

SCIENCE

VOL. 96

FRIDAY, JULY 17, 1942

No. 2481

<i>Collective Farming in Russia and the Ukraine:</i> SIR JOHN RUSSELL	47	<i>Societies and Meetings:</i> <i>The Alabama Academy of Science:</i> WINNIE MCGLAMERY	65
<i>International Scholarships and Fellowships:</i> DR. FRANK AYDELOTTE	52	<i>Reports:</i> <i>The New York Botanical Garden</i>	65
<i>Scientific Events:</i> <i>Council for Scientific and Industrial Research of the Commonwealth of Australia; Work on Infantile Paralysis at the Johns Hopkins University; Commonwealth Fund Fellowships in Medicine and Public Health; Radio Programs on the War Work of Engineers; Honorary Degrees Conferred by Harvard University</i>	54	<i>Special Articles:</i> <i>Sulfhemoglobin Formation and Labile Iron in Vitro and in Vivo:</i> PROFESSOR GEORG BARKAN and PROFESSOR BURNHAM S. WALKER. <i>Skin Sensitivity to Human Plasma:</i> DR. MILTON LEVINE and DR. DAVID STATE	66
<i>Scientific Notes and News</i>	57	<i>Scientific Apparatus and Laboratory Methods:</i> <i>Elimination of Contaminants with Ultra-violet Radiation:</i> DR. ALBERT M. KLIGMAN. <i>Solubility of Anterior Pituitary Gonadotropin in Alkali Halide Solutions:</i> DR. DAVID O. ROSBASH and OTHERS	69
<i>Discussion:</i> <i>The Cultivation of Tobacco Among the Pueblo Indians:</i> PROFESSOR LESLIE A. WHITE. <i>Breeding Disease-Resistant Crops:</i> DR. FRED N BRIGGS. <i>Weather Forecasts:</i> B. E. SCHAAER. <i>Per Cent.:</i> DR. FERRIN B. MORELAND. <i>Health as a National Asset:</i> PROFESSOR THEODORE KOPPANYI. <i>Cementing Sino-American Friendship:</i> DR. EGBERT H. WALKER	59	<i>Science News</i>	8
<i>Quotations:</i> <i>Contributions to Science of the Johns Hopkins University</i>	62		
<i>Scientific Books:</i> <i>Thermodynamics; Physical and Chemical Constants:</i> DR. W. F. G. SWANN. <i>Sensation and Perception:</i> PROFESSOR R. S. WOODWORTH	63		

COLLECTIVE FARMING IN RUSSIA AND THE UKRAINE¹

By Sir JOHN RUSSELL, F.R.S.

DIRECTOR OF ROTHAMSTED EXPERIMENTAL STATION

At the outset I must remind you of a few geographical facts in regard to European Russia. It is a vast rolling plain, with no mountains except at its edges, but it has a backbone of higher land in the center so that most of the rivers rise here and wind slowly north, south or east to the sea. Moscow at the center owes its rise and development to the fact that it is near to all of them. The rainfall (including the snow) is highest in the west central part and falls off as you go to the southeast, but it is nowhere high by English standards: not more than 25 inches. In the wetter part there is much forest; coniferous trees and birch in the north, more deciduous trees in the center and to the south, but with much marsh. To the southeast, where the rain suffices for grass but not for trees,

¹ Afternoon lecture, Royal Institution of Great Britain, December 18, 1941.

there is the black earth and the steppe, and still further eastwards the steppe becomes more arid in character. The forest and the steppe have given a distinctive character to Russian life, just as its rivers have played a great part in shaping its history. It is impossible to convey any adequate impression of the vast size and almost endless solitude of Russia: even in 1935 only about 6 per cent. of the land of European and Asiatic Russia was in cultivation; the rest was mostly wild.

From early times the Russians adopted a system of agriculture very much like the old three-field system, with its scattered strips common in northern Europe. Alongside a feudal system very different from ours were the peasant Communes who held in common the land allotted to them, periodically redividing it among themselves. The peasants' share grew steadily, and

Science

96 (2481)

Science **96** (2481), 47-70.

ARTICLE TOOLS

<http://science.sciencemag.org/content/96/2481.citation>

PERMISSIONS

<http://www.sciencemag.org/help/reprints-and-permissions>

Use of this article is subject to the [Terms of Service](#)

Science (print ISSN 0036-8075; online ISSN 1095-9203) is published by the American Association for the Advancement of Science, 1200 New York Avenue NW, Washington, DC 20005. 2017 © The Authors, some rights reserved; exclusive licensee American Association for the Advancement of Science. No claim to original U.S. Government Works. The title *Science* is a registered trademark of AAAS.