

THE SCIENTIFIC MONTHLY

CONTENTS

DEFECTS FOUND IN DRAFTED MEN. DR. C. B. DAVENPORT AND LIEUTENANT COLONEL ALBERT G. LOVE	5
THE HAVEN OF HEALTH. DR. GEORGE ERIC SIMPSON	27
THE DISADVANTAGES OF BEING HUMAN. PROFESSOR B. W. KUNKEL . .	38
THE MECHANISM OF EVOLUTION IN THE LIGHT OF HEREDITY AND DEVELOPMENT. PROFESSOR EDWIN GRANT CONKLIN	52
GROWING PLANTS AS HEALTH-GIVING AGENTS. DR. JAMES ANDERS . .	63
THE MICROSCOPIC IDENTIFICATION OF COMMERCIAL FUR HAIRS. DR. LEON AUGUSTUS HAUSMAN	70
THE DEFLECTION OF LIGHT BY GRAVITATION AND THE EINSTEIN THEORY OF RELATIVITY.	79
THE ORIGINS OF CIVILIZATION. PROFESSOR JAMES HENRY BREASTED . .	87
THE PROGRESS OF SCIENCE: The St. Louis Meeting of the American Association for the Advancement of Science; National Scientific Societies Meeting at St. Louis; The Rockefeller Institute for Medical Research; Problems of Food and Nutrition; Scientific Items	106

THE SCIENCE PRESS

LANCASTER, PA.

GARRISON, N. Y.

SINGLE NUMBER, 50 CENTS

YEARLY SUBSCRIPTION, \$5.00

COPYRIGHT 1919 BY THE SCIENCE PRESS

FEB 4 1920
FEB 10, 1920
UNIV. OF MASS.
FEB 4 1920
FEB 10, 1920
UNIV. OF MASS.

FEBRUARY, 1920

THE SCIENTIFIC MONTHLY

CONTENTS

THE TERMITODOXA, OR BIOLOGY AND SOCIETY. PROFESSOR WILLIAM MORTON WHEELER	113
DEFECTS FOUND IN DRAFTED MEN. C. B. DAVENPORT AND ALBERT G. LOVE	125
TONE COLOR. DR. T. PROCTOR HALL	142
MILTON'S IDEAS OF SCIENCE AS SHOWN IN PARADISE LOST. KATHERINE MORSE	150
SCIENCE AND SOCIAL UNREST. PROFESSOR ERNEST R. GROVES	157
POPULAR MISCONCEPTIONS CONCERNING NATURAL HISTORY. DR. ROGER C. SMITH	163
THE MECHANISM OF EVOLUTION IN THE LIGHT OF HEREDITY AND DEVELOPMENT. PROFESSOR EDWIN GRANT CONKLIN	170
THE ORIGINS OF CIVILIZATION. PROFESSOR JAMES HENRY BREASTED	183
THE PROGRESS OF SCIENCE: The St. Louis Meeting of the American Association for the Advancement of Science; The Dues of the American Association and the Salaries of Scientific Men; Grants for Research of the American Association; Scientific Items	208

THE SCIENCE PRESS

LANCASTER, PA.

GARRISON, N. Y.

SINGLE NUMBER, 50 CENTS

YEARLY SUBSCRIPTION, \$3.00

COPYRIGHT 1919 BY THE SCIENCE PRESS

MARCH, 1920

Vol. 10, No. 3
MAR - 5 1920
UNIV. OF MICH.

THE SCIENTIFIC MONTHLY

CONTENTS

SPACE, TIME AND GRAVITATION. PROFESSOR EDWIN BIDWELL WILSON	217
THE NEED FOR A MORE SERIOUS EFFORT TO RESUME A FEW FRAGMENTS OF VANISHING NATURE. DR. FRANCIS B. SUMNER	236
THE ORIGINS OF CIVILIZATION. PROFESSOR JAMES HENRY BREASTED	249
THE MECHANISM OF EVOLUTION. PROFESSOR EDWIN GRANT CONKLIN	269
A GRAPHIC METHOD OF MEASURING CIVILIZATION AND SOME OF ITS APPLICATIONS. DR. ROLAND M. HARPER	292
FINIS CORONAT OPUS. FRANK V. MORLEY	306
ON RHYTHM. PROFESSOR D. FRASER HARRIS	309
THE PROGRESS OF SCIENCE: The Critical Situation of Education and Science; The Salaries of Experts in the Fed- eral Service; The Conditions in the Government Service; Teaching Positions in the United States; Scientific Items	317

THE SCIENCE PRESS

LANCASTER, PA.

GARRISON, N. Y.

SINGLE NUMBER, 50 CENTS

YEARLY SUBSCRIPTION, \$5.00

COPYRIGHT 1919 BY THE SCIENCE PRESS

CENTRAL LIBRARY
APR 5 1920
THE SCIENTIFIC MONTHLY

THE SCIENTIFIC MONTHLY

CONTENTS

THE BEGINNINGS OF HUMAN HISTORY READ FROM THE GEOLOGICAL RECORD—THE EMERGENCE OF MAN. PROFESSOR JOHN C. MERRIAM	321
THE MEASURE OF EXCELLENCE IN SCIENTIFIC ACTIVITY. PROFESSOR R. D. CARMICHAEL	343
THE RELATION OF PHILOSOPHY AND THE SCIENCES. PROFESSOR G. R. WELLS	360
WHY DOES OUR PUBLIC FAIL TO SUPPORT RESEARCH? PROFESSOR T. D. A. COCKERELL	368
SCIENCE AND THE STATE. DR. WILLIAM SALANT	372
INERTIA. SIR OLIVER J. LODGE	378
THE MECHANISM OF EVOLUTION. PROFESSOR EDWIN GRANT CONKLIN	388
A NATURE DRAMA. PROFESSOR H. L. FAIRCHILD	405
THE PROGRESS OF SCIENCE: The Solar Eclipse of May 29, 1919, and the Einstein Effect; Professor Einstein on the Theory of Relativity; Scientific Items	419

THE SCIENCE PRESS

LANCASTER, PA.

GARRISON, N. Y.

SINGLE NUMBER, 50 CENTS

YEARLY SUBSCRIPTION, \$5.00

COPYRIGHT 1919 BY THE SCIENCE PRESS

Vol. 16, No. 5
GENERAL LIBRARY

MAY - 1920

MAY, 1920

THE SCIENTIFIC MONTHLY

CONTENTS

THE BEGINNINGS OF HUMAN HISTORY READ FROM THE GEOLOGICAL RECORD—THE EMERGENCE OF MAN. PROFESSOR JOHN C. MERRIAM	425
OCCUPATIONAL THERAPY IN TUBERCULOSIS. CAPTAIN FRANK A. WAUGH	438
ACADEMIC UNREST AND COLLEGE CONTROL. PROFESSOR J. J. STEVENSON	457
PHILOSOPHY IN THE SERVICE OF SCIENCE. PROFESSOR A. H. LLOYD	466
THE PROBLEM OF THE HISTORY OF SCIENCE IN THE COLLEGE CURRICULUM. PROFESSOR HENRY CREW	475
THE PLANETESIMAL HYPOTHESIS IN RELATION TO THE EARTH. PROFESSOR REGINALD A. DALY	482
THE MECHANISM OF EVOLUTION. PROFESSOR EDWIN GRANT CONKLIN	498
STATE PARKS IN IOWA. PROFESSOR L. H. PAMMEL	516
THE PROGRESS OF SCIENCE:	
The Northumberland House of Joseph Priestley; The Work in Industrial Chemistry of the American Chemical Society; Meat and Milk in the Food Supply; Scientific Items	523

THE SCIENCE PRESS

LANCASTER, PA.

GARRISON, N. Y.

SINGLE NUMBER, 50 CENTS

YEARLY SUBSCRIPTION, \$5.00

COPYRIGHT 1919 BY THE SCIENCE PRESS

GENERAL LIBRARY
JUN 4 1920
VOL. 10, NO. 6
UNIV. OF MICH.

JUNE, 1920

THE SCIENTIFIC MONTHLY

CONTENTS

RECENT CALIFORNIA EARTHQUAKES. DR. ANDREW H. PALMER	529
A POLICY FOR THE U. S. NATIONAL MUSEUM. PROFESSOR T. D. A. COCKERELL	553
GUSTAF RETZIUS, 1842-1919. DR. OLOF LARSELL	559
THE PHYSICAL SPENCER. DR. JAMES FREDERICK ROGERS	570
PRESENT ECONOMIC AND SOCIAL PROBLEMS. DR. DAVID JAYNE HILL . .	581
THE RATE OF EVOLUTION. PROFESSOR EDWIN GRANT CONKLIN	589
POPULATION. PROFESSOR E. M. EAST	603
THE PROGRESS OF SCIENCE: Encephalitus lethargica; The Wireless Telephone; Scientific Publications in English for the Nations of Continental Europe; Scientific Items	625
INDEX TO VOLUME X	631

THE SCIENCE PRESS

LANCASTER, PA.

GARRISON, N. Y.

SINGLE NUMBER, 50 CENTS

YEARLY SUBSCRIPTION, \$5.00

COPYRIGHT 1919 BY THE SCIENCE PRESS

INDEX

NAMES OF CONTRIBUTORS ARE PRINTED IN SMALL CAPITALS

- Academic Unrest and College Control, J. J. STEVENSON, 457
- American Association for the Advancement of Science, The St. Louis Meeting, 106, 211; Dues of, and the Salaries of Scientific Men, 213; Grants for Research, 215
- ANDERS, JAMES, Growing Plants as Health Giving Agents, 63
- BREASTED, JAMES HENRY, The Origins of Civilization, 87, 183, 249
- CARMICHAEL, R. D., The Measure of Excellence in Scientific Activity, 347
- Civilization, The Origins of, JAMES HENRY BREASTED, 87, 183, 249; and some of its Applications, A Graphic Method of Measuring, ROLAND M. HARPER, 292
- COCKERELL, T. D. A., Why does our Public fail to support Research?, 368; A Policy for the U. S. National Museum, 553
- CONKLIN, EDWIN GRANT, Mechanism of Evolution in the Light of Heredity and Development, 52, 170, 269, 388, 498; The Rate of Evolution, 589
- CREW, HENRY, The Problem of the History of Science in the College Curriculum, 475
- DALY, REGINALD A., Planetesimal Hypothesis in Relation to the Earth, 482
- DAVENPORT, C. B., and ALBERT G. LOVE, Defects found in Drafted Men, 5, 125
- Deflection of Light by Gravitation and the Einstein Theory of Relativity, JOSEPH J. THOMPSON, 79
- Disadvantages of being Human, B. W. KUNKEL, 38
- Drafted Men, Defects found in, C. B. DAVENPORT, ALBERT G. LOVE, 5, 125
- Earthquakes, Recent California, ANDREW H. PALMER, 529
- EAST, E. M., Population, 603
- Economic and Social Problems, DAVID JAYNE HILL, 581
- Education and Science, The Critical Situation of, 317
- Einstein on the Theory of Relativity, 422
- Evolution, The Mechanism of, in the Light of Heredity and Development, EDWIN GRANT CONKLIN, 52, 170, 269, 388, 498; The Rate of, EDWIN GRANT CONKLIN, 589
- FAIRCHILD, H. L., A Nature Drama, 405
- Finis Coronat Opus, FRANK V. MORLEY, 306
- Food, Supply, Meat and Milk in, 26; and Nutrition Problems of, 111
- Fur Hairs, The Microscopic Identification of Commercial, LEON AUGUSTUS HAUSMAN, 70
- GROVES, ERNEST R., Science and Social Unrest, 157
- HALL, T. PROCTOR, Tone Color, 142
- HARPER, ROLAND M., A Graphic Method of Measuring Civilization and some of its Applications, 292
- HARRIS, D. FRASER, On Rhythm, 309
- HAUSMAN, LEON AUGUSTUS, The Microscopic Identification of Commercial Fur Hairs, 70
- Health, The Haven of, GEORGE ERIC SIMPSON, 27
- HILL, DAVID JAYNE, Present Economic and Social Problems, 581
- History of Science in the College Curriculum, HENRY CREW, 475
- Human History read from the Geological Record, the Emergence of Man, JOHN C. MERRIAM, 321, 425
- Industrial Chemistry, Work on, 524
- Inertia, OLIVER J. LODGE, 378
- KUNKEL, B. W., The Disadvantages of Being Human, 38
- LARSELL, OLOF, Gustaf Retzius, 559
- LLOYD, A. H., Philosophy in the Service of Science, 466
- LODGE, OLIVER J., Inertia, 378
- LOVE, ALBERT G., and G. B. DAVENPORT, Defects found in Drafted Men, 5, 125
- Meat and Milk in the Food Supply, 26
- MERRIAM, JOHN C., Beginnings of

- Human History read from the Geological Record, the Emergence of Man, 321, 425
- Milton's Ideas of Science as shown in *Paradise Lost*, KATHERINE MORSE, 150
- MORLEY, FRANK V., Finis Coronat Opus, 306
- MORSE, KATHERINE, Milton's Ideas of Science as shown in *Paradise Lost*, 150
- Museum, U. S. National, A Policy for, T. D. A. COCKERELL, 553
- Natural History, Popular Misconceptions concerning, ROGER C. SMITH, 163
- Nature, The Need for a More Serious Effort to rescue a Few Fragments of Vanishing Nature, FRANCIS B. SUMNER, 236; Drama, H. L. FAIRCHILD, 405
- PALMER, ANDREW H., Recent California Earthquakes, 529
- PAMMEL, L. H., State Parks in Iowa, 516
- Philosophy, and the Sciences, the Relation of, G. R. WELLS, 360; in the Service of Science, A. H. LLOYD, 466
- Planetary Hypothesis in Relation to the Earth, REGINALD A. DALY, 482
- Plants Growing as Health Giving Agents, JAMES ANDERS, 63
- Population, E. M. EAST, 603
- Priestley, Joseph, The Northumberland House of, 522
- Progress of Science, 106, 211, 317, 419, 522, 625
- Research, Why does our Public fail to support?, T. D. A. COCKERELL, 368
- Retzius, Gustaf, OLOF LARSELL, 559
- Rhythm, D. FRASER HARRIS, 309
- Rockefeller Institute for Medical Research, 110
- ROGERS, JAMES FREDERICK, The Physical Spencer, 570
- SALANT, WILLIAM, Science and the State, 372
- Salaries of Experts in the Federal Service, 318
- Science and Social Unrest, ERNEST R. GROVES, 157; and the State, WILLIAM SALANT, 372; History of, in the College Curriculum, HENRY CREW, 475
- Scientific Items, 112, 216, 320, 424, 527, 630; Activity, the Measure of Excellence in, R. D. CARMICHAEL, 343
- SIMPSON, GEORGE ERIC, The Haven of Health, 27
- SMITH, ROGER C., Popular Misconceptions concerning Natural History, 163
- Societies, National Scientific, Meeting at St. Louis, 108
- Solar Eclipse of May 29, 1919, and the Einstein Effect, 419
- Space, Time and Gravitation, EDWIN BIDWELL WILSON, 217
- Spencer, The Physical, JAMES FREDERICK ROGERS, 570
- STEVENSON, J. J., Academic Unrest and College Control, 457
- SUMNER, FRANCIS B., The Need for a More Serious Effort to rescue a Few Fragments of Vanishing Nature, 236
- Teaching Positions of the United States, 120
- Termitodoxa, or Biology and Society, WILLIAM MORTON WHEELER, 113
- THOMSON, JOSEPH J., The Deflection of Light by Gravitation and the Einstein Theory of Relativity, 79
- Tone Color, T. PROCTOR HALL, 142
- Tuberculosis, Occupational Therapy in, FRANK A. WAUGH, 438
- WAUGH, FRANK A., Occupational Therapy in Tuberculosis, 438
- WELLS, G. R., The Relation of Philosophy and the Sciences, 360
- WHEELER, WILLIAM MORTON, Termitodoxa, or Biology and Society, 113
- WILSON, EDWIN BIDWELL, Space, Time and Gravitation, 217