of the sea was remarkably calm at the time, and this no doubt accounts for the brilliancy of the bows, which are due to the reflected image of the sun.

I wish to thank the readers of NATURE who have given explanations of the phenomenon, and to say that these explanations have been much appreciated by my brother officers and myself.

ALLAN J. LOW.

September 10.

The Convolvulus Hawk-Moth.

AN unusual number of the convolvulus hawk-moth has been noticed in this neighbourhood during the last month, and I venture to ask if a similar occurrence has come to light in other localities. The record, which is by no means exhaustive, extends chiefly some thirty miles along the coast, though some specimens have been captured twenty miles inland. It would be of interest to know whether this is an immigration from overseas or whether any of your entomological readers can advance a reason for their appearance.

C. E. ROBSON.

Hancock Museum, Barras Bridge,
Newcastle-upon-Tyne, September 14.

EXAMINATIONS IN SECONDARY SCHOOLS.

THE valuable Report published in 1911 of the Consultative Committee, of which the Right Hon. A. H. D. Acland was chairman, appointed by the Board of Education to consider the subject of examinations in secondary schools has borne tentative fruit in a series of regulations set forth in a circular of the Board, No. 996, dated May 25. This has now been given practical effect in the appointment of a Secondary-School Examinations Council, with the Rev. Wm. Temple, formerly headmaster of Repton School, as chairman (see p. 58). The council is comprised of representatives of the universities, of the Teachers' Registration Council, of the Association of Education Committees, of the various examination boards, and of the County Councils and Municipal Corporations Associations, but it contains no names *directly* representative of either boys' or girls' secondary schools, or of the Associations of Headmasters and Headmistresses concerned with them, or that of a single headmaster. This fact tends to deprive the Examinations Council of much weight, and of that direct personal association with the problems of secondary-school life which the occasion demands; and it would have been desirable also to include, especially in the present changed outlook and temper of employers, representatives of the great industrial organisations of the country. For some unexplained reasons the provision for nomination by a standing committee of professional bodies has been withdrawn after consultation with them.

It may be remembered that the report of the Consultative Committee reviewed in detail the origin and development of the multiplicity of external examinations of which the secondary schools in England are the subject, including the examinations of such bodies as the College of Preceptors, the Oxford Delegacy,

the Cambridge Syndicate, the Public Services, the London and Provincial Universities, and the numerous professions which demand special entrance examinations. It discussed the evil effects of all these diverse examinations on the work and *moral* of the secondary schools, preventing them from realising their true purpose, and instituting aims other than those of the efficient education and training of their pupils. It showed how, for example, the universities and the professions are to some extent defeating their own ends by their demands upon the schools and by their conflicting requirements, reducing the time available for methodical instruction and training, and leading to too early technical training, which lowers the value of the finished product of the school as a whole. Striking figures were given showing the number of pupils who passed to the universities from 371 secondary schools the subject of full inspection by the Board during the school years 1907-8 and 1908-9. Out of 14,789 pupils who left these schools during those two years, only 400 went to the universities, or 2.7 per cent.

A full consideration of all aspects of the question led the committee to the conclusion that, whilst external examinations were necessary and desirable in secondary schools, they must be brought under better regulations, reduced very largely in number, and intimately connected with a well-considered and adaptable scheme of inspection, so as to ensure a sound basis of liberal education free from specialisation. The report suggested that an examination should be instituted for the award of a secondary-school certificate, with due regard to the pupil's school record, open to candidates who have reached a class the average age of which is sixteen, and who have been in attendance at a secondary school for at least three years, and that the only other external examination should be one suitable to the attainments, general and special, of pupils of an average age of eighteen or nineteen in respect of whom a secondary-school higher certificate would be awarded.

These examinations, closely linked with inspection, it was suggested, should be organised by the Board of Education acting through an Examinations Council, which would include representatives of the universities, the professions, the local authorities, the teachers in different types of schools, and other persons with practical experience of industrial and commercial life, as well as of the official experience of the Board itself. It should be entrusted with the necessary powers to carry out the main principles laid down in the report.

In the concluding sentence of the report reference was made to the fact that seven years previously to its issue in 1911, namely, in 1904, this subject of the examinations in secondary schools had been referred to a like Consultative Committee and recommendations made, the main proposals of which were never embodied in practical action, and the committee plaintively urged that it could not contemplate the recurrence of such an unsatisfactory state of things, and