

William J. Eney papers, 1900-1982

*Held by Special Collections, Linderman Library
Lehigh University, Bethlehem, Pennsylvania 18015*

*Call No.: SC MS 0117
1 Box, .4 linear feet*



Abstract:

Documents and photographs related to Lehigh University Civil Engineering faculty William J. Eney's early teaching years (1930s) at civil engineering summer camps (Canadensis, Pa.); his lecture documents on bridge engineering; his own invention of testing equipment: Eney Deformeter; correspondence between Smithsonian Institution and Lehigh University about Eney Deformeter, and photographs and documents about construction of Fritz Engineering Laboratory addition and Baldwin Universal Testing Machine (1950s); Civil Engineering faculty, staff and students (1900-1905 and 1950-1960s). The documents were donated by Anthony and Lois Winston (the daughter of William J. and Florence Eney) on March 26, 2005.

Contact Information:

Special Collections
Linderman Library
Lehigh University
Bethlehem, Pennsylvania 18015, USA
Phone: 610-7584506
Fax: 610-758 6091
URL: <http://www.lehigh.edu/library/speccoll/specialcoll.html>
Email: inspc@lehigh.edu

Processed by

Eleanor Nothelfer

Repository

Lehigh University, Linderman Library, Special Collections

Creator

Eney, William J.

Title

William J. Eney papers, 1900-1982

Provenance

Donated by Anthony and Lois Winston (the daughter of William J. and Florence Eney) on March 26, 2005.

Restrictions to Access

This collection is open for research.

Preferred Citation

[Identification of item], William J. Eney papers (1900-1982), SC MS 0117, Special Collections, Linderman Library, Lehigh University, Bethlehem, PA

Copyright Notice

Please inquire about copyright information.

Biographical Sketch:

Professor William J. Eney, Lehigh University MS '38, was a distinguished Professor of Civil Engineering at Lehigh University, head of the Civil Engineering Department, and at the same time was head of the Fritz Engineering Laboratory 1952-1962. He came to Lehigh in 1936 and received his Master of Science degree from Lehigh in 1938 and continued in the department eventually becoming head of both the Department and Fritz Engineering Laboratory. With the help of Bethlehem Steel Corporation, he designed and built the seven story addition to the Fritz Engineering Laboratory (1952 to 1955). He retired in 1971.

Scope and Content Note:

The collection consists of one archival box with 28 folders containing assorted photographs, letters, newspaper articles and publications.

Online Cataloging Terms

Eney, William J. (William Joseph)
Lehigh University – Dept. of Civil and Environmental Engineering

Lehigh University – Faculty
Lehigh University – Alumni and alumnae
Fritz Engineering Laboratory.
Bethlehem Steel Corporation.
Smithsonian Institution.
Lehigh University – Administration.
Merriman, Mansfield, 1848-1925.
Slutter, Roger G.
Errera, Samuel Joseph.
Beedle, Lynn S.
Whitaker, Martin D. (Martin Dewey), 1902-1960.
Grace, Eugene G. (Eugene Gifford), 1876-1960.
Neville, Harvey A.
Bewley, Loyal Vivian, 1898-
Astin, Allen V., 1904-1984.
Gallagher, Robert T. (Robert Taylor), 1905-1982.
Karakash, John J.
Stout, Robert D. (Robert Daniel), 1915-
Fritz, John, 1822-1913.
Harpel, Kenneth
Smiley, Kenneth E.
Sutherland, Hale, 1884-
Stottard, George Dinsmore.

Bodine, Alfred V.
Vogel, Robert M.
Worthington William E.
Finn, Bernard S.
Civil engineering – Study and teaching.
Bridges – Québec (Province) -- Québec.
Bridges – Switzerland
Structural engineering
Bridges
Steel – Testing
Eney deformer
Canadensis (Pa.)
Skytop Lodge
Pocono Mountains
Summer survey camps
TELSTAR Satellite
Baldwin Universal Testing Machine
Sopko, Richard N. (photographer)

Related Material

Archival files in Special Collections related to Fritz Engineering Laboratory, Dept. of Civil and Environmental Engineering and William J. Eney.

Description of Collection:

Box 1:

117.01.01 Smithsonian, four letters dated October 25, 1967, 26 January 1979, 25 February 1980, 24 March 1980, 27 March 1980 from the Smithsonian Institution to Prof. William J. Eney, 62 Wall St., Bethlehem, PA 18018 dealing with the donation of the “Eney Deformeter” and other engineering artifacts such as the Quebec Bridge member and a Bollman truss tested in Fritz Laboratory. The writer of the letters is Robert M. Vogel, Curator, Division of Mechanical and Civil Engineering, Smithsonian Institution.

117.01.02 “Eney Deformeter” 1, four glossy photos and ten negative and positive prints of a device that illustrates the mechanical analysis of a two hinged arch truss with assembled spring member.

117.01.03 “Eney Deformeter” 2, 21 glossy photos showing the parts, design and assembly of the deformeter and its uses in analyzing rigid frame, model submarine frame, rib arch.

117.01.04 “Eney Deformeter” 3, ten letters dated June 11, 1981, August 5, 1981, August 7, 1981, 11 August 1981, 14 August 1981 (two letters), August 28, 1981, 14 October 1981, November 3, 1981 exchanged between Lehigh professor Dr. Roger G. Slutter and Prof. William J. Eney and the National Museum of American History represented by William E. Worthington, Jr., Museum Specialist, Robert M. Vogel, Curator and Charles T.G. Looney, Research Associate regarding the Eney Collection (total of 31 items) of objects illustrating a history of materials testing being donated to the Smithsonian Institute by Prof. William J. Eney with supplemental Fritz Engineering Laboratory research reports written by Fritz Laboratory staff describing the testing procedures. The last letter is a letter of condolence to Mrs. Eney on the death of Professor William J. Eney.

117.01.05 “Eney Deformeter” 4, four letters dated August 5, 1981 (from Lehigh professor Dr. Roger G. Slutter to Robert E. Vogel, Curator), February 23, 1982 (from Mrs. Eney to Robert E. Vogel, Curator), 4 March 1982 (letter to Mrs. (Florence) Eney from Bernard S. Finn, Chairman Department of the History of Science and Technology enclosing a Deed of Gift to the National Museum of American History of the Smithsonian Institution signed by William J. Eney, dated August 19, (19)81 listing the 30 items being donated, August 4, 1982 (letter to

Mrs. Eney itemizing a item omitted from the Deed of Gift from Diana C. Ansley, Office of the Registrar, Smithsonian Institute) .

117.01.06 “Eney Deformeter” 5, three mimeographed sheets titled ENEY DEFORMETER GAGE William J. Eney, Lehigh University, Bethlehem, Pennsylvania, Made by John J. Fitzgerald. Lists Your Order No., Model E, Model F, Special, Serial No., etc. describes each Part included in the various models; one yellow tablet sheet with brief Eney handwritten notes; mimeographed standard letter with William J. Eney letterhead describing the Eney Deformeter as an instrument for use in Structural Model Analysis; two sheets with glossy photos and typed captions describing the use of the Deformeter for Rigid Frame Analysis with Eney Deformeter; publication from Experimental Stress Analysis titled “A large displacement deformeter apparatus for stress analysis with elastic models” by William J. Eney (Fritz Laboratory Report No. 214.88)

117.01.07 “Eney Deformeter” 6, ten sheets of printed matter – three pages of Eney letterhead (same as in Folder 6), two sheets of glossy photos attached with captions, one sheet of publication positive prints, one sheet of negative prints, two sheets of a drawing “Detail of Bolted Spring,” and one publication from ASCE’s Civil Engineering, vol. 12, No. 3, March 1942 titled “Determining the Deflection of Structures with Models” by William J. Eney.

117.01.08 Photographs: Survey Trips, six mylar sleeves holding 14 photographs:

117.01.08.01: 1936 The Pines, Canadensis, PA Survey Course June 1936 Class of 1939; 8 x 10 inch black and white glossy photo (23 men and one child (possibly Prof. Eney’s daughter, Lois) seated on grass with trees in background with surveying equipment, William J. Eney in center of first row)

117.01.08.02: 1937, 8 x 10 inch black and white glossy photo (Survey Course, 21 men seated and standing with surveying equipment in front of leafy trees, William J. Eney seated in center of second row, two copies of same group of men with different poses)

117.01.08.03.01: 1938 – 8 x10 inch black and white glossy photo - Survey Course June 1938 Class of 1941 (44 men and one dog with surveying equipment pictured in front of leafy trees William J. Eney in center wearing tie in second row);

117.01.08.03.02: 1939 – 8 x 10 inch black and white glossy photo - Survey Course June 1939 Class of 1942 (36 men with surveying equipment seated and standing in front of leafy hedge, William J. Eney fifth from left in second row)

117.01.08.04.: Mylar sleeve with two pockets 5 x 7 inch:

117.01.08.04.01: Lehigh Surveying Camp at Canadensis, PA. 1939? (two reprint copies of photo);

117.01.08.04.02: Survey Camp at Pines in Poconos 1937 or 1938 Bob Evans Holding Hand Up was Student Asst. William J. Eney is fourth in second row (27 men with surveying equipment seated and standing, man in center front row has pipe in mouth)

117.01.08.05: Mylar sleeve with two pockets 5 x 7 inch containing four photographs:

117.01.08.05.01: (two black and white reprint copies of photo in 117.01.08.02);

117.01.08.05.02: (black and white reprint copy of photo 117.01.08.03.01);

117.01.08.05.03: (black and white reprint copy of photo 117.01.08.03.02)

117.01.08.06: Mylar sleeve containing two 8 x 10 inch black and white glossy photos:

117.01.08.06.01: (Country landscape hill on horizon, leafy trees and meadow with five members of a survey team in middle of photo);

117.01.08.06.02: Skytop Lodge (Aerial view of a Pocono resort named Skytop Lodge, great expanse of forested area, two lakes, roadways among fields and scattered buildings)

117.01.09: "TELSTAR" Satellite 1961-62 (two mylar sleeves)

117.01.09.01: Globe Times article, 1/5/1962 "Researchers At Lehigh Test Space Satellite For Rigors of 7,000-Mile Ascent In April" (original newspaper article and photocopy) with photo of Prof. Roger G. Slutter (wearing hard hat) and Dr. Lynn S. Beedle);

117.01.09.02: 8 x 10 inch black and white glossy photograph: Telstar test December 1961 (l - r) Samuel Errera, Engineer of Tests, Fritz Lab and Prof. Roger G. Slutter

117.01.10: Ground Breaking For Fritz Lab June '53, 8 x 10 inch black and white glossy photograph (four men pictured left to right: William J. Eney (head Civil Engineering Department), Eugene G. Grace (Chairman of the Bethlehem Steel

Corporation and president of Lehigh's Board of Trustees), Martin D. Whitaker (president of Lehigh University), Alfred V. Bodine (Board of Trustees)

117.01.11: Photographs Fritz Lab Cornerstone Laying (seven mylar sleeves containing 13 black and white glossy photographs):

117.01.11.01.01: two 8 x 10 inch black and white glossy photographs (overall view of ceremony, three cameras – one on truck bed, two on ground, Steelwork by Bethlehem Steel Company sign prominently hanging from steel framework, crowd of people beneath steel framework, Prof. William J. Eney (back to photo) facing the crowd, erector crane boom and operator in cab at right of stage, cornerstone hanging in sling in front of stage)

117.01.11.01.02: (different angle but very similar to 117.01.11.01.01)

117.01.11.02.01: 8 x 10 inch black and white glossy photograph (spreading cement beneath suspended cornerstone a man (Eugene G. Grace) in suit and hat wearing "spectator" shoes using a trowel to spread cement in center of photo, Prof. William J. Eney, Trustee Alfred V. Bodine, Pres. Martin D. Whitaker standing at right side of photo looking at the preparation, in background a group of three women, two children and men observing, photographer taking close up of man with trowel)

117.01.11.02.02: 8 x 10 inch black and white glossy photograph (close ups of four men: Alfred V. Bodine, William J. Eney, Eugene G. Grace, Martin D. Whitaker viewing cornerstone, over the shoulder of Eugene G. Grace is a cameraman operating a movie camera on a tripod, in background a group of three women, two children, and men in short sleeved shirts)

117.01.11.03.01 & .02: two 8 x 10 inch black and white glossy photographs (two slightly different angle close ups of five men on a stage with Lehigh seal and two large Lehigh banners: man standing by microphone is Eugene Grace, seated – Martin Whitaker and A. Bodine in front, in back clergyman and William J. Eney)

117.01.11.04.01 & .02: two 8 x 10 inch black and white glossy photographs (two slightly different angle close ups of five men on a stage with Lehigh seal and two large Lehigh banners: standing at microphone is Lehigh president Martin D. Whitaker, seated is Eugene G. Grace (wearing hat), Alfred V. Bodine, clergyman, Prof. William J. Eney)

117.01.11.05: two 8 x 10 inch black and white glossy photographs;

117.01.11.05.01: (Eugene G. Grace standing at microphone on stage, Alfred V. Bodine with head bowed, Martin D. Whitaker, clergyman and William J. Eney smiling)

117.01.11.05.02: (extreme close up of Eugene G. Grace wearing hat speaking with Martin D. Whitaker in profile, William J. Eney behind Eugene G. Grace and Alfred V. Bodine next to Martin D. Whitaker standing off stage)

117.01.11.06: 8 x 10 inch glossy black and white photograph (cornerstone hanging in sling being placed by two workmen, William J. Eney in center of photo, at right side is cameraman with movie camera on tripod, in distance another cameraman among group of spectators, partially obstructed by cornerstone are Martin D. Whitaker and Eugene G. Grace)

117.01.11.07: (two 4 x 5 inch glossy black and white photographs)

117.01.11.07.01: Fritz Lab – Lehigh University 236-149 Erection of Steelwork June 22, 1954 (steelwork on south side of Lab placed with Bethlehem Steel crane)

117.01.11.07.02: June 12, 1954 (Overall view of stage and cornerstone in sling, William J. Eney at microphone, in background is Chandler-Ullmann Hall and groups of spectators)

117.01.12: Fritz Lab Dedication W.(William) J. Eney Notes

117.01.12.01: (contents removed from binder - contains the October 14, 1955 program of events, floor plans of the new lab, lists of credits, Eugene G. Grace's remarks at dedication regarding the demonstrations of the Baldwin Universal Testing Machine, Presentation of Fatigue Testing Installation)

117.01.12.02: (list of people who were sent invitations to the dedication)

117.01.12.03: (two newspaper articles about dedication: Bethlehem Globe-Times, October 14, 1955 and magazine article from Engineering News-Record, October 20, 1955)

117.01.12.04 8 x 10 inch black and white glossy photo by Don Hunt, Bethlehem, Pennsylvania (five men pictured left to right: Harvey A. Neville, dean of Graduate School; Loyal V. Bewley, dean of College of Engineering; Martin D. Whitaker, president of Lehigh; Allen V. Astin, director of National Bureau of Standards; William J. Eney, department head of Civil Engineering)

117.01.13 Fritz Lab Newspaper Clippings (14 Bethlehem Globe-Times articles:

January 31, 1952; June 5, 1952; June 6, 1953; September 18, 1953; October 14, 1955; March 3, 1956; May 22, 1957; 1960; March 11, 1965; October 10, 1966; May 12, 1971, "Ready to Jump" (University professors Robert T. Gallagher, Robert D. Stout, William J. Eney and John J. Karakash in a C47 airplane), and a copy of pages from Chapter 2 of *Bridges of Metropolitan Cleveland* mentioning Prof. William J. Eney

117.01.14 John Fritz [Photos] (mylar sleeve with two pockets containing three photographs):

117.01.14.01 John Fritz 11/64/39-11, 5 x 7 inch black and white glossy photo (Photo of an elderly John Fritz with white beard seated at a table with letter in his right hand; he is wearing a dark suit and striped bow tie)

117.01.14.02 5 x 7 inch black and white glossy photo (Elderly John Fritz standing by Riehle test machine in Fritz Engineering Laboratory, c. 1910)

117.01.14.03 John Fritz c. 1910, 8 x 10 inch black and white glossy photo, this is a cropped enlarged photo of 117.01.14.02 (Photo of an elderly John Fritz standing by Riehle machine in Fritz Lab. He is wearing a dark overcoat and derby hat and a walking cane in gloved right hand)

117.01.15 Photographs: Fritz Lab, tests, construction, faculty, etc., 13 mylar sleeves containing 34 photographs

117.01.15.01 Mylar sleeve with two pockets containing two photos

117.01.15.01.01 1933, 5 x 7 black and white glossy photo (Grad students and Faculty identified: 1st row: Uhrich, Hans, Gibbs, Flanigan, DeBarardinis; 2nd row: Garrett, Zabriskie, Simcoe, Kaufman, Byers, Tomb; 3rd row: Newcomb, Sawyer, Bell, Antoniotti, Kugler; Back row: Profs. Becker, Uhler, Sutherland, Jensen, Payrow, Fuller)

117.01.15.01.02 1934, 5 x 7 inch black and white glossy photo (Grad students and Faculty identified; Front row: Langham, Taylor, Meixsell, Witmer, Heether; 2nd row: Paternoster,-----, Hutt, Stender, Metz; 3rd row: Kennedy, Moffet, Bahr, Ferris, Robinson, Barnes; Back row: Profs. Payrow, Uhler, Sutherland, Jensen, ?)

117.01.15.02 Mylar sleeve with two pockets containing five photos

117.01.15.02.01A & B Grad Students and Faculty at Lehigh - 1937, 5 x 7 inch black and white glossy photo, two prints (18 men sitting on steps, each man identified with inked name; 1st row: McNally, Mount, Welch, Bodine, Snyder

(grad students); 2nd row: Ehasz, Minnich, Haulenbeek, Crispen, Firling, Berutich (grad students), Lyse (faculty); 3rd row: Godfrey, Fuller, Jensen, Payrow, Sutherland (faculty), Eney (grad student))

117.01.15.02.02.C, D, E (Three additional photos of previous pocket with typed caption beneath one copy, hand written note "Graduation grad students 1937 on another print)

117.01.15.03 Mylar sleeve with two pockets containing five photos

117.01.15.03.01 4 x 6 inch black and white glossy photo (Group of 15 men in front of ivy on rough stone wall, William J. Eney second from right in back row)

117.01.15.03.02 5 x 7 inch black and white glossy photo (view of a Fritz Lab test set up for concrete beam)

117.01.15.03.03.01 2 ¾" x 4 ½" black and white glossy photo (two men standing together in front of a porch with arms across each others' shoulders, William J. Eney left)

117.01.15.03.03.02 2 ½" x 3 ½" black and white glossy photo (Fritz Lab test set up – two men monitoring a hydraulic jack)

117.01.15.03.04 5 x 7 inch black and white glossy photo (Fritz Lab test set up on a steel I-beam, three men monitoring instrumentation)

117.01.15.04 8 x 10 inch black and white glossy photo, 236-46 Excavation for Footings – South Wall 1-5-54 (written in pencil), Addition to Fritz Engineering Laboratory Department of Civil Engineering & Mechanics Lehigh University 236-46 1/5/54 Excavation for Footings – South Wall (typewritten caption on back), (view of Bean Contractors Inc. Easton, PA crane with clam shell digger suspended over a hole, five men standing observing, Wilbur Power House and Physics Building in background, dusting of snow on ground)

117.01.15.05 8 x 10 inch black and white glossy photo, Addition to Fritz Engineering Laboratory Department of Civil Engineering & Mechanics Lehigh University 236-50 1/8/54 Pouring Column Footing C1 (typewritten caption), 236-50 Pouring Footing C1 1/8/54 (handwritten in pencil), (view of cement mixer and four men observing the flow of concrete into a hole, in background is south wall of original Fritz Lab and Wilbur Power House)

117.01.15.06 8 x 10 inch black and white glossy photo, Addition to Fritz Engineering Laboratory Department of Civil Engineering & Mechanics Lehigh

University 236-47 1/8/54 Formwork – Footing B1 (typed caption on back), (four workmen standing by five holes, Wilbur Power House and Physics Building in background, dusting of snow on ground)

117.01.15.07 8 x 10 inch black and white glossy photo, Addition to Fritz Engineering Laboratory Department of Civil Engineering & Mechanics Lehigh University 236-44 1/5/54 Temporary Office Quarters Concrete Formwork Shop Mezzanine (typed caption, same in pencil), (worker walking on temporary flooring suspended between steel beams attached to north wall of original Fritz Lab, slender steel roof joists (designed by John Fritz) visible at top of photo)

117.01.15.08 8 x 10 inch black and white glossy photo, Addition to Fritz Engineering Laboratory Department of Civil Engineering & Mechanics Lehigh University 236-52 1/15/54 Temporary Office Quarters Forms & Reinforcing Mezzanine Above Machine Shop (typed caption, same handwritten in pencil), (view of five workmen readying the temporary flooring with reinforcing rods for concrete floor built on north wall of original Fritz Lab, steel roof joists visible)

117.01.15.09 6 ½” x 8 ½” black and white glossy photo (similar test set up in original Fritz Lab section as shown in 117.01.15.03.04 except seven men are pictured in this photo and a large portrait of John Fritz hand on the wall above the test set up; men identified as: Fred Roesli (Swiss grad student on controls), Charles Schilling (plaid shirt), Cesar Buenaventura (Philippines researcher), William J. Eney (on ladder), Knud Knudsen (wearing white coat – student from Norway), Alex Smislova (Turkish student seated & wearing glasses, Jack Verschuren (Dutch student seated & wearing jacket), c. 1953

117.01.15.10 mylar sleeve with two pockets containing four photos

117.01.15.10.01 4 x5 inch black and white glossy photo, Plastic Design Conference at Fritz Lab 1955, 205.85 (large single story gable frame test set up on north wall of new addition to Fritz Lab, floor level view of large group of men seated or standing observing the test)

117.01.15.10.02 4 x 5 inch black and white glossy photo (plastic design conference at Fritz Lab 1955, photo is a high view of large group of men standing in front of Riehle test machine with gable angle loaded in the machine)

117.01.15.10.03 3 ½” x 5 inch colored glossy photo of group of men wearing suits standing outdoors socializing, William J. Eney, profile at extreme right of photo, standing by an automobile partially visible, partial view of a Quonset hut)

117.01.15.10.04 3 ½” x 5 inch colored glossy photo (similar to previous photo except for slightly different angle – a Quonset hut is prominent in background – M STAR D painted on west end left side of door, William J. Eney again visible in profile by automobile)

117.01.15.11 mylar sleeve with two pockets containing four photos

117.01.15.11.01 4 x 5 inch black and white glossy photo, Ceremony of Laying Cornerstone June 12, 1954 236-144 handwritten in pencil on back (view is similar to 117.01.11.07.02 except Albert Bodine at the microphone on the stage, Chandler-Ullmann Hall in background, group of spectators and cornerstone in sling in foreground)

117.01.15.11.02 4 x 5 inch black and white glossy photo (men standing in line being greeted by a woman at a table with paper cups , on floor is a carton with words Lehigh Valley Dairy, William J. Eney standing in profile at left side of photo, possibly the 1955 plastic design conference)

117.01.15.11.03 4 x 5 inch black and white glossy photo, Fritz Lab – Lehigh Univ. written in ink on back (large group of men sitting on chairs lined up in front of Baldwin Universal Testing Machine observing a test on a concrete cylinder, possibly the 1955 plastic design conference)

117.01.15.11.04 4 x 5 inch black and white glossy photo (photo shows demolished concrete test cylinder beneath the test head of the Baldwin Universal Testing Machine, possibly the 1955 plastic design conference)

117.01.15.12 mylar sleeve with two pockets containing four photos

117.01.15.12.01 4 x 5 inch black and white glossy photo (view of stub I-beam in place beneath test head of Baldwin Universal Testing Machine, two researchers standing on either side of beam holding clipboards)

117.01.15.12.02 4 x 5 inch black and white glossy photo (close up view of stub beam in Baldwin Universal Testing Machine, research standing with clipboard at left side of test set up)

117.01.15.12.03 4 x 5 inch black and white glossy photo (view of single story gable frame in test set up with group of four men observing calibration, plywood box with RILCO Laminated Products Inc. St. Paul, Minn. stenciled on box)

117.01.15.12.04 4 x 5 inch black and white glossy photo (close up view of white coated researcher crouching by a gas cylinder on the lab floor by a test set up of a concrete slab)

117.01.15.13 mylar sleeve with two pockets containing four photos

117.01.15.13.01 Fritz Lab – Lehigh University 4 x 5 inch black and white glossy photo (view of a test set up against north wall of Fritz Lab addition for a reinforced concrete beam, three technicians at west end of beam, part of Baldwin testing machine visible)

117.01.15.13.02 Bill Eney 4 ¼” x 5 inch black and white glossy photo (formal photo of William J. Eney waist high in front of a structural model of a bridge, photo similar to pose used in publication Lehigh Alumni Bulletin, March 1952)

117.01.15.13.03 4 x 5 inch black and white glossy photo (view through the open large bay door in the Fritz Lab addition showing a flat bed truck backing through doorway with men standing observing the shipment of large reinforced concrete beam, man in center with legs wide apart, shipment has AMDEK stenciled on end)

117.01.15.13.04 3 ½” x 5 inch black and white glossy photo (four white coated researchers by a test set up with hydraulic jack)

117.01.16 Photographs: Hydraulic press (Baldwin Universal Testing Machine); Faculty, etc., 11 mylar sleeves

117.01.16.01.01 8 x 10 inch black and white glossy photo, Demonstration Model 5,000,000 lb. *Universal* Testing Machine (¾ frontal view of William J. Eney standing by model)

117.01.16.01.02 8 x 10 inch black and white glossy photo, Demonstration Model 5,000,000 lb. *Universal* Testing Machine (waist high profile view of William J. Eney operating the model)

117.01.16.02 8 x 10 inch black and white glossy photo, How 5,000,000-lb. Testing Machine Works (photo of illustration of Baldwin *Universal* Testing Machine)

117.01.16.03 mylar sleeve with two photographs

117.01.16.03.01 8 x 10 inch black and white glossy photo, (photo of three men standing in front of the operating console for the Baldwin 5,000,000 lb testing machine located in the addition of Fritz Engineering Laboratory, on back of photo)

is printed Merin Studios, 1010 Chestnut St., Phila. 7, PA; handwritten in pencil on back: 1959, (Profs.) Fuller, (William J) Eney, Ryht)

117.01.16.03.02 8 x 10 inch black and white glossy photo, on back of photo is handwritten in pencil: Oct 1959 (Japanese graduate student, Prof. William J. Eney and Mr. Kenneth Harpel, Fritz Lab foreman wearing hard hat standing in front of Baldwin testing machine)

117.01.16.04 (mylar sleeve with one photograph and one photo release form)

117.01.16.04.01 8 x 10 inch black and white glossy photo (full length view of Baldwin *Universal* Testing Machine with a Duff-Norton worm gear jack being observed by two men in a test load)

117.01.16.04.02 8 x 8 ½" typed paper with letterhead PHOTO RELEASE From: Bond & Starr, Inc., Gateway Park Penthouse, Pittsburgh 22, PA. for further information call William G. Smock, 3/31/59

117.01.16.05 8 x 10 inch black and white glossy photo, on back is printed in red crayon Eney, 5-21-57, handwritten in pencil is Prof. William J. Eney Center (pictured are four men in suits standing on stairs possibly Packer Hall or Linderman Library)

117.01.16.06 8 x 10 inc. black and white glossy photo, on back of photo handwritten in pencil is Oct 1959 For Lehigh Fund Raising William J. Eney Standing Rt. (four men pictured in University Center 3rd Floor reception rooms, two standing (William J. Eney on right in back), two seated, same four men as in previous photo)

117.01.16.07 mylar sleeve with two photographs

117.01.16.07.01 8 x 10 inch black and white glossy photo, on back is handwritten in pencil: Dr. Kenneth E. Smiley, vice pres. Of Lehigh presenting 25 yr recognition awards at faculty appreciation dinner given in University Center May 28 or thereabouts in 1961. W.J. Eney went to Lehigh in Jan 1936, to Prof. Eney (frontal view of William J. Eney shaking hands with Dr. Smiley (in profile))

117.01.16.07.02 7 x 9 inch black and white glossy photo, written in pencil on back is William J. Eney – right (view of three men standing talking to man in center in dark suit, man on left is Dr. Bruno Thurlimann, man on right is Prof. William J. Eney – faculty at Fritz Lab)

117.01.16.08 mylar sleeve with two pockets containing three photographs

117.01.16.08.01 5 x 7 inch colored photo, September 1962 (group of 13 men in suits standing beneath tree: 2nd from left is John J. Karakash, 4th from left in back is William J. Eney, 5th from left is Robert Stout)

117.01.16.08.02 4 ½" x 6 ½" black and white photo (upward view of a man with goatee seated at a podium)

117.01.16.08.03 4 ¾" x 4 ¾" black and white photo, written on back in ink is: Fall 57, Talk to Eng. N. Greys Fritz Lab, W.J. Eney – standing (profile view of William J. Eney standing in front of Baldwin testing machine and group of seated men)

117.01.16.09 mylar sleeve containing two photographs

117.01.16.09.01 8 x 10 inch black and white glossy photo, To Main Office printed on overhead track, Thru This Portal Passes The Nation's Finest Team of Steel Fabricators printed on lintel of a small building (group of 45 men wearing overcoats in two ranks in front of small building, at supports for overhead track, 16 men (3rd from left is Samuel Errera, 6th from right Lynn S. Beedle) crouched in front, 29 men standing in back, William J. Eney in back row 11th from right wearing hard hat)

117.01.16.09.02 8 x 10 inch black and white glossy photo, Oct 1957 written in pencil on back (William J. Eney standing in front of Baldwin testing machine with a beam ready for test)

117.01.16.10 mylar sleeve with two pockets containing three photographs

117.01.16.10.01 5 x 7 inch black and white glossy photo (same view as in 117.01.16.01.02 except smaller format)

117.01.16.10.02 5x 7 inch black and white glossy photo (same view as in 117.01.15.09 except on back written in pencil in William J. Eney's handwriting is this message "Dad Here is a view of the 38 ft beam test. I am in picture also my co-director Dr.Knudsen – white coat – Norwegian, Fred Roesli – Swiss student operating controls, Chas Schilling – plaid shirt taking readings – America, Ceaser Buenaventura – behind me – “ “ Phillipines (i.e. Philippines), Yours truly – I'm watching a crack, Knudsen, Alex Smislova – a Turkish instructor, Jack Verschuren – a Dutch Boy – taking readings, Dan Brown – out of sight (c. 1953))”

117.01.16.10.03 4 x 5 inch black and white photo, Hale Sutherland (written in ink on back of photo)

117.01.16.11 8 x 10 inch black and white glossy photo, on back of photo is attached a NEWS RELEASE from the Office of Public Information Lehigh University stating "World's largest wire rope, manufactured in the Trenton, N.J., mills of CF&I Steel Corporation of Denver, undergoes tension testing on Lehigh University's universal testing machine, one of the world's largest. For safety, rope is encased in sheath of wood and canvas. The huge rope survived more than two-million pounds of tension, well above minimum design requirements. (view of wrapped wire rope in throat of Baldwin testing machine, 2-29-68)

117.01.16.12 mylar sleeve with two photographs

117.01.16.12.01 8 x 10 inch black and white glossy photo, Roger Slutter (written in pencil on back: view of Roger Slutter standing on test head of Baldwin testing machine observing two pieces of shaft loaded in the machine)

117.01.16.12.02 8 x 10 inch black and white glossy photo, Ivan "Jack" Taylor (written in pencil on back: view of Jack Taylor at the controls of the Baldwin testing machine)

117.01.17 Photos. Fritz Lab. Construction (Folder contains 19 pages of 39 photos, one mylar sleeve contains two photos)

117.01.17.01 Addition to Fritz Engineering Laboratory (paper page with two photographs 4 x 5 1/4" black and white glossy)

117.01.17.01A 236-62 Pile Driving 1/21/54 (Physics Building in back)

117.01.17.01B 236-63 Pile Driving 1/21/54 (Close up of pile driver)

117.01.17.02 Addition to Fritz Engineering Laboratory

117.01.17.02A 236-64 The Mezzanine 1/22/54

117.01.17.02B 236-65 Excavating the Pit 1/25/54

117.01.17.03 Addition to Fritz Engineering Laboratory (paper page with two photographs 4 x 5 1/4" black and white glossy)

117.01.17.03A 236-66 Pouring Footing C5 1/25/54

- 117.01.17.03B 236-67 Pouring Footing C6 1/25/54
- 117.01.17.04 Addition to Fritz Engineering Laboratory (paper page with two photographs 4 x 5 1/4" black and white glossy)
- 117.01.17.04A 236-68 Repairing the Power Failure 1/28/54
- 117.01.17.04B 236-69 The Mezzanine 2/1/54
- 117.01.17.05 Addition to Fritz Engineering Laboratory
- 117.01.17.05A 236-70 Construction Site 2/2/54
- 117.01.17.05B 236-71 Inside of Machine Pit 2/26/54
- 117.01.17.06 Addition to Fritz Engineering Laboratory
- 117.01.17.06A 236-72 Whalers in Machine Pit 2/26/54
- 117.01.17.06B 236-73 Relocation of Steam Line 2/26/54
- 117.01.17.07 Addition to Fritz Engineering Laboratory 236-74 Relocated Steam Line 2/26/54
- 117.01.17.08 Lehigh University Department of Civil Engineering & Mechanics
Fritz Engineering Laboratory Addition
- 117.01.17.08A 236-75 The Mezzanine 2/1/54
- 117.01.17.08B 236-76 Construction 2/16/54
- 117.01.17.09 Lehigh University Department of Civil Engineering & Mechanics
- 117.01.17.09A 236-77 Driving the Piles 2/16/54
- 117.01.17.09B 236-78 Inside the Pit 2/16/54
- 117.01.17.10 Addition to Fritz Engineering Laboratory
- 117.01.17.10A 236-80 Temporary South Wall 3/10/54
- 117.01.17.10B 236-81 Removing South Roofing 3/22/54

117.01.17.11 Addition to Fritz Engineering Laboratory
117.01.17.11A 236-83 Preparation for Removal 3/23/54
117.01.17.11B 236-84 Lifting of Roof Section 3/23/54
117.01.17.12 Addition to Fritz Engineering Laboratory
117.01.17.12A 236-86 Opening in South Wall 3/24/54
117.01.17.12B 236-116 View of Anchor Bolts from Pit 4/8/54
117.01.17.13 Addition to Fritz Engineering Laboratory
117.01.17.13A 236-88 Bite Off South Wall 3/24/54
117.01.17.13B 236-89 View of Roof Trusses 3/24/54
117.01.17.14 Addition to Fritz Engineering Laboratory
117.01.17.14A 236-91 Removal of Roof Truss 3/24/54
117.01.17.14B 236-93 Removal of Window 3/25/54
117.01.17.15 Addition to Fritz Engineering Laboratory
117.01.17.15A 236-94 Tearing Brick Wall 3/25/54
117.01.17.15B 236-98 Anchor Bolts 3/26/54
117.01.17.16 Addition to Fritz Engineering Laboratory
117.01.17.16A 236-96 Unloading Anchor Bolt 3/26/54
117.01.17.16B 236-97 Unloading Anchor Bolts 3/26/54
117.01.17.17 Addition to Fritz Engineering Laboratory
117.01.17.17A 236-99 Penetrometer at Footing A6 3/26/54
117.01.17.17B 236-100 Penetrometer at Footing Ba7 3/26/54
117.01.17.18 Addition to Fritz Engineering Laboratory

117.01.17.18A 236-102 Removal of Footing A7 3/26/54

117.01.17.18B 236-103 Temporary South Wall 4/2/54

117.01.17.19 Addition to Fritz Engineering Laboratory

117.01.17.19A Penetrometer at Footing D5

117.01.17.19B 236-118 Removing Lathe from Power House 4/9/54

117.01.17.20 mylar sleeve with two pockets containing two photographs

117.01.17.20A 236-111 Anchor Plate Close up 4-8-54 (sunlight filtering through openings above pit)

117.01.17.20B 236-112 Anchor Plate Close up 4-9-54 (M3 CP3001-C printed on top plate)

117.01.18 Lehigh Faculty Award May 1957 (two mylar sleeves with three photographs, one newspaper clipping)

117.01.18.01 Big Night for Lehigh Faculty Civil Engineering Head (William J. Eney) Wins Top Faculty Award at Lehigh, *Globe-Times*, May 21, 1957 (newspaper clipping)

117.01.18.02 8 x 10 inch black and white glossy photo (five men in front of Lehigh insignia, left to right: William J. Eney, Martin D. Whitaker, James L. McLennan Jr. Paul J. Frantz, Elmer W. Glick, photo similar to previous newspaper clipping)

117.01.18.03 8 x 10 inch black and white glossy photo (two men behind bouquet of flowers on a dais, left to right: Martin D. Whitaker and William J. Eney)

117.01.18.04 8 x 10 inch black and white glossy photo (two men shaking hands, left to right: William J. Eney and Martin D. Whitaker)

117.01.19 mylar sleeve containing two photograph sheets

117.01.19.01 Fritz Lab – Lehigh University 8 x 10 inch color photograph (multistory test setup with color coded structural members, two men standing on Fritz Lab addition main test bay floor: man wearing striped shirt is Richard Sopko, lab photographer and draftsman, man kneeling on second test tier is Kenneth

Harpel, Fritz Lab foreman, man standing on third test tier is Robert Dales, Lab technician)

117.01.19.02 Fritz Lab – Lehigh University 8 x 10 inch color photo sheet of four prints 4 x 5 inch

117.01.19.02A (smaller version of 117.01.19.01)

117.01.19.02B (overall view of main bay of Fritz Lab addition shows full view of Baldwin Universal Testing Machine and multistory test setup of previous photo at left, five men in photo)

117.01.19.02C (view of man (Richard N. Sopko) holding card and four blurred figures of men to his right in front of Baldwin Testing Machine setting up a test)

117.01.19.02D (frontal overall view of Fritz Lab main bay (similar to view in 117.01.19.02B, six men observing a test setup)

117.01.20 Photographs: C.E., Fac., Stu., Class, etc. (folder contains six envelopes each holding one 8 x 10 inch black and white glossy photographs)

117.01.20.01 Dept. of Civil Engineering – Lehigh University 8 x 10 inch black and white photo (group of 28 men standing on steps of Linderman Library c. mid 1950s, left to right – First row: 1. ?, 2. M. O. Fuller, 3. Howard Strausser, 4. Hale Sutherland, 5. Wm. J. Eney, 6. Kleinschmidt, 7. George C. Driscoll, 8. S. J. Errera, 9. E. K. Muhlhausen; Second row: 1. Albert de Neufville, 2. K. Knudsen, 3. Lynn Beedle, 4. M. B. McPherson 5. Alexis Smislova, 6. ?, 7. Vincent Force, 8. Russell Johns(t)on, 9. Raymond Snyder, 10. Cyril Jensen; Third row: 1. ?, 2. ?, 3. C. Diefenderfer, 4. ?, 5. Roger Kolm, 6. Wm. Schutz, 7. John McNabb, 8. Ferdinand Beer, 9. Bruno Thurlimann

117.01.20.02 8 x 10 inch black and white photograph (group of 27 men standing on steps of Linderman Library, c. mid 1950s, left to right, 1st row: William J. Eney fifth from left; 2nd row: George C. Driscoll, ?, ?, Lynn Beedle, ?, ?, ?, 3rd row: Ivan “Jack” Taylor, ?, ?, Bruno Thurlimann, Emil “Karr” Karpovich, ?, Brucker; 4th row: ?, ?, ?, Evans) (on back of photo is stamped Merin Studios, 1010 Chestnut St., Phila. 7, PA. and handwritten in pencil the identity of some of the men and Emil Karr, 36 Sweetgum Rd. Levittown, PA.)

117.01.20.03 8 x 10 inch black and white photograph (group of 26 men standing on Linderman Library steps, c. 1950s (listed on back of photo): Front row: K. Force(Fors), Fuller, Eney, Strausser, McNabb; second row: Driscoll, Kleinschmidt, Liebig, R. Johnston, ---, Beedle, Errera; Third row: McPherson,

Muhlhausen, Sutherland, Loewer, Smislova, de Neufville, Jentoft; Fourth row: Williams, West, Snyder, Kolm, Jensen, Beer, Knudsen

117.01.20.04 (duplicate of 117.01.20.04 except no listing of names on back)

117.01.20.05 CE – Mech Dept Staff (group of 26 men seated and standing in paneled room, c. early 1950s, names listed on back: Front row: Shook, B. Johnston, Payrow, Eney, Sutherland, Fuller, Jensen, Osborn; Second row: Topracsoglou, Crispin, McPherson, Kleinschmidt, ?, Beer, Kolm, Paul ---, Dittig, Muhlhausen; Third row: ?, Liebig, ?, Beedle, ?, ?, ?, ?(Crabtree)

117.01.20.06 8 x 10 inch black and white glossy (group of 11 men standing on steps, two in front holding a large framed picture featuring a handwritten letter, two photos: a man and a bridge, two column printed item), second man from left is Hale Sutherland, behind him is M. O. Fuller)

117.01.21 Xmas Party Photographs & Negatives (four mylar sleeves with two pockets each containing three 4 x 5 inch black and white photos with matching negatives in three of the sleeves, the remaining sleeve has only negatives)

117.01.21.01A Fritz Lab Christmas Party (group of people standing in main bay of Fritz Lab addition holding booklets apparently singing Christmas carols, Christmas tree in corner by large bay door).

117.01.21.01B Negative of previous photograph

117.01.21.02A Fritz Lab Christmas Party (group of people standing around a keg on a table, man on left leaning on keg is Ray(mond) Snyder and man on right leaning into keg tap is Roger Dittig)

117.01.21.02B Negative of previous photograph

117.01.21.03A Christmas Party in Fritz Lab (slightly different view of 117.01.21.01)

117.01.21.03B Negative of previous photograph

117.01.21.04A (Negative of Christmas Party, man standing trying to hit a piñata-type object hanging from a rope, group watching attempt)

117.01.21.04B (Negative of a photo of Prof. George Dinsmore with his son in foreground, in background are two other men all standing in the main bay of Fritz Lab)

117.01.22 Civil Engineering 1900, 04, 05(2), 06 (three mylar sleeves containing five 8 x 10 inch black and white photographs), one paper envelope containing five negatives of Class of '04 – '05 – '06 Eney)

117.01.22.01 mylar sleeve containing two 8 x 10 black and white glossy photos

117.01.22.01A C.E. '00. (26 men wearing suits in photo - 21 seated on stone steps, five standing (appear to be faculty) in front of door with C.E. '00 stenciled on cross braced wooden door, gray bearded man standing in middle is believed to be Prof. Mansfield Merriman, head of civil engineering department 1881-1907, two transits, two surveying rods, an axe and two measuring rod are among the men)

117.01.22.01B C E 0 4 (33 men wearing suits in photo seated on stone steps in front of cross braced wooden door with C E 0 4 stenciled on door, five men in back appear to be faculty - gray bearded man wearing derby hat in rear center is believed to be Prof. Mansfield Merriman, head of civil engineering department 1881-1907. There is a defect in upper right corner which indicates that this photo is a reproduction of an original that was damaged before the reproduction. The original photograph is also in Special Collections)

117.01.22.02 CE '05 (mylar sleeve containing two 8 x 10 black and white glossy duplicate photographs – each copy indicated with an A and B, 33 men wearing suits in photo – 27 seated on stone steps, six men – appear to be faculty - standing in front of cross-buck wooden door on which is stenciled CE '05 and in chalk Meeting. On right side of photo above third row of seated men printed in white is W.M. Flickinger, one man in third row has bandaged head, standing man with grey beard is believed to be Prof. Mansfield Merriman, head of civil engineering department 1881-1907)

117.01.22.03 C.E. '06 (mylar sleeve containing one 8 x 10 inch black and white glossy photograph, 36 men wearing suits in photo, 30 seated on stone steps, dog in front row, six standing in front of cross-buck wooden door C.E. '06 stenciled on door along with chalk are words: Meeting, Goltz, Important, H. A.M.AC, in lower right corner in white is word Flick...and what appears to be a tear in original photograph which indicates that this glossy photo is a print of an original photograph also in Special Collections. Six men standing appear to be faculty – man with grey beard is believed to be Mansfield Merriman, head of civil engineering department 1881- 1907)

117.01.22.04 C.E. 04, 05 (2), 06 Negatives (paper envelope containing negatives of 117.01.22.01B, 117.01.22.02, 117.01.22.03(3 – 1 negative is of entire photo

that appears as 117.01.22.03 but two other negatives are of same subject but section enlargements). Negatives are cataloged 117.01.22.04 A, B, C. C-1, C-2)

117.01.23 “Fritzie” (folder contains seven items of ephemera)

117.01.23.01 New York Herald Tribune, Saturday, October 15, 1955 (newspaper Article “New Lab Is Dedicated By Lehigh University”)

117.01.23.02 (photocopy of previous newspaper article from Herald Tribune)

117.01.23.03 3 ¾” x 4 ¾” black and white proof print, back of print in pencil is BS2877 (chicken egg on pedestal beneath test head of Baldwin Universal Testing Machine, crouching man at left of pedestal)

117.01.23.04 3 ¾” x 4 ¾” black and white proof print, back of print in pencil is BS2878 (chicken egg shells on pedestal beneath test head of Baldwin Universal Testing Machine, two crouching men on each side of pedestal)

117.01.23.05 3 ¾” x 4 ¾” black and white proof print, back of print is BS2872 (close up of chicken egg shells and baby chick on pedestal beneath test head of Baldwin Universal Testing Machine demonstrating the control range of the Baldwin 5,000,000 lb testing capacity – delicate enough to “hatch” a chicken egg all the way to 5,000,000 lbs of compression or tension depending on required test force)

117.01.23.06A & B FRITZIE was born under 5,000,000 lb. testing machine; lived a full life with no breakdowns; but finally gave his all for good old Fritz Lab, wishing the 5,000,000 lb. testing machine the same. (two photocopies of label on plastic box (located in display case next to elevator in Fritz Lab addition) containing the wishbone of “Fritzie” which has been preserved as a monument to the testing capacity of the Baldwin Universal Testing Machine)

117.01.24 “Engineering Parley” (newspaper article and photocopy “Engineering Parley Draws 450 at Lehigh”)

117.01.25 (folder contains two 8 x 10 inch black and white glossy photographs)

117.01.25.01 (20 people pictured, on back of photo is typed label which reads as: 1955 Plastic Design Conference – Fritz Lab: Front Row: Ed Estes (AISC), AISC rep., George Driscoll, Lynn Beedle, Samuel Errera, Jack Taylor. Middle Row: ?, ?, ?, Veronica Olanovich, Patricia Torres, Bernandine Krenicky. Back Row: ?, Bill Schutz, Bob Ketter, ?, Maxwell White, Yusuru “Joe” Fujita, Geerhard Haaijer, Oscar Darlington)

117.01.25.02 (237-83) (Summer 1965) – 56 (group of seated men in front of Baldwin Universal Testing Machine which has a test setup in ‘throat’, seven men standing around machine and some men sitting on second floor balcony)

117.01.26 Swiss Bridges [Photos of foreign bridges purchased from MOMA (13 sheets of paper)]

117.01.26.01 (three sheets of photocopied paper stapled together with typed information: 1st page - Photographs of foreign bridges purchased from The Museum of Modern Art – Swiss Bridges; 2nd page - Foot bridge near Wulflingen, Canton Zurich, Switzerland; Salgino Bridge, near Schiers, Canton Grisons, Switzerland; Scaffolding of the Salgina Bridge; Schwandbach Bridge; Schwandbach Bridge (close-up view); Van Tschiel Bridge, Canton Grisons, Switzerland; Chatelard Aqueduct, Canton Valais, Switzerland; Bridge over the Thur; Bridge over the Thur, near Felsegg, Canton St.Gall, Switzerland; also on second page is a label – Empire Folder Better folders for better files 304S Send your Order to the nearest “Y and E” Representatives or to our Home Office Yawman and Erbe Mfg. Co. Main Factories and Executive Offices Rochester, N.Y. Branches and Agents in all Principal Cities. 3rd page has typed statement: Photograph of Bridges secured from The Museum of Modern Art, New York).

117.01.26.02 6 ¼” x 9” black and white glossy photograph pasted on 8 ½” x 11” sheet of paper (WJE written in upper left corner), (typed caption) Footbridge near Wulflingen, Canton Zurich, Switzerland. 1933. Robert Maillart and W. Pfeiffer, engineers. Stiffened slabarch of 124-foot span. The subtle reverse curve of the footway makes this one of the most graceful of Maillart’s (i.e. Maillart) bridges. Arch and deck slabs fuse into one as they approach mid-stream, yet the total thickness of the crown is only 4-1/2 inches.

117.01.26.03 7” x 8 ¼” black and white glossy photograph pasted on 8 ½” x 11” sheet of paper (WJE written in lower right corner), (typed caption) Salgino Bridge, near Schiers, Canton Grisons, Switzerland. 1930. Robert Maillart, engineer. Three-hinged arch of 269-foot span. A Classic version of its structural type, the lean and flattened arch bridges the chasm in one smooth leap.

117.01.26.04 5” x 7” black and white glossy photograph pasted on 8 ½” x 11” sheet of paper (WJE written in lower right corner), (typed caption) The scaffolding of the Salgina Bridge. The daring lightness and notable elegance of the arch were presaged in its scaffolding, designed and executed by the Coray family of Chur, long famous in this highly specialized field.

117.01.26.05 5" x 7 ¼" black and white glossy photograph pasted on 8 ½" x 11" sheet of paper (WJE written on upper right corner), (typed caption) Schwandbach Bridge. The inner edge of the slab-arch follows the curve of the highway.

117.01.26.06 6 ½" x 9" black and white glossy photograph pasted on 8 ½" x 11" sheet of paper (WJE written on lower right corner). (typed caption) Schwandbach Bridge (close-up view). The inner edge of the slab-arch follows the curve of the highway.

117.01.26.07 4" x 5 ½" black and white glossy photograph pasted on 8 ½" x 11" sheet of paper (WJE written upper and lower left corners), (typed caption) Val Tschiel Bridge, Canton Grisons, Switzerland. 1925-26, Robert Maillart, engineer. Stiffened slab-arch of 142-foot span. Here for the first time Maillart used his extremely thin barrel vault, stiffened by the deep rigid girder formed by parapets and road-slab. The semicircular openings along the parapet and the incongruous masonry abutments were stipulated by the Grisons officials.

117.01.26.08 6 ½" x 9" black and white glossy photograph pasted on 8 ½" x 11" sheet of paper (WJE written upper and lower right corners). (typed caption) Chatelard Aqueduct, Canton Valais, Switzerland, 1925. Robert Maillart, engineer. 100-foot span. The structure is hybrid, for the arch springs conventionally from its abutments, then merges with the box girder that carries the water. This fusion of two seemingly incompatible forms is curiously successful.

117.01.26.09 6 ½" x 9" black and white glossy photograph pasted on 8 ½" x 11" sheet of paper (WJE written in upper right corner), (typed caption) Bridge over the Thur. At once bold and delicate, the lither arch looks very much at ease in the friendly, man-scaled landscape.

117.01.26.10 4" x 6" black and white glossy photograph pasted on 8 ½" x 11" sheet of paper (typed caption) Bridge over the Thur, near Felsegg, Canton St. Gall, Switzerland. 1933. Robert Maillart, engineer. Two parallel three-hinged arches of 226-foot span. No bridge of Millart's (i.e. Maillart) is more assertive of strength than this light span over the Thur. Characteristic of his later work are the powerful concisely defined, highly differentiated (i.e. differentiated) shapes – the pointed arch, the straight-drawn outer edges of the arch, ribs, the splayed slab-supports of the approaches. Every part is alive and at work. The X-shaped abutment-joints of reinforced concrete, more economical than conventional steel hinges contribute a great deal to the sense of unity and continuity of structure.

117.01.27 Photographs: Quebec Bridge Failure – 1, 10 mylar sleeves containing 21 8 x 10 inch black and white glossy prints

117.01.27.01 Starting the erection of the North Shore cantilever arm, showing the supporting platform in place carrying the first sections of the lower chord. 264 – June 18-15 (photo shows massive steel girders and beams supported on a masonry pier, water and low hills in background)

117.01.27.01A (Two smaller prints of previous photo printed on single sheet)

117.01.27.02 Erecting the third panel of the Cantilever Arm (photo shows massive steel superstructure supported on two masonry piers on a rocky surface, in foggy distance is a horizon of low hills)

117.01.27.02A (Two smaller prints of previous photo printed on single sheet)

117.01.27.03 Detail of the large link and connection at the tip of the main pier post 288 Jul 13, 15 (photo shows riveted steel superstructure of girders and eyebars, three workers on the superstructure)

117.01.27.03A (Two smaller prints of previous photo printed on single sheet)

117.01.27.04 An end section of the bottom chord being removed from the vertical planning machine (photo shows huge riveted steel sections horizontally installed in a machine, seven men in photo looking at camera)

117.01.27.04A (Two smaller prints of previous photo printed on single sheet)

117.01.27.05 Sept 11, 1916, 10:40 A.M. Just before the loss of the suspended span. Finn Photo (in black in lower right corner) (photo shows two opposite steel superstructure bridge sections reaching out across open water, from the ends of each section are cables suspending a third bridge section, beneath right section are several steam boats and a cloud of dark smoke)

117.01.27.05A (Two smaller prints of previous photo printed on single sheet)

117.01.27.06 The suspended span falling. (photo shows the suspended section hitting the water in spumes of water, three boats are visible in front of fallen section)

117.01.27.06A & B (Two sheets of two smaller prints each sheet of previous photo)

117.01.27.07 Quebec Bridge Suspended Span Being Lifted, Sept. 11, 1916. Its Fall. The Tell-tale Marks Left on the Truss Seats Recorded by Photographs and Sketch Diagram.

117.01.27.07A (Two smaller prints of previous illustration printed on single sheet)

117.01.27.08 The suspended span higher up Sept 19, 1917. (Finn in lower right corner) (Photo shows the middle section of bridge almost at same level as the two cantilever sections with supporting framework hanging below bridge deck, low hillside in background)

117.01.27.08A (Two small prints of previous photo printed on single sheet)

117.01.27.09 View of the bridge from the North Shore (Photo shows an angle of completed bridge with steamboat passing beneath center span and treetops in foreground)

117.01.27.09A (Two smaller prints of previous photo printed on single sheet)

117.01.27.10 Completed Bridge from Chaudiere Wharf (Finn Photo in lower right corner) (Photo shows broad view of completed bridge across river, in foreground are treetops and a rocky ledge, in distance a low hillside)

117.01.27.10A (Two smaller prints of previous photo printed on single sheet)

117.01.28 Photographs: Quebec Bridge Failure 2 (Negatives)
(Sheet of paper stating: Section of the Quebec Bridge after the failure were brought to original Fritz Lab to be tested to determine failure mechanism. The tested sections were donated to the Smithsonian. The Quebec Bridge design is based on the Firth of Forth Bridge in Scotland which also failed on the first attempt to build it.) (15 mylar sleeves holding 15 negatives of previous mentioned photographs).