

Appendix 2

Menlo Park Employees, 1879–1880

The following list is derived largely from laboratory Time Sheets, Jehl 1937–41, the Edison Pioneers Biographical File (NjWoe), and references to employees found in notebooks or other documents. However, this list is not complete; it does not include employees who were not mentioned in these sources and there are significant gaps in the run of time sheets. Because many employees were either shifted to the lamp factory or hired to work there during the last two months of 1880 and other employees were shifted to New York in the early months of 1881, the editors have decided to only include the years 1879–1880. Many of those whose first time sheets date from November or December 1880 probably worked in the lamp factory.

Each employee's name is followed, in parentheses, by the known dates of his work at the laboratory. If an employee was still working for Edison at the end of 1880, there is no end date. Specific dates (i.e., month and day) are usually derived from time sheets or from Edison Pioneers material. We have used only the beginning and ending dates of the weekly time sheets. Because there are significant gaps in the time sheets, it is possible that an employee may have started or ended his employment on different dates than those we have indicated.

Following the date there is a brief description of the employee's primary role at the laboratory. For cases in which laboratory records and reminiscences do not provide an adequate description of an employee's work, we have used the enumeration lists from the 1880 Census. Respondents gave census enumerators brief self-defined descriptions of their occupations. Our citation method for the 1880 Census lists two numbers. The first is taken from the column labeled "Dwelling

houses numbered in order of visitation” and the second from the column labeled “Families numbered in order of visitation.” If we have been unable to determine the employee’s primary role, we have indicated it as Unknown.

Following the brief description of the employee’s primary role, we summarize the particular kind of work that each did. However, for machinists and a few others (such as pattern maker Milo Andrus) who were involved in a wide variety of experimental work, we have not indicated specific tasks. The last items in each entry are the sources from which we derived information about the employee.

- Acheson, Edward G. (12 Sept. 1880–). Experimental assistant. Especially lamp filaments. Time Sheets; *Pioneers Bio.*; Jehl 1937–41, 548–50; *ANB*; Acheson 1965; Szymanowitz 1971.
- Acker, Ben (12 Aug. 1880–). Carpentry and general labor. Time Sheets; 1880 Census 262–83.
- Acker, Charles (12–26 Aug. 1880). Unknown. Time sheets indicate shop work and electric light. Time Sheets; 1880 Census 262–83.
- Acker, James (6 Feb.–8 Apr. 1880). Laborer. Time sheets indicate building extension and dynamo. Time Sheets; 1880 Census 262–83.
- Acker, Smith (1 Dec. 1878–16 Jan. 1879). Unknown. Probably labor on new buildings. Labor Account (*TAEM* 22:785, 788; *TAED* A281A, A281B); 1880 Census 262–83.
- Anderson, Thomas (7 May–18 Nov. 1880). Unknown. Time sheets indicate work on electric light, possibly laying underground conductor. Time Sheets; 1880 Census 468–509.
- Andersson, Hugo (20 May 1880–). Machinist. *Pioneers Bio.*; Jehl 1937–41, 546, 685–86.
- Andrews, William Symes (4 Dec. 1879–). Machinist. Time Sheets; *Pioneers Bio.*; Jehl 1937–41, 319.
- Andrus, Arthur (30 Sept. 1878–28 Oct. 1880). Hired in 1878 to make carbon buttons for the telephone transmitter. 1880 time sheets show work on electric light experiments. Son of Milo Andrus. Time Sheets; 1880 Census 210–31; *TAEB* 4: 459.
- Andrus, Milo P. (7 June 1878–). Carpenter and pattern maker. Time Sheets; 1880 Census 210–31; Jehl 1937–41, 222; Doc. 1974 n. 6.
- Applegate, A. A. (13 Aug.–16 Sept. 1880). Unknown. Time sheets indicate electric light and lamp factory. Time Sheets.

- Arnold, Elmer (13 Aug.–2 Sept. 1880). Unknown. Time sheets indicate electric light. Time Sheets.
- Askins, John (29 July 1880–). Unknown. Time sheets indicate electric light and lamp factory. Time Sheets.
- Badgley, John (9 Oct. 1879–29 Apr. 1880). Carpenter. Time sheets show work on electric light and telephone experiments. Time Sheets; 1880 Census 42–46.
- Barbar, Thomas (3 Sept. 1880–). Unknown, possibly machinist or machinist's assistant. Time sheets show work on electric experiments and lamp factory. Time Sheets.
- Batchelor, Charles (1870–). Edison's principal experimental assistant. Time Sheets; 1880 Census 319–44; *TAEB* 1:495–96.
- Bennett, A. (24 Sept.–4 Nov. 1880). Unknown. Possibly laborer, one time sheet indicates lamp factory. Time Sheets.
- Bennett, William H. (6–20 Feb. 1880). Mason. Time sheet indicates work on machine shop. Time Sheets; 1880 Census 38–42.
- Berggren, Ernest (11 Apr. 1880–). Office work and bookkeeping; assistant to William Carman. Edison Pioneer. Time Sheets; *Pioneers Bio.*; Jehl 1937–41, 546–47, 696.
- Bogan, William, Jr. (23 July 1880–). Laborer; lamp factory glassblower apprentice. Time sheets indicate electric light and lamp factory. Jehl claims that Bogan dug trenches for the underground lines in Menlo Park. Time Sheets; 1880 Census 310–35; Jehl 1937–41, 518.
- Bogan, William, Sr. (16 July–14 Oct? 1880). Laborer. Time sheets indicate lamp factory. Time Sheets; 1880 Census 310–35.
- Böhm, Ludwig (c. 20 Aug. 1879–22 Oct. 1880). German-born glassblower who constructed the vacuum pumps and globes for Edison's incandescent lamp. Time Sheets; Docs. 1786 n. 7 and 2000; Jehl 1937–41, 223, 324–28, 370–71, 495, 516, 612, 708.
- Bradley, James J. (26 Dec. 1879–). Machinist. He helped set up the Edison lamp factory at Menlo Park in 1880. Time Sheets; *Pioneers Bio.*; *TAEB* 3:589 n. 4; Testimony in *Edison v. Maxim v. Swan* (*TAED* W100DIG); Jehl 1937–41, 678–79.
- Bradley, John (1–8 Jan 1880). May be John Brawley. Unknown. Time sheet indicates electric light. Time Sheets.
- Brawley, John (23 July–26 Aug. 1880). Unknown. Time sheets indicate electric light. Time Sheets.
- Breath, William L. (9 Jan.–22 Apr.? 1880). Laboratory assistant. Time sheets indicate electric light. Time Sheets.

- Brison, James M. (23–30 Dec. 1880). Unknown. Time sheet indicates electric light, unknown if he continued to work for Edison. Time Sheets.
- Britton, Ed (8 Jan.–9 Dec. 1880). Unknown. Time sheets indicate electric light. Time Sheets.
- Burk, Martin, Jr. (17–30 Dec. 1880). Laborer. Time Sheets.
- Burk, Martin, Sr. (26 Dec. 1879–). Laborer. Time Sheets.
- Campbell, Charles (17 Sept. 1880–). Machinist? Time sheets show dynamo construction and tool repair. Time Sheets.
- Campbell, Henry Alexander (24 Oct. 1878–). Carpenter; superintendent of construction for the lamp factory. Time Sheets; *Pioneers Bio.*; 1880 Census 177–91; Jehl 1937–41, 222–23, 686–87.
- Campbell, John R. (5–25 Nov. 1880). Unknown. Time sheets indicate electric light and conductor cables. May have been at Menlo Park after 25 November; in 1881 he worked at the Edison Machine Works. Time Sheets; Edison Pioneer Files.
- Campbell, William (1 Jan.–27 Feb. 1880). Laborer. Time sheets indicate electric light and building extension. Time Sheets.
- Carman, George E. (April 1877–c. 6 April 1880). Purchasing agent and general assistant in laboratory and office. By December 1879 only assisting in laboratory. Brother of William Carman, Edison's bookkeeper. Time Sheets; Carman's testimony, *Edison v. Maxim v. Swan* (TAED W100DID [image 4]); *TAEB* 3:534 n. 2; Jehl 1937–41, 284, 318.
- Carman, Theodore F. (26 Dec. 1879–4 Mar. 1880). Purchasing agent; also assisted with construction of armatures. Teamster who hauled construction materials and machinery for building the Menlo Park laboratory in 1876 and for the new buildings in fall 1878. Time Sheets; 1880 Census 274–94; Doc. 1562, esp. n. 5.
- Carman, William (1876?–). Bookkeeper, accountant, and sometimes secretary. Time Sheets; 1880 Census 333–58; *Pioneers Bio.*; Doc. 1652 n. 14; Jehl 1937–41, 318, 495, 498.
- Clark, Charles P. (3 Sept.–4 Nov. 1880). Unknown. Time sheets indicate lamp factory. Time Sheets.
- Clarke, Charles L. (1 Feb. 1880–). Mathematician, mechanical engineer, draftsman, experimental assistant. One of the few employees at Menlo Park with formal engineering training. Time Sheets; *Pioneers Bio.*; Jehl 1937–41, 402–403, 855–56; *NCAB* 30:44.
- Clarke, Samuel A. (24–30 Sept. 1880). Unknown. Time sheets indicate lamp factory. Time Sheets.
- Claudius, Hermann (14? Dec. 1880–). Electrical engineer.

- Mapping out central station districts; constructing small models of stations and distribution networks. Had formerly worked in the Austrian Imperial Telegraph Department. Time Sheets; Doc. 2028 n. 2; Jehl 1937-41, 732-33.
- Conover, Edward (10 Sept.-4 Nov. 1880). Unknown. Time sheets indicate lamp factory. Time Sheets.
- Cornell, J. (6 Feb.-8 Apr. 1880). Laborer. Time sheets indicate work on dynamo building. Time Sheets.
- Cornish, A. H. (1 Jan.-8 Oct. 1880). Office work. Time Sheets.
- Cousins, W. (29 Oct.-25 Nov. 1880). Laborer? Time sheets indicate winding cables for underground conductors. Time Sheets.
- Crane, Alonzo (13 Aug.-14 Oct. 1880). Unknown. Time sheets indicate electric light. Time Sheets.
- Croley, C. (13 Aug.-9 Sept. 1880). Unknown. Time sheets indicate electric light. Time Sheets.
- Crosby, George (Nov. 1879?-1 July 1880). Hired as unpaid laborer although he is identified in the 1880 census as a machinist. Assisted with vacuum pumps, ore separation experiments, and general laboratory work. Time Sheets; 1880 Census 213-35; Doc. 1926 n. 3.
- Cunningham, David H. (30 May 1879-). Machinist. Time Sheets; 1880 Census 84-89; Jehl 1937-41, 680.
- Daley, Brainard (17 Sept.-18 Nov. 1880). Unknown. Time sheets indicate electric light, including "digging on lines." Time Sheets.
- Danbury, M. (5-25 Nov. 1880). General labor. Time Sheets.
- Dean, Charles (18 Oct. 1878-). Machinist. Particularly involved in dynamo construction. First superintendent of the Machine Works. Had formerly worked for Edison at his Newark shops. Time Sheets; 1880 Census 211-33; Jehl 1937-41, 25, 52, 220, 319; *TAEB* 4:539.
- Dean, George (30 May 1879-). Machinist. Son of Charles Dean. Time Sheets; Jehl 1937-41, 546, 676.
- Donegan, Michael (23-29 April 1880). Laborer. Time sheet indicates electric railway. Time Sheets; 1880 Census 173-87.
- Dougherty, D. (17-23 Sept. 1880). Unknown. Time sheet indicates electric light. Time Sheets.
- Dume, Thomas (6-12 Feb. 1880). Laborer. Time sheets indicate building extension. Time Sheets.
- Duncan, William S. (26 Dec. 1879-4 Nov. 1880). Unknown. Time sheets indicate electric light, electric railway, telephone. Time Sheets.
- Dunham, Nelson V. W. (6-26 Aug. 1880). Unknown. Time

- sheets indicate lamp factory, particularly cutting fibers. Time Sheets.
- Edison, Charles P. (June 1878–26 Feb. 1879). Edison's nephew, known as Charley. Experimental assistant. Telephone receiver experiments; sent to England in February 1879 to demonstrate and promote electromotograph telephone. Died in Paris 19 October 1879. Time Sheets; *TAEM-G2*, s.v. "Edison, Charles P."
- Egan, James (9–16 Oct. 1879). Machinist. Apparently had a contract for telephones on which a number of other machinists at the laboratory worked. He had worked for Edison at Newark. Name sometimes spelled "Eagan." Time Sheets; Egan to Charles Batchelor; Richard Dyer to Egan, 8 June 1882; both DF (*TAEM* 27:522, 80:594; *TAED* SB1677194, LB007429).
- Eldridge, James A. (10 Sept.–28 Oct. 1880). Unknown. Time sheets indicate electric light and lamp factory. Time Sheets.
- End, Theodore (11 Nov.–16 Dec. 1880). Unknown. Time sheets indicate electric light, filling in cables. Time Sheets.
- Erichs, William Eridis (17 Sept.–21 Oct. 1880). Unknown. Time sheets indicate lamp factory. Time Sheets.
- Erliche, Robert (2 Aug.–23 Dec. 1880). Machinist? Time sheets indicate electric light, electric railway, tools for lamp factory. Time Sheets.
- Fernander, Nels (26 Dec. 1879–11 Mar. 1880). Unknown. Time sheets indicate electric light. Time Sheets.
- Fink, W. M. (26 Dec. 1879–29 Jan. 1880). Unknown. Time sheets indicate winding coils for telephone and electric light. Time Sheets.
- Flaherty, John (13 Aug.–28 Oct. 1880). Unknown. Time sheets indicate electric light and lamp factory. Time Sheets.
- Flammer, Charles (14 June 1878–4 Nov. 1880). Machinist. Time Sheets; 1880 Census 334–60; Jehl 1937–41, 546.
- Force, Joseph J. (1 Oct.–4 Nov. 1880). Glassblower. Brother of Martin Force. Time Sheets; 1880 Census 257–77.
- Force, Martin (1877–). Laboratory assistant. A carpenter who worked on the construction of the Menlo Park laboratory in winter 1876 and then packing pens and running the steam engine at the electric pen factory in Menlo Park. Sometime in late 1877 or early 1878 he became a general handyman around the laboratory. By June 1878 he was generally assisting with experiments. Time Sheets; 1880 Census 257–78; *TAEB* 3:534 n. 3; Jehl 1937–41, 278–79.
- Freeman, Erastus (26 Dec. 1879–18 Nov. 1880). Carpenter.

- Time sheets indicate electric light. Time Sheets; 1880 Census 199–219.
- Freeman, Fred (6 Feb.–12 Dec. 1880). Laborer. Time sheets indicate building extension. Time Sheets.
- Gallagher, J. (24 Sept.–5 Nov. 1880). Laborer. Time sheets indicate insulating cables and winding wires. Time Sheets.
- Gavin, H. (24 Sept.–7 Oct. 1880). Unknown. Time sheets indicate electric light. Time Sheets.
- Gibbon, William (20–26 Aug. 1880). Unknown. Time sheet indicates electric light. Time Sheets.
- Griffin, Michael (15 May–23 Sept. 1880). General labor. Time sheets indicate electric light, electric railroad, lamp factory. Time Sheets; 1880 Census 190–206.
- Griffin, Stockton L. (c. 1 June 1878–c. 28 Feb. 1881). Personal secretary. Former telegraph operator who had worked with Edison in Cincinnati in 1867. Time Sheets; *TAEB* 1:297 n. 1, 276 n. 1; Jehl 1937–41, 35, 696.
- Gunn, James (6–26 Feb. 1880). Laborer. Time sheets indicate dynamo and battery. Time Sheets; 1880 Census 430–71.
- Habberfield, Charles (29 Oct.–4 Nov. 1880). Unknown. Time sheets indicate lamp factory. Time Sheets.
- Hahn, Fred (13 Aug.–4 Nov. 1880). Unknown. Time sheets indicate lamp factory. Time Sheets.
- Haid, Dr. Alfred (June 1879–). Chemist. First Ph.D. chemist hired by Edison; he was nicknamed “Doc.” Time Sheets; Jehl 1937–41, 262–63.
- Hall, Louis (13 Aug.–4 Nov. 1880). Unknown. Time sheets indicate lamp factory. Time Sheets.
- Hammer, William Joseph (Dec. 1879–). Laboratory assistant. Primarily assisted with lamp experiments. Became chief electrician of the Menlo Park lamp factory. Time Sheets; *Pioneers Bio.*; Jehl 1937–41, 405–8; Doc. 1972 n. 7; *ANB*.
- Hankins, Mathew (13 Feb. 1879–?). General labor; glassblowing. Among other things he helped his father, who ran a dairy in Uniontown (now Iselin) to grade the bed for the electric railroad. Became first apprentice glassblower at lamp factory. Time Sheets; *Pioneers Bio.*; Jehl 1937–41, 517–18, 812.
- Hechtel[?], Albert (3 Sept. 1880–?). Unknown. Time Sheets.
- Hense, Rudolph (2 Oct. 1878–5 June 1879). Machinist. Time Sheets; *TAEB* 4:595 n. 3.
- Herman, Carl (30 May–5 June 1879). Unknown. Time sheets indicate electric light. Time Sheets.
- Herrick, Albert B. (28 Aug. 1879–Jan. 1881). Experimental assistant. Primarily involved in lamp experiments in the

- laboratory and the lamp factory. Left to attend Stevens Institute of Technology. Time Sheets; Pioneers Bio.; Doc. 1972 n. 5; Jehl 1937-41, 408, 544, 661.
- Hickman, David K. (mid-July 1880-). General laboratory assistant. Became foreman of the pump department at the Menlo Park lamp factory. 1880 Census 573-613; Pioneers Bio.; Jehl 1937-41, 518.
- Hickman, George (11 Nov. 1880-). Census identifies as tinsmith. Time sheets indicate soldering, winding armatures, and electric light. Time Sheets; 1880 Census 213-35.
- Hickman, John Parker (20 Sept. 1880-). Laboratory assistant and lamp factory employee? He worked on sealing copper and platinum wires for inside parts and copper clamps. Pioneers Bio.
- Hill, George (Fall 1879-). Vacuum pump assistant to Francis Jehl. Jehl 1937-41, 369.
- Hipple, James (Spring 1880?-). Listed in census as a messenger residing at the Sarah Jordan boarding house. Became William Holzer's assistant and learned glassblowing. 1880 Census 213-35; Jehl 1937-41, 497, 632, 716.
- Holcombe, William (11 Nov. 1880-). Unknown. Time sheets indicate electric light, especially dynamos. Time Sheets.
- Holloway, James (1879-). Machinist. Time Sheets; Pioneers Bio.; Jehl 1937-41, 318, 682-83.
- Holzer, Frank (3 Oct. 1880-). Glassblower. Lamp factory. Brother of William Holzer. Time Sheets; Pioneers Bio.
- Holzer, William (16 Jan. 1880-). Glassblower. Later superintendent of Menlo Park lamp factory glass department. Married Alice Stilwell (Mary Stilwell Edison's sister). Time Sheets; 1880 Census 213-35; Jehl 1937-41, 253, 495-96, 513-14, 631, 716, 803, 812.
- Hood, John (8 June 1878-). Machinist and mechanic. Time Sheets. Jehl 1937-41, 320, 682.
- Horn, John (11 Nov.-23 Dec. 1880). Laborer? Time sheet indicates winding cable. Time Sheets.
- Hornig, Julius L. (4 Jan. 1880-). Mechanical engineer. Central station design and electric railroad. Time Sheets; Hornig's testimony, 3, 7, *Edison v. Siemens v. Field*, Lit. (*TAEM* 46:6, 8; *TAED* QD001:2, 4); Jehl 1937-41, 546, 577.
- Houlding, T. (24 Sept. 1880-?). Unknown. Time Sheets.
- Howell, Thomas H. (17 Nov. 1880-). Unknown. Time sheet indicates electric light and lamp factory. Brother of Wilson Howell. Time Sheets.
- Howell, Wilson S. (Dec. 1879-). Experimental assistant.

- Worked initially on exhausting lamps with the vacuum pumps then given primary responsibility for developing insulation for underground cables. *Pioneers Bio.*; *Doc.* 1985 n. 1; Jehl 1937-41, 404-6, 72-26.
- Hughes, Charles T. (21 Oct. 1879-). Purchasing agent; experimental assistant with telephone receiver and autographic telegraph. Worked with Patrick Kenney on the autographic telegraph, worked on electric railroad projects, and served as agent for the Edison Electric Light Co. *Time Sheets*; 1880 Census 213-35; Jehl 1937-41, 546, 885.
- Isaac, Earnest (26 Feb. 1880-?). Unknown. *Time Sheets*.
- Isaac, M. (1880). Photographer. Jehl 1937-41, 497.
- Jackson, George (15 June 1878-5 June 1879). Machinist. *Time Sheets*; *TAEB* 4:414 n. 10.
- Jehl, Francis (3 Mar. 1879-). Laboratory assistant. Vacuum pump design and operation, electric lamp tests. *Time Sheets*; 1880 Census 213-35; *Doc.* 1685 n. 2; *Pioneers Bio.*; Jehl 1937-41.
- Jenkins, John F. (11 Nov.-12 Dec. 1880). Unknown. *Time sheets* indicate boiler room, electric light. *Time Sheets*.
- Johnson, Edward (Sept. 1880-). Long-time Edison associate who worked on electric light experiments at Menlo Park laboratory beginning in September 1880. *Doc.* 1988 n. 1.
- Kelly, John (1880). Machinist. Jehl 1937-41, 546.
- Kenly, John F. (30 May-5 June 1879). Unknown. *Time Sheets*.
- Kenny, Patrick (July? 1878-). Experimenter. He worked with Edison on autographic telegraph. *Time Sheets*; *TAEB* 1: 622 n. 21; 4:284 n. 3; Jehl 1937-41, 39, 263.
- Knight, John K. (4-27 Sept. 1878; 1 Nov. 1878-10 Jan. 1879). Laboratory assistant. He tested generators, made carbon buttons and did other electric light work. He was discharged in January. *Time Sheets*; *TAEB* 4:708 n. 2.
- Knight, Joseph H. (30 Nov. 1878-20 Feb. 1879). Laborer. Made carbon buttons. *Time Sheets*; 1880 Census 32-35.
- Kruesi, John (1871 or 1872-). Foreman of machine shop. Swiss-born machinist who constructed much of Edison's experimental apparatus at Newark and then became foreman of the machine shop at the Menlo Park laboratory. In 1881 he headed the Electric Tube Co., which manufactured the underground electric tubes for the Pearl Street central station. *Time Sheets*; *TAEB* 2:633 n. 6.
- Lawson, John (Jan. 1879-). Chemist. Known as "Basic." *Time Sheets*; 1880 Census 213-35; *Pioneers Bio.*; Jehl 1937-41, 262-63.

- Lee, Mark (11 Nov.–16 Dec. 1880). Night watchman. Time Sheets; 1880 Census 197–214.
- Lewis, Richard (16 Apr. 1880–?). Unknown. Time Sheets.
- Lighthipe, James (1879). Claims to have been at Menlo Park working on motograph telephone experiments before being sent to England as a telephone expert on 30 Nov. 1879. *Pioneers Bio*.
- Livingston, Francis (30 Jan. 1880–?). Toolmaker. Time Sheets; Doc. 1914 n. 7.
- Loforge, Charles E. (26 Nov.–16 Dec. 1880). Carpenter. Time Sheets; 1880 Census 164–71.
- Logan, Thomas (1877 or 8 June 1878–). Machinist; became foreman of the machine shop after John Kruesi took over management of the Electric Tube Co. in 1881. Time Sheets; 1880 Census 582–623; *TAEB* 4:414 n. 11; Jehl 1937–41, 680.
- Lomas, George (6 Aug. 1880–?). Unknown. Time Sheets.
- Lomas, William (13 Aug. 1880–?). Unknown. Time Sheets.
- Mack, Edward (21 Dec. 1878–16 Oct. 1879). General labor. Time Sheets.
- Macoy, John (13 Aug. 1880–?). Unknown. Time Sheets.
- Malone, Felix (23 June 1880–?). Unknown. Time Sheets.
- Martig, G. (11–18 Nov. 1880). Unknown. Time sheets indicate electric light work on Johnson's experimental screws for clamps for electric lamps. Time Sheets.
- Martin, John (11 Nov. 1880–). Unknown. Time sheets indicate electric light, especially direct converter. Time Sheets.
- McCollin, John (17 Dec. 1880–?). Unknown. Time sheets indicate direct converter. Time Sheets.
- McCombe, Thomas (11 Nov. 1880–). General labor. Time sheets indicate electric light. Time Sheets.
- McIntire, Henry M. (15 Nov. 1878–20 Feb. 1879). Chemist. He was the first college-educated chemist at the laboratory. Time Sheets; *TAEB* 4:661.
- McKine, David (11 Nov.–16 Dec. 1880). Unknown. Time sheets indicate general labor on electric light and lamp factory. Time Sheets.
- McLeollium[?], John (10–16 Dec. 1880). Unknown. Time Sheets.
- McMore[?], C. (24 Dec. 1880–). Unknown. Time sheets indicate electric light. Time Sheets.
- Merrill, Frank M. (1880). Engineer. Edison's letter of recommendation from Edison dated October 1880, DF (*TAEM* 53:521; *TAED* D8014ZAE).

Millheels, Albert (15 Oct. 1880-?). Unknown. Time Sheets.

Miller, William H. (17 Sept. 1880-?). Unknown. Time Sheets.

Mills, William Albert (30 Apr. 1880-?). Laboratory assistant. Entry in notebook dated 27 Nov. 1880. N-80-09-28:189, Lab. (*TAEM* 36:535; *TAED* N106:189). Time Sheets.

Mitchell, Thomas (11 Nov. 1880-). Unknown. Time sheets indicate lamp factory. Time Sheets.

Moffatt, Benjamin Franklin (1880). General labor; apprentice glassblower at lamp factory. Son of Charles W. Moffatt. 1880 Census 98-215; Jehl 1937-41, 517-18, 688, 812.

Moffatt, Charles William (27 Sept. 1878-5 June 1879?). Carpenter and pattern maker. His name appears as Moffat in the census, as Morfitt on time sheets, and as Moffett in Jehl 1937-41. Time Sheets; 1880 Census 98-215; *TAEB* 4:595 n. 2; Jehl 1937-41, 687-88.

Moore, Bery (11 Nov. 1880-). General labor. Time Sheets.

Moore, Mack (25 Nov.-23 Dec. 1880). Unknown. Time sheets indicate electric light and lamp factory. Time Sheets.

Moore, Walter (11 Nov. 1880-?). Machinist. Possibly W. H. Moore whose name appears in time sheets from 11 Nov. to 30 Dec. 1880. Time Sheets; 1880 Census 312-37.

Moses, Dr. Otto (c. June 1879-). Chemist. Second Ph.D. chemist hired by Edison. Also acted as librarian and translator as he knew German and French. Time Sheets; 1880 Census 99-104; Doc. 1754; Jehl 1937-41, 496-97, 535.

Mott, Charles P. (Jan. 1880-). Office worker and draftsman. Kept daily journal of activities at the laboratory beginning on 14 Mar. 1880. Brother of Samuel D. Mott. Time Sheets; Docs. 1890 n. 13 and 1914; Jehl 1937-41, 546.

Mott, Samuel Dimmock (Sept. 1879-). Draftsman. Brother of Charles P. Mott. Time Sheets; 1880 Census 213-35; Doc. 1985 n. 7; *Pioneers Bio.*; Jehl 1937-41, 318, 546, 664, 696.

Mumsell, Dr. C. E. (Mar.-Apr. 1879). Chemist. Ph.D. See Chapter 1 introduction.

Mungle, Alex (1879-). Machinist. Time Sheets; *Pioneers Bio.*; Jehl 1937-41, 318, 685.

Murphy, M. (11 Nov.-9 Dec. 1880). Laboratory assistant. Time sheets indicate electric light. Time Sheets.

Nichols, Dr. Edward Leamington (Oct. 1880-June 1881). Experimenter. In particular he worked on the chemical balance meter and the electric dynamometer. Organized lamp testing department at Menlo Park lamp factory. Time Sheets; *Pioneers Bio.*; Jehl 1937-41, 552-53; Doc. 2065 n. 7; *ANB*.

- O'Connell, William (11–25 Nov. 1880). Unknown. Time sheets indicate electric light. Time Sheets.
- Olsson, Alfred (30 May–5 June 1879). Unknown. Time sheets indicate telephone experiments. Time Sheets.
- Ott, John (c. 5 May 1875–). Machinist; became experimenter. Time Sheets; *Pioneers Bio.*; *TAEB* 2:560 n. 1, 4:276 n. 1; Jehl 1937–41, 679.
- Poinier, Arthur O. (9 Oct.–Dec. 1879). Experimental assistant. Time sheets indicate telephone experiments; notebook entries show work on carbon filament lamps. Time Sheets; Doc. 1850.
- Rabone, Walter (11 Nov. 1880–). Time sheets indicate electric light. Time Sheets.
- Raettig, Charles (11 Nov. 1880–). Draftsman. Time Sheets.
- Randolph, John (8 Nov. 1878–). Office boy and general labor around the laboratory. Known as “Johnny,” he later became Edison’s bookkeeper and secretary. Time Sheets; 1880 Census 182–96; Randolph’s testimony in *New York Phonograph Co. v. National Phonograph Co.* and *Edison v. American Mutoscope Co. & Keith*, Lit. (*TAEM* 116:96, 117:715; *TAED* QM001159, QP0100159); Obituary in *Newark Advertiser*, 17 Feb. 1908; Jehl 1937–41, 696.
- Randolph, Joseph (11–25 Nov. 1878). Made lampblack buttons. Time Sheets; 1880 Census 182–96.
- Rowland, Edward C. (Jan. or Feb.? 1880). Draftsman. His name appears on the drawings for Edison’s patent application Case 202, which was filed on 5 Feb. 1880, PS (*TAEM* 45:435; *TAED* PT010AAA); Jehl 1937–41, 546–47, 696.
- Roxberry, John (9 Oct. 1879–). Machinist? Worked on Egan telephone contract and on direct converter. Time Sheets.
- Roxbury, A. J. (30 Nov. 1878–16 Oct. 1879). Hired in November 1878 to assist with painting of the machine shop. Became a shop assistant in December 1878. Time Sheets; *TAEB* 4:749 n. 8.
- Rule, William, Sr. (11 Nov. 1880–). Possibly machine shop assistant. Time sheets indicate machine shop and fire room. Time Sheets.
- Russell, James (Summer 1880–). Had charge of canvassing of Pearl Street central station district. Time Sheets; Doc. 1995 nn. 1–2.
- Sculley, Harry (2–9 Dec. 1880). Laborer. Time sheets indicate “running wire.” Time Sheets.
- Sculley, Henry (2 Dec. 1880–). Time sheets indicate electric light. Time Sheets.

- Segredor, John (30 May 1879–March 1880; Summer 1880). Experimental assistant. He worked on a telephone order after coming to the laboratory and later on electric light. Left in March 1880 and then returned that summer before leaving again in September to obtain vegetable fibers in Georgia, Florida, and Cuba. Died in Havana, Cuba, on 27 October 1880. Time Sheets; Doc. 1972 n. 4.
- Seymour, James M. Jr. (30 May 1879–) Laboratory assistant. Time sheets indicate he worked on telephones, including the Egan contract, and electric light. May have been at the laboratory as early as 1878. Time Sheets; Pioneers Bio.; Doc. 1855 n. 9.
- Sheeley, M. J. (11 Nov. 1880–). Unknown. Time sheets indicate electric light and lamp factory. Time Sheets.
- Smith, C. F. (11 Nov. 1880–). Unknown. Laboratory time sheets indicate direct converter. Time Sheets.
- Smith, John (11 Nov.–16 Dec. 1880). General labor. Time Sheets.
- Swanson, Alfrid (Dec. 1876–). Served as night watchman, ran steam engine, and made carbon buttons. Time Sheets; *TAEB* 4:415 n. 13; Jehl 1937–41, 128, 131.
- Table, A. (11 Nov.–16 Dec. 1880). Laborer. Time sheets indicate electric light, lamp factory, and house, presumably meaning Edison's house. Identified as [Abbin?] M. in census. Time Sheets; 1880 Census 593–635.
- Thury, Rene (1880?). Laboratory assistant. Jehl 1937–41, 553, 864.
- Tilton, E. C. (11 Nov. 1880–). General labor? Time Sheets.
- Tweed, Louis (11 Nov. 1880–). Unknown. Time sheets indicate electric light. Time Sheets; 1880 Census 113–18.
- Upton, Francis (c. 13 Dec. 1878–). Mathematician and experimenter. A key assistant on electric light research. Nicknamed “Culture,” he was first hired by Edison in November 1878 to review all scientific literature related to electric lighting. Time Sheets; 1880 Census 261–82; *TAEB* 4:702 n. 1, 767 n. 5; Pioneers Bio.
- Vail, John H. (July 1880–). Machinist. Worked largely on dynamos; in charge of running dynamos in Menlo Park central station. Time Sheets; Pioneers Bio.; Jehl 1937–41, 546–48, 884–85.
- Van Cleve, Cornelius (June 1880–?). Laboratory assistant. Laboratory notes show that he kept record of carbon experiments from June and July 1880. Known as “Neal,” he was the husband of Hattie Van Cleve, the half sister of Mary

- Stilwell Edison. N-80-06-02, Lab. (*TAEM* 36:397; *TAED* N105); 1880 Census 581-622; *TAEB* 2:769.
- Vansickle, A. (11 Nov. 1880-). Unknown. Time sheets indicate electric light and lamp factory. Time Sheets.
- Voorhees, Benjamin (9 Oct. 1879-25 Nov. 1880). Machinist. Time Sheets; 1880 Census 27-30.
- Weiseman, O. (13-20 Feb. 1879). Laborer? Time Sheets.
- Welsh, Alexander. (Fall 1880-). Lamp factory. Exhausting lamps, later in charge of carbonizing. Upton's testimony, 3255-56, *Edison Electric Light Co. v. U.S. Electric Lighting Co.*, Lit. (*TAEM* 48:134-35; *TAED* QD012F3254).
- Weniger, John (11-25 Nov. 1880). Laborer. Time sheets indicate winding cable, moving engine. Time Sheets; 1880 Census 206-328.
- Westerdahl, Anton R. (1880-). Machinist. Brother of Axel Westerdahl. Time Sheets; *Pioneers Bio.*; Jehl 1937-41, 546, 686.
- Westerdahl, Axel K. (1880-). Machinist. Brother of Anton Westerdahl. *Pioneers Bio.*
- Wheeler, Moses (11 Nov. 1880-). Coachman. His wife is listed in the census as a child's nurse, possibly for the Edisons. Time Sheets; 1880 Census 318-43.
- Williams, Arthur (13-20 Feb. 1879). Unknown. Time sheets indicate electric light. Time Sheets; *Pioneers Bio.*
- Wood, Samuel L. (10-16 Dec. 1880). Carpenter. Time Sheets; 1880 Census 331-56.
- Wright, Frank (11 Nov. 1880-). Identified in census as apprentice, probably in machine shop. Time sheets indicate direct converter and planing dies. Time Sheets; 1880 Census 211-33.
- Wright, William (30 May 1879-). Machinist. Time Sheets; 1880 Census 211-33.
- Wurth, Charles (5 June 1879-). Machinist. Had worked in Newark shops and then in Menlo Park until March 1877. *Pioneers Bio.*; *TAEB* 2:519 n. 2.