Sept 29 12:30-1:45 Miss Peterson and Mr. Pritchard at studio. Discuss 4-9 grades - 5th grade is "marking time" only "no progress" M.T.P. "Your tendency is deductive, not inductive." "Could you have weak chroma one year) strong next) ? J.C.P.
"Value of this lies in its application - design. M.T.P. "Can these scales be made in water color in 8th grade?" J. C. P.
Discuss masks to select colors in 8th grade.

Oct 1 Mr. Pritchard and Miss Peterson at studio. "Is solar spectrum a standard - is your circle of hues like it? Why not? How do you get that red? "Is it measured - By whom, by what? Can it change - will it fade? "Can children find any color in your sphere?" "Do you go from particulars to universals - do you use synthesis or analysis? -(in teaching color) "Work out a few harmonious groups under rules and show them. "Make a selection for each grade.

They accept the course of study and Mr. P. asks Miss P. when she can have Mr. Hopkins approve of it?

Oct 5 Mr. Pritchard at studio.
Reviews question of placing photometer on a paying basis. How many have been made, at what cost -) """""" sold for how much ) is there any disappointment as to their work? How cheaply can they be gotten up - A circular to be sent out - and followed by another as to its use, and merits -(for color, C. P. S. - and general laboratory.)

In evening at Miss Peterson's - Go over MSS of course of color study. Suggests use of Dr. Ross' Rythm and Balance. My objections to Rythm and also to Harmony. Why not yellow at top - and go against clock hands? (yellow not a primary sensation)

Oct 10 Mr. Currier (painter) at studio. Sees sphere, color tree, photometer, V. scales, etc. - tells his plan for teaching the verb in languages - "We can only approximate nature in any field - "She always eludes us. Is always an exception
3 steps (first-a positive and striking statement -
in each (new if possible
definition(next-an amplification satisfactory to the
scientist(last-a popular illustration - using familiar
terms

1 What this system will do for the child
that others can not do.
Describes a color - (locates)
Relate the color to others
Writes by a notation
Names harmonize and find them.

Page 5"x4" - 60 pp. linotype 8 point type

[paper
cover/pens
comp./
binding
28 lines 252 words ]
12,000 ) 50 pp.

primary 221) 300 schools in Boston)
grammar 65) 200 extra copies ) 500 copies.
Absolute?
Is the spectrum ab.?
How far will pigment color change?
3 months?
printing must be supervised, (Mumford at Detroit
Photo-Chrome Co.)
Will artists accept this new system?
Hambridge list in Esoterics.
What does it displace?
Who will use it?
Stores
Dyers and Chemists
Architects and Decorators
Paint grinders
Modistes
Printed and Woven Goods
Will two people agree as to **harmonious** colors?

M. T. P's questions.
to the law.
"What satisfies one eye, or one person, will not satisfy the next.

Oct 11
3-6 Mr. Hopkins and Miss Peterson. Sees and hears 1st and 3rs chapters and Course of Lessons. "Need no explain to grade teacher. Assert like a god. Discuss materials and publishing. "A ten years business" - $100,000 capital - "Billy Cochran can prevent and turn down anything. "Affiliation with other houses - "May have been consulted by Scribner. "Can't prevent your doing a good mail business. "Already looked up his capital for 5 years. "Must make it pay return. "Rand McNally might undertake whole thing.


Oct 12
At Everett School - Discuss papers and enamels with Mr. Pritchard - 5 - Call on J. F. H. at Latin School and ask him not to mention the color problem to Mr. Cochran for the present.

Oct 13
Mr. Pritchard at studio - Considers the photometer - Name, use, value, need, description - Get exercises from Dr. Wendell's class - "We are sending you under a separate cover, inviting your attention to -------- and beg to say that they are now in use in -------- giving great satisfaction ---- a few for sale, correspondence solicited. Invites your attention, and asking you to take one on approval"

Show sketch to Prof. Clifford on train.

Oct. 17
At studio 12-1:30 Miss Peterson and Mr. Pritchard. 11. Discuss Rythm and Balance - "Measured character of the system seems to be emphasized at start. This is what it differs from all others. "Centre of balance must be defined. State where it is found. "Sequence divided into Regular and Irregular. "Area - as an element of balance must be included - Which grade?

My objection to Rythm.
Miss P's objections to opposites and neighbors. How far this should follow Dr. Ross' term.
"""""" fit Boston conditions especially.

169
Oct 18 3:30-5:30 Mr. Hopkins and Miss Peterson at studio. Grades 1-6.

24 10:30 Mr. Cochran, Mr. and Mrs. Louis Prang. Mr. Cochran asks for the MSS of my book on color. I say that I am not for the moment free to submit it - but will be glad to consider it later. They ask if it might not conflict with what he has already published - if he is not committed to Dr. Ross. He says no - "Those scales were simply done as job -work by M---- Your work would not be incorporated as that was - but published as a unit, a new book on color."

Mr. Prang says he is coming to the lecture before the Society of Arts - and asks if he may step in to look around the studio - (sees Color Tree, Photometer - and Charts)

24 Mr. Pritchard O.K's photometer circular and we go to Heintzman, 185 Franklin St. for 1000 copies.

-------------(On page 11a. there appear three clippings - two about the lecture of A. H. M. before the Society of Arts, and one which suggests a new color - "Rose du Barry red", which appears in the carpet of an auditorium here in Boston.)

(The following color names are noted on this same page.)

| "crimson scarlet" | (Higgins Ink) |
| contradict | pink violet |
| contradict | (Florist terms) |
| green pink | Capt. Abney |
| V | brighter shade |
| H&C | true depth of tone |
| C | toned down |
| contradict | deep tint |
| Rood | |

Oct 26 10-10:30 Mr. C. F. Perkins at studio. Sees all new models and charts - and takes away the sketched claims (1902) for a system of charts to reconsider.

Mr. Crang (O'Hare Dial Co.) brings five enamels.

27 Mass. Institute of Technology - 599th meeting of the Society of Arts - 8 P.M. After dinner with Prof. Cross, Dr. Hough, and Prof. Prescott - at Tech Club - gave hour talk on "A Practical Color System, based on Photometric Measurements" - In Physical Lecture Room (22 Teller) to audience of over a hundred.

Questions until 10 P.M.
Oct 31  Mr. and Mrs. Prang - to see photometer and charts - Mr. Pritchard.

Nov 1  At Dr. Wendell’s desk (4-5) Meet Mr. Swan, and Mr. Sawtell and Mr. Hill. Discuss photometer and Perkins’ figures.

3  Mr. Cram takes 5 enamels and samples - for Miss Grant to make a new set - Charges at .50 an hour. I suggest that blue is too dark, and green not strong enough.

4  Mr. Gilman at studio 2:30-3:30
   (value culmination in white above emphasis)
   "A student (I) who was ignorant of previous attempts, used two cardboard pyramids to display color relations, between the extremes of white an black - 100 years before, a German student (Lambert), and 40 years later (Runge) had suggested a solid; Wundt (75) used it as common property in psychology - the present solid grew from the little twirling model of 1879: in which Value was paramount (the artistic foundation of color), not wave-length. (Darwin took an idea current in political economy, and transplanted it into Biology. (Malthusian doctrine). Saint Saens heard several tones in a bell.

Print large, a connected simple outline for teachers - small the detailed explanation for students.
   (Enamels of a shape to fit on sphere.)

   Gave talk and demonstration of the photometer to private audience. Dr. Wendell and Bigelow - Profs.
   Derr, Swan, Lawrence, Sawtell, Drisco----------Miss Vinton and 3 (3d year) students.

9  1:30-5:50  Mr. Pritchard and Miss Peterson review first six grades - with Mr. Hopkins criticisms -

11  4:30  Miss Mary L. Patrick (899 Wash. St. Newtonville) and Miss Peterson - discuss materials necessary.

14  3:30-5:30  Room 22 - Walker, M.I.T.
   Gave 2nd demonstration of a practical color system Same audience as Nov. 7 - with a dozen graduate architects.

In reply to Dr. W's question about next lecture - said it would be
   1st A color notation
   2nd Records of good and bad groups-Laws of harmony
   3rd Selection of colors to enhance a given color.
Asks for a H-S section P.

I show him the problem of comparing sensation of light \( \eta_8 : \eta_2 : \eta_1 \quad \text{achromatic} \quad 3.5 : 1 : 0.5 \).

Folmar Schwing
407 Broome St.
Somma makes - see by Saville & Anthony, New York.
Wiring for a Standard Lamp in Photometers.

End View - full size.

a.a. through bolts, brass — backed w/insulated.

b.b. 1/4" brass screws, into chase case 1/2" dia.
Nov 19 4:30-6 Mr. Pritchard at studio -
He does not accept Mr. Orr's program of
partnership.

21 3:30-5:30 Room 23 - Walker, M.I.T.
3d demonstration - Color Balance
Drs. Wendell & Bigelow, Profs. Clifford,
Derr, Swan, Lawrence, Sawtelle, Drisco,
Gill, and Prof. Humphrey - group of post
graduates -- Prof. Clifford says "I think
it is sound" - (has not changed his opinion
in the five years he has followed my progress.)
Dr. Wendell - moves a vote of thanks & saying,
"We are indebted to Mr. M. for a new and
interesting view of color." Later - asked
how to fix a "middle value" since it must vary
with the intensity of the source of light.
Asks Mr. Lawrence about a Nernst lamp.
Mr. L. says it is most like daylight in color-
but takes nearly half an hour to come down
to a steady intensity when lighted; - also
a change of voltage disturbs it again for
some time.
I ask about a Wellsbach mantle over gas or
kerosene flans (Prof. Cross) and quote
Abney's crater of positive pole of an arc lamp.
Describe studio methods of controlling the
light.

Nov 23 Dr. Bigelow at Library - Rogers Bldg., M.I.T. 11.
Talk over a paper on the photometer for the
Tech Quarterly - 4000 words - ready by Feb.1905.
1. Necessity for a scale of Value
   Its value to artists & others who require
   a scale.
2. How obtained. -
   The "middle point is O" with + and - variations.
3. Mechanism.
4. Method of Use -
   Sources of error - precautions. Tabulate and plot color.
5. Personal equation.
6. Visual Ease as a factor. -

Discuss color terms in general. Asks why "colors
swear" Speaks of books by
Chapman - Birds of Eastern U.S. and Bird Life
Chevreul, Bunson - Prang
Meyer - (Butterflies)
Exner - Colors "beautiful and hateful"
Charles Henry - (Sorbonne Librarian)
Paterson
Nov 23  4-5 P.M. Mr. Pritchard and Mr. W. A. Bourne, Expert in Signal Oils. -  
Show photometer -  
   Read glasses - red & green (13 & 37) then change velvet & black paper - (18) - by color of light  
Discusses test of two lamps - 60 hours continuously.  
   Tells of lack of air (high altitude) as due to "freezing of oil (winter st.) lanter, not vapor on lenses (carbon product) to oil"  
Believes a test of color blindness - would be welcomed for railway employees - day signals - flags - lanterns  
Will send two lanterns and case of oil for me to test - recommends "America-wick".  
Thinks I might write Macbeth & Co. of Pittsburg, W.C.C.Eglin, 10 Sanson St. Phila - about P.  

Nov 24  10-11:30  Mr. Hopkins (Thanksgiving Day)  
Sees my plan to use black - middle gray and white paper with twelve special paints - to make all color gradations.  
This simplifies his fear about 150 paper (reduced to 50)  
Discuss Books of 50 colors - to remain in schools - while each pupil makes his own book of colors with the crayons and three levels of paper.  
Discuss 2 spheres - Primary - Grammar -  
Offers to speak to Mr. Reed (Dixon Co.) about the pencils - and Forbes Co. about the papers.  
Sees no reason why I cannot issue the pamphlet myself.  

Nov 25  26  Mr. Pritchard - Talks over partnership - Does not want it to hurt our friendship - Rather give his share than have that disappear -  
Quotes figures on an 80 p. pamphlet -  
1000 sheets $1.92.  
500 bound  50.  
30 cuts  10.  
1 color insert  50.  
Say $300. for 500 copies  222.  
Cost 60¢ a piece  66.  
St. not prerevised  add. 30¢  288.  

Dec 1  At Mr. Lawrence's office, Elec. Eng. M.I.T.  
Shows me a resistance
two rows of thin battery carbons - 100 sq. each - 1"sq x 1/10" thick ($15 - Stuart Howland - Franklin Sq.)

Also suggests

Hydrometer.

Western E. Co.
Waverly Park,
N. J. - Volt-
meter 0-150V
Model E - 29.50

To install a standard of 16 c.p. on the commercial current of studio - Discusses an Amyl-Acetate (Hefner) lamp - but does not advise it.

See Findlay at Ellis & Co. 16a.
272 Congress St.
about handling the book -

Possible markets: Lawrence,
Springfield, Buffalo, Providence,
& New Haven - anti-Prang.

Test apparatus
to determine portion giving
greatest sensitiveness.
Dec 9 1904
Studio 4-6 Mr. J. C. Peterson - Discusses Harmony - Materials for the system - Possibility of commencing in 1 or 2 schools Feb. 1st.

Dec 23
Studio - noon - Mr. Pritchard finds Mr. Bowker & Mr. Teale of J. A. Andrew & Son - considering color insert from my sphere - (plates $25-30 and the printing of 1000) Returns MSS and says it is all right in the large: - some small matters to be reconsidered.

30
Joseph Dixon Crucible Co. Jersey City - 3:30-5
Met Mr. Reed - Mr. Tracy, Mr. Engelkrek and Mr. Van Dorn. Saw processes and discussed colors.

31
At Mr. Cochrane's office - 113 University Bldg., N.Y. 11-1:30 - Met Mr. Snow and Mr. Fosdick
Explained terms - qualities and measuring color instruments. Left MSS for answer as to contrast royalty, etc. M.C. suggests course of lectures in principal cities.

Jan 9 1905
Mr. Lambert sees photometer, Color Sphere and Charts. We discuss new clamp for spar of Slipper III.

Jan 18
3-4,5 With J. Fred Hopkins at his office.
Show him Cochrane's letters of Jan 6 and 11, - and discuss their meaning. "sparring for time" "would hurt their new books" - "kept my MSS three years" - "said I thought it about time to send me a cheque."
He will take a press copy, if necessary - and go before the Board of Supervisors in March and urge its acceptance - so that it may be placed upon the list for next year. "Let me have the copy by March 16, and I will say, 'Gentlemen, this is the best thing on color yet, - we must have it.'"
Suggests Ellis & Co. or Polson & Suningren - Questions offering it to Davis Press Co. (Bailey, 17 etc.) or Silver Burdett: - any rival in fact. But this would consume more time. Think I could get 1000 @ $35 - sell to dealers at 50% and on the market for 75%. Will be glad to help in any way: - suggests extract to be published in Journal of Education - with promise of an ad. - and other Journals.

Jan 21 26
3:30-5 Miss Fiske calls to show her plan of design - especially line, form and color in millinery.

Mr. Reed of the Dixon Pencil Co. 1-2. Sees color sphere, photometer, charts & book (MSS) and
discusses crayons, - also a publisher.

Feb 2
Mr. Pritchard at studio 4:30-6
Sees type, design for cover, etc.

8
Mr. Geo. Young (Hammet & Co) sees color sphere, charts, etc. Will send colored papers -
Dr. Wendell tel. to question phot. calibration
Geo. Taylor calls.

9
Mr. Winslow of Tech. Biological dept. calls to ask about color charts. Finds Prang & Bradley charts unfitted for his purpose.

14
Miss --- (his student) calls to obtain scale.

14
Change to 80 lb white paper, and pick new cover -
also add two lines on each page -

Feb 20
12-12:30 With Mr. Young at his office-
Spheres - 2" & 3" - wood - cost .01$-.02$.8
15 paper 30 papers & white & Black
5 colored pencils - .33 dozen boxes
" crayons .21 "

Jan 23
Mr. C. C. Birchard makes offer to handle this 17a.
book for 20% net sales - I to pay also for marketing, circular their distribution and all advertising other than in his general catalogue.

24
Leave frontispiece with J. A. Andrews - and see Mr. Findlay who will charge 10% of net sales and packing when he fills an order for me.

30
Leave MSS and Sample of cover with Mr. Findlay, who agrees to have it out Feb. 20 -(Payment in 30 days)- To charge 10% on his net sales - nothing on sales made by me- only cost of packing and delivering. To bear their imprint and appear in their catalogue. But it remains entirely my property - they acting as printers only for me, - and granting use of their facilities for distribution.

p. 497 of Wundt 17a.

Fechner's law

Weber's law illustrated
by Cats' eye shutter.
Feb 22 Began portrait of A. E. Orr - at 102 Remsen St. for trustees of South Brooklyn Savings Bank.

- Red tint 2
- Violet " 1
- Green Blue -----
- Green shade 1
- Yellow " 2

Feb. 20 Mr. Gagnebin brings Dr. Ed. Ulbrich and Mr. Metz to the studio 10-11. Sees photometer, sphere, tree and charts. The Dr. offers to translate my book into German.

3-4 Dr. Bigelow comes to look over my logarithmic curve - questions if its use is legitimate.

Mar 2 Gave short description of color at E. H. S. 71-74 dinner - Young's Hotel 7-10.

Called on Mr. Pritchard at Everett School.

Mar 6 With Mr. Finlay - Says I can't afford more than 25% off to teachers - printing of 1000 color plates costs near $50. - with 16 on a plate - 200,000 - 300,000 copies, it would be less.

Mar 16 Mr. Gunnison (Wadsworth, Howland & Co.) 4-5
Sees sphere, photometer, tree, enamels - Describes machine for coating enamels - (5 rolls)
Baking -(300 temp.) Can enamel on copper, tin or cardboard. Mauve hardest to match -
Red (vermilion) must be heightened by alizarin. Thinks the set of five enamels (364) will cost about 10 cents. Thinks sphere would be printed by color process (10 sectors)
Tests color for matching and fading in sunlight.
Will make experimental samples and come Sat. 4 P.M.

Mar 18 Mr. Howland with Mr. Gunnison 4-5:30
See all the system (except charts)
Brings experimental samples - Suggests continuing experiments until I am content with results, and then making me a proposition based on the cost of producing the (enamels
(crayons 5 colored spheres
later water colors (colored balls-10"

175
Mar 29 25 copies of Color Notation
      31 18 " " " " " "
Apr 3 Orr portrait finished in 13 sittings.

20 presentation copies.
12 copyright -- (Eng)
2 " " " N.S.

April 10 W & H colors

Red - tube No. 3
Yellow - " " 5 (darkened with 10)
Green " " 10
Blue " " 9 (grayed with 10)
Purple " " 2 (" " 9)

{Red ch. \{Red ch. \}
otherwise balanced

\begin{flushleft}
Mar 27 1905
Mr. John S. Clark \hfill 4-5 (Also Mr. Pritchard) 19.
Sess mat. & models and charts. Accepts ideas -
"We must think color" - "Imitation has been
whole aim: now color per se." The teacher
must be trained for this new attitude.
\end{flushleft}

\begin{flushleft}
Apr 26 12:30 - 1 N.E. Cotton Mkt. Asso'n-Chipman Hall.
Showed sphere - charts and photometer -
Mr. Hartshorne, Kittredge, Dennett, Eaton &
Sanborn (Utica) White, Gunnison, Bradley, Sawyer.
\end{flushleft}

\begin{flushleft}
1:30-5:30 Mr. Gunnison (at above meeting)
Takes five colors to match. Suggests Converse
(to make spheres) and Babb - Mr. Mitchell (to
\end{flushleft}
3-4 at M.I.T. (Dr. Wendell & Mr. Swan)

Studied Lummer-Brodun eye-piece - also Weber- (total - reflection prisms) - Experimented with cylindrical lens.

May 2

4-5:30 Mr. G- , Mr. Kimball, - Mr. Putnam's educational agent - Show models and photometer. Mr. G. brings two sets of color enamels - 1 1/2".

6

4-5:30 Mr. Gunnison - new set of color enamels - 2".

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May 8

4:15-6:30 Mr. Howland, Mr. Robbins and 20.

Mr. Gunnison - 25% royalty on cost of production.

15

11-12 Mr. Kittredge of Textile Amer.

15

4-4:30 Mr. Howland comes to discuss contract - and accepts Mr. Orr's suggestion of a minimum of 25% on cost - to be considered at end of 2 years for increase if business warrants.

15
May 15 1:30-5 Mr. Forbes calls to see P. and asks me to make tests of light in Albany Bldg. (damage by passing train) - at 10 a.m. Wed. $25. as expert witness and time spent in making tests.


22 1-3:30 Test of light at Albany Bldg. with Howard Forbes - Pleasant - sunny - but with cloud shadows flying.

On first floor (room 104) 6'-6" from window, light diminished 76.6%.

In corridor of second floor 2-0 " " light diminished 60.6% by north bound trains.

(On page 20a there are figures concerning the above measurements.)

May 24 9:30 a.m. At Dr. J. P. Haney's office - 500 Park Ave., N.Y.

Showed enamels, crayons, balls, circle and two spheres.

"You have done a splendid thing for teachers who are anxious to understand color. But they will best decide how to present it to children - after it sifts through their thought." "Children demand the strongest chromas - and like Dow you had better wash your hands of the ways and means for schoolrooms - devoting your attention to the teachers. That is a big field in itself."

"We have found it best to give a straight rule of thumb, and when the teacher finds that this brings good results, - we say this is because etc. - : theory after practice.

June 12 11 a.m.-3 - Mr. Rufus A. Herrick - (Tech)

Am. Dyewood Co., 113 High St. Brings card of wound yarn to test P.

Measure 2 readings of a blue (3% diff. according to lay " " " " brown(.05 " because smooth)

Describe bottle to test translucence of a solution.

Show charts.

Discuss woven mercerised fabric for charts.
June 16 8:30 Met Mr. Hopkins in Back Bay Station - Advised papers for the lower grades - The spheres can wait.
"Chroma is a familiar term to more than 1/3 of our teachers at the present time. System can go into our primary grades next November, and in Grammar Grades next January." Try Christian Ross - Robert Graves Wall Paper Co. 5th Ave. N.Y. for colors.

June 19 Mr. Forbes calls, shows photographs and advises bill for professional services in conducting photometric tests at the Albany Bldg. May 17 - 22 June 6 and 9 - Day and a half 37.50

Mr. W. H. Varnum - Calls to see color system and models. Give him book and reprint - He thinks to order 18 or 20 (teachers & library)

Mr. Lyon - 25 hours on spheres @ .35 8.75
5 - 5 colors & B. & W.
6 - 5 ' 5 lighter, 5 darker & B & W
1 -10 " " 10 " 
2 -10 " y6 y7 y8 - y4 y3 y2
1 twelve inch sphere, 10 hues, y1.3-5.7-9

Sent Mr. Gammon cut and text for Crayon boxes.

June 10 E. B. Estes & Sons - 45 John St. N.Y. White birch balls.

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<th>Diameter</th>
<th>1000 lots</th>
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<td>2&quot; dia.</td>
<td>7.00 per M</td>
<td>5.25 per M</td>
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f.o.b. N.Y.

(On page 23a there are figures on comparison of light cons in each Photometer.)

Aug 14 1 P.M. Mr. Clark (Milton Bradley Co) at studio - Sees photometer and school material. Takes 2 spheres and set of balls to show Mr. Tapley. (Return 27 blue enamels to Mr. Gunnison to be flattened.)

Sept 16 Call on Mr. Clark - at 120 Boylston St. Says Mr. Tapley doubts patent protection of the colors. Thinks the spheres would be noisy (dropped often).

Sept 23 9-10 At studio: Mr. Arthur S. Allen, Tympalam Co. 216 Summer St.