



El mundo de Peirce: Un recorrido en imágenes

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Charles Sanders Peirce (1839-1914)

“Thus, in brief, my philosophy may be described as the attempt of a physicist to make such conjecture as to the constitution of the universe as the methods of science may permit, with the aid of all that has been done by previous philosophers. I shall support my propositions by such arguments as I can. Demonstrative proof is not to be thought of. The demonstrations of the metaphysicians are all moonshine. The best that can be done is to supply a hypothesis, not devoid of all likelihood, in the general line of growth of scientific ideas, and capable of being verified or refuted by future observers.”

CP, 1.7, c. 1897.

- Peirce in Berlin, 1875.
- (Second –of five– travel to Europe)



The Peirce Family

John & Elizabeth Pers in 1637

emigrated from Norwich (England) to Watertown (Massachusetts)

Robert & Mary Knight (Moved to Middlesex, MA)

(1620-1706)

Benjamin & Hannah Bowers (Moved to Suffolk, MA)

(1668-17??)

Jerathmiel & Rebecca Hurd

(1708-17??)

Jerathmeel & Sarah Ropes (Moved to Salem, MA)

(1747-1827)

Benjamin, Sr. & Lydia Ropes Nichols(*) (Moved to Cambridge, MA)

(1779-1831)

Benjamin, Jr. -Charlotte Elizabeth "Lizzie" -Charles Henry (MD &Chemistry)

(1809-1880)

Benjamin, Jr. & Sara Hunt Mills

James Mills - Benjamin Mills - Charles Sanders - Helen Ellis - Herbert Henry Davis

(1834-1906)

(1834-1870)

(1839-1914)

(1845-1923)

(1849-1916)

"I was named after Charles Sanders, husband of my paternal grandmother's(*) sister Charlotte. Sanders Theater at Harvard, some years later, had the same namesake."

MS 1602

Jerathmiel Peirce (1747-1831).
Peirce-Nichols House (1782) 80 Federal Street. Salem, MA.



- “ That same great grandfather [Jeramiel] amassed a considerable fortune, founded at first I think, upon some process for making morocco, but later in the adventurous China Trade”
- MS 848, 1911.

Benjamin Peirce, Sr. (1779-1831)



HARVARD UNIVERSITY, CAMBRIDGE, MASS.

PLATE XLVII
FIRST HINTON VIEW 1810

1797. Graduated from the Andover Academy Andover.

Departed for Harvard where he settled into room one at Hollis; graduated in 1801.

Returned to a merchant's life in Salem with his father's shipping firm "Wait and Peirce."

1803. Married to his maternal cousin Lydia Ropes Nichols.

1811. Elected as a Federal Republican Senator from Essex County to the Massachusetts legislature.

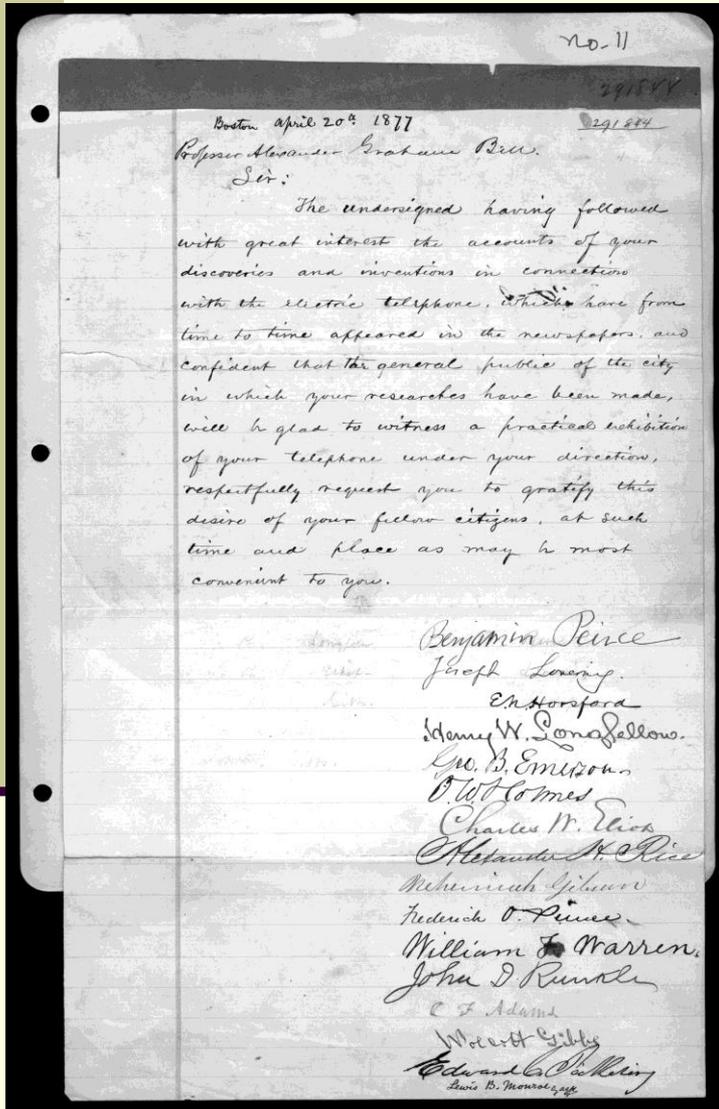
1825. Before failing in the business, moved to Cambridge.

1826. Became librarian at Harvard College; wrote the first catalog of the Harvard Library, and a manuscript history of the college, published posthumously in 1833.

1826, Lydia opened a boarding house near Porter's Tavern, in Cambridge.

- Harvard College, c.1830.

Benjamin Peirce, Jr.
Apr. 4, 1809 – Oct. 6, 1880



"I was educated by my father (...) and if I do anything it will be his work." MS. 1608

"My father took great pains to teach me concentration of mind and to keep my attention upon the strain for a long time (...) But as to moral self-control he unfortunately presumed that I would have inherited his own nobility of character, which was so far from being the case that for long years I suffered unspeakably, being an excessively emotional fellow, from ignorance of how to go to work to acquire sovereignty over myself."

CSP to Victoria Lady Welby.

Benjamin Peirce:

- 1831/42. Professor of Mathematics/ and Astronomy.
- 1867- 1874. 3rd Superintendent of the U.S. Coast Survey.
- 1879. Lowell Lectures on "Ideality in the physical sciences" edited posthumously by James Mills in 1881.

Letter from Benjamin Peirce to Alexander Graham Bell,
April 20, 1877

1839. Charlie was born on Sept. 10th
to Benjamin Peirce and Sarah Hunt Mills

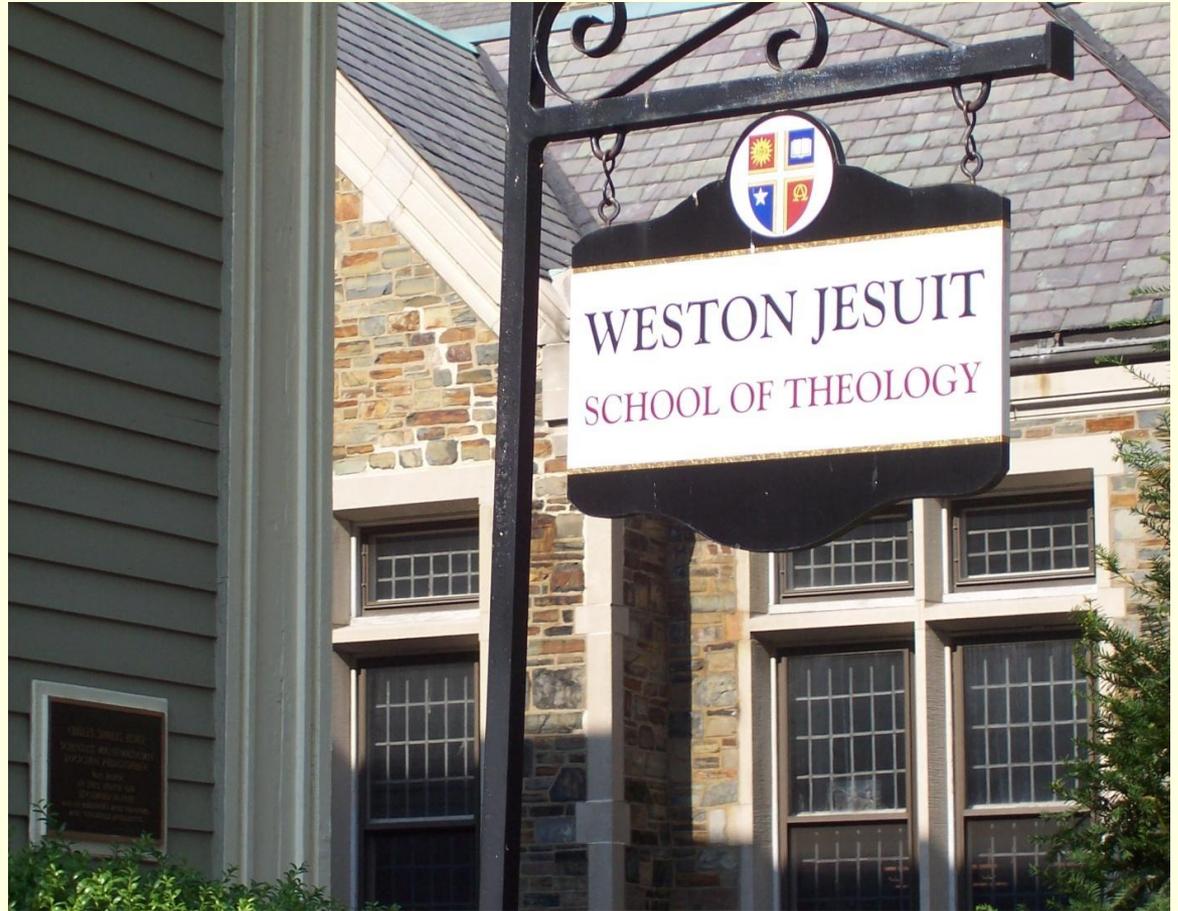


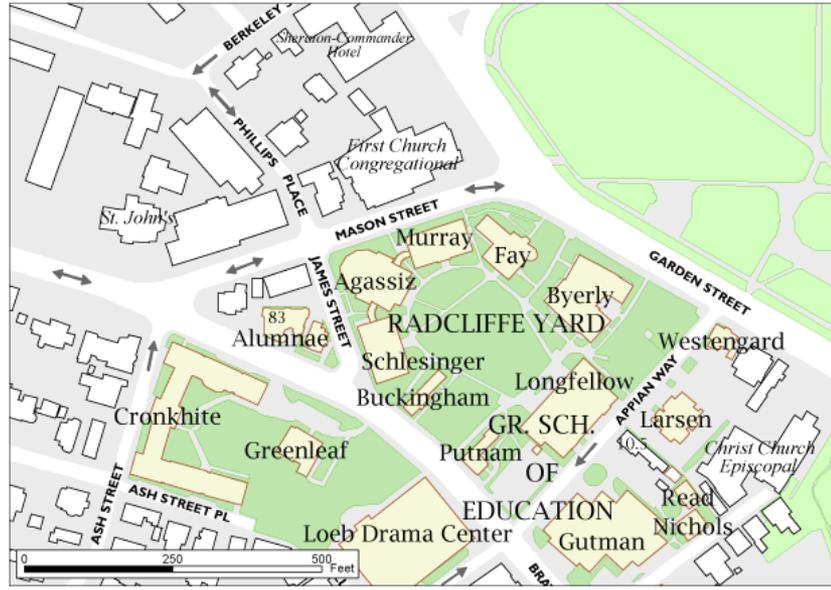
4 Mason Street
Cambridge, MA.

Thanks to: Juan Luis Rodríguez



CHARLES SANDERS PEIRCE
SCIENTIST, MATHEMATICIAN
LOGICIAN, PHILOSOPHER
WAS BORN
IN THIS HOUSE ON
SEPTEMBER 10, 1839
ONE OF AMERICA'S MOST ORIGINAL
AND VERSATILE INTELLECTS





1839. Cambridge was a college town of about 8,000 inhabitants and Boston was a small city of about 85,000

- “I remember how angry people were when a furniture dealer cut down some elms to built a store. Cambridge was a lovely place at that time [1844], and people went to Boston in an ‘Hourly.’
- MS. 1602

- Methodist Church, in Cambridge, ca. 1830.



1845. Moved to the “Function Grove”, in Quincy Street.



“[My father’s] house might almost be said to have been a rendezvous of all the leading men of science (...) so that I was brought up in an atmosphere of science. Agassiz came in every day without ringing (...) Alexander Dallas Bache was a particular close friend (...) Joseph Henry [came] only occasionally [and Admiral] Charles Henry Davis. But my father was a broad man and we were intimate with literary people too. At the house in Mason Street (...) and later in our house on Quincy Street, I most distinctly recollect (...) among them Longfellow (...) James Lowell (...) Theodore Park (...) Oliver Wendell Holmes (...) I particularly remember (...) Emerson [and] the most eminent of the political people such (...) Webster (...) and at a later date Henry James the elder.”

■ CSP to Victoria Lady Welby. Sep. 20, 1906.

1849. Admitted at Cambridge High School

“I went to Marm Session’s school in the Craigie House when I was 5 years old (...) I think we must have moved in 1845 [to the New House in Quincy Street]. I soon after began going to Miss Ware’s school.”

MS. 1602.

“1854. Left the High School with honor after having been turned out several times. Worked at Mathematics for about six months and then joined Mr. Dixwell’s school in town.

1855. Graduate at Dixwell’s and entered College. Read Schiller’s *Aesthetic Letters* and began the study of Kant.”

My Life Written for the Class Book, 1859.



Cambridge High School (ca. 1903)

1855. Entered Harvard College



Harvard College, c.1858.



Massachusetts Hall, c. 1890.

- “One of the things which I hope to learn during my stay in Cambridge is the answer to this question (...) whether Harvard is an educational establishment or whether it is an institution for learning what is not yet thoroughly known, whether it is for the benefit of the individual students or whether it is for the good of the country and for the speedier elevation of man into that rational animal of [which] he is the embryonic form.” *CP*, 5.585, 1898.
- 1859. Graduated B.A. - 1862. Received a Master of Arts
- “As the fall of 1860 began, Charley moved into Massachusetts Hall number 5 where he took up duties as proctor. Apparently that arrangement lasted only a semester or so, for he seems to have moved back into a room at Function Hall in a few months”. Ketner, *His Glassy Essence*, p. 229.

1859. Temporary aide in U. S. Coast Survey On board of U. S. C. S. Schooner *Twilight*.

- “It has always been a matter of personal regret to me that I missed the first impression the [Darwin’s immortal Origin] made in Cambridge (...) owing to me having set out on the tenth of Nov., before its appearance on Nov. 24 ’59, to go under instructions from Superintendent of the Coast Survey to take part in the triangulation on the east coast of Louisiana.”
 - MS 706. Jan. 28, 1909.
- Aug.–Sep. ’59: Machias and Cooper, Maine (as a volunteer).
- Nov. ’59–Feb. ’60: Pascagoula and Biloxi, Mississippi.
- Mar.–Apr. ’60: Bird Island, Isle au Breton, Louisiana.

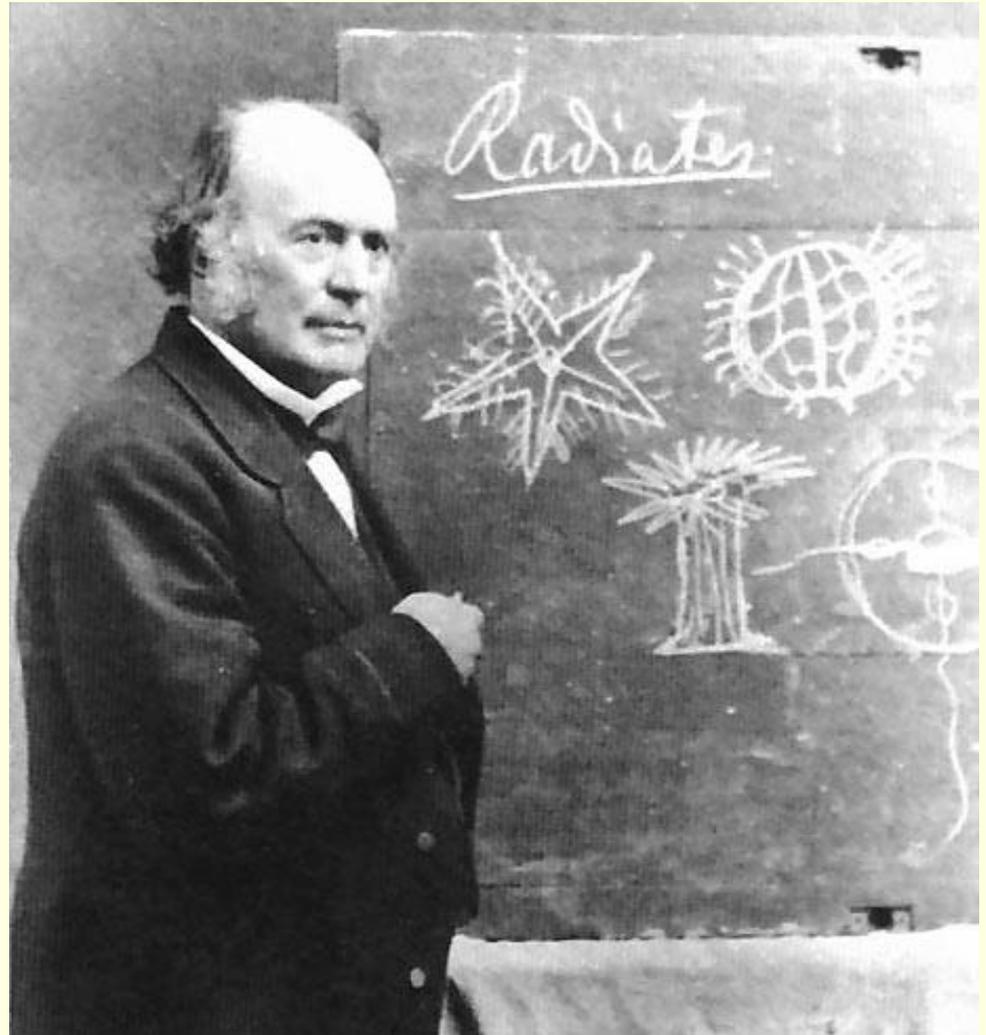
- Biloxi Light House, built in 1848.



1860. Studied fossil classification under
Louis Agassiz, summer-fall.

“Agassiz set me to sorting fossil brachiopods without knowing anything about them, and I understand that my work was preserved at the museum, as a most amazing monument of incapacity, to the high delectation for all who entered as a student for many years.”

MS 902, Sep. 16, 1910



1861. Entered Lawrence Scientific School at Harvard

“This chemical analysis is so bewildering at first that I am entirely ‘muddled and beat’ and have to employ most of my time reading up (...) In last year’s there is a son of Prof. Peirce, Charles, whom I suspect to be a very ‘smart’ fellow with great deal of character, pretty independent and violent though. In my presence he attacked Herbert Spencer whose work I deeply admired; I felt spiritually wounded, as by the defacement of a sacred image or picture, thought I could not verbally defend it against his criticism.

Willy.”

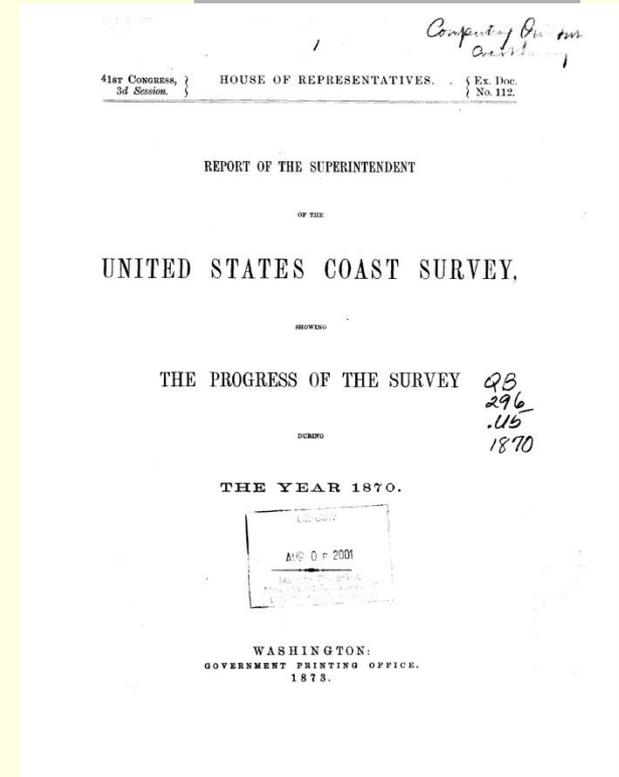
William James to his family in Newport, NY. 16 Sep 1861.



1861. Appointed regular aide in U. S. Coast Survey, 1 Jul.



Coast and Geodetic Survey Building
New Jersey Avenue, DC.



*The Coast and Geodetic Survey Annual Reports
1844 - 1910*

<http://www.lib.noaa.gov/researchtools/subjectguides/cgsreports.html>

1862. Married to Harriet Melusina “Zina” Fay, 16 Oct.

Harriet Melusina Fay:
granddaughter on her father’s side
of the Judge Fay (Mason Street);
and on her mother’s side of John
Henry Hopkins, the First Episcopal
Bishop of Vermont. Her father,
Charles Fay, who had been a
Harvard Classmate of Benjamin
Peirce, was rector of the Episcopal
Church at St. Albans, VT.

Saint Luke’s Episcopal Church
8 Bishop St Saint Albans, VT.



Saint Luke's Episcopal Church

- "State of Vermont, Count of Franklin, Be it remembered that in St. Albans in said County, Charles S. Peirce of Cambridge, Massachusetts, and Harriet Melusina Fay of St. Albans, on this sixteenth day of October A.D. 1862, were duly joined in marriage by me. Charles Fay, Rector"
- [Quoted from the parish records]

- Altar window. It is a memorial to Dr. Fay's wife, Charlotte, Bishop Hopkins' daughter.

Thanks to Anne Brown (Communication Officer Episcopal Diocese of Vermont) and Carolyn Fouts (member of St. Luke's Episcopal Church).



1862. Married to Harriet Melusina “Zina” Fay, 16 Oct.

“The newlyweds took up residence in the Peirce family house until they could move into modest quarters of their own at 2 Arrow Street in 1864, but owing to the meagerness of Charles’s income they took their meals in the elder Peirce’s house until 1870.”

Brent, *Peirce*, p. 62.

“When Charles and Zina returned from the First Survey assignment in Europe, they moved to their second house, at 10 Arrow Street Cambridge, MA.”

Brent, *Peirce*, p. 82.



1865 (Spring). First (of two) *Harvard Lectures on 'The Logic of Science'*
- Begins *Notebook*, 12 Nov.; last entry Nov., 1909.

"Theses lectures will take up two points in order:

1st. The degree and character of the certainty of scientific ratiocination.

2nd. The degree and character of the certainty of scientific primitive principles."

W 1, 163, 1865.

"... for he cannot always live on this computing business and nothing else seems to offer for him. He is just now engaged on an article, metaphysical I believe, for the *North American* and is longing for an opportunity to redeliver or publish his lectures."

Sarah Mills to Benjamin Peirce, Aug.

■ 1865 Delivered at Boylston Hall
(before the Mansard roof addition of 1871)



1866. First (of three) *Lowell Institute Lectures* on
"The Logic of Science; or Induction and Hypothesis," 24 Oct.-1 Dec.

"Your first question is, 'where have I been?' To C. S. Peirce's lecture, which I could not understand a word of but rather enjoyed the sensation of listening to for an hour. I then turned to O. W. Holmes's, and wrangled with him for another hour."

William James to his sister Alice
Cambridge, MA., Nov. 14, 1866.

Drawing from: Harriette Knight Smith,
History of the Lowell Institute(1839-1898).
Boston: Lamson, Wolfe and Co., 1898



1867. Elected to American Academy of Arts and Sciences.

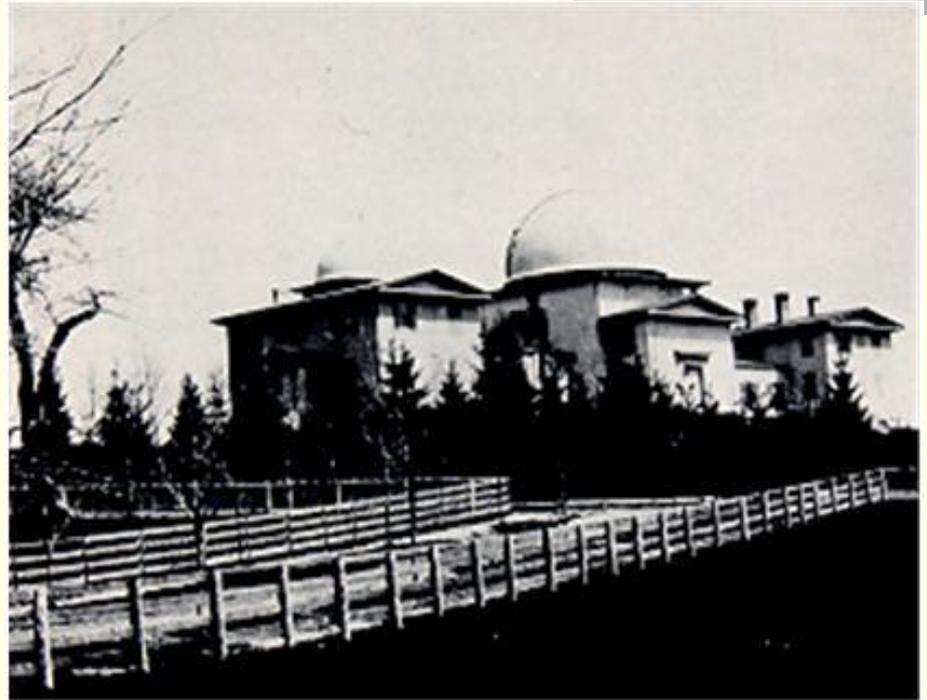
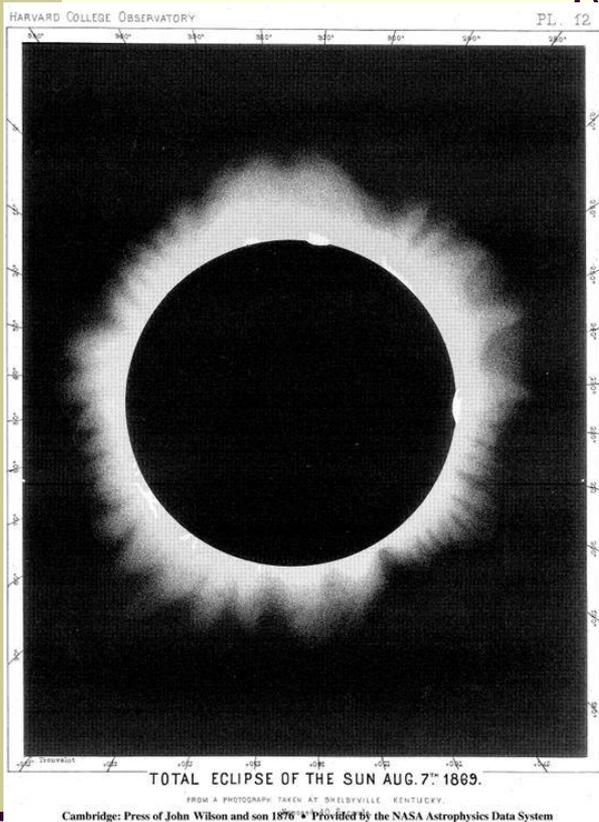
- “On May 14, 1867, after three years of almost insanely concentrated thought, hardly interrupted even by sleep, I produced my one contribution to philosophy in the ‘New List of Categories’.”

- CSP to Mario Calderoni

- During the 19th century the Academy shared quarters with the Boston Athenæum (c. 1896) and later the Massachusetts Historical Society.



1869. Assistant at Harvard College Observatory (founded in 1839, c. 1851)

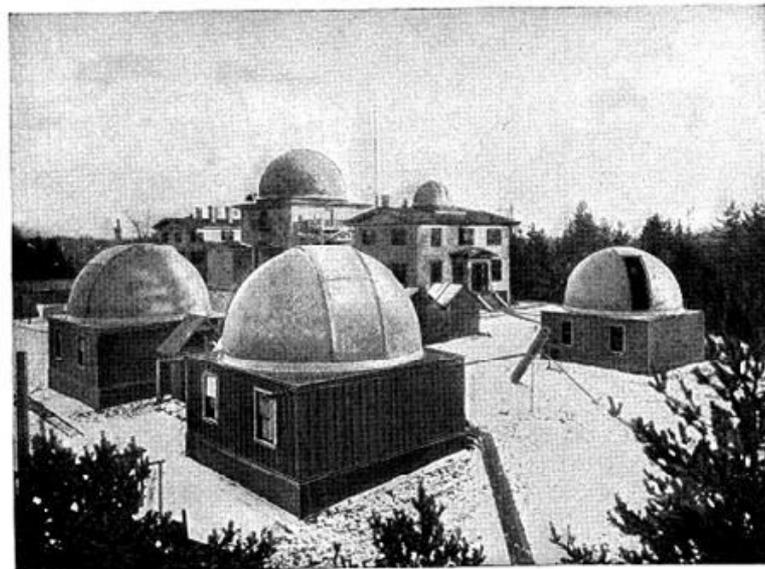


- “The spectrum of the prominences [in the corona] was observed by Mr. C. S. Peirce, at Bardstown [KY], as well as by myself at Shelbyville [KY]. The result of my own observation was to establish beyond a doubt that magnesium was a constituent of the prominences; and, since 1869, this observation has been confirmed by a variety of observers, who have established the fact that magnesium ordinarily furnishes part of the light of the ‘sierra’ or chromosphere.” Professor Winlock. *Annals of the Astronomical Observatory*. Vol. 8, pg 56.
- A historical account of the observatory from Oct. 1855 to Oct. 1876 <http://ads.harvard.edu/books/hcoann/>

Harvard Computers (c. 1892)



“Perhaps the most striking results thus far achieved by these women assistants are Mrs. Fleming’s discovery that variable stars of a certain type may be proved variable by the bright lines in their spectra, and Miss Maury’s discovery that Beta Aurigae is a close binary, proved so from the study of its spectrum. Yet the whole experiment of employ women (...) is worthy of attention.”
The New England Magazine, n.s.Vol. 6 (1892): 165-176



The Harvard Observatory.

WOMEN'S WORK AT THE HARVARD OBSERVATORY.

By Helen Leah Reed.

ASTRONOMERS have always welcomed to their ranks, women of genius like Caroline Herschell, Mary Somerville, and Maria Mitchell; and various European and American observatories have of late years employed not a few women computers. The Harvard College Observatory has been especially appreciative of the work of women; not only employing them as computers, but definitely encouraging them to undertake original research. Yet, although there is a field for woman's work in astrometry, the so-called old astronomy, with its problems relating to the positions and motions of the heavenly bodies, a much wider scope is offered for the work of woman in astrophysics, the so-called new astronomy. For in this latter branch of practical astronomy, photography is now so largely used that the observer, magnifying glass in hand, can at any hour of the day study the photographic plate with results even more satisfactory than those formerly obtained by visual or telescopic observations at night. In the average observatory, where men are employed, it is obviously impracticable for women to engage in night observing. Photography as applied to astronomy has, therefore, greatly increased her opportunities for original research. Although in astrometry, photography has often been used to show the contact of an eclipse, or the transit of a planet, or to answer some similar purpose, its use in astrophysics is much more extensive. Yet, valuable as are the photographic records of solar and lunar surfaces, the photographic analyses of the stars in a group or of the con-

1869. Second Harvard Lectures on “British Logicians.” 14 Dec-15 Jan '70.

■ “I heard Chas. Peirce lectured yesterday... on ‘British Logicians.’ He has recently been made assistant astronomer... But I wish he could get a professorship of philosophy somewhere. That is his forte, and ... I never saw a man go into the things so intensely & thoroughly.”

■ William James to Henry Pickering Bowditch, 29 Dec. 1869.

- Boylston Hall
- (after the mansard roof addition of 1871)



1869. Second Harvard Lectures on "British Logicians," 14 Dec – 15 Jan '70.

course ought to be supplemented by higher courses, wherein the scholar as such should have a chance to say his say, to present his truth, to indicate the recent advance of his science, whether that science were Geology, or Sanskrit, or Latin Grammar, or Mathematics. Thus, then, the coming of the natural sciences, with their high demands upon the learner, and their strong assertion that they taught truth about "things," had seemed at first to threaten the purity and authority of the collegiate course of former times. To prevent such evil effects the device of "parallel courses" suggested itself; and in many Western Colleges this device has developed the system of the various so-called "Colleges"—departments of one large institution, whose concurrent courses all lead to degrees, while the degrees themselves have different names, according as the courses have more or less of the traditional character of the classical course in them. But this system of parallel courses, with or without differently named degrees at the end of the courses, could not suffice, in the larger institutions, to meet all the needs of the new situation. Such organization of natural history work as Agassiz initiated at Cambridge, demanded room for a higher sort of instruction. Other departments could not remain behind where natural science led. And thus it was that the call for what used to be called "post-graduate" study became general. And so, once more the "materialistic" interests, in getting a hearing for themselves, brought to pass the beginning of a revolutionary change. Those whom the Columbia committee accused of thinking only of the "body," began a process that is now transforming with the highest purpose the training of the soul. Such was the origin of the modern American University.

II

A FRIEND and colleague of mine has given me a look into an interesting note-book of his own, written out in the first year of his graduate life, and, as it chances, in the first year of President

Eliot's administration at Harvard. The notes are an evidence of the state of "post-graduate" work at Cambridge in the academic year 1869-70. A series of "philosophical lectures" was then offered to graduates, and formed, I believe, the first course of formal graduate instruction in metaphysical topics at Harvard. The lecturers were Professor Bowen, Mr. John Fiske, Mr. Charles Peirce, Mr. Cabot, Dr. Hedge, and—last and greatest name—Emerson. The lecturers followed in series, filling the winter with what constituted one long course. Examinations were held upon all the courses but Emerson's. The whole series, as represented by my friend's note-book, is a decidedly impressive one. Mr. Fiske's lectures, on "Positivism," afterward took shape in the "Cosmic Philosophy." Professor Bowen's and Dr. Hedge's contributions to the work were also substantially repeated in later publications. Mr. Cabot, now Emerson's biographer, broke on this occasion a silence that he has in general maintained far too rigidly. Emerson himself read those papers on the "Natural History of the Intellect" which have since been seen, in the original manuscript or in copy, by a few students, but which have so far not been published—papers in which, as he said, he was "watching the stream of thought, running along the banks a little way, but only seeing a little, knowing that the stream is hollowing out its own bed." Mr. Charles Peirce, on the contrary, expounded, in the highly technical form that he has since so much developed, that "Algebra of Logic" whereof he is still easily the first master among us in this country. Stronger and more interesting contrasts in thought and method could hardly have been presented to young graduates of philosophical ambitions. The courses, however, were regularly attended, I believe, by three students. Such was one beginning of a department of University instruction.

By this same year, however, the custom of offering some sort of "post-graduate" work, however little it might be in amount, was comparatively common throughout our country wherever there were ambitious teachers. Columbia College had taken definite action

- "Mr. Peirce, on the Contrary, expounded, in the highly technical form that he has since so much developed, that "Algebra of Logic" whereof he is still easily the first master among us in this county. Stronger and more interesting contrasts in thought and method could hardly have been presented to young graduates of philosophical ambitions. The courses, however, were regularly attended, I believe, by three students. Such was the beginning of a department of University instruction."
- Josiah Royce. "Present Ideals of American University Life" *Scribner's Magazine*. Vol. 10, no. 3 (Sep. 1891), p. 381.

1870. First (of five) Survey assignment in Europe:
18 Jun – 7 Mar. '71



1872. Founding member of the Cambridge Metaphysical Club

■ It was in the earliest seventies that a knot of us young men in Old Cambridge, calling ourselves, half-ironically, half-defiantly, "The Metaphysical Club," -for agnosticism was then riding its high horse, and was frowning superbly upon all metaphysics- used to meet, sometimes in my study, sometimes in that of William James.

■ *CP*, 5.12, 1907.



William James's Studio at
95 Irving St. Cambridge, MA. (1889-1910)

1872. Peirce's Family moved to 4 Kirkland Place.
Last home of Benjamin (1880) - Sarah Mills Peirce (1887); his sister
Charlotte Elizabeth Peirce (1888) and James Mills Peirce (1906).



4 Kirkland Place. Cambridge, MA.



- “When the widow(*) of Charles Sanders died in 1872, she left a modest fortune to her niece Charlotte Elizabeth Peirce, Benjamin’s sister (and Charles’ “Aunt Lizzie”), who used it to buy the Kirkland Place house and make it the last home of Benjamin and Sarah”
- Max Fisch. “Peirce’s Place in American Life”, p. 277

1876. Separated from Melusina Fay in Oct.



“Melusina Fay Peirce
Early Feminist and Founder of the
Cooperative Housekeeping Association
an 1870 Experiment in Cooperative Living
(1836-1923)”

THE
ATLANTIC MONTHLY.
*A Magazine of Literature, Science, Art,
and Politics.*
VOL. XXII. — NOVEMBER, 1868. — NO. CXXXIII.

CO-OPERATIVE HOUSEKEEPING.

I.

THE YOUNG AMERICAN HOUSEKEEPER.

“MY dear,” said I last autumn to a young married lady friend, whom in the spring I had seen brilliantly blooming and handsome, “it strikes me you are looking a little careworn.”

“I am,” returned she, with great animation, “and I have been giving it as my opinion that quite too much is expected of women. First, I had all the packing and moving of going down to the sea-shore to attend to. Then, my house was full of visitors all summer; and I had to take breath as well as I could between hurrying a cake into the oven and being in the parlor to receive or entertain them. Of course there was any quantity of sewing to do; and, as if all this were not enough, Mr. — would come in daily to know if I had learned my French lesson, and whether I had given my regular hour to my piano; and now I have just got through with the pleasant experience of selling and stowing our furniture preparatory to going to Europe. So it is no wonder if I have grown a little thin; and, in fact, as I said before, I

have come to the conclusion that *entirely too much* is expected of women!”

Whether the conclusion be just or otherwise, nothing could more perfectly represent the plight of a multitude of intelligent and ambitious young matrons of moderate means than the lively complaint of my beautiful friend. For in these days of strain and struggle and desire, who of us is there that understands how to live? who that possesses a domestic machinery so perfectly balanced, so nicely adjusted, so exquisitely oiled and polished, that every duty and every pleasure glide from it noiseless and complete as do the separate marvels that fall from the crafty wheels and lathes of this modern era?

THE OLD-FASHIONED HOUSEKEEPER.

That the art of living, so far as the body and its surroundings are concerned, can be, and often is, carried to a very high degree of perfection, the superlative housekeepers we all have known are ample proof. My whole girlhood was spent just across the street from the greatest genius in this

Entered according to Act of Congress, in the year 1868, by TICKNOR and FIELDS, in the Clerk's Office of the District Court of the District of Massachusetts.

VOL. XXII. — NO. 133.

33

1877. Elected to National Academy of Sciences, 20 April



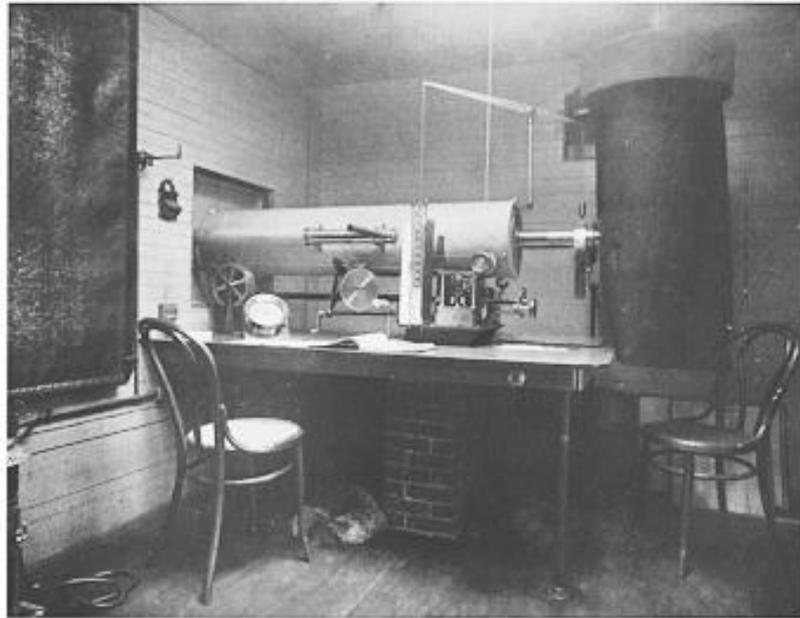
Portrait by Albert Herter (1924),
in the Academy's Board Room



National Academy of Sciences c. 1920

- President Lincoln signs the charter of the National Academy of Sciences (March 3, 1863).
- Founding Members (Left to right): Benjamin Peirce, Alexander Dallas Bache (first president of the Academy), Joseph Henry, Louis Agassiz, President Lincoln, Senator Wilson, Admiral Charles Henry Davis, and Benjamin Apthorp Gould.

1878. *Photometric Researches. Made in the years 1872-1875.*
Leipzig: W. Engelmann, Aug. 1878



15 INCH MERIDIAN PHOTOMETER

Meridian Photometer at Harvard College Observatory

PHOTOMETRIC RESEARCHES.

BY C. S. PEIRCE.

CHAPTER I.

THE SENSATION OF LIGHT.

WHEN a point is emitting unpolarized and homogeneous undulations equally in all directions, its state may be defined by two numbers; as, for instance by the wavelength of the undulations and their amplitude at a certain distance from the point. If the light is not homogeneous, indefinitely more numbers will be required to define it. But when a point upon the retina is illuminated, just three numbers are in every case requisite to define the sensation produced. In other words, light is a triple sensation.

2

CHAPTER I.

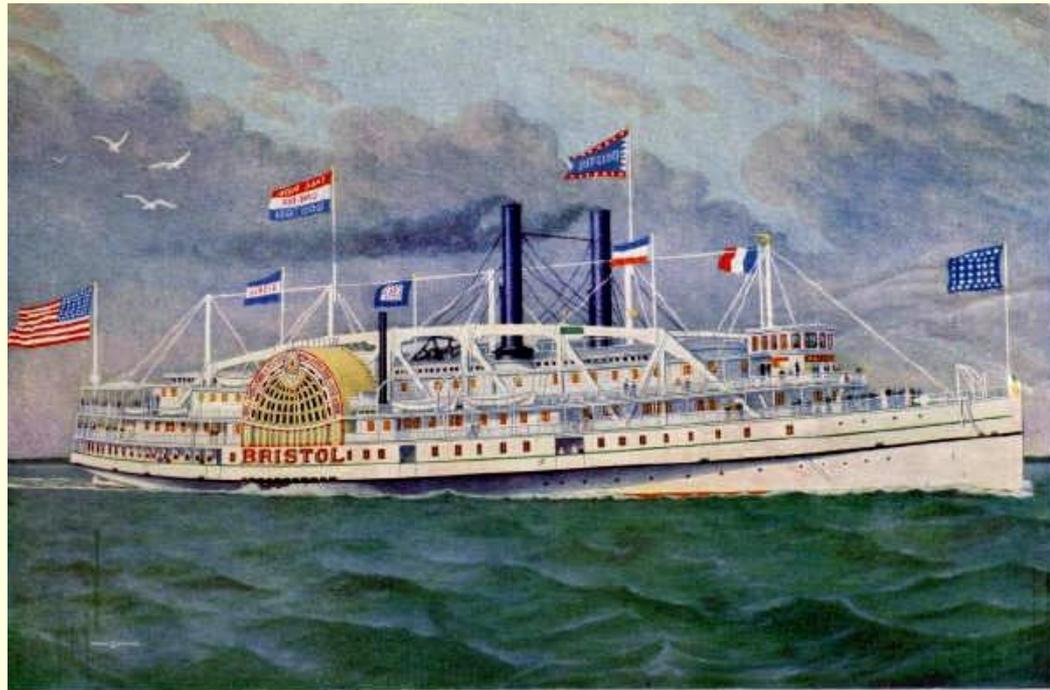
Light considered purely as something in the external world may be called *noumenal light*. Light considered as an appearance, and as a function of the sensation, such that it is measured by the convention just mentioned, may be termed *phenomenal light*. Photometry generally concerns phenomenal light; and in these researches, I shall nowhere touch upon the question of how the noumenal light of stars is constituted, (as to the difference of their spectra, for example), but shall confine myself to considering how it appears.

If the light *A* precisely matches the light *A'* in appearance, and the light *B* precisely matches the light *B'*, then the mixture of *A* and *B* will precisely match the mixture *A'* and *B'*. This is by no means a self evident proposition, for as two lights

Annals of the Astronomical Observatory of Harvard College. Vol. IX
Smithsonian Astrophysical Observatory/NASA Astrophysics Data System (ADS)

<http://www.adsabs.harvard.edu/>

1879 From Boston to New York, Jun. 21
in the *Bristol* steamer (Fall River Line)



The Long Island Sound steamboat *Bristol*, typical of the big paddlers of 1870, operated by the Narragansett Steamship Company

Thanks to Allen Dale

- “Abduction seeks a theory. Induction seeks for facts. In abduction the consideration of the facts suggests the hypothesis. In induction the study of the hypothesis suggests the experiments which bring to light the very facts to which the hypothesis had pointed.” CP. 7.218

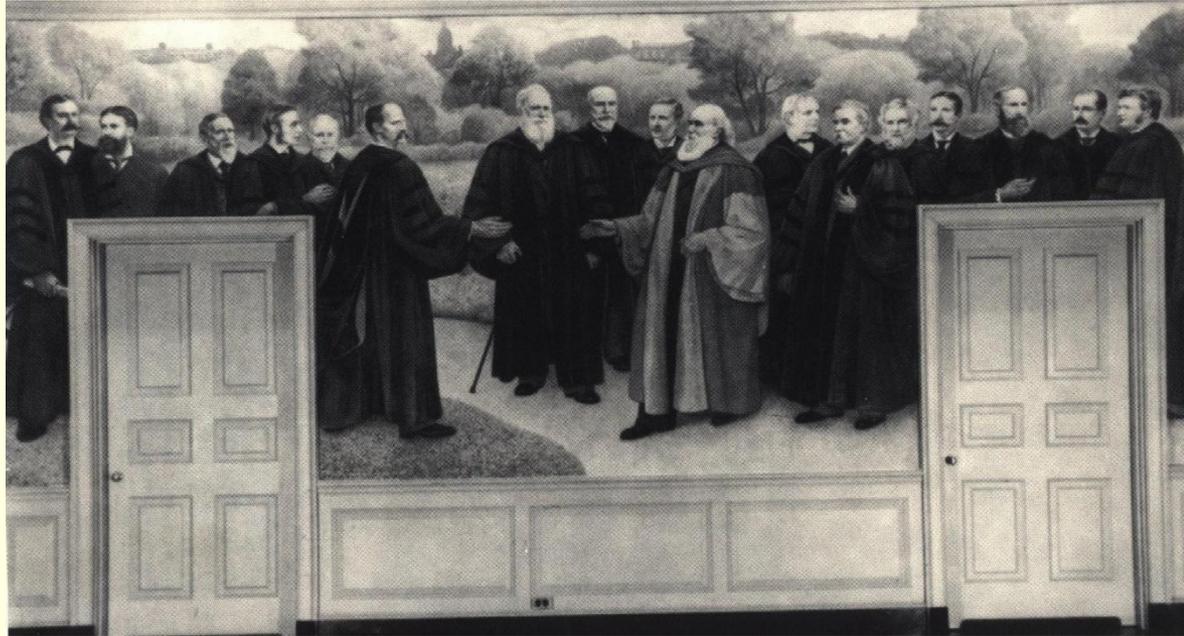
1879 – 1884. Lectured in Logic at Johns Hopkins University

- “It would be a great pleasure to me to enter your society of scholars in Baltimore, the idea of which I approve from the bottom of my hearth. You are the only real university in America.”
- CSP to President Daniel Coit Gilman, Jan. 13, 1878.

Johns Hopkins University
founded in 1876. Baltimore, MD.



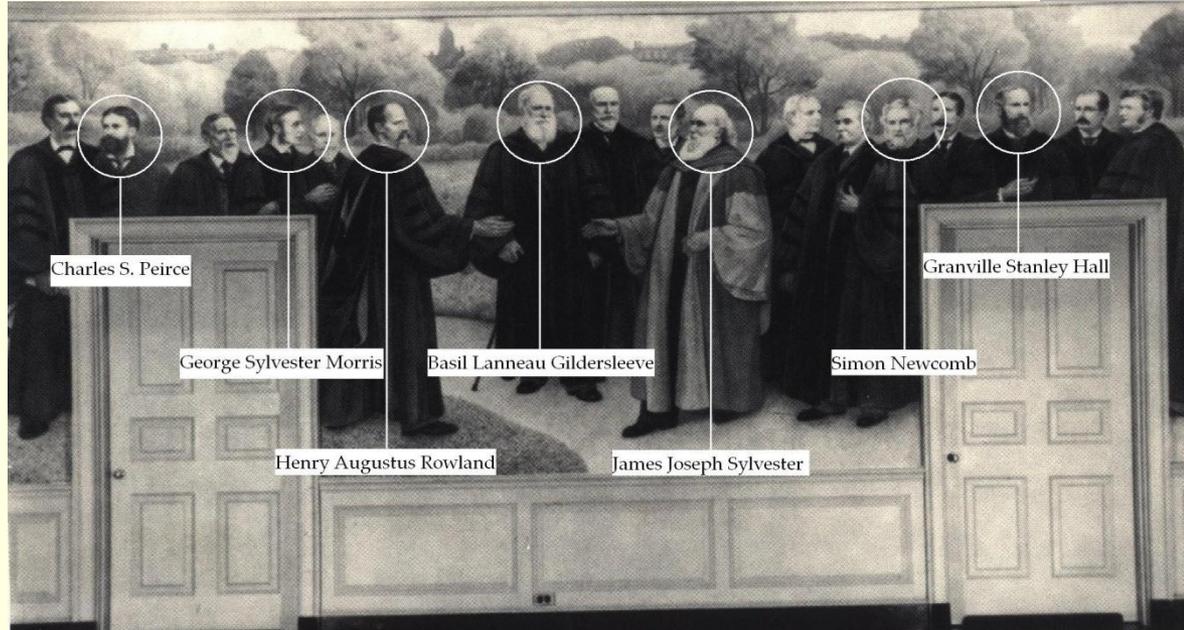
1880. Fourth (of five) Survey in Europe - JHU



“One university in our country, the Johns Hopkins of Baltimore, has been carried on upon principles directly contrary to those which have been governed the other colleges. That is to say, it has here alone been recognized that the function of a university is the production of knowledge, and that teaching is only a necessary means to that end (...) I am proud to say that in those four short years the members of this little university have published some one hundred original research (...) fairly equal to the sum of what all the other colleges in the land have done (except in astronomy) in the last twenty years”

CSP at a 4th of July gathering of Americans at Paris in 1880.

1880. Fourth Survey in Europe - JHU



- G. S. Morris: Lecturer on the History of Philosophy, and on Ethics.
- H. A. Rowland: Professor –and director of the Lab.– of Physics [E. H. Hall’s paper on *effect Hall*]
- B. L. Gildersleeve: Professor of Greek, founded the *Am J. of Philology*.
- J. J. Sylvester: Head of the mathematics department; founded the *Am. J. of Mathematics* (1878)
- S. Newcomb: Professor of mathematics and astronomy, then Director of Naval Observatory.
- G. S. Hall: Developed the psychology laboratory; Professor of Psychology and Pedagogy(1884); founded the *Am. J. of Psychology* (1887); President of Clark University(1889)

“Original Faculty of Philosophy”. Mural by Leon Kroll (1956), in Shriver Hall

“On Small Differences in Sensation”

By Charles Sanders Peirce & [his student at JHU] Joseph Jastrow
 Presented 17 October 1884 and published in
Memoirs of the National Academy of Sciences, 3 (1885): 73-83.

<i>First group.</i>						
Ratio of pressures.	Peirce, observer.		Jastrow, observer.			
	$\epsilon=1.25,$		$\epsilon=1.5,$		$\epsilon=0.0,$	
	Mean confidence.		Mean confidence.		Mean confidence.	
	Observed.	Calculated.	Observed.	Calculated.	Observed.	Calculated.
1.015.....	0.14	0.10	0.30	0.2	0.34	0.27
1.030.....	0.30	0.35	0.40	0.42	0.55	0.56
1.060.....	0.70	0.70	0.85	0.87	1.02	1.12

Ratio of pressures.	Jastrow, observer.			
	$\epsilon=0.25,$		$\epsilon=0.4,$	
	Mean confidence.		Mean confidence.	
	Observed.	Calculated.	Observed.	Calculated.
1.005.....	0.00	0.03	0.00	0.06
1.010.....	0.07	0.06	0.05	0.12
1.020.....	0.12	0.12	0.50	0.39

1883. Transcribed and translated Petrus Peregrinus' *Letter on lodestone* at Bibliothèque Nationale de France
1893. *Petrus Peregrinus* announced; prospectus only published.

THE LETTER OF PEREGRINUS

teeth comes near the north pole and owing to the impetus of the wheel passes it, it then approaches the south pole from which it is rather driven away than attracted, as is evident from the law given in a preceding chapter. Therefore such a tooth would be constantly attracted and con-

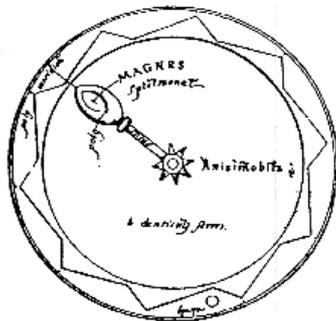


FIG. 4.—PERPETUAL MOTION WHEEL

stantly repelled. In order that the wheel may do its work more speedily, place within the box a small rounded weight made of brass or silver of such a size that it may be caught between each pair of teeth; consequently as the movement of



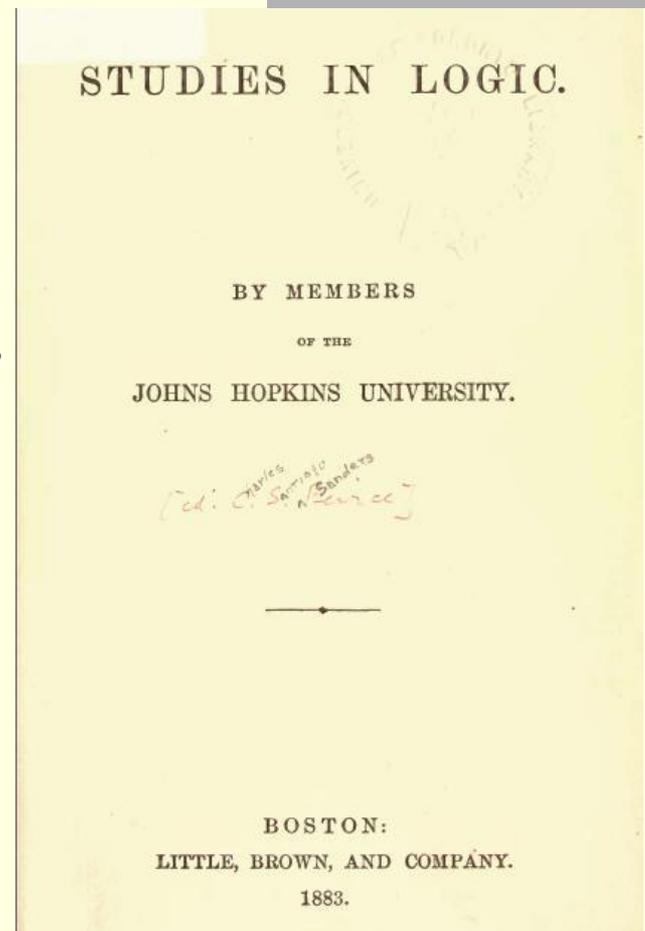
Introductory History of Experimental Science in the Middle Ages

- “The brief treatise on the lodestone by Petrus Peregrinus, dated 1269, occupies a unique position in the history of the human mind, being without exception the earliest work of experimental science that has come down to us. Nor can we learn that anything of this sort had been written earlier.”

1883. *Studies in Logic*

“The young men in my group who were admitted to his circle found him a most agreeable companion (...) We were members of his ‘scientific’ fraternity; Greeting were brief, and we proceeded to the business That brought us together (...) This type of cooperation and delegation of responsibility came as near to a pedagogical device as any method that he used”

Joseph Jastrow, “Charles S. Peirce as a Teacher”
Journal of Philosophy, 12, 26 (1916): 723-726.



- <http://www.archive.org/details/studiesinlogic00peiruoft>

1884. In charge of Office of Weights and Measures, Oct. 22 – Feb '85.

- In 1901, the Office of Weights and Measures (OWM) moved from its home in the Coast and Geodetic Survey Building on New Jersey Avenue in the District of Columbia to the Butler Building next door.
- This was a temporary location for OWM, then moved to the National Bureau of Standards (NBS) campus. The South Building was complete in 1904, and the NBS Weights and Measures Section occupied a laboratory on the ground floor.



1887. Moved to Milford, PA.



Port Jervis, N.Y.

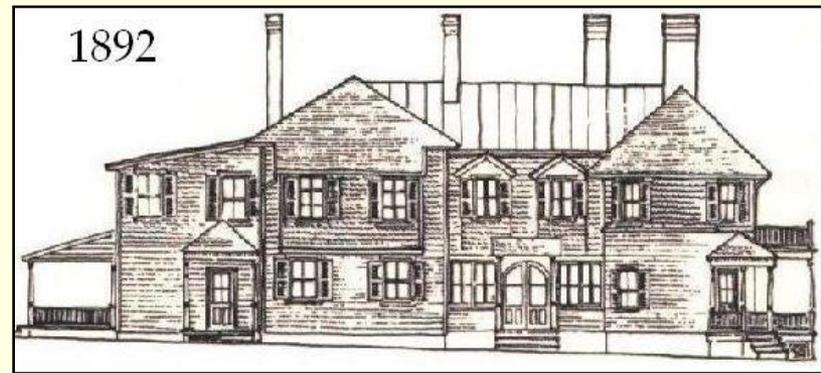
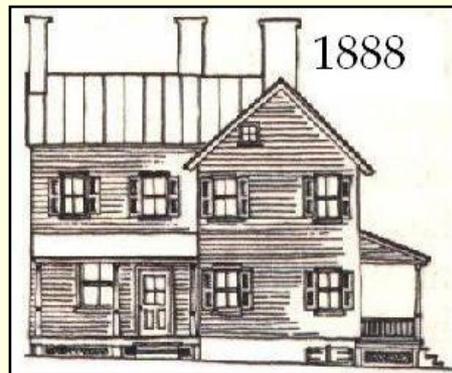


Milford, PA.

1888. Purchased his home “Arisbe”,
in Route 6/209, Milford, PA.

“When a man is about to build a house, what a power of thinking he has to do before he can safely break ground! With what pains he has to excogitate the precise wants that are to be supplied! What a study to ascertain the most available and suitable materials, to determine the mode of construction to which those materials are best adapted

... Now without riding the metaphor too far, I think we may safely say that the studies preliminary to the construction of a great theory should be at least as deliberate and thorough as those that are preliminary to the building of a dwelling house.” CP. 6. 8-9, 1892



Grey Towers. Pinchot Family. Milford, PA.

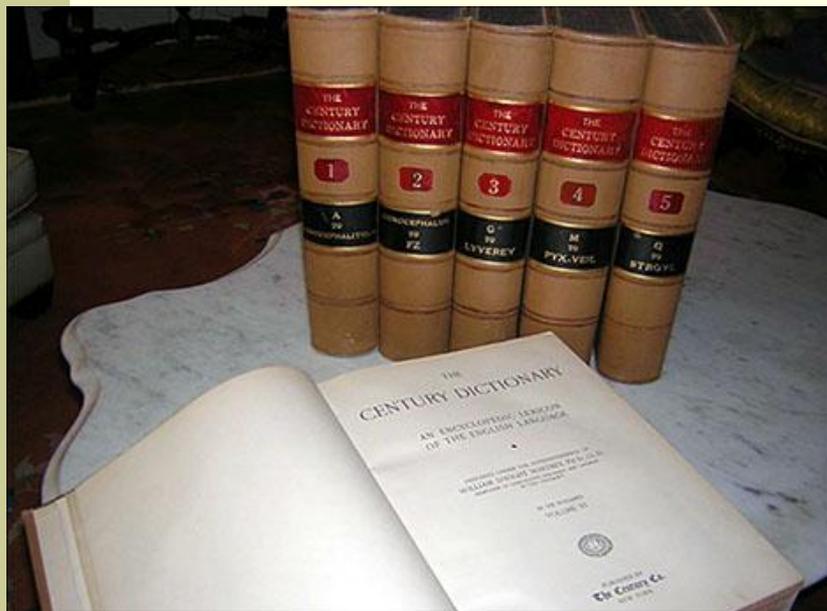


1888. Established definitely in Arisbe until his dead



- “Now I propose to put up three pretty cottages of about 4 rooms each, and make the house a sort of Casino [i.e. resort] for fashionable people of ‘cultural’ tendencies, to spend the summer, have a good time, and take a mild dose of philosophy. There is now no railway through the valley. When it comes, as it will in a few years, values will be greatly enhanced, and my place, with the business I shall have built up will be worth considerable. My ultimate aim is to set going an institution for the pursuit of pure science & philosophy which shall be self-supporting.”
- CSP to Francis C Russell, Sep. 17 1892.

1889. Contributor to *Century Dictionary* William Dwight Whitney (General Editor)



- “It’s true that I wrote many definitions for one of the ‘encyclopedic lexicons.’ But they were necessarily rather vaguely expressed, in order to include the popular use of terms, and in some cases were modified by proofreaders or editors; and, for reasons not needful here to explain, they are hardly such as I should give in a *Philosophical Dictionary* proper”
 - CSP. *Reply to the Necessitarians*. CP. 6.18, 1893.

Brevoort Hotel
(5th Av. with 8th Street)



Century Club
(7 West 43th Street)



“Should you desire to see me, I shall be in New York next week,
where The Brevoort and the Century Club are my headquarters...”

CSP to Daniel Gilman, June 6, 1879.

Reading Room, at the Century Club. (c.1896)

“ I went to the Century, where I happened to sit down next to Charles Peirce, and stayed talking to him ever since, or rather he talking. He is a most genial man –got down books and read aloud. He began by saying Lincoln had the Rabelais quality. It appears he worships Rabelais. He read passages from Carlyle in a voice that made the building reverberate (...) He then talked about plasms, force, heat, light, Boston, Emerson, Margaret Fuller, God, Mammon, America, Goethe, Homer, Silver, but principally science and philosophy – a wonderful evening.”



John Jay Chapman to his wife,
at 1 a.m., Friday, August 11, 1893.

1892. Peirce's Mystical Experience at Saint Thomas Episcopal Church

12 W 33rd St. 1892. Apr 21

✓

Dear & Reverend Sir:

I took the Holy Communion at St. Thomas's this morning, - in fact, just now, - under peculiar circumstances, which it seems proper to report.

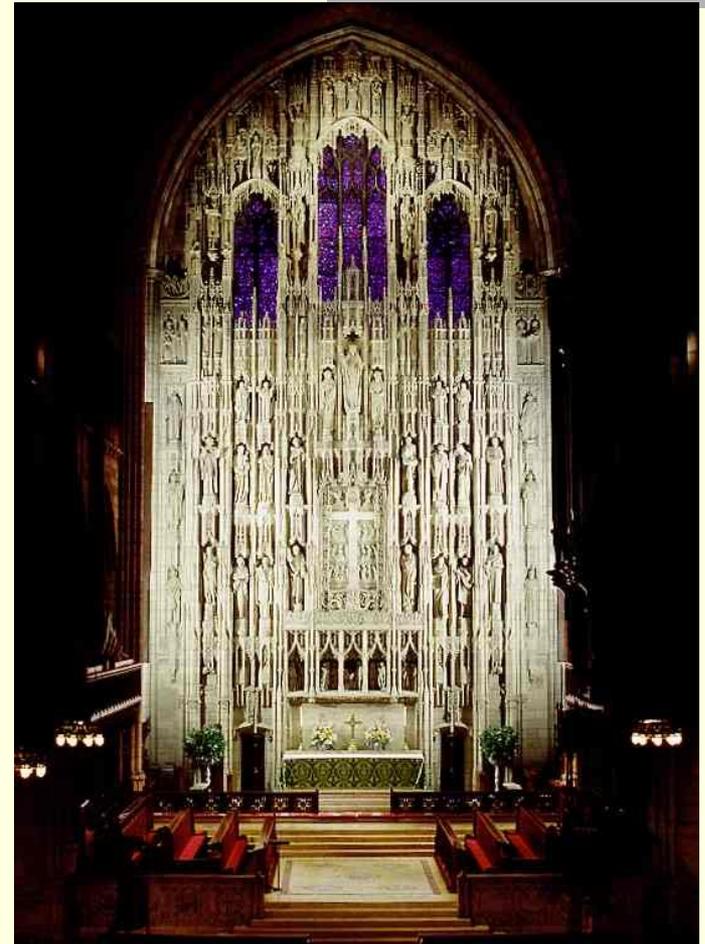
For many years I have not taken the Communion and have seldom entered a church, although I have always had a passionate love for the church and a complete faith that the essence of christianity, whatever that might be, is God Divine; but still I could not reconcile my notions of common sense and of evidence with the propositions of the creed, and I found going to church made me sophistical and gave me an



1892. Peirce's Mystical Experience at Saint Thomas Episcopal Church

■ "12 W 39th St. 1892 Apr 24

- Dear & Reverend Sir:
- For many years I have not taken the Communion and have seldom entered a church (...) I could not reconcile my notions of common sense and of evidence with the propositions of the creed (...) Therefore, I gave it up.
- This morning (...) I felt I had to go to church anyway (...) finally I came to St. Thomas (...) But this time (...) no sooner had I got into the church than I seemed to receive the direct permission of the Master to come. Still, I said to myself, I must not go to the communion without reflection! (...) But when the instant came, I found myself carried up to the altar rail, almost without my own volition (...)
- I may mention (...) that which seemed to call me today seemed to promise me that I should bear a cross like death for the Master's sake, and he would give me strength to bear it. I am sure it will happen (...) I never before been a mystical; but now I am."
- CSP to Rev John W. Brown, Rector of St. Thomas.



Saint Thomas Episcopal Church.
5th Ave. at 53rd Street. New York, NY.



1892. Second (of three) *Lowell Institute Lectures* on "The History of Science," 28 Nov.-5 Jan.



- Photogravure of Huntington Hall, 1889.

1893. *Search for a Method* announced by Open Court;
not completed.

- “I have to give a negative answer to what you say about a sojourn in France and for the present also to what you say about the rewriting of yours [*Pop. Sc. Mon*] papers for publication in book form.

- I think you should concentrate yourself totally on the completion of the arithmetic. I request for your report of the status of this matter. It is a large sum of money that I am to therein.”

Edward Hegeler to CSP,
May 15, 1893.

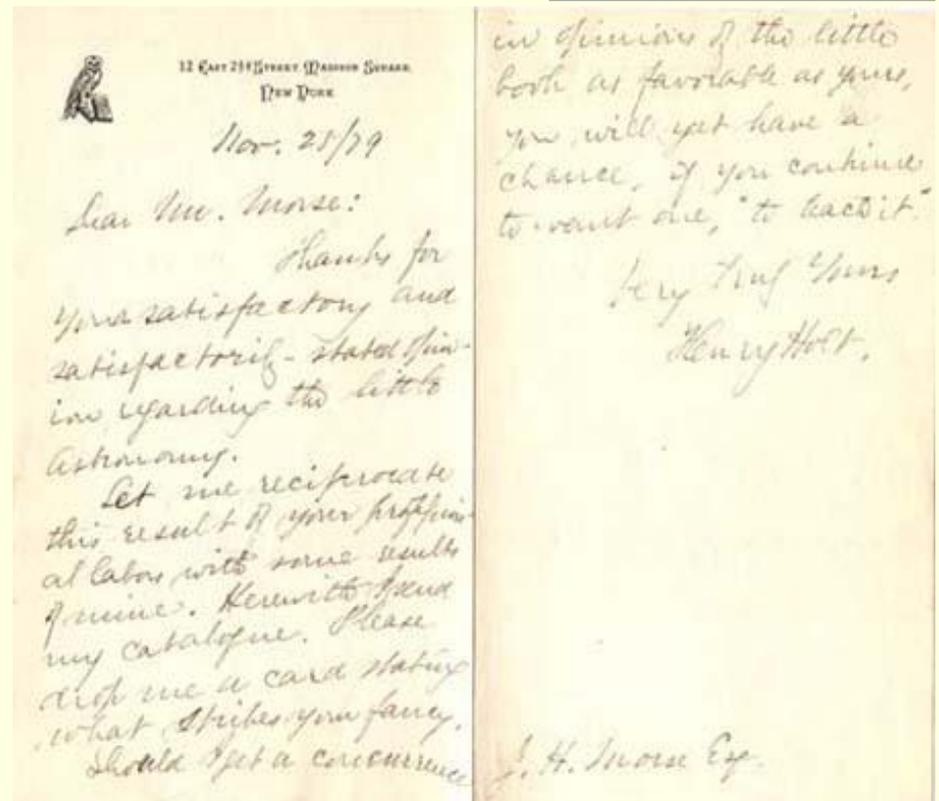
- The Hegeler - Carus Mansion
1874



1894. *The Principles of Philosophy* (in 12 vols.)
announced by Henry Holt Co.; not completed

- I am positive that if you think you could “do it without a publisher and sell 500 copies”, that is by all manner of means the wisest course (...) To a Publisher, the matter would no take an aspect of very great business importance (...) the older I get, the more reasons I find for doing (...) [the] aid of ‘the things of the spirit,’ outside of the business. If the two are mixed, they hurt each other.

- Henry Holt to CSP, Dec 2, 1893.



-
- 1894. *How to Reason* rejected by both McMillan Co. and Ginn Co.
 - 1895. *New Elements of Mathematics* rejected by Open Court.
 - 1898. *The History of Science* announced by G. P. Putnam; not completed

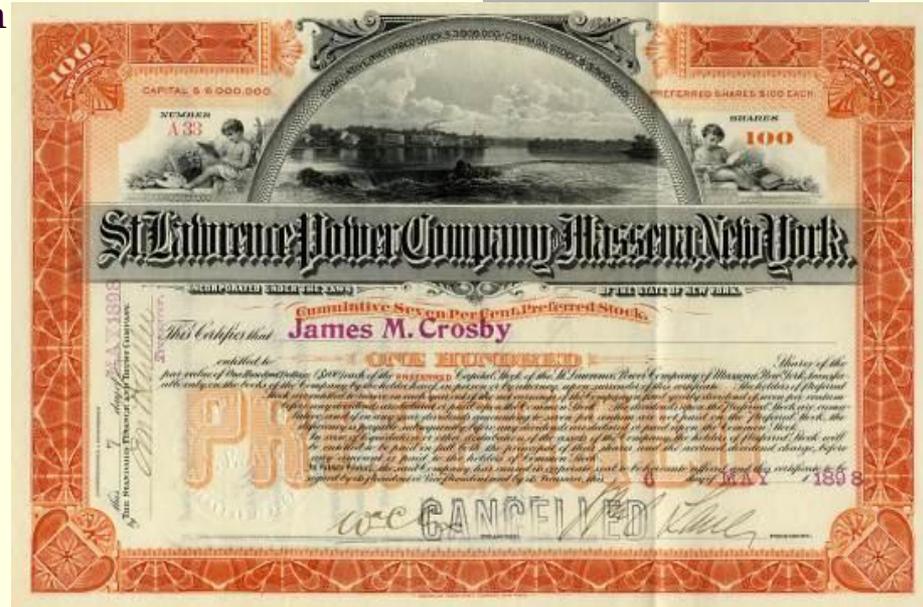
1896. Consulting Chemical Engineer (until 1902), St. Lawrence Power Co.

“Now if you want to go in, I will take you in on the ground floor: ...There will be four millions of shares & two millions of 5 percent bonds (...) Not a share will ever be given to the public, it will be a close corporation. I want you be in it. But don't talk about it, either now or latter”

CSP to Francis C. Russell, Oct. 4, 1896.

“ [I'm allowed] to purchase any amount of stock for cash up to \$100.000. They will let me in on the ground floor, and into the pool, -which last privilege will never be given to anybody except those who have the right to it. It lets us into the profits of the carbide business, the acetylene illuminating business, and every development”

CSP to his cousin Henry Cabot Lodge, undated fragment (L 254)



1898. Cambridge Lectures on “Reasoning and the Logic of Things.”

Cambridge *Conferences*

REVISED ANNOUNCEMENT

Mr. CHARLES SANDERS PEIRCE

of MILFORD, *Pennsylvania*



WILL give a course of Eight Class Lectures on REASONING AND THE LOGIC OF THINGS, at the rooms of the CAMBRIDGE CONFERENCES, Studio House, 168 *Brattle* Street, on Monday and Thursday Evenings in February and March, 1898, at eight o'clock.



- “Upon this first, and in one sense this sole, rule of reason, that in order to learn you must desire to learn and in so desiring not be satisfied with what you already incline to think, there follows one corollary which itself deserves to be inscribed upon every wall of the city of philosophy:

Do not block the way of inquiry.”

- CSP. Four Lecture: *The First Rule of Logic*. CP. 1.135, 1898.

Cambridge Lectures at *Studio House* 168 Brattle St. Cambridge, MA.



■ Thanks to: Juan Luis Rodríguez

1901. Contributor to Baldwin's *Dictionary of Philosophy and Psychology*

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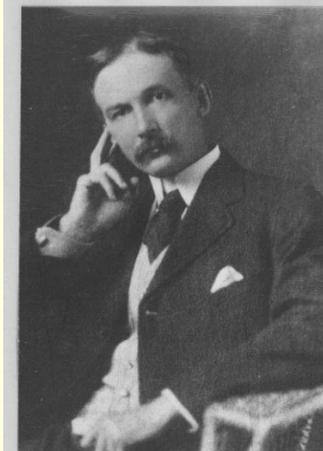
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 (C. S. P.) Dr. C. S. PIRNCE, Milford, Pike Co., Pennsylvania.

¹ Deceased.

² The names of contributors are given in this list under one subject only, although in many cases they have written in other subjects as well.



J. Mark Baldwin

"I Should not thinking of writing (as you suggest) the article on Relative Logic! A Logic-Dictionary without an article from you on that subject would be a dictionary with Hamlet left out.

Why are you so remiss as not to write a big book? What's a Dictionary with its contracted little articles?"

Christine Ladd-Franklin to CSP, Nov. 14, 1900

1901. Peirce-Langley Correspondence on Hume and Laws of Nature (At the Smithsonian Institution)



Law
1

Hume on Miracles and Laws of Nature. 3004.10

By C. S. PEIRCE.

I. What is a Law of Nature?

This phrase is used by physicists pretty vaguely and capriciously, in several respects. It is felt to be particularly appropriate as the designation of a physical truth of a widely general kind, exact in its definition, and found to be true without exception, to a high degree of precision. Yet there are truths of this description to which the title is refused, while others, special, rough in their statement, merely approximate in their truth, even subject to out-and-out exceptions, are nevertheless, so called.

But there are two common characters of all the truths called laws of nature. The first of these characters is that every such law is a generalization from a selection of observations; the principle of the selection having reference to the outward conditions under which the observations were made, and not to those results of them which are taken as the

- (...) I Think the difficulty (...) is that you ask me to treat of the “Laws of Nature” with special reference to Hume’s argument about miracles, when in fact that argument has nothing to do with Laws of Nature, was not understood so by Hume, nor by the philosopher of Hume’s day or since (...)
- Now I will go ahead and write the article. But I cannot, in 4000 words, advance full proof of what I say. I can only mention some facts tending that way, and state that careful investigation has shown me that there is really no connection between the two.
- CSP to Langley. May 29, 1901.

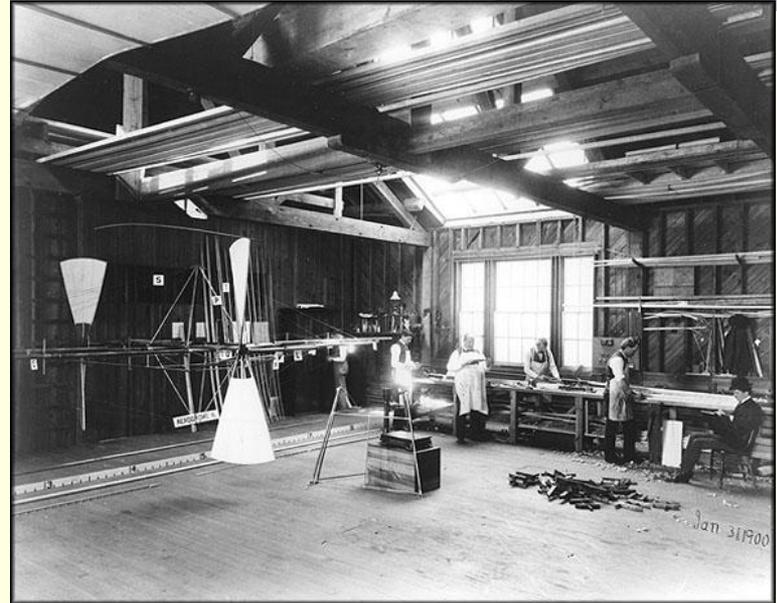
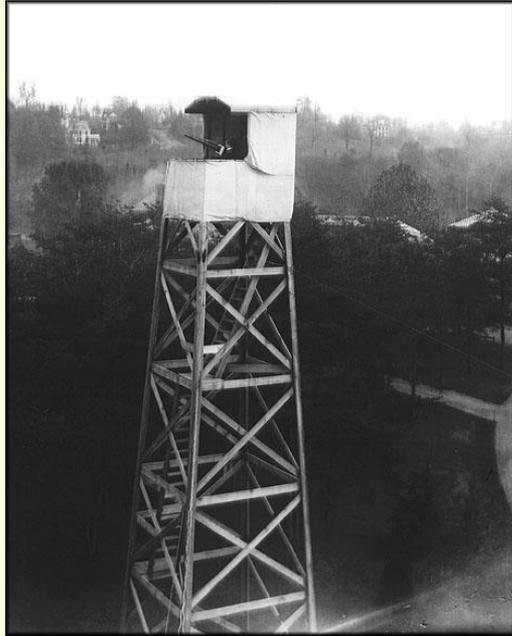
1902. Grant application for “Proposed Memoirs on Minute Logic” rejected by Carnegie Institution

“ Now this new Carnegie Institution seems to have been created just to meet such cases as mine. I think it will be long before they get another chance to spend money to such good effect as in furthering the completion of my logic.”

CSP to J. McKen Cattell,
January 1902.



1902. Peirce-Langley Correspondence (At the Smithsonian Institution)



I wish you could give me some employment for a few months. I have lately written a section [dealing with the Classification of the Sciences] of my big book on logic (...) Some friends have been buying the copyrights of the separate parts in order to enable me to go on. But their money has given out. Since it will represent forty years of industry, I am strongly in hopes the Carnegie Institution will do something for me in the autumn (...) But some of the trustees are determined to put me down (...) If I could get something to write for you which would tide me over writing on some subject allied to my book, it would be a great thing for me (...) There is a lot of work people want me to do, which is the right in my line, but they are unable to keep me alive while I do it.

CSP to Langley, May 6, 1902.

1903. 26 Mar-17 May [Third] *Harvard Lectures on
“Pragmatism as a Principle and Method of Right Thinking”*



“A certain maxim of Logic which I have called Pragmatism (...) as I originally stated it (...) is as follows:

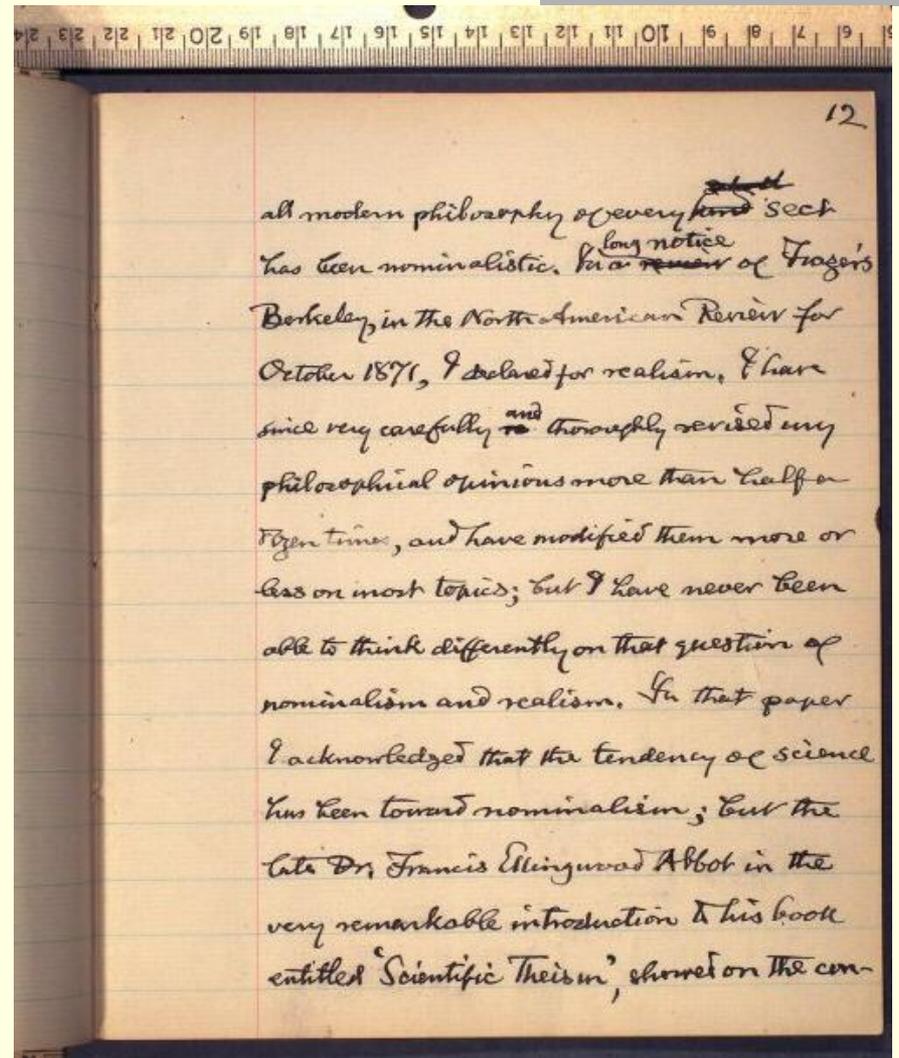
Consider what effects, that might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of those effects is the whole of our conception of the object.”

CP. 5.14/18, 1903.

- Seven lectures delivered in 11 Server Hall, on Thursdays at eight o’clock.

1903. Third Lowell Institute Lectures on “Some Topics on Logic” 23 Nov.-17 Dec.

- “I have heard friends and colleagues try to popularize philosophy in this very hall, but they soon grew dry, and then technical, and the results were only partially encouraging (...) The founder of pragmatism [Peirce] himself recently gave a course of lectures at the Lowell Institute (...) –Flashes of brilliant light relieved against Cimmerian darkness! None of us, I fancy, understood all that he said– yet here I stand, making a very similar venture”
- William James in his *Lowell Lectures on Pragmatism*, in 1906.



1907. Harvard Philosophy Club Lectures on
“Logical Methodeuteic” 8 – 13 Apr.



Emerson Hall

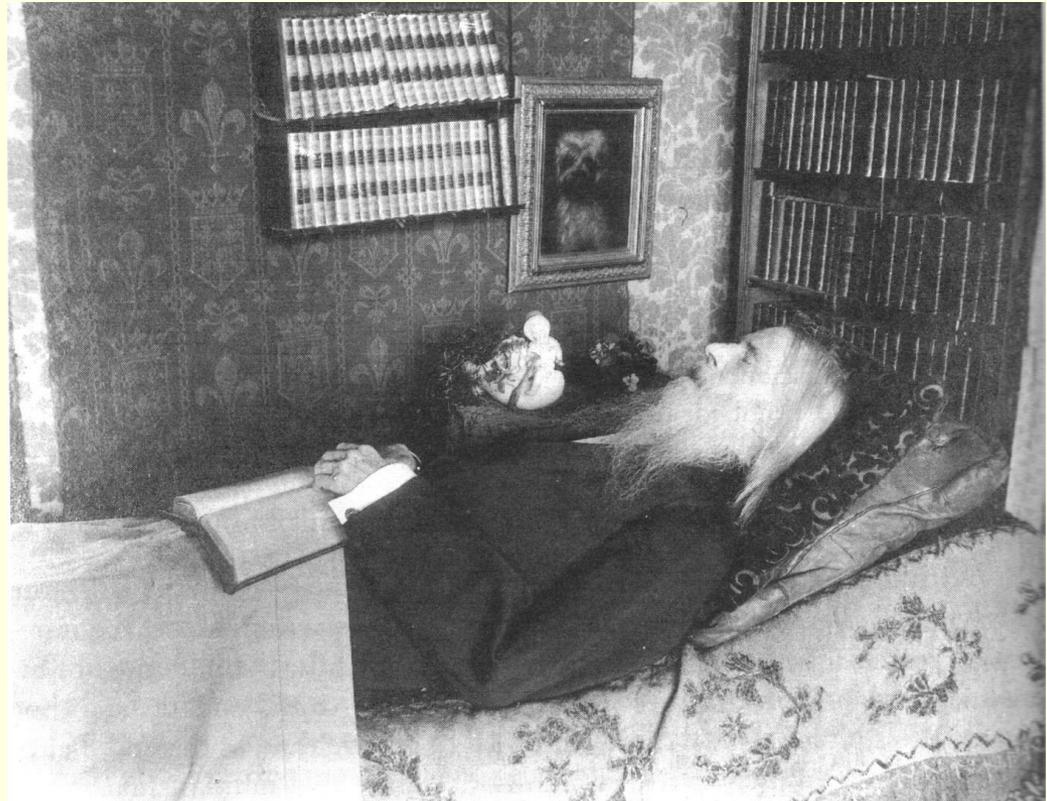
Thanks to Juan Luis Rodríguez

1914. Peirce died on 19 April.

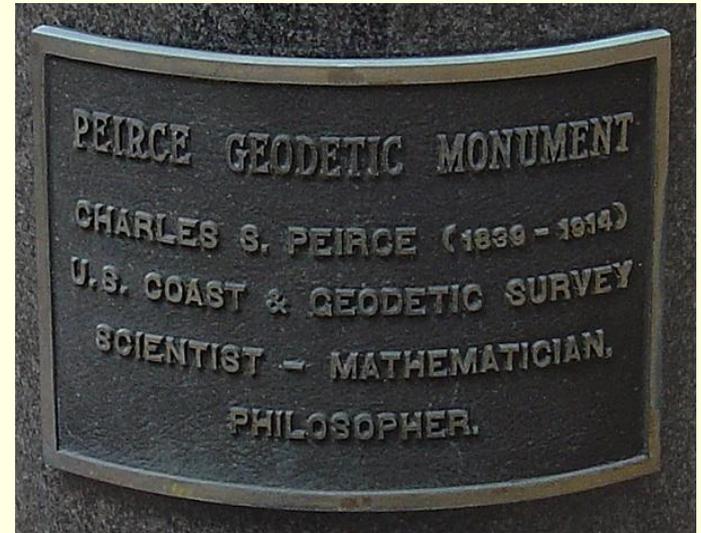
The Passing of a Master Mind

“Certainly it remains true for all the times that no more effective stimulus to promising young minds can be found than to give them the opportunity of contact with master minds in action (...) Yet nothing would have shown better the greatness of a great University than to find a place for it for rare men like Charles Peirce. His memory invites not only to personal tribute, but is a reminder of our neglect of the true worth of genius.”

Joseph Jastrow, *The Nation*, 14 May, 1914.

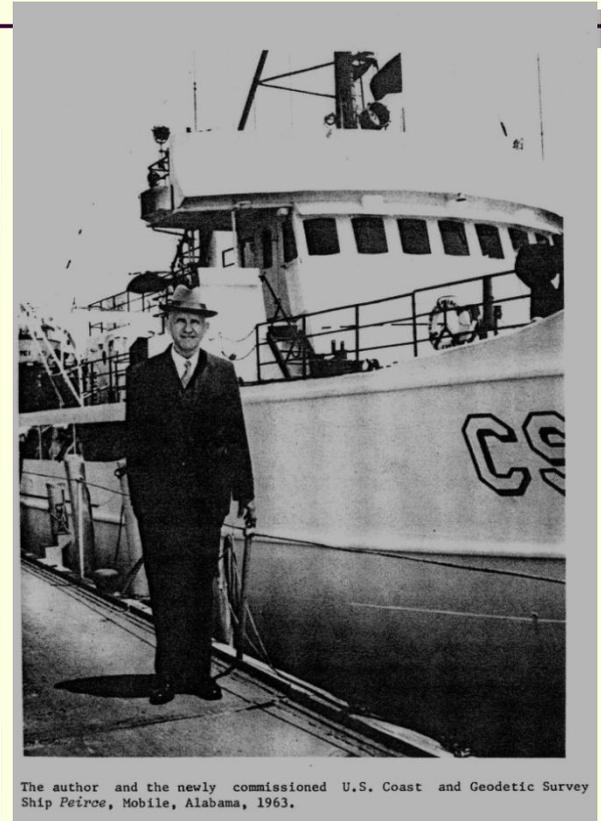


In Memory of Charles S. Peirce



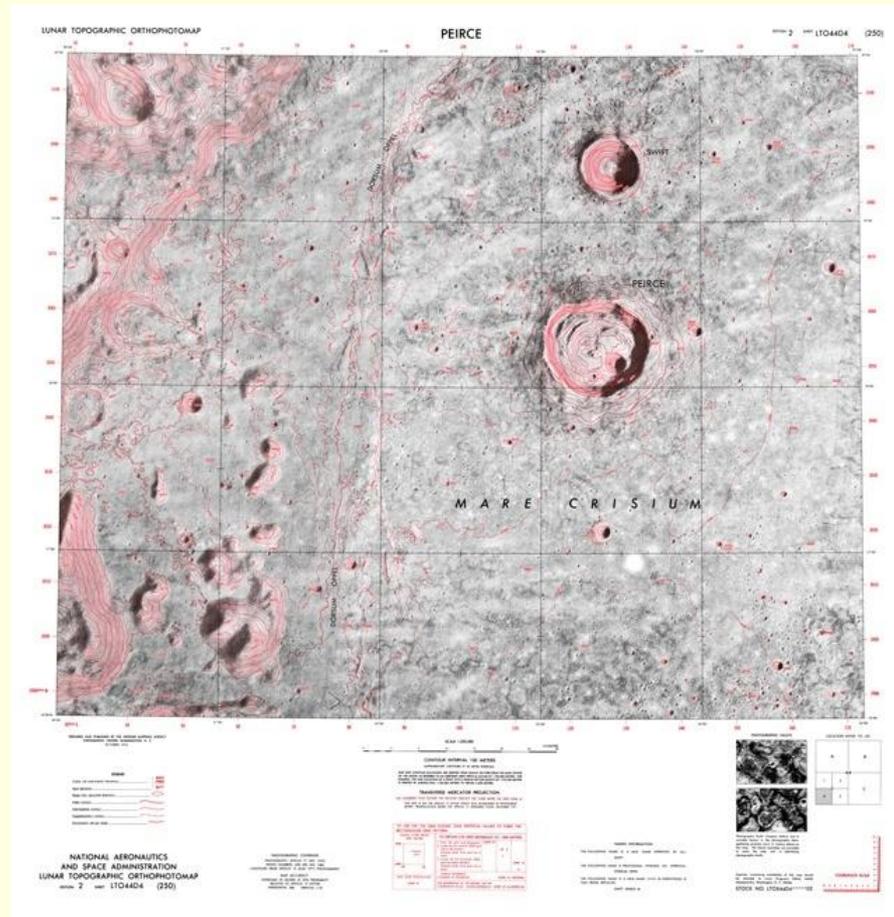
- Peirce Geodetic Monument (NOAA, 1987) is a reminder of Peirce's contributions to American thought and of our nation's bond with science. It is part of the official network of triangulation points throughout the U.S. 39° 46' 20" North Lat. 86° 10' 25", 215.82 m.o.s.l.

NOAA Ship PEIRCE



- Twin diesel, length 165 feet, beam 33 feet, draft 11.2 feet. In service 1962-1985. Named for Charles S. Peirce one of the greatest of American intellectuals. Peirce served with the Coast Survey for thirty years and was famous in many branches of the physical sciences. After a series of reversals, he died in poverty and relative obscurity.

In Memory of Benjamin Peirce, Jr.



El mundo de Peirce: Un recorrido en imágenes

Edison Torres

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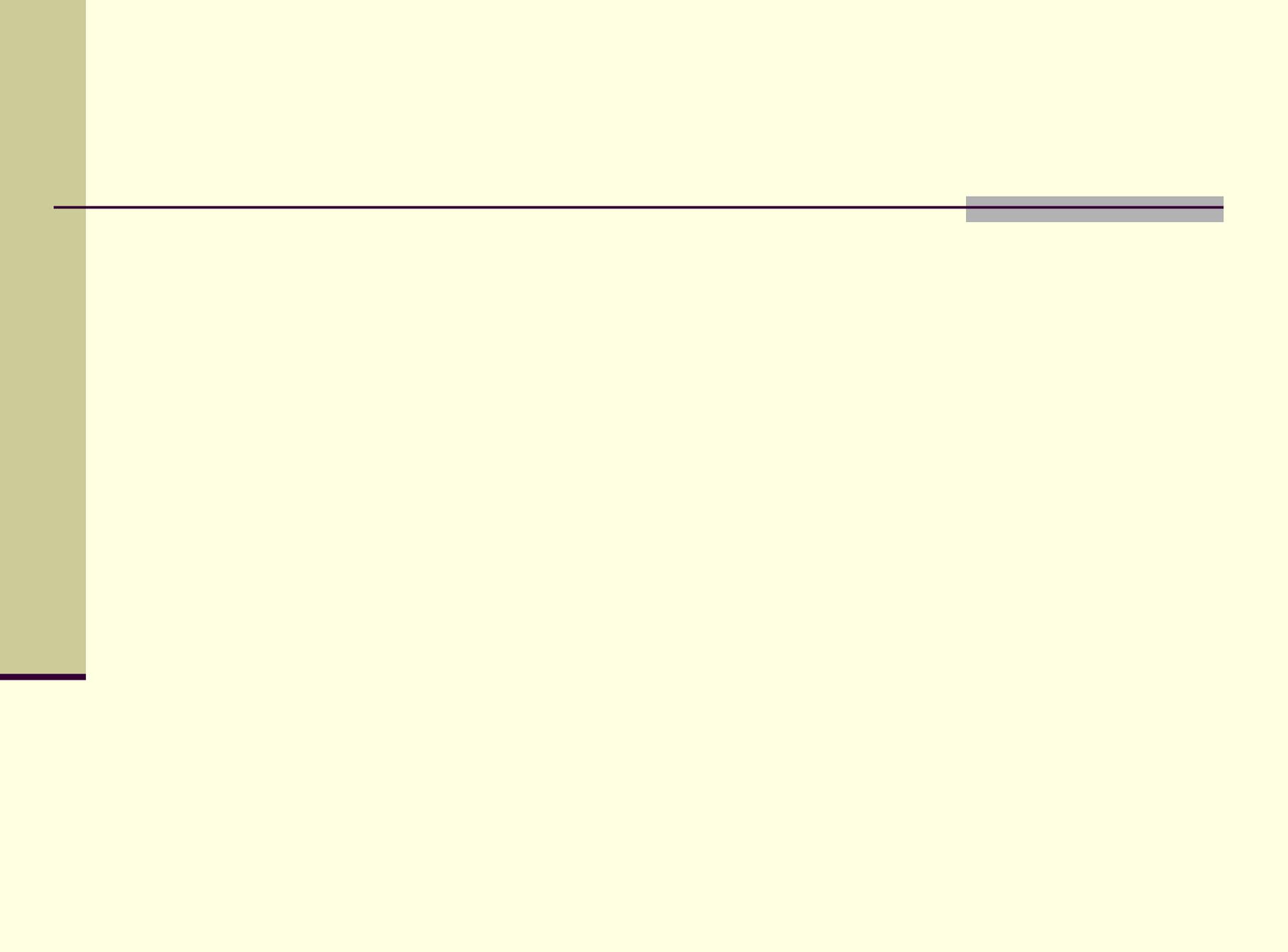
Centro de Estudios Filosóficos Eugenio Pucciarelli

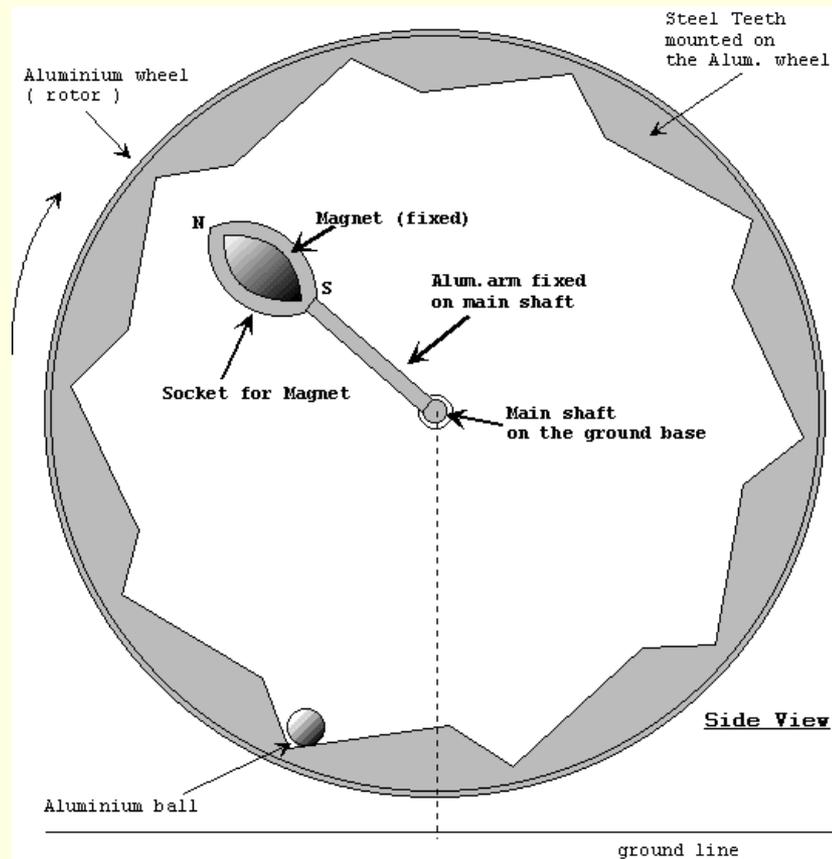
Grupo de Estudios Peirceanos Argentina



Academia Nacional de Ciencias de Buenos Aires
11 y 12 de septiembre de 2008
Buenos Aires, Argentina







RMOD V 3.0 - The Enhanced Peregrinus Permanent Magnetic Motor
Design and Drawing by Jean-Louis Naudin
23 June 1997 - Email : JNaudin509@aol.com