is secondary butyl alcohol,

CH, CHOH.CH, CH, Up to the present no fewer than fourteen of these alcohols have been prepared, and separated into their