

The April Meeting of the Rocky Mountain Section Source: The American Mathematical Monthly, Vol. 39, No. 10 (Dec., 1932), pp. 566-567 Published by: <u>Mathematical Association of America</u> Stable URL: <u>http://www.jstor.org/stable/2300502</u> Accessed: 16/01/2015 13:00

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THE APRIL MEETING OF THE ROCKY MOUNTAIN SECTION

The sixteenth regular meeting of the Rocky Mountain Section of the Mathematical Association of America was held at the University of Wyoming, Laramie, Wyoming, on Friday and Saturday, April 15 and 16, 1932. There were three sessions, Professor O. H. Rechard, chairman of the Section, presiding at each.

The attendance was thirty-five, including the following thirteen members of the Association: Jack Britton, Pauline F. Folk, G. W. Gorrell, C. A. Hutchinson, M. H. Ingraham, A. J. Kempner, Claribel Kendall, A. J. Lewis, S. L. Macdonald, A. S. McMaster, O. H. Rechard.

At the business meeting the following officers were elected for the ensuing year: Chairman, A. G. Clark, Colorado Agricultural College; Vice-Chairman, W. V. Lovitt, Colorado College; Secretary, A. J. Lewis, University of Denver.

Members of the Association and friends were guests of the University of Wyoming at a dinner on the evening of April 15. The principal speakers at the dinner were President A. G. Crane, of the University of Wyoming, and Professor S. L. Macdonald, of the Colorado Agricultural College. The Section was fortunate in having Professor M. H. Ingraham, of the University of Wisconsin, present as guest speaker.

The following seven papers were read:

1. "Operational calculus" by Professor C. A. Hutchinson, University of Colorado.

2. "Contributions of mathematics to life insurance" by Professor G. W. Gorrell, University of Denver.

3. "The Baire classification of functions" by Professor O. H. Rechard, University of Wyoming.

4. "The development of the postulational method in mathematics" by Professor M. H. Ingraham, University of Wisconsin.

5. "The teaching of calculus" by Professor S. L. Macdonald, Colorado Agricultural College.

6. "Geometric progressions" by Professor A. J. Kempner, University of Colorado.

7. "Controversial topics in mathematical logic" by Professor M. H. Ingraham, University of Wisconsin.

Abstracts of the papers follow, the numbers corresponding to the numbers in the list of titles:

1. This paper is expository in character, and presents the salient features of the operational calculus, as applied to the solution of problems in electrical engineering.

2. This paper gives a brief history of the problem of life insurance and shows the role mathematics has played in its development.

3. In this paper, Professor Rechard presents the Baire method of classifying functions as given by Baire in his dissertation "Sur les functions de variables

réelles" published in "Annali di Matematica Pura et Applicata" in 1899. Functions of classes one, two, and three are exhibited and the classical proofs **are** given that the classification can be correct to any number α of the first or second class, but is not exhaustive. Comparison is made between the Baire, Young, and Sierpinski methods of classification. Some of the questions which need to be answered before a necessary and sufficient condition can be found for a function to be of class two, Baire, are suggested.

4. This paper discusses the historical development of the postulational method, and the major characteristics and uses of this method. Especial attention is paid to the use of the method for generalization, in which case the postulates should be non-categorical, and for establishing isomorphisms in which case they should be categorical. As illustrations, the postulates for a field, for Euclidean geometry, and Huntington postulates for an arithmetic mean are used. It is pointed out that at least logic is generally assumed as a background for sets of mathematical postulates.

5. It is the belief of the writer that in an elementary course in calculus, definitions, principles and descriptive matter should be reduced to a minimum consistent with clearness and rigor. It is maintained in this paper that most text books are at fault in this particular. The paper maintains that the derivative is not a rate, it is not a slope. The derivative is the limit of a ratio and is an entirely abstract concept. Rate and slope are merely properties of the derivative. By making clear that in certain cases a distinction is necessary between the limit of a ratio and the ratio of the limits the writer holds that the definition of the derivative may be clarified, which is seldom done by text book writers.

7. This paper discusses some of the current attempts to examine and explain the relation of logic to mathematics. In particular three schools of thought are considered. 1) The school led by Russell which attempts to define all mathematics in logical terms. 2) The school led by Brouwer which makes mathematics prior to logic and places stringent limitations on the use of classical logic. 3) The school led by Hilbert which is interested in the formal structure of mathematics and the questions of formal consistency, and studies mathematics as a set of marks on paper which are made in accordance with certain rules. The attempt is made to give a sympathetic discussion of each of these three points of view. A. J. LEWIS, Secretary

ERNEST JULIUS WILCZYNSKI

Ernest Julius Wilczynski was born in Hamburg, Germany, on November 13, 1876, and died in Denver, Colorado, on September 14, 1932, after a lingering illness of about ten years. With respect to his original contributions to existing mathematical knowledge, his influence on the development of mathematical institutions in the United States, his interest in the promotion of good teaching,