by Dr. Wilder during the early years of the university illustrate what can be done by an earnest man in spite of lack of facilities now regarded as essential. He had no assistance except from students; but little apparatus, for a long time there was not a single microscope in the laboratory and then but one which was rented; a departmental stenographer was unthought of in those days. It was under these conditions that many men now widely known for their contributions to science received their early training and under which Dr. Wilder published many papers.

In the earlier years Dr. Wilder devoted his attention to various zoological problems; but later he gave most of his time to a study of the morphology of the brain, and to a simplified terminology of the parts of the brain. He prepared nearly two thousand vertebrate brains, many of which are human, including thirteen from educated persons. This collection is now at Cornell University. In 1867 he devised the "slip-system of notes," the use of which has become universal.

His published works include "What Young People Should Know," 1874; "Anatomical Technology" (with S. H. Gage), 1882; "Physiology Practicums," "Emergencies," 1883; "Health Notes for Students," 1890; "The Brain of the Sheep," 1903, numerous reviews and articles in magazines and in the "Reference Handbook of Medical Sciences" and several musical compositions.

After his retirement from Cornell he lived at Chestnut Hill, Mass., and at his summer place at Siasconset, Mass., and devoted himself to the preparation of his autobiography and to a history of the regiment with which he served during the Civil War, the 55th Massachusetts Infantry. He was engaged all day upon this work the day before he died.

Dr. Wilder was twice married. His first wife, Sarah Cowell Nichols, to whom he was married in 1868, died in 1904. His second wife, Mary Field, died in 1922. Two daughters survive. They are Mrs. Shepard Stevens, wife of a Yale professor, and Mrs. Robert R. Reed, of Washington, Pa.

J. H. COMSTOCK

CORNELL UNIVERSITY

SCIENTIFIC EVENTS

CLÉMENT ADER AND THE AEROPLANE[1]

M. CLÉMENT ADER, one of the pioneers of aviation, has died at Toulouse, at the age of 84. It is claimed in France that he was the first man to fly in a power-driven aeroplane, and he had come to be regarded in France as "the father of aviation."

An electrical engineer by training and engaged in the government service in the Department of Ponts-et-Chaussées, M. Ader devoted himself passionately to the study of flight from a very early age. One of his first efforts was a man-lifting kite. He had a large bird cage built in his garden at Passy in order to observe the flight of birds.

In 1886 he began to build a flying machine, and after four years' hard work brought it to completion. It was called the "Eole." His enterprise attracted some attention, but the trials were held in great secrecy, and the public was not quite sure whether the "Eole" had flown the few feet which were claimed for it or not. A second model was built a year later, but was wrecked while being tried at Satory. However, the government had become interested in his work and placed funds at his disposal for a fresh attempt.

Eventually, on October 14, 1897, a third machine, known as the "Avion," built by M. Ader, flew, it is claimed, though the question will ever remain in doubt, about 300 yards in the presence of representatives of the Ministry of War. It was a curious structure, with folding bat-like wings and twin screw propellers driven by a steam engine. M. Ader placed his plans at the service of the government, but his machine did not inspire sufficient confidence, and his offer was refused. This was a bitter blow to him. He had had to face ridicule and incredulity enough during his unsuccessful attempts, but to be discredited after half a lifetime's work had been crowned with moderate success was more than he could bear. He gave up his research work, burned his plans, and went into retirement in his native village of Muret, in the Haute-Garonne.

As flight progressed the value of Ader's experimental work was recognized, and he has long been given his proper place in the history of aviation. Last summer he was made a Commander of the Legion of Honor; a monument is to be erected at Satory on the spot where he made his flights, and the original machine is preserved in the Musée des Arts et Métiers.

All French military aircraft are now officially referred to as *avions* as a generic term for heavier-than-air machines of all types. The name was chosen in recognition of M. Ader's services to aviation.

[1] From the London *Times*.

CAPTAIN AMUNDSEN'S PROPOSED FLIGHT TO THE NORTH POLE

CAPTAIN ROALD AMUNDSEN has sent a message to the London *Times* from King's Bay, Spitzbergen, under date of May 1, as follows:

When this article appears in print, and if everything continues to develop in accordance with our plans, the trial flights will be over, and the start may take place any day. Up to the present everything has conformed to