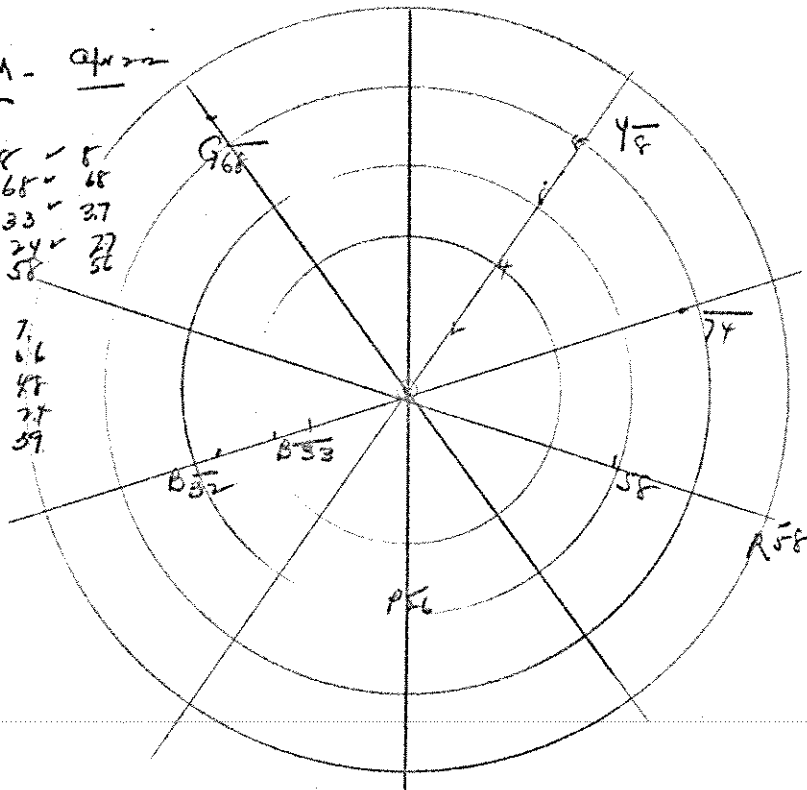


cloudy sky - 2PM - Apr 22

Y	11	11	10	8	5
G	24	13	84	68	68
P	50	26	42	33	37
R	85	35	31	24	27
		15	78	58	56
YR			7		
P			66		
R			48		
B			27		
D			39		



He sees that Abney confounds intensity with both V & C. Wants a middle gray basis for pitch of painting.

Apr 8 Re-tested eye-piece from Mr. Wolff. Query? Is second diaphragm a mistake. Does it blur the separation. Otherwise inferior accuracy at inter-line of the two planes.

Apr 12 Teachers Institute - M.N.A.S. all day and Alumni dinner in evening. 91.
1-1:30 F.P. Fredericks - Trenton School of Art at Studio. Partlett resigns - is made Emeritus - succeeded by F.P. Hopkins art director.

Apr 16 3:30-4:30 Mrs. Whitney - School Superintendent of Everett - with Mr. Putnam - at studio. Sees grade work from Somerville - charts, color tree - (3 H sections) - Hears part of Baltimore address - Thinks perhaps Miss Ellicott has not pushed these arguments enough before her teachers.

Asks where it is already in use - perfected?
why old R-Y-B should be given up?
is such refined color enjoyed by children?
Agrees that the truth is of first importance.

Apr 17 Meet Vesper George and go to his studio to see decoration for Olympic Th.
Says he will get some dealer to make up "middle colors" in quantity, if I do not do so myself.
Explains to him why that would make trouble all around - but if he persists in this I hope he'll get some responsible firm that can settle for the infringement. Recount my experience with Milton Bradley and Devco - and their prompt disclaimers.
Am working as hard as I can to complete the Atlas of measured charts - after which we can consider his want of measured colors in quantity. But the Atlas of prime importance as supplementing the book.

Called on John Andrews Sons - 204 Summer St. to ask Mr. Bowker about reproducing the charts for a new edition of the book.

Apr 18 8:30-9:30 Mr. Bowker of John Andrews Sons at 212 Summer St. Sees Atlas and doubts if his process can reproduce such subtle gradations. Shows Guerin's original he is reproducing - using burnt sienna for the red, - but says the cold green grass is very ~~diffxxxx~~ difficult. Reds invariably fade - Advises talking with Mr. Getty at Forbes factory-Everett. 92.

11-1:45 Mr. A. S. Wiester at studio & P. Yacht Club. Refers to his curves of pigment weights, all except yellow follow the same ratio: yellow inverts it. Query: why?

Thinks I should be in touch with schools of art, through the student body - (pres. or sec.) offering a lecture on Color.

Impartial statement of the science - without advertisement

Necessity of a system - to avoid clashing colors

Measured relations - that can be reproduced

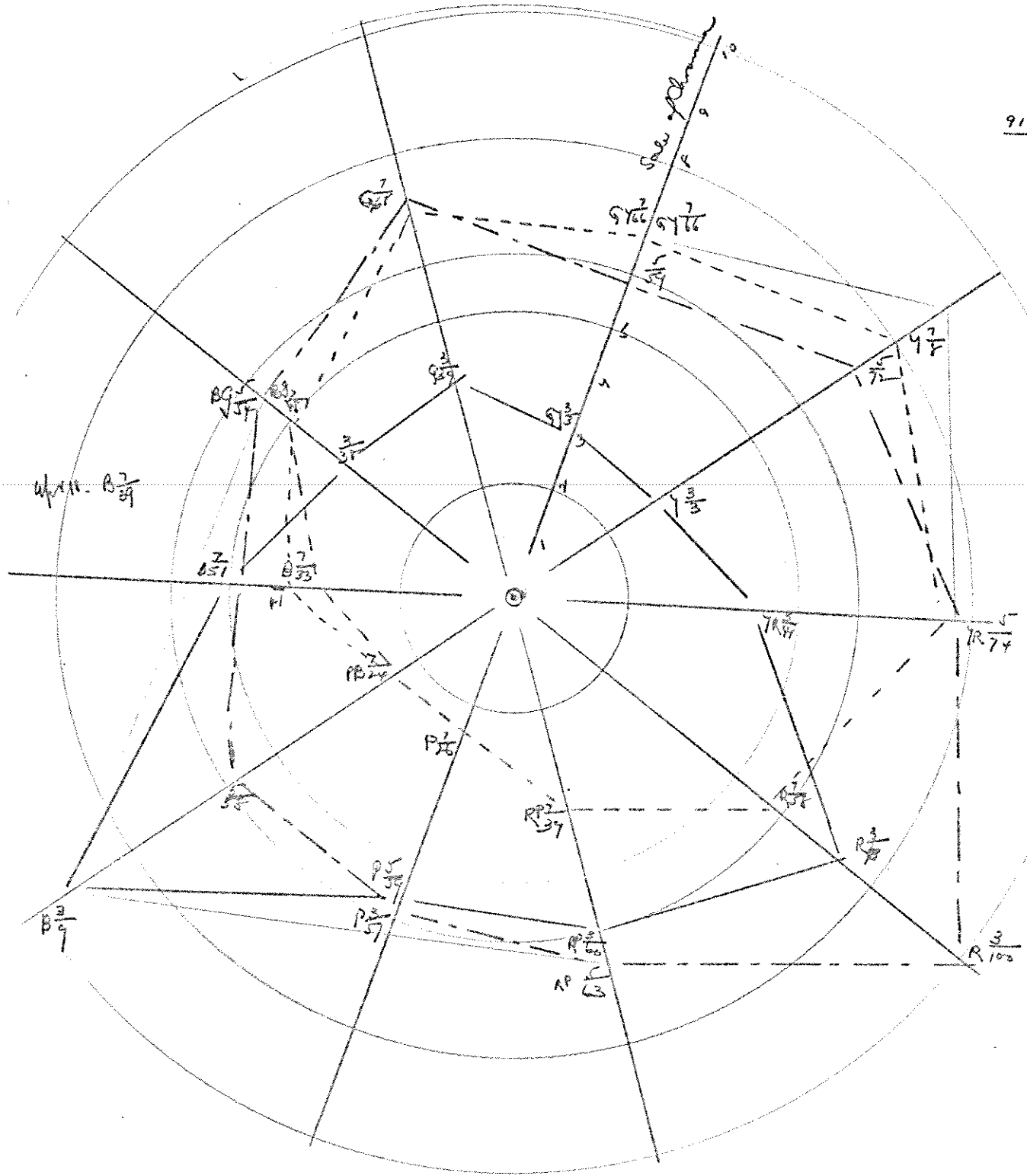
Science underlying art

Invite criticism & suggestions from normal students.

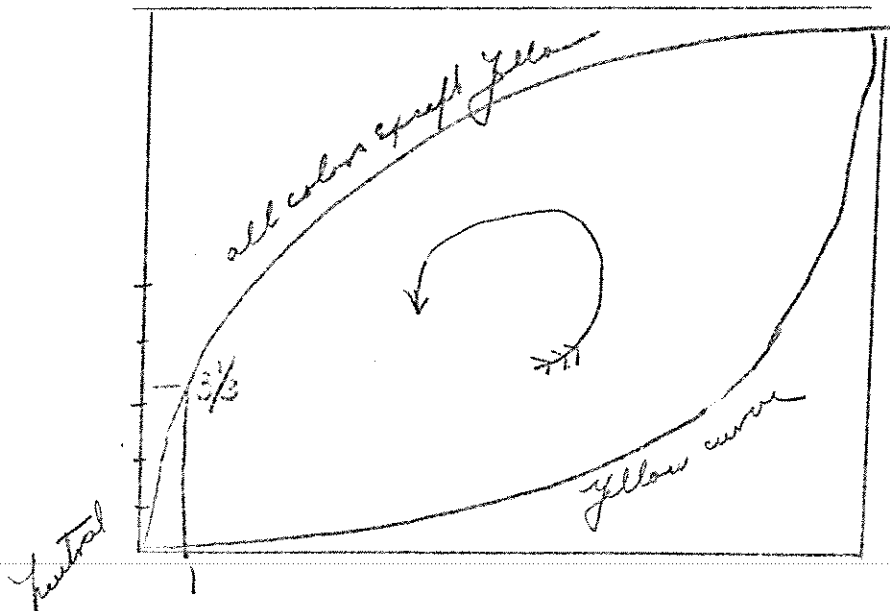
(Could say W & H were at present only firm handling these colors.)

Plan view of Colse Tree
with contours at levels 30 50 70

91 a



70 - - - - -
50 - - - - -
30 - - - - -



92a

two 1/5 curves of
pigment weights.

Apr. 18, 1912. 92b.

Dear Mr. Anderson: -

Please hand the enclosed text for chart 70 to Mr. Howland. The retest shows that blue has four steps of chroma, 1/, 2/, 3/, and 4/. Also that red steps /1, /2 and /3 are a trifle weak, while in yellow-red the steps /4, /5, and /6 are slightly weak. But I hardly think the weakness is sufficiently marked to warrant taking more time for so small a change.

I hope this chart may be on the market before my address at Baltimore, May 14, and also that you can make me a large copy on black for the occasion.

The "orange" sample for chart 60 is too red as you will find by balancing it against blue 40/.
Thanking you again for your earnestness in forwarding the work, most sincerely yours

Speaks of the Mark Hopkins Inst. of Arts - San Francisco - (Yates teaching) - University of Cal. validates certificate of teacher whatever their schooling.

2-4 Mr. Bartlett at M.N.A.S. reviews history of the school and asks welcome to Hopkins from all the teachers - also not to discuss these matters with outsiders.

Apr 26 At Buff & Buff Mfg. Co. - Jamaica Plain 9-10 93.
Tested new eye-pieces and 12 photometers -
pad chge. #244.
Found one defective prism
two " " openings

Then went to Malden factory & saw exp. chart 70.

Received 3 instruments in P.M.

1 at studio
6 Apr 29
3 May 3
3 " 8
13 in studio

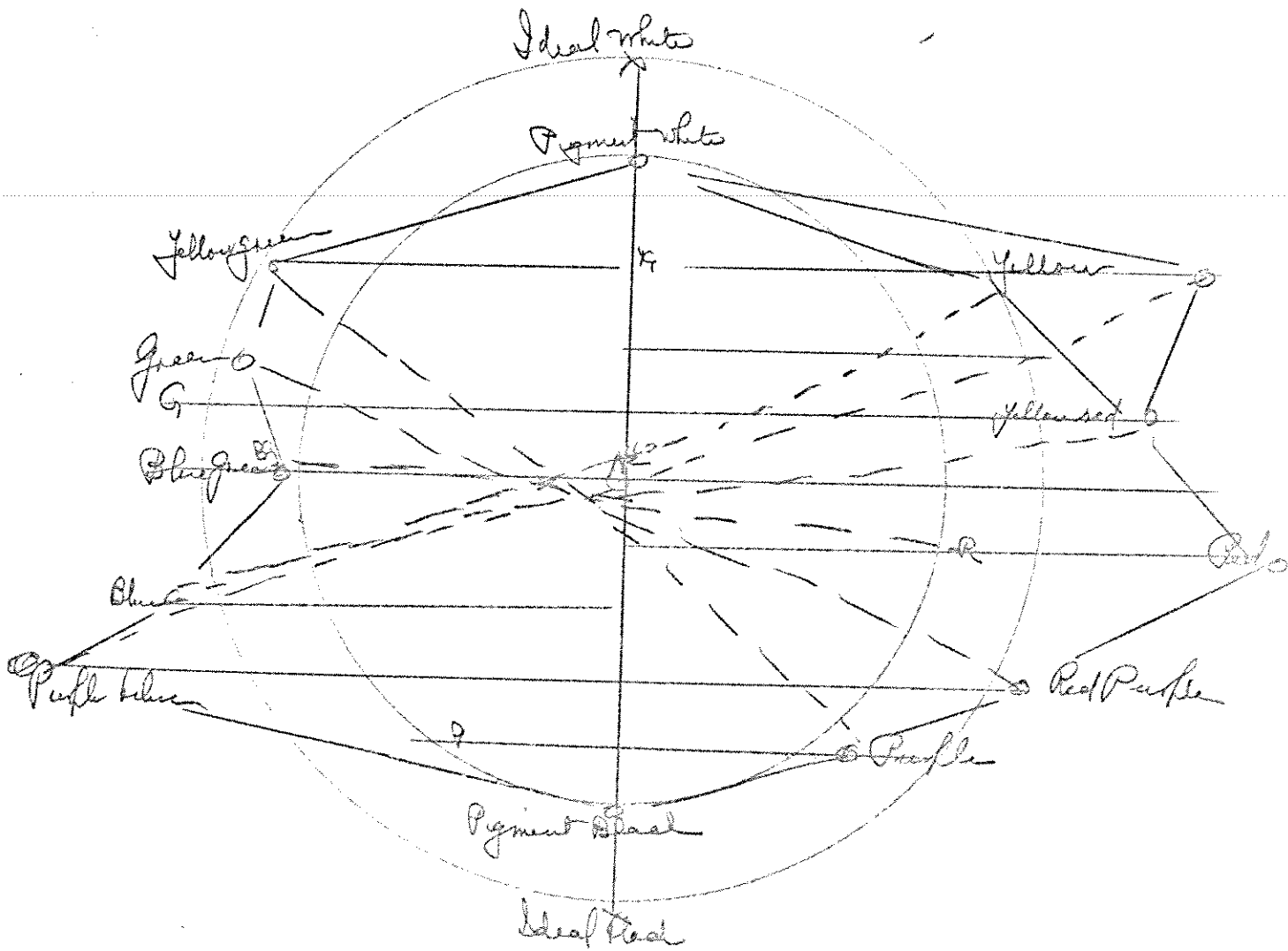
Apr 29 Retest of 70/30 balances of Y & PB) 2⁷: 8³
G & RP) 98 72
See page 76 - Is balance inversely as dial
log. scale or as arith. scale?

Apr 30 2-3 With Miss Taylor in Public School Class N.A.S?
Talked over color- and elimination of R-Y-B theory. She thinks a light yellow and a dark blue needed for children. Asks if these cannot be furnished with middle colors. Says water color can wait until sixth grade - too much a matter of haphazard luck and difficult technique for beginners. Crayons and pastels better for young children.
Imitation of flowers & chicks - need not be picturesque. Picture study may keep to the story and illustrative side.
In sixth grade picture composition may be contrasted with design.

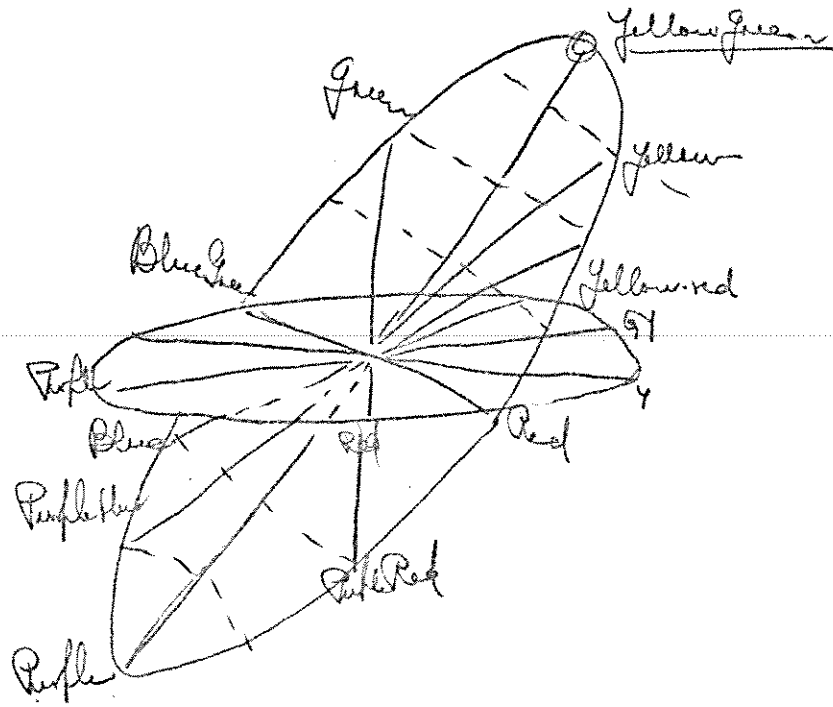
Color { nature work
{ object drawing
{ theory proper
{ design

I suggest omitting all theory and teaching a handful of ten colors (leads inevitably to true complements - without old R Y B fallacy)
Using flat colors - not atmospheric attempts - Drop adjective "artistic".

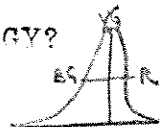
Apr 30 3:30-5 Miss Patrick & Miss Eaton at studio. 94.
 Bring 2nd year high school work in color -
 students having had no preparation except
 those two years.
They had a box with five middle colors and the
three maxims but do not abuse the strong colors.



94a.

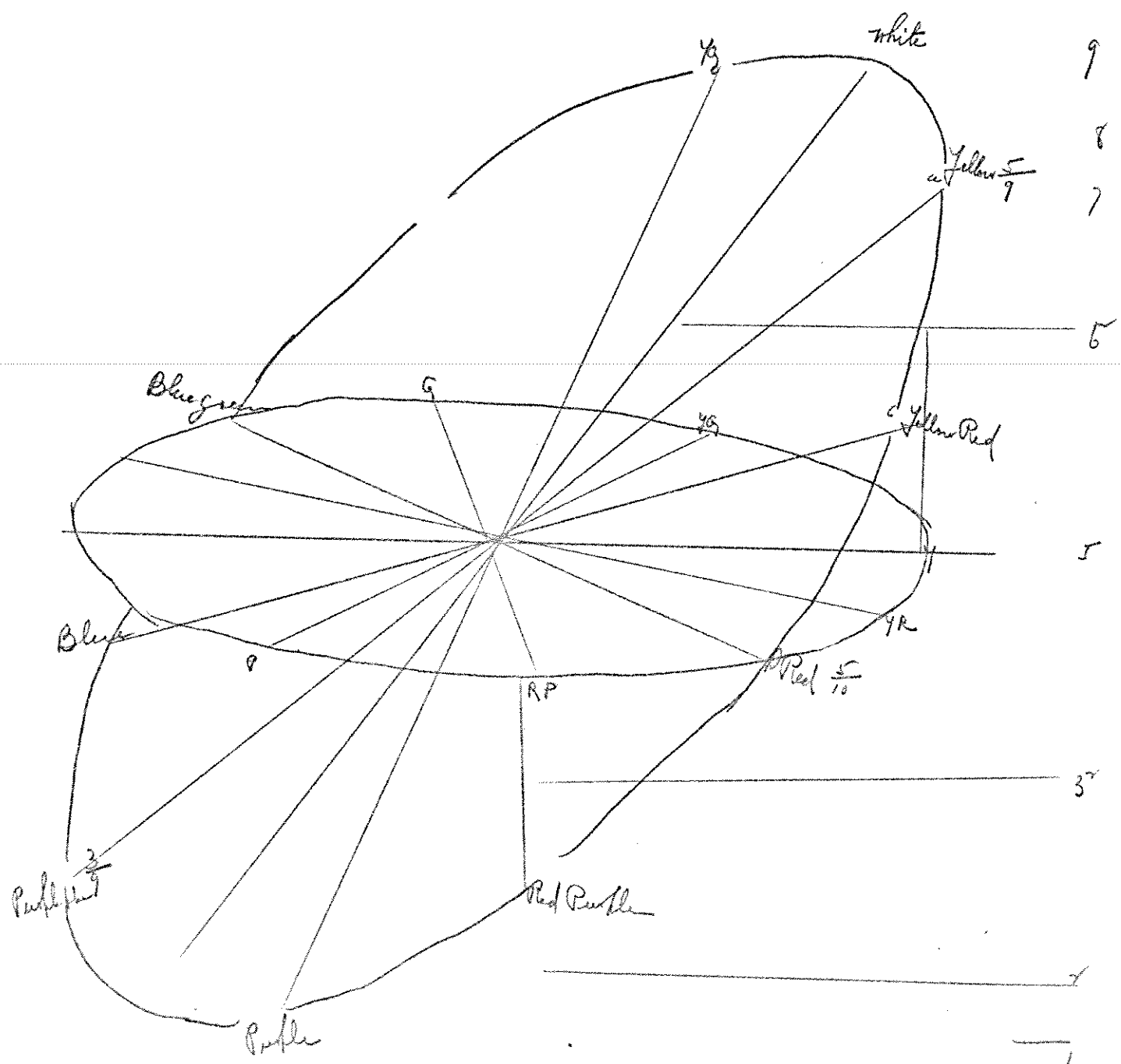


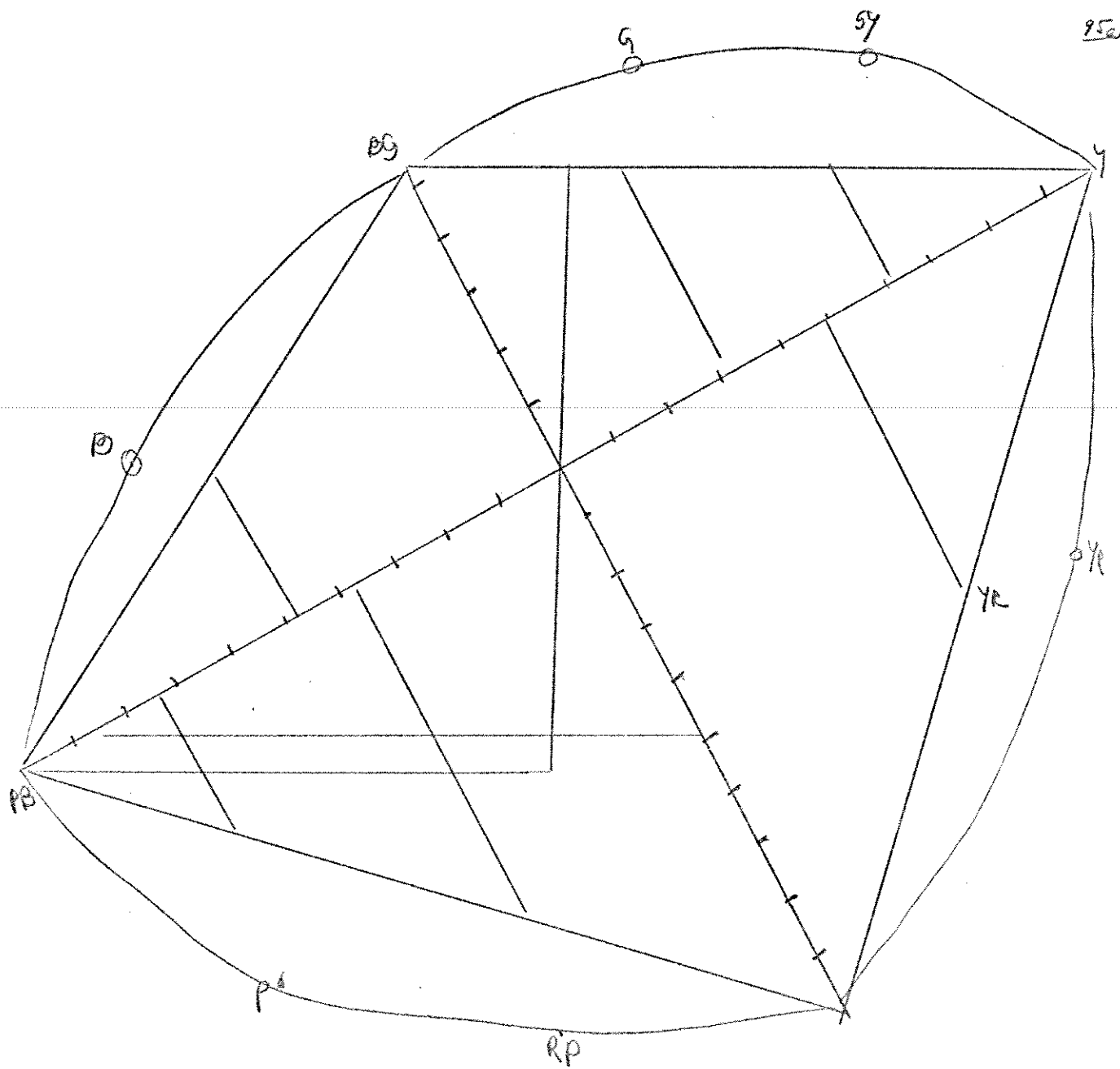
Is yellow sensation as luminous as GY?
 See Nutting's Elements - page 3.



$BG \& R = \frac{1}{2}YG$

25





May 1 11:30 -12 At. Dr. Williams office

96

To test color vision of Miss Barbara Clarke

1. Acuteness - type letters
2. Holmgren yarns - test skein of VG and P
3. Nagel cards - irregular sequence of spots in irregular field. in circles.
4. Gaal yarns - 10 rows in 8 gradations - only two of a simple hue - figures in spots in irregular field
6. Color lantern - groups of 3 lights - 3 magnitudes
7. Exploration of retina.

I ask if other methods involving Color value and chroma would not be an advantage - since all these tests are confined to matching or contrasting of hues - independent of value or chroma?

Discuss rate of after-image disappearance - young and old eye

Twilight - (purkinje effect) vision and accommodation.

He shows me Dr. Fitz bar for measuring pupil aperture.

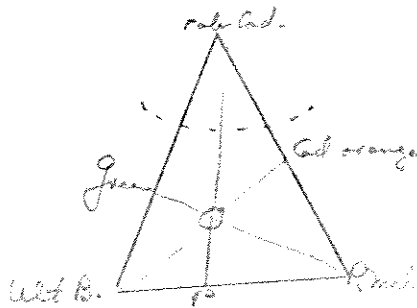
Speaks of difficulty in preserving colors of Holmgren yarns

Miller & -- had to get more than half of the 158 varieties redyed - and as dyes vary from season to season, also small lots are not easily made.

This involves considerable expense.

May 4 Mr. Adelbert Ames.

97



Describes pigment mixtures placed on strings in a frame five feet square and method of finding most neutral point.

Yellow & Blue does not make gray but all greens - and the yellow angle of the frame seems to depart very much from my charts.

I say it is subtractive (absorptive action of pigment) instead of additive (retinal blending of light).

Tells of his neutral scale - (black and white makes blue) and final use of the cosine curve. Finds my photometer very useful - can read within half a percent.

Believes my method right - but has developed his pigment diagram to become familiar with vagaries of their mixture.

I suggest he write this up for some journal.

Volume V.

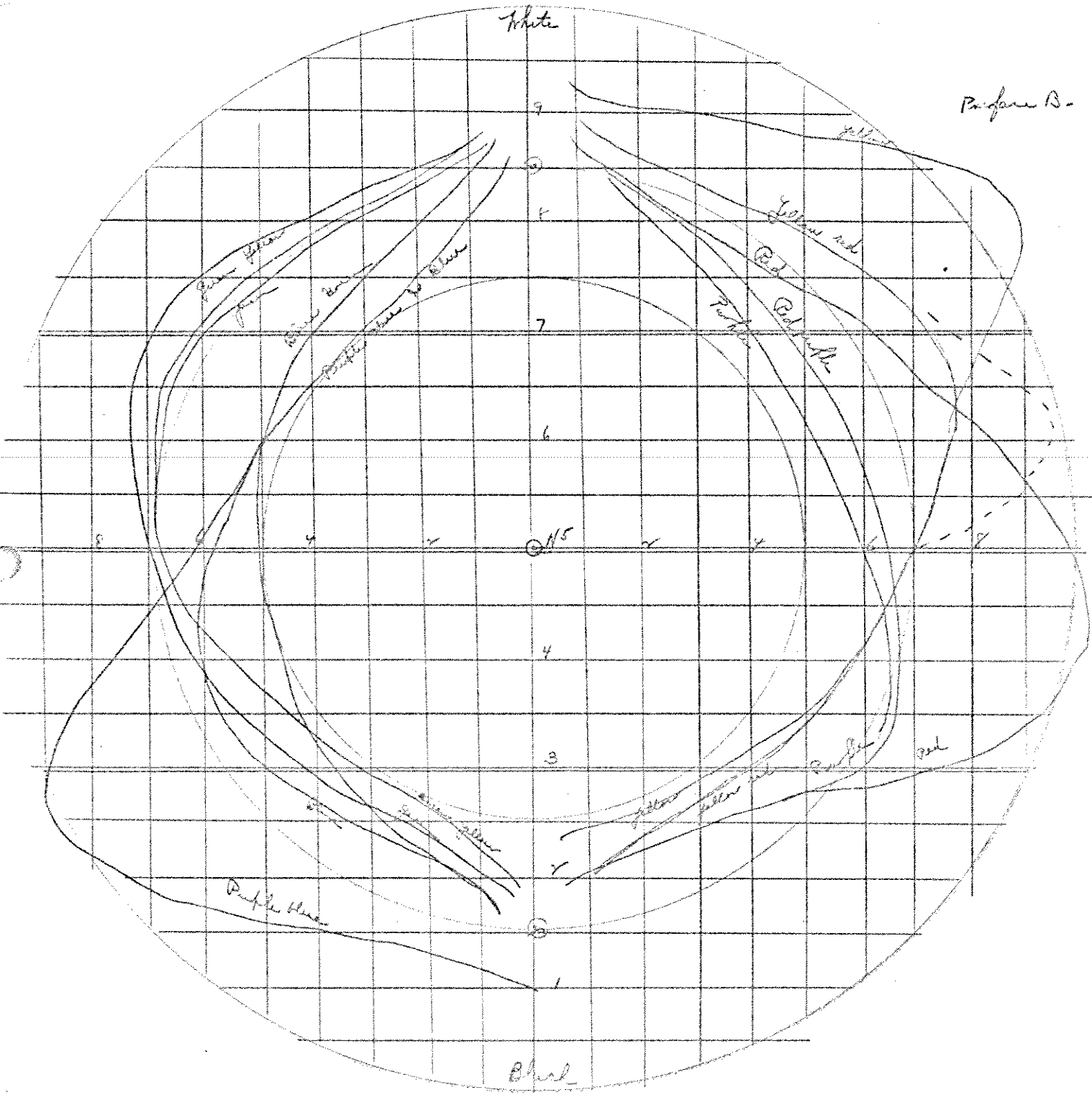
(In the inside cover page there are several clippings. The first is a review of A Color Notation in the Transcript - May 17, 1905. There is a clipping entitled "Synthetic Daylight" which describes various unsuccessful methods of obtaining artificial daylight, and ends with a description of Mr. Ives method of using a body which can be heated to a very high degree of incandescence, such as the oxides of which incandescent gas mantles are made, and of subtracting the radiations which this body gives out in excess by the interposition of colored glass or dyed gelatine. (London Post) There is a clipping on "A New Theory of Colors". This is the Rosenstiel theory which forms a new chromatic circle where the complements of red and orange are two greenish-blue tints, and the complement of yellow is blue, not violet, which is the complement of green.)

Preface

Consists of lists of names of teachers and towns where they are. Also the two charts on the following pages.

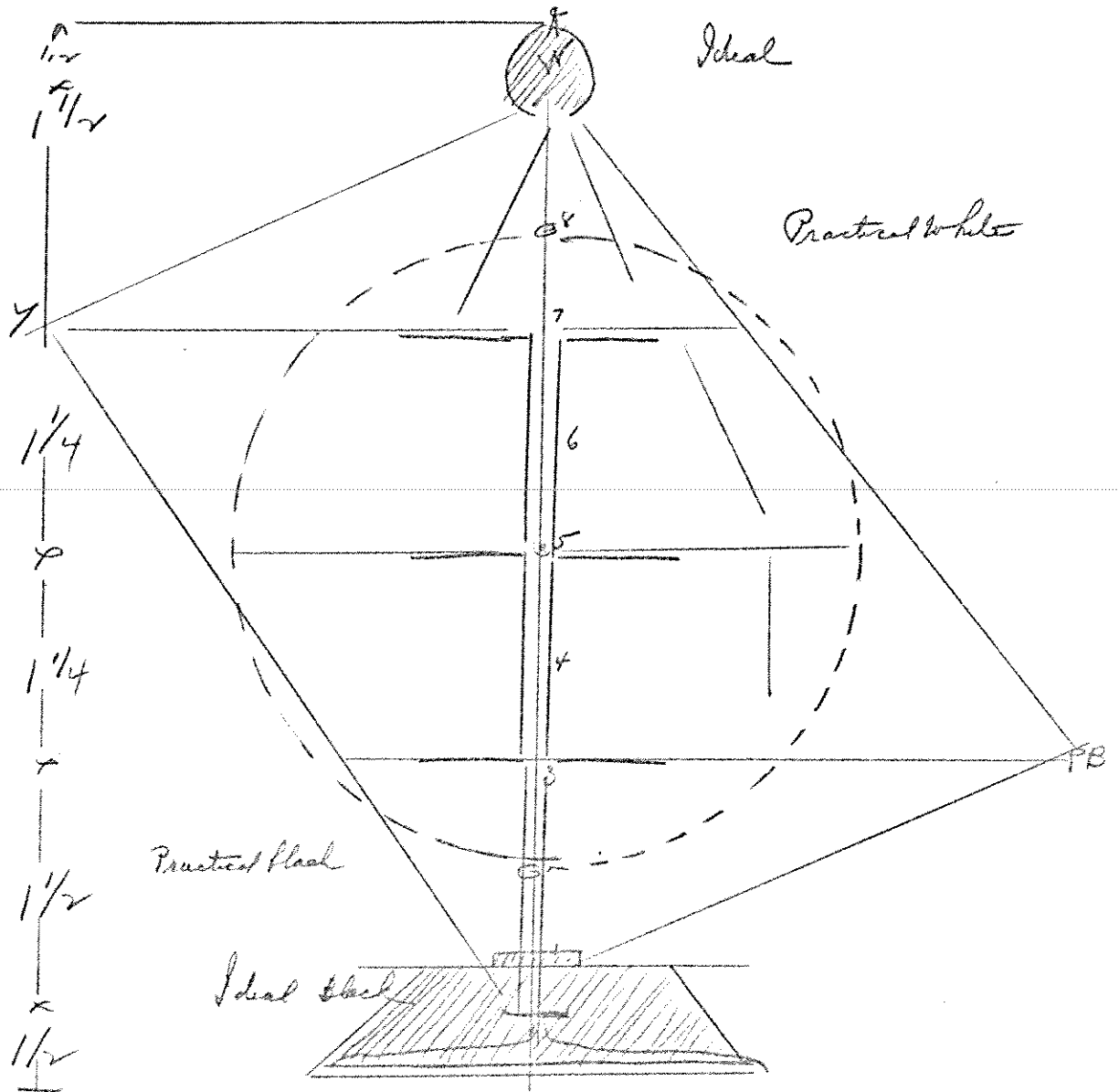
White

Page B-



Chal

- May 8 1912 Pritchard at studio 4:30-6
Talks over my paper for Baltimore
Says "outcome of present teaching is deplorable"
teachers must be shown that my system is
simple - simplicity itself - not difficult.
"Middle colors must be fixed in the mind." 1.
- May 13 Mr. Howland at studio - 2:30-3:30
To see new color tree with charts 30 -50 - 70,
and discuss a smaller edition - inexpensive -
by reproducing these charts in a simple form -
omitting chromes 1,3,5,7,& 9 (See sketch on
next page.)
Questions of cost of hand work and transportation.
- May 15 Reached Baltimore 12:30 - met the Hopkins -
lunched at Hotel Belvedere - and visited
Dresden exhibit at the Maryland Institute.
Mr(s) Katherine Ball of San Francisco in eve.
on Japanese prints.
-
- May 16 Gave my color demonstration before the F.A. &
M.A.T.A. Dr. Buchner of Johns Hopkins presiding.
Discussed by Fernum, Buchner, Pease and
Miss Church - Hopkins & Kirby. Took
5 p.m. for N.Y.
- May 17 At Scribners 10:15 -12:15 with Mr. Chapin,
Mr. Burlingame and Mr. Brownell.
At Harvard Club with Allen, Beck & Cle--?
Took 4 p.m. for Boston.
- May 22 D-- Dunham at studio 4-6.
Brings exercises in color with Prof. Pope -Harvard. 2.
Asks if yellow is not in excess in Nature?
(Thinks this is to excuse R-V-B theory.)
- May 24 Malden Factory, 2-2:40, with Otto and Mr. Putnam
explaining experimental plates for the new
color tree - advantage of even steps of chrome
N 2 4 6 8 over odd steps - also degree of con-
1 3 5 7
trast between colors and their ground. 20%
- May 29 Dr. Williams at studio 10:30-11
To see new photometer by Puff -
Also color tree. Asks "what it is for"
Rec. charts 30 . 50 & 70 with double intervals
of chrome and loaned Mr. Howland cuts for
"Education" reprint.



June 5 Delivered Ahmed in commission at City Point to Mr. Quiring and the new engineer - Mr. Stevens of Monhegan, Me.

June 11 Telephone from Bowker (John Andrew & Son - 5. Summer St. City) that 1000 copies each of the three plates (30.50.70) on DeYonge paper - printed in six colors (P.V.G.B. Bt. Sienna & Black) by the University Press, Cam (Kimber) would cost \$70.00. An additional 1000 would add \$20.00 - and if on heavy stock (wedding card) \$10.00 more. The plates to cost 45.00 for each cut - 135.00 for the set. Proofs to be forwarded with originals to my London address. Also will make me a set of progressive proofs. Tell Bowker to go ahead with the plates - and aks Kimber to submit his figures to me in a letter.

June 14 Train for Montreal to join SS Letitia for Glasccw.

Summer spent in Scotland, returning by Durham, York, Whitby Scarborough - Lincoln and Boston to London - and by Cunard SS Franconia from Liverpool Sept. 17.

Saw portrait in Glasgow Municipal Building of a former provost - Sir Andrew Orr of Harviestown and Castle Campbell - 1872.

Sept 30 8:30 Mr. Putnam at studio. 7.
Wants to fix date for speaking before the Everett teachers. Advises showing new set of exercises.
Went what Tichener says in Am. Journal of Psychology - Jan.1909. page 15. - Apr.1912 p.236 is my Wash. address

answers to Miss Patch's queries

1. Green varies from 6-7 in chrms. Why?
2. PP is stronger than its parts P & B. Why?
3. Purple is at 3/ in one chart and 2/ in another. Why?
4. Mr. Fay claims yellow is equally chromatic at values 3/ and 8/, the only difference being that of value, not of chrms.

Wants to put other colors in the Munsell box - I fear this will confuse teachers.
Says Bidwell wants to know if I will speak at the DesMoines meeting next May (4-day journey, 3-day convention)

4 p.m. With Mr. Howland at 84 Washington St. Agree that Box No. 2 (10 crayons) "illustrates Plate I of the book" and I suggest that this be added to cover.

Agree that when various other colors are asked for they shall be packed in a box without the printed "MUNSELL CRAYONS"

In answer to the four questions above: - I say that a mere novice knows better than to make the 4th assertion: that personal assertions do not weigh against scientific measures. That the system provides for all colors - and that the change of place is caused by change of pigment bases furnished by commerce. (1) Lastly that PB (2) (3) is an independent laboratory product, not made by mixing pigment P and pigment B - which have less chroma than PB which is artificial ultramarine.

Sept 30 3-4 p.m. Mr. Adelbert Ames at studio.

9.

Asks how to establish chroma rotation when one leaves the plane of the equator.



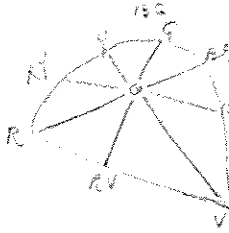
I show him balance of the maxims Y 8/9, G 5/7, B 3/6, P 3/6 and R 4/10 by the area x V^2



Balance of Y 8/9 and P 3/9 by area x V^2



Balance of a hue & its "split opposite" Worked from extremities of the diameter P - PC - until the arcs meet 90 distant.



Refer to his pigment triangle - and quote Helmholtz's figure to find relation of white to the parts of the spectrum.

He finds color of day affects photometric reading. I tell him of a standard light also of a curve to translate Mazda lamp into daylight.

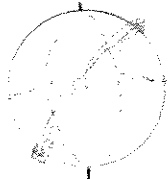
He cannot eliminate the shiny surface of his color discs. I suggest use of turpentine - as otherwise the proportion of "body light" and "surface light" is always variable. (Ostwald)

Mr. Ames neutral scale - magnesium powder & black very from 3-12%

- | | |
|------|-------|
| 1-93 | 8-37 |
| 2-88 | 9-30 |
| 3-76 | 10-25 |
| 4-68 | 11-21 |
| 5-59 | 12-15 |
| 6-49 | 13-12 |
| 7-42 | |

Ames 325

- Sept 30 At home 8-10 Paul Perkins 11.
 Is looking for some line of business where a taste for art is essential. (Tired of law school). Would first earn some return and then perhaps try an art school course - to see if he could gain the technical skill of some form of creative art. We talk over Cobb, Vose, Doll, Bailey, Wingate, Irving, Casson, Davenport & Bob Andrews dip into commercial advertising. I tell him of the experience of some of my pupils.
- Oct 7 Mr. Roy Frap-- (Editor of Photographic Magazine) discusses my position as a state instructor interested in a text book. Says I believe in the new color attitude, and if conscientious must teach it. Pupils will get it in my lectures. If they want further study of the book, they are at liberty to purchase. This does not involve any indorsement of the text book by the state.
 Also talk with Hopkins, who says I should follow the truth with my students. He intends to put the question before the Commissioner of Education, and will go over the presentation with me before submitting it.
- Oct 8 12-12:45 With Mr. Howland & Mr. Putnam at store. Signed contract for another year. Met Mr. Robbins. Suggested a model lesson by a grade teacher, to be printed for gratuitous distribution with materials and book. Ordered 30 copies of book to school - c/6. Parker. 13.
 4-4:30 With Mr. Pritchard at his office. Advises a model lesson by practical teachers. Says the system has not required any serious modification during ten years - is therefore stable - and should now be pushed by some large agency.
- Oct 10 10:30 Mr. Howland brings Otto's model of the tree to studio. It is 10" high and should be 6". Threads could be larger.
- Oct 16 Telephone conversation with Mr. Wadsworth and Miss Cheney as to writing some model color lessons - The teachers feel overworked and do not have time.
- Oct 18 Miss Patrick brings color work of 1st grade and high school.



COLOR BALANCE

ILLUSTRATED

by a series of practical color exercises
that have succeeded in graded schools.

An introduction
to the Munsell System of measured
scales of Hue, Value and Chroma

Boston, 1912

Preface: The grade teacher needs a simple color manual, outlining what can be done in the limited time given to the subject. These exercises meet the immediate requirements of the school room, and altho' necessarily brief, - are supplemented by references to the larger book - A Color Notation - for those who wish to pursue the study into its larger aspects.

Contents

Contrast and Balance give visual pleasure
Color contrasts have three qualities
Hue, Value, Chroma - two fail to
describe a color
Balance of these qualities established
by measure
Balance of Light Dark)
 Warm Cold)
 Weak Strong)

Middle colors - their prevalence in art
A threshold for estimating all colors
Memory of color and its records

- Oct 19 Send MSS and illustrations for a 3d edition of book with a copy of Atlas to Mr. Chapin of Scribners.
- Oct 21 J. F. Hopkins suggests foregoing any returns 15. on the Color System in this State - or resignation from school.
- Oct 22 At Mr. G. I. Aldrich's office - 9-10 Town Hall, Brookline. Says the Act of 1896 refers only to "agents of the board" - was a drive at Bailey by John S. Clark - which unfortunately hit others. Has not been otherwise enforced. "Should not go to meet trouble - wait until it comes." Does not care to accept either horn of dilemma. I tell him of Bartlett, Jepson, Cross, & Miss Hoyt.
- Oct 24 9:30 Office of Frederick P. Fish - 84 State St. Compare our experience in Scottish weather last July. I then open question of authorship, showing him the letter from Prof. Funtington to Prof. Clifford. Refer to my lectures at Harvard, Technology, Columbia, etc. Say color has been my special research for twenty years.
Book was offered to publisher in 1905.
 But hesitation caused by difficulty of reproducing the colors and handling the illustrative material, so I published it myself - and now have the Atlas worked out in pigment. As 3d edition must soon issue, the Scribners again show interest in it, and I wish to ask if in putting it into their hands, my position as teacher in the Normal Art School is in any way affected. Refer to enactment regarding Agents of the Board, which was forced by John S. Clark to punish Bailey as State Agent.
- Mr. Fish says: "I cannot see how the enactment affects you at all but I will lock it up with Mr. S-- and write you in a day or so. We must trust to your good faith and the good faith of reputable publishers."
 "I am very glad the system proves valuable and wish you success. Please have the new edition of the Atlas sent to me with bill. I saw J should like to present the copy instead of letting him pay for it - but he insists on his request.
- Dr. Verhoeff examines my eyes. Calls the trouble scintillating sectors, etc.