

Lowell Observatory Archives Image Database

Antoinette Beiser, Padraig Houlahan, Ed Nettell, and Ava Stone

Lowell Observatory, Flagstaff, AZ 86001 USA
Asb@lowell.edu

Abstract. We describe the preservation and digitization of Lowell Observatory's historical photographs including database creation and accessibility.

1. Introduction

The Lowell Observatory Archives contain over 1600 images, dating from 1855, that have been scanned into a database accessible from the Library's home page. Included are photographs of Percival Lowell's travels to Korea, Japan, and northern Africa in the late 1800s, as well as photographs of the construction of the Observatory, early staff, and equipment.

2. Preliminary work

Due to the deteriorating condition of the original glass plate envelopes, the library staff decided four years ago to re-envelope plates and film negatives in acid-free enclosures. At this time a thorough inventory was conducted against an existing Excel file that briefly described each item. We surveyed other image databases on the web, and assessed search fields and results displays. Search fields were defined for the new database.

3. Database creation and usage

The original Excel file was re-formatted and saved in tab-delimited format to facilitate column identification. Simple program filters were used to clean up the data files. The data was imported to MySQL on a Unix server. Old records were modified as needed and new records were added by the web page.

4. Scanning

Contact prints were made from glass plates and film negatives were developed as prints. Volunteers and staff attended a class on scanning at nearby Northern Arizona University. Images were scanned as thumbnails for search results pages, low resolution (72 dpi) for individual screen viewing, and high resolution (300 dpi) archival copies that are available for purchase.

5. Search fields

The database is searchable by the following fields: call number, content, description, and subject. The call number is an accession number assigned to the print and linked to a thumbnail of the image. The content is a description of the photograph taken from the original envelope. The description includes information on size of the negative, black and white or color, glass or film, and name of the photographer if known. Subjects include personal names, topics, equipment, buildings, telescopes and staff.

6. Subject headings

Names are based on staff members listed in W. L. Putnam's book, *Explorers of Mars Hill, 1894-1994*. Building names are as referred by the staff (e.g., 'Baronial Mansion' for Percival Lowell's home on Mars Hill). Topical subject headings follow established Library of Congress format. Local headings were used when appropriate (e.g., 'Snow scenes' or 'Storm 1923'). The subject heading list is also a link to the photographs.

7. Use policy and pricing

Any public use of the photographs displayed on the web site requires the written permission of the Observatory. The photographs displayed on the web site are for reference only. Photographs used in a particular commercial project are subject to a one-time use fee of \$15.00. Permission is given for one-time, non-exclusive use only. The images cannot be used commercially in products such as T-shirts or in advertisements. Use of the credit line 'Lowell Observatory Archives' is required. For complete pricing information and access to the Lowell Observatory image database see: <http://www.lowell.edu/Research/library>