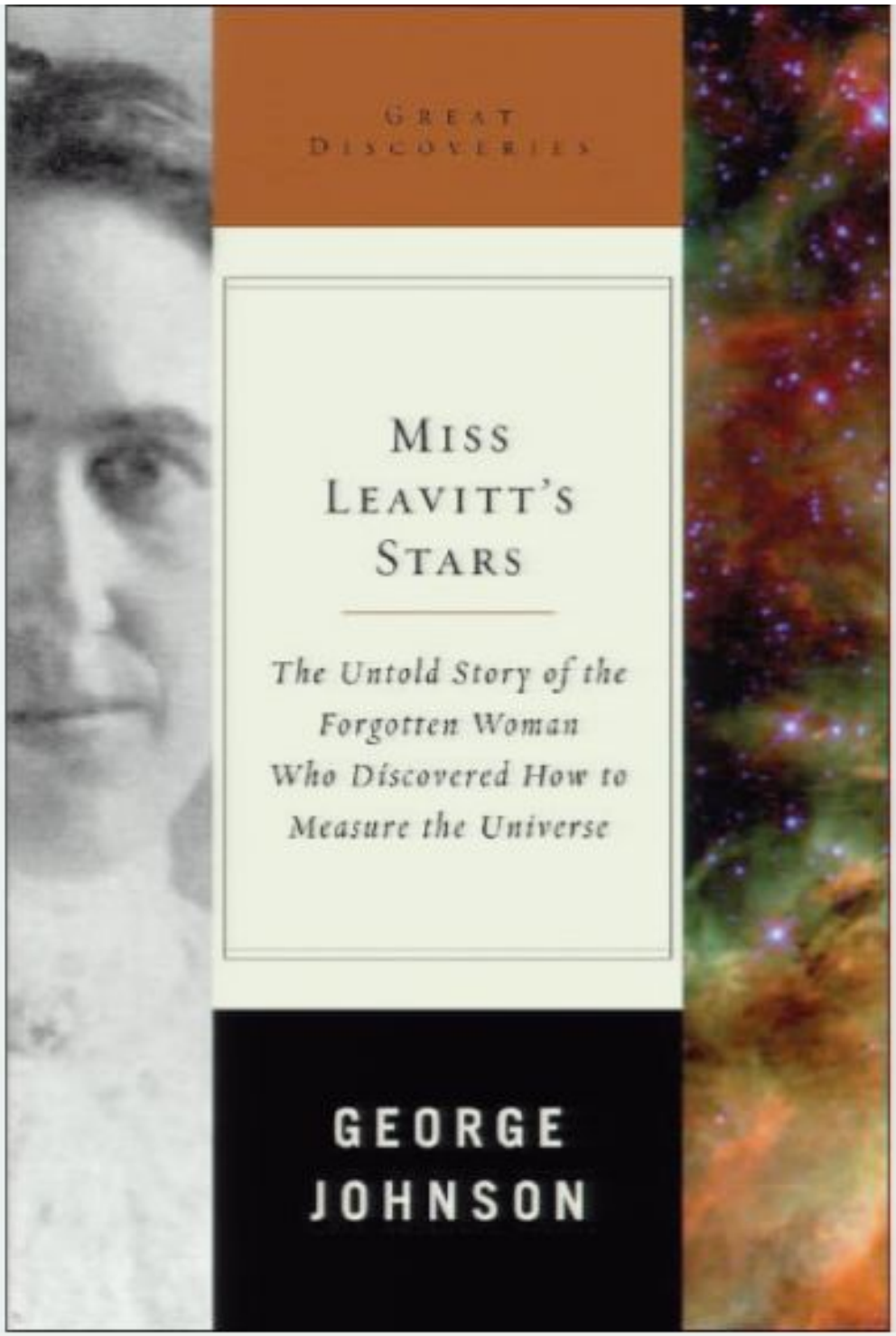
Title: The Search for Miss Leavitt

Date: May 03, 2006 07:00 PM

URL: http://pirsa.org/06050003

Abstract: Inside Harvard College Observatory in 1904, a young woman named Henrietta Swan Leavitt sat hunched over a stack of glass photographic plates, patiently counting stars. The images had been taken by a telescope high in the Peruvian Andes, and Miss Leavitt was given the tedious chore of measuring the brightness of thousands of tiny lights, something that would now be done by machine. Her job title was \'computer,\' but during the next few years she rose above her station as a tabulator of data and discovered a new law, one that would change forever our view of the universe. George Johnson, the author of Miss Leavitt\'s Stars: The Untold Story of the Woman Who Discovered How to Measure the Universe, writes about science for The New York Times from Santa Fe, New Mexico and is winner of the AAAS Science Journalism Award. His other books include A Shortcut Through Time: The Path to the Quantum Computer, Fire in the Mind: Science, Faith, and the Search for Order and Strange Beauty: Murray Gell-Mann and the Revolution in 20th-Century Physics. He is co-director of the Santa Fe Science-Writing Workshop and can be reached on the Web at talaya.net. A graduate of the University of New Mexico and American University, his first reporting job was covering the police beat for the Albuquerque Journal. <kw> Miss Leavitt\'s Stars, George Johnson, Leavitt, astronomy, cephoid, Magellanic cloud </kw>


GREAT DISCOVERIES
MISS LEAVITT'S STARS
The Untold Story of the Forgotten Woman Who Discovered How to Measure the Universe
GEORGE JOHNSON

Inside the Harvard College Observatory in 1904, a quiet 36-year-old woman named Henrietta Swan Leavitt sat hunched over a stack of photographic plates, patiently counting stars. The images had been taken by a telescope high in the mountains of Peru, and Miss Leavitt had been given the tedious chore of measuring the brightness of thousands of tiny lights, comparing how they varied from day to day. It is a task that would now be done automatically with an array of photoelectric cells and digital electronic circuits. Miss Leavitt's job title was "computer," as though she were little more than a human machine. But during the next few years, she rose beyond her assigned station as a tabulator of data to notice a subtle pattern, one that would change forever the map of the sky.

After thousands of hours of squinting and counting, she discovered by 1912 the stellar yardstick that would allow astronomers to begin measuring the universe. Certain kinds of stars, called Cepheid variables, pulse with the regularity of beacons. The rhythm of their light, she realized, betrayed their inherent brightness and thus, most importantly, how far away they were. Astronomers, tethered to the earth, finally had a "standard candle," a way to reach out and gauge the depth of the heavens. If two Cepheids were beating at the same rhythm, you would know that they shared the same inherent brightness. If one appeared to be dimmer, you could estimate how much farther away it was.

Over the next dozen years, some of the most flamboyant figures in American astronomy leaped on this discovery and battled over our place in the universe. Some, like the headstrong Harlow Shapley, were determined to prove that the Milky Way was the universe -- that the smudges of light called nebulae were not distant worlds but small, nearby clouds. His rival, Edwin Hubble, every bit as overbearing and self-assured, believed that the nebulae were galaxies in themselves, that the Milky Way was just one island in what was called a "cosmic archipelago." The issue was vigorously debated in the astronomy journals and on the floor of the National Academy of Sciences in Washington (where, on one occasion, a visiting scientist named Albert Einstein was in the audience.)

By 1925, Hubble had won. He used a blinking Cepheid to estimate that a stellar haze called Andromeda was a million light-years away -- much too distant to be anything but an enormous galaxy of its own. In the next decades, Hubble and

Lapp, H. (1975). *A craftsman's handbook*. B. B Garvan (Ed.). Philadelphia: Philadelphia Museum of Art.
Miller, J. (1980, July 2). Rare art by Amishman goes on exhibit. Lancaster, Pennsylvania *New Era*, 23.
Swank, S. T., Forman, B. M., Sommer, F. H., Schwind, A. P., Weiser, F. S., Fennimore, D. H., & Swan, S. B. (1983). C. E. Hutchins (Ed.), *Arts of the Pennsylvania Germans*. New York: W. W. Norton.

HENRIETTA SWAN LEAVITT (1868–1921), American Astronomer.

Henrietta Swan Leavitt was born on July 4, 1868, in Lancaster, Massachusetts, one of seven children. She was the daughter of a Congregational minister, Reverend George Roswell Leavitt, and Henrietta S. (Kendrick) Leavitt. Her Puritan heritage could be traced to Jordan Leavitt, who settled in Hingham, Massachusetts, in the 1640s. In 1885, she entered the preparatory department of Oberlin College. Two years later, she entered Oberlin, where she flourished, although her hearing was, by this time, deteriorating. She enrolled at the Society for the Collegiate Instruction of Women (Radcliffe), where her kind personality made her popular among her classmates and minimized the effects of her now-profound deafness. In her senior year at Radcliffe, a course in astronomy aroused her interest and she took another course there after graduating in 1892.

Two decades earlier, in 1872, Henry Draper had taken the first astronomical photograph, the first to show that spectral lines existed in the ultraviolet and infrared as well as the visible portion of the sun. Then, in the 1880s, Edward Pickering significantly advanced the study of the spectra of stars by employing a large prism in front of a photographic plate to capture an entire field of stars at once. As director of the Harvard College Observatory, he had ambitious plans to map the heavens using this technique. For this, he needed assistance. He chose Leavitt, who had begun as a volunteer. Unfortunately, she had to leave the Observatory when a family crisis called her to Wisconsin. After two years, Pickering encouraged Leavitt to return at his expense. He offered her a pay increase and told her that if she had to leave the Observatory again she could take with her the materials and data she had collected. Pickering's offer of a raise in 1900 was an uncommon gesture. In 1902, within a short time of her appointment, she advanced to head the photometry department.

Because of Leavitt's outstanding initiative and unfailing patience, Pickering chose her to execute his ambitious 1904 plan to redetermine star magnitudes using the most up-to-date photographic techniques. The accuracy of such data was crucial to investigations of astronomers during this period, and Pickering's staff began with the "North Polar Sequence" as a standard for the entire sky. Forty-six stars were selected, and 299 photographic plates using thirteen telescopes were employed to establish this primary sequence. Leavitt and her colleagues then applied this scale to measure the thousands of stars in the heavens. Leavitt discovered 2,400 variable stars while making these stellar measurements

U.S. astronomer.
Born in Lancaster, Massachusetts.
Parents: Henrietta (Kendrick) and George Leavitt.
Education: public school, Cambridge, Massachusetts; Oberlin College (1885–1888); Society for the Collegiate Instruction of Women (later Radcliffe College) (1888–1892).
Staff member, Harvard Observatory (1902–1921).
Died in Cambridge, Massachusetts.
DAB, DSB, NAW.

Henrietta Leavitt was one of seven children of a Congregationalist minister, who had a parish in Cambridge, Massachusetts, during most of Henrietta's childhood. She attended public school in Cambridge and, after the family moved to Cleveland, Ohio, studied at Oberlin College (1885–1888). Although her hearing was seriously impaired, this handicap did not impede her progress at school. Leavitt completed her undergraduate education at Radcliffe College, then known as the Society for the Collegiate Instruction of Women (1888–1892).

Leavitt took a course in astronomy during her senior year at Radcliffe and developed an interest in the subject. After graduation she took another course and then spent some time traveling before volunteering her services to the Harvard Observatory in 1895. Appointed to the permanent staff in 1902, she soon attained the position of chief of the photographic photometry department. She worked at the Observatory until her death, of cancer, at age fifty-two.

Much of Leavitt's scientific work involved the accurate measurement of the brightnesses—and hence the magnitudes—of stars. During the first years of the century, visual photometry was superseded by photographic

lish a "north polar sequence" of magnitudes that would serve as a standard for the entire sky. In 1913 the system of the north polar sequence was adopted by the International Committee on Photographic Magnitudes for its projected astrographic map of the sky. Leavitt worked on this project until her death, at which time she had established sequences for 108 areas.

In the course of her observations Leavitt made the important discovery that the fainter stars of a sequence were usually redder than the brighter stars. This phenomenon raised the question whether the stars were actually more red or whether their light appeared red because of the effects of interstellar absorption. Since Leavitt's discovery, photoelectric techniques have been developed that can distinguish between the two cases.

Leavitt's most important theoretical contribution was the establishment of the period-luminosity relation of the cepheid variable stars—stars that brighten and dim in a highly regular fashion. In her study of these stars she noted that the longer the period of pulsation, the brighter the star. This relation was used by subsequent astronomers for determining the distances from the earth of similar stars within our own galaxy and in distant galaxies.

H. Leavitt, "Ten Variable Stars of the Algol Type," *Annals of the Harvard College Observatory* 60, no. 5 (1908): 109–146; "1,777 Variables in the Magellanic Clouds," *Annals of the Harvard College Observatory* 60, no. 4 (1908): 87–108.

A9 132:480; A23 121:432; A39 6:84; A41 8:105–106; A46 2:382–383; B35 G79.

Dict of Sci Bio

finally, the initiative and referendum. In the 1896 presidential campaign she found her hero in William McKinley. During the early years of the twentieth century she supported imperialism, Theodore Roosevelt-style progressivism, and birth control, along with woman suffrage and prohibition, which she had espoused in Kansas. Having given up Catholicism with her marriage, she listed herself in 1893 as a Campbellite (Disciples of Christ) and in 1897 as a Theosophist.

Remaining in the East after 1896, she did some lecturing, but as her public influence declined, her interest turned toward her family and domestic difficulties. In 1901 she filed a petition for divorce but withdrew the plea and attempted a reconciliation at the urging of her children. At the same time she filed a petition for bankruptcy, indicating the dire state of her finances. The reconciliation was short-lived, and she won a divorce on grounds of nonsupport in 1902. For the next thirty-one years she lived quietly with her son Ben in Brooklyn and for a short time with her daughter Louise, lectured occasionally for the adult education program of the New York City Board of Education, and served as president of the National Society for Birth Control. She died in 1933 in Callicoon, N.Y., of a leg infection and chronic nephritis and was buried in Cedar Grove Cemetery, Flushing, Long Island.

[Clippings and biographical material in the collection of the Kans. State Hist. Soc., Topeka, are the principal source. Other unpublished sources are: Donald H. Ecroyd, "An Analysis and Evaluation of Populist Political Campaign Speech Making in Kans., 1890–1894" (unpublished Ph.D. dissertation, State Univ. of Iowa, 1954); pension records of Joseph P. Clyens, Nat. Archives, Washington, which include the birth dates of his children and other family data; and death record of Mrs. Lease from N.Y. State Dept. of Health. Particular points

LEAVITT, Henrietta Swan (July 4, 1868–Dec. 12, 1921), research astronomer at the Harvard College Observatory, was born in Lancaster, Mass., one of seven children of the Rev. George Roswell Leavitt, a Congregational minister, and Henrietta S. (Kendrick) Leavitt. Both her parents were of colonial stock; her father, a graduate of Williams College and the Andover Theological Seminary, was a descendant of Jordan Leavitt, who settled in Hingham, Mass., in the 1640's. Perhaps reflecting her Puritan heritage, Miss Leavitt was a deeply conscientious person, devoted to her family, her church, and especially her work. Growing up in Cambridge, Mass., and, after 1885, in Cleveland, Ohio, where her father held successive pastorates, she attended public school in Cambridge and the preparatory department of Oberlin College (1885–86), followed by two years in the college itself (the first in the Conservatory of Music). In 1888 she entered Radcliffe College (then known as the Society for Collegiate Instruction of Women) as a freshman. Although extremely deaf, she impressed her classmates "with the clarity of her mind and the sweet reasonableness of her nature." A course in astronomy during her senior year apparently roused her interest; she took another the year after her graduation in 1892 and, after an interval of travel, began in 1895 volunteer work at the Harvard Observatory. She was appointed a permanent staff member in 1902. Starting as an assistant in the examination of variable stars, she quickly advanced to the position of chief of the photographic photometry department.

Although Miss Leavitt was not accorded honors and publicity commensurate with those achieved by her illustrious contemporaries WILLIAMINA P. FLEMING and ANNIE J. CANNON, she was fully as deserving. Her most important work required greater understanding and even more meticulous care, and was more desper-

praised for his bravery, good judgment, and concern for the well-being of his troops.

• Except for his official correspondence found in National Archives Record Groups 94 and 107 there is no body of Leavenworth papers. Jeffrey Kimball, "The Battle of Chippewa: Infantry Tactics in the War of 1812," *Military Affairs* 31 (1967–1968): 169–86, considers his early leadership. Roger L. Nichols, *General Henry Atkinson: A Western Military Career* (1965), provides details on some of his actions. See also Marcus L. Hansen, *Old Fort Snelling, 1819–1859* (1918); Elvid Hunt, *History of Fort Leavenworth, 1827–1927* (1926); and Bruce E. Mahon, *Old Fort Crawford and the Frontier* (1926), for his actions at those places. Doanne Robinson, ed., "Official Correspondence of the Leavenworth Expedition of 1823 into South Dakota for the Conquest of the Ree Indians," *South Dakota Historical Collections* 1 (1902): 179–256, focuses on his Arikara campaign, while Brad Agnew, "The Dodge-Leavenworth Expedition of 1834," *Chronicles of Oklahoma* 53 (1975): 376–96, examines his last campaign.

ROGER L. NICHOLS

LEAVITT, Henrietta Swan (4 July 1868–12 Dec. 1921), astronomer, was born in Lancaster, Massachusetts, the daughter of George Roswell Leavitt, a minister, and Henrietta Kendrick. She attended the Society for the Collegiate Instruction of Women (later known as Radcliffe College) in Cambridge, Massachusetts, graduating in 1892. The following year she obtained credits toward a graduate degree in astronomy there for work done at the Harvard College Observatory; she never completed the degree. Leavitt spent the remainder of the 1890s traveling, teaching school, and making measurements of stellar brightness at the Harvard Observatory. In 1900 illness led her to a long stay with family in Wisconsin. Although she lost part of her hearing, she was persuaded to return as a permanent member of the observatory staff in 1902. She continued this work even when poor health forced her to return to Wisconsin for some time in 1908.

pected of variability and were compared to images of the same star on other plates. Working this way in 1904 and 1905, Leavitt found some 1,054 variable stars in the Magellanic Clouds of the southern hemisphere. In 1908, despite ill health, she published a list of the 1,777 variable stars she had found in these regions in the *Annals of the Astronomical Observatory of Harvard College* (60, no. 2). Moreover, Leavitt was able to find the period of the variability of sixteen stars in the Small Magellanic Cloud that varied like the star Delta Cepheus. She commented in another 1908 article in *Annals* (60, no. 4) that the brighter of these so-called Cepheid variables had longer periods. In 1912 Leavitt returned to the subject of Cepheid variables, plotting the magnitudes of twenty-five Cepheids in the Small Magellanic Cloud at both maximum and minimum brightness against the logarithms of their periods. The longer the period, the greater the brightness at maximum. As all the stars were in the Small Cloud, and hence at roughly equal distances from Earth, Leavitt noted in the *Harvard College Observatory Circular* (1912) that apparent differences in the photographic magnitudes of the stars probably corresponded to real differences in their emission of light. The Danish astronomer Ejnar Hertzsprung soon pointed out that if one knew the actual brightness of Cepheids of given periods, one could estimate their distance from Earth from the apparent brightness. Hertzsprung and later Harlow Shapley used the period-luminosity relationship to estimate the distance of the Small Magellanic Cloud, placing it far beyond our own galaxy. They argued that nebular regions of the sky like the Magellanic Clouds were indeed distant "island universes," outside the confines of our own galaxy. This conclusion was hotly debated at the time. However, both the existence of galaxies not our own and the use of the period-luminosity relationship to find stellar distances, would become widely accepted by astronomers.

America's Top Woman Astronomer Went Unrecognized for Her Discoveries

By WEBB GARRISON

Astronomer Henrietta Swan Leavitt worked years without pay and went unrecognized by colleagues.

She didn't even have her major discovery named for her. Yet she laid the foundation for scientific theories about life on other worlds.

In 1888, at age 20, Henrietta began study at what is now Radcliffe College after partial deafness forced her to give up her dream of becoming a concert pianist. "I had no idea what I wanted to do with my life," she later said. "But because it fitted my schedule, I took a course in astronomy."

Henrietta Leavitt
She found stars — but not fame.

After graduation with a Phi Beta Kappa key, Henrietta found herself unable to get a job. So in 1895, she went to famed Harvard College Observatory and asked for a chance to work for free.

Seven years later, she was added to the payroll as "assistant in the examination of variable stars" — stars which pulsate with their own rhythm instead of with uniform brightness.

Henrietta pored over photographs of the night sky so intently that she identified about 2,400 variable stars — half those known to astronomers of her era. She also discovered four novae (stars that suddenly become bright, then gradually fade), and a number of asteroids and other heavenly bodies.

But these achievements were insignificant compared with her real discovery. For more than 8 years, Henrietta concentrated on timing the changes in light intensity of certain stars. She learned the slower the "pulse rate" of a star, the brighter its light.

This discovery was used by other astronomers to provide a new yardstick by which to measure the universe and it produced the formula that should have been named for Henrietta, but became known as the "Harvard Standard."

Using that standard, astronomer Harlow Shapley startled the scientific world in 1918 with a model of the galaxy containing Earth 10 times as large as the accepted one at the time.

And from that came the deduction that the great numbers of solar systems in other galaxies must have millions of planets — and of these, at least 100,000 probably sustain life.

Henrietta Swan Leavitt died in 1921 without knowing that she had laid the scientific groundwork for modern theories about extra-terrestrial life, the origin of UFOs and voyages to Earth from far-distant planets.

		Cavanagh, Bridget	W	F	19	Servant		1	Servant			Ireland
	5	263 288	Towle, Warren O.	W	M	35			1	works Organ factory	—		Mass
			— Emma F	W	F	25	wife		1	Keeping house			N. Hamp
			— Clara A	W	F	7	daughter		1	at school		1	Mass
			— Lottie E	W	F	3	daughter		1	at home			N. Hamp.
			— Betsey J	W	F	4/12	Son daughter		1	at home			Mass.
	9	264 319	Leavitt, Geo. R	W	M	41			1	Clergyman			Mass
			— Henrietta S	W	F	36	wife		1	Keeping house			Mass
			— Henrietta S	W	F	11	daughter		1	at school			Mass
			— Martha A	W	F	6	daughter		1	at school			Mass
			— Geo. W	W	M	4	Son		1	at home			Mass
			— Mira F	W	F	2	daughter		1	at home			Mass
			— Caroline R	W	F	1/12	May daughter		1	at home			Mass
			Kendrick, Mary A	W	F	27	Sister in law		1	at home			Mass
			McDonald, Catharine	W	F	25	Servant		1	Servant			Nova Scotia
	11	265 320	Leavitt, Erasmus D	W	M	70			1	at home			N. Hamp.
			— Almira F	W	F	67	wife		1	Keeping house			Mass
			— Almira F	W	F	30	daughter		1	at home	Spinal difficulty		Mass.
			Marston, Ada L	W	F	23	Servant		1	Servant			Maine
	21	266 321	Hawkes, Levi	W	M	41			1	Plumber	—		Mass
			— Adeline D	W	F	40	wife		1	Keeping house			Mass
			Hatch, Caroline B	W	F	47	Roomer		1	at home			Conn
			— Rebecca	W	F	44	Roomer		1	at home			Mass
			Copeland, Sarah B	W	F	36	boarder		1	seamstress			Maine
	23	267 322	Cutting, Gilbert	W	M	75			1	Piano Tuner	—		Mass
			— Mary A	W	F	69	wife		1	Keeping house			Mass
			— Gilbert E	W	M	44	Son		1	Piano Tuner	—		Mass
			Ramsey, Fred M	W	M	30	Son in law		1	Clerk in Bank	—		Mass
			— Francenia	W	F	33	daughter		1	boarder			Mass
			Barnes, Kate	W	F	25	Servant		1	Servant			Ireland
	27	268 323	Fryer, Edward H	W	M	31			1	Bookbinder	—		Eng.

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9-11 Kelly (formerly Warland)

Please fill out and return with as little delay as possible to George M. Jones, Secretary, Oberlin, Ohio.
(Kindly note suggestions on page 1.)

1. Full name? Henrietta Swan Leavitt

2. Present occupation? Astronomical Research

3. Postoffice address? 641 (No.) Church (Street) Beloit (Postoffice) Wisconsin (State)

4. Place of birth? Lancaster, Mass. 5. Date of birth? July 4 1868

6. Date of marriage 18 To whom? (full name)

7. Is husband (*or wife*) living?

8. Academic degrees received:—

	Name of College or University	Year
Degree of A.B conferred by	Radcliffe College	in 1892
Degree of conferred by		in

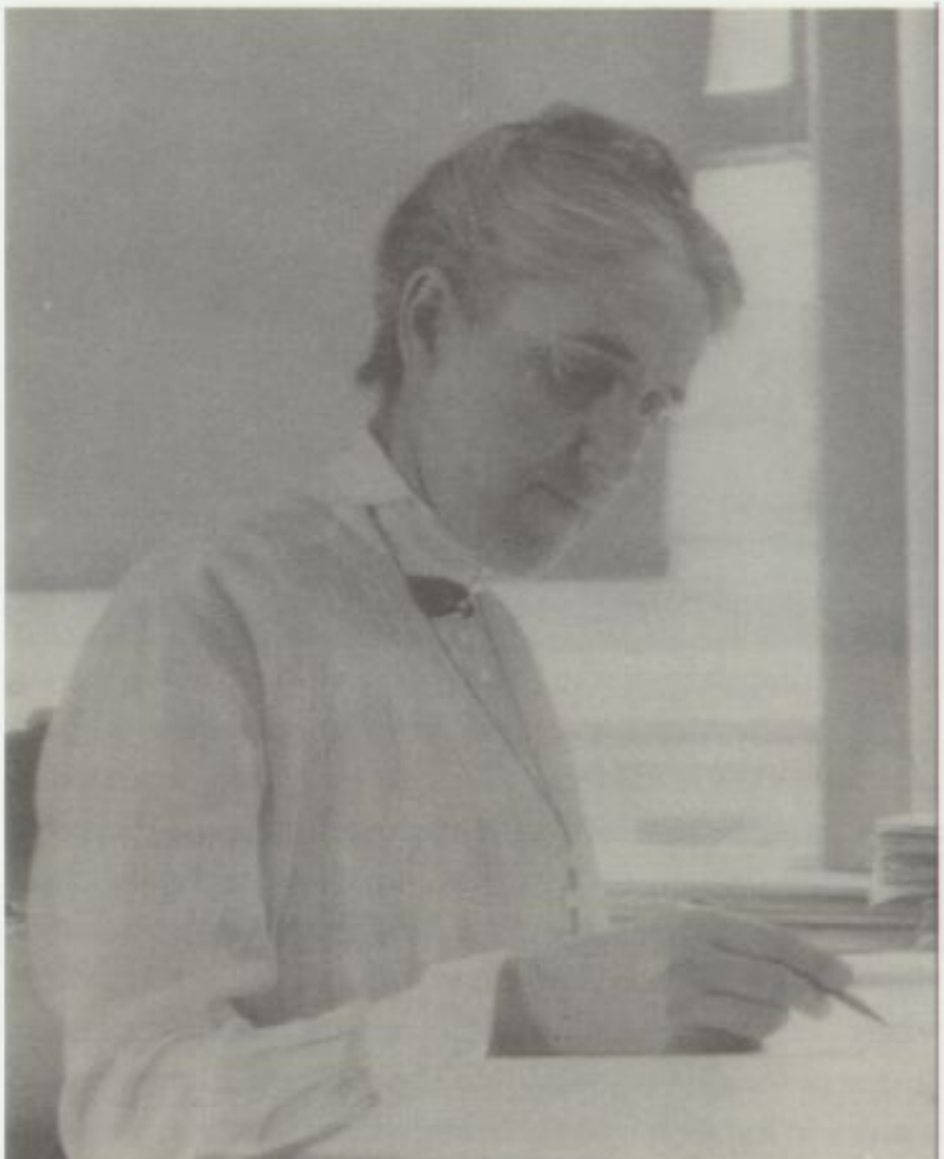
9. Other honors received, and civil offices held? (Please give dates) Member Astronomical and Astrophysical Society of America 1904. Fellow American Association for the Advancement of Science 1906.

10. Military services?
Rank, Company and Regiment? Dates of entering and leaving service?

11. Places of residence, and occupations followed since last year of study in Oberlin? Radcliffe College 1888-92
We should like statement, in brief,
Graduate study Harvard Observatory 1893-94, 1895-96. Travel in Europe 1896-98
showing, so far as you can conveniently recall the facts, what occupations were followed, and where followed, with dates of entering and leaving them.
Assistant in Art Department Beloit College 1899-1902. Travel in Europe 1902 Assistant in Harvard College Observatory, Cambridge, Mass., since 1903.

12. Books or articles written or edited? Harvard Observatory Circulars 8 73, 79, 82, 86, 88, 90,
We should like a complete list, with dates of publication.

FIG. 49. A group of women computers, directed by Mrs. Williamina Fleming (standing). The seated figure in the front is Miss Evelyn Leland



Observatory Pinafore

"He must open the dome and turn the wheel,
And watch the stars with untiring zeal,
He must toil at night though cold it be,
And he never should expect a decent salaree."

"We work from morn till night,
Computing is our duty,
We're faithful and polite,
And our record book's a beauty."


© Anglo-Australian Obs./Royal Obs. Edinburgh

LOUIS G. NEWHALL
ALBERT H. BLEVINS

OFFICE OF
NEWHALL & BLEVINS
ARCHITECTS
9 PARK STREET

THIRD FLOOR
TICKNOR BUILDING

TELEPHONES
450 HANCOCK
451 HANCOCK

Linnaean Hall
check address
3-5 Linnaean

BOSTON, August 28, 1915

Re. Linnaean Hall - Cambridge

Please put on your list for renting the following suites in the above building -

Suite 4 - Living room, Dining room, chamber, kitchenette, bath & piazza
Rent $40. per mo. on yearly lease.
Available Sept. 1, 1915.

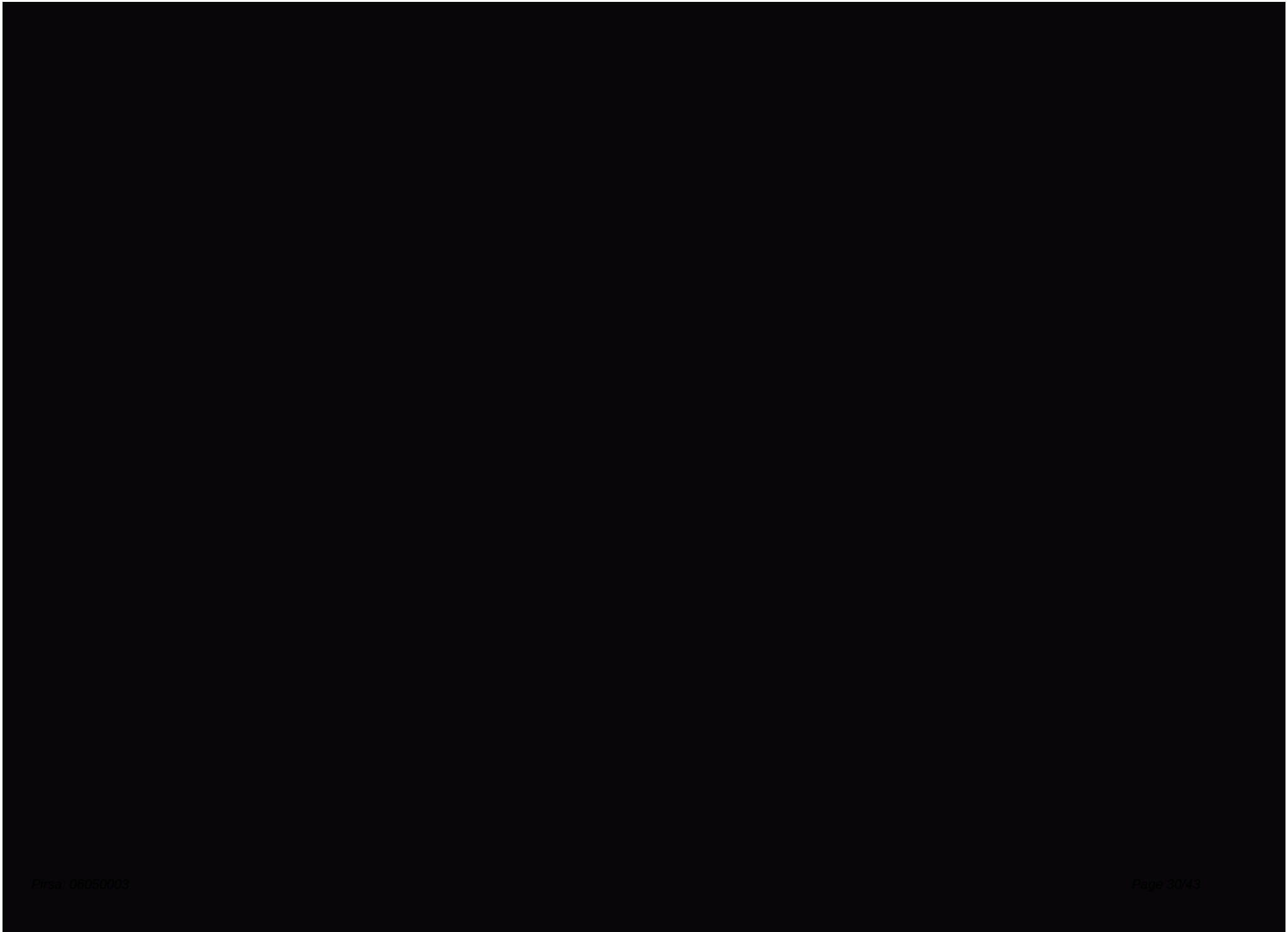
Suite 6 - Living room, chamber, kitchenette and bath
Rent $30. per mo. on yearly lease.
Available Sept. 1, 1915.

Suite 23 - Living room, Dining room, chamber, kitchenette, bath & piazza
Rent $42.50 per mo. on yearly lease.
Available Oct. 1, 1915.

Suite 25 - Living room, Dining room, chamber, kitchenette, bath & piazza
Rent $42.50 per mo. on yearly lease.
Available Sept. 1, 1915.

Suite 26 - Living room, chamber, kitchenette, bath ~~expixxxx~~
Rent $32.50 per mo. on yearly lease.
Available Oct. 1, 1915.

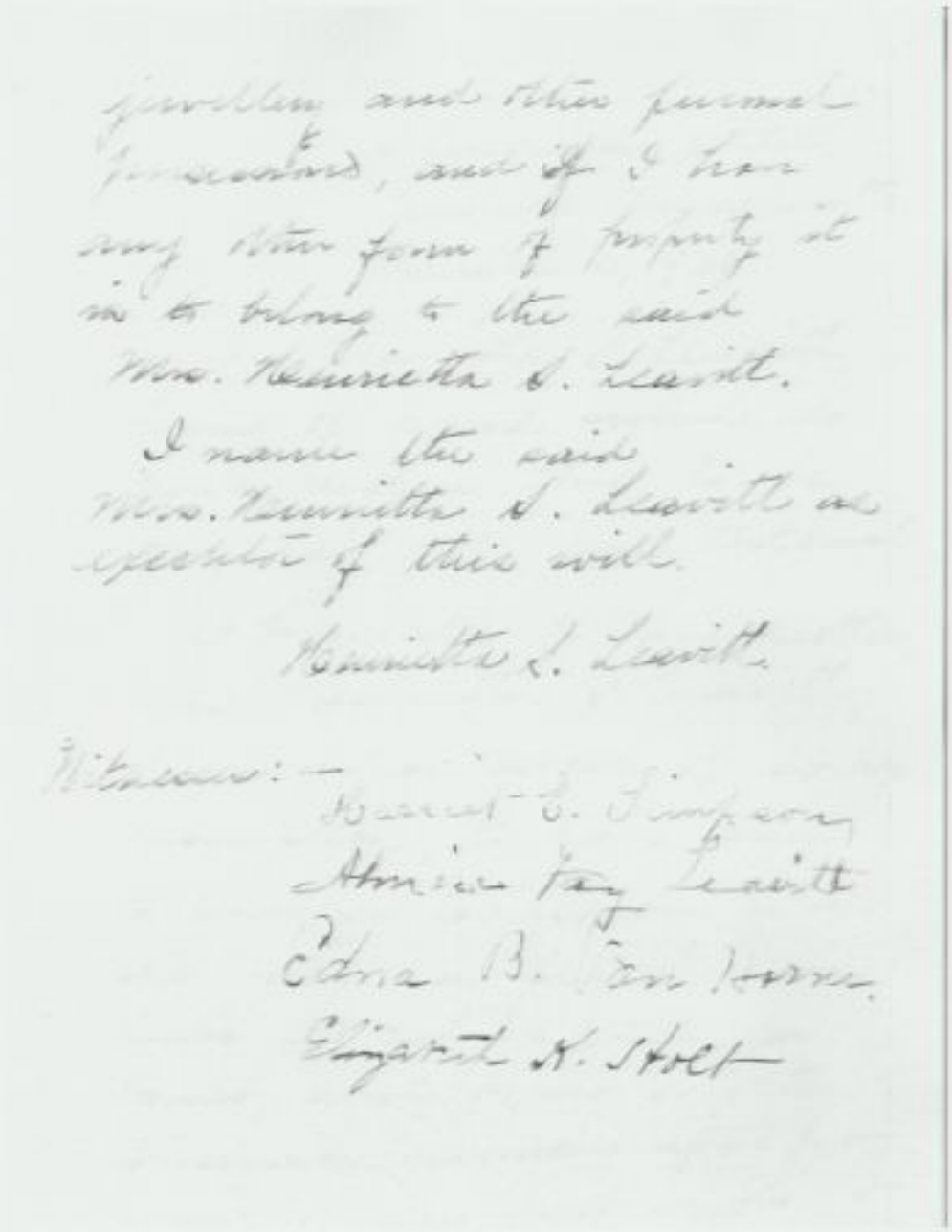
Suite 28 - Living room, Dining room, 2 chambers, kitchenette, bath & piazza
Rent $52.50 per mo. on yearly lease



Kinnaird Street.
Cambridge, Massachusetts.
December 2, 1921

I, Henrietta S. Leavitt,
being of sound mind, do
hereby declare this to be
my last will and testament.

I bequeath to my mother,
Mrs. Henrietta S. Leavitt,
all my possessions of every
description, to have and
to hold or to dispose of as
she may see fit. This in-
cludes all cash, deposits in
banks, liberty bonds, or other
financial securities after pay-
ment of my just debts. It
includes all household effects



provision and other funeral
[illegible] and if I have
any other form of property it
is to belong to the said
Mrs. Henrietta S. Leavitt.

I name the said
Mrs. Henrietta S. Leavitt as
executrix of this will.

Henrietta S. Leavitt

Witness:—
Harriet E. Simpson
Annie Fox Leavitt
Edna B. Van Horne.
Elizabeth N. Stoel—

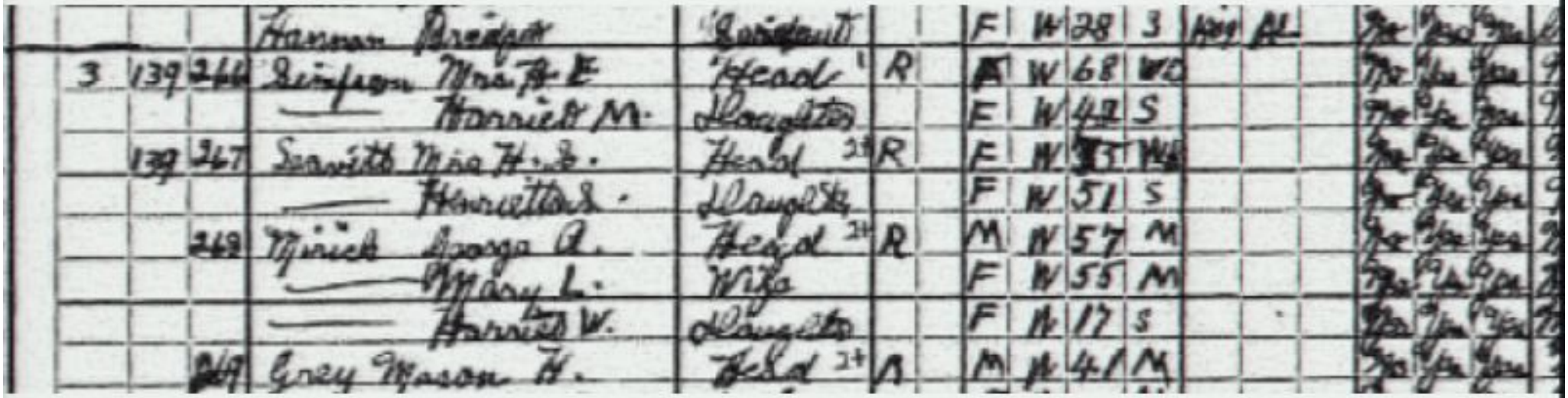
SCHEDULE OF PERSONAL ESTATE IN DETAIL.

	DOLLARS	CENTS
Book case and books	5	-
Folding screen	1	-
Rug	40	-
Table	5	-
Chair	2	
Desk	5	
Table	5	
Rug	20	
Bureau	10	
Bed-stead	15	
Mattresses (two)	10	
Chairs (two)	2	
One @ $100 face value First convertible 4% Liberty Bond	96	33
One @ $50 face value Fourth 4¼% Liberty Bond	48	56
One @ $50 face value Victory 4¾% Note	50	02
	314	91


ERASMUS D. LEAVITT
BORN DEC. 20, 1809.
DIED SEPT. 29, 1886.
ALMIRA FAY
WIFE OF
ERASMUS D. LEAVITT
BORN DEC. 13, 1812.
DIED FEB. 20, 1895.
MARTHA ALMIRA LEAVITT
BORN DEC. 17, 1842.
DIED DEC. 12, 1845.
FATHER
LEAVITT


ROSWELL HENRY LEAVITT
BORN OCT. 4, 1871.
DIED JAN. 8, 1873.
MIRA FAY LEAVITT
BORN FEB. 20, 1878.
DIED DEC. 1, 1880.
HENRIETTA SWAN LEAVITT
BORN JULY 4, 1868.
DIED DEC. 12, 1921.
GEORGE R. LEAVITT
BORN JUNE 7, 1838.
DIED MARCH 4, 1911.


WILLIAM JAMES
TEACHER PSYCHOLOGIST
PHILOSOPHER
ALICE GIBBENS



			Hanson Bridget	Resident			F	W	28	3	Ire	AL							
3	139	246	Simpson Mrs A E	Head	R		F	W	68	WD									
			— Harriet M.	Daughter			F	W	42	S									
	139	247	Sawtelle Mrs H. L.	Head	28	R	F	W	33	Wid									
			— Henrietta L.	Daughter			F	W	51	S									
		248	Minick George A.	Head	24	R	M	W	57	M									
			— Mary L.	Wife			F	W	55	M									
			— Harriet W.	Daughter			F	W	17	S									
		249	Grey Mason H.	Head	24	R	M	W	41	M