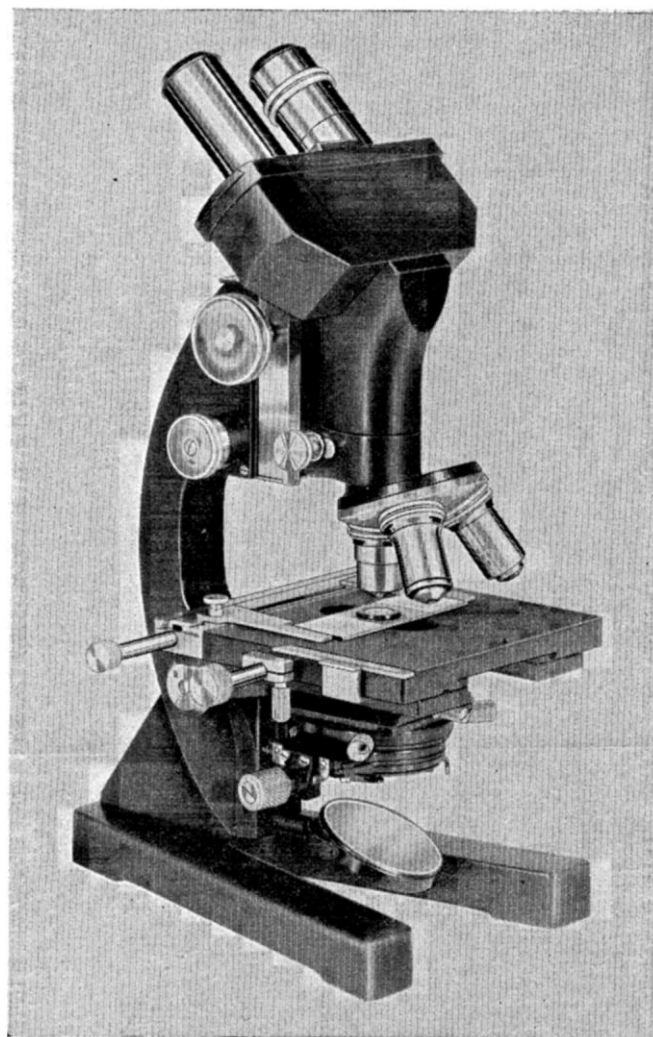


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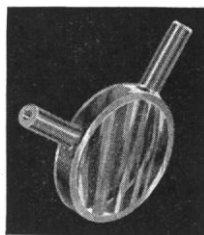
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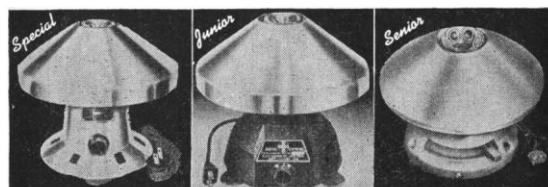
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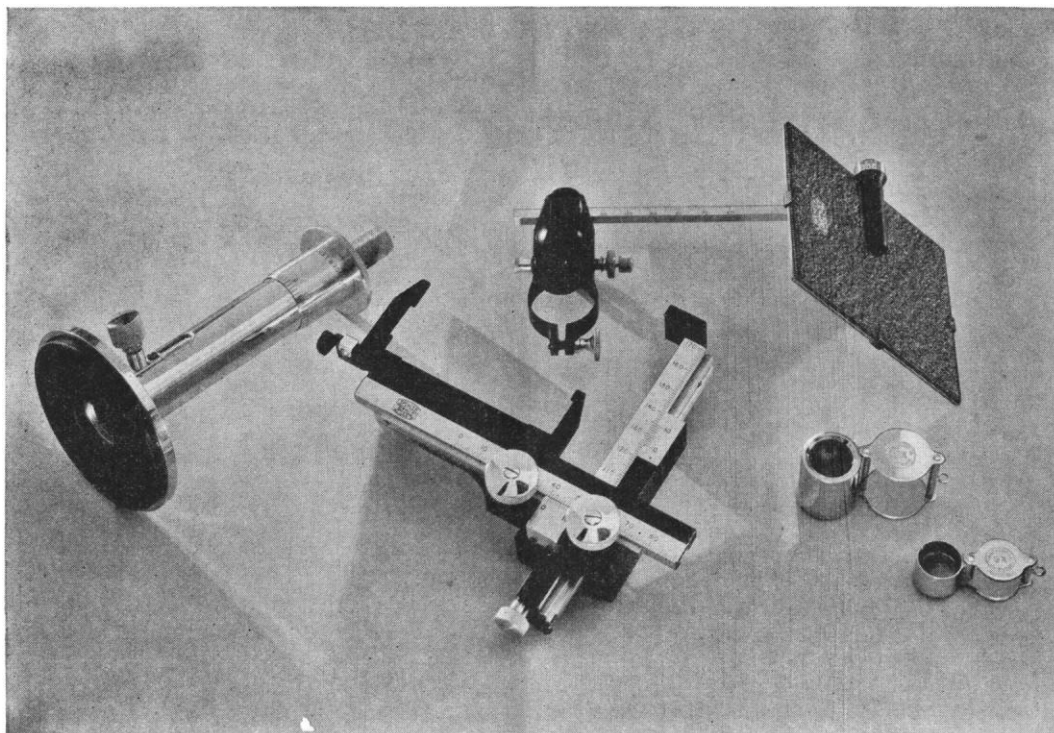
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FRIDAY, FEBRUARY 16, 1940

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<i>The American Association for the Advancement of Science:</i>	
<i>Science, War and Reconstruction:</i> DR. JULIAN SORELL HUXLEY	151
<i>The Gravity Anomaly:</i> DR. WILLIAM BOWIE	158
<i>Obituary:</i>	
Charles Zeleny: PROFESSOR FERNANDUS PAYNE.	
Almon Ernest Parkins: DR. S. C. GARRISON and DR. H. A. WEBB. <i>Recent Deaths and Memorials</i>	160
<i>Scientific Events:</i>	
<i>The New York Academy of Medicine; Symposium of the Society for Development and Growth; Research Conferences on Chemistry at Gibson Island; Bermuda Biological Station for Research; The Phipps Auditorium of the Colorado Museum of Natural History; Gifts for Scientific Research to Cornell University</i>	161
<i>Scientific Notes and News</i>	164
<i>Discussion:</i>	
<i>The Smaller Animals of the Great Plains:</i> PROFESSOR V. E. SHELFORD. <i>Anaplasmosis among Deer in the Natural State:</i> DR. WILLIAM HUTCHINS BOYNTON and GLADYS M. WOODS. <i>Increasing the Usefulness of Maps:</i> PROFESSOR R. L. EDWARDS	167

<i>Special Articles:</i>	
<i>Manganese Deficiency for Citrus in California:</i> DR. E. R. PARKER, DR. H. D. CHAPMAN and R. W. SOUTHWICK. <i>The Production and Utilization of Alcohol by Plant Tissues:</i> DR. C. A. LUDWIG and OTHERS. <i>The Effects of a Beef Liver Fraction upon Fat Synthesis in Rats:</i> PROFESSOR E. W. MC-HENRY and GERTRUDE GAVIN. <i>The Pigment of the Vertebrate Lens:</i> DR. GORDON L. WALLS	169
<i>Scientific Apparatus and Laboratory Methods:</i>	
<i>An Apparatus for the Study of Experimental Airborne Disease:</i> PROFESSOR W. F. WELLS. <i>Halowax-paraffine for Infiltrating Histologic Tissues:</i> PROFESSOR ED. D. CRABB	172
<i>Science News</i>	8

SCIENCE: A Weekly Journal devoted to the Advancement of Science, edited by J. McKEEN CATTELL and published every Friday by

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New York City: Grand Central Terminal

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SCIENCE is the official organ of the American Association for the Advancement of Science. Information regarding membership in the Association may be secured from the office of the permanent secretary in the Smithsonian Institution Building, Washington, D. C.

SCIENCE, WAR AND RECONSTRUCTION¹

By Dr. JULIAN SORELL HUXLEY

LONDON, ENGLAND

WHAT can a natural scientist say about war and reconstruction which can not be better said by a sociologist, a political scientist, a historian or a practical politician? He can at least attempt to see this war and the problem of war in general in the long-range perspective of science, even though, if he is not to indulge in the merest puerilities, he must not be afraid of leaving his last and becoming a "political animal" as well as a mere scientist.

War, in its proper sense of organized intra-specific group fighting, is a very peculiar phenomenon. So far as is known, it is confined to men and to a few species of ants. This does not mean that war is instinctive in man as it must be in ants. The evidence from some ancient civilizations, such as Mohenjo-Daro,

¹ The first address in America under the arrangement between the American Association for the Advancement of Science and the British Association for the Advancement of Science for exchange lectures on alternate years. Columbus, Ohio, December 29, 1939.

indicates that they were wholly pacific. In any case, the basic quality of man's nature is its plasticity, its absence of unalterable instincts. To say that it is hopeless to try to eradicate war because that would mean altering human nature is unscientific. It rests on a confusion between phenotypic human nature, as actually expressed, and human nature as something genetically given. The former can readily be modified, the latter can not. War is a phenomenon on a par with duelling and religious persecution. These latter have dropped out of civilized societies without any alteration in the genetic basis of human nature: and the same could be accomplished for war.

War is of course not the same as conflict. Conflict is a permanently inevitable feature of human life—internal conflict, conflict between individuals, conflict between groups. The overcoming of conflict in the right way is indeed an indispensable process in the development of human personality. But inter-group

needed to the chimney, and can be lifted when the injector flask is removed from the orifice entrance. Simple baffles distribute the air evenly through the bell jar.

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OPERATION

A routine run would be conducted as follows: The burner is removed, lighted and reset in the chimney. Animal cages are placed on the platform by lifting the bell jar. The flask containing the culture is weighed and set in position with the nozzle venturi above the pool of liquid. Compressed air under five pounds pressure is admitted to the nozzle, and the flask turned until the culture flows into the stopper well and begins to atomize into the flask. The pressure on the nozzle is now raised to 20 pounds. The degree of air infection is determined by samples taken with the air centrifuge at appropriate intervals. To close a run, the nozzle is lifted out of the liquid by turning the flask, without cutting down the pressure. After 15 minutes, the air is cut off. Another 15 minutes is permitted to flush out the bell jar.

The precautions used in handling animals depends entirely upon the nature of the infection and the animals. They may be dipped in disinfectant; they may be jacketed. Sometimes no precautions are deemed necessary beyond handling the animals with gloves.

W. F. WELLS

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This wax is superior to bayberry wax for hardening paraffine, for the mixture supports the tissue as well as paraffine containing bayberry wax and the sections stick together better, thus forming a much stronger ribbon. My students and I find that difficult tissues, such as thyroid gland and adnexa, small intestine, rabbit appendix and kidney section readily at 4–6 micra after being infiltrated and imbedded in paraffine containing 12 to 15 per cent. Halowax. Refined household paraffine served as well as imbedding paraffine of 50–52° m. p. for this purpose. The tissues were infiltrated in tumblers under desk lights. No difficulties that could be attributed to the use of Halowax were encountered in ordinary microtechnique in which several stains and various methods of staining were used.

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- JEFFREYS, HAROLD. *Theory of Probability*. Pp. vi + 380. 2 figures. Oxford University Press. \$7.00.
- STEWART, T. DALE and WILLIAM D. STRONG. *Anthropometric Observations on the Eskimos and Indians of Labrador*. Pp. 163. 1 figure, 16 plates. Field Museum, Chicago. \$1.75.
- WEISKOTTEN, HERMAN G. and others. *Medical Education in the United States, 1934–1939*. Pp. 259. American Medical Association, Chicago.
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