# LOUIS AGASSIZ AND THE HALL OF FAME<sup>1</sup>

NEARLY a century ago Louis Agassiz, following his friend Charpentier, boldly set before his confreres in the infant Academy of Neufchatel the novel and apparently revolutionary theory of a Glacial Age in which a mantle of ice covered the Alps and extended widely over Europe. This induction, conceived during his vouthful encampment upon the Aar Glacier and his descent into its very heart, led step by step to our present knowledge of the repeated glaciations not only of the northern hemisphere but of the entire globe. The ten years between 1837 and 1847 Agassiz devoted to establishing this theory, and from the time of his arrival in Massachusetts in 1846 he was delighted to witness the vestiges of glaciation in North America, and before he passed away in 1873 he experienced the conversion of a startling and fantastic hypothesis into a well-established principle of the earth's history. This brilliant induction at the age of thirty yields the secret of Agassiz's great career, epitomized on the walls of his Penikese laboratory in four words: "Read Nature Not Books." For, next to his unrivaled inspiration as a teacher came his revolutionary insistence upon direct recourse to nature summed up in one of his most beautiful sentences. "If you study nature in books, when you go out-of-doors you can not find her." There never was a day in American educational history in which this observational method of Agassiz was more glaringly needed than the present day.

The little Swiss Canton of Neufchatel vielded not less than three great gifts of Switzerland to the United States—to Princeton University Arnold Guyot, comrade of Agassiz in glaciation; to our National Geological Survey Leo Lesquereux, classmate and comrade in botany; to all America Louis Agassiz, naturalist, geologist, zoologist. The French and Swiss social revolution of 1848, which hastened the departure to our shores of these three great men, inaugurated among us a scientific metempsychosis, the effects of which are quite beyond calculation. Into our practically virgin field of natural history, Agassiz brought the great traditions of his master, Cuvier, the brilliant founder of paleontology; of Humboldt, then the most influential scientist of Europe; of the British geologists, Buckland, Murchison, Sedgwick and Lyell. While never destined to be a disciple of Darwin, he paved the way for evolution through newer conceptions of creation in his titanic researches on living and fossil fishes, as well as through the vistas of geo-

<sup>1</sup> Address at the Hall of Fame of New York University, on Thursday, May 10, 1928, at the unveiling of a bust of Jean Louis Rudolphe Agassiz.

logic time in his glaciation theory and in his insistence upon the observation of nature.

Following to America the ardent French pioneers and explorers. Rafinesque. Bonaparte. Audubon and Lessen. Agassiz brought with him the great traditions and canons of the European school as well as the example of research and publication in all branches of natural history, especially the life of the sea. Our birds, mammals and reptiles had been discovered and described by early French, Spanish and English explorers; it remained for Agassiz to explore our beautiful seacoast and to show the romance in the life of the sea. Thus his third great contribution to America was his creation of a school of explorers of the world beneath the waters—a school which numbered among its pupils all the distinguished men of American biology enrolled in our National Academy of Sciences between the years 1846 and 1873, besides the hundreds and even thousands of lavmen who were attracted by his contagious enthusiasm.

To his leadership, exerted to arouse public interest and attention, we owe directly our seashore laboratories and many of our museums. It was he who inspired young Albert Bickmore, the creator of the American Museum of Natural History, and his own son Alexander, the founder and benefactor of the Cambridge Museum of Comparative Zoology, in the days when the National Museum of the Smithsonian Institution and others were not yet dreamed of. Every American college and university of the fifties, sixties and seventies filled its chairs of zoology by a pupil of Agassiz. Thus his influence extended a thousandfold.

These are the four outstanding reasons why the bronze portrait of Louis Agassiz should be placed in this Hall of Fame to-day. Is it not a felicitous example of the power of heredity that Alpheus Hyatt, perhaps the most original and skilful disciple of Agassiz and a master of form in the science of paleontology, should be the father of Anna Vaughn Hyatt, the very gifted sculptress, who has to-day in this beautiful bronze perpetuated the name and fame of Louis Agassiz.

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### ERNST J. LESSER

THE sudden death of Dr. E. J. Lesser, biological chemist at the City Hospital in Mannheim, Germany, involves a very great loss to medical science. He possessed the qualities of the true research worker in a very exceptional degree. He had insight and enthusiasm;—and these were combined with exemplary

patience, caution, self-criticism and a remarkable technical skill. Those who knew him were impressed by his gifted, generous and beautifully modest personality as well as by his deep understanding of other fields of knowledge. Dr. Lesser studied medicine in Freiburg and Munich. After taking his degree he worked in the physiological laboratories of Voit in Munich and Bernstein in Halle. In 1906 he was made "Privatdozent," submitting a thesis on the electromotoric force of the current of the frog skin. The following years mark the beginning of a series of investigations on life without oxygen, which led to the important observation that there occurs a restitution of glycogen when frogs are allowed to recover after a period of anoxibiosis. This phenomenon of oxidative recovery is now one of the basic laws of muscle physiology. In 1910 Dr. Lesser accepted the position in Mannheim, which he held until his death, with only a short interruption during the war, when he substituted as professor of biological chemistry at the University of Strasbourg. His work on the diastatic ferment of the liver led him into a broad investigation of carbohydrate metabolism which made him a recognized leader in this field. Here he succeeded in the preparation of an active extract of the pancreas, but before he was ready to publish his results, which he wanted to elaborate as far as possible, there appeared the first paper of Banting on insulin. Interested only in the progress of science and not in personal matters. he kept this fact secret—only his intimate associates knew of it—and never made any claims of priority. His series of papers on the nature of the action of insulin is a classic and his summarizing articles in text-books and reviews are proof of the clarity and penetration of his mind. Not surrounded by the glamor of an academic position, he did not receive the full recognition of the high qualities of his character and his work at the early age at which he died.

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#### SCIENTIFIC EVENTS

## THE SECOND INTERNATIONAL CONFER-ENCE ON BITUMINOUS COAL

Between 60 and 70 scientists and fuel technologists in eleven different countries have tentatively accepted invitations to speak at the second International Conference on Bituminous Coal, which will be held at the Carnegie Institute of Technology in Pittsburgh, Pennsylvania, during the week of November 19. The list includes about forty Europeans whom Dr. Thomas S. Baker, president of the Carnegie Institute of Technology in Pittsburgh, Pennsylvania, during the week of November 19.

nology, personally invited while making his recent two months' visit in Europe in the interests of the conference.

It is announced that the purpose of the congress is similar to the one held in 1926 by the Carnegie Institute of Technology: to present the results of recent studies of coal that have to do with improved methods of utilization and combustion. The program will include the discussion of low temperature distillation, high temperature distillation, coal tar products, power, smokeless fuel, complete gasification of coal, hydrogenation, pulverized fuel and its new applications, fixation of nitrogen, coal beneficiation, etc.

Upon his return from Europe in April, President Baker expressed the opinion that the second conference will be much larger in scope and importance than the first, and that the number of delegates from foreign countries will be considerably in excess of that at the 1926 meeting, when thirteen different nations were represented.

Among the distinguished scientific men in Europe who have either definitely or tentatively accepted invitations to speak are the Right Honorable Sir Alfred Mead, Harald Nielsen, Dr. Cecil H. Lander and Dr. R. Lessing, of England: Donat Agache, president of the executive board of the Kuhlmann plants: André Kling, director of The Municipal Laboratories of Paris, and Henri Lafond, International Company for the Manufacture of Gasoline and Oils, France: Dr. Friedrich Bergius, inventor of the Bergius process for the production of oil from coal; Dr. Franz Fischer, director of the Kaiser Wilhelm Institute for Coal Research; Professor Fritz Hoffman, inventor of a process for manufacturing synthetic rubber from coal; Dr. Carl Krauch, director of the I. G. Dye Trust, and Rudolph Rawlikowski, of the Cosmos Machine Construction Institute, Germany, and many others.

Professor Sumner B. Ely, of the Carnegie Institute of Technology, is secretary of the conference. The advisory board includes John Hays Hammond, E. M. Herr, Samuel Insull, Frank B. Jewett, Otto H. Kahn, George E. Learnard, the Honorable A. W. Mellon, Auguste G. Pratt and Charles M. Schwab.

# THE SIXTH NATIONAL COLLOID SYMPOSIUM

THE Sixth National Colloid Symposium will be held under the auspices of the Colloid Division of the American Chemical Society at Toronto, Canada, June 14, 15 and 16, 1928, with Sir William B. Hardy, of Cambridge, England, as the guest of honor. The following program of papers has been announced by the chairman, Professor Harry B. Weiser, The Rice Institute, Houston, Texas.