

7-1914

## Newton Horace Winchell, 1839-1914

Warren Upham

Follow this and additional works at: <https://digitalcommons.morris.umn.edu/jmas>



Part of the [Life Sciences Commons](#), [Physical Sciences and Mathematics Commons](#), and the [Social and Behavioral Sciences Commons](#)

---

### Recommended Citation

Upham, W. (1914). Newton Horace Winchell, 1839-1914. *Journal of the Minnesota Academy of Science*, Vol. 5 No.2, 78-82.

Retrieved from <https://digitalcommons.morris.umn.edu/jmas/vol5/iss2/3>

This Article is brought to you for free and open access by the Journals at University of Minnesota Morris Digital Well. It has been accepted for inclusion in Journal of the Minnesota Academy of Science by an authorized editor of University of Minnesota Morris Digital Well. For more information, please contact [skulann@morris.umn.edu](mailto:skulann@morris.umn.edu).

## NEWTON HORACE WINCHELL, 1839-1914

A Memorial by Warren Upham, Secretary of the Minnesota  
Historical Society

A member of this Academy of Science who had attained a worldwide fame by his work as the State Geologist of Minnesota, Professor N. H. Winchell, has fallen,—let us rather say, and more truly, he has been promoted, called up higher. He was born in North East, Dutchess County, N. Y., December 17, 1839; and died in a hospital of Minneapolis, the city of his home, on Saturday afternoon, May 2, in the seventy-fifth year of his age.

Like his brother, Alexander, with whose family he had his home during the early part of his university studies, at Ann Arbor, Michigan, Newton Horace devoted himself mainly to the science of geology, with allied interest in all branches of natural history. In Michigan he did much early work for botany; and in his latest years, after his geological survey of Minnesota was completed, he performed very valuable services for the Minnesota Historical Society on the archaeology and ethnology of this state and the northwest. From the later work resulted a quarto volume, published in 1911, entitled, "The Aborigines of Minnesota," 761 pages, with many illustrations and about 500 maps of groups of Indian mounds. This volume, and the twenty-four Annual Reports and six quarto volumes of Final Reports of the Geological and Natural History Survey of Minnesota, are monuments more enduring than bronze, which will be consulted and studied during all the coming centuries by investigators of the origin and history of the races of mankind and by all interested in geology or earth lore, not only in the schools and universities of Minnesota but of all the world.

Newton Horace Winchell in boyhood attended the public school and academy at Salisbury, Conn.; and at the age of sixteen years he began teaching in a district school of his native town. Two years later, in 1858, he entered the University of Michigan, where his brother was the professor of geology. The

next eight years were spent alternately in studies at the university and in school teaching, the schools taught being in Ann Arbor, Grass Lake, Flint, Kalamazoo, Colon, and Port Huron, Michigan. Previous to his graduation at the university, in 1866, he had been two years the superintendent of public schools in St. Clair, Mich.; and next after graduation he was again superintendent of schools at Adrian in that state for two years, 1867-69. He received from his Alma Mater the degree of master of arts in 1867.

During a year, in 1869-70, he was an assistant to Prof. Alexander Winchell on the Geological Survey of Michigan; and later in 1870 he visited and reported on the copper and silver deposits of New Mexico. In 1871 he assisted Prof. J. S. Newberry, the state geologist of Ohio, surveying and reporting on twenty counties in the northwestern part of that state.

In the summer of 1872, N. H. Winchell was invited by President Folwell, of the University of Minnesota, to take up the work then recently ordered by the legislature for a survey of the geology and natural history of this state, to be done under the direction of the Board of Regents of the University. In this work he continued twenty-eight years, until 1900; and during the first seven years, until 1879, he performed also the full duties of the university professorship of geology. Later he relinquished teaching, aside from occasional lectures, and gave all his time to the diversified duties of the state survey and the curatorship of the university museum.

In the summer of 1874 Professor Winchell accompanied General Custer's expedition to the Black Hills, brought back many valuable additions for the museum, and prepared a report which contains the first geological map of the interior of the Black Hills.

In 1873 he was one of the organizers of the Minnesota Academy of Natural Sciences, which he served during several terms as president; and he continued as one of its most active members throughout his life.

He was a fellow of the American Association for the Advancement of Science, and presided over its geological section at the Philadelphia meeting in 1884. He was also one of the chief founders of the Geological Society of America, in 1889, and

was its president in 1902. He was a member of national societies of mineralogy and geology in France and Belgium. In the International Congress of Geologists he became a member in 1888, being reporter for the American committee on the nomenclature of the Paleozoic series; contributed papers in French to its subsequent meetings at Boulogne and Zurich; and attended its triennial meeting last August in Toronto.

Under appointment by President Cleveland in 1887, Professor Winchell was a member of the United States Assay Commission. His geological reports received a diploma and medal at the Paris Exposition of 1889, and a medal at the World's Fair in Chicago in 1893.

He was the chief founder of the *American Geologist*, a monthly magazine, which was published in Minneapolis, under his editorship, during eighteen years, 1888-1905, in two volumes yearly, forming a series of thirty-six volumes. This work, in which he was much assisted by Mrs. Winchell, greatly promoted the science of geology, affording means of publication to many specialists and amateurs throughout this country. It also brought out many biographic sketches, with portraits, of the principal early American workers in this wide field of knowledge.

In one of the bulletins of the Minnesota Geological Survey, entitled "The Iron Ores of Minnesota," 430 pages, with maps, published in 1891, Prof. N. H. Winchell had the aid of his son, Horace Vaughn Winchell; and in a text-book, "Elements of Optical Mineralogy," 502 pages, 1909, he was associated in authorship with his younger son, Prof. Alexander Newton Winchell, of the University of Wisconsin. During parts of the later years of the Minnesota survey he was aided by his son-in-law, Dr. Ulysses S. Grant, professor of geology in the Northwestern University, Evanston, Illinois.

In 1895-96 Professor and Mrs. N. H. Winchell spent about a year in Paris, France, and again he was there during six months in 1898, his attention being given mainly during each of these long visits abroad to special studies and investigations in petrology.

My association with Professor N. H. Winchell began in June, 1879. Coming from the Geological Survey of New Hampshire, in which I had been for several years an assistant, I was

thenceforward one of the assistants of the Minnesota survey six years, until 1885, and again in 1893 and 1894. In the meantime and later, while I was an assistant geologist of the surveys of the United States and Canada, on the exploration, mapping, and publication of the Glacial Lake Agassiz, which occupied the basin of the Red river and of lakes Winnipeg and Manitoba, my frequent association with Prof. Winchell kept me constantly well acquainted with the progress of his Minnesota work. Since the spring of 1906 he had been in the service of the Minnesota Historical Society, having charge of its Department of Archaeology. During all these thirty-five years I had intimately known him, and had increasingly revered and loved him. Besides being a skilled geologist, Newton Horace Winchell was a good citizen, a Christian in faith and practice, beloved by all who knew him.

Among the many special investigations which Prof. N. H. Winchell published during the forty-five years of his active work as a scientist, author, and editor, none probably has been more widely influential upon geologic thought and progress than his studies and estimates of the rate of recession of the Falls of St. Anthony, cutting the Mississippi river gorge from Fort Snelling to the present site of the falls in Minneapolis. This investigation, first published in 1876, gave about 8,000 years as the time occupied by the gorge erosion, which is likewise the approximate measure of the time that has passed since the closing stage of the Ice Age or Glacial period, when the border of the waning ice-sheet was melted away on the area of Minnesota.

Artificially chipped quartz fragments and rude aboriginal implements found in the Mississippi valley drift at Little Falls, in central Minnesota, belonging to the time of final melting of the ice-sheet there, and other traces of man's presence at nearly the same time, or even much earlier, in numerous other localities of the southern part of our great North American glaciated area, have led Professor Winchell and others, as the late Hon. J. V. Brower, Professors G. F. Wright and F. W. Putnam, and myself, to a confident belief that mankind occupied this continent during the later part of the Ice Age, or even quite probably much earlier in that period, and possibly even before our continental glaciation began. This very interesting line of investigation was the theme of the last paper written by Professor Win-

chell, entitled "The Antiquity of Man in America Compared with Europe," which he presented as a lecture before the Iowa Academy of Sciences in Cedar Falls, Iowa, on Friday evening, April 24, only a week before he died.

The work on which he was engaged for the Minnesota Historical Society, during his last eight years, based on very extensive collections, by Hon. J. V. Brower, of aboriginal implements from Minnesota and other states west to the Rocky mountains and south to Kansas, enabled Professor Winchell to take up very fully the questions of man's antiquity and of his relation to the Ice Age.

He had enjoyed somewhat good health until the last week, although suffering in some degree with a chronic trouble of many years, and his death resulted from a needed surgical operation done on the preceding day.

"Green be the turf above thee,  
Friend of my better days!  
None knew thee but to love thee,  
Nor named thee but to praise."