Red Green Blue | 40 - or 50 -
yellow Blue

4 colors - of 5 levels
- ten grays -

Color Triangle
- absorption & transmision 19a 30a

Visual judgment affected by twilight rather than sensations
Intensity is **Chroma** (not saturation)
Saturation is a combination of (chroma and value)
in their highest degrees.
Rood says "a color is saturated if it - is perfectly pure - and perfectly bright.

1st. What public is the description intended to reach? artist - or scientist -
- if latter - terms must be more fully explained -
definitions of "middle value" (p.9)
warm and cold (p.12)
relative distance of colors (p.17)
intensity (300)
-advises reading his "Vision" (p.776 ) and
Shaeffer's Vol. II of Physiology. - lends me his "Vision".
Asks where in this scheme of color is "Intensity"?
luminosity-value -
saturation = chroma -*but what is "Intensity" or visiva?*
Do artists recognize it? Can they produce it?

(p.19) criticizes color triangle
"19a "absorption and transmission"
Speaks of the twilight preserving blue when all
the reds and yellows have disappeared -
- I say that if (an) artist succeeds in repro-
ducing all his sensations by pigment - he has
expressed all qualities of color - but he can
modify a pigment as - Vermillion only in two ways-

**Its value** may be raised or lowered
by adding white or black

**Its hue** may be made more crimson
or more scarlet by adding
purple or yellow

In both cases - a loss of chroma or intensity

Dr. Bowditch then says "Your scheme may help
to clear up an unknown field between the
color descriptions by artists and by physiolo-
gists.
(I say I hope I may not be shot down between
the lines.)

-------------

**Experiment with the Photometer - Dr. Cleghorn**
suggests mirror inclined to reflect upper sky (as Luxfer
prisms)

<table>
<thead>
<tr>
<th>Example</th>
<th>0.9</th>
<th>0.5</th>
<th>0.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result</td>
<td>21</td>
<td>74</td>
<td>79</td>
</tr>
<tr>
<td>reflect</td>
<td>23</td>
<td>75</td>
<td>79</td>
</tr>
</tbody>
</table>

Dr. Cleghorn finds the red determination very
severe on the eye.
*Dr. Bowditch is quite uncertain in his readings (partially color-blind to red - green) asks for soft eye shield - 4 colors at 2 levels (60° r. bg y-b (40°) and ten steps of gray value. Criticizes my method of adjustment to varying intensity of light - by lifting cabinet and diminishing size of hole - Thinks superposed diffusing screens better. I ask why the same ratio is not preserved? He claims it tends to negative the measurement of the shutter.

<table>
<thead>
<tr>
<th>daylight</th>
<th>J night</th>
<th>A</th>
<th>J</th>
<th>A electric bulb</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>(Red)</td>
<td>41</td>
<td>(45)</td>
<td>51</td>
</tr>
<tr>
<td>50</td>
<td>(Green)</td>
<td>35</td>
<td>(36)</td>
<td>49</td>
</tr>
<tr>
<td>60</td>
<td>(Yellow)</td>
<td>41</td>
<td>(44)</td>
<td>50</td>
</tr>
<tr>
<td>50</td>
<td>(Blue)</td>
<td>35</td>
<td>(34)</td>
<td>51</td>
</tr>
</tbody>
</table>

Mar 27 Took new soft eye-shield and envelope of samples to Dr. Bowditch's laboratory - also left bill for No. 5.

Mar 28 Returned new sample cabinet - with corrections - Mr. Hall telephones that it ought to exasperate me - but he believes such mistakes can be avoided after one perfect model has been produced.

Mar 29 Mr. Monté at studio 4-5 Sees charts, spheres and photometer. Remarks - loss of familiar names (orange, violet) new idea of decimal measures "standard values - "middle gray" practical uses

Has been teaching Primary Binary Tertiers
t R-----V-----G gray {citron (b)} {olive (g)} {russet (r)}
Reads middle gray 51 ) 48.5)
red and blue (48.5) 1% 23%
Apr 1  
Mr. Flanagan and Mr. Kaula  
Reads gray F  
K  
48.5  50.  
48.5  50.  
49.  
49.6  
49.3  
reads red  
by gray and black marks - corrects his high red - finds the intense hue - excites the sense of value unduly - Arrive by gradually strengthening the red - find first reading always high - but averaged by a lower reading later - 3 or 4.  
Prof. Clifford on train-thinks "intensity" should be confined to light - not for color -  
Z. returned No. 7 with No. 4 cal. refitted.  

----------  
Haworth & Watson - Lowell  
Amer. Paper Tube Co. - 60 State  

360.  

Apr 5  
Rec. note from Prof. Cross asking for the photometer. Visit him, and he discusses the diaphragm for standardizing a 50° gray.  
A cone or pyramid of light- first perpendicular-then included. Calls up Prof. Clifford who suggests reading a set of values with 2 or 3 added diffusers.  

Is surprised to learn that black velvet reflects 4½% and black pigment reflects 15½% - formerly called 1-5%  
(Explains latter as grains of black imbedded in prismatic way.)  
Would find out "by experiment" what happened in each case.  

----------  
Prof. Cross says he feels green - when white and black are mixed on rotation machine.  

Apr 10  
Discovered in experiments with standard red disk that - by making two templates and sliding one by the other - a new ratio is established.
<table>
<thead>
<tr>
<th>Value</th>
<th>Intensity of stimulus</th>
<th>1/2 in</th>
<th>1/3 in</th>
</tr>
</thead>
<tbody>
<tr>
<td>50.</td>
<td>66.6</td>
<td>51.2</td>
<td>102.25</td>
</tr>
<tr>
<td>25.</td>
<td>44.4</td>
<td>25.6</td>
<td>68.17</td>
</tr>
<tr>
<td>12.5</td>
<td>29.6</td>
<td>12.8</td>
<td>45.45</td>
</tr>
<tr>
<td>6.75</td>
<td>19.5</td>
<td>6.4</td>
<td>30.3</td>
</tr>
<tr>
<td>3.125</td>
<td>13.0</td>
<td>3.2</td>
<td>20.2</td>
</tr>
<tr>
<td>1.5625</td>
<td>8.6</td>
<td>1.6</td>
<td>13.5</td>
</tr>
<tr>
<td>.78125</td>
<td>5.7</td>
<td>5.7</td>
<td>9.1</td>
</tr>
<tr>
<td>.39065</td>
<td>3.8</td>
<td>3.8</td>
<td>6.2</td>
</tr>
<tr>
<td>.1953125</td>
<td>2.5</td>
<td>2.5</td>
<td>4.1</td>
</tr>
<tr>
<td>.09765</td>
<td>1.6</td>
<td>1.6</td>
<td>2.6</td>
</tr>
<tr>
<td><strong>100.38</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

"Intensity of stimulus" "illumination" p. 785

Twice says "Intensity of illumination" p. 786

Says a color is (1) "more intense" (yellow rest) p. 792
(2) " saturated ( " fatigue"

Bowditch’s Sense of Vision - p. 786 -

"Although our power of distinguishing absolute differences of luminosity diminishes as the intensity of illumination increases, yet with regard to the relative difference no such difference exists.

On the contrary, it is found that within pretty wide limits, whatever be the intensity of illumination, it must be increased by a certain constant fraction of its total amount - in order to produce a perceivable difference in sensation.

This is only a special case of a general law of sensation known as Weber’s law, which has been formulated as follows by Foster: "The smallest change in the magnitude of a stimulus which can be appreciated through a change in our sensation, - always bears the same proportion to the whole magnitude of the stimulus."

Apr 11 Chas. Hall at studio and house 4-10
 Saw Slipper design
  " Photometer and Charts -- Reads red and green " glass
 After image - left eye 11 sec. right eye 7 sec.
Apr 14  Prof. W. H. Pickering at studio 3:45:30
Sees photometer and charts - reads middle
gray 49.50 .51 - Sees rotary sphere -
after-image 6 sec.
Says he will speak to his brother about the
system. Speaks of the polarizing photometer -
reads 1/60 - (60-59)

Rec. nos. 2, 3, and 11 from Mr. Hall - but have
to write him that the slides are not on center -
so that circles do not register. Also all three
have new scars. Ask if he cannot give his personal
attention to having the remaining ones delivered
in perfect condition.

17  Prof. Cross at lunch -
refers to Prof. Langley's Color and Vision
Brucke Des Couleurs
Helmholtz-VonBezold - Should accept Rood's
terms willingly.
Discuss Color Constants - (Questions chroma as
strange)

v  light scale - or luminosity of colors
C  strength " " saturation " " (purity, freedom
H  mixture " " hue " " (wave length)

Should avoid "Intensity" because it serves two or
three meanings. Says I may use his name in
asking Dr. Bigelow if "Schaefer's Physiology is
in the Tech library.
Also offers me use of Langley's pamphlet. (Miss
Merrill lib.)
Does not object to chroma - except that it is
unfamiliar.

Apr 17  Dr. House - Physiologist (John Hopkins)
Sees Photometer - sphere and charts.
Says physicist is busy with spectral hues. -
but physiologist like the painter - is busy with
the sensation. Takes my scheme to study - and
will report soon on "Intensity".

(V  light-scale its extremes are white and black
(C  strength " " strong color and
(H  mixture " has no extremes - is a circuit

Agrees that this should include all color sensation -
Believes Herring's theory of six fundamental "

Apr 21  Send Nos 6 - 9 to Ziegler (ret. 26)
25  Deliver No. 3 cal.
Apr 26
See Mr. Filene at XX Cent. Club
He reiterates commercial need of standard colors - for contracts - for telegraphing abroad
for choosing harmonious combinations

28
11-12:30 With Dr. Cleghorn at Harvard Laboratory (physiological) He thinks the L gives an impartial measure of the stimulation - Needs a more rapid means of changing sample - (Suggests wheel or roll) These 24 readings consume 30 minutes.

30
3-5 Dr. Cleghorn at studio.
Sees sphere - charts - discs, etc. Discusses "Intensity or brightness - Thinks wire or celluloid model of color curves would be a great help - The idea that saturation of each color occurs at a different level in the scale of light is not familiar.

May 1
J. A. Macy (Helen's editor) at studio

2
See Dr. Bowditch (and Dr. Cleghorn) Thinks it may be necessary to find agreement between physical terms and those of the painter - since the mystery of color-sensation has only found a working theory - and is ignorant of the processes. Believes my scheme valuable educationally - and to the painter. Feels himself partially color-blind and would hesitate to accept his own color estimates.

This is his notion of saturation and luminosity

<table>
<thead>
<tr>
<th>9</th>
<th>obscure</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>value - warm &amp; cool</td>
</tr>
<tr>
<td>13</td>
<td>chroma ?</td>
</tr>
<tr>
<td>14</td>
<td>value &amp; hue</td>
</tr>
<tr>
<td>15</td>
<td>intensity need saturation</td>
</tr>
<tr>
<td>17</td>
<td>need of definition of weak, strong, warm, cool</td>
</tr>
<tr>
<td>18</td>
<td>distance</td>
</tr>
<tr>
<td></td>
<td>luminosity - intensity?</td>
</tr>
<tr>
<td></td>
<td>i.e. saturation (see p.11)</td>
</tr>
<tr>
<td></td>
<td>purity</td>
</tr>
<tr>
<td>16</td>
<td>distance</td>
</tr>
<tr>
<td></td>
<td>hue - color wavelength</td>
</tr>
<tr>
<td></td>
<td>value - saturation</td>
</tr>
</tbody>
</table>
19 color triangle
19a explain contradiction by absorption and transmission
30c measure color blindness?
52 difficulty of permanent pigments

Dr. Bowditch's notes

May 6
Show models to Mr. Pritchard and Miss Evarts at Everett School - and try its explanation to a 13 yr. pupil - Estelle Wilcox.

1. Colors arranged between white and black-light scale
2. " in circle of balanced opposites-hue "
3. " removed from gray in order of strength-strength sc.

Area | Value | Chroma
--- | --- | ---
18 | 75 | 107
20 | 60 | 97
21 | 49 | 95
22 | 27 | 87
17 | 30 | 112

Prof. C. E. Peabody - 5-6
"It seems to me very beautiful"
Suggests magazine article first-
then book - Suggests patent
protection for "Process of Identifi-
cation of Color"
Discusses color-printing.

Adjustable color slides in a top - to prevent any gradation of color mixture and grays.

disc divided for measures a quantitative color-mixers
<table>
<thead>
<tr>
<th>L</th>
<th>44</th>
<th>38</th>
<th>36</th>
<th>41</th>
<th>41</th>
<th>36</th>
<th>83</th>
<th>77</th>
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</thead>
<tbody>
<tr>
<td>R</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>34</td>
<td>37</td>
</tr>
<tr>
<td>R</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>47</td>
<td>37</td>
</tr>
<tr>
<td>L</td>
<td>+</td>
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<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>45</td>
<td>36</td>
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<td>L</td>
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<td>+</td>
<td>+</td>
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<td>51</td>
<td>33</td>
</tr>
<tr>
<td>L</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>49</td>
<td>38</td>
</tr>
<tr>
<td>L</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>49</td>
<td>38</td>
</tr>
</tbody>
</table>

Legend:
- **Purple**
- **Blue**
- **Green**
- **Red**
- **Yellow**

Rotating disk for rapid reading. The central area for direct view. See Vol. I. p. 140 (Apr. 1901)
Fine color chart from E. B. Rumsey. 8/31/04
Wave lengths
May radiate from a centre of disturbance as in water

To display color mixtures in various vertical planes

Hemisphere in aluminum with set screw to adjust angle and dial.
May 10 10:30-11:45 Prof. A. E. Dolbear of Tufts. Says photometer will measure physiological
condition of the visual judgement - fatigue
of retina, etc.
Measure amount of light reflected from, or
transmitted through any substance.
Should write to Bausch & Lomb describing it
and its uses.

<table>
<thead>
<tr>
<th>Measures red glass</th>
<th>yellow glass</th>
<th>63</th>
<th>49</th>
<th>window glass</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>1/2</td>
<td>21</td>
<td>20</td>
<td>86%</td>
</tr>
</tbody>
</table>

Says of the charts that they are very beautiful
and this would be true even if they did not
have an additional significance because based
on physical tests.

May 14 4:30-5:30 Mr. Perkins
Sees new color instrument and charts - Admires
photometer - "a perfected instrument"-
Considers the patent for both the toy and the
"art or process of identifying colors"
-Reads green paper (only varies 1% either side
of orange) - Reads green glass -33 - (same by
elec. bulb)

May 15 Dr. Bowditch at lecture in Med. School -
The sensation of red requires 16 times as much
light (Photometric) as blue i.e. rapid
vibrations are felt in feeble intensities of
light. Slower vibrations (red) require greater
intensities of light.
This is the 2nd quantitative - Intensity
(brilliancy or luminosity) energy of vibration
\[ \frac{m v^2}{2} \] - it is light without color

May 17 Aluminum hemispheres hung in crotch - to revolve
at any angle and carry color templates in any plane.

May 19 3:30-4 Showed Mr. Perkins hand-top and claims -
He discusses "An art by which one person conveys
to another the precise image of a given color-
reference being had to a chart or charts produced
by certain color-measurements." Thinks the
color-top new, and capable of broad claim.

May 21 At Robinson Hall - Lawrence Scientific School-
Harvard - Tell Hall, Sargent, and others that
I think I have "touched the core of the color
problem". As amusing to the child who loves to
play with colors as to the scientist who looks
hemisphere - hung in circle to be revolved

Three or more equal radii for ebru - to rotate to mingle colors by rotation.
for a logical system.

(Met Prof. Peabody on street - who calls it
a method with apparatus - says spinning of
color is old - but that spinning of colors
to establish a color scale is new. If exist-
ing apparatus would do this, carry the problem
farther so that it and its tools may be pro-
tected by patent. Then describe it so that
others versed in the art - can construct the
apparatus and do the work.)

May 26
Guest at Mr. Godfrey L. Cabot's - 16 Highland St.-
Cam. with the M. P. Club.
Mr. W. H. Downes of the Trans. gives me "Color
Problems" to review - (Is it original
(Are there errors
(What is its value
(Who would use it

May 29
Delivered Mr. Clifford's Lumenometer (No. 1) at
Tech. Saw Prof. Cross - and described aerial
color effect of my new top - He said "I can concei-
the effect you describe - but do not remember to
have seen it anywhere"

May 28
Patent applied for - Color Top

June 3
Asked to have electric service discontinued for
summer.

June 7
9:30-11 Prof. Cross, Clifford, Derr, Goodwin
and Wendell test Lumenometers at Institute of
Technology.

Black velvet reads 3.9 4.1.5 etc. average 4.35
Yellow    " 72"
Red      46 "very satisfactory, very
Blue    30 "perfect - new"

"Stands the test perfectly."

Prof. Cross says he would mention it to the
Sec. of the Soc. of Arts, for a meeting next
winter. Also call the attention of Dr. Williams
(oculist) to it. Thinks it a valuable instrument.
Wishes to see new color top which I describe.
Thinks Prof. Cattell should refer to the older
use of some instrument when he says the principle
"is not new." Would ask him for a reference.
Certainly here are five or six physicists who
find it new and interesting. Why not send it
to "Nature" - but in the fall when those interested
will be back from vacation."

"Here are several of us who find it newer than
much of what appears in "Science." (Prof. C's
witticism on Prof. Kettell.)
Claw foot - holding adjustable ball with clips to retain color-cards at any angle - to be clamped to motor shaft.

Short pipe with ball and socket joint to clamp on motor spindle.

When blue falls back, centre loses blue and becomes intense red (gains by omission of green)

When yellow falls back - a yellow ground gives sp. circuit (blue field)

Spectrum circuit (blue field)

Excellent spectrum - if slightly inclined forward

Spectrum circuit - " (purple field)
June 14  4-5  At Mr. Perkins office - discussed a new patent for the system of charts - I ask what it would protect more than is already covered by the copyrights and patents.

Mr. Skinner (architect) inquires about amount of illumination to be obtained by a hooded sky-light - and I suggest that the Lumenometer be used to plot the degrees of illumination at certain regularly spaced intervals of a given floor space - and then be compared with other rooms.

July 18  23  Talk over skeleton of color-triangle with Miss Hall and then dictate a chapter on its construction.

Sept. 30  Mr. Jepson brings to studio - Mr. Arthur Briggs of Jamestown, N.Y., N. S. A. (Hamilton & McClintock 256 Church St., Agts. in N. Y. of Hall & Co.) pupil of Mr. Alfred Barker (in charge of textile dept. class in color) - Bradford Technical College - Yorkshire, Eng. Show Photometer - Charts, sphere - Mr. A. B. reads red 59.5 purple 55. )within 1% of my readings- gray 50. ) Mr. J. reads higher -

Met Denman Ross at restaurant (oak - - ) and discussed value and "intensity" of color. Said he might have to use one of my Lumenometers - as Prof. Sabine's was large and expensive-

Oct 1  Mr. Perkins at his office from 1:40-5:50 Discussed new claim for color-top - "combination" - also patent for charts - but I said his form of claim for the charts could not stand as it would include the color cards long in use.

18  Mr. Macy and Mr. Seaver at studio to photograph medallion of Helen Keller. Loaned former eight of her letters to me.

21  Mr. Frederick Andrew introduces Mr. W. D'A Ryan at General Electric station in West Lynn. I describe and sketch the light-meter (find he has a copyrighted Lumenometer) which interests him very much. He sees its value as measuring color-curves of artificial light in terms of daylight. (comparison of various lamps) - acetylene, Nitech, Welsbach, Incandescent, etc. Also total illumination of any point in a given room or street. (Where is another lamp needed?)
Also disturbance of colors by change of illumination.
Also curve of light for a day.
Makes appointment to see it at my studio,
Tuesday, Oct. 28, at 11 a.m.
Asks me to dinner of Am. Institute of Electrical
Engineers - Oct. 24 - Marlboro Hall Hotel, N.Y.

Oct 22
Heard Mr. Ryan's lecture at 45 W. 26th St.
(Edison Light Co)

23
Dined with his assistant - Mr. Stickney) and then
with Mr. Ryan went to meeting of A. I. Elec.
Engineers - hearing three (11) papers on photometry-
with demonstration by Prof. Matthews.
Imitation of daylight - and means of measuring
other light in terms of daylight imperative for
color comparisons.
Take Mr. Ryan to lunch at Nat. Arts Club - and
then spend two hours at the Met. Art Museum -
studying old masters.

Oct 28
Appointment at studio to test Munsell photometer-
11 a.m. Mr. Ryan inspects the instrument -
approves its scale and fitting. Reads R. Y.
G. and B. in daylight and in electric bulb
(36 c.p. reflector). Reads velvet and middle
gray - black paper and two reds (1% apart)
Show him my plates for color identification.
Will see special committee tomorrow P. M. to
discuss:

A. Apparatus from a theoretical point of view - as to possible errors - etc.

B. Consider its practical commercial value -
   1 In obtaining information for publication
      with respect to various lights and their
      effect on colors
   2 Practicability of using it directly to
      demonstrate the values of different lights.

He finds it astable, accurate, and remarkably
well worked out. Queries if it cannot be used
to measure the flux of light in any room, by
mirrors set at various points so as to focus
into it - Giving a mean reading of the flux.
Discusses curves of intensity, through the colors,
for various lamps - Intends
to set up arc lamp, gas and
Welsbach and Nernst and Weld
as incandescent in the studio-
and testing the instrument.
Need of system admitted - and its practical advantages.
What are its weak points?
1. Fading and chemical changes of pigments.
2. Variable light and sensitivity of the retina.

Oct 30
Mr. W. H. Downes - of the Transcript - sees Photometer and charts of new system. Also sphere and models - (send description of P. to "Nature")

31
Interview with Mr. Perkins at his office, on rejection of claim for top. He will try combination of rotated discs or color cards, with a color field - which is seen through the color mist.

Nov 10
Commander Murdock comes to studio - 10:30-11:15
Sees rotating discs and approximations of a "middle grey" by average estimates - and by curve of sensation (Fechner).
Reads same on Photometer (see opposite) easily and accurately - remarks on readings of the eye to "fool us" and need of considering these estimates physiologically - Knows that his right eye decides the sensation - Discusses the Bunsen - its grease spot - difficulties of color comparisons - Is struck by ease in comparing daylight readings with those of any artificial source. Suggests that the government should have it at the N. Y. navy yard - for signal glass tests. Would like to use it on some people whom he believes to be totally color blind. Also sees model of color sphere - and book plates.

Will send memoranda so that I can submit it for government test at navy yard.

Query:
Is there a plus, and a minus in color sensations?
describes C of any Hue whose V's have been equalized.

Adjustable cabinet with rotating discs to replace the fixed cards of photometer. Illumination value equalized to measure difference of chroma.

\[
\begin{align*}
\text{Grey} & \quad \text{Corrected} \\
57 & \quad 53.5 \\
57 & \quad 54.5 \\
57 & \quad 55.3
\end{align*}
\]

- 47 46.5 86.15 87.5
- 45 42.6 85 85.5

\text{daylight - Cool shades}
\text{electric bulb}

A. made by Lauer.

PIGMENT CURVE describes combined C & V or any Hue

Set of templates grading any color to W & B by 10 equal steps

Given, the strongest sensation of Red
1. to grade it to white)
2. " " " black) by equal
3. " " " gray) sensations

Experiments show that
1. Equal loss of chroma requires unequal steps of value.
2. Unequal steps of chroma will permit equal steps of value.
Finds the change most marked at the extremes. 49a.

Dec 4 1902
Mr. Gilman at studio 8:45-9:30.
Show discs for gradation to W. B. and N.
red ) He finds the steps nearest the extremes
yellow ) seem greatest. Query? Does Fechner's
green ) blue ) law hold in the extremes of sensation.
purple )

It was brought about by these same means - and as
an offspring cannot supersede its parent. Says I
am getting beyond him in this search: - a thing
sure to happen when one enters really original
research - Speaks of getting so far into the woods -
that no one can hear our voice.
Kepler's answer when told no one would read his
work. "If God had waited 5000 years - he could
well wait 100!" - Refers to the few real readers,
who can go along with the thought of Plato.

Finds the purple scale "smoothest" easiest to the eye?
Feels necessity of only attempting short intervals
of these estimations, with eye fully reposed - shielded
by black velvet - free from all disturbing elements.
A very fatiguing exercise.

Show him the plates worked out quantitatively in
color. "They are very illuminating - cannot fail
to leave a permanent impress of color relations.
Should think a set of lectures on color, illustrated
by these plates - and published as a monograph -
would be referred to by scientists.

Dec 8
Tel. from Mr. Perkins that the color top is allowed.

11
Mr. Vose - of Silver Burdett & Co. at studio 3:30-4
Show him color top and color charts.
He asks if this would not soon give a child a clear
estimate of color-values. Does not know of any
way of deciding what colors are pleasant together -
yet supposes there must be some law.
Speaks of the difficulty and disappointments of
color-printing. His house only undertakes what
there is a "very strong demand for".
A child's edition of this color-system might interest
them.