

Nyctanthes, the crescent-shaped ovular trace (Fig. 5A) soon after its entrance into the funicle divides into two bundles (Fig. 5B). These bundles repeat the division and some of the branches pass to the opposite side (Fig. 5C). These branches divide further, so that the ovule shows about its middle 25–30 bundles in the integument (Fig. 5D). Such extensive development of the integumentary vascular system has been observed so far only in a few other flowering plants. These have been listed by Dahlgren⁴. From comparison with the gymnosperms, the presence of such an integumentary vascular system is generally regarded as a primitive character⁵, but its occurrence in such gamopetalous forms as the Oleaceae and the genus *Echinops*⁴ of the Compositae together with its absence from such a primitive order as the Magnoliales raises a doubt that this character may be really a recent acquisition related to the development of an exceptionally thick integument.

The perianth traces in the Oleaceae are noteworthy for showing concentric structure, but specially interest-

ing is the vascular supply of the calyx in *Olea fragrans*. In this species, although the calyx is quite well developed, in many flowers there are absolutely no traces for the four sepals. In other flowers, two or three weak sepal traces are given out, but these disappear in the thalamus itself and never reach the sepals. The calyx is thus quite non-vascular. This supports Mrs. Arber's⁶ view that the vascular tissue is in no way more conservative than the organ it supplies.

The gynoecium of *Olea fragrans*, a cultivated garden shrub which does not set seed, consists of two whorls of opposite and decussate open carpels bearing ovules along their margins (Fig. 6). This abnormal structure of the gynoecium is the normal feature of this species in the material at our disposal.

¹ Fotidar, A. N., *J. Ind. Bot. Soc.*, 18 (1939).

² Joshi, A. C., *Amer. J. Bot.*, 23 (1936).

³ Holroyd, H., *Bot. Gaz.*, 78 (1924).

⁴ Dahlgren, K. V. O., *Svensk Bot. Tidsk.*, 18 (1924).

⁵ Wettstein, R. v., "Handbuch der systematischen Botanik" (1935).

⁶ Arber, A., *New Phytol.*, 32 (1933).

RURAL LIFE IN EUROPE

BY DR. L. DUDLEY STAMP

IT is one of the inevitable consequences of war that the steady march of social progress is interrupted by the more urgent problems of the moment. In Britain, for example, the great work of slum clearance and rehousing has been temporarily suspended, and it is actually possible in the lull to take stock of what has been achieved in the past twenty years. On the other hand, reforms which might have been delayed indefinitely may be rushed through if they have an important bearing on the prosecution of the War. The war-time ploughing programme of the Government may well be the salvation of British agriculture, and the evacuation to rural areas of both children and adults supplies just the stimulus which was needed to stem the tide of rural depopulation and the consequent disappearance of rural community life.

It is indeed certain that all the countries of Europe were becoming aware of the seriousness of the problems of rural life, and no fewer than twenty nations had agreed to take part in a European Conference on Rural Life—to be "devoted to the well-being and solidarity of the European peasantry"—under the auspices of the League of Nations at Geneva in October 1939. The Conference, a natural development of that on Rural Hygiene in 1931, was to have based its work on a series of documents previously prepared. The documents were of two main types: (a) illustrated national monographs, prepared officially according to a uniform plan, presenting in attractive style a résumé of the problems of rural life, and (b) studies on specific problems prepared by various international bodies.

Several of the national monographs were published¹—including those for Belgium, Finland, Latvia, Lithuania and Netherlands—and form handy summaries covering the organization of rural life and occupations, including education, medico-social policy and nutrition.

Of the second group of pamphlets, the International Labour Office prepared one on recreation in rural

areas and one on sickness and insurance; the International Institute of Intellectual Co-operation one on intellectual aspects of rural life, and the Health Committee of the League of Nations a general survey of medico-social policy. These surveys² suffer from the difficulty that they deal with political units so utterly different that comparisons are virtually impossible. The very word 'peasant' is rarely if ever applied to the English country dweller, and the problems here are obviously very different from those in eastern Europe. Nevertheless, it is remarkable that certain fundamental difficulties are apparent throughout—and outstanding is the inadequacy of rural housing. Cramped, overcrowded, ill-planned houses, frequently with antiquated sanitary arrangements, no piped water supply and lacking electric light not only affect health (for example, tuberculosis) but also prevent the proper use of leisure and opportunities for recreation and education which are otherwise available.

Rural housing is, after all, only one result of the fundamental economic position. A few years ago Lord Stamp³ summed up the whole problem in a single sentence: "the world as a whole and over a given length of time has almost certainly been fed below cost-price for the last hundred years, if one takes into account the proper elements of costs". The more advanced nations are often the last to recognize that the rural countryside needs above everything money. Britain is certainly no exception; with the drift to the towns from the impoverished country areas Britain has become more and more urban-minded as well as urban-dwelling. The Town and Country Planning Acts only conceive 'planning' in terms of urban expansion, whilst slum-clearance is regarded as a problem of the great cities despite the fact that the worst slum is often the farm labourer's cottage.

¹ Allen and Unwin, 40 Museum Street, London, W.C.1. 1s. 6d. each.

² Allen and Unwin, 9d. and 1s. each.

³ "World Agriculture: an International Survey", 1932.