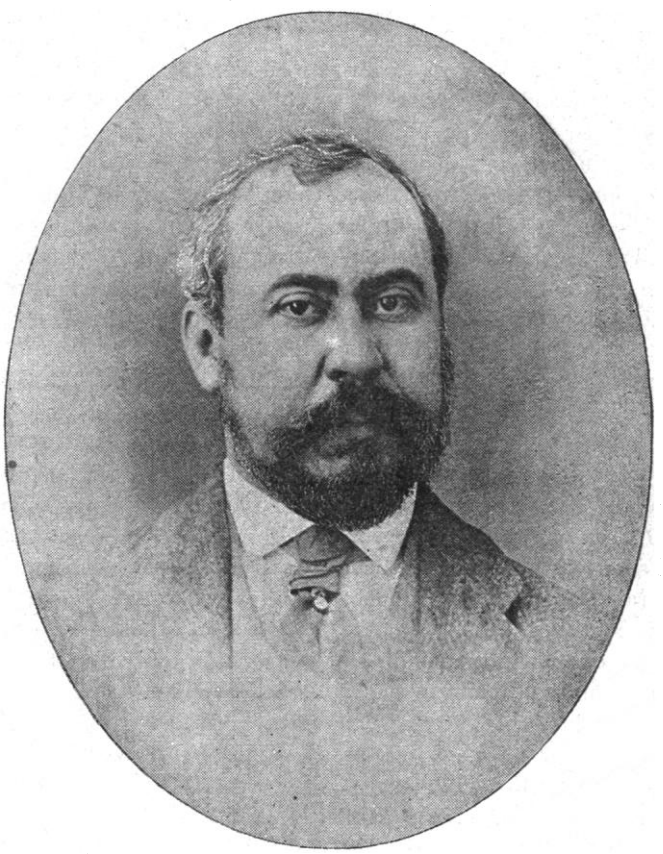
SCIENCE.

FRIDAY, DECEMBER 21, 1883.

JOHN LAWRENCE LECONTE.

AMERICAN science has suffered a sad loss in the death of one of its best-known exponents. An advanced leader in his own department, profound and accurate in his labors, a cultured scholar, a genial companion and a true friend, — such a man was LeConte.



Ever sincerely yours
John L. LeConte

John L. LeConte, the son of Major John Eaton LeConte and Mary A. H. Lawrence, was born May 13, 1825, in New-York City. When but a few weeks old, his mother died, and the father thenceforward devoted himself to the care and development of his only child. The father died in 1860, having seen his son rise to a foremost place among the naturalists of his day.

On arriving at suitable age, he was placed in St. Mary's college, Maryland, from which he was graduated in 1842. The discipline of the school was severe, the training accurate and thorough. Early in his pupilage he exhibited decided tastes for natural-history studies outside of the scholastic course, greatly to the alarm of his tutors. The father, on being apprised of this, was greatly pleased, and directed that the tendencies should not be repressed, inasmuch as the boy exhibited no deficiency in his regular studies. His progress in the study of mathematics and languages was rapid and thorough, and doubtless laid the foundation for the accuracy and retentiveness of his memory, so marked in his maturer years. After the completion of the college course, he returned to his native city, and entered the College of physicians and surgeons of New York, receiving his medical degree in 1846.

For many years Major LeConte had been in correspondence with European entomologists, notably Dejean, and laid the foundation of the cabinet, now greatly enlarged, which made the basis of the future labors of the son. In 1844 the first essays of the latter in original work made their appearance, with unmistakable evidences of his youth and inexperience.

During 1849 he made several visits to the Lake-Superior region, once in company with Professor Agassiz, collecting largely, and publishing the results in Agassiz' work on that region. In the autumn of 1850 he visited California, remaining the greater portion of the following year, stopping for a while at Panama, collecting largely in many departments of natural history in a region in which nearly every thing was new to science, extending his explorations through the Colorado desert and as far east as the Pima villages. The material collected in these regions was carefully studied on his return, and the results published in the annals of the New-York lyceum. In 1852 the LeContes removed to Philadelphia, where the greater portion of the scientific labors of both have since been published. For a few months in 1857 LeConte accompanied the Honduras interoceanic survey, under the late J. C. Trautwine, publishing his observations in the report of that expedition. He visited at the same time the Fuente de Sangre, contributing an account of that phenomenon in Squier's 'Nicaragua.'

After these voyages, LeConte's scientific labor was uninterrupted until the breaking-out of the war. In 1862 he was appointed surgeon of volunteers, and shortly after made medical inspector with the rank of lieutenant-colonel; in which position he remained until 1865, exhibiting a capacity for organization and direction in a wider field than the cabinet to which he had hitherto confined himself.

During the summer of 1867 he acted as geologist of the survey for the extension of the Union Pacific railway southward to Fort Craig, under the command of Gen. W. W. Wright. His report, which in no way detracts from his reputation as an entomologist, was published as part of the report of the survey.

In the autumn of 1869 he started for Europe with his family, remaining abroad until near the close of 1872, visiting, in the mean time, Algiers and Egypt. His residence abroad interrupted somewhat his authorship, but not his studies. He visited all the accessible public and private museums; and his wonderful memory of the species of his own cabinet enabled him to settle many doubtful points of synonymy. Those who met him abroad were deeply impressed by his thorough scholarship, and his quick and accurate perception of the affinities of Coleoptera which he had never before seen. On his return he resumed his labors, which continued, with slight interruptions by ill health, until within a week of his death.

LeConte's career in science began in 1844 with his first paper in the proceedings of the Philadelphia academy, followed by others in other journals: these gave but little evidence of the future powers of the man, until, in 1850, his 'Monograph of Pselaphidae' appeared, in which an arrangement of these minute forms was proposed which remains at present the basis of the general classification of these insects. Shortly after appeared his 'Attempt to classify the longicorn Coleoptera of America, north of Mexico,' — a work of far wider application than indicated by its title, in which numerous suggestions of new characters and wider applications of old ones are found.

To follow his papers from this period would be a history of scientific coleopterology in America. Their importance and utility attracted attention abroad, and many were reprinted in whole or in part. As to their scope, they cover nearly every family in the order: and in every case his work is an improvement on what preceded it; he always left a subject better than he found it.

Several of his works require a special notice. His edition of the entomological writings of Say, in which he was assisted in their departments by Baron Osten-Sacken and Mr. P. R. Uhler, proved of inestimable value to students by placing within easy access the works of that pioneer of American science. The volumes appeared in 1859, have run through several editions, and are still in demand. Realizing that his favorite branch needed greater encouragement, he undertook, in 1860, the 'Classification of the Coleoptera of North America,' with the accompanying list of species, and de-

scriptions of new forms. This work was never completed, but extended to the end of the Cerambycidae. The interruption of the work by the war made an interval of time in which the edition of the earlier-issued parts became exhausted, and, to a certain extent, antiquated from more recent studies. The results of this book are abundantly shown in the vast increase in the number of intelligent students and collectors, accompanied by a further demand for the exhausted edition, rendering a new one necessary.

Before the new edition could be prepared, it became imperative to study the Rhynchophora; and at this point LeConte made one of the boldest strokes of his career in the isolation of that series from other Coleoptera, and by proposing a classification of them as remarkable in novelty as it was true to nature. This was followed by the 'Species of Rhynchophora,' published as a separate volume by the American philosophical society.

The preparatory studies having been thus completed, LeConte looked forward with pleasure to an entirely new work to replace the old 'Classification,' and my co-operation was invited in the preparation of monographic essays. Two years ago, his health then slightly failing, he expressed the desire that the authorship of the new work should be equally divided; and in January, 1882, the work was begun. It was completed in March, 1883, in time for him to realize that it had been at least well received. To speak further of this work would, for obvious reasons, be inappropriate: suffice it to say, that his first edition made the ground-work of the second, and his spirit actuated the embellishment of the superstructure.

Since the completion of this work, his health has not admitted of much study; but he continued his work until within a few days of his death, and the incomplete manuscript will be published in the form he desired.

While LeConte's reputation will be based on his entomological writings, he by no means limited himself to this field. Mention has already been made of several important geological contributions. There are others of less moment. He has contributed a number of articles on vertebrate paleontology, and several on existing mammals. His 'Zoölogical notes of a visit to Panama' (*Proc. Philad. acad.*, 1852) illustrate the extent of his study in another direction. At least one article on purely social science has emanated from his pen.

In a general review of his writings, LeConte is found remarkably free from controversial tendencies. He gave to science the best results of his labor, knowing that what was worthy would in time be adopted. I know that he was better pleased to have errors of his own corrected than to correct those of another. He was above the limit of those petty jealousies which too often prevail between active workers in the same field. Those who sought his advice or assistance, either in person or by correspondence, were always made welcome; and the numerous cabinets determined by him gave evidence alike of his industry and liberality. The result of LeConte's labors has been the elevation of coleopterology in America from a traditional knowledge to a science with a permanent and distinctive literature.

LeConte was president of the American association for the advancement of science in 1874; and his address on retiring, regarding the relations of the geographical distribution of Coleoptera to paleontology, opened a new field for the thoughtful student.

No prominent public position was ever held by LeConte. He was urged by his friends for the position of commissioner of agriculture; and, while he received an indorsement of which any man might be proud, the choice of President Hayes gave it to another. That his eminence as a naturalist was recognized is shown in the numerous societies, at home and abroad, of which he was elected a member. Of the entomological societies of London, France, and Berlin, he was made an honorary member, — a distinction attainable by few, from the limited number allowed by the societies' rules. At the time of his death he was president of the American entomological society, and a vice-president of the American philosophical society.

In 1861 Dr. LeConte was married to Helen, daughter of the late Judge Grier, who, with two sons, survives him.

Dr. LeConte died Nov. 15, 1883, and was buried in West Laurel Hill cemetery, in the vicinity of Philadelphia. His death is an irreparable loss to American science, and a calamity in his special department.

GEORGE H. HORN.

THE WEATHER IN OCTOBER, 1883.

THE monthly review of the U. S. signal-service gives in copious detail the weather conditions which prevailed in October. The peculiar features of the month were the deficiency in temperature and excess in rainfall in the greater part of the country. The former was most strongly marked in the Missouri valley and New England, the mean temperature falling below the average 3°.7 and 3°.6 respectively in these districts. In Tennessee, Florida, the Rio Grande valley, the South Atlantic and Gulf states, however, the mean temperature was from 2°.5 to 4°.3 above the average; so that the distribution of temperature was rather irregular. One instance of a maximum temperature of 100° was noted, while the frosts were frequent.

The distribution of rainfall is indicated by the following table: —

Average precipitation for October, 1883.

Districts.	Average for October. Signal-service observations.		Comparison of October, 1883, with the average for several years.
	For several years.	For 1883.	
	Inches.	Inches.	Inches.
New England	3.82	6.23	2.41 excess.
Middle Atlantic states	3.07	5.13	2.06 excess.
South Atlantic states	4.77	3.14	1.63 deficiency.
Florida peninsula	6.27	9.09	2.82 excess.
Eastern gulf	3.79	2.51	1.28 deficiency.
Western gulf	3.75	5.23	1.48 excess.
Rio Grande valley	3.86	0.94	2.92 deficiency.
Tennessee	3.42	5.60	2.18 excess.
Ohio valley	3.04	6.75	3.71 excess.
Lower lakes	3.12	2.86	0.26 deficiency.
Upper lakes	3.80	3.62	0.18 deficiency.
Extreme north-west	2.01	2.93	0.92 excess.
Upper Mississippi valley,	3.19	4.82	1.63 excess.
Missouri valley	2.01	4.12	2.11 excess.
Northern slope	0.81	1.94	1.13 excess.
Middle slope	1.26	3.40	2.14 excess.
Southern slope	1.57	2.98	1.41 excess.
Northern plateau	2.50	1.64	0.86 deficiency.
Southern plateau	0.67	0.84	0.17 excess.
North Pacific coast	4.45	3.49	0.96 deficiency.
Middle Pacific coast	1.11	1.71	0.60 excess.
South Pacific coast	0.33	1.16	0.83 excess.

The drought in New England and in some portions of the Southern States was broken by the copious rains of the month, but still continued in other sections.

The storms of the month present some noticeable features. The weather over the North Atlantic Ocean was generally stormy, being attended by a succession of strong westerly breezes. There were seven depressions charted on the ocean, all of which moved in a north-easterly direction. Of these, four were continuations of storms in the United States, one of which moved to the British coast; and one was a tropical hurricane which gave evidence of its presence off the Atlantic coast by high winds at coast stations, and which moved north-eastward as far as the twentieth meridian. Nine depressions were charted in the United States; all, with one exception, moving north-easterly, and but one being a severe storm. This occurred on the 17th and 18th, causing violent gales on Lake Michigan, though few casualties were reported. One depression moved in quite an unusual path: it was reported at Yuma, Arizona, on the 2d, and moved in a northerly direction into British America. There is reason to believe that it was a tropical hurricane which crossed Mexico in the latter part of September from the Caribbean Sea, and, recurving in the Pacific, entered the country in Arizona as a weak depression. All of the tropical hurricanes of this season have run their courses mainly in the ocean. Though they have been fully as numerous and as severe as usual, their ravages have been confined to the islands in their path and to the vessels exposed to their fury.

Sunspots continue to be numerous. There was only one brilliant aurora in October, and this was observed principally in New England and northern New York. Severe shocks of earthquake were experienced in San Francisco on the 9th and 10th, causing considerable alarm, but no material damage. A new volcano has made its appearance, bursting out in Bering Sea: it has been exceedingly active, having already formed an island eight hundred to twelve hundred feet high. On the 20th a shower of mixed sand and water fell at Unalashka, sixty miles east of the volcano, which may have come from it.

The accompanying map represents the mean pressure, temperature, and wind-directions. The former is worthy of note because of the regular increase of pressure from west to east. Usually there are two high areas in October, — one near the eastern coast, and the other in the north-western territories. The latter was wanting in October of this year.