fields, must for a long time prepare the way for the formulation of richer and more fundamental conclusions and general principles than we have yet been able to achieve. We should not wait for some one to state or demonstrate these laws. This is yet, even for a genius, impossible. We must contribute in partial, microscopic, sometimes unconscious ways to the emergence of such laws.

Professor Adams, speaking of the available and most useful tasks of the historian, has a word which is equally good for us,

> To furnish materials, to do preliminary work, is to make a better contribution to the final science than to yield to the allurements of speculation, to endeavor to discover in the present state of our knowledge the forces that control society, or to formulate the laws of their action.[64]

Not only is this a model principle, but it emphasizes the value of our goal, for the real philosophy of history will not be written until geographic factors have had broader and deeper recognition. Here I do not speak as a geographic enthusiast, nor in denial of the supremacy of the human spirit.

Such then is the mode of advance of our science—the old story of interest, hypothesis, test, correction, publication, criticism, revision; progress by error, by half truth, by zigzag, spiral and apparent retrograde; by aero-flight, by patient tunneling; some at the salients of progress, and some in the ranks of humble endeavor, the goal in front of all.

ALBERT PERRY BRIGHAM
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LEWIS LINDSEY DYCHE

LEWIS LINDSEY DYCHE, professor of systematic zoology and curator of the collections of mammals, birds and fishes, at the University of Kansas, died in Topeka, Kansas, Wednesday, January 20, 1915. Professor Dyche was intimately associated with the life of the university for nearly thirty-eight years, having seen nearly every class graduated from the institution. His first connection with it was as a student in the preparatory department. He entered the middle class of the preparatory department in September, 1877, at the age of twenty years, being registered from Auburn, Kansas. James Marvin was then chancellor of the university. There were 12 members of the faculty and a total attendance of students of 361, of whom 110 were of college grade. Mr. Dyche finished the senior preparatory work at the end of the next year and in September, 1879, became a freshman in the collegiate department, enrolling as a student in the classical course. In the year 1880, however, on entering his sophomore year, he changed his work to that of natural history. He became a junior in the collegiate department in the regular course of events in September, 1881, still enrolled in his newly chosen field of natural history.

In 1882 Mr. Dyche was made instructor in natural history, but retaining his place in the junior class. He continued his connection with the instructional side of the university until his death. Mr. Dyche was graduated from the university in June, 1884, receiving two degrees, that of Bachelor of Arts and that of Bachelor of Sciences, he having combined both the classical and scientific work then offered in the university. He continued his study in natural history at the university of Kansas by entering the postgraduate course in September, 1884, receiving his Master of Arts degree in 1886 and his Master of Science degree in 1888. His teaching title was during these years "assistant," being equivalent to the title of assistant professor at the present time.

In September, 1888, he was advanced from the rank of assistant in natural history to that of full professor of anatomy and physiology, taxidermist and curator of mammals, birds and fishes. In 1890 zoology was added to his list of teaching subjects. We must remember, however, that in the nineties the number of both students and teachers was small and

[64] Geo. B. Adams, *Am. Hist. Rev.*, 14, 236.

the field of work had not been so carefully differentiated as at present. In September, 1892, physiology and anatomy were dropped from his title and he limited himself to the field which he occupied with little change until the end of his career. His title became professor of zoology, taxidermist and curator of mammals and birds. Francis H. Snow was then chancellor of the university.

It stood thus until 1899 when anatomy for a year was again put in his charge and his title of curator was that of curator of zoological collections. In the very next year we find anatomy cared for in a separate department and Professor Dyche returning to his work under the title of professor of systematic zoology and taxidermist. In 1903 the title of taxidermist was dropped as being unnecessary and Professor Dyche was given the title which he retained until his death, namely, that of professor of systematic zoology and curator of mammals, birds and fishes. In 1901 the legislature of the state, largely through the efforts of Professor Dyche, appropriated $75,000 for the erection of a natural history museum for the housing of the natural history collections. The building was finished in 1902, a considerable part of it being given over to the extensive and important collection of North American mammals and birds.

On December 1, 1909, Professor Dyche was given partial leave of absence in order that he might act as fish and game warden for the state of Kansas. This action was taken by the board of regents of the university at the request of the then governor, W. R. Stubbs. This request was acceded to for the reason that of all men in the state of Kansas Professor Dyche was the most competent in every way to carry on a large project of this character on a scientific basis. It was acceded to also with the belief which has been fully substantiated that the fish hatchery under his supervision could be put upon an economic and scientific foundation.

Since December, 1909, Professor Dyche has given most of his time to the fish and game wardenship although still connected with the university as professor of systematic zoology and curator of mammals, birds and fishes. For some years prior to 1909 Professor Dyche had done little or no undergraduate class work, confining himself to work as curator, investigator and writer, and to such occasional graduate work as was desired by students expecting to enter the museum field.

During his long career as a teacher, in connection with other university men, he took part in or conducted many scientific expeditions, twenty-three in all it is said, for the collection of museum material. These expeditions covered practically all of North America. Some of the most important were to Greenland and the Arctic regions. Of the Peary expedition and the rest it is not for me to speak. They were filled with strenuous endeavor and many thrilling experiences. Indeed few men even of bygone border times could equal his experiences in this respect. He was a noted hunter and won his place as an explorer, his talents as naturalist, woodsman, hunter and explorer being of a high order. The result of all of this was no doubt to shorten his days but he helped build up large scientific collections of great value into which he had put his life and he saw them become an integral part of the university which he loved. He was one of the charter members of the chapter of Sigma Xi at the University of Kansas. He lectured much and in this field was exceedingly graphic and interesting. He wrote much, his last writings being in the shape of bulletins in regard to fish culture in the large. These bulletins are much sought after and show the results of a life time of close observation and study. As a taxidermist he had few equals, his knowledge of the pose and habits of animals and the habitat in which they live being unusually accurate. His fidelity to nature, his great skill and his keen observation are well attested by the brilliant display of North American mammals which he was largely instrumental in preparing at the University of Kansas.

Professor Dyche had in larger degree than most men the creative instinct, the instinct

of originality. He had immense persistence and enthusiasm, well attested by his accomplishments against great odds. A mere study of his life is in itself thrilling. He leaves an honored name of which his family may well be proud. He was an extremely likeable man, a loyal son of his university who brought much honor to his alma mater.

FRANK STRONG

UNIVERSITY OF KANSAS

THE BONAPARTE FUND OF THE PARIS ACADEMY OF SCIENCES

THE committee appointed to deal with the allocation of the Bonaparte Fund for the year 1914, has, we learn from *Nature*, made the following proposals, which have been unanimously adopted by the academy:

1. 2,000 francs to Pierre Breteau, to enable him to pursue his researches on the use of palladium in analysis and in organic chemistry.

2. 2,000 francs to M. Chatton, to give him the means of continuing his researches on the parasitic Peridinians.

3. 3,000 francs to Fr. Croze, to enable him to continue his work on the Zeeman phenomenon in band and line spectra, the amount to be applied to the purchase of a large concave grating and a 16-cm. objective.

4. 6,000 francs to Dr. Hemsalech, for the purchase of a resonance transformer and a battery of condensers for use in his spectroscopic researches.

5. 2,000 francs to P. Laïs, director of the Vatican Observatory, to assist in the publication of the photographic map of the sky.

6. 2,000 francs to M. Pellegrin, to facilitate the pursuit of his researches and the continuation of his publications concerning African fishes.

7. 2,000 francs to Dr. Trousset, to aid him in his studies relating to the theory of the minor planets.

8. 2,000 francs to M. Vigouroux, to assist him in continuing his researches on silicon and its different varieties. These researches, in which it is necessary to make use of hydrofluoric acid, necessitate the use of expensive receivers.

9. 3,000 francs to M. Alluaud, for continuing the publication, undertaken with Dr. R. Jeannel, of the scientific results of three expeditions in eastern and central Africa.

10. 9,000 francs to be divided equally between MM. Pitard, de Gironcourt, and Lecointre, all members of the scientific expedition to Morocco organized by the Société de Géographie.

11. 2,000 francs to Professor Vasseur, to assist him in his geological excavations in a fossil-bearing stratum at Lot-et-Garonne.

12. 3,500 francs to Dr. Mauguin, for the continuation of his researches on liquid crystals and the remarkable orientation phenomena presented by these singular bodies when placed in a magnetic field. The grant will be applied to the construction of a powerful electromagnet.

13. 2,000 francs to Dr. Anthony to meet the cost of his researches on the determinism of the morphological characters and the action of primary factors on the course of evolution.

14. 4,000 francs to Professor Andoyer, a first instalment towards the cost of the calculation of a new table of fifteen figure logarithms.

15. 4,000 francs to M. Bénard, to enable him to continue his researches in experimental hydrodynamics on a large scale.

16. 2,000 francs to Dr. Chauvenet, to enable him to continue his researches on zirconium and its complex combinations.

17. 2,000 francs to Professor François Franck, for the chronographic study of the development of the embryo, with special examination of the rhythmic function of the heart.

18. 2,000 francs to Professor Sauvageau, for the pursuit of his studies on the marine algæ.

SCIENTIFIC NOTES AND NEWS

THE gold medal of the Royal Astronomical Society has been conferred on Professor A. Fowler for his work in astrophysics.

THE Berlin Anthropological Society has awarded its Rudolf Virchow Medal to Dr. Karl Poldt, emeritus professor of anatomy in Vienna.

PROFESSOR FRITZ HABER and Professor R. Willstätter, both of the Kaiser Wilhelm Institute for Chemistry, have been elected members of the Berlin Academy of Sciences.

DR. HANS MEYER, known for his explorations in Africa, has been elected honorary professor of colonial geography in the University of Leipzig.

DR. PIERRE WEISS, professor of physics in the Zurich Technical School, has been awarded