After a slow start, a number of entries have come in for the first assignment in the ASSIGNMENT 3-D competition announced in the July/August '91 Stereo World. Additional images which arrived ahead of the March 15, 1992 deadline for the "Urban Detail" assignment will appear in following issues.

Next assignment: "Animals"

By this we mean any life form other than plants or humans. Wild, domestic, fuzzy, slimy, endangered, microscopic, flying, biting, burrowing, slobbering or sleeping animals are eligible. Selected for publication will be those images using stereo in a way which best reveals some aspect of the creature pictured. Deadline for the "Animals" assignment is September 15, 1992.

The Rules

As space allows (and depending on the response) judges will select for publication in each issue the two or three best views submitted by press permission for its one-use reproduction in Stereo World. All other rights are retained by the photographer. Send all entries directly to: ASSIGNMENT 3-D, 5610 SE 71st, Portland, OR 97206.

“Sewing Machine Fence” by Otto Willau, Vienna, Austria, 1991. In the outskirts of Vienna, where Mr. Willau lives, are many houses inhabited by do-it-yourself types who create interesting yards and gardens. This fence was built with the heavy cast-iron side parts of old treadle sewing machines - a better fate, at least, than the scrap metal furnace. Camera: Twin Yashica 108. Film: Fujichrome 50.

“The Giant Web” by Michael Passarelli, Flushing, NY. This view of the Brooklyn Bridge was taken with a Realist on June 6, 1991. Kodachrome 64, 1/150th, f/11.

Prizes are limited to the worldwide fame and glory resulting from the publication of your work. Anyone and any image in any print or slide format is eligible. (Keep in mind that images will be reproduced in black and white.) Include all relevant caption material and technical data as well as your name and address. Each entrant may submit up to 6 images per assignment. Any stereographer, amateur or professional, is eligible. Stereos which have won Stereoscopic Society or PSA competitions are equally eligible, but please try to send views made within the past eight years. All views will be returned within 6 to 12 weeks, but Stereo World and the NSA assume no responsibility for the safety of photographs. Please include return postage with entries. Submission of an image constitutes permission for its one-use reproduction in Stereo World. All other rights are retained by the photographer.
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Front Cover:
Stereoscopic X-rays have been known for years in medicine and industry. In the case of flowers, radiography is used not to find broken bones or tumors, but to reveal details of the inner structure without cutting and peeling away much of what you wanted to see. Done more for art than botany, NSA member Albert G. Richards has been making them for over 30 years. What makes his images truly special is that many are stereo pairs, like this gracefully sensual Columbine blossom. For more such views and Mr. Richard's account of how they are made, see "3-D Floral Radiographs" on page 20.

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Member, International Stereoscopic Union
If you haven’t renewed your NSA membership by now, you’ve blown the deadline for the basic $22 bulk mail subscription rate. Before letting any feelings of despair over this dominate your life, remember that for only another ten dollars you’ll receive this first class publication by first class mail. (And you’ll be reading it up to four weeks earlier than the bulk mail. (And you’ll be reading it up to four weeks earlier than the bulk mail subscribers.) More important, you won’t miss the many fascinating articles coming up in 1992.

The amount and variety of material that arrives in the mail continues to amaze me. Anything from article ideas to filler to news items to complete features can show up – sometimes in combinations that overflow the mailbox. When all of this is added to the already scheduled articles and columns, a unique publication results – one that is well worth the slight added expense of first class postage. This issue’s feature on B.F. Childs and our recent features on Samoa and H.H. Bennett are typical of the well researched stereo history articles currently in the works for future issues. (Overdue thanks must go to NSA Board member Andy Griscom for his help in editing such major articles. It allows me more time for the million and three little details cluttering up the rest of the operation, as well as a bit more time for sleep some nights.)

Our coverage of the emerging technology of micro polarizer arrays, in this issue’s “The 3-D Cutting Edge”, is equally typical of the way we try to stay on top of current developments in the whole field of stereo imaging. This particular advance (in essence, independently polarized pixels) has the potential of making 3-D video practical and affordable on a large scale. Combined with high definition screens, the concept could offer sharp stereo images with no flicker, restricted viewing angles, or loss of color. Only polarized glasses would be required for viewing.

**VR!**

Of course the hottest 3-D topic currently is Virtual Reality, and the few who haven’t at least heard of it will soon have that gap closed thanks to the movie *The Lawnmower Man*, which may do for (or to) VR what *Star Wars* did for holography. Much more on the hardware, software, and various implications (both social and stereographic) of virtual reality systems will be appearing in these pages as the strange looking helmets steadily move into that place in public awareness once occupied by the stereoscope. Despite their popularity and wide distribution, holograms are still actually created by very few people working with relatively expensive and complex technology. Virtual reality, on the other hand, may soon offer anyone the chance at 3-D interaction – first through arcades and later as a consumer item as rapid advancements in computer and video technology continue. Will this eventually expand and enrich people’s appreciation of stereo images? It could be that an image one manipulates directly in three dimensions will have far more of such an effect than any number of holograms floating on cereal boxes or credit cards. Between virtual reality systems and things like micro-polarizer arrays, 3-D images could well become more common than flat ones in a decade or so. Your experiences with (or thoughts about) VR are invited.

**Next –**

After a long absence, the popular feature “The Unknowns” will return to *SW* starting with the next issue. Neal Bullington will again select unidentified views for reproduction and present the solutions sent in by readers. Also returning will be a feature seen every four years, our stereo coverage of the New Hampshire presidential primary election campaign by frequent *SW* contributor Laurence Wolfe. ☑

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**Nell Treadwell**

Nell Treadwell, wife of former NSA president and current board member T.K. Treadwell, died February 17, 1992. Nell and Tex met in graduate school and were married in 1942. As well as singing, she played and composed for both organ and piano and taught music in Texas and Maryland schools. Deeply interested in all aspects of history, she actively researched her family genealogy and preserved much of the photographic record. Her historical interest extended to antiques, and she became an authority on early glass and silver, documenting her research in extensive writings.

She had suffered from heart problems for several years and had recently experienced several strokes, leading to her hospitalization in February. Nell will be missed at NSA conventions by the many members who found her company and conversation a delightful and calming respite from the hectic pace of programs, meetings and trading. Our thoughts and sympathies are with Tex, who has done so much in every area over the years for the NSA. ☑
Samoa

I am more impressed than ever with the readers of Stereo World. Since the publication of my article "Samoa: Stereoviews and Stereotypes" I have heard from several collectors with information I was not able to turn up in two years of extensive museum and library research.

Both Rob Oechsle of Okinawa, Japan and Dorothy Truhon of Gainesville, Florida wrote to say that Keystone #16405 (fig. 7 in the article) was originally published by Kilburn (#8377) under the title "Samoa Baby at the World's Fair." That this image was not made in Samoa, but was later marketed as though it had been seems to affirm my point that the content of a popular image was less important than its function as a blank canvas to hang a caption on. Mrs. Truhon also informs me of several other Kilburn/Samoan/Chicago images of which I was unaware.

Readers should know that the Southeast Museum of Photography, of which I am director, is planning a survey of popular imagery of Seminole Indians for the summer of 1993 which will include stereos. We would be delighted to hear from collectors willing to lend material for this show.

Alison Devine Nordstrom, Director
Southeast Museum of Photography
Daytona Beach Community College
PO Box 2811
Daytona Beach, FL 32120-2811

Dorothy Truhon also suggested that readers could help identify other ethnic groups photographed at that 1893 World's Fair. This would especially apply to images later published by the same or other view publishers WITHOUT mentioning in the title that they were taken at a fair or other exposition.

- Ed.

The stereo article on Samoa (Vol. 18 #4) was most interesting in view of my having worked there for a few months in the early '80s.

While I can't ascertain past stereo-typing of Samoan cultural life activities such as siva-dancing, tapa-making or kava-drinking, I can say that I participated in the annual "Palolo sea worm" harvest by standing hip-deep in seawater for a few hours. The Palolo is an edible worm that migrates in swarms past the islands on one or two nights a year and is a prized delicacy.

But would it be worth stereophotographing the yearly American Samoa dog-shoot, in which village hunters are issued rifles to hunt down the undomesticated offspring of village and house pets? The sight of a pickup truck full of dog carcasses passing through Pago-Pago is not the idea of a tourists' paradise. Nor would stereo macro close-ups of the old wooden clothespin style implements used by the Samoans' ancestors in their eating of "long-pig," or ritual cannibalism.

More preferable would be stereo shots of pretty pastel colored homes and thatch "fales" (huts) in outlying coastal villages. And so too, macro shots of butterflies and gorgeous flowers. And stereo images of modern day Samoan women who are taking their place as off-island fashion models on the Pacific Rim. Not to forget stereophotos of the present German inhabitants of the former German Samoa, like the woman I saw walking to a neighbor's house carrying a black glass cake cover with its iron cross style handle.

Perhaps someday I'll return to American Samoa and properly image Robert Louis Stevenson's grave - in stereo.

Ron Paul Smith
Sharon, MA

The concern of turn-of-the-century stereographers (and more so of the view publishers who wrote the captions) seems to have been to present the Samoans as innocents in need of American guidance and protection. Unlike many views from the Asian mainland, negative aspects of Samoan life weren't stereographed or published due largely to this paternalistic approach to "our Pacific Island cousins". A similar slant to any published stereographs today (see the review of "La Guadeloupe" in NewViews) would be in an effort to protect tourism, as you suggest. What would really be the most interesting and revealing would be a stereo "Day in the Life of Samoa" treatment produced by about a dozen photographers from around the world as well as an equal number of SAMOAN photographers.

- Ed.

The Stereo Credit Crunch

Fred Lightfoot made some good points in his letter [SW Sept./Oct. '91 page 13] about stereo publishers giving credit. Many people you wouldn't suspect used images from others, and giving credit was rare. If you pirated the view, then you probably didn't want to identify the source; if you bought it, you didn't have to.

Take John Soule of Boston, who bought hundreds of negatives but was pretty scrupulous. Sometimes, as with his "Skeleton Leaves" series, he not only credited the maker, but noted the copyright. On the other hand, he seems to have often bought views with the right to copyright, as with his images of California made by Hazeltine. In other cases, if you read the fine print, he distinguished between what he bought and what he photographed himself. His post-war images of Charleston, made by George Barnard, identify Soule just as "Publisher" and say only that they were "Taken on the spot...". But for the series immediately following, of the Portland fire, he claims that they were "Photographed by John P. Soule".

B.W. Kilburn of New Hampshire was not as ethical. Starting in the 1870s he either bought or pirated views from dozens of people such as Wilson, Hazeltine, Braun, Good, England, Soule, and Ferrier & Soulier. He copyrighted practically (Continued on page 37)
Among the earliest of the 19th century photographers to arrive in the upper Peninsula of Michigan was Bernard (Brainard) Freemont Childs, a Civil War veteran who first arrived in Houghton during 1867-68. Undoubtedly one of the most prolific photographers of the Lake Superior region, Childs practiced his art for over twenty years, and eventually compiled a stereoscopic view list of at least 500 images. With his assistants, Childs sailed the entire Lake Superior shoreline in his small sailboat named The Wanderer, and documented those voyages through hundreds of stereographs he published under the title "Gems of Lake Superior Scenery." His arrival in Michigan marked the emergence of one of the more notable careers among Lake Superior photographers and sparked some interesting and significant relationships among photographers from that region.

Childs arrived in Houghton at 25 years of age, having spent time in the Civil War as a member of the 2nd Vermont Infantry Regimental Band, a group of 23 musicians, all volunteers. Though his service lasted only from June to December of 1861 – due to the dismissal of regimental bands by the War Department as an unnecessary expense – it had a lasting impact on his life. Childs suffered severely from diseases throughout his service and was given a furlough from 4 September to 14 October.

B.F. Childs employs his artistic skills painting a sign advertising the gallery selling his Michigan views, about 1870. Marquette County Historical Society Collection.
Taken by army ambulance to Washington, he was sent to his hometown of Wilmington, Delaware to convalesce. His diseases resulted from exposure during and subsequent to the army campaign that culminated in the First Battle of Manassas. Years later Childs wrote a lengthy description of his afflictions, particularly that he suffered painfully his entire life from chronic diarrhea, rendering him unable to perform manual labor, especially in his later years. This may account for his decision to leave the photographic profession after some twenty or so years.

The incorrect spelling of Childs' first name from Bernard to Brainard appears in records and documents for the duration of his lifetime. The error is traced to his wartime service and was finally clarified when he applied for a government pension for that service. According to a deposition taken by Childs, and witnessed by his lifelong friend and fellow photographer Daniel Cross, Childs "...further deposes that his regiment was in line to march on a reconnaissance into the enemy's country that resulted in the engagement of Drainsville [sic], Va, when the furlough was...

"Among the Copper Mines." Views under this title form part of a subseries to "Gems of Lake Superior Scenery", in which Childs provided an extensive stereo record of Michigan's copper and iron mines.
After the discharge of the 2nd Vermont Regiment in December of 1861, Childs remained in the Washington, D.C. area, and later operated photographic businesses at nearby Fort Alexandria and Richmond, Virginia. Existing cartes de visite with his advertisement on the back reveal that he also spent some time working as a photographer in Marblehead, Massachusetts. From there Childs spent a short period of time working up photography was Daniel Cross from Vermont. Cross and Childs became lifelong friends after they served together in the Civil War. Cross himself was a member of the photographic profession for well over fifty years, being among other things one of the first manufacturers of the gelatin dry plate.

"Old Nokomis - Sault Ste. Marie." Childs' views of Native Americans are highly regarded as being among the most intimate and revealing of the living environment, despite the lack of the subject's full name in the title.

brought to his cot, and it was then too late to correct the spelling of his first name, and he further deposes that Bernard F. Childs and Brainard F. Childs are one and the same person."

Bernard Childs was an artist prior to his enlistment in the army, and given his fondness for such arts as music and painting, it is not surprising that he entered the photographic profession. The individual responsible for Childs taking
ing in the photographic portraiture business in Vermont with his friend Daniel Cross.

The young artist moved from Vermont to northern Michigan’s Keweenaw Peninsula during 1867-68 to pursue his photographic career. Among the photographers who already had established themselves in business there was Christian B. Brubaker from Houghton. Shortly after his arrival, Childs began working with B.F. Childs No. 73, “Indian Bural Ground, L’Anse.” Stereographic evidence that missionaries had reached the north shore of Lake Michigan long before Childs brought his camera to record the Chippewa people.

Brubaker, who is best known for his photographic publishing business. He began printing Childs’ first images of the Lake Superior region as a stereoscopic series titled, “Lake Superior Views”, which were published on yellow mounts from his Houghton studio. Besides “Lake Superior Views”, Childs and Brubaker published a second series, “The Picturesque of Lake Superior”, which also were printed on yellow mounts. All information about these early images was always printed on the back. A large proportion of the images portray the copper mining industry, which was the early lifeblood of the town of Houghton. Both of these series were printed by Brubaker during the late 1860s and into 1870.

B.F. Childs No. 23, “The Pictured Rocks. The Castle.” As precisely composed as a painting, this gem among the “Gems” illustrates Childs’ skill with the classic, 19th century stereo scenic tradition.
While some of Childs' earliest images from these two series do exist, they are not as familiar as his later work. Some of these early views (yellow mounts), particularly the copper mining activities and Chippewa Indian images, were also published later as part of Childs' third and most popular stereoscopic series, "Gems of Lake Superior Scenery."

By 1871 Childs had moved to Marquette, a bustling harbor town experiencing tremendous growth due in part to the iron mining industry. He opened his own studio on Front Street, which overlooked the harbor. His business, called "Childs Art Gallery", became one of the largest and best known studios in the Upper Peninsula.

Childs' studio was successful enough that he soon employed at least two assistants, Charles D. Cole and E.C. Hafer. While Childs himself photographed and traveled throughout the northern region, it appears that the studio still functioned in his absence. Childs and Cloe developed both a personal and professional relationship, as Cole first became a manager and eventually part-owner in the studio business. Cole himself also frequently appears in numerous stereographs taken by Childs.

Sometime in the early 1870s Childs began traveling along the Lake Superior shoreline in his small sailboat, The Wanderer. With one or two of his assistants, he eventually traveled the entire

"Victoria Point. 300 feet high."
shoreline, documenting these voyages through hundreds of stereographs. It was primarily from these voyages that Childs was able to produce "Gems of Lake Superior Scenery", his largest and best known body of work, printed on orange mounts. Many of these images also were labeled with a subseries which represented a variety of topics: "North Shore Ramblings", "South Shore Ramblings", "Views of Mackinac Scenery", "Among the Copper Mines", "Among the Iron Mines", and "Winter Scenery on Keeweenaw Point."

B.F. Childs had a habit of numbering his negatives, although all were not consistently labeled. This numerical sequence helps to determine travel patterns which reflect Childs’ various trips along the shoreline. The numbering also has helped to identify the gaps that exist within that series.

In addition to the magnificent scenic record that he created and both the copper and iron mining activities he recorded, Childs photographed the Chippewa Indians who lived throughout the Lake Superior region. In fact, the late William Darrah identified Childs as one of the more notable photographers of American Indians during the years 1860 through 1892. Childs made a notable num-

"Among the Iron Mines of Lake Superior." An underground view of an 1870s workplace that today looks more like the set of an Indiana Jones movie.
ber of photographs of the Chippewa tribe. The bulk of these images are from the Sault Ste. Marie area, where he photographed the Indian villages along the Saint Mary's River. Childs also photographed the Garden River area, located on the Canadian side of the Saint Mary's River. He recorded the Chippewa from the L'Anse Reservation near Baraga, and Beaver Bay, located along Lake Superior's north shore. Childs' photographs depict a range of well-known personalities among the Chippewa, including "Old Nokomis" and "The Rapids Pilot" as well as revealing a lifestyle that included whitefishing, basket-making, and canoe-building. The intimacy that Childs was able to capture in his images imparts an obvious trust between him and the people he chose to photograph. One of the men appearing frequently in Childs' stereographs is an Indian who perhaps acted as a guide for the photographer.

Childs owned and operated a thriving photographic business in the upper peninsula of Michigan for well over twenty-five years, from 1870 through the 1890s. The serendipitous find of his original business ledger, which covers a seven year period from 1871 to 1878, reveals an incredible volume of stereographs produced and marketed by his galleries. The ledger also provides an unusual glimpse into a photographer's business operations during the 1870s. He was shipping gross lots of his stereographs to all the notable photographic companies, including E.H. Anthony & Company; Wilson Hood & Company; John H. Fesch & Company; Sammons Clark & Company; Lovejoy & Foster and Woodbridge & Forbes. In terms of photographic supplies, "10% ounces of nitrate silver cost $10.12, and 8 dozen albumen paper cost $7.40." Childs was selling stereographs for $18.00 per gross, $3.00 per dozen or .25 each. Moreover, Childs Art Gallery, complete with a waiting room, carried a large supply of frames, paintings, and other photographic supplies. Stereoscopes were available for $1.50 each. The ledger also reveals that Childs and his assistant Charles Cole were making a good salary for the time. During 1872, from February 1st to November 14th, Childs earned $1104.45 and Cole made $568.00. These salaries reflect the volume of photographs that were being produced by the Childs' Art Gallery.

Confusion as to the proper credit of Childs' images may be traced back to his business partnership with two photographers who were mainly publishers of stereographs. These men were C.B. Brubaker, his original publisher, and William Whitesides. For a time, Childs' work was published by Brubaker from both Houghton and Marquette. Although he continued to maintain his Houghton studio, Brubaker had moved to Marquette to go into partnership with Whitesides in about 1872. They worked together publishing Childs' "Gems of Lake Superior Scenery" on orange mounts. A significant amount of Childs' existing work does not credit him as the photographer, but rather as published by Brubaker & Whitesides.

An important entry in Childs' ledger on January 8, 1873, details the dissolution of the co-partnership between Brubaker and Whitesides, who ended up working together only a year. Childs and Brubaker continued their business relationship, and another notable journal entry from August 11, 1874 notes the sale of an unspecified number of Childs' stereoscopic negatives to Brubaker for the sum of $3,250.

Adding further confusion to the problem of identifying Childs' work is that in April of 1880, he opened a second branch studio in Ishpeming, which was managed by Charles Cole. All of these images were printed on either gray or dark gray mounts to differentiate between the two galleries. The images printed from the Ishpeming gallery do not have Childs' full name on the mount, but just the
information “Gems of Lake Superior Scenery” and “Childs Art Gallery”.

Numerous examples of identical Childs’ images are found printed at least three different ways: on yellow, orange and gray mounts. They may be printed with or without Childs’ name on the mount, but published by Brubaker from either Houghton or Marquette, published by Brubaker & Whitesides from Marquette, or simply printed “Childs Art Gallery” from the Marquette of Ishpeming studios.

Childs remained active in his photographic business until 1884-85, when he and his wife, Fannie, moved to Arkansas City, Kansas. By 1893 Childs was in business again, this time as a druggist, working with a partner named Jonathan B. Hull. This business, known as Childs & Company, was in operation for over twenty years until Childs retired in approximately 1916. During the early years when Childs was living in Kansas, he continued to maintain the studio and photographic supply shop at the Marquette gallery. In the early 1890s the studio changed proprietors when Childs sold his photographic business to his first assistant, Charles Cole, who kept the original studio name.

Bernard Childs was 79 years old when he died in 1921 in San Diego, California, where he had gone to live with his sister Louise Allen after the death of his wife in 1918. Married for over 44 years, the Childs had no children. Consequently, Childs left a large portion of his estate to St. Paul’s Episcopal Church in Marquette for the purpose of establishing a home for the poor.

Although B.F. Childs died over seventy years ago, he left a visual legacy of over 500 images that truly represent northern Michigan’s unique and vibrant history. It seems only fitting after all the years of little recognition, that he finally be acknowledged and honored with the other notable 19th century individuals who practiced the art of photography.

Sources


Veterans Administration Pension File, XC2557, 799. Childs, B.F.


Original business ledger of B.F. Childs. Located in the archival collections of the Marquette County Historical Society, Marquette, Michigan.


Lynn Mitchell has been researching photographer B.F. Childs for five years and is presently writing a book about him. In addition, she has compiled an index of Childs’ existing stereographs from both private and institutional collections. She would welcome any information about Childs or copies of his images that you may want to share. Contact Lynn Marie Mitchell, 2854 ½ North Euclid, Tucson, AZ 85719.
Virtual Sculpture
Computer Pairs for Virtual Reality Experiments Become 3-D Art
by Robert A. DeVoe

Picture this: You don a special helmet with goggles which cover your eyes with mini-video displays, slip your hands into sensing gloves, and suddenly you are in another dimension! You're walking - actually floating - in an exotic space filled with floating sculptures and glowing paintings. You can turn the pieces of art with your gloved hand, and by pointing your finger you can drift right through the wireframe chambers of sculptured forms. You can move various shapes to please your sense of design, and even converse with other travelers in this dreamlike world. How much this reminds one of the first experience looking through a stereoscope, but it is that experience magnified a hundredfold!

At the heart of this revolutionary brave new world is the computer with its incredible graphics potential. Some of the powerful new tools of Computer Aided Drafting & Design have begun to manifest their artistic potential in the hands of the modern artist, and with this new medium we can see a renewal of interest in stereoscopy. The rapidly developing experimental work in computer generated "Virtual Reality" requires realistic three dimensional simulations to give the you-are-there feeling so familiar to 3-D aficionados.

In my work as an artist, I've found the computer to be an exciting new medium which allows me to sketch my sculptural designs on an electronic sketchpad, and to view them in finished form long before I physically produce them. Along the way, I've been intrigued with the idea of producing "Virtual Art" for Virtual Reality environments, and this as an end in itself. The sculpture need not actually exist in physical material; it floats in the visionary space of the illusionary world created by computer programs.

The concept opens a whole new set of parameters for the artist. Virtual art lives in weightless space; mechanical considerations, strengths of materials, welding, shaping, support - all are out. I had forgotten how much these factors had influenced my sculptural work in the past as I tried to blend engineering structural strength with esthetics. You'll remember the classic Greek and Roman sculptures where the marble figure of a man leans against a tree trunk, so that the figure will not break at the ankles. How often I'd longed to be able to suspend a form in space with no visible support (to hover as it was, over other more earthbound forms) and ended up with a compromise solution. Now suddenly, freed from gravity and released from the labor intensive construction limits, I could do anything I imagined!

But, while it is certainly coming soon to the general public - I guesstimate well before the 21st century - Virtual Reality has a very limited audience of dedicated experimenters now, meaning that my Virtual Art would reach only a few. How does one exhibit Virtual Art? Faced with this dilemma, I have found two very promising answers. Currently I'm one of the directors of the DISPAR Virtual Reality Network,* a computer network bulletin board system accessed by users all over the country through their computer modems, and dedicated to the development of Virtual Reality interactive environments in the home. On that network, we're
I speak in tones of bronze
a whispered secret geometry
--
the pulse of living mantras
feathered, petalled and painted
in splendid fields forever.

Jewel in the Lotus

The Oracle

The Oracle

The Emisisary

The Emisisary

experimenting with stereoscopy via computers as the essential first step in the process. We've developed stereo graphics and images and have devised a simple but effective aid to stereoscopic free-viewing: a device made of cardboard which fits on the monitor screen and directs the eyes for cross-eyed viewing. We also use anaglyphic (red/green) stereo pairs for viewing as well. For my first exhibition on DISPAR in January, users downloaded stereo pairs designed for viewing on the computer monitor. The sculptures shown in the illustrations for this article actually float in space in front of my monitor, and I can pass my hands through them.

The second answer to the exhibition dilemma is actually not very new. I remember seeing 3-D movies with the red/green glasses, (and later with polaroid filter glasses) and how much I was moved by that experience – even if the movies were incredibly bad! Why not have an exhibition of Virtual Sculpture all done with anaglyphic drawings, and hand out red/green glasses to the patrons? Imagine walking around an apparently bland exhibit of drawings, only to have the drawings float off the walls in moving three dimensional form!

Again, testing a few samples with patient friends has yielded startling results. Viewers soon discover that the sculptures appear to follow them as they move about, almost like seaweed forms which, while rooted to the sea floor, sway as passing currents move them. Watching people discover this is entertaining; they stand and sway back and forth as if drunk, and pass their hands through their hallucinations like magicians casting spells. So again, I'm making

* DISPAR Virtual Reality Network is an international computer network BBS offering a variety of online services emphasizing educational applications of Virtual Reality, but is by no means limited to that purpose. It offers Conferences for special interest groups, Electronic Mail, Online talk sessions, and Archives as well as many other services. Their address is: DISPAR, 31 Columbia, Aliso Viejo, CA 92656. Voice phone: 714-831-1776. Modem: 714-831-9101 (2400 baud 8N1).
arrangements with a gallery in Laguna, California for an exhibit of my Virtual Sculpture in early spring of 1992.

The sculpture designs which illustrate this article are preliminary versions of the works I'll be exhibiting. I designed them using a program called AUTOCAD on my home computer, an IBM 386DX with super VGA color monitor. Autocad has been an architect's dream machine ever since it evolved and is certainly the most remarkably versatile drafting system ever developed. Used primarily to blueprints of buildings, machines and other objects, it can take a blueprint and instantly display the finished object in natural perspective. Thus an architect may use Autocad to draw plans for a building down to the finest detail, and then translate that set of plans into a perspective view of the building, and virtually walk through the building to see what it will look and feel like when complete. So extensively has Autocad become a part of the design-engineering world that a special network of computer bulletin board services has evolved where users may seek advice and exchange information on CAD programming. I am especially indebted to two CAD programmers on that bulletin board service, Ron Lloyd and Dennis Shinn, who suggested some of the 3-D techniques I've used. Ron Lloyd, for example, developed a system for creating anaglyphic superimpositions on screen for full screen viewing, and I have adapted his system to my needs.

In my art work, it is a tremendous advantage to design the sculpture in blueprint form and then to view it in perspective from any angle; to walk around it as it were, and to lift parts off from one place and try them in another. When the construction phase is finished, I then display the object in perspective on screen in side-by-side stereo views - my point of view displaced by the distance between my eyes - and watch it float in space before me. It has opened an infinity of potentials for my art and for worlds undreamt of for us all.

"Mantis" is one of the sculptures created by Robert DeVoe with the help of computer generated stereo imaging. With the ability to create free-floating 3-D structures without the limits of wood, steel and plastic via the computer, he has now dropped the final step of actually building a physical object in favor of "Virtual Sculpture" existing only in the perception of the viewer. As the artist puts it, "The anaglyph is the piece; the medium is the message!"
Fame is fleeting. Artist and gadfly Andy Warhol is said to have stated that everyone is famous for fifteen minutes. Of course that is not so. It cannot be true even on average. A few people are famous for much longer. But most of us are never famous (whatever that means) at all. And of those who are, very few will be remembered for long once their moment is past. To appreciate this one has only to spend some time trying to trace the identities of some of the “famous” people of the nineteenth century whose stereo images graced the commercial viewcards of theatrical photographers such as Jeremiah Gurney and Napoleon Sarony.

When I wrote an article for Stereo World several years ago on “The Birth of Burlesque in America” (Jan./Feb. ’86) it was illustrated with quite a few stereo views made by these productive photographers. In covering the so-called British Blondes (the Lydia Thompson Burlesque Company) I deliberately omitted a picture of talented Alice Atherton, an American girl who joined The Blonds in 1870, although I had several excellent examples to choose from. The reason for the omission was that I discovered a discrepancy between the views I was certain were of Alice Venie Atherton, who remained active in vaudeville until 1926. She and her sister Alice Atherton apparently shared an appointment in front of Gurney’s camera and used the same shoulder drape for the two views on this page.
Atherton and an illustration showing a different girl so identified in Blum's *A Pictorial History of the American Theater*. This other girl, whose stereo portrait I also had on hand, apparently also was an Atherton, at least on stage. The trouble was that I could find no second such person listed in the usual sources, and this created an unacceptable doubt that I had to resolve before running a picture which might turn out to be of the wrong performer. So, I withheld the portrait I intended to use. These people were "famous in their day and now no small effort was needed to sort them out. Fame is indeed a temporary condition, which I suppose offers some consolation to those of us who will miss out on Warhol's promised fifteen minutes.

Alice Atherton. Unlike all of her contemporary actresses, she eschewed wearing earrings when sitting for stereo portraits.

This especially appealing portrait of Alice Atherton by an unidentified photographer dates from about 1870 when she was a very popular addition to the British Blondes.

The Mystery

The unraveling of the "Atherton Mystery" is interesting in itself as it illustrates the problems encountered in identifying the celebrities pictured on the old viewcards. Many *Stereo World* readers have in their collections several or more of these, issued mostly but not exclusively by Gurney and Sarony between about 1865 and 1875. I have heard them referred to as "ladies", "beauties" etc. This reflects the fact that most, but not
all, of the people pictured are female. Inevitably some of us become curious and wish to find out more about the subjects. Who were they? Why were they chosen to be so honored? Our collections are always more valuable to us when accompanied by all desired background information. This can be obtained only by someone's effort — hours in the library seeking out sources or reading microfilms of ancient newspapers. Deduction and detective work are always part of the business — a necessary part.

Many of the commercial pictures (some 3-D and many 2-D) have an identification on the mount. The ideal is a printed name under the picture. Usually we are not so lucky. Most other portraits, when identified at all, carry a penciled notation placed on the back of the mount by an employee of the issuing photographer. Some of these can be read without much difficulty but others, after more than a century of rubbing, have all but been erased and are very difficult to discern. Another group, though often better preserved, can best be described as examples of "handwriting from hell" and defy us to interpret what is written. Added to this are spelling difficulties in which the name may be misspelled or approximated phonetically. In some cases an incorrect name is given, but usually the listed name is valid if one can read it.

Wearing tights was characteristic in shows featured as burlesque or extravaganza. Stereographs such as this one of Alice Atherton dressed in one of her stage costumes are not easy to find.

To illustrate further elements that can confuse identification, consider the case of Kate Firmin, a lovely actress of the 1870s who became known as "The Beautiful Brunette". Some of the stereo views showing a portrait of Kate simply bear the penciled notation "Brunette" on the back.

Alice and Her Sister

In the case of Alice Atherton, some viewcards have the full name but more simply say Atherton, and some carry no identification at all. The complication is that there is another girl whose portraits also carry the Atherton name. I have two stereo pictures, from the same sitting, of this second girl. One has "Atherton" penciled on the back and the other similarly has what appears to be "Effy Atherton" with the first name very hard to read. Still, there were now two Athertons and none of the references I appealed to suggested the existence of anyone but Alice.

There is a reference book, *The New York Times Obituary Index*, which locates the date, page, and column of the newspaper's obituaries for individuals, listed alphabetically. This, along with microfilm files of the newspaper, is a major starting point for tracking down information on persons so listed. But it is not infallible. I have found that someone important enough to receive front page treatment or even a separate write-up away from the necrology section, may have been omitted in the listings. In the case at hand, neither of the Atherton ladies was listed in the index although informative obituaries had appeared in the newspaper. This led to a substantial delay in solving the Atherton mystery as it became a back-burner item on my list of priorities.

I was quite certain that the two girls were sisters. Though there is a resemblance in the pictures, the main clue lies in evidence that both girls sat for stereo views by Gurney at the same time and in fact used the same shoulder drape. The pictures are illustrated here for comparison. I owe it to NSA member Jacob Wolfson of Salem, MA for locating the New York Times obituaries of both ladies and clearing up most of the questions related to the mystery. He was also able to verify the identity of the second girl by matching the picture misidentified as Alice Atherton in Blum's *A Pictorial History of the American Theater* with a correctly identified copy of the same picture in the *Catalog of Dramatic Portraits* in the theater collection of the Harvard College Library.
American musical comedy.

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together both in England and America. Alice was working in

Brooklyn, NY in early 1899 when she caught cold. This turned to

pneumonia and Alice Atherton died suddenly on the morning of

February 4, 1899. Theatrical historian Odell referred to her as a good and true burlesquer. She was said to

have a quick memory and adapted well to changing bills and frequent rehearsals. Because of her

success at one point with a laughing song she was sometimes referred to as Laughing Alice Atherton.

From the Age of Three

Alice Atherton was born in

Cincinnati, Ohio sometime around 1847. Her maiden surname was Hogan. She first appeared on stage in that city at the National Theater when she was hardly three years old, carried on for the baby part in “The Sea of Ice”. She was onstage almost constantly from that time. After playing children's parts in Cincinnati, she played in Louisville and Mobile, where she joined the touring Lydia Thompson Burlesque Company (the so-called British Blonds). This led to a three year stint with the Blonds in New York at Woods Museum, starting with the 1870 season. During this time the theater played to packed houses and was restored to financial health. It should be noted that in those days burlesque was comedy, skits, song, and dance and did not carry the disreputable connotation earned in the twentieth century by certain derivative theatrical forms. It did however feature ladies wearing tights which struck a risque chord in the tenor of the times.

Also in the cards for Alice was romance and marriage, which arrived in the form of an inventive comedian, Willie Edouin (real name William F. Boyer), who married Alice and shared the good and lean times until Alice’s death at the end of the century. They had two daughters, one of whom used the stage name Daisy Atherton and acted in England and America for many years.

Alice and Willie toured extensively with burlesque troupes such as Rice Surprise Party and Willie Edouin’s Sparks. They went to England to live in 1884. After failing at theatrical management, Willie and Alice worked separately and together both in England and America. Alice was working in Brooklyn, NY in early 1899 when she caught cold. This turned to pneumonia and Alice Atherton died suddenly on the morning of February 4, 1899. Theatrical historian Odell referred to her as a good and true burlesquer. She was said to have a quick memory and adapted well to changing bills and frequent rehearsals. Because of her success at one point with a laughing song she was sometimes referred to as Laughing Alice Atherton.

All in the Family

Alice Atherton’s sister seems to have performed in Burlesque and later vaudeville with the stage names Venie Bennett and Venie Atherton as both are listed in the records. She does not seem to have reached the success that Alice attained in her younger days but continued to perform in vaudeville until 1926, a year before her death. She married the comic actor John A. Mackay, and they were together until his death in 1891. No children were listed in her obituary. At one time Venie Atherton had her own vaudeville act, “Where There’s a Woman There’s a Way”. Her photo in the Harvard College Theater Collection identifies her as Levine Atherton. It is suggested that the probable pronunciation was LaVenny, which became shortened to Venie, possibly in childhood.

As is the case with many performers, Venie Atherton’s age was understated in her obituary. But hers was lowered by more than ten years. One can suggest this was so stated by her only relative, niece Daisy Atherton, who may have felt her own acting career was furthered by obscuring the true age of her aunt and in turn her own age.

Such apparently benign little inconsistencies appear harmless but do indeed complicate the efforts of those of us who try to identify such once well-known celebrities. But then again, it does add to the spice of the game.

Who Was Who?

The use of stage names by performers has often confused the process of researching them. And when they marry it compounds the problem. When Alice Hogan (a.k.a. Alice Atherton) married William F. Boyer (a.k.a. Willie Edouin) the combination of names under which they may be referred to in official and informal sources is correspondingly multiplied. One may have to track down all of these possibilities in searching for information. We have already seen that Lavine Hogan, Venie Bennett, Venie Atherton, and Mrs. John A. Mackay are all the same person. And Daisy Atherton, Alice’s actress daughter, would on official documents have to list her father’s true family name of Boyer.

As noted earlier, fame is fleeting. If you would like to identify some of the erstwhile celebrities whose portraits may grace your viewcard collection, expect the troubles outlined herein - and more. Be suspicious of all birth dates, distrust all stage names, and hope for luck.
While many people love and appreciate flowers, they may never realize or see the secret beauty that lies hidden within the blossoms. Of course when we close our eyes, we cannot see the beautiful flowers around us. But even with our eyes open, we see only that portion of the flower that is nearest to us. In a rose, the nearest petals hide from our view all of its secret details that lie beyond. Much of the beauty of the blossom is hidden. With the penetrating power of the X ray, 3-D floral radiographs dramatically show the details in all the successive layers of petals and other tissues.

Radiography, whether it is industrial, medical, dental, or floral is basically a photographic process whereby an object is exposed to X rays, and its image is cast upon a sheet of X-ray film. In photography, the film is located within a camera equipped with a lens. A tiny image of an object is cast on the film by the visible rays of light which enter the camera after being reflected from the surface of the object. There is no camera or lens involved in the radiographic process. When a radiograph is made.

Columbine. The graceful architecture of this blossom is beautifully revealed in 3-D. At the end of each of the five spurs is located a small round organ that generates the nectar stored within the spur. The amount of nectar in each spur is clearly seen in this illustration, but is never seen or photographed otherwise unless the spur is dissected. (All radiographs by the author.) © 1992 Albert G. Richards.
of an ailing tooth, for example, the X-ray machine is positioned near the patient's face and a film packet is inserted on the other side of the tooth, next to the tongue. The image of the tooth is always slightly larger than life-size, and the internal anatomy of the tooth is displayed within its silhouette. These same factors apply when making a floral radiograph (an X-ray picture of a flower).

Hyacinth. This blossom is composed of many florets facing outward from the central stem. When looking at either the left or right images alone, one is uncertain as to which direction each floret is facing. When fused into 3-D, the correct direction becomes apparent. Reproduced from The Secret Garden - 100 Floral Radiographs by Albert G. Richards (1991) ALMAR Company, Box 15174, Ann Arbor, MI 48104. © 1992 Albert G. Richards

Lily. The blossom appears to float far in front of the stereo window. The history of X-ray technology includes another stereo connection. In 1896, stereographer John Carbutt introduced the first specially formulated X-ray film, greatly reducing exposure times over those of regular photographic plates. (See "John Carbutt on the Frontiers of Photography" by William Brey, NSA Book Service.) © 1992 Albert G. Richards
The science of radiography is based on the fact that X rays can penetrate through an object, whereas visible cannot. Therefore, X rays enable one to "see" within the object. As the rays pass through the object, they are attenuated differently by portions of the object that are either thicker, denser or composed of higher atomic number elements than other parts.

When radiographing iron castings, broken bones, teeth or flowers, the penetrating power of the X ray must be adjusted to optimize the way the differences in thickness and composition of the object record on the film. The images are always in shades of black and white, since the phenomenon of color does not exist in the X ray spectrum. The process does not require the introduction of any chemicals into the flower, nor is the flower harmed by its exposure to X rays. The type of shadows produced by side-lighting in photography do not occur in floral radiography, nor do "depth of field" problems occur.

Great care is exercised in choosing and preparing a flower that is to be recorded. The chosen blossom should be fresh and undamaged. Clean flowers, in prime condition, are the starting point for making beautiful floral radiographs. Foreign materials, hidden within a blossom, would be visible on a radiograph and therefore must be eliminated before radiographing the flower. Occasionally a hidden insect is discovered that also must be removed. Dewdrops and raindrops record as ugly dark spots on the flower's image. These drops of moisture can be removed either by waiting for them to evaporate naturally or by absorbing them with pointed strips of blotting paper carefully inserted between the petals.

Wind and rain may deposit solid particles of dirt on a blossom. Some particles can be removed by the careful use of a tiny brush. Other particles, lodged deeply within a flower, can be removed with a miniature vacuum cleaner with probes shaped like large hypodermic needles. Debris adhering to the petals and fuzzy stems of some flowers can be carefully removed with sticky cellophane tape. Flowers grown in a greenhouse are usually much cleaner than those grown outdoors.

Floral radiographs are produced by placing the flower between the X-ray machine and the film. Either cut or potted flowers can be used with the film positioned vertically and the Z-ray beam directed horizontally. Movement of the flower, whether due to wilting or air currents, is always a problem to consider. Working carefully and rapidly usually minimizes this problem.

The sharpness of the image depends on the type of film that is used, along with geometric factors, such as size of the focal spot of the X-ray tube, the distance between the X-ray tube and the flower, and the distance from the flower to the film. The sharpest images, made with the least enlargement, are produced by placing the flower as close to the film as possible and as far from the X-ray tube as is practical. The time of exposure increases rapidly as this latter distance is increased. Ideally, the film should...
be located between two to five feet from the X-ray tube. Water or oil cooling of the anode of the X-ray tube is desirable to prevent damage to the focal spot during long exposures. Dental X-ray machines are not suitable for making good floral radiographs. The best floral radiographs are produced with beryllium window X-ray tubes, but only some medical and industrial X-ray machines have this desirable feature. Depending on the makeup of the flower, the proper tube voltage lies in a range from 20 to 30 kilovolts peak. Thick succulent petals record properly at higher voltages, while thin, fragile petals register better at lower values.

By law, dental and medical X-ray machines must have a certain amount of inherent, plus added, filtration present before they can be used with human beings. For floral radiography, only the inherent filtration of the beryllium window of the X-ray tube is employed. Most X-ray films are made with a sensitive emulsion layer on both sides of the film base. Any X-ray film can be used to produce a floral radiograph, but the second emulsion layer is of small benefit in this application because the major portion of the image will be recorded in the first emulsion layer. This is because the attenuation of these low energy X rays by the film base is considerable, and only a very reduced amount of the radiation ever reaches the second emulsion. The best floral radiographs are made using slower speed fine-grain X-ray film. When floral radiography is performed in a lighted laboratory, the film must be wrapped in a very thin sheet of opaque material, but if exposed in a darkened room, the film may be used uncovered.

The proper time of exposure must be determined by trial and error, since it is influenced by such variables as the type of flower, the speed of the film, the distance between the X-ray tube and the film, the X-ray tube voltage and current and whether the film is to be used bare or wrapped.

After exposure and processing, the radiographs can be used as negatives to produce contact prints or enlargements on photographic paper, with the image of the flower appearing dark against a white background. They can also be copied using 35mm positive [slide] film so the image of the flower appears light against a dark background, just as it appears in the radiograph. These small duplicates can then be placed in stereo mounts and the two images projected. A wider range of densities can be seen in a radiograph viewed by transmitted light than can be recorded on a radiograph viewed and viewed in a stereo viewer by reflected light.

Examples of 3-D floral radiographs of Columbine, Hyacinth, Lily and Star Magnolia blossoms are included as illustrations. After the first film of each stereo pair was exposed, the flower was rotated 5 degrees about its vertical axis, and then the second image was recorded on a second sheet of film. The two images correspond to what your left and right eyes would have seen if magically, you had been suddenly gifted with X-ray vision.

Ever since X rays were discovered in 1895, many people have produced 2-D radiographs of flowers. My making of more than 4000 2-D floral radiographs over a period exceeding 30 years has provided the necessary experience to develop this unusual art form of 3-D floral radiography to its present high degree of excellence. It literally provides one with a third eye with which to see and appreciate the hidden beauty of flowers.
Many different books were produced by View-Master during the glory years of Sawyer's. All of these books are fantastic works with amazing insight into the subject matter, factual descriptions, detailed text and absolutely wonderful View-Master illustrations. In our opinion the finest example of these works is the two-book set Mushrooms in Their Natural Habitats.

The book was written by Alexander H. Smith, Ph.D., professor of botany and botanist at the University of Michigan Herbarium. Dr. Smith was well known throughout the scientific world for his research work on Agaricacea (grilled fungi). He had written many scientific papers and books on the subject and was editor-in-chief of Mycologia, official publication of the Mycological Society of America. Although many works on mushrooms had been written prior to this time, Dr. Smith felt an in-depth study was needed to give the true picture, descriptive and visual, of the plants as found in nature.

Reel 1 Scene 2 of "Mushrooms in Their Natural Habitat" shows Aleuria Aurantia emitting spores. © 1992 View-Master Ideal Inc. A Subsidiary of Tyco Inc.

The stereoscopic color pictures, which are an integral part of the work, were taken by William B. Gruber, inventor of the View-master system. At the time of the production of this work, his official title was Chief Research Engineer for Sawyer's Inc. Mr. Gruber was well versed in stereo photography and a photographer of note in the field of educational photography. He spent over 11 years and traveled many thousands of miles to gather the photographic material presented in the publication. Many photographs of fungi in the southwestern United States were unavailable because of government imposed travel restrictions during World War II and much time and research went into finding other examples of the same or similar subjects.

Published in 1949, Mushrooms in Their Natural Habitats is composed of two volumes, 9 ½ x 6 ½", with red fabricoid binding.

Volume 1 consists of a 626 page text book dealing primarily with "Fleshy fungi", the species of mushrooms most frequently encountered in the fields and forests. It presents a radically different approach in the study of mycology. Photographs usually illustrate the text of a book. In this case however, the text is written "around" the 3-D pictures. It is designed for a wide range of readers. A chapter on "The Mushroom in Relation to Other Living Organisms" is intended for those who are not experts in the field. All species are first described in a tech-
Mushrooms in their Natural Habitats
by Alexander H. Smith, Ph.D.

Techchnical chapter, including microscopic data, spore sizes, exact colors, and other pertinent data. The text covers preparation of specimens for study, collecting techniques, the fruiting habits of fungi, and classification and identification. Everything of possible interest is contained in the mammoth work.

Although all photographs were taken in the natural habitat of the fungi, not all are natural habitat photographs, due to the fact that some items were added to the pictures and others rearranged. Since it was necessary to show important taxonomic details in addition to the fruiting bodies, plus their manner of growth, some fruiting bodies had to be arranged.

Even though the text is very scientific in nature, the amateur botanist can also appreciate and understand the work due to the great visual specimens displayed on the 33 View-Master reels.

Volume 2, although it looks to be a book, is a special case that holds a model "C" viewer and a special envelope book with the 33 View-Master reels. (The viewer accompanying the set is black.) A total of 231 Kodachrome stereo pairs illustrate representative key-species of important genera and families of mushrooms. Mushroom stereos used for illustration were carefully selected from thousands to enable the student to recognize and identify a wide variety of species that come close to the key-types illustrated. The stereo pairs provide the user with an image of an actual foray into the woods with the true-to-life realism that only 3-D can provide.

Of the many species of fungi, the most common from the northeastern U.S., Great Lakes region, Rocky Mountain states, Pacific northwest, and Southern California have been included in this book. Also, illustrations of endemic North American fungi have been included wherever feasible. Many pictures were taken and discarded as better examples were found or when a more common species of fungi was needed. Some of the stereos taken and not used portray extremely exotic mushrooms that were too rare to be included in the actual production.

According to the instructions in the mushroom text:

Viewing the photographs is a very simple procedure. The most important factor to keep in mind (Continued on page 33)


Writing in what has become a standard reference work for photographic historians and collectors, *The World of Stereographs*, the late William C. Darrah observes that “Only a few stereo ferrotypes were produced, mostly in the late 1860s and early 1870s. The ferrotype is the rarest form of stereograph.” We may add that the stereo ferrotype is probably the rarest form of ferrotype (tintype).

The writer was doubly delighted, therefore, to acquire two of these elusive pieces. Many scholars and collectors have never encountered an example. Interestingly, scrutiny under the loupe shows that these stereo ferrotypes are chronologically successive outdoor views taken several years apart and probably by the same operator. This combination of circumstances probably approaches the rarest of the rare.

The plates are each about 7” x 3 3/8” with clipped corners, roughly the customary size for cardboard mounted paper views of the era. The images are slightly hyper, acceptably sharp and have fair contrast. Each view is on a single, uncut sheet of japanned iron. This tells us unambiguously that these plates were intended as stereo images. (Plates for stereo ferrotypes were offered to the trade in at least two standard sizes: 6 3/4” x 3 1/4” and the smaller 5 1/2” x 3 1/4”. The slightly odd size of these particular views suggests that the operator may have cut them down from larger plates. Odd sized ferrotype plates are commonly seen because cutting and trimming for a variety of uses was conveniently accomplished with shears.) Adjacent pairs of carte-de-visite sized ferrotypes taken with four tube cameras are occasionally remounted for stereo viewing. They may even be sold as “stereo tintypes”. Such contrived views must, however, not be confused with authentic ferrotype stereographs. Close inspection is indicated for all presumed stereo ferrotypes.

These two images are of the same home and family, probably in the New England area. The architecture of the home (a frame house with a shingled, side-gabled roof; windows with six panes above and below; a central chimney; a central entry with sidelights) is compatible with that part of the country. Evidently they were taken several years apart. Estimating from the growth of the children, the time gap may be about five years. Judging from the...
overall physical similarity of the plates, as well as the similarity of the compositional style and the simple fact that they are of the same family, it seems very likely that the views were taken by the same traveling photographer. The earliest of the two views (figure 1) shows a group of eighteen people, presumably the extended family, at the rear of their house which has two extensions. The later view (figure 2) shows eight people at the front of the house. As is typical of the genre, they hold things or pets for the portrait. In figure 2 the operator posed the family in the available sunlight, deliberately avoiding the shadows and calculating his exposure for full sunlight. His photographs suggest that he was an experienced photographer.

Interestingly, this early photographer's remarkable photographic service - providing an archival quality, three-dimensional family portrait taken and delivered on location for a reasonable price - has never since been equaled in the entire history of photographic services to the public. (Try asking a professional photographer to do the same today!) To his customers he offered immortality for a pittance. For those of us who view his work well over a century later he has provided the means for instantaneous time travel back to a specific moment of our past. Like so many others, this unknown local photographer is receiving our appreciation only belatedly. He was more successful in his personal contribution to what we may term The Great American Ferrotype Legacy than he would have known.

Outdoor stereo ferrotypes are now gaining recognition as a pinnacle in both stereograph and ferrotype collecting. Still, we know little about them. Much information remains to be accumulated before we have adequate knowledge of the brief and peripheral, yet enchanting, role of the stereo ferrotype in the history of photography.

Jim Foster is a professional photographer and avid collector who writes about the early history of photography. He has a special interest in the history of the ferrotype and would like to hear from readers who own stereo ferrotypes. Jim welcomes correspondence at Box 3008, Urbana, IL 61801.
A recurring topic for discussion which periodically gets attention from Stereoscopic Society members has to do with the copying of other members' stereo views. Recently printmakers were asked to indicate whether or not they objected to other members copying their viewcards. Among those who responded, most, but not all, had no objection. This raises several questions as to motives in making copies, the advantages and disadvantages of doing so, and what results can be expected when comparing the copy to the original.

Why Copy Views?

First we should realize that no copy is ever quite equal to the original and some loss in quality is to be expected. The result is inevitably less than the prototype, and this explains one reason why some would prefer not to have copies of their work produced. So, why make copies? The fact that all of the stereo views that we enjoy in Stereo World result from copying procedures of one sort or another should establish how desirable quality copies are in lieu of the originals.

When an especially good and/or interesting stereo view is produced by one of our members in the Stereoscopic Society, it is usually in the form of a color transparency pair or a print pair mounted on a standard viewcard. Original color transparencies are unique; one of a kind. For mounted prints, theoretically more originals can be produced from the negatives but in reality most viewcards issued by Society printmakers are also unique in that duplicates are never made. Actually, in my experience, there is no guarantee that a duplicate, if made at a later date, adequately matches an original print of outstanding quality.


Some stereo photographers actually copyright their views. I am not sure what this accomplishes when there is little likelihood of economic gain from the pictures. Stereoscopic Society activity is certainly not motivated by the hope of financial gain. With a few exceptions, making a living selling newly issued stereo views does not seem realistic at this time. But, copyrighting does offer legal protection to the photographer, if needed.
Copying Old Views

Many old commercial stereo views were copyrighted by the issuing firms. For the most part the old viewcards have passed into the public domain and the firms which issued them have long since ceased to exist. They can be copied at will and be used for any purpose. Copyrighting did not prevent pirating, as copied views were issued from the earliest time whether the original was copyrighted or not. By and large, the copies were of degraded quality compared to the originals and were sold at reduced prices. It would seem that pirating stereo views was fairly easy to get away with at minimal risk.

Adequate copyright laws originally did not exist for literature, let alone photographs, in the early days of photography. Charles Dickens (1812-1870) was a vocal advocate of legal protection for writers like himself who were victimized by publishers who appropriated their work without compensation following its initial printing. Following this mind-set, he actually charged a fee for sitting for photographers who could then sell the photos to anyone interested. He got paid up front. This set a sort of standard adopted by many celebrities and also the photographers. Theatrical photographer Napoleon Sarony offered liberal fees to photograph well known 19th century figures with exclusive rights to the pictures he produced. This did not prevent fly-by-night pirates from selling copies of the originals.

Copyng Techniques

The best quality copies seem to be made on 35mm color film. I use Kodachrome 25 or 64. The resolution is excellent. Copying transparencies with appropriate fussing can produce results nearly (but not quite) as good as the originals. This medium also works well in copying prints, but changes the format to transparency which is fine if one wishes to project them for an audience. Reproducing a viewcard is something else. For reproducing black & white prints it is first necessary to make a negative. The copies are not as good as 35mm color transparency film produces but nice results can be obtained with adequate attention to the darkroom work involved. A drawback is that the original viewcard mount is not likely to be duplicated, if that is important. Much the same holds true for trying to make a copy of a color print viewcard. It must be expected that duplicating a high quality stereo viewcard will prove to be a disappointment when critically examined, especially when a magnifier is used. Still, even under the restrictions, there are many reasons to make copies of stereo views.

Society Membership

The Stereoscopic Society of America offers a means for stereo photographers to meet kindred spirits. Persons interested in taking part in the Society postal folio circuits should contact the Corresponding Secretary: Jack E. Caven- der, 1677 Dorsey Ave., Suite C, East Point, GA 30344.

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The Only National Organization Devoted Exclusively To Stereo Photography, Stereoviews, and 3-D Imaging Techniques.
In February, the International Society for Optical Engineering, in conjunction with the Society for Imaging Science and Technology, presented a symposium on electronic imagery in San Jose, California. Held at the huge San Jose Convention Center, the symposium included two full days of sessions on stereoscopic displays and applications. In addition, there were sessions on holography and an exhibitors hall where several companies displayed 3-D imaging software and hardware.

Computer software continues to advance stereography into new realms, and the first half-day of sessions addressed stereoscopic display and software issues. One paper, presented by J. Liu on behalf of the Heinrich-Hertz Institute in Germany, demonstrated software construction of intermediate pictures for a multi-view 3-D system. The software generates a tertiary view, and possibly any number of additional intermediate views, from a binocular stereogram. Software of this nature may eventually find application in autostereoscopic systems whether lenticular or holographic in nature.

Robert Akka, software consultant at Stereographics Corporation, with a paper titled "Automatic software control of display parameters for stereoscopic graphics images," outlined the geometry for positive and negative parallax variables and interactive computer programming which would allow user control to change their relative values. D.F. McAllister of North Carolina State University, similarly addressed the issues of parallax in pure geometry with a paper titled "Minimizing absolute parallax in stereo." It's interesting to see the technical aspects of a stereo image which is comfortable to view and visually pleasing, reduced to pure mathematics. I believe that most practicing stereographers make an intuitive application of the geometrical principles discussed here, and that ultimately these mathematical values become aesthetic issues.

Dimension Technologies Inc. has for the past year been marketing an autostereoscopic display system that uses a Liquid Crystal screen. [See SW May/June 1990 page 35.] J.B. Eichenlaub, a develop-
operator at Dimension Technologies, outlined its current state. At the present time, the screen remains relatively small (about 9 x 12") and is limited to still imagery which is imputed from a video camera. The display is now in color but scaling up its size is in the hands of third-party developers who are working to build larger liquid crystal displays.

An elegant presentation on a 50-inch autostereoscopic color TV display was made on behalf of NHK Science and Technical Research labs, who are working with Sanyo Electric and Toppan Printing Company to develop the system. Toppan is the company responsible for the lenticular 3-D postage stamps produced in recent years in Japan. The autostereoscopic TV display uses a unique hollow lenticular screen to generate the binocular separation necessary for stereo. As with any lenticular autostereoscopic display there is a restricted viewing angle and periodic pseudoscopic zones that become apparent.

The final session of the conference, chaired by Scott Fisher of Telepresence Research, addressed virtual environments and some of the latest developments in virtual reality. E.M. Howlett of LEEP Systems discussed the use of high-resolution inserts in head-mounted stereoscopic displays. His thesis posits that higher resolution is not necessary in the peripheral areas of our visual field. At the end of the second day of sessions, conference participants had a chance to don the Cyberspace 2 head-mounted display and experience virtual reality for themselves. Two environments were available in virtual reality. The first was the actual environment of the room, experienced through the LEEP dual-video system, and the second was a computer generated room in which participants could fly a jet by using a joystick for maneuvering.

In the exhibitors room, Lenny Lipton of Stereographics Corporation was demonstrating his 120 hertz alternating field stereo video system. A unique and recent development is the head-tracking unit which causes the stereo image on screen to move in relation to the viewer. The stereo image may then be seen with one’s head tilted or the viewer can look over, under or around the 3-D image. Optical engineer Kirby Meachum of Ohio displayed a unique autostereoscopic slide projection system developed for the Air Force. It made use
of eight rear projected slides and a mechanically traveling slit device which yielded an effective 3-D image.

Electronic Imagery Inc., developers of software in use by NASA, offered anaglyph glasses for viewing a 3-D image converted to stereo by their Imagescale Plus software. The software, by my estimation, uses the gray scale information in an image generated by a single light source to render a volumetric stereogram which is then displayed as an RGB anaglyph.

Another exhibitor, Sadeg Faris of Hawthorne, New York, demonstrated a back-lit 3-D photo print viewable with polarizing glasses. Faris' innovation is the micro-polarizing array which should work for many 3-D applications. Essentially, Faris' array polarizes light in a checkerboard rather than a linear fashion and can be incorporated into the photo-emulsion development process. Theoretically then, we may shortly see 3-D movies at our local theater which require only a silver screen and polarizing glasses. The need for projection through polarizers would be eliminated as would be both twin-strip and single-strip configurations. The left and right eye image would be composited, along with the polarizing elements, in a single frame of movie film. Faris is beginning to market his invention for still imagery and soon we may see it applied to motion pictures.

In 1950, one of television's classic science-fiction adventures debuted - SPACE PATROL. This forerunner of STAR TREK centered around the voyages of the crew of a United Planets space cruiser as it crossed the solar system and beyond. Through a special licensing agreement with Wade Williams III, SPLIT INFINITE proudly offers high quality Realist-format reproductions of the full set of 24 Kodachrome Stori-View slides, packaged in a colorful box, including a booklet and viewer. This is one of the scarcest media-related 3D slide sets. Six of the original Stori-View SPACE PATROL cards recently sold for $350 at a Hakes auction. Here's your chance to acquire a complete set for the introductory price of $49.95, plus $5 postage and handling. All duplication is done on a Honeywell 805 Repronar. Satisfaction guaranteed or money back. Allow 4 - 6 weeks for delivery.

SPLIT INFINITE, PO BOX 2324, BREMERTON, WA 98310.
is that the quality of the light used for viewing will greatly influence the color of the image one obtains. Since daylight is extremely variable as to quality depending on one's location, the season, etc., it could not be accepted as the standard of illumination. Instead the photographs are intended to be viewed with a 100W-150W frosted white Mazda bulb. It is best to place the bulb in a light fixture of the goose-neck type and reflect the light down on a large sheet of white paper or several sheets of good white grade typing paper. Some will no doubt be quick to point out that no grade of paper is pure white, but this, even though true, is a minor consideration not likely to influence adversely the color of the reproductions. View the photographs against the reflected light. The intensity of the illumination can be easily regulated by changing the distance between the viewer and the paper. All comparisons of color, including those found in the glossary, were made by this method.

(We found these instructions interesting and viewed several reels using a 150W soft white bulb with the light reflected against the white paper. The results do depict excellent color when using this method.)

The set was produced in a limited edition of 500 copies and therefore is quite rare. Many of these sets are still the property of colleges and universities throughout the country. The original selling price for the set was $26.50. (Quite a difference from the price one would sell for today.) The 33 reels could also be purchased separately for $11.00. Originally packaged in a silver/green Sawyer's logo box, the set of reels remained in inventory for several years and was later sold in a white personal reel box.

This monumental work was enthusiastically received by the scientific community and is still considered "the" definitive work on mushrooms. A short time ago we met one of the Forest Rangers at Mt. Hood. She continues to use her mushroom set today and feels that it is not only an interesting way to study fungi but a real asset to her in her work for the National Park Service.
3-D Substance

Billled as "the 1st 3-D hero of the '90s", a comic book character called Substance – Spirit of Justice is featured in two recent releases from 3-D Zone Publications. This particular superhero is able to make himself invisible with the help of a high tech netting material which he can expand to make other objects disappear as well. The character is revealed to readers by being printed only in the blue anaglyphic ink, visible only to the left eye through the red lens of the glasses. (Presumably the bad guys can't see him, since they're not wearing 3-D glasses!)

The method has been used in earlier 3-D comics for special effects in specific panels, but Substance floats through nearly the entire comic (this is No. 2) this way, easily outwitting several crooks and "Captain Gaze" who wears radar goggles and hopes to seize the secret of invisibility for military use. The 3-D drawings are easily seen through the outline figure of Substance, which tends to fade in and out with the retinal rivalry induced by its being seen by only one eye. This adds to the effect nicely, exercising the readers’ senses in the creation of the illusion.

3-D Substance is created and written by Jack C Harris, Drawn by Steve Ditko, and calligraphed by Ken Feduniewicz with 3-D conversion by Ray Zone. For a current catalog and ordering information, send $1.00 to 3-D Zone, Box 741159, Los Angeles, CA 90004.

International View-Master Meeting

The first International meeting dedicated to View-Master collectors and photographers has been set for September 18-20, 1992 in Dinkelsbühl, Germany. Sponsored by the German View-Master Club, the event will be held in the Museum 3. Dimension, which recently moved into larger quarters in one of the medieval town’s ancient buildings. (See July/Aug. NewViews, page 33.)

Stereo projection of both historic and current reels, including rare advertising reels, will be a highlight of the event. A competition open to anyone with reels covering any subject will offer awards and prizes. Workshops on View-Master photography, cameras and mounting will also be included.

A trade fair and flea market will offer both new 3-D products and used treasures from cameras to projectors, viewers, reels, etc. A special View-Master exhibition will open, to run for one year, at the Museum 3. Dimension featuring some never before exhibited items.

Registration is DM 95.00 prior to April '92, DM 145.00 after that. Contact Werner Stahle, Rahm 27, D-8500 Nürnberg 20, Germany. Tel. 0911 / 55 46 51.

This column depends on readers for information. (We don't know everything!) Send information or questions to David Starkman, P.O. Box 2368, Culver City, CA 90231.
Guadeloupe Book First in 3-D Series

Enjoy Your Trip In the Third Dimension

Never a year seems to pass without some new or new-old development in what might be termed Consumer 3-D. In that tradition a firm in France is aimed at publishing a series of twelve 3-D “Photo-Guide” books of scenes in French lands overseas and in France itself. The first of these, on the Caribbean islands of Guadeloupe, is now in print. La Guadeloupe en relief by C. Chris is a quite interesting and well done 68 page, slick-paper, soft-bound tour of the islands in some 80 half and full page color photos (40% in anaglyph 3-D) plus color advertisements for places to stay, shop, dine and wine.

The text is in both French and English. An especially handy feature is a map identifying the location of each photograph — offering a new dimension to the term “point and shoot” stereography for those who speak no French and might have a driver who may not understand “Take me to the tripod holes” in English. The notes on the rear cover end with “Enjoy your trip in the third dimension”. Readers are likely to do just that.

The book is available direct from C. Chris Publications 3D, BP 5076, 34032 MONTPELLIER Cedex, France for 100 F (includes overseas postage).

—Melvin M. Lawson

The Color Anaglyph Dilemma

La Guadeloupe en relief, photographed, written and published by C. Chris, is the latest example of the dilemma facing any publication seeking commercial success with anaglyphic stereo photos. Custom inks for left and right monochrome images provide the easiest viewing with the least ghosting, especially if the European style orange and bright green colors are used. But the now commonly expected full color publications are about the only type that will get financial support from clients or advertisers, even if the anaglyphs must suffer in the process.

With careful planning, many color anaglyphs can be surprisingly effective, as in David Burder’s feature in the current Minolta Mirror annual reviewed in the July/August ‘91 NewViews. But in a situation where the images can’t be chosen on the basis of which will be the least troublesome in a color anaglyph, the inherent limitations of the process are exposed with every bright red, blue or yellow element in the picture. Close work with a printer willing and able to carefully manipulate the anaglyplic colors in with the color separation process prior to making the plates is also necessary.

In La Guadeloupe en relief, the anaglyphic effect is at the mercy of both intrusive strong colors and high contrast scenic views in direct sunlight. The retinal rivalry and ghosting are obvious in some scenes, while in others would probably bother only experienced stereo enthusiasts. In views of houses and close-ups of the island flora, most of the anaglyphs work very well and probably represent the sort of impressive 3-D effect Mr. Chris had in mind for the entire ambitious project. Best of all are some underwater views and a delightful eye-to-eye stereo portrait of an iguana.

The purpose of the book is of course to promote tourism in Guadeloupe, and only the most inviting and charming images are included among the ads for hotels and restaurants. In that respect it’s part of a long tradition of published stereography employed as a less than objective promotional device, and it makes no claim of being otherwise. The potential of stereography to provide some feeling of what it’s like to actually live someplace remains for amateurs to explore largely on their own. This is certainly the first publication of its type in the busy, competitive field of tourism books, and it definitely succeeded in placing Guadeloupe high on my list of stops if I ever find myself on a Caribbean cruise. Whether or not it will also spread interest in anaglyphic stereo imaging remains to be seen.

Books in progress in C. Chris Publications' “The World in 3-D” series are listed as: The Alps; Corsica; Languedoc-Roussillon; Chateaux of the Loire; Mont St. Michel; Polynesia; St. Martin; Martinique; Réunion and New Caledonia.

—John Dennis

The Next 3 NSA Conventions

Facilities contracts have been signed for national conventions through 1994. Those who need to plan in advance can now pick one or more of these combinations of dates and places to enter on their calendar or computer.

1992 Fort Wayne, IN Aug. 14-16
1993 San Diego, CA Aug. 13-15
1994 Milwaukee, WI June 17-19
The *Simpsons illustrated 1992 Annual* is a 32 page comic book format publication in "Mind-bending knee-slapping eye-popping 3-D" featuring most of the Matt Groening characters from the animated TV series. Yellow, blue and pink tones are incorporated into the anaglyphic drawings to give an impression of color to the pages. This interferes less than one might expect with the 3-D effect, but the use of screened magenta and cyan for the anaglyphic colors allows some ghosting in the otherwise well done 3-D separations by Ray Zone.

Most interesting of all is a six page section of stereo photos taken during a party kicking off *The Simpsons* third season and in the animation studio. The Realist stereos by Gary Schwartz include Matt Groening as well as the show's producer, director, publicists, and several of the people behind the voices of the regular characters. Also seen are guest voices Steve Allen and George Takai. Several steps in the animation process – both drawing and video – are shown in color anaglyphs which work fairly well in most cases. Some suffer from intrusions of non-anaglyphic strong colors or ghosting, but the images fuse easily if viewed under a very bright light, and they clearly represent a first in a fan magazine dedicated to an animated show. (Collectors of 3-D glasses will find the special "SIMPS-O-VISION" glasses a must.) As Bart announces in the centerfold, "Whoa! Totally dimensional, Man!"

*Simpsons Illustrated* is published five times a year. To request the 3-D issue or to subscribe, write to *Simpsons Illustrated*, Box 10195, Des Moines, IA 50340 or call 515-243-4543.

Beautiful floral radiographs in 3-D are offered as stereo cards with white backgrounds or as stereo slides with black backgrounds. Only a limited number of cards and slides of each flower will be produced, then the original radiographs will be destroyed. Each will be numbered and signed by Albert G. Richards.

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Stereo’s Ups & Downs Reflected in Text Books

Stereo Ascending: A Text Located by Mark Willke

I recently purchased a book on photography, and discovered that there were almost five pages devoted to stereo! One quote in the stereo section is particularly interesting: "...At one time this most beautiful branch of photography enjoyed immense popularity. However, its star waned, unfortunately, though the signs of the times are that it is once more in the ascendant. Meanwhile there are many devotees who recognize the marvelously beautiful results which are possible with the stereoscope, and who, by their patient work and excellent photography, will be the means of placing the neglected art once more on its former pedestal."

I thought this statement pretty well summed-up today’s stereo scene, but surprisingly, the book was printed in 1903! Titled Photographic Instruction Book, it was written by Townsend T. Stith, (hard-cover, 282 pages) and was published by Sears, Roebuck & Co.

Mr. Stith evidently thought very highly of stereo photography, as can be seen in another quote from his book. After listing some of the various supplies needed for stereoscopic photography, he states, “All these things can be obtained from the photographic dealers, so that the amateur who aspires to stereoscopic work - and he can hardly have a nobler ambition - will not find any difficulties in procuring the materials he will require."

Certainly a lot has happened in the world of stereo during the almost 90 years that have passed since this book was published, but I find it interesting that parts of the stereo chapter sound as though they could have been written today. I only wish that the materials and supplies situation today were as trouble-free as it apparently was in 1903!

How Not to Write About Stereo: A Text located by Robert G. Wilson

The early books on the techniques of photography treated stereoscopic photography in different manners. A few, like The Stereoscope by Sir David Brewster, were entirely devoted to stereo. It was indeed fortunate that not many books presented stereoscopic photography as Tapley did in his 1884 book written for the new amateur photographer. His complete coverage of the subject was the short one-page chapter shown here from Amateur Photography: A Practical Instructor by D.J. Tapley, New York: Hurst & Co., 1884.

CHAPTER XVII STEREOSCOPIC PICTURES

These views, which once were so popular, are made by a camera having two lenses, placed as far apart as a person’s eyes. The two pictures are cut apart, trimmed into shape and transposed in mounting - that is, the right is placed at the left, and vice versa. The pictures are then viewed through a stereoscope, the effect of which is to bring the magnified image of one picture over the other, giving an effect of perspective and relief, as in nature.

The work necessitates the purchase of a special outfit, and the exercise of unusual skill and care, somewhat out of the range of amateur art. As the pictures are out of fashion - the graphoscope and the 5 x 8 view having taken their place, I will not go into the details of the work, and I would advise my readers to take the same course.

Photography text books can be a way of judging the prominence of stereography at certain points in history. These two classic examples document the decline and resurgence in stereo interest just before and after the turn of the century. Similar swings in the treatment of stereo could be pulled from selected texts published in the 1940s compared to some from the early to mid 1950s.

Letters

(Continued from page 3)

everything, but I can’t think of a single case, offhand, in which he gave credit to the source.

All in all, it’s difficult in many cases to track down who actually took a photo. This is especially true of the big producers such as Anthony, Soule, Langenheim, Stacy, Kilburn, and Keystone, but also of many of the smaller operators as well. However, this does help to account for the wide range of techniques which show up under their imprints.

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3-D NUDES, uncut, u-mount. 24 exposures, approx. 19 slides, $50.40; Postcard Newsletter sample, $100. $50. $21, yearly sub., 12 issues. The Snap Shoppe, 1871 SW 37th Terrace, Fort Lauderdale, FL 33312.

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ARTHUR GIRLING’S “Stereo Drawing - A Theory of 3-D vision and its Application to Stereo Drawing” 100 pages hardbound 8'/2" x 12". Stereo photographers are finding that the book applies equally to stereo photography and is a mine of information on methods of making 3-D pictures and viewing them. Written in non-technical language and profusely illustrated with B&W drawings and also 11 pages of superb anaglyphs, this book is a must for the serious stereoscopist. Now available from the NSA Book Service, 4201 Nagle Road, SW 89th Ave, Portland, OR 97225.

JOHN WALDSMITH’S “Stereo Views, An Illustrated History and Price Guide” available signed from the author, $22.95 softbound or $34.95 hardbound, add $2.95 postage and handling. MasterCard & VISA accepted. John Waldsmith, PO Box 191, Sycamore, OH 44462.

NIMSO ACCESSORY LENSES: Close-up & infinity focus - from StereoType, PO Box 1637, Florence, OR 97439.

OLD KEY WEST IN 3-D, Joan and Wright Langley, 62 pp, 52 duotone stereo views with plastic viewer, softbound, 9" x 6"; $14.95 plus $2.50 shipping. The Langley Press, 821 Georgia St., Key West, FL 33040.


RED WING VIEW COMPANY is now “StereoType”. We provide stereoconsulting, produce newsletters, and publish wholesome & pleasing new print views. Contact: (503) 997-8879 or PO Box 1637, Florence, OR 97439.

TDC STEREO SELECTRON CHANGER, new in original box, complete with one Selectron slide tray and all adaptors, etc. For use on any TDC stereo unit. $150. pnp, Please write for availability. Scott Kemling, PO Box 24522, Edina, MN 55424.

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EARLY 1900s NUDES in 3-D! Nine quality reproduced Realist slides only $18. A fraction of the cost of the original! Famous 3-D Dreams Bathing Beauties catalog is always free! 3-D Dreams, Box 1441, Orem, UT 84059-1441.


VIEW-MASTER MODEL "A" viewer, Exc.+, in slightly worn original woodgrain-style cardboard box with space for reel storage, $25; Guild 3-D viewer, mint- in original box, $20; Tru-Viewer, brown & white, mint- in original box, $15; 50 cardboard-frame red/blue anaglyptic glasses, brand new, $20. 75 different hand-lettered View-Master reels, SASE for list. Mark Wilke, 200 SW 89th Ave., Portland, OR 97225.

VOYEURISTIC MOUNTS, $75. Or write for availability. Scott Kemling, PO Box 24522, Edina, MN 55424.

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VIEW-MASTER MODEL "A" viewer, Exc.+ in slightly worn original woodgrain-style cardboard box with space for reel storage, $25; Guild 3-D viewer, mint- in original box, $20; Tru-Viewer, brown & white, mint- in original box, $15; 50 cardboard-frame red/blue anaglyptic glasses, brand new, $20. 75 different hand-lettered View-Master reels, SASE for list. Mark Wilke, 200 SW 89th Ave., Portland, OR 97225.

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BAERSTADT BROS., and 1500 other selected stereo views in stock. Will trade only for Maine flat mount views - any subject or condition. Write or call for details: Blaine E. Bryant, 864 Bridgerton Road, Westbrook, ME 04092, (207) 854-4470.

VIEW-MASTER Mark II collector’s dream outfit. Stereo Color camera in original package with instructions and warranty card, eveready case in original (although unlabeled) box, film cutter in original box with instructions, film inserter in original envelope with instructions, View-Master dusting brush in original bag, and a color brochure advertising the entire Mark II system, all stored in a large "Fine Products from GAF" box. Everything in pristine like-new condition with the exception of owner ID engraved on back of camera body. Will trade entire outfit for boxed Stereo Realist equipment in similar condition. What have you got? Mark Wilke, 200 SW 85th Ave., Portland, OR 97225. (503) 279-7653.

Wanted

AFRICAN AMERICAN civilian and military stereographic cards from Civil War, the West and World War I. Paul Batchelor, 11330 S. Edbourne Ave., Chicago, IL 60628.

ALASKA AND KLONDIKE stereo views; also Daguerreotype, Ambrotypes & Tintype stereos. Send copies, descriptions, prices. Thanks! Robert King, 3800 Coventry Drive, Anchorage, AK 99507.

ANDREW JOHNSON, cdvs & stereos. Views showing the Reviewing stand at the Grand Parade in D.C. (See Darrah). Buy or trade. Michael W. Griffith, 4316 Hale Drive, Liburn, GA 30247.

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BIERSTADT BROS., and 1500 other selected stereo views in stock. Will trade only for Maine flat mount views - any subject or condition. Write or call for details: Blaine E. Bryant, 864 Bridgerton Road, Westbrook, ME 04092, (207) 854-4470.

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As part of their membership, NSA members are offered use of classified advertising. Members may use 100 words per year, divid- ed into three ads with a maximum of 35 words per ad. Additional words or additional ads may be inserted at the rate of 20c per word. Please include payments with ads. We cannot provide billings. Deadline is the first day of the month preceding publication date. Send ads to the National Stereoscopic Association, P.O. Box 14801, Columbus, OH 43214, or call (419) 927-2930. A rate sheet for display ads is available upon request. (Please send SASE.)
WANTED

ANY OF THE RAUMBILD-VERLAG VIEWS, especially the ones of Hitler's Germany. Also older View-Master reels of scenic views and movies. Send sell list. Vance, 5513 Hwy 73-E, Concord, NC 28025.

AVIATION views: pre-1945 aircraft, zeppelins, balloons. Please send photocopy and price to F. Doerenberg, Dept 661-FCS, POB 9327, Ft. Lauderdale, FL 33310.

BOXED SET OF AFRICA. Also South African diamond mining & related. Alan Young, 404 Westeia Dr., Westfield, IN 46074.

BRIT AND HELLER. Any images by Peter Britt or Louis Heller. Mautz, PO Box 9, Brownsville, CA 95918.


DAGUERREOTYPES of children with toys or just nicely tinted images - and stereo views of Louisville and New York City. Larry Berke, 26 Marksman Lane, Levittown, NY 11756-5110.

DUO-VEX camera, and other Univex items. Roy Shetter, Box 4, Willow Street, PA 17584, (717) 464-3004.

EARLY NON-AMERICAN TOWN SCENES - card or glass: naked ladies (can be later) and table-top viewers wanted. John Norman, Belfort Str. 19, 7800 Freiburg, Germany.

FLORIDA STEREOS of historical value, especially Tallahassee, Tampa and Gainesville. Price and describe or send on approval, highest prices paid for pre-1890 views. No St.Augustine. Hendriksen, PO Box 21153, Kennedy Space Center, FL 32915.

HIGHEST PRICES PAID. Pennsylvania views: Allentown, Bethlehem, Mauch Chunk, Pottsville. Also large lots or collections of View-Master reels. Leonard Griff, 1545 Appletree Road, Harrisburg, PA 17110.

I AM A CONTINUAL BUYER of Block Island, Rhode Island: Stereos, cabinets, real photo post cards. Ship for prompt payment: Peter Benin, 96 Bald Hill Rd., Wilton, CT 06897.


IOWA FLAT MOUNT STEREO VIEWS. Buy or trade. P. Juhl, 1427 Dolen Place, Iowa City, IA 52246, (319) 354-9386.

LONG ISLAND, NY collector seeking any stereo views and real photograph post cards of Long Island. I answer all letters and pay postage. Good material seldom refused. Joe Trapani, 611 Haig Street, Baldwin, NY 11510.

MUYBRIDGE VIEWS. Top prices paid. Also Michigan and Minning - the 3 Ms. Many views available for trade. Leonard Walle, 60 Pinto Lane, Novato, CA 94947.

NEW MEMBER permanently wants old stereo views of Saginaw and East Saginaw. Also, old stereo views, post cards, pho, or anything pertaining to the Pierre-Marquette or Potter Street passenger train depot in Saginaw or East Saginaw. Please describe, send Xerox, or on approval. I have a few postcards and stereo views to trade. Darren, 1914 North Charles, Saginaw, MI 48602.

NEWBURYPORT, MASS. stereo views by Merriner, Moseley, MacIntosh, Reed and others. Buy or trade. Scott Nason, 12 Marlboro St., Newburyport, Mass. 01950, (508) 462-2953.


RAUMBILD STEREO BOOKS WANTED! These are German books with 6 x 13 cm paper views in pockets in the thick covers. David Starkman, PO Box 2368, Culver City, CA 90231. Tel: (310) 837-2368 or Fax: (310) 558-1653.

REALIST 2.0 and Wollensak 10 stereo cameras in good to excellent condition. Also, Realist stereo viewer, Michael Passarelli, 144-64 Sanford Ave., Flushing, NY 11355, (718) 539-9444.

REALIST ALUMINUM MASKS wanted. Elliott Swanson, PO Box 2324, Bremerton, WA 98310, (206) 479-8197.

RELATIVE SEEKING cabinet by C.C. Lein, Iowa City, IA. Reverse identifies Samuel Coleman, Law Class '92. Please describe, send Xerox, or on approval. P. Juhl, 1427 Dolen Place, Iowa City, IA 52246.

REPLACEMENT CORD for Kodaslide II. Also any complete card sets except travel, especially comic. Please send condition and price. Also want cabinet photos of children with toys, pets, costumes, etc. Send Xerox of possible and price. Bob Truesdell, 1125 Stonewood Ct., Gladstone, OR 97027, (503) 656-6230.

WANTED

RUSSO-JAPANESE WAR VIEWS: Individually card or sets. Also, U&U Russia boxed set and tour book. V. Buttignol, 9893 W. Mocassin Tr., Wexford, PA 15090.

SEEKING STEREOGRAFIES of Seminole or other Florida Indians. Send Xerox front and back to: Alison Nordstrom, PO Box 2811, Daytona Beach, FL 32120-2811.

STEREO DAGUERREOTYPES: All kinds, all nations & subjects. Any condition. Ken Appollo, PO Box 241, Rhinecliff, NY 12574, (914) 876-5232.


STILL LOOKING FOR Baja stereo slide cases/cheeks/files with drawers marked "Versatile". Also looking for Stereo Realist brand slide cases/cheeks/files in exc. or better condition. Mark Wilke, 200 SW 89th Ave., Portland, OR 97225, (503) 297-7653.

STILLWATER, MINN. Stereos wanted by local collector. Photographers include Sinclair, Lomis and others. Please write with description and reasonable price to Brent Peterson, PO Box 590, Stillwater, MN 55082.

TDC 118 3-D PROJECTOR (Old style), capable of projecting full frame 3-D slide mounts. Excellent condition and working order. R. Ferragallo, 5743 San Pablo Dam Rd., El Sobrante, CA 94803, (510) 222-5613. FAX (510) 835-5740.


VIEW-MASTER B6551 Vanguard launch in envelope; any 3 reel airport packages (C00 Orley, C283 London, etc.). Also wanted, boxes of VM blank reel mounts. Elliott Swanson, PO Box 2324, Bremerton, WA 98310, (206) 479-8197.

VIEWS OF GLASS MAKING INDUSTRY, glass exhibitions, glass blowing, etc. Send info and price to Jay Doros, 780 Chancelor Ave., Irvington, NJ 07111-2997.

April 18-19  (OH)  Ohio Camera Swap, Shadybrook Armory, Cincinnati, OH. Contact Bill Bond, 8910 Cherry, Blue Ash, OH 45242. Call 513-891-5266.

April 25  (WA)  Puget Sound Photographic Collector's Society Twelfth Annual Camera & Photographic Sales, Swap, and Show. Kent Commons, 4th Ave. N. & James, Kent, WA. Contact PSPCS, Suite E, Box 202, 5109 Point Fosdick Dr., Gig Harbor, WA 98335. Call 206-851-6361.

April 25  (TX)  NSA SOUTH CENTRAL REGION, SPRING MEETING. 10am - 3pm, Convention Center, 1200 Geo Bush Dr., College Station, TX. Contact Carroll Bell, Box 9162, College Station, TX 77842. Call 409-693-7004 days.

April 25-26  (OH)  Akron-Cleveland Camera Show & Model Shoot, Holiday Inn-Coliseum, Richfield, OH. Contact Photorama USA, 20219 Mack Ave., Grosse Pointe Woods, MI 48236. Call 313-884-2243.

April 26  (MA)  Boston Antique Photographic Image Show - #1 image in the NE - No cameras! New location - Westford Regency, I-495 exit 32, Westford, MA. Contact Russell Norton, Box 1070, New Haven, CT 06504. Call 203-562-7800.

April 26  (IL)  Chicagoland's Camera & Photo Show, Holiday Inn, 860 Irving Park Rd., Itasca, IL. Contact Photo Show, Box 761, Grayslake, IL 60030. Call 708-223-5190.


May 3  (Ont., Canada)  NSA CANADIAN REGIONAL MEETING, 1:30 pm, 7 Scott Ave., St. George, Ontario. Stan White will demonstrate 3-D techniques. Contact Martin Bass, 416-472-1773.

May 3  (NJ)  18th Annual Ocean County Camera Club Photo Trade Show, Lakewood High School, Lakewood, NJ. Contact Harold Kessler, 1195 Cecil Court, Lakewood, NJ 08701. Call 908-363-8099 or 363-8056.

May 9-10  (CA)  Western Photographic Collectors Association Trade Show and Exhibition of Photographica, Pasadena Center, 300 Green St., Pasadena, CA. Contact WPCA, Box 4294, Whittier, CA 90607. Call 310-693-8421.

May 10  (AZ)  Phoenix Camera Shows, Best Western Sir Francis, Phoenix, AZ. Contact Dale at 602-266-3301.


May 17  (CA)  Buena Park Camera Swap Meet, Sequoia Club, 7530 Orangethorne Ave., Buena Park, CA. Call 714-786-6644 or 786-8183.


May 17  (NJ)  IMAGE SHOWS, Historical Photos & Images, No Cameras, Firemans Hall, Parish Dr., Wayne, NJ. Contact Diane 201-523-6696 or Tom 201-838-4301.

May 17  (IL)  Chicagoland's Camera & Photo Show. (See April 26.)

May 17  (MD)  Baltimore, MD Show & Sale, Chesapeake Antiquarian Photographic Society, Quality Inn, 1015 York Rd., Towson, MD. Contact A.P. Ben Miller, 1335 Valley Brook Rd., Baltimore, MD 21229. Call 410-744-7581.

May 22-24  (OH)  Ohio Camera Collectors Society 30th Annual Show, Sale & Auction. Radisson Hotel North, Columbus, OH. Contact John Durand, Box 282, Columbus, OH 43216. Call 614-885-3224.

June 14  (AZ)  Phoenix Camera Shows. (See May 10.)

June 14  (CA)  Buena Park Camera Swap Meet. (See May 17.)

June 14  (NJ)  Second Sunday Camera Show. (See May 10.)


June 20-21  (OH)  Ohio Camera Swap. (See April 18.)

June 21  (IL)  Chicagoland's Camera & Photo Show. (See April 19.)

June 28  (CO)  Denver Colorado 6th Photorama USA. (See April 28.)

June 28  (VA)  Barone Camera Swap Meet, Holiday Inn Crystal City, Arlington, VA. Contact Camera Swap Meet c/o Barone & Co., Box 18043, Oxon Hill, MD 20745. Call 703-768-2231.

WANTED: STATUE OF LIBERTY original stereo views of statue in pieces displayed at Phila. Exposition, in Madison Square Park NYC, Bedloes Island and Paris. CONTACT: Peter B. Kaplan 7 East 20th St. NY NY 10003. Tel: (212) 995-5000 FAX: (212) 995-5608 Purchase or usage rights for book project.
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THIRD ANNUAL SPRING
Boston Antique
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"The #1 Antique Photo Image Show in the NE"

50 tables of stereoviews, CDV's, Daguerreotypes, photographs, etc.

New Location!
No Cameras!
Sunday
26 April 1992
10 AM - 5 PM
Public Admission $5

Westford Regency Hotel
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Westford, MA

Preview Admission 8:30 AM $20
DC Show: 5 April, 1992
Managed by Russell Norton
PO Box 1070
New Haven, CT 06504
(203) 562-7800

STereo World January/February 1992
Burlesque and vaudeville star Venie Atherton, like her now equally obscure sister Alice Atherton, was stereographed by Jeremiah Gurney in the early 1870s. For more on the complex research involved in identifying these stereo portraits, see Norman Patterson’s “Profiles From Oblivion: The Atherton ‘Mystery’” on page 16.