

## BALANCE IN BRITISH FARMING

DR. H. G. SANDERS suggests in his presidential address to Section *M* (Agriculture) that the forty-seven years life-time of the Section has seen science applied to British agriculture at an ever-increasing rate, and there have also been violent economic changes. Farming systems which have been built up in more leisurely times have achieved a balance which might be upset by these scientific and economic impacts. There has clearly been an improvement in some aspects of the really basic factor—soil fertility. The lime status of the soils of Britain has been raised markedly and is still improving, and the increasing use of chemical fertilizers has led to better plant nutrient content. In regard to drainage the situation is less satisfactory. There is still uncertainty and much argument over the importance of maintaining the organic matter content of the soil, the danger being that, if it is allowed to fall, soil structure will be lost. New chemicals have proved powerful aids in keeping land clean, but there are obvious dangers in their indiscriminate use. On many farms the ley has replaced the root crop as the pivot of the rotation, and advanced practitioners are showing how great the production from newly established grass can be. Full summer utilization necessitates conserving surplus herbage at peak periods of growth, and silage fits better into advanced grazing control than hay. Much is known about the extra cost involved in making high-quality hay and silage, but little about the increased animal production from first-class material and its possibilities in

economizing expensive concentrated foods. There is urgent need for more applied research into such problems.

One aspect of balance in traditional farming systems has been the relation between the feeding-stuffs produced from the land and the head of live-stock maintained. A high degree of self-sufficiency is still a sensible economic aim, but its attainment depends on high-quality roughages and more precise knowledge of their potentialities, not only as maintenance ration but also for animal production.

A rough balance in the farming of Britain as a whole has grown up in a somewhat haphazard way. Sales of store sheep in Scotland are well established, and similar ones for store cattle have recently started and are developing rapidly on the Welsh border. The reverse movement of grain and straw from east to west is unorganized and depends on the initiative of individual merchants. British farmers have had outstanding success in the development of pedigree livestock, but the future will probably see more use of crossbreds for commercial exploitation. In poultry this is already widespread and in sheep also, though with them the benefits are often lost by continuing and indiscriminate crossing. The development of a system of pedigree breeders and crossing breeders to provide livestock for the ordinary farmer would help in the simplification of farming which advancing knowledge is making ever more necessary. The ultimate solution of this problem of keeping abreast with science should not be monoculture, but mixed farming with the more scientific processes in the hands of specialists.