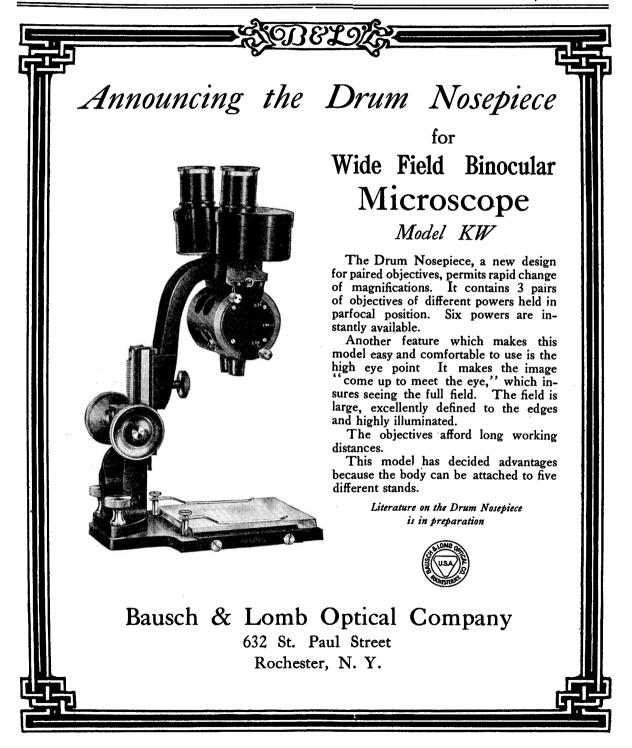
SCIENCE

NEW SERIES VOL. LXIV, No. 1651

FRIDAY, AUGUST 20, 1926

ANNUAL SUBSCRIPTION, \$6.00 SINGLE COPIES, 15 CTS.





SCIENCE

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

THE SCIENCE PRESS

Lancaster, Pa. Garrison, N. Y. New York City: Grand Central Terminal.

Annual Subscription, \$6.00. Single Copies, 15 Cts.

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.

Entered as second-class matter July 18, 1923, at the Post Office at Lancaster, Pa., under the Act of March 8, 1879.

SCIENCE AND CIVILIZATION¹

IF we go no farther than the dictionary, "science" implies organized knowledge, while "civilization" implies those arts and practices which pertain to a community life. But a community life, whether from the viewpoint of the clan, the village, the city, the state, the nation or the community of nations, implies specialization and cooperation. It means that one individual or group of individuals shall devote, in a restrictive way, time and human effort to the performance of some one task in an expert or specially effective way. And thus, with many individuals or groups of individuals, many tasks are undertaken, many things are accomplished and all go as contributions into the great pool of human product, and from which each individual or group of individuals, in return for its own contribution, draws the varied elements of life and comfort.

As we approach a more and more fully objective view of our world as it now is—a view and judgment as by our distant cousins on Mars—we shall perhaps see more and more clearly that the entire fabric of our present civilization is based on this reciprocal relation of give and take, like some vast chemical reaction which is ever proceeding toward some ultimate condition of equilibrium, but to which it will perhaps never attain. There is, then, this great pool of the product of human effort. Each individual, by contributing in some relatively expert fashion the product of his own effort, time and energy to this pool, becomes entitled thereby to draw therefrom such portion of the products of his fellows as he may need or as his own contribution may merit.

And furthermore, a wide range of the most serious problems of our civilization center about the ways and means of effecting this exchange and interchange. How as individuals may the farmer, the miner, the mechanic, the tradesman, the banker, the professional man, place most efficiently each his own contribution in this great pool and draw therefrom those contributions of others, needful and reasonably sufficient for life and comfort?

It was not always thus. There was a time in the evolution of man, when the individual, or at most the

¹ Address given at the Mills College meeting of the Pacific Division of the American Association for the Advancement of Science, June 18, 1896.



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