cannot leave an outbreak area or invade a cultivated one without flying, aircraft methods of attacking them in flight are urgently required, especially in view of the large agricultural developments to which Britain is now committed in East and Central Africa.

For attacking flying swarms, the aerial curtain spray method was on the programme for trial in Kenya in 1945. It consists essentially in laying spray at right angles to the direction of flight, irrespective of wind. The spray from a single run would be largely wasted in sub-lethal doses, so the main problem is how to make repeated runs in the moving air in such a way that the sheet from each run is laid immediately over the preceding one, and the curtain so formed continuously contains the minimum necessary amount of poison. It was shown in 1945 that locusts could be killed in this way, and certain deficiencies were discovered[6]. Since then, advances have been made at Porton in the rather elaborate calculations of what happens to a falling curtain of this sort in relation to a swarm flying through it. Considerable improvements have also been made in the special aircraft equipment necessary, and increased knowledge has been gained of the amount and toxicity of spray droplets of different sizes picked up by locusts in flight[3]. Field trials of aerial curtain spraying are planned for this year.

In conclusion, it should be made clear that no one technique of locust control is likely to meet all requirements. It may ultimately be possible to prevent the occurrence of plagues of some species by changes in the ecology of the outbreak centres. In the meantime, constant vigilance is required over great areas, and insecticides will have to be used by a wide enough variety of methods to suit all circumstances.

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NEWS and VIEWS

Mathematics at University College, Leicester: Prof. R. L. Goodstein

AN interesting appointment has been made at Leicester to the newly created chair of mathematics. Dr. R. L. Goodstein, of St. Paul's School and Magdalene College, Cambridge, has been a lecturer at Reading since 1935. He has no less extensive a knowledge of mathematics, as commonly understood, than any of his contemporaries; but it was Wittgenstein who excited and inspired him, and he has made his reputation and won his position by original work on the foundations of mathematics. It is half a century since Russell first insisted that investigation into the principles of mathematics was a task for expert mathematicians, not for philosophers, but hitherto the subject has been one in which a mathematician could not take more than an amateur interest without endangering his professional status. A bad tradition has been shattered at last.

Institute of Metals (Platinum) Medal: Dr. R. C. Stanley

THE Institute of Metals (Platinum) Medal for 1948 has been awarded to Dr. Robert Crooks Stanley, chairman and president of the International Nickel Company of Canada, Ltd., in recognition of his outstanding services to the non-ferrous metal industries. Dr. Stanley, who was born at Little Falls, New Jersey, in 1876, was educated at the Stevens Institute of Technology and Columbia University. On the organisation of the original International Nickel Company in 1902, Dr. Stanley became assistant superintendent of the Camden (N.J.) Works, and eventually superintendent; in 1904 he was transferred to Bayonne as assistant general superintendent of the Orford Copper Co. At both plants he was responsible for a complete modernization programme. 'Monel', the white alloy of nickel and copper, owes its discovery in 1905 to Dr. Stanley, who conceived and developed the process for producing the alloy direct from ore without separating the nickel and copper. In 1917 he was elected a director, and in 1918 vice-president in charge of all operations of the International Nickel Company. When he became president in 1922, the nickel industry was at its lowest ebb, and one of his initial efforts was the formation of a Development and Research Division, through which thousands of commercial peace-time applications for nickel were established. Thus began probably the most vital phase of growth in the nickel industry. Following the acquisition of the Mond Nickel Company, Ltd., Dr. Stanley continued as president and became chairman in 1937. In both the First and Second World Wars, Dr. Stanley was responsible for greatly increasing nickel production for its many vital war uses.

University Halls of Residence

THE Report of a Commission appointed by the Committee of Vice-Chancellors and Principals of Great Britain and Ireland on "The Planning of University Halls of Residence" has recently been published (Oxford: Clarendon Press, 1948. 6*s*.). The chairman of the Commission was Dr. Keith Murray, rector of Lincoln College, Oxford, and the secretary, Prof. C. M. Attlee, formerly professor of education in University College, Nottingham. The Commission visited the most important universities and colleges which have residential halls or hostels (forty-seven altogether), and interviewed a number of authoritative witnesses. The investigation was thorough, so the Report is exhaustive, dealing with size and layout of residential halls, corridors and staircases, optimum size, finance and costs, administration and management. One appendix deals with the floor areas of all constituent rooms of a hall to accommodate 150 students and staff. Another lists equipment required, including furniture, crockery, cutlery, linen and domestic materials. A short bibliography is appended.

Care has been taken to consider the need for quiet and for adequate and suitable heating and lighting.