



Smithsonian
*Freer Gallery of Art and
Arthur M. Sackler Gallery*

Bailey Willis Glass Plate Photonegatives Collection

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Collection Overview

Repository:	Freer Gallery of Art and Arthur M. Sackler Gallery Archives
Title:	Bailey Willis Glass Plate Photonegatives Collection
Identifier:	FSA.A1991.06
Date:	circa 1904
Creator:	Willis, Bailey, 1857-1949
Extent:	160 Items (Glass plate photonegatives; Box 1-13; 12.7x20.3 cm, 15.2x25.4 cm) 119 Items (Modern copy prints; Box 14-15; 12x19.5 cm)
Language:	English .
Digital Content:	Image(s): Bailey Willis Glass Plate Photonegatives Collection

Administrative Information

Citation

Bailey Willis Glass Plate Photonegatives Collection. Freer Gallery of Art and Arthur M. Sackler Gallery Archives. Smithsonian Institution, Washington D.C.

Restrictions

Collection is open for research.

Conditions Governing Use

Permission to publish, quote, or reproduce must be secured from the repository.

Biographical / Historical

Bailey Willis was born at his parents' country estate at Idlewild-on-Hudson, near Cornwall, New York in 1857. He was the son of Nathaniel Parker Willis, a poet and journalist, and Cornelia (Grinnell) Willis of the prominent New England Grinnell family. His maternal granduncle, Henry Grinnell, was a benefactor of Arctic expeditions. His mother was instrumental in nurturing young Willis's interest in nature and exploration. After his father's death when Willis was ten years old, his mother, concerned about her son's "tendency to dream ineffectually," decided to train him in the stern disciplines of mathematics and science (Willis, *A Yanqui in Patagonia* 4). At the age of thirteen, Willis began schooling in Germany, where he received rigorous Prussian education.

Biographical / Historical

Returning to New York in 1874, Willis entered the School of Mines at Columbia University, graduating with degrees in Mining Engineering in 1878 and Civil Engineering in 1879. After graduation Willis worked as an

assistant for Raphael Pumpelly, a prominent geologist, by estimating iron and coal resources for the Northern Pacific Railroad. Geological work in the Pacific Northwest convinced Willis to support the preservation of Mount Rainier and its surroundings. The Mount Rainier National Park was established by law in 1899.

Biographical / Historical

In 1882 Willis married his cousin Altona Holstein Grinnell. After her death in 1896, he married Margaret Delight Baker, daughter of anatomist Frank Baker. Margaret assisted Willis as draftsman and secretary.

Biographical / Historical

Willis first earned international recognition as a geologist in the field of structural geology. Following the bankruptcy of the Northern Pacific Railway in 1884, Willis worked on assignments from the United States Geological Survey. While working in the southern Appalachian Mountains, he became interested in what had caused folding and faulting. By using laboratory experiments, Willis investigated the conditions causing the deformation of strata and published his new interpretation of the deformation in the report "The Mechanics of Appalachian Structure" (1893). This study established him as one of the country's leading structural geologists. His later book *Geologic Structures* (1923) went into three editions.

Biographical / Historical

In addition to geological studies in the United States, Willis actively engaged himself in foreign expeditions throughout his life. From 1903 to 1904, Willis led a scientific expedition to China under the auspices of the Carnegie Institution of Washington. With Eliot Blackwelder, an associate geologist, and R. H. Sargent, a topographer, the expedition investigated the geomorphology, stratigraphy, and paleontology of the country. The result of the expedition appeared as *Research in China* in 1907, which won a gold medal from the Geographic Society of France. Furthermore, in recognition of this work, Willis was awarded an honorary doctorate by the University of Berlin in 1910. In the same year the Argentine government invited Willis to conduct a geological survey of Patagonia for the region's irrigation potential.

Biographical / Historical

In 1915, at age 59, Willis accepted a position of Chairman of the Department of Geology at Stanford University, where he remained affiliated as a professor emeritus after his retirement. In California, Willis extended his research to the area of seismology, and served as President of the Seismological Society of America. Believing in the permanence of continents, he held an oppositional view to the continental drift theories. In 1949, Willis died in Palo Alto, California at age 91.

Scope and Contents

Bailey Willis Glass Plate Photonegatives Collection consists of 160 glass plate photonegatives and 119 modern copy prints mostly of Japanese subjects. Depicting Meiji-era Japan and traditional paintings, the photographs are attributed to the prominent American geologist Bailey Willis, who travelled to Japan in 1904 in his return trip from China to the U.S. From 1903 to 1904, Willis led a scientific expedition to China to conduct geological and paleontological investigations under the auspices of the Carnegie Institution of Washington. The expedition was proposed by Dr. Charles D. Walcott, the Director of the U.S. Geological Survey, who would become the fourth Secretary of the Smithsonian Institution in 1907. After the expedition,

the Smithsonian Institution took custody of 375 glass plate photonegatives taken by Willis during his Chinese expedition. The current Willis Collection does not retain Chinese glass plate photonegatives, which appear to be housed in the Huntington Library. Twelve original prints of China are in the Charles Lang Freer Papers, acquired by Freer directly from Willis. The Willis Collection richly documents Japanese local scenes, people, buildings, industries, agriculture, and art. It also contains a small number of Middle Eastern and Western images. These photographs are thought to be taken and/or purchased by Willis during his short stay in Japan in 1904, although there is no direct evidence that Willis was the original photographer of any or all of these. Since there are many views of locations that Willis never visited, it seems likely that the plates were acquired from another photographer.

Arrangement

Box 1-3 Japanese paintings; Box 4-11 Japanese scenes; Box 12 Middle Eastern scenes, miscellaneous; Box 13 Western scenes, miscellaneous; Box 14 Japanese painting and scenes; Box 15 Japanese scenes

Local Numbers

FSA A1991.06

Names and Subject Terms

This collection is indexed in the online catalog of the Smithsonian Institution under the following terms:

Subjects:

Geology
Photographs

Types of Materials:

Glass negatives, Modern copy prints

Names:

Freer, Charles Lang, 1856-1919
Walcott, Charles D. (Charles Doolittle), 1850-1927
Willis, Bailey, 1857-1949

Places:

China
Japan