## INTERSOCIETY COLOR COUNCIL Leanning News LETTER NO. 112

MAY, 1954

## News Letter Committee:

I. H. Godlove Deane B. Judd palenting visles level Dorothy Nickerson and Marie the Tolog

For matters of business deliabilities tolo (subscriptions, missing copies, Subscription price to non-members etc.) address the Secretary

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\$4.00 annually

TWENTIETH At the recent annual meeting, the application of the Packaging Institute for admission to the ISCC as a member-body was MEMBER-BODY approved. The Packaging Institute becomes the twentieth memberbody of the ISCC. We heartily welcome this new addition to our ranks; and at an early date will publish the names of the officers and delegates to the Council. As we all know, color in packaging is an interesting, many-sided field, which has made great progress in recent years. That it is likely to advance in even greater strides is indicated by the following quotation on the purposes and policies of the Packaging Institute as set forth in a brochure which accompanied their application.

"The Packaging Institute is a Technical Association, incorporated in 1939 under the laws of Delaware as a non-profit membership association, and authorized to do business in the State of New York of Section 210 of the General Corporation Law under the name Packaging Institute, Inc. It was founded to aid its members in the solution of their technical packaging problems by mutual help.

"The principal policy of the Packaging Institute is to help the producer of packaged products solve the packaging problems when these problems are technical, engineering or economic in their nature.

"Thus, the activities of the Packaging Institute are chiefly concerned with protection of packaged products and the economical production of packages and packaged products. "

NEW MEMBERS We welcome to individual membership in the Inter-Society Color Council the following persons who were approved for membership at the Board of Directors' meeting on March 23 at the Hotel Statler in New York just prior to the Annual Meeting.

Miss Margaret M. Balcom 5706 Surrey Street of goldsfer at rolog Chevy Chase 15, Maryland

Particular interest: Measurement, specification and standardization of color. May York 22, New York Eastman Kodak Co. . 1

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Dr. Maarten A. Bouman Research Unit for Perception Kampweg 3, Soesterberg The Netherlands

Mr. I. Matthew Buchholtz 169 West 52nd Street H. Godlove, E Bayonne, New Jersey

Mr. Joseph T. Funk 210 North Trade St., Winston-Salem, N. C.

Mr. William J. Goodwin c/o Bakelite Company River Road Bound Brook, N. J.

Mr. Francis F. Goldsborough c/o C. H. Stuart & Co., Inc. Harrison Street and account abutited t Newark, N. Y. What and of more those were

Mr. Sherman H. Hubbard Route 3, Hemlock Road Kingsport, Tennessee asserting out to notife tong activation and ve betselbat at espirate

sinaomoosa doldw equis Mr. Robert E. Innis Hercules Powder Company Experiment Station date has anotaloges girls reduced illorg-don a se ensus led to swal Wilmington 99, Delaware [ among) and to 015 moldoed to start well to educate and at seed

Mr. Jack L. Lane 10220- 129th Street Edmonton, Alberta, and gied of at edutified galaxies of to volley lagingly edit Canada turbet era emeldorg eacht madw ameldorg galgarioeg edd evice atouborg beganlosg

Mr. Paul F. Peters, Jr. 1334 Mahoney Street Rodeo, California analogo to not douborg fac

Mr. Wilfred D. Sinclair Canadian Industries, Ltd. Paint and Varnish Division Foot of Laughton Avenue Toronto 9, Ontario

i sjaerejul reimoldrei Miss Ruth L. Strauss 20 East 53rd Street New York 22, New York

Color vision theories, color aptitude, defective color vision, personnel selection.

> Dyestuffs, pigments, their application and properties.

Visual safety planning, transportation, color and lighting coordination.

Color application to all phases of plastics, including measurement of color and color change as measured by small color differences.

Color in cosmetics and make-up, also color separation and color control in printing, especially in reproducing paintings via gravure or photo-offset.

Spectrophotometry of pigments, fibers, and lubricants. there at see most feet

Transparent standards using single number specifications.

Function and Aesthetics; color in private and public establishments.

> Color designations and their correlation or differences. The practical application of results for greater benefit to individual consumer's enjoyment.

> > anideed femuna out of tolta facting,

Color science, colorimetry, interior decoration, color for commercial buildings. and terotestil to brook and ta

Color in relation to interiors, both residential and commercial. Color therapy in rehabilitation work.

Mr. D. A. Westburg and the The use of color as a tool in design, 915 National Building sound and both functionally and esthetically, in Minneapolis, Minnesota all areas of industry, resident, and es yd Tielsd bestoge commercial uses. La fedt eveliad ew be U. Threaton was renominated to succeed biaself on Cheirman, Dr. P.

3 Pomander Walk, N. W. delaw I was all nosored to was in the washington, D. C. and Mark to blod and published will noselly an expense.

Mr. Frederic D. Weekes Fluorescence and colorimetry.

Mr. Horace White Washington 1, D. C. one populadaed egoilo defined anosura we farcame? has laited the the Spatial and Temporal Sw

L. hedd, and rr. r. r. wilson, inc medical W.C.L. Colorants for interior work areas. Vision Associates and the blad asy Relationship of visual skills, illumina-515 4th Street, N. W. Design and tion and color.

Miss Georgia G. Whitehead Decorating, principally home interiors 1050 Thirty-seventh Street and the correlation of color and psycho-Des Moines 11, Iowa physics pertaining to them.

Mr. Russel Wright 221 East 4th Street New York 17, New York

Psychological experiments, industrial

CALIFORNIA On April 28th this affiliate of the ISCC devoted an even-COLOR SOCIETY ing to a program on the role of color in the production of "Contemporary Porcelain" by Albert H. King, for many years

a member of the ISCC. The talk was illustrated with color slides prepared by Herman V. Wall, and included comments on the history of porcelain and some experiences of Mr. and Mrs. King, who have many friends in the color field in the East, as in the West, during twenty years of research in high-fire hard procelain and reduction of glazes. The meeting was held at the Art Center School Auditorium, 5353 West 3rd Street, Los Angeles. Ed. - After this issue had been completed, a letter with more news was received from Secretary Louisa King. We will pass on this news in our next issue.

COLOR COUNCIL This flourishing affiliate of the ISCC met for a dinner OF TORONTO meeting on March 16 at Prince Arthur House, 145 St. George St., Toronto, when they were addressed by Gene Willard

Butt of Robt. Simpson, Ltd., Interior Designers, whose subject was Architectural and Interior Colours of the 17th Century. Both Mr. Butt and his wife, Margaret L. Butt, are Toronto Colour Council members.

On April 27th, the Council held a regular evening meeting at the Walberg Building, University of Toronto, at which they were addressed by Dr. E. I. Stearns of the Calco Chemical Division, American Cyanamid Company, Bound Brook, N. J., immediate Past-President of the ISCC. Dr. Stearns! topic was "Dyeing for a living." Many of us who had heard a previous talk of this title by Dr. Stearns will wish that we had been able to hear it a second time at Toronto.

The March issue of "Colour Comments", four pages of news and comment compiled by the veteran color worker C. R. Conquergood continues to be an interesting news sheet. Mr. Conquergood, long President of Canada Printing Ink Co., Inc., is also currently President of the Colour Council of Canada.

ophthalmology at the Horthern Dispensory, he became a surgeon at Midtown Hornital

PHYSICAL SOCIETY This group, in announcing its Fourteenth Annual General COLOUR GROUP Meeting, reports that seven Science Meetings were held during the fiscal year 1953-54, the attendances averaging

53; and we believe that all of these were reported briefly by us. At the meeting Dr. L. C. Thomson was renominated to succeed himself as Chairman, Dr. D. R. Duncan was nominated to succeed Dr. R. W. G. Hunt; and the following committee was nominated: Dr. M. P. Lord, Mr. W. N. Sproson, Dr. J. W. T. Walsh, Mr. J. King, Mr. D. L. Nedd, and Mr. M. H. Wilson. The meeting was held on 24th March, 1954, at the Institute of Ophthalmology, Judd Street, London, W.C.1.

The Seventy-ninth Science Meeting of the Group was held at the same place and date along with tea at 4:30. The following papers were presented: Additivity of Colour Equations, by Miss P. W. Trezona, Newnhan College, Cambridge; and The Number of Kinds of Human Retinal Receptors and the Spatial and Temporal Summation and Resolution Allowed by their Pathways, by Dr. G. S. Brindley, R. A. F. Institute of Aviation Medicine. The next meeting of the Group will be held at the same place on 26th May, 1954, when papers will be given by Mr. W. N. Sproson on Subjective White in Colour Television, and by Dr. M. Gilbert on Colour Preferences in Colour Television.

With the Colour Group notice came a report of the Physical Society's 38th Annual Exhibition of Scientific Instruments and Apparatus, held at Imperial College, South Kensington, London S.W.7, on the 8th, 9th, 10th, 12th and 13th of April. Three demonstration lectures listed in connection with the Exhibition, while of general interest, are not listed here as being not specifically germane to the color field.

COLOUR COUNCIL OF MONTREAL? From the March "Colour Comments" of the Colour Council of Toronto we learn that on February 23rd, four of its members visited Montreal, where they met with a group in

Montreal and discussed the formation of a Colour Council there. President C. R. Conquergood, Secretary S. K. Graham, Director R. C. Allison and Douglas Hamly, now of Hawkesbury, were in attendance. As a result of the meeting a provisional executive or steering committee was named to report back to a further meeting. Chairman was Miss Irene Kon of Kon & Shanks Ltd., 1019 Sherbrooke St. W., and the Secretary was Mr. E. L. Barry of the Canadian Paint, Varnish and Lacquer Association, Sun Life Bldg. About 40 persons attended the enthusiastic meeting. It is expected that the Montreal group will organize along the lines of the Toronto Council.

PASSING OF LE GRAND H. HARDY We have just been informed by ISCC Secretary Evans that Dr. Le Grand Haven Hardy, noted ophthalmologist, long an ISCC Individual Member, died in his sixtieth year during

the week of April 12 after being in poor health for a number of months. Many ISCC friends will long remember Dr. Hardy's dynamic personality and his vigorous presentation of his very individual points of view. His many sided personality is illustrated by the fields in which he worked and published: defective color vision, orthoptics, scotometry, space perception, pseudo-isochromatic (color-vision) test charts, retinal size scotometer, the role of accommodation and convergence, a prism vergence training device, illumination and even the "squinting Madonnas" of medieval painting.

Dr. Hardy was born in Provo City, Utah in 1894, took his A.B. degree in 1916 at Brigham Young and B.S. in 1919 and M.D. in 1921 at Columbia University. After being an Assistant Surgeon at the New York Eye and Ear Infirmary and director of ophthalmology at the Northern Dispensory, he became a surgeon at Midtown Hospital

(1925-29) and director of research of the Lighthouse Eye Clinic in 1931-34. He was attending ophthalmologist, Presbyterian Hospital and Vanderbilt Clinic from 1940, director of the Knapp Memorial Laboratory of Physiological Optics from 1941. He was a Du Bois fellow from 1942-1946; and was associated with the Institute of Ophthalmology from 1943.

He was president of the American Orthoptic Council from 1938 and at various times was associated with the Office of Scientific Research and Development; the U.S. Army, the Air Force, the U.S. Navy, the Ophthalmological Society, the Association for Research in Ophthalmology, the Optical Society of America, the New York Ophthalmological Society and the Inter-Society Color Council. Dr. Hardy's interesting and always fresh points of view will long be missed in ISCC meetings.

MARGARET HAYDEN A phone call from Mrs. Margaret Hayden Rorke, Secretary and RORKE RETIRES Managing Director of the Textile Color Card Association of the United States, an early ISCC Member Body, informed the

Editor that she was retiring to private life as of May 1 and would establish her home in California. TCCA President Roy E. Tilles, who made the public announcement, stated that her retirement was accepted with great regret, since she had served the Association with great distinction during the past thirty years, during which time the scope of its membership had grown apace. She was also prominently active in national trade association affairs and a leader in the promotion of industrial color standardization and color coordination. She was an ISCC Counsellor in the 1931-32 administration, and Treasurer from 1933 through 1939.

Mrs. Rorke's dynamic personality, her erudition in many areas of the field which touched her life work, - esthetic, creative, commercial, practical and her lively imagination, which succeeded so well in bringing an aura of romance into the seasonal mode color-names for promotional work and thus brought exaltation to the souls of many romance-starved women, - all these will be long remembered by her TCCA and ISCC friends. And of recent years her practical common sense has been of great aid to the Armed Services in various color standardizations and esthetic problems bordering their fields. For a fine summary of these and other TCCA activities see Mrs. Rorke's 1954 report as Chairman of delegates to the ISCC, which will appear in the minutes of the 1954 meeting.

Mrs. Rorke told the Editor that her Association will carry on in cooperation with the ISCC as before, and that she personally will never cease to lose interest in the Council activities. Her responsibilities in the TCCA will be assumed by Miss Estelle M. Tennis, who was named by the Board of Directors as Executive Secretary. The Editor remembers Miss Tennis well and favorably from a date early in the period of TCCA and ISCC cooperation. Miss Tennis served for a number of years as Assistant to the Managing Director, so that we are assured she will be well qualified to carry on where Margaret Hayden Rorke left off. To paraphrase: The Queen is retired but not forgotten; long live the Queens!

NEW JOURNAL OF OPTICS

Through the courtesy of ISCC Secretary Evans we received prospectus of a new journal of optics whose first issue, it was hoped, would be made in December, 1953. It is Optica Acta, European Journal of Optics. Articles are to appear in English, French or German, with a summary in each of these languages. Editors for these three languages are, respectively, C. G. Wynne, A. Marechal and G. Franke. The Board of

Control includes J. M. Otero y Navascues, President (Madrid), W. S. Stiles, Secretary (Teddington, Middl.), A. Arnulf (Paris), A. Biot (Ghent), J. Cabannes (Paris), R. W. Ditchburn (Reading), P. Fleury (Paris), F. Gabler (Wein), G. Hansen (Oberkochen), E. Ingelstam (Stockholm), H. Korte (Braunschweig), G. Toraldo di Francia (Firenze) and A. C. S. Van Heel (Delft). As our readers will see, the majority of the names are famous ones in the field of the new journal. The Journal will incorporate papers on optical theory, optics of the eye and vision, photometry, colorimetry; instrumental optics, including light sources, optical materials and thin films; testing methods, physical detectors of light, and short notes giving information of interest to optical workers. The cost, for volumes of 4 to 6 issues, will be 3,500 francs. (\$10 in the U. S. when the subscription is handled through the American Institute of Physics). Pages per volume will vary from 192 to 228, depending on the number of subscribers. Page size will be 21 x 27 cm. There will be no page charge to authors, but they will be furnished 50 free reprints of published articles. Publication in France is by La Société de la Revue d'Optique, 3 boulevard Pasteur, Paris XVe. In this country subscriptions will be handled by the American Institute of Physics, 57 East 55th Street, New York 22, New York.

COLORIMETRY OF FLUO-RESCENT MATERIALS

The problem of getting the proper artificial light source to match daylight for use in measuring the color of fluorescent substances occupied most of the

attention of ISCC Subcommittee for Problem 18 at the March meeting in New York under the chairmanship of Dr. S. Goldwasser. As a first approximation, the committee decided to try a combination of two 500-watt daylight lamps and one 15-watt Blacktube ultraviolet source.

The designation of a standard light source is necessary before any work in fluorescent colorimetry can be accomplished. Since the ultraviolet component of daylight is as important as the visual component in exciting the color of fluorescent substances, the standard light source must match the energy distribution of daylight in both the ultraviolet and visable regions. Mr. W. E. K. Middleton of the Subcommittee has recently completed theoretical calculations on the spectral radiance of the overcast sky, which allow for factors such as the absorption by cloud droplets and the reflectance of the earth's surface. The proposed combination of visible and ultraviolet light sources appears to match this energy distribution closely enough to recommend it for preliminary trial.

In order to test the proposed standard light source, Committee members will measure the color of several fluorescent samples using both the proposed source and daylight by the technique of disk colorimetry. This method, which was proposed by ISCC President Dorothy Nickerson and interestingly demonstrated by her at the March meeting of the committee, will make use of a group of Munsell disks specially selected for this problem by the Munsell Color Company. If the proposed source will give essentially the same results as does daylight, the way will be cleared for its formal adoption. The Committee hopes to conclude this phase of its work in time for the forthcoming CIE Meeting in Zurich. It is hoped that at this meeting some formal recommendation can be made for a standard light source for the colorimetry of fluorescent substances. (This report was prepared by Subcommittee Secretary Eugene Allen at our request - Ed.)

TRICHROMATIC PIGMENTS

In a slightly provocative letter which we reproduce here with permission, our occasional correspondent, Henderson Wolfe, takes issue with a British appraisal of the effectiveness of paintings done with only three oil pigments. Mr. Wolfe's

letter, dated March 8 from the Color Farm, New Preston, Connecticut, follows along with our brief comments:

"In the March Supplement of the British Intelligence Digest, I find the following statement: 'All the intermediate lights like yellow-green, purple, pink, orange, blue-green, mauve, etc., can be made up from red, blue, and green. In fact, an American physicist, who happened to be a good artist, produced effective paintings done with just three oil colours!! Ignoring for a moment the standards by which the phrase 'good artist' was arrived at it is distressing to see in a reputable scientific magazine, and not for the first time, a misrepresentation of the artist's craft.

"In actual practice I have yet to find any well-known painter who ever limited his palette to three colors, except perhaps as a stunt. On the contrary, investigation shows that palettes of ten to thirty colors are very common. The reasons are, of course, convenience and efficiency. Although in theory any color might after some labor be produced from three pigments, it is far quicker to start with a pigment approximating the color desired, and qualify it with one or more additional pigments. The speed thus gained lowers the interval between the artist's concept and the finished product, with the result that his inspiration remains fresh. Imagine the stale, stereotyped pictures that would result from the artist putting the physicist's formula to work."

Mr. Wolfe, in mentioning the quickness of obtaining a match, and the advantages consequent upon that speed, undoubtedly has a strong point. But the Editor, who may not be qualified to judge the merits of the argument, not having done any painting for a score of years, thinks there may be something to be said on the other side. The scientist in question was no doubt the late Herbert E. Ives, who claimed that the artist's extensive palette was unnecessary and uneconomical, and developed a Trichromatic set of pigments which were prepared for him commercially by the Interchemical Corporation. Dr. Ives was a many-sided genius. The artist Charles Bittinger, who gave him some lessons, told the Editor that Ives, though already well along in years, learned in a few months what it takes most art students the period of their full course to learn. It was not much later that Ives demonstrated his theories by actual painting before the Royal Society. If the Editor's memory serves him correctly, Ives' primary pigments were something like the primaries of color photography; that is, the "red" was almost a magenta and the "blue" almost a cyan (blue-green). The speed with which a genius like Ives could arrive at a desired color no doubt was beyond the abilities of us ordinary mortals; and with us, Mr. Wolfe's point may be true.

Yet the Editor met a similar situation in dealing with dyestuffs. It has been possible to show textile mills, who were accustomed to mixing five to eight dyes, that the colors could generally be obtained with a mixture of three dyes. Our former colleague, Hugh R. Davidson, produced the 100-odd colors of the Munsell system on wool with three-component mixtures in each case, using a total of a dozen dyes because of varying cost and fastness requirements, not because of the color limitations of any one set of three dyes. Davidson and Hemmindinger recently repainted about a thousand Munsell "Renotation" colors using a total of six dyes. Mr. Wolfe's point is doubtless important, but the speed obtained with many pigments to start with is partially counterbalanced by the time required to squeeze out the pigments from many tubes after the artist's first creative conception. And to many amateurs the cost of a large array of pigments may be a serious deterrant.

I.H.G.

Since the above was written, a letter from Mr. Wolfe in reply to copy of it says that Dr. Ives will be remembered among the great physicists who sponsored color theories, like Maxwell and Rood. Eight of Wolfe's students, who have just completed a project employing three colors, will spend the next few weeks imitating the palettes of some nineteenth century masters. He will forward any results that seem helpful.

COLOR VI
GNETTE No. 18

courtesy of E. Taylor Duncan, we obtained the following item.

There was no American flag flying over a Kansas City school
yesterday - only a small red flag. A citizen bristled. The principal explained:

"The American flag was not up because of the bad weather. The small red flag
warned the children to enter the building immediately and not play outside until
class time, because of the weather. We've used that storm signal for 16 years, and
this is the first time we have been accused of un-Americanism."

COMPLIMENTS

For many years we have kept a "Compliments and Slams" folder.

AND SLAMS

In it can be found material to bolster the flagging morale when it is low, and to aid in coming down a peg in exalted moments of fatuous complacency. Recently, because of the human urge for variety, we have been pleased to receive two or three slams; at least the remarks implied criticism of our appearing to sponsor or foster statements to which the critics objected. We begin with one which seems to us clearly and charmingly written in a style which is effective without being trenchant. This is from Mr. G. J. Chamberlin, Managing Director, The Colour Laboratory, The Tintometer Ltd., Salisbury, England.

The Editor . . . Dear Sir,

I am an enthusiastic reader of the News Letter, and find therein much of interest, education and entertainment, but I must confess I was brought up with a jerk when reading in the March issue of page ten, first paragraph, the statement that the colour chips in the Color Harmony Manual "represent to the best of our knowledge the most stable general collection of color standards now in existence."

It would be churlish of me to challenge the statement that these chips are stable; my concern is in the wider implication that the authors believe that other colour standards are <u>less</u> stable, if my understanding of my own language is adequate.

I have no doubt that you can guess what is coming. Yes, sir, you are quite right. I make use of no comparative or superlative adjectives, but merely remark with Churchillian understatement that Lovibond glasses are stable. This has been proved not over 8 years, but over 70 years, and the great Dr. Judd himself states in print in the U.S.A. that he has satisfied himself on this point. Other, although perhaps less eminent, authorities (including ourselves) have constantly confirmed this stability.

Ed. Note: A letter from Mr. Granville, received after this issue was made up, states that he intended to refer to opaque reflecting standards only. His letter will be reproduced.

OBJECTIONS OF A letter dated April 12, 1954, from Dr. Gordon L. Walls, well PROF. WALLS known author of "The Vertebrate Eye" (Cranbrook Inst. of Science, 1942), asked for copies of the Elsie Murray letter "criticizing the monograph of Walls and Mathews" and then added the following para-

graph.

"Miss Murray errs in terming me a "California optometrist." I am anything but an optometrist. And, I don't think the Department of Psychology of this University will like it said that I "teamed up with" it. The monograph, published by the University of California Press, did appear in the series of "University of California Publications in Psychology" --- it had to be assigned to some series or other! (Ed. note. - Dr. Walls, in an asterisk note, says: This sentence is not 'advertising' - the monograph has long been out of print.) Otherwise, the only connection was the fact that Miss Mathews was a graduate student in psychology, who had come to me for four semester-hours' worth of 'special work' (her doctorate thesis research was in a far-foreign field, that of personality assessment!)"

Ed. note 2 - perhaps Miss Murray was misled by the fact that Prof. Walls' book The Vertebrate Eye, dated 1942, listed him as Research Associate in Ophthalmology at the Wayne University College of Medicine. In the intervening dozen years he has been working in comparative physiology and morphology and in the physiology and psychology of human vision.

JESUS THE There is a story in the apocryphal gospel of the 4th or 5th contury, called the Fseudo-Matthew, which is interesting because it brings out the human side of the child Jesus and makes him a miraculous dyer. The story goes that the child Jesus, while in a dyer's shop, took all the clothes waiting to be dyed with different colors and mischievously cast them into a furnace. Upon withdrawal of the garments, which evidently resisted the action of the fire, the clothes were found to be of the desired colors. The story was retold in the interesting article on Chemical Knowledge in the New Testament by H. Zahnd and D. Gillis (J. Chem. Educ. 23, 128-34 (1946). Some of our readers may recall that we once reported in these pages that Jesus was a patron saint of the Persian dyers.

I.H.G.

BLINDMAN'S Once upon a time the Editor wrote to a famous archaeologist that all archaeologists (save the addressee and a few women) appeared to be color-blind. Also that they had an inordinate fondness for the color-word <a href="mailto:buff">buff</a>, using it in any old way which suited the enthusiasm of the moment. Some of their combinations, like "dark pinkish buff" and "orangy buff," are monstrosities, which are not and probably will not be recognized by Webster. Your Editor suggested that, if they must have variants of buff, they try <a href="mailto:buff">buff</a> and <a href="mailto:rebuff">rebuff</a>.

This was recalled and relayed to our Vice-president Waldron Faulkner, senior partner of a Washington firm of architects, after he reported on the broad usage of buffs (along with grays) in classifying Indiana limestones. Recently his rejoinder came by letter, taking an opportunity to add, as he put it, to our collection of "buff" or "off-color" stories. "An architect friend of mine," he says, "was complaining yesterday of the dull color used by the government for painting its offices. This he calls 'Blindman's Buff' and I suggest that it be added to the ISCC-NBS Dictionary of Color Names!"

COLOR AND In News Letter No. 111, we commented on the address and article PERSONALITY by Helen Sisson wherein she told us that we must key the colors of women's nylons to the ensemble, while the Editor had asked her (page 11) whether it was not well to key colors generally to the personality of the individual (admitting her dictum in the case of hosiery). Now comes our handsome and puissant ISCC member, H. Creston Doner, Director of Design and Color for

Libby-Owens-Ford Glass Co. According to a clipping from the Washington Post and Times-Herald of March 30, this expert says in effect: Key your color to personality! "The personality of the person and his color preferences should be considered always when selecting colors (to wear or have in your home)." Mr. Doner, a member of the American Institute of Decorators, on April 2nd and 3rd took part in a Washington Home Fashion League "Idea Festival." Experts in furniture, fabrics, glass, carpets and color were on the panels presented in the auditorium of Woodward and Lothrop's Bethesda store. On a Saturday afternoon panel, Mr. Doner showed some of the color slides from his illustrated lecture "Our World of Color."

COLOR AND JAIL BREAKS

Journal of the American Institute of architects came to us through the courtesy of Mr. Waldron Faulkner, chairman of the A.I.A. delegation to the ISCC. It is reported that a Japanese doctor proposes the rehabilitation of convicts by coloring the individual cells, on the theory that murderers like green, and so on. He would paint the murderers' cell interiors in green's complementary red. Thieves like yellow, blue and violet; confidence men prefer violet and red; embezzlers like yellow and blue; violent prisoners like blue. The doctor's cure, giving a prisoner surroundings that irritate rather than quiet him, sounds unorthodox and impractical to the Journal's editors. They think it encourages the frequency of jail breaks.

1954 FALL AND

According to a late March release by the Textile Color WINTER GLOVE AND Card Association of the U.S., the 1954 Fall and Winter SHOE COLORS Color Card for Women's Gloves includes pastels, "lively" colors and darker ones. It embraces four "soft ceramic

The following item from the January 1954 issue of the

shades, " Porcelain White, China Pink, Bluegloss and Goldglaze. Spanish Purple and Joyous Red have "gay sparkling" colors. In the medium and darker range are Mahogany, Tortoise Shell (a "spirited golden brown"), Winter Red (a "warm garnet"), and Duskgreen, a "deep pine version." Neutrals include Blond Ivory, Oakbeige, Charcoal Gray and Graysmoke. Also specified are black, brown, navy, white and chamois.

The TCCA announced on the same date a 1954 Fall and Winter Women's Shoe color special card in cooperation with the Guild of Better Shoe Manufacturers, Inc. These Guild promotional colors are shown in two types of leather, as well as in woolen, worsted and satin shoe fabrics. The Guild colors are Spanish Tile, described as a "glowing pottery tone" and Chromite, described as a "deep smoky mineral shade."

TURKESTAN) MURALS

KIZIL (CHINESE In our article in the preceding News Letter (page 11) on the Color and Art of (Greater) India, when we mentioned the Central Asiatic art style of Kizil (p. 13), we

momentarily forgot a very important reference to an article on the materials in the wall paintings of Kizil by R. J. Gettens of Harvard's Fogg Art Museum (Tech. Studies in the Field of Fine Arts 6, 281-94 (1938). Microscopical and microchemical analyses were made on the paintings which date from the 5th to the 8th century A.D. All of the paintings were done on a clay wall support which had been prepared with a thin ground layer of gypsum. The green pigment is a copper silicate similar to the mineral chrysocolla, the blue an excellent ultramarine and the red a native iron oxide. The brown-black pigment appears to be a lead compound overlaying a thin layer of Pb30/. Chemical changes have occurred and made difficult identification of the violet-gray flesh tones. Thin layers of red ocher were placed over a white surface layer for modeling face lines. This surface layer is believed to be

a complex mixture of lead, calcium and sodium sulfates; and the white pigment on all the paintings is gypsum (calcium sulfate). The pigments were applied probably with the traditional glue-tempera medium of the East since, from two of the paintings it was possible to extract with water an organic substance which dries like glue. Baid Jaclleyel lo Jedi se maideoredai en Jeon I. H. G.

LONG BEACH In our September 1953 issue we had an article about the offi-COLOR cial and unofficial California colors. Here we add notes about another California color, called after the city Long Beach. It was the subject of half a column of remarks (the Inside Out column) by the columnist Harry Fulton in the Long Beach Independent of December 14, 1953. He quoted remarks of the "only one local resident," Mr. Walter H. Case, Sr., who was aware that Long Beach was a color as well as a city. Mr. Case discovered the name's definition in the 1934 edition of Webster's New International Dictionary, and wrote to the publishers, G. & C. Merriam Co. about it. The Merriam Webster editors wrote to the editor of the ISCC News Letter about the matter for it

name was invented by our member-body, the Textile Color Card Association of the U.S. and was introduced in the Spring season of 1922. Mrs. Margaret Hayden Rorke, until her recent retirement to private life in California, Managing Director of the TCCA, supplied the information that this variety of sand color was named after Long Beach, California.

happened that he had written the definition. He supplied the facts that the color

Mr. Fulton, in quoting the Webster definition put a question mark after "red" in the hue description as yellowish red-yellow, but himself described it later in the column as a "yellowish red-color" which would designate a hue redder than that of the dictionary hue. Mr. Fulton suggests that the color, if it is "good looking" might be made the official color of the city. According to National Bureau of Standards measurements, the Munsell Renotation is 8.4 YR 6.4/2.2, according to which the ISCC-NBS description is "light grayish yellowish brown."

ALLISON Under date of February 11 we received copy of a letter from ARTICLE ISCC Treasurer Norman Macbeth to Ronald C. Allison of The T. Eaton Co. Ltd., 190 Yonge Street, Toronto, Ontario, giving very high praise to Allison's article "The Proof of the Pudding" entered under "Views and Opinions" in the December 1953 issue of Illuminating Engineering. Macbeth recommends our reading the article, and only an unusual avalanche of News Letter correspondence has prevented our doing so. Since Macbeth is an outstanding illuminating engineer, his opinion will be much more valuable than ours, so we pass on his recommendation to you. Since Treasurer Macbeth at the moment of writing is on a trip around the world - and we hasten to add that ISCC finances are in the best shape they have ever been - we are taking the liberty of quoting the nonpersonal part of his letter without permission. "Without a doubt this article," writes Macbeth, "is the plainest talk which I have seen printed in Illuminating Engineering for some time. The comparison which you have made involving eating and taste, as compared to seeing and color, is so utterly clear that the readers of this article could certainly understand the importance of color in our everyday life as compared with the simple physical measurements ...."

Here we will add merely that Mr. Allison is an ISCC member, and that he was a guest at the recent Board of Directors meeting which preceded the Annual Meeting, and made a number of remarks about cooperation between art, design and science groups in the ISCC which were very appropriate and very well received. We hope to read Mr. Allison's article at the earliest opportunity.

GONE CONSERVATIVE

TWYEFFORT We received copy of the March 14 Coloroto Magazine of the New York Sunday News, with four million circulation, and discovered that long-term ISCC member Ray G. Twyeffort.

of Twyeffort, Inc. was again the Profile in the News (pp 8-9). Previous "Profiles" concerning him were in the New Yorker and the Readers Digest. The article is by M. Pete Coudros, whose style is almost as interesting as that of Twyeffort himself. Four or five pictures show the latter in the fashionable men's dress ensembles he is now advocating, including a Gun Metal Gray dinner suit. In a letter to ISCC President Nickerson, dated March 31, he wrote "The latest creation I wore is a Gun Metal Gray Dinner Suit with satin facings to match. I enclose a sample of these; the fabric is an English-made baby mohair, crisp, cool and keeping its shape. The Homburg hat is also a gunmetal gray. Our firm has made these for fastidious men in 18 states, and most men like the change to alternate with their black dinner suits which have been accepted for the past forty years, so at least its a break from our past semiformal evening regimentation."

"My crusade of the past several years," he continues, "has been against too much emphasis on the casual, which has made a casualty of dignity; and this is why I am (now) advocating more conservative color and attire for the time being. I anticipate a big demand for color (in men's clothing) again, when color television gets rolling." We wish we had more space available to requote Mr. Twyeffort's trenchant remarks quoted by Pete Coutros. They are not only clever, but as a former President of the Merchants, Tailors and Designers Association of America they bear considerable weight. But perhaps interested persons can consult the Coutros article in the nearest available library.

COLOR CHOICE PERSONAL

According to a recent news clipping passed on to the Editor by ISCC member R. E. Redmann, five of a panel of six color experts agreed that color selection by the consumer is usually not governed by scientifically determinable rules but by purely personal preferences. The occasion was a luncheon meeting of the Home Fashions League held at the Roosevelt Hotel, New York. A single dissenting voice was that of Russel Wright, industrial designer, who contended that a scientific basis for selecting colors for home furnishings was more desirable. Mrs. Olga Gordon, homefurnishings coordinator for the Wanamaker Stores, remarked that the American homemaker was not "sold" by unrealistic advertising which urged her to have, for example, an impractical frilly pink bedroom simply because it was "chic".

Other members of the panel included Carolyn Schnurer, dress designer; William Moore Stuart, president of the Martin Senour Paint Company; Don Caverly of Sylvania Electric Products; and Carl E. Foss, color consultant who has been an ISCC delegate for many years. Barbara Welles served as moderator.

THE SENATE AND COLOR

According to a quotation by Jack Bell in the Louisville Times of March 22, passed on to us by E. Taylor Duncan, a well publicized Senator understands that gray is intro-

spectively intermediate between black and white. He is quoted as saying: "I'm afraid that this isn't all going to be black and white but that there will be a lot of gray left even after the committee has made a full investigation."

LIGHT AT WORK

COLOUR AND This is the title of a book by Robert F. Wilson, F.R.S.A., art director of the British Colour Council, London, The book had just been received from the Seven Oaks Press,

London, by the Canada Printing Ink Co. Ltd., Toronto, Canada, according to the

September 1953 issue of its house organ Canadaink. We copy, by permission of the company's president, ISCC former vice-chairman C. R. Conquergood, his brief review of the book.

This is one of the most practical books on the subject for the average business executive that has come to our attention. The descriptive matter on the jacket sums it up briefly: "Colour and Light are two important factors in our industrial life, assisting to achieve the ideals of (1) increased production, (2) reduced absenteeism, (3) improved standards of working conditions, (4) better relations between all engaged in industry, (5) safety.

Many of the principles dealt with by the author in relation to factories, offices, canteens, rest rooms, etc., are also applicable to public buildings, including schools and hospitals, since they affect people of all ages and in all stages of health, both mental and physical. The book is  $5\frac{1}{2} \times 8\frac{1}{2}$  of 150 pages and is priced at 25 shillings. It is arranged in eight chapters with 12 illustrations in colour.

NEAR-WHITE

The following is a copy of a January 14 letter from SURFACES Richard S. Hunter, chairman of the ISCC committee on Problem 19, A Study of Near-White Substances, to Dr.

Balinkin. The letter, which explains itself and asks for opinions of ISCC members, follows:

Here is a copy of a letter I just received from Mr. Simpson, chairman of the NEMA Committee on Color Of Kitchen Appliances, in reply to mine asking whether his group needed the assistance of my Problem 19 group. As you can see, his committee has already selected their standard white and its tolerances and has placed the color measurement problem in the hands of Norman Barnes of the General Electric Company. Thus, Mr. Simpson feels they probably need no assistance from us. The question now arises, what shall be the plan of action on Problem 19, "A Study of Near-White Surfaces"? We have, at the moment, no specific materials problem to use as a basis for study.

I believe that a survey of the presently available information on the colorimetry of whites and the rating scales and techniques used for different materials may be warranted, but I wonder if we should do more. I am inclined merely to ask for information from ISCC members acquainted with the procedures for whiteness rating of different materials. I would combine this information in a report with summaries of the whiteness studies published by MacAdam, Judd, Hemmindinger, and others and call our project completed when this was done. If this is to be our plan of action, I would attempt to round out my committee at the coming meeting of the ISCC, arrange with its members for specific information on practices in the different fields which each represents, and then compile this information for publication when it is received. Does this not seem to you to be the wisest course of action?

IMETERS FOR TV TUBES

HUNTERLAB COLOR- We have received a Hunterlab bulletin describing two interesting new developments in the form of Tristimulus Colorimeters primarily for TV Picture

Tubes. Two models are diagrammed and described. Filter-disk Model D12A is with single photo cell connected to a galvanometer and green, amber and blue filters on a disk. Three Photo cell Model Dl2B is with direct-reading current balance. Specifications and prices are given. The address of the laboratory is Hunter Associates Laboratory, 5421 Brier Ridge Road, Falls Church, Virginia. In a letter to the Editor, Richard S. Hunter, Director, passes on this information and writes further as follows:

As you probably know, the Joint Electron Tube Engineering Council has recently prepared a method for the measurement of monochrome TV picture tubes with photoelectric tristimulus colorimeters. The new instruments have been developed primarily to perform measurements according to the new procedure. However, they can both be used for color by reflection and transmission as well as by phosphor emission. Insertion of a daylight filter permits measurements of objects as under daylight. Use of an ultraviolet source permits measurement of phosphor colors under ultraviolet rather than electron-beam excitation.

The first of the two instruments has simply a disk with tristimulus filters in front of a hermetically-sealed barrier-layer photocell. Current generated by this photocell is measured by deflection of a galvonometer spot. CIE values of chromaticity are computed from these deflections using equations with constants derived from settings on a known standard.

The second instrument has three hermetically-sealed photocells, each with its own filter. Chromaticity is read directly from the dial of this instrument which is connected to a potentiometer rheostat and a current-balancing bridge. The bridge compensates in part for fluctuation of specimen brightness during test and therefore gives results of higher precision than are given by the one-cell device.

Rapid, precise color comparisons of CIE coordinates are possible with both these instruments, but accuracy is restricted by the well-known limitations of the photoelectric tristimulus method of color measurement.

AIR-SEA RESCUE BULLETIN Received just too late for our March issue was a copy of the most interesting bulletin described here, along with a brief abstract written at our request by Comdr. Dean Farnsworth,

Head, Human Engineering Branch of the U.S. Naval Medical Research Laboratory, U.S. Submarine Base, New London, Conn. The abstract follows:

Colorists who have been noting an increase of scarlet for life jackets on ferries, rescue boats and other life-saving gear will be interested in the latest Color Vision Report (Number 28) from the New London Submarine Base Research Laboratory and the Naval Air Experimental Station in Philadelphia. Observations were made by Laboratory personnel from a P4Y-1P Aircraft flying at altitudes of 500 and 1000 feet over Long Island Sound to test the detectability of red, orange and yellow targets. Colors from Munsell 2.5 Red to 7.5 Red were detected first, a significantly greater percentage of time than the standard lifeboat yellow.

The frontispiece of the report is a reproduction of a color photograph by Paul Berg, staff photographer of the St. Louis Post-Dispatch, and is contributed by courtesy of the Post-Dispatch. The Project Director for the Aeronautical Medical Equipment Laboratory in Philadelphia was Mrs. Marion Willis, Research Psychologist, and individual member of the ISCC.

"A Preliminary Field Evaluation of the Relative Detectability of Colors for Air-Sea Rescue" by Florence L. Malone, Color Vision Report No. 28, 23 November 1953, may be obtained on request from the Librarian, U.S. Navy Medical Research Laboratory, U.S. Naval Submarine Base, New London, Connecticut.

LATEST BOOK

CHESKIN'S We have received a prospectus about the latest book by Louis Cheskin, Director, the Color Research Institute of America, 176 West Adams Street, Chicago 3, Illinois.

This, we believe, is his seventh work, including his Color Wheel and Color Charts. If one can judge by the many quotations or abstracts in the prospectus, it may prove to be extremely interesting. Though written by a consultant who was originally an artist, it apparently includes a great deal of material of a practicalpsychology nature. As the title, How To Color-Tune Your Home, indicates, emphasis is upon color in the home. The price of the work is \$5.00.

YELLOW GLASSES AND

We have received reprint of an article by Oscar W. NIGHT DRIVING Richards of American Optical Company (Highway Research

Abstracts 23, No. 7, July 1953), entitled "Yellow Glasses Fail to Improve Seeing at Night-Driving Luminances." The title itself is a brief abstract, but since a fine condensed summary is given, we copy it in the following paragraph. Thirteen references are included.

Acuity and contrast were measured for 73 persons (ages 16 to 72) at 11, 1.0, and 0.1 ft.-L. (3025 K.) with and without Noviol C glasses, and without the yellow glasses at an intensity equal to the overall transmission of the yellow glasses. The latter permits evaluation of any effect due to yellowness separate from decreased illumination. Yellowness had little effect at the higher luminances and some loss of seeing found at the lower levels is associated with the Purkinje shift. A small but statistically significant loss of vision occurs from yellow glasses. The loss appears to increase with age. No observers showed any consistent gain in seeing with yellow glasses for both acuity and contrast for all luminances tested, although random small gains were common. Since there is barely sufficient luminance for average night driving, the loss from yellow glasses is potentially dangerous and the data recommend that yellow glasses not be worn during night driving on public roads. Her bus notation upod hould need to be and a road and a road a

"THE PAINT BIBLE"

11th EDITION OF According to the Newsletter of the Gardner Laboratory, Inc., Bethesda, Md., the 11th Edition of "Physical and" Chemical Examination of Paints, Varnishes, Lacquers and

Colors, by Gardner and Sward, which was sold out between 1950 and 1952, has been reproduced by a lithographic process. The book contains nearly 200 color chips, 722 pages, 758 halftones and illustrations, and 52 charts. The price within the U.S. is \$21.00. The same Newsletter contains a brief description of the Gardner Ink Photometer.

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