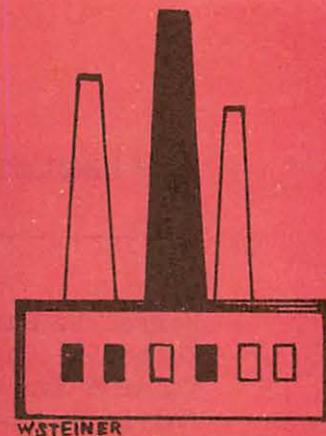
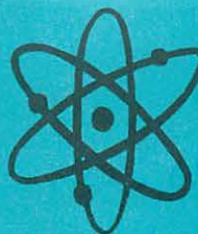




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WSTEINER

INTER-SOCIETY Color COUNCIL

NUMBER 148

July-August 1960

MAXWELL COLOR CENTENARY

The Centenary of James Clerk Maxwell's famous demonstration of trichromatic color reproduction is to be marked by a conference from May 17th to 19th, 1961 in London, organized jointly by the Physical Society Colour Group and the Inter-Society Color Council of the U. S. A. Color appearance, measurement, and reproduction in photography, television, and printing, will be discussed, and a Centenary Discourse will be held at the Royal Institution. Further information will be available later.

NEW MEMBERS

The following applications for individual membership were accepted at the last Board of Directors' Meeting held in Rochester, New York, on June 13, 1960.

Associate Individual Members

Dr. Carl B. Blake
Sinclair and Valentine Co.
611 W. 129th Street
New York 27, N. Y.

Mr. Francis E. Blod
1 East 53rd Street
New York 22, N. Y.

Mr. Randell Cook
120 Glorietta Blvd.
Orinda, California

Mr. Robert I. Goldberg
95 Madison Avenue
New York 16, N. Y.

Mr. Peter C. Hereld
249 S. Prospect Avenue
Bergenfield, N. J.

Particular Interests:

Control of color in printing inks.

New developments in terms of color psychology, color research, color developments in packaging and product design.

More effective use of color in packaging and advertising. Commercial and residential color engineering.

Marketing, packaging, product styling.

Uses of pigments and pigment dispersions in industry.

 Newsletter Committee:

Warren L. Rhodes, Chairman
 Katherine Chandler
 Waldron Faulkner
 Calvin S. Hathaway

William J. Kiernan
 Deane B. Judd
 Dorothy Nickerson
 Helen D. Taylor

Send Newsletter Items to Editor,
 Warren L. Rhodes
 Graphic Arts Research Department
 Rochester Institute of Technology
 Rochester 8, New York

Other correspondence to Secretary,
 Ralph M. Evans
 Color Technology Division
 Eastman Kodak Company
 Rochester 4, New York

Associate Individual Members (Cont.) Particular Interests:

Mr. O. C. Holland
 Interchemical Corp.
 Printing Ink Div.,
 67 West 44th Street
 New York 36, N. Y.

Psychological aspects, lighting.

Mrs. Elizabeth D. Quackenbush
 10 East 40th Street
 New York 16, N. Y.

Color in ceramics.

Mr. Charles D. Reilly
 Engineering Research Lab.
 DuPont Exp. Sta.
 Wilmington 99, Delaware

Measurement, specification, formula-
 tion and theory.

Mr. George W. Reincoehl
 Exhibitors Bldg.
 Grand Rapids, Michigan

Employing color and light in coordina-
 tion with all other components to
 achieve optimum spacial environments
 (offices) for human beings who work
 with their hearts and minds.

Mr. Richard E. Seeber
 National Aniline Div.,
 Allied Chemical Corp.
 Buffalo 10, N. Y.

Color matching instrumentally, includ-
 ing fluorescent colors. Color speci-
 fications.

Affiliate Individual Members

Mr. Paul Giesecke
 American Cyanamid Co.
 1937 West Main Street
 Stamford, Connecticut

Color matching, color difference,
 color specification.

Mr. Don Francis Hill
 10574 Eastborne Avenue
 Los Angeles 24, California

Color standards, color systems of nota-
 tion, color science, color vision, art
 and color, color psychology, color
 lighting for theatres, color television
 transmission and reception, color organs
 and color music (invented and built
 one), color in metaphysics, astrology,
 and occult subjects.

Affiliate Individual Members (Cont.) Particular Interests:

Mrs. Emma Jambor de Edvi Illes Color consultation - teaching.
 Calle Olympto, Edif. "DOMUS"
 (Esq. Gr. Avenida, Sab. Grande)
 Apt. 602
 Caracas, Venezuela

Mr. F. Jay Singleton The use and coordination of color in
 170 North Main Street its relation to building materials and
 Wharton, N. J. interior design.

CHANGES IN
 NEWSLETTER
 COMMITTEE

Four new members have been added to the Newsletter Committee. They are: Katherine Chandler, Interior Designer, Voorhees, Walker, Smith, Smith and Haines, Architects; Waldron Faulkner, Faulkner, Kingsbury and Stenhouse, Architects; Calvin Hathaway, Director, Cooper Union for the Advancement of Science and Art; and William Kiernan, Bell Telephone Laboratories. Dorothy Nickerson, Deane Judd, and Helen Taylor will remain on the committee. By adding these new members, the Newsletter expects to broaden its coverage to bring interesting and informative articles to all ISCC Member Bodies. Contact any member of the committee if you have items which you think should be published in the Newsletter. If this is not convenient, send items directly to the Editor.

TWO COLOR MEETINGS
 IN EUROPE

The Newsletter received information about two important European color meetings. The 4th Journées Internationales de la Couleur was held in Rouen, France, April 28-30, 1960, and the 4th National Italian Color Congress was held in Padua, June 2-4, 1960.

Summaries of the papers presented at the French meeting were reported in Couleurs magazine, Volume 3, Number 36. Section 1 (6 pages) deals with Colorimetry, Section 2 (1 page) with Psychology and Aesthetics of Light and Color and Section 3 (9 pages) with Application of Color. Newsletter readers wishing photographic copies of these summaries (in French) may obtain them by writing to the Newsletter. (Charges 25 cents per page)

Although the Newsletter does not have a detailed report of the Italian Meeting, a list of speakers and topics is available. If a sufficient number of readers are interested the list will be translated and distributed (no charge).

The Newsletter will try to publish translations of some of the summaries from these two meetings and if possible, some of the complete papers.

IDI ANNOUNCES
 ANNUAL DESIGN AWARDS

The 1960 IDI design award citations and medals were presented by H. CRESTON DONER, National President of IDI and PAUL R. MacALISTER, Chairman and founder of the award program - on behalf of the Tenth IDI Award Jury which consisted of themselves and DONALD W. BRUNDAGE, Chairman of the San Francisco Chapter; ROBERT M. GOODMAN, Chairman of the Chicago Chapter and BENJAMIN E. WERREMEYER, Vice-Chairman of the Chicago Chapter.

In making the citations, MacAlister pointed out that only three such medals may be presented annually by IDI to industrial designers or design teams, regardless of their affiliation, for their noteworthy and fresh approach to the design of a product which is mass produced and nationally distributed in the United States. The selection of the designers to be honored is made by elected IDI officers, all of whom are practicing designers. The Jury bases its decisions on examples of current work submitted for their consideration.

The 1960 IDI Design Awards Were Presented to:

DAVE CHAPMAN, fasid - KIM YAMASAKI, asid - FRANK CARIOTTI of Dave Chapman, Inc. for their research report and recommendations on the design of facilities for U. S. schools, produced for the Educational Facilities Laboratories, Inc. The Jury deemed this project to be a true first in the field of industrial design - the development of a nondimensional product of logic to guide the creation of facilities to utilize educational television to its fullest - at a time when the national eye is focused on the problem of educating future American citizens.

* * *

WILLIAM L. MITCHELL - idi & THE GENERAL MOTORS STYLING STAFF for their work on the Corvair for the Chevrolet Motor Division. In servicing the needs of a particular market, this design team has taken a step forward in the development of a small, rear-engine American automobile of finely-scaled proportions, with a minimum of ornamentation . . . a satisfying design solution for this increasingly essential mode of transportation.

* * *

WALTER DORWIN TEAGUE, JR., asid - DAVID H. DELAND - BENJAMIN H. STANSBURY of Walter Dorwin Teague Associates, for their design of the Euphorian Dental Chair for the Ritter Company. Starting with the revolutionary idea of a California dentist - and a curve - this design team has developed a product of finely sculptured form compatible with human anatomy, and with a rare completeness of detail, to ease the tensions of both patient and dentist - resulting in a pleasing design of mental and physical benefit to humanity.

The keynote speaker for the function was EARL LIFSHEY, noted HFD (Home Furnishings Daily) columnist and former managing editor of Retailing Daily, who was also the guest speaker just ten years ago when the first of IDI's annual awards were announced on June 21, 1951.

NATIONAL PAINT, VARNISH
AND LACQUER ASSOCIATION

The NPVLA again offers its 1960 Color Survey gratis to ISCC members. This booklet is an amazing collection of data on paint sales.

The statistics are presented in tabular form and in chart form. Trends are shown on the basis of color and on the basis of use.

Requests for copies should be sent to Louis Fisher, Director, Statistical Division, National Paint, Varnish and Lacquer Association, 1500 Rhode Island Avenue, N. W., Washington 5, D. C.

In red type on the NPVIA letterhead is:

THE ROAD TO PROSPERITY IS PAVED WITH COLOR
73rd Annual Meeting. October 27, 28, 29. Chicago, Illinois.

NATIONAL INTERIOR
DESIGN MONTH

The National Society of Interior Designers has proclaimed September 18 - October 18, 1960 as the Second National Interior Design Month. In a letter, NSID president, Michael Greer compared National Design Month with the January White sale, Mother's Day, and Valentine's Day; pointing out that at one time these were hardly noticed. Tremendous annual promotion resulted in undeniable profit.

"National Interior Design Month can be as important. It will have tremendous impact on the American public, increase the taste level of the American Home and American Business, and be a good business promotion for you (Interior Designers)."

Using the slogan "Why Wait -- Let's Decorate ... Enjoy Your Home, Enjoy Your Office, NOW!," the NSID plans to use window displays, magazines, newspapers, radio and television to help promote the idea of National Interior Design Month.

THE COLOR GUIDE FOR
ARCHITECTURAL PORCELAIN ENAMEL

A paper was presented at a recent session to the Porcelain Enamel Institute by Mr. H. R. Spencer, President of the Erie Enameling Company. Members of the ISCC will remember that Mr. Spencer spoke on architectural porcelain enamel at the Annual Meeting in 1958. This paper should therefore be of general interest to members of the Council and particularly to the Subcommittee on Color in the Building Industry.

Architectural porcelain enamel has been in use for many years but it has only recently been perfected as a modern building material. One of its chief assets is in its wide range of non-fading colors. The producers of this material, like the manufacturers of other materials whose range is unlimited, were asked to produce an ever-increasing range of colors. (In one instance they were asked to match the color of the necktie of the boss!)

As might be expected, each manufacturer developed different color ranges, some of which could not easily be matched by competitors. This situation became so serious that Mr. Spencer proposed in 1957 that the Porcelain Enamel Institute develop a series of industry-wide standard colors. This idea met with favor and was accepted.

The first step was to get each manufacturer to submit samples of his most popular colors, which came to about 300. From these fifty were tentatively selected. These were checked with the major frit producers for three requirements: Stability, acid-resistance and reproducibility in low gloss within commercial tolerances. These tests reduced the final number to forty-seven colors, which were adopted as industry-wide standards, and were approved by the American Institute of Architects.

The forty-seven standard colors are shown on the Color Guide to assist in the selection of architectural porcelain enamel. The chips are reproduced by a color-depositing process in a low gloss, which is recommended for exterior use. They are given both a PEI number and an approximate Munsell notation. Six chips show representative samples of stippled color combinations.

Mr. Spencer's paper gives the typical story of a material which can be produced in an almost unlimited range of colors. The natural tendency is to produce such a material in increasingly wide color ranges because of competition. This leads ultimately to a limited range of standard colors which are readily available throughout the industry. The first step in setting up these standards is to find out what is in general demand. The next step is to select a tentative range that meets certain technical requirements. The final step is to have these colors adopted as the standards for the industry.

This sequence follows the recommendations of the ISCC Subcommittee on Colors for the Building Industry and the Porcelain Enamel Institute is to be congratulated for doing this voluntarily. It is to be hoped that other producers will follow this example so that eventually all building products will have color standards which will be useful to producers and consumers alike.

Waldron Faulkner

MORE ABOUT THE
COOPER UNION MUSEUM
COLOR EXHIBIT

Dear Editor: By the time this reaches you the remarkably fine color exhibit that has been going on at the Cooper Union Museum in New York since mid-April will be closed. I hope many ISCC members saw it. Many were led to do so by Bill Kiernan's review in the last Newsletter.

It is far and away the best all-around color exhibit I have ever seen. The aesthetic impact is what it should be -- yet the logic as well as the magic is there too. From the moment one steps into the dramatically darkened entrance and sees demonstrations of color mixtures in pools of light, lifted out of their usual more prosaic backgrounds -- one knows that here indeed we have an exhibit that lays equal weight on the Art-Science-and-Industry aspects of color.

By demonstrating color mixtures of light on the several faces of a free swinging cube, a new dimension is added by motion--the constant change in color mixtures, and the shadow colors, is most effective. Among demonstrations of the physics of light, who would think of finding a cut glass chandelier! And the aesthetic impact of the "blue room" is a color experience that hits one quite before he realizes that this is a room that tells the story of pigments and dyes--natural and man made. Beautifully chosen art objects illustrate various color facts--textiles and ceramics, both tell the story. Beetles, thousands of them, form an Indian headdress in the room in which diffraction principles are demonstrated!

This is indeed an exhibit of which the ISCC could have been proud, had it only been possible to have made it a part of its annual meeting. With the color talents of the Cooper Union Museum staff so beautifully demonstrated, it is my sincere hope that within another five years they can be persuaded to plan

another color exhibit, one around which an ISCC meeting can be arranged. Here at last is an articulate group representing the arts that may be able to help us plan and execute the kind of meeting in which aesthetic as well as technical principles of color are equally well demonstrated.

For those who missed the exhibit, I recommend that they read the full page review that appeared in Interiors, page 20, for June.

Not only to ISCC member, Calvin S. Hathaway, Director of the Cooper Union Museum, should go our congratulations and thanks for celebrating the Cooper Union Centennial anniversary with such a fine color exhibit, but also to Mr. Christian Rohlfing, Curator of the Department of Exhibitions and to Mr. Edward Kallop, Associate Curator, who spent the better part of a year in studying the field and in organizing the contents of the show. It is Mr. Kallop who is responsible for the 36 page booklet (available from Cooper Union Museum, Cooper Square, New York 3, New York for fifty cents) that not only catalogues the exhibit but provides a most useful and interesting introductory essay on "The Logic and Magic of Color". In my enthusiasm I want all ISCC members to be able to share at least this much of the exhibit, even if they missed the show itself.

Dorothy Nickerson

EDITOR'S NOTE

The following enchanting story was sent to the Newsletter by Helen Taylor several months ago. A friend of hers planned a trip to the locale of the story (Greece) and she wanted the item returned for her friend's use. I copied the text and sent the original back to Mrs. Taylor who gave it to her friend prior to departure. When I prepared the item for this issue of the Newsletter I discovered that I had failed to copy the cover page with the author's name. Consequently, this delightful narrative must be published anonymously.

RUG DESIGNING AND DYEING IN PYRGOS

In 1928 my husband and I went to live on the frontier of Mt. Athos in a large Byzantine tower which was a metorchi of the monastery of Vatopedi. The Greek Government had taken over the land from the monastery and settled a small group of refugees from Asia Minor there. We arrived simultaneously with many of the villagers. They went into the small houses that had been built for them. We went into the tower.

Our original idea in going there was for my husband to study the monastic world of Athos with the object of writing a book. We meant it as a temporary arrangement, but were so delighted with life in the old tower that we remained.

We had no furniture, but village carpenters were eager for work and whole trees arrived from Athos to disappear into manure heaps before being hewn into chairs and tables for us. But there is a limit to the amount of furniture two people can use, and that form of help soon came to an end, and work was the cry that went up all round us, for the people had settled on stones, not land. One day we were asked to go and see a sick man, and we found to our dismay that he was actually dying of malnutrition. Then it dawned on us that the people were so poor that it was economically impossible for them to properly feed the old who were past bread winning. The man told us that in Turkey he had been a rug de-

signer, and we then discovered that half the people had come from the Princes Isles, near Istanbul, and the other half from Caesaria. Those from Caesaria were highly skilled rug makers.

The man's wife ran into the room with a large pair of scissors and started muttering and snipping and tugging at cushions and mattresses until she had emptied them and heaped the floor with shining masses of colored rug silks.

"Na!" she cried, "look!" and out she pulled more and more. So we gave them an order for a silk rug.

The man sat, yellow and huge on his bed, rolling tobacco leaf into cigarettes with his bony fingers. The skin was stretched thinly over a nose that lay like a shadow on his face. He did not live to see the rug finished, but his family worked on it, and the first rug of the Pyrgos industry came into being.

We decided early in the venture that it was no use producing Turkish rugs in Greece, and there were factories for the ordinary Greek rug, with which the people in the village could not hope to compete.

My husband, going to and from the monasteries, brought back photographs he had taken of Byzantine motives, chiefly from illuminated parchments or books. We decided that they could be used for rugs and that there might be the opportunity of developing a village industry that would produce something with an appeal to lovers of Greek art. We would take Athos designs; the old women would spin, and become earners and an asset in a family instead of eaters of bread.

We decided the rugs must be de lux, the very best possible to achieve, and the price was only to cover the cost of production after providing a generous wage for the workers. In fact it was so generous before the war that two thirds of the selling price went to the girls who made the rugs while the other third covered materials, the spinning, and loom upkeep. Now unfortunately half the selling price goes into materials, and only have in wages.

The greatest opposition in starting the industry was from the villagers themselves. They were conventional in their conception of rugs. They frankly said the designs were dreadful, but the more they objected the more determined we grew. We got no help with the designs although the brother of the original man was also a rug designer. He was determined to put Turkish rugs on our market, and simply said anything else was impossible. So we worked for days over squared paper that we knew nothing about, and finally designed three rugs which are still first favorites. The Tree of Life from the monastery of Esphigmenou; the Vatopedi Fresco, and the Lavra Phiali.

Our next battle was the dyeing. We believed we should do vegetable dyeing from the plants round the village. The villagers declared the idea was absurd, so we finally made our first rugs entirely from self-colored wool from the sheep's backs. We then got in touch with Mrs. Melas of the Liaki Techni in Athens, and, without seeing the rugs, she came to our help and agreed to exhibit for us at the International Fair in Thessalonika. Those rugs got the Grand Prix. The

villagers were astounded. They could not believe that anything as awful as those black and white abominations could be noticed. But orders began to pour in, and from then until the war they never could keep up with their orders.

After nursing the industry for a few years we decided the time had come to give it over to the villagers. The Agricultural Bank was willing to loan girls money to provide themselves with equipment; the Liaki Techni took all they could produce. We acted as advisors, and worked away at vegetable dyeing. Our only helper in this was the village midwife, Paraskavoula, now dead. Paraskavoula came forward with our first colors, from onion skins and almond leaves. Paraskavoula said briskly:

"If one plant has a color, all have." But she overlooked the fact that not only have all plants a color, most of them have many colors. We made a rug for the New York World Fair with twenty-five colors and shades in it all dyed from the one plant *Erica Mediterranea*.

We gathered, and boiled and fermented every plant right through the year. Roots, leaves, bark, chips. Testing from different localities and soils, using different mordants, until today people in the village can, if they wish, get all the colors they need within a mile of the village. But they prefer in-different dyeing from the packet. They say it is easier, although I now find with certain plants that if the boiled dye is well fermented wool can be dyed fast by simply soaking it in the cold bath for several days. And such a bath seems to gain virtue from age and use.

Until the war came to Greece the industry continued, although we had left in the winter of 1939 when it first broke out in Europe. I am told that after we left the dyeing deteriorated. The villagers began a mixture of vegetable and synthetic dyes; then the quality of the work began to slip, and finally Turkish and Athos designs began to get mixed. This could have been avoided had some organization sent someone from time to time to inspect and insist on the standard being kept up. But war came to Greece and there was no chance of the industry surviving.

After the war was the aftermath, and the financial crisis. The difficulties of restarting were overwhelming. The Liaki Techni could no longer afford to advance girls money on orders, though they were willing to take rugs on the understanding that no payments could be made until the rugs were sold. The exchange was against both English and American customers, and people naturally hesitated to invest in rugs.

We decided, however to do our best to reestablish the industry on its old footing, but the process must naturally be slower as we could not afford to pile up rugs against our slender capital. We decided only to make rugs for orders. We cut expenses in every possible way. I, for instance, did all the dyeing, and the copying of the plans. Where, before the war we paid for someone to pack the rugs, I now did that. We borrowed looms and equipment, but try as we could we did not begin to cover the expenses until the exchange moved into a better position. Where a factory could have helped cover expenses was in the pupils; but we paid pupils the same rate as we paid experts. The pupils were never satisfied for they had to pay the teachers out of their earnings. Before the

war pupils worked for seven or eight months under a teacher before they received pay, although we paid the teachers for the pupils' knots. After the war, because of the acute poverty, we decided that pupils must receive as much as teachers, but for the first rug they worked on they had to turn over all their earnings to the teacher; the second rug half their earnings, the third rug a third, and so on until they had completed their eighth rug and were considered fit to work without further instruction. This enabled teachers to make considerable sums over and above their own earnings on the knotting, and did give the pupils a little in pocket, this sum increased as the girls gained speed in knotting. It was as fair a scheme as we could work out, although it caused little satisfaction, and it would have made our losses less had we been able to turn back some of the pupils' earnings into the rugs. I do not believe the selling price ever covered the cost of production, and this naturally hampered us in developing the industry beyond the capacity of a few girls. At the same time one gets the idea that it could gradually be put on a paying footing if some Greek organization was again willing to back it, and be content with rather lower profits than they got before the war, when they sold the rugs for double the price paid in the village. I am sure if the quality was maintained at its present standard the demand would increase, but I am also sure that it could not be left in the hands of the villagers themselves.

The rugs are unique in design and color, and there is no reason why the same idea could not be developed in other parts of Greece. Designs of localities like Epiros, Crete and Rhodes could be utilized. I would be willing to help in every way possible in investigating the different districts for dyes or design.

The present industry in Pyrgos could well be turned into a school for both dyeing and rug making, and pupils could be sent there from selected districts.

Vegetable & Natural Dyes

Dyes can be obtained from all plants, and indeed most plants yield a good range of different colors and shades by treatment. Most of the colors from plants are fast if the right method of fixing is used. Colors produced from plants are always pleasing, even when faded, and seldom can one achieve the horrible clashes which stun the eye when the more violent colors from a packet of synthetic dyes are put together.

We have now been experimenting with dyes for something like twenty-five years, and particularly with the plants of the Athos peninsular.

To dye from plants requires very little skill once the idea of having to fix the color has itself become fixed in the mind of the dyer. The time of the year must be studied; the age of the plant; the part of the plant to be used, and its locality. A plant from a stream will produce something entirely different from a plant of the same species on the mountain top.

With vegetable dyes may be included those natural dyes from stones, earth, and other matter which were in use in ancient times.

For instance kermiz. Kermiz is the tiny insect what raises the bright red berry on the scrub oak, in fact the oak takes its name from the insect. Until comparatively recently it was considered a vegetable dye. When the pregnant kermiz creeps from the berries in thousands to its breeding places it is swept up, dried into tiny crystals, and like cochineal is ready to convert into color. It is the cochineal of the European old world, and was used to ransom kings, and for the gowns of cardinals; and until very recent times to dye the red coats of the English soldiers. It might even have been used by Lydia, the dyer of purple, for the ancient word 'purple' really meant color, and if you go to Phillipi today you will find the hills covered with scrub oak, and the scrub oak with kermiz.

It was of the greatest commercial importance to Greece. Today only people in a few localities use it, and few of those realize the range of colors that can be obtained from it.

Another color of great antiquity is made from verdigrez from copper. Such a bath takes from two to three months to prepare, but once prepared can be used for a very long time, although wool cannot be crowded into it. The best method is to dye it skein by skein, each skein remaining in the brew for at least three or four weeks. No boiling is required but the whole method is cold dyeing. The color is an intense verdigrez green, that glows vividly and instead of fading gains intensity as it ages.

These are what I call natural dyes, and can be obtained anywhere. In the past many of the richer colors were superimposed on each other--thus blue would be dyed over a red foundation for its loveliest effect, and in reverse red at its best was dyed over a blue foundation.

I am now going to list a few of the commonest plants from which dye can be obtained in Greece.

ARBUTUS, or Strawberry Tree. Roots; deep rose brown; pale rose; grey. Leaves; green or yellow. Very reliable.

ERICA MEDITERRANEAN. From green young shoots. Yellow; dull gold; brown. Plants from chestnut forests give much richer shades. Very reliable.

VERONICA. Leaves; yellow and green in various shades. Very reliable.

ILEX. Red. From berries.

MOUNTAIN ASH. Bark; yellow, green, blue, various shades of pink and mauves.

ONION SKINS. Sand, yellow, brown.

BLACKBERRY ROOTS. Reddish brown, and a fine copper color. Very reliable.

ASPHODEL. Roots; Yellow, dull gold, green.

STINK WEED. Yellow, green, bronze, brown.

MADDER. Turkey red, orange, copper, reddish browns.

PINE BARK CHIPS. Reddish brown.

WALNUT SKINS. Brown, if husks green deep violet brown.

THISTLE, DONKEY THORN. Deep puce head of variety known in M.E. as Donkey Thorn. Long boiling. Deep pink dye. Indian tape was dyed from it.

ST. JOHN'S WART. Whole plant; Pink, red, yellow.

DYERS ROCKET. Whole plant, can be used either green or dyed, but flowers must have opened. Yellow.

GLOBE ARTICHOKE. Leaves and plant. Yellow and green.

ALMOND LEAVES. Bright yellow.

STOCK FLOWERS. Green and blue.

MARIGOLDS. Flowers; bright yellow.

BEEETROOTS. Roots. Yellow.

STINGING NETTLES. Bright green.

SEA HOLLY. Branches with leaves and berries, blue grey, very dark.

QUINCE.

PEACH.

APPLE.

PEAR.

MULBERRY. Chips and bark, give various pinkish and copper colors.

ELDER BERRIES. Green, blue.

YELLOW DAISY. Flowers. Green or blue.

Designs

The designs are all taken from Athos, and if the rugs are genuine that is to say of the highest quality; dyed from vegetables; and of unmixed Athos design the village signature will be found in the form of what is known as the 'nut-cracker' double headed eagle. It usually appears as a small border, or a motive in a larger border, and sometimes single in the center itself. This is the oldest double headed eagle on the mountain, first used by hermits as wooden carved nutcrackers, later as brass tongs for incense burners. No rug coming from Pyrgos is genuine without it.

EYE, FILM, AND CAMERA
BY RALPH EVANS

Several months ago I received a copy of Mr. Evans' new book, Eye, Film, and Camera in Color Photography. (John Wiley and Sons, Inc., New York, 410 pages, \$8.95) I searched in vain for a reviewer, first in my mind and then by correspondence. I then happened across a review in Popular Photography by Editor, Bruce Downes which I felt expressed my reaction very well. The following is a reprint of this review:

Ed.

"Despite its rather formidable title, this is one of the most important books on photography to have been published in years. Evans, director of the Color Technology Division of the Eastman Kodak Co., has been doing research in his chosen subject for many years during which he has been lecturing and writing books full of his stimulating findings. His books have been priced on the high side and have appeared under a scientific halo that has not helped their popularity. This one is no exception, but photographers who let this mislead them are missing the kind of enlightenment that could make them better photographers.

Although principally about color this book is actually a major work on photography in which the author presents by far the most thorough description of photography as a process, as a descriptive medium, and as a creative tool yet to have appeared. Concerned as it is with the psychology of vision, Eye, Film, and Camera sheds tremendous light on the great potentials and limitations of photography and winds up as one of the best books on photographic esthetics available. It is full of illuminating insights and gives profound meaning to a craft that for too long has been approached superficially by teachers as well as photographers."

Bruce Downes

ELSIE MURRAY
ON VISION

The Newsletter received a reprint of VISION; COLOR; TESTS by Elsie Murray, Cornell University. (October, 1958)
The reprint is taken from Medical Physics, Vol. 3 edited by Otto Glasser, Copyright 1960 by the Year Book Publishers, Inc., Chicago.

A summary cannot do this reprint justice. Those Newsletter readers who are interested in color vision and color vision tests and who have not read this work should obtain a copy and read it as it was written.

BASIC BOOK OF MODERN
COLOR PHOTOGRAPHY

Writing on color for the neophyte is a formidable task. The subject is so big and fraught with jargon that authors must feel that the reader is frightened off before he becomes acquainted with the fascination of the study of color.

It is always interesting to see how an author will approach this task, and to speculate on the likelihood of his success. Authors Hollis Todd, and David Engdahl plunged into this subject in a recent article in Modern Photography magazine (September 1960). Their work, Basic Book of Modern Color Photography (Part One), attempts to explain in simple, though accurate, terms such complex notions as color temperature, additive and subtractive color mixture, spectral emittance, spectral absorbance, and analysis and synthesis in color photography.

Teaching beginners something about color is not new to these authors. They are both on the staff of the School of Photography, Rochester Institute of Technology. Whether they have been successful or not remains to be seen. That their approach is interesting and refreshing is evident to those who have read Part One of their book.

USE OF A GROUP SCREENING
TEST FOR COLOR VISION
DEFECTS

The Canadian Medical Association Journal, June 18, 1960, carried an interesting article by A. G. S. Heathcote, D. D. Brooks and A. L. McKay. The article describes an attempt to screen school age children in Canada for color vision defects.

The authors were aware that many young men did not know that they had defects until they were tested by industrial organizations. Since the problem could not be solved economically by administering tests individually, it was decided that group screening would be attempted.

The authors thought that the simplest method of group testing was to obtain slides for projection by photographing H-R-R pseudo-isochromatic plates. Several kinds of color film were used with careful photographic technique. The resulting slides were screened by specially selected individuals.

After considerable testing in Canadian Schools, (sixth graders were found to be the most responsive) the authors selected fourteen slides to be used in group screening. Over 80% of the group under test can be eliminated, and the remaining 20% can be given individual tests. A very considerable amount of time can be saved by this group screening, and mass testing of school children is feasible.

EVERETT CALL FORMS
A NEW COMPANY

In July 1960, Everett R. Call announced the formation of a company devoted to the development of economic, marketing and statistical research programs for individual companies, trade associations and federal agencies. The name of the company is United Marketing Services, 1000 Vermont Avenue, Northwest, Washington 5, D. C.

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