Spinning Views • 3-D Wings • First Random Dot Pair?
Entries in our “Unusual” assignment continue to trickle in with table-top scenes comprising nearly half of the views. The wide range of what our readers consider unusual has been interesting to see. The category may well have been too broad, and perhaps should have been broken into separate assignments like Unusual Images from the Natural World, Unusual People or Events, and Unusual Creations. That might have encouraged more entries in specific areas, but meanwhile it’s certainly fun going through the wild variety of material now arriving.

Current Assignment: "Unusual"

To say this covers a wide range of potential subjects would be an understatement, to say the least. What we would like to see are the stereographs you consider the most unusual you have ever taken—in whatever sense of the word you may regard the images. Abstract light patterns or computer generated images could certainly be among these, but please keep in mind that actual stereographs of “reality” can be just as unusual, given the right circumstances, as any constructed image.

Unusual Creations

It can be the subject itself that’s unusual or something about the stereography or the photographic processes involved. The unusual aspect can be a spectacular event, a bizarre subject, an unlikely circumstance, or a humorous situation. An initial guide may be to pick images that not you or anyone else is ever likely to be able to record again. We’re taking a chance on this wide-open category that could bring in nearly anything and everything, so if you’re uncertain whether or not a particular image fits, send it in anyway and share the confusion!

Deadline for the “Unusual” assignment is October 25, 1995.

The Rules:

As space allows (and depending on the response) judges will select for publication in each issue at least two of the best views submitted by press time. Rather than tag images as first, second or third place winners, the idea will be to present as many good stereographs as possible from among those submitted.

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)

(Continued on page 35)

“Dr. Land Discovering Stereo at Nine Months” by David V. Vaughn of Carbondale, IL, is a reference to the famous Polaroid Vectograph of a fly which became a popular eye testing device for stereopsis.

“Clones” by Dale Walsh of St-Laurent, Quebec, is a play on the word cones with the stereo implication of two almost identical entities. The small cones were shot with an SLR on a slide bar at a distance of 1.8 inches with a separation of .5 inches.
When Stereo Went for a Spin ........................................ 4
by Peter H. Fowler

StereoScript ...................................................... 11

The Stereo World Wide Web ..................................... 12

Profiles from Oblivion: Fanny Janauschek ...................... 14
by Norman B. Patterson

Civil War Unfolds in Depth ....................................... 17
Review by John Dennis

Shooting Wings of Courage ...................................... 18
The First 3-D IMAX Drama
by Don Maren

Random Dot Stereo from 1919! ................................. 26
by John Dennis & Norman B. Patterson

Editor's View Comments and Observations, by John Dennis ..................... 2

NewViews Current Information on Stereo Today, by David Starkman & John Dennis ...... 24

The Society News from the Stereoscopic Society of America, by Norman B. Patterson ...... 30

Calendar A Listing of Coming Events .......................... 33

Classified Buy, Sell, or Trade It Here .......................... 34

Underwood & Underwood (1890s), "Helping Grandma." is one of the several humorous and sentimental views using a spinning wheel as a prop. A child poses with a modern style Saxony wheel in this example from Peter H. Fowler's feature "When Stereo Went for A Spin."
The officers and board of the National Stereoscopic Association and the staff of Stereo World wish to thank the following individuals for their extra financial support of the NSA this year. We don’t want this to sound too much like a PBS Pledge Break, but it’s literally true that without such added help from members the NSA would be unable to provide any sort of research grants or help with regional activities. Promotional efforts to encourage the continued growth of the organization would be impossible, as would any purchases of the minimal hardware and software needed to keep the magazine from slipping any further behind in the bewildering field of today’s electronic publishing and communications. (The 1990 model Mac on which this text is being typed is regarded with scorn, or at least as a museum piece, when inquiries about software for it are made.)

Assuming that paper and printing cost increases and any new postal regulations will be more or less reasonable, the recent increase in dues should cover the day-to-day and month-to-month expenses of the NSA and Stereo World. This leaves Everything else up to the generosity of our members, who we hope will remember that the NSA receives no grant funding of any kind from any source, public or private.
When Stereo went for a Spin

The spinning wheel appears frequently in nineteenth century stereos as a symbol of domesticity, and innumerable genre scenes were embellished with wheels to establish that this was a homey interior. In the process, a record of types and styles of spinning wheels was created—of much more interest than the photographer’s original intent.

There were three main stages in the evolution of the spinning wheel. The simplest and oldest spinning device is the drop spindle, involving no mechanism at all. The drop spindle is a short rod with a small disc on one end to act as a flywheel. The disc is spun by hand, then dropped to twist the fiber, which is wound on as a separate operation. I do not have any stereos of one in use, and there may not be old photos of one because in the long exposures needed in early photography the whole thing would have been a meaningless blur. The drop spindle goes back thousands of years, and is still in use in some undeveloped areas, and as a teaching device for neophyte spinners.

The first mechanical spinner is the spindle wheel, the type the Princess could prick her finger on. This was invented in the far east sometime in the 500-1000 AD period, and was in use in Europe by the fourteenth century. Because they are easy to build, they were still being made for everyday use in the backwoods areas into the

(Fig. 1) “Cosey & Dosey”, English genre of about 1858 with lap-held spindle wheel. Maker unknown. All views from author’s collection except as noted.
twentieth century, and are still made for hobby spinning. The typical early eastern ("Charka") spindle wheel was worked sitting on the floor cross-legged, turning the wheel with one hand and feeding the fiber with the other. An interesting variant is seen in "Cosey and Dosey" (figure 1), in which the wheel is held in the lap, but is otherwise similar to a Charka. While this card looks like an English issue c1858, we have the same view in a French tissue, beautifully tinted and pierced, so I don't know the source of the negative.

The anonymous view of a Welsh family posed with a typical spindle wheel (figure 2) is from the 1860s, as is the well-known A.J. Russell "Mormon Family" view (figure 3) of about 1868. The reason for the large size of the drive wheel is that the spindle is of small diameter, typically only about ¼ inch, so it needs to turn fast to get any work done.

The "Great Wheel" as these are called is worked standing up, by giving it a spin by hand and walking back and forward to make the draw. These wheels are also therefore called "Walking Wheels", and

(Fig. 2) No. 255, "Welsh Group, the Spinning Wheel." An 1860s English view of a group posed in Welsh national costume. Maker unknown.

(Fig. 3) Smith's American Views No. 481, Utah Series, "Mormon Family." This c. 1868 A.J. Russell negative published by Smith shows a crude great wheel.
the sitting Welsh lady is obviously not really using the wheel. A slightly more sophisticated type uses a treadle operated wheel driving an intermediate pulley which is geared up to the spindle. Interestingly, "Barney's Blarney" by U&U (figure 4) in 1897 shows a spindle wheel with the intermediate pulley, which I presume was made much earlier than the photo, and could have been 100 years old in 1897. The long, sharp spindle can clearly be seen in the stereo, outlined by the white dress. Continuous running of the fiber onto the spindle for a few decades could make the tip very sharp indeed.

The modern wheel is the flyer type, in which the fiber runs through the spindle and is wound by a flyer onto the bobbin, the twist being provided by differential speed of the bobbin and flyer. If that sounds complicated, just try and do it—it's even harder than it sounds. The two English genre cards from the early 1860s, "Barney's Blarney" (figure 5, this title obviously having a long history) and "Rustic Courtship" (figure 6),
show a very crudely made flyer wheel. Interestingly enough it is the same wheel in both views. Note how the wheel is used as a prop to give a domestic air to the scenes. Much more elaborate flyer wheels were being made well before the date of these photos.

The Keystone view of the spinning room at Mount Vernon (figure 7) shows two different styles of flyer wheels, though I am very skeptical that either actually dates to before 1800. I have owned a wheel from about 1825, and it is mechanically exactly like wheels made into the twentieth century, but stylistically looks earlier than either wheel in the Mount Vernon collection.

A variant on the single flyer can be seen (with difficulty) in the Centennial Photo Co. picture (figure 8) of the log cabin at the Centennial Exhibition. This was an upright “Castle” or “Parlor” wheel with two flyers. These wheels usually date from the 1850s and 60s, so this one was probably not very old in 1876, and would almost cer-

(Fig. 6) “Rustic Courtship in Flanders” is an English genre view of the 1860s. The same early style flyer wheel as seen in the English “Barney’s Blarney” appears here with different people. Maker unknown.

(Fig. 7) Keystone No. 23477, “The Spinning Room, Showing Wheel and Loom, Mt. Vernon, Va.” The two flyer wheels may not be as old as the building by quite a few years.
Fig. 8) Centennial Photo Co. No. 557, "LOG CABIN IN YE OLDEN TIMES." The dual flyer spinning wheel was in fact quite modern at the time of this 1876 view. The thread per spinster, partly because it was too expensive and delicate. The unfortunate operator was expected to treadle with her feet, and draw fiber with each hand onto the two bobbins simultaneously. This did not result in the production of twice as much thread per spinster, partly because it is difficult to keep the fiber running evenly with both hands, and if either side lost the thread, the whole operation had to stop and be restarted after re-threading the lost side. I would guess the discontent and resentment of the ladies expected to operate this contraption may also have reduced production.

(Fig. 9) No. 39, "La Fille mal gardée." An 1870s (?) French view with an elegant parlor wheel.
Wheels for ladies could be made very elegant, as the French card (figure 9) from the 1870s shows. The flyer is unfortunately outside the edge of the picture, but the high style of the frame and wheel is clearly visible. Note that this was made around the same time as the Mormon wheel discussed earlier. Another typical French wheel is seen in the card from the 1890s (figure 10) showing the informally attired young lady apparently in her back yard looking concerned lest the fence isn't high enough. The photographer’s intent is not too clear, as the informal dress and the presence of the wheel suggest an intimate interior, while the background seems to represent an exterior.

The common wheel design we now tend to recognize as the norm is the “Saxony” style flyer wheel. The early U&U card “Helping Grandma” (figure 11) shows a typical Saxony, which could have been made any time in the nineteenth century.

(Fig. 10) A French view from the 1890s with a typical European parlor wheel of the later nineteenth century.

(Fig. 11) Underwood & Underwood (1890s), “Helping Grandma.” The child is neither treadling nor drawing the fiber—just posing cutely with a modern style Saxony wheel.
broken. (This card is #4 in a "comic" set which does not strike us now as very humorous.)

As a final note on the artistic license of photographers, the 1892 Kilburn "Love and Jealousy" (figure 13) has a Saxony flax wheel made in about 1825 on which the flax has been tangled into a horrible knot in the flyer. The card is, I think, supposed to show a jealous husband about to clobber his sleeping wife's visitor. From the look of the wheel it may be his wife who is the object of his rage, for sleeping on the job.

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(Fig. 12) Kilburn No. 7418, "No. 4, Blissful Submission." The fallen wheel suggests domestic ruin in this 1892 "comic" view.

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(Fig. 13) Kilburn No. 7447 (1892), "Love and Jealousy." If the lady really got the flax into that tangle on the flyer, she may be the one in trouble. The wheel looks much older than the view.
“Verso” Thoughts

The following thoughts, titled VERSO—About my Work, are from NSA member Craig Daniels and summarize an interesting contemporary attitude about stereography. Printed in the format of a classic view card back, these were in fact the words which inspired the creation of this column and it was about time they were presented in it!

An old card viewed in the stereoscope can be a captivating experience. Aside from its play of perspective and the strange feeling of visiting another time and place, there's the graceful balance that a well crafted view card achieves between its picture front and leg- ended back: a mixed medium for life and its interpretation. This is an art form to contend with, worthy of serious practice and critical review. The print pair stereograph has power, reach, social potential, and an inher- ent poetry.

Through stereography, I simply try to match appealing images with well edited thoughts on worthwhile subjects: letting the medium itself carry my ordinary efforts with its engaging illusion and recognition of life. Each completion (revision, rather), becomes a small self-documented cultural artifact, registration for a visual delight, or a bit of history, another portal to the vastness of life. Presently, you could probably afford to take all the serious print pair workers in the world out to dinner. But stereo is upon us now as novelty art, perhaps soon to become a familiar part of our lives through video, cinema, and routine illustrations for books, periodicals and education.

The far end of my spindly bridge between thought and perception has a slippery anchorage. As life rushes by, new images, memories, and mental abstractions quickly displace the few visual experiences I even try to focus on—like the press of so many curiosity seekers gathering to the scene of a happening. But a view card's thin slice of frozen time affords us a pause in which to clearly see and “take in” a subject, perhaps a detail made visible only through stereogra- phy, or a scene otherwise lost to living eyes—with faces still fresh and earnest in the light of a distant summer.

Florence, Oregon
December 29, 1994

Then as Now: A Stereographer in Need of A Day Job

NSA President Peter Palmquist is the author of the definitive book on Stereographer Thomas House- worth. (Laurence & Houseworth, NSA, 1980, 150 pages, 97 illustrations, available from the NSA Book Service.) In researching the book, Peter learned that Houseworth had been in deep financial trouble in the late 1880s. But just how deep that trouble was only became apparent with the discovery of a hand-written letter in the collection of the Society of California Pioneers in San Francisco. It was written to Frank G. Edwards, a San Francisco importer of carpets, oil cloths and window shades, and proves that then as now, stereogra- phy wasn't necessarily a lucrative profession.

Frank G. Edwards Esq.
Dear Sir:

I am still seeking something to do and if you should hear of anything I would be obli- ged to you if you want to let me know. I could be a valuable man to someone who wants a superintendent or one capable of taking charge of a business. I am a good salesman, bookkeeper, correspondent or purchasing agent, and would be willing to do anything or go anywhere to find something to do, to sup- port myself and my family.

If you will bear me in mind in case you hear of anything I will be obliged to you.

Respectfully Yours,
Thomas Houseworth

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The Only National Organization Devoted Exclusively To Stereo Photography, Stereoviews, and 3-D Imaging Techniques.
The NSA and Stereo World have been a graphic part of the internet's World Wide Web for several months now, thanks to a web site called the 3-D Web. This graphical interface with the information highway takes up where the photo-3d mail list leaves off, providing detailed color images and information relating to many aspects of stereography. (Those attending the Atlanta International 3-D Festival were able to explore the 3-D Web in person on a computer in the demonstration room.)

Included on the main menu are pictures and stats covering several stereo cameras, the "3-D Yellow Pages" in which suppliers of stereo images and equipment present their wares, a 3-D Gallery featuring both pairs and anaglyphs, illustrated information on the NSA and ISU, the archive of files and Frequently Asked Questions from the photo-3d mail list, and links to a surprising number of other stereo imaging related web sites. While the commercial area of the 3-D Web doesn't display everything currently available, the potential exists for an all-inclusive, quickly updated electronic marketplace displaying even the more obscure stereo related equipment and supplies. Dealers in antique images and equipment could eventually find the web an ideal place to exhibit items for sale or trade.

Those who select the NSA icon from the menu get background and membership information as well as samples of recent Stereo World covers and contents pages. While this is far from being "on line", more sample articles and news items from SW will be appearing there in light of the encouraging response from web browsers who have discovered the NSA via their computer screens. Prior to the Atlanta 3-D Festival, a detailed schedule and full registration information were provided along with the 3-D pair Festival logo.

Getting There

To access the World Wide Web requires an internet account. Not all providers give access to the web, and/or they may charge extra for it. Compuserve and America On-Line now have access to the web but ask about costs when setting up your internet account. According to 3-D Web site admin-
istor Bob Mannle, you shouldn't try to get on the web with less than a 14.4K modem, and 28.8 would be better.

Once you have access to the web, you'll want to get the software "Netscape" version 1.1, which is now available in stores or can be downloaded off the internet with your ftp services at no cost (an evaluation copy). Although there are other programs, Netscape seems to be the most popular and offers the most advanced HTML (Hypertext Markup Language) programming language.

The URL (Uniform Resource Locator) for the 3-D Web site is:

http://www.tisco.com/3d-web/index.html

The first part of this address (http) refers to Hypertext Transport Protocol, the protocol used by the web to move data from place to place. The second part is the host computer (tisco.com) and finally a path name on the computer of 3-D Web.

This will bring you to the home page and the main menu, where clicking on icons takes you into various areas of interest whose menus will often lead to yet other menus. For instance, as well as stereo images, the 3-D Gallery includes instructions for doing your own anaglyph conversions with photoshop.

The 3-D Web's host machine (tisco.com) has made it possible for the web site to sub-lease space to stereo suppliers for advertising at a rate of $20 per month, per Meg of files. This basically pays the expenses of the site and makes it possible to include non-profit groups like the NSA and ISU along with other images and information like the archives of the photo-3d mail list.

Of course to get daily updates of 3-D information, ask questions, or join debates over stereo theory on the internet, the photo-3d mail list is the site to check out:

photo-3d@bobcat.etsu.edu

(See SW Vol.21 No. 4, page 31). Photo-3d people like John Bercovitz, Bob Wier and Tim Klein have supported the 3-D Web site by sharing files of helpful information from photo-3d.
The actress that the world came to know as Fanny Janauschek grew up as one of nine children in a family of modest means. She was born in Prague, Bohemia, of pure Czech blood in either 1827 or 1830, depending on which story you choose to believe, and was given the full name of Franziska Magdalena Romance Janauschek. As a child she gave evidence of multiple talents. She entered the Prague Conservatory in 1842 to study vocalization and the Italian language.

At first Fanny leaned toward music but this soon took second place to a growing bent toward the theatrical. Her debut on the stage came in Prague at the age of sixteen. Thereafter Julius Benedix trained her in Cologne and, when she was eighteen, he made her his leading actress at the Stadt Theater in Frankfort-am Main. She remained there for more than ten years. For another decade she toured the principal cities of Germany, Austria, and Russia, becoming one of Germany's leading tragedians. She was said to have received many gifts of jewels from various rulers (especially including the king of Bavaria who was known to be partial to actresses on occasion). Included during this time was a three year stint as a "royal actress" under the patronage of King John of Saxony.

On to America
In 1867 Fanny came to America. She was either pushing forty or already there. Although she had a command of several languages, English was not one of them. But her fame had preceded her and there was a lucrative financial...
potential awaiting foreign stars in American cities after the Civil War. She was prepared to perform in German with a company that she had brought with her from the continent.

Max Maretzek had the New York Academy of Music in the fall of 1867 for Italian opera. Starting on October 9th, Fanny’s company acted there on the “off nights” in German tragedy. Her opening play was Medea, a selection which invited comparison with Ristori who had recently done the part. During the better part of the next two months Fanny and the company presented 22 performances of twelve plays in their repertoire, including Deborah, Mary Stuart, and Brunhild. Reviews could be said to be mixed and relatively few people went to see her. Of those who did, the majority of the audience was drawn from the German speaking community. But she did make an impression which developed into a loyal following. That boded well for the future. It was not cheap in the money of the day to attend these performances: general admission was $1.50 with an additional fifty cents for reserved seats in the orchestra. Private boxes could be had for $6 to $12 per performance.

In German and English

In November of 1868, Fanny appeared in Boston with the illustrious Edwin Booth in Macbeth. He acted in English and she did her part as Lady Macbeth in German. Although this is difficult to imagine now, it was not considered unusual in those days. At that time, it was actually encouraged in order to have the opportunity to see celebrated foreign stars. How this worked for the audience is not clear but one supposes that it went as well as attending operas sung in a language one does not know. Lady Macbeth was one of Fanny’s most popular characterizations.

Learn English!

Theatrical producer Augustin Daly saw Fanny’s performance in Deborah during the initial 1867 run at the academy of Music. He encouraged her very strongly to learn English well enough to perform in that language. She was known to be linguistically adept and a very hard worker when she committed to anything. Fanny took Daly’s advice and set 1869 aside as the year to master English well enough to perform in it. She took “four professors” to the country for a period of intensive study. They concentrated on reading, grammar, pronunciation, and the study of her roles. By the fall of 1870 she was ready, and on October 13, under Augustin Daly’s management, she returned to the same stage at the New York Academy of Music where she had made her American debut. This time she did Mary Stuart in English. The New York papers were impressed with her acting and evidently approved of her mastery of the language. She went on under Daly’s guidance to do some of her other familiar roles, such as Deborah, in English so successfully that she was said to have cleared $20,000 on the season. This was an enormous sum by the standards of those times.

Fanny continued to act in English and stayed in America four years before going back to Germany in 1874. Somewhere along the line she seems to have decided to make America her permanent home. Although she would return to Europe, still she eventually came back to New York in 1880 where she settled in Brooklyn. For years she toured the United States in classic plays. She was honored and admired as one of the last actresses of what has been described as “the grand style”. This “bold, broad school” of acting fit best her most successful roles such as Lady Macbeth, Catherine II, Mary Stuart, Medea, and Brunhild (a role in which she was greatly admired by Longfellow).

Unlike many present-day personalities whose private lives are public knowledge and who violate
personal confidences with tell-all biographies for money, most of the personalities of Fanny's era kept their private affairs to themselves. And the theatrical press seemed too polite to ask questions that were of the "none of your business" type about things that would have been red-lined by an editor anyway. Little about Fanny Janauschek's personal business found its way into print. But she did have her share of problems along the way.

Bad business arrangements marked her life, compounded by personal misjudgment of associates. Her early tours in the United States were not well managed by Herr F.J. Pillot. He styled himself as a German baron and was rumored to be Fanny's husband, although it was denied by both. Herr Pillot was known, on occasion, to take a drink. Finally, Fanny sent him packing. But she did arrange to pay him an allowance which continued throughout his latter years, even though he made occasional empty threats of blackmail toward her. He lived in Boston until his death in 1884. Later in life Fanny's investments went sour and she lost much of the money she had accrued.

**Changing Tastes**

Changing times were matched by changes in acting styles. Although as late as 1885 Fanny filled the spacious Grand Opera House doing *Mary Stuart* and other productions, as the years crept by her popularity ebbed away too. And, of course, she was getting older. Otis Skinner, when he was a young man and Fanny was in her fifties, played opposite her and he recalled her as "a short, rather stocky woman...her eyes were of hazel-gray, large and weary-lidded, but when they suddenly opened, it was the unmasking of a battery." She was not a great beauty and exerted power over her audiences by the strength of her voice, the authority of gesture and pose, and a tragic intensity of her characterizations. This was the old school, and it went out of fashion. It is likely that Fanny neither would nor could at this stage in her life adjust to the evolving tastes.

**Don't Look Down, Edwin Booth**

But, Fanny Janauschek was not ready to quit and probably needed the income. She did melodramas, and even tried vaudeville. She accepted subordinate parts. In 1895-1896 she played a part that matched her style in an ordinary vehicle called *The Great Diamond Robbery*. Her skills raised it to something better than it should have been, but she detested it. "I hope Booth was not looking down at me" she was reported to say. Critic A.C. Wheeler observed, "We come to the grim facts of an otherwise resplendent career, and see a woman of sixty-five, grown gray in the service of the public, wrinkled and spectacle-wearing, offering her memories with a mantle of reproach, and still proudly capable of asserting her birthright and her authority when the challenge comes...the only Mary Stuart left to the Western world."

She made a tour as Meg Merrilies. The company was bad and the scenery was worse but it probably was the best she could afford. A writer who saw her in 1899 in Washington described her as a strange apparition from the past, both play and playing no longer capable of moving an audience.

**Final Curtain**

Fanny Janauschek was in her Brooklyn home in 1900 when she suffered a stroke which left her paralyzed. She was moved to Saratoga. A benefit was held for her in 1900 which raised $5,000. When this ran out her collection of elegant costumes and jewels was sold (with her full consent, it was asserted) in 1903 to pay her debts and continuing expenses. She was moved to the Brunswick Home in Amityville, Long Island, in 1904 and died a few months later, impoverished and nearly blind. She was to be buried in an indigents grave until some fellow actors took up a collection to give her a proper burial. About twenty people attended the funeral. As one observer noted, "She became a brave, stubborn, unhappy old woman, and died alone and almost forgotten in an alien land." Such are the fruits of fame.
Civil War Unfolds in Depth

Review by John Dennis

Not too many years ago it would have been nearly unthinkable to produce a set of lithographed reproduction stereoviews in the 6 x 13cm format for a folding paper viewer with any hope that serious collectors would even look at it. But high-definition refinements in photo scanning and printing techniques, combined with a folding viewer from The Added Dimension, Inc., have made just such a project a reality.

"Civil War 3-D" by James D. Van Eldik is a marvelously compact package that includes nine Civil War views from the author's collection and an easy-to-use, sharp stereoscope. The images and the viewer are all printed, perforated and folded from a single sheet of medium weight cardboard, the ultra thin, 7-inch plastic lenses being the only thing added. Once the four cards (one view printed on each side) are separated, they can be inserted in front of the view of "Sherman at Atlanta" which is printed in the viewer itself.

While some of these images have appeared in dozens of historical books and articles (usually flat), others are less common and offer an intriguing taste of the stereo documentation of the war. But nine views amount to exactly that—a taste—and as soon as you've slipped the last view into the scope you want to see either more sets or a real book, filled with views from several of the best collections. The folding Added Dimension viewers were designed for advertising and promotional applications, and this one (printed on the outside with the famous "Grant's Council of War" view) promotes not a product or resort but the potential of new techniques in publishing historic stereoviews.

Publishers represented include E.&H.T. Anthony & Company, John C. Taylor Co., and The War Photograph & Exhibition Co. Rather than reproduce the original cards, the images here are all precisely positioned within a brown printed border with the titles at the top. While the images won't be mistaken for actual photographic prints in the viewer, the reproductions are fine enough that no dots or screen patterns interfere with the image details.

The viewer itself isn't Added Dimension's very latest version with side panels to provide a rigid, distortion-free box, so some care is required in holding it. Unlike a book, these loose views can easily get separated from the viewer or each other, or be lost completely. They do fit behind the built-in Sherman view when the viewer is folded, and a large paper clip at the top will then hold the whole thing together.

The "Civil War in 3-D" is available by mail through either Cygnus Graphic, Box 32461, Phoenix, AZ 85064 or Reel 3-D, Box 2368, Culver City, CA 90231.

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STEREO WORLD July/August 1985
by Don Marren

Clinging like an ant to a steep rock face, Cuillaumet (Craig Sheffer) exerts superhuman courage and a profound will to survive after he crash-lands his plane. "This is a man I admire," says Director Jean-Jacques Annaud. "Frankly, I'm bored with the so-called Hollywood hero who does things for reasons that are gross or vulgar. Cuillaumet is motivated by the most noble and honorable sentiments, and it is so moving. He has old-fashioned values, which are very contemporary." ©1994 Sony Pictures Entertainment, Inc.
It was clear from the start that the IMAX 3-D film *Wings of Courage* wasn’t going to be an easy shoot. “The story of airmail pilots in the treacherous Andes in the ’30s is a bad weather story,” says Ernie McNabb, the film’s stereographer. Out of necessity, you have to get out into the bad weather to shoot it.”

Most of the film was shot at altitudes of more than 10,000 feet in the Canadian Rockies (doubling for the Andes) in freezing temperatures in the middle of winter! Happily, everyone involved in the production survived, and the film was completed as a cost of $15 million—considerably pricey for a 40-minute film. (With basically one shooting location, Into the Deep cost about $3.5 million. Small-budget, full-length films like *Four Weddings and a Funeral* and *The Brady Bunch Movie* cost about $5 million and $10 million each respectively.)

“There’s no question that shooting *Wings of Courage* was a huge challenge to everyone involved and that includes the actors,” says director Jean-Jacques Annaud. “Because it takes so long to set up every shot with the IMAX 3-D camera, and since the camera holds only three minutes of film at one time, there was a huge amount of pressure for the actors to perform perfectly whenever we were ready to shoot. (Annaud shot the film in fourteen six-day weeks with an average of four set-ups per day—three or four times fewer than his usual quota.)” Furthermore,” Annaud adds, “due to the extremely difficult weather conditions, Murphy’s Law was fully operational throughout the filming; everything that could go wrong, did. Of course, I am ready to do it all again.”
To meet the challenge, Annaud chose technicians endowed with vast resources of patience. "Considering the discomfort of the waiting rooms I had to offer—a snap hook attached to a rock face, a hole in the snow in the midst of a blizzard—I headed for people with a sturdy constitution." One such person was the Director of Photography, Robert Fraisse. He had suffered along with Annaud in rice fields for The Lover, and he is a mountain enthusiast. Annaud points out that most of his crew knew me; they had already shivered their way through British Columbia during the filming of Quest for Fire. I found their skills and good humor still intact."

Included in the Canadian crew was veteran stereographer and cinematographer Ernie McNabb. He has seen his share of danger while shooting other films in 70mm, IMAX or 35mm. Over the years, he's found himself perilously hanging out of airplanes and helicopters, and even diving under the polar waters for the National Film Board of Canada documentary Arctic 4. McNabb's stereography credits include the first IMAX 3-D film Transitions (also director of photography), Sea Dream and Space-hunter—Adventures in the Forbidden Zone. He was also a stereo consultant on several pictures, including Magic Journeys. (Look for a profile on McNabb and his work coming up in Stereo World.)

Referring to the Wings of Courage shoot, McNabb says he remembers below zero temperatures and over 60mph winds when the crew had to hang on to the light stands for fear of being blown over. While using the IMAX 3-D rig (two cameras with a beam splitter) during a snow and sleet storm, the camera operators had to use a credit card to continually scrape the mirror clean each time a shot was taken.

And the film! According to a report in the New York Times, the IMAX 3-D camera broke down 78 times (someone actually counted?) in freezing weather. Apparently, the film, which doesn't have the same thickness of base as the Kodak film used in other IMAX 3-D shoots, jammed and snapped repeatedly. Eventually, the camera crew learned how to handle the new film, and everyone was pleased with the results.

Four IMAX cameras were used in the filming. "It was a matter of logistics," claims McNabb. "We tended to leap-frog from one shooting location to another. Jean-Jacques, Robert and I would climb into a helicopter and scout a location. Depending on what the shot required, we would call for the appropriate camera rig, since each had some features that the other didn't have. The crew and grips would then fly the rig up to that location on a helicopter where it would have to be assembled. We would then go on to scout the next location for another rig. Very frequently, we had two rigs being utilized at two different locations at once, with a third rig on a helicopter ready to be flown to the next location. Jean-Jacques, Robert and I were always shuttling between these locations. It was quite an operation. Of course, we had to schedule these shoots with the appropriate weather conditions. It was a nightmare for the assistant directors."

Wings had an enormous crew, including a full camera crew for each rig—camera operator and assistant, second assistant, loader, grips, etc. "We were up in the mountains and we were always dealing with the possibility of bad weather conditions," continues McNabb. "We had 100 to 110 people spread over various mountain locations at any one time—and that included the caterers." In addition, there were extras used for studio scenes which were shot in Vancouver. "Over 200 people were men back." (Whatever happened to bonne chance?)

Guillaumet's plane, bashed by a storm, plummets and crash lands, forcing him to trek for six days over a desolate, frozen landscape before being rescued. The film's story is as straightforward as that.

In many ways, Wings is another telling of the "mail-or-cargo-must-get-through" axiom dramatized in many of those exciting Hollywood Pony Express adventure films and in the Cary Grant/Jean Arthur/Rita Hayworth vehicle Only Angels Have Wings. But none ever looked this good. Annaud, along with Robert Fraisse (director of photography) and

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**Seeing Wings of Courage**

**Review by Don Marren**

There's much to praise in the IMAX 3-D movie Wings of Courage. After all, what can you say about a large-screen 3-D format that's as close to perfection as it'll get? No other 3-D system offers the resolution or the brightness of IMAX 3-D, and certainly no other format duplicates the power of vast or intimate 3-D images that—as Director Jean-Jacques Annaud claims, put the audience "inside a space."

Wings of Courage, the first IMAX 3-D movie produced by Sony Pictures Classics, premiered in New York last April and opened in three other cities during the summer. It is scheduled to open in other locations in Canada and the United States in the fall. Depending on the site, the film will be shown in IMAX 3-D, IMAX or OMNIMAX formats.

The 40-minute film is based on the true story of French pilot Henri Guillaumet, who is recruited by legendary aviators Jean Mermoz and Antoine de Saint-Exupery to join their fledgling airmail company flying mail between France and South American cities in 1930. Before Guillaumet's first mail delivery, Mermoz warns him of the perils of flying over the Andes, which peak at 21,000 feet: If you drop, you'll never be found again" and "Remember the local saying—the Andes don't give
involved in the making of this film.” He adds emphatically, “It’s not what you call a small crew.”

According to McNabb, there were advantages and disadvantages to the different cameras used in the filming. “The IMAX 3-D camera’s best feature is its overall stability. The camera (actually two cameras in one—see SW Vol. 21 No. 3) is very durable because the sensitive camera lens alignment is in an integrated body and is not affected by vibrations. For this reason, the camera was used in windy conditions, like on a helicopter, on an airplane or in other rugged work. It really took severe punishment especially in scenes where there was a lot of acceleration, bouncing or jostling. The other rigs with their big glass beam splitters were more delicate and would get damaged easily under rough conditions.”

The other two 3-D cameras used in filming were the IMAX 3-D rig and the National Film Board of Canada (NFB) 3-D rig, which was used in shooting Transitions in 1986. Both assemblies consist of two IMAX 65mm cameras, one positioned vertically and the other horizontally, installed on either of a half-silvered mirror. These rigs offer one feature—and it’s an important feature—that the IMAX 3-D camera doesn’t have: each rig allows interocular and convergence to be precision-set to produce a wide range of 3-D effects.

The NFB rig, which has a large crane assembly, features a precision gyroscopic stabilizer attached to the entire structure to ensure absolute stability of the system. It allows the cameras to shoot virtually anywhere—on a train, helicopter, etc.

The IMAX 3-D rig, which was used to shoot films like The Last Buffalo and Imagine, is really—more or less—the NFB rig split in two. One part consists of the camera head only. Because it is now separated from the central electronics control box, the camera head is free to be mounted almost anywhere where space might be a consideration. Both units are, of course, linked by an umbilical cord of wires. The major drawback in the IMAX 3-D rig is the loss of the gyroscopic stabilizer.

The fourth camera used was a regular IMAX 2-D camera. “Jean-Jacques, Robert and I discussed the
possible use of 2-D several times before and during production," explains McNabb. "This was not an economic decision, but one done out of necessity by Jean-Jacques. In some places, we just didn't have extra 3-D cameras available to shoot certain scenes. In one case, we left a second unit behind with a 2-D camera to catch some weather scenes that we couldn't wait for." McNabb continues: "Jean-Jacques was very wise in his use of 2-D. He used it in action scenes and in cuts, where the perception of the fact that you are watching a 2-D image really doesn't occur to you because you're taken up with the movement and drama of the moment on the screen. Your brain tends to be so engrossed with the movement in the imagery that you are able to forgive the lack of stereography. It's a conscious and clever use of 2-D."

Both Annauad and McNabb agree that shooting a dramatic story with IMAX 3-D equipment is entirely different from shooting a film with standard 35mm or 70mm equipment. The IMAX cameras are basically immobile. Panning and tilting flexibility is almost nonexistent. The huge pool table size of IMAX 3-D cameras and rigs make it difficult sometimes for even two operators to handle.

There were other filming problems. "Stereoscopic images require a very large depth of focus," says Annauad. "Due to the size of the IMAX negative (10 times the size of 35mm), the IMAX 3-D camera with its wide-angle lens had very little depth of focus, particularly in weak light. We had to make up for this by using a lot of lighting in the numerous interior scenes. We could not set up (light) projectors, as they would have been constantly in the shot due to the wide-angle lenses. The IMAX 3-D camera sees everything from the floor to the ceiling, including the legs of its own tripod. How do you do a movement without seeing the dolly rails? I dreamed of finding a Steadicam operator who was a weight-lifting world champion, with very short legs and tiny feet. As a substitute, the film's stereographer helped me to find solutions to suit each impossibility."

Then there was the noise made by the IMAX cameras, which McNabb blames on "the youthfulness of the format." McNabb points out

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that a conventional Panavision theatrical motion picture camera is designed to contain noise and move the film as quietly as possible. "Most noise that is generated is actually caused by the air that is trapped when you advance the film. There's a slight popping sound with this little piece of 35mm film that standard movie cameras are designed to muffle. IMAX film is 10 times larger and you have so much air being shifted around inside the camera body that you hear a continuous roar. The actors always knew where the camera was. Because of the noise, all the dialogue in Wings was added in post-production.

(In the late '80s, McNabb overcame the IMAX camera noises while shooting some dramatic scenes for Emergency/Urgence, a medically-themed IMAX 2-D film directed by Colin Low. The camera was placed in a sound blimp—a 200 pound box—with four thick sound blankets on top of it. The material quieted down the camera sufficiently enough that he was able to record personal dialog while filming.)

Annaud, who won an Academy Award for Best Foreign Language Film in 1977 for Black and White in Color, had already signed an exclusive three-picture agreement with Sony Pictures Britannia—a Sony Pictures Entertainment Company—when he was asked to direct Sony's first 3-D project. (Into the Deep, the first IMAX 3-D film to be shown at the Sony IMAX Theater in New York, was produced by Imax Corporation.) "They thought I was the only filmmaker mad enough to take that kind of risk," laughs Annaud.

McNabb, who enjoyed the Annaud experience believes that the director took some daring risks in shooting Wings of Courage. "The primary focus of the film was on bad weather, and those conditions destroy stereography. There were low contrasts in the snow scenes which created many stereographic problems. Jean-Jacques did not want vistas of beautiful scenery because he wanted to concentrate on drama and action, and if you're really into deep drama, you're not going to shove objects into people's faces for 3-D effects. His overall approach was an unconventional look at stereography in the modern sense."

Annaud seems to love a good challenge. Before he made Wings of Courage, he directed several feature films, each totally different from the other, and each with its own inherent set of filming problems. Quest for Fire was a fable set in prehistoric society that won him a French César as Best Director and the film a César as Best Film of the Year. In the Name of the Rose was a medieval monastery mystery that starred Sean Connery and won a César as Best Film of the Year. The Bear was about an orphan bear's fight for survival and won Annaud a César for Best Director. The Lover was about a love affair between a young French school girl and an older Chinese businessman.

Casting was one of the most important aspects of the production, says Annaud. "We felt it was necessary to signal to the audience that this was going to be a real movie, not a demo or something made for an expo. So we started thinking about using very big stars." Since the aspect of youth was all-important to this story, Annaud ended up using actors who were close to the ages of the characters. He choose Craig Sheffer, Tom Hulce, Elizabeth McGovern and Val Kilmer. "These actors have at least two things in common: they don't live in Los Angeles and they read. I chose them for a third point: I had seen them give remarkable performances in films I had loved."

According to Annaud, there are many advantages to IMAX 3-D over 35mm films for both the audience and filmmakers. "Traditional films, just like theater, painting and photography, offer their 'representation' within a definitive framework. The use of a giant screen had changed this fundamental idea as the spectator is so close to the screen that he cannot discern the edges anymore. With IMAX 2-D, he is no longer in front of an image, but inside that image. With IMAX 3-D, he is no longer inside an image but inside a 'space.' He is on the set with the characters in the action. The incredible sharpness of the photographic resolution, the stereoscopic vision, and the three dimensionality of watching a movie in IMAX 3-D make the boundaries between reality and illusion disappear. IMAX 3-D is, therefore, a more efficient tool, a more formidable weapon, placed at the disposal of the illusionists we filmmakers are."
New Vertical Camera Brackets & Bars

Anyone who works with twin cameras should know about Jasper Engineering of Mountain View, CA. In the past (Vol. 20 No. 3) NewViews has reported on Jasper's excellent 8" slide bar and 16" slide bar/adjustable twin camera bar.

Jasper's latest productions are for twin vertically mounted 35mm cameras, or for a single vertically mounted camera to be used on a slide bar. All of the new items have been precision made of solid black finished aluminum. The most basic item is a single vertical bracket which may be mounted onto the moving camera platform of the 8" or 16" slide bar.

Next is a twin vertical bracket, which consists of two vertical brackets and a base for holding them together. The finish is so good that when the three pieces are assembled it almost appears to be a single piece. The vertical brackets are available in fixed or adjustable versions. The adjustable versions are necessary when using cameras that don’t have a tripod socket centered below the lens.

The final component is the 12" interocular bar. If the twin vertical brackets are mounted to the interocular bar instead of the fixed base, a separation of up to 7.5" becomes possible for hyperstereo effects and spatial control. It is not intended to be used as a slide bar, as the vertical bracket has to loosened and tightened to change the position.

The design, construction, fit and finish of all Jasper's products is first class, as one would expect from a precision machine shop. For more information and prices, contact Jasper Engineering, 1240-A Pear Ave., Mountain View, CA 94043, (415) 967-1578.

New Agfa Film for Direct B&W Slides

If you've wanted to try some black & white stereo slides but found the special processing too intimidating, or black & white print film slides from negatives too muddy, a new, direct black & white reversal film is now available. Made by Agfa under the name Scala 200, the film has only been available in the U.S. since May, 1995.

The ISO 200/24° film is actually aimed at the professional advertising, fashion and journalism photographic markets as a way to go directly from camera to scanner for publication without the need for the intermediate contact sheets or prints generally associated with images from black & white negatives. Available in 35mm or 120 rolls, the film is designed to match the contrast, exposure latitude and grain characteristics of 100-speed professional Ektachrome and similar films.

NSA member Franklin Flocks tested a roll of Scala 200 in his stereo camera at the Atlanta International 3-D Festival with impressive results. While the tone is described as "neutral black", the slides seem to have a sort of glowing warmth in the skin tones and highlights, even in the flash shots. (Although contrast remains a factor with flash, and dark clothing or hair can merge into the background as easily as with any slide film.)

Many photo dealers who carry professional films should by now stock Scala 200, or you can call Agfa at 1-800-243-2652 for the location of retailers. The one catch is that processing can be done only in labs with equipment designed for Scala film. For one near you, call the Agfa number or contact Main Photo Service, 827 S. Main St., Santa Anna, CA 92701, (800) 640-MAIN or (714) 647-7600. They charge $8.00 per roll unmounted, with a $4 shipping charge for any number of rolls. Local dealers who use Fuji Processing Labs may be able to forward your film through Fuji to Main Photo, avoiding some of the shipping expenses.

With a minimum of effort, Scala 200 could provide today's stereographers with a way to try emulating the look of those amazing glass stereo transparencies of the 19th century, with considerably less panic if you drop one!
Many of us who shoot stereo photos sometimes forget that our stereo viewers are just as important as our cameras. Once the final picture is mounted, the quality of viewing depends completely on the quality of the viewer.

One person who has taken this realization to heart is George Themelis, whose company, Stereo Viewer Supplies Services, is now in its second year of service to the stereo community.

George has devoted himself to repairing, modifying and improving old stereo viewers such as the Stereo Realist Red or Green Button, the Kodaslide I and II and others. Besides the obvious steps like cleaning the case, lenses, and electrical contacts, he will modify viewers for European format apertures, brighter halogen bulbs and new reflectors. He also offers a number of different transformers and power supplies for A/C operation of battery stereo viewers.

In addition to his earlier book for do-it-yourself repairs and alterations to the Realist red-button viewer, George has now published three new books under the heading HOW TO MAINTAIN, REPAIR AND IMPROVE YOUR... Covered are the Realist Green-Button model 2062, Kodaslide models I and II, and the View-Master model D. Soon to be published are manuals covering Brumberger/Star-D, Revere/Wollen-sak, Airequipt Stereo Theater, View-Master models F & H, and a new manual on the Realist Red-Button.

A unique feature of George's books are the included "hardware sets" with different small parts for each viewer. In the case of the Kodaslide I and II, this consists of a new reflector, supplies to fix the focusing track, and fine sandpaper to clean the electrical contacts. The books are fully and clearly illustrated to make home repairs as easy as possible.

The books are $20 for the first one, and $15 for each additional one in the same order. Most of the other parts or replacement items involved in improving viewers are available through George's catalog, which provides full information on prices and shipping charges.

Contact George Themelis, 10243 Echo Hill Dr., Brecksville, OH 44141, (216) 838-4752.

fj834@cleveland.freenet.edu

Most of the existing or planned systems for autostereoscopic video displays involve a similar limitation—only one or two people can view them at a time. That limitation becomes, if anything, an advantage when you're talking about arcade games. Most establishments don't want to deal with the expense or hassle of glasses, shuttering goggles or VR headsets in order to give their customers an actual stereoscopic experience.

Self-contained, autostereoscopic displays could revolutionize these games from convenience stores to interactive emporiums like Virtual World.

So far, the existing systems for lenticular or barrier-strip autostereoscopic video haven't found their way into arcades. Now a new system has been developed by HinesLab Inc., maker of the StereoCam " dual-camera mount for 3-D films. The display is built around a liquid crystal panel and rear-projection optics. More than two images are used in creating the 3-D effect, allowing lateral head movement, horizontal motion parallax, and look-around ability. The method also provides for vertical head freedom, and the user can sit or stand in front of the monitor within a range of viewing positions.

HinesLab is offering technical licenses for the 3-D video display to the video, computer, and arcade-game industries, and can be contacted at 4525-B, San Fernando Road, Glendale, CA 91204, (818) 507-5812.

According to reports in the British press, at least two other systems with similar potential have been designed. These use a head-tracking camera to direct images from two video projectors through mirrors directly to the right and left eyes of the user. The viewer's head can move as much as 12 inches and the tracking camera will continue to aim the correct images into each eye, providing total separation with no loss of brightness. One of these systems, designed by the Australian firm Xenotech, is being developed by the Korean electronics company Samsung, while another is under development by the British subsidiary of Sharp Electronics.

This column depends on readers for information. (We don't know everything!) Please send information or questions to David Starkman, NewViews Editor, P.O. Box 2368, Culver City, CA 90231.
In countless book introductions and articles about the history of stereo imaging, theories of stereo vision, or single image random dot stereograms and the random dot stereo pairs from which they evolved, credit is rightly given to Dr. Bela Julesz for creating the first useful random dot stereo pairs with a computer at Bell Labs in 1960.

There were earlier, manual attempts by others at creating such stereo pairs free of monocular depth cues, such as cut-and-paste experiments with sandpaper mentioned by Dr. Julesz. In the 1994 book Stereogram, a 1939 precursor of Julesz’s random dot pairs is reproduced on page 84. This hand drawn face of Venus hidden in a field of blobs was created by Boris Kompaneysky of the Russian Academy of Fine Arts. While less than perfect, it’s an impressive first effort at a multi-plane human face done years before Dr. Julesz independently created simple shapes in two planes on his computer.

Now, thanks to Paul Wing and Bill Patterson, a far earlier random dot pair has come to light. In 1919, Herbert John Mobbs inserted a random dot stereo pair of a floating letter L in the postal folio of the United Stereoscopic Society. This was a separate British group from the Stereoscopic Society that continues today, but they had overlapping memberships and combined outings.

As can be seen on the folio envelope, Mr. Mobbs gave his creation a lengthy title revealing the hidden image. On the back of the card (long since fallen off) was a photographic copy of this pair, mounted transposed. His point was not so much the image itself, but to challenge the members of the group to identify which image was pseudoscopic.

The pair was created "by drawing the letter L in spots on a piece of glass and then placing the remaining spots on a plane further back. The whole was afterwards photographed." It appears that he then copied that photographic pair in ink on the fabric pasted to the card shown here. This was probably to eliminate any shadows or paper contours visible in the photo so that only the spots would form the image. (Did Boris Kompaneysky perhaps use a similar technique in 1939?)

What is almost certainly the world’s first random dot stereo pair was created by H.J. Mobbs in 1919 and titled: Simple Monoscopist: “Ah! The Heavens.” Sophisticated Stereoscopist; “No! L.”
One effect of the copying was the creation of a more interesting, random-plane background due to slight differences in the positions or shapes of the spots between the right and left halves. In the original photos, they would have been identical except for the shift of the dots comprising the L.

While some members of the folio commented on Mobbs’ patience and skill in devising the pairs, none took notice of any potential value they might have had in the study of human depth perception, and not one of them said anything like: “Good Heavens, man, you could make a fortune selling books and posters full of these clever little pictures!” All of that would have to wait for Bela Julesz’s independent 1960 reinvention of the random dot stereo pair, Christopher Tyler’s 1979 invention...
H./.

Mobbs, Hon. General Secretary of the Stereoscopic Society, 1921-61, reinvigorated the organization following the First World War. He was probably the first to “invent” the random dot stereogram, in 1919.

His stereo interests were widespread, but he was an especially keen and skillful transparency maker using the 45 x 107mm format with a transposing printing frame. He later made 6 x 13cm glass transparencies as well. His major bragging triumph was the design of the world’s first “speaking clock”, which at the time was a highly original project and so advanced in concept that it was not superseded for many years. He made many stereo gadgets—among them a versatile enlarger and a set of film and plate carriers of various sizes which enabled camera tilt to be corrected. He also invented a jig for aligning and mounting a pair of prints on a 7 x 3.5 inch stereo card. We have yet to learn if he ever made any other random dot stereo pairs.

with a strong sense of humor and good company at all times. He lived in London, where he was a senior telecommunications engineer in the Post Office.

of the single image random dot stereogram, and Dan Dyckman’s 1990 article about making your own single image random dot stereograms in Stereo World. It’s unlikely that many people outside the two Stereoscopic Societies mentioned above have ever seen H.J. Mobbs’ random dot stereos until now.

(Those single image stereograms which rely strictly on the “wallpaper effect” of slightly different, repeating images were of course predicted by Brewster and crafted by others long before the concept was combined with the true “hidden image” or “camouflage” effect of random dot stereo pairs. In that sense, single image stereograms predate single image random dot stereograms, but the random dot (and later random patterns of all sorts) concept made possible the large, complex SIS pictures now seen.)

Active in both the United Stereoscopic Society and the Stereoscopic Society, H.J. Mobbs served as the Hon. General Secretary of the Stereoscopic Society from 1921 to 1961. He was the guiding spirit that, for a period of forty years, kept the Society moving forward while staying true to its objectives. In doing so a certain body of legend attached itself to his name but it is said that no one has done more for the Society.

One who knew him well described him as a cheerful man, with a strong sense of humor and good company at all times. He lived in London, where he was a senior telecommunications engineer in the Post Office.

His stereo interests were widespread, but he was an especially keen and skillful transparency maker using the 45 x 107mm format with a transposing printing frame. He later made 6 x 13cm glass transparencies as well. His major bragging triumph was the design of the world’s first “speaking clock”, which at the time was a highly original project and so advanced in concept that it was not superseded for many years. He made many stereo gadgets—among them a versatile enlarger and a set of film and plate carriers of various sizes which enabled camera tilt to be corrected. He also invented a jig for aligning and mounting a pair of prints on a 7 x 3.5 inch stereo card. We have yet to learn if he ever made any other random dot stereo pairs.

Dr. James Quinlan

Dr. James Quinlan died on July 21, 1995, during open heart surgery. He was a welcome presence at many NSA trade fairs and related activities. Previous heart problems had forced him to drop out of these activities for several years, but it was one of the pleasures for dealers and collectors alike to find him present again at the recent Atlanta show. Visiting every table, he was both inquisitive and informative, interrupting his patient, close study of seemingly every piece of material displayed to discuss some aspect of a view he had noticed, to share some bit of information, or to check an opinion against someone else’s eyes and mind.

As a research geologist for 16 years with the National Park Service at Mammoth Cave, he was a natural for collecting cave imagery. He had seen, collected and studied far more than one could imagine existed. He also collected stereo views (and related imagery) which were used for advertising, where, as he loved to explain, there was an image relating to the text that would often be found on the back. He educated numerous dealers and fellow collectors to the wealth of material that existed in this format, covering so many aspects of history and social history. As you began to learn from him, you could share with him the joy of the few new examples he uncovered after examining thousands (and often more thousands) of views, front and back.

Just as one view, seen in the proper light, can illuminate an entire area of stereography and its historical surroundings, so one collector can illuminate the whole field of collecting. Thus, along with his distinguished contributions to geology, Jim leaves a legacy to the field of stereo collecting.

- Larry Gottheim
ARCHIVAL SLEEVES: clear 2.5-mil Polypropylene
CDV (3 3/8" X 4 3/8") per 100: $7 case of 1000: $60
CDV POLYESTER (2-mil) per 100: $10 case of 1000: $90
CDV PAGE 8-pocket top load per page: $0.50 case of 100: $50
POSTCARD (3 3/4" X 5 3/4") per 100: $8 case of 1000: $70
POSTCARD PAGE 4-pocket top load per 100: $18 case of 500: $70
4" x 5" per 100: $9 case of 1000: $70
STEREO / #6 3/4 COVER (3 3/4" x 7") per 100: $9 case of 1000: $80
STEREO POLYESTER per 100: 2-mil $12 or 3-mil $16
CABINET / CONTINENTAL (4 3/8" x 7") per 100: $10 case of 1000: $80
#10 COVER (4 3/8" x 9 5/8") per 100: $10 case of 500: $45
5" x 7" per page: $5 case of 200: $25
BOUDOIR (5 1/2" X 8 1/2") per 25: $6 case of 500: $30
8" x 10" per 25: $8 case of 200: $40
11" x 14" per 10: $8 case of 100: $45
16" x 20" (unsealed flap) per 10: $20 case of 100: $99

Russell Norton, PO Bx 1070, New Haven, CT 06504-1070

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antique wooden storage box and stereoviewer. $1,100 for en-
tire collection. Send SASE for list of slides. Edward S.
Hoyt, P.O.Box 8088, Longboat Key, Fl 34228

The Next Best Thing to Being There!
The three-reel View-Master packet for the Atlanta International 3-D
Festival was designed and produced by 3-D Book Productions in
the Netherlands and includes
detailed text describing the
scenes.
Reel A: Contemporary views by
Atlanta Stereographic Association
members Bill Walton, Larry Moor,
Cynthia Morton and Clark Brown.
Reel B: The Battle of Atlanta com-
memorated through rare stereo-
views.
Reel C: The Atlanta Cotton States
Exposition of 1895, using some of
the historic views seen in the Stereo
Theater show, and the Invited
Exhibit of the same name by Mike
Griffith.

While they last, the packets are available for $10 (postage included)
from the NSA, PO Box 398, Sycamore, OH 44882.

Doll Collectors Discover Stereos

Articles about stereographs have a way of popping up now and then in some of the least likely publications. The most recent example is an article that appeared in the October, '95 issue of Doll Reader magazine titled "Old Dolls and Toys on Stereoview Cards" by Katherine Kuckens.
The refreshingly accurate description and history of stereoviews in the text is accompanied by four full-size reproductions of sentimental views featuring children, dolls and toys. Reproduced in color, two tinted views probably look even better than the originals. A pirated view ("The Gipsy Camp") is explained, with the use of bisque-headed, ball-jointed dolls in place of live people pointed out.
While no viewer is included, the article is nevertheless an outstanding example of how the stereoscopic record of a particular subject can be presented in a publication devoted to that subject. (Imagine the stereo gems that could be selected for publication in a car collector magazine or a railroading magazine.) Also to its credit, the Doll Reader article's final paragraph suggests that readers take stereos of their own doll collections, and provides the address of the NSA. Doll Reader is published by Cumberland Publishing, 6405 Flank Dr., Harrisburg, PA 17112.

Upcoming National NSA Conventions

1996
Rochester, NY August 1-5
1997
Bellevue, WA July 4-6

STEREO WORLD  July/August 1995  29
Life Membership

In accordance with a vote at the 1994 annual meeting in Milwaukee, several members of the Stereoscopic Society of America were nominated for Life Membership in the society. The nominations were approved at the SSA meeting in Atlanta. Included are the doyen of our group, Richard E. Markley (member #381) and his older brother, Miles R. Markley (#506, our third most senior member). Their stories tell us much about amateur stereography in this century and are the substance of this column. Also awarded Life Membership was Paul Wing, Jr. (#385, our second most senior member) who will be featured in a later column.

A Family Tradition

Stereo photography was already a family tradition when Miles Markley was born in 1902. He recalls that his first experience as a 3-D subject was a stereogram at age three made by his uncle Carl Veley. That card is still around.

Richard Markley was born in 1913 in Kimball, a small town in western Nebraska, 60 miles east of Cheyenne, Wyoming. He recalls that his father was insistent that new acquisitions for the Holmes scope on their parlor table were from original negatives. These included Europe, Near East, and American views, especially of western mountains. Of greatest interest, however, were the stereograms taken by the aforementioned favorite uncle in Michigan. Carl Veley's views included pictures of his grandparents, his army life in the Spanish-American war, and, best of all, of his younger sister, the favorite aunt that the Markleys saw every summer. The last of Carl Veley's views is dated 1909, which fixes the time when his camera was lost.

From this experience Richard Markley recalls that the thought of making his own stereograms never left him. His first stereo views were made with a borrowed camera slid against a ruler clamped to the top of a step ladder. He was not completely discouraged by the limitations of these sequentials.

In about 1934, while living with his older brother Miles and attending the University of Denver (B.S. 1938), Richard Markley spotted a stereo camera in a shop window. Along with some other odd used items, it was being marked down daily in a Dutch auction. He had never actually seen a stereo camera before, but inspected it and convinced Miles it was something they both needed. This fixed focus 45x107mm Richard Verascope was built to accommodate twelve glass plates in a brass changing box. The trays had been shimmed to handle cut film, not available in Denver, but on order from Rochester. With the camera came the cunctator, a delayed shutter device that was introduced in 1913. This helps somewhat in dating the camera. Included also was a transposing printing frame, but no viewer. One was devised. Richard soon built a jig on a cutting board with which to cut 45x107mm from locally available 5x7" sheet film. This was operated in the dark for both negative and positive sheets. Savings were significant.

Miles and Winnifred Markley were captured in this 1966 portrait during a stopover for armed forces lectures on their second leisure trip toward Australia.
Early Projection Stereo

In about 1936 the University of Denver invited the public to a science fair. Richard Markley’s project was stereo projection of campus scenes that he had taken. Previously, polarized light had been used as a laboratory tool obtained by passing a beam through a crystal of Iceland Spar. However, an exciting material called Polaroid had been patented and was being produced by the new Polaroid Corporation. This company provided material to Richard to use as polarizers in two similar projectors and six pairs of analyzers. An aluminum painted screen completed the setup. Since these were in black and white, they could still be compared with projected anaglyphs.

After an M.D. (University of Colorado, 1942) Richard Markley went to San Francisco for his internship. The Verascope stayed with brother Miles. He had no stereo camera in California or during his first two and a half years as Medical Officer on the USS El Paso, but continued to take sequentials on a better slide bar made in the hospital shop.

World War II

The El Paso was not a famous ship but it took Richard to all the-
In 1983, on an escorted trip to Washington, D.C., Miles Markley was awarded medals for Distinguished Public Service by the Secretary of Defense.

**Stereo Photography**

The very first stereo views Miles Markley made were produced with a slide-bar (a common experience among Society members). Next came the 45x107mm Verascope. Eventually came the Realist that he continues to be happy with. Miles notes that their early Realist had no depth-of-focus scale, just a printed chart. In 1952, his uncle Carl J. Veley designed and made a calibrated scale to fit over the focus knob. He sent a duplicate to the David White Company, and they adopted it in subsequent models. Veley always felt hurt that White neither replied nor acknowledged his gift. Presumably, they feared he might claim remuneration. Anyway, it improved the camera for all of us.

**Favorite Travel Companions**

In 1952 Miles and Winnifred Markley took a new Realist to Europe, choosing the new air service. After the first of several lecture series for the American Dental Society of Europe (this one in London) they spent two weeks, saved by flying, touring Scandinavia. Returning to London, they picked up a little Hillman Minx, and then ran up 5000 miles touring post-war Britain and Europe through the summer. Slides from this and many subsequent trips have delighted Society members in the Alpha Transparency Circuit ever since.

The view of Miles and Winnifred Markley reproduced here was made in 1966 on a stopover for Armed Service lectures on their second leisure trip toward Australia. (The original stereo transparency is currently touring in Folio OX-9 in memory of Winnifred.) On their first trip in 1956 they had been entertained in both Australia and New Zealand by Stereoscopic Society members. Miles had taken a Realist camera to H.A. Tregallus (the long-time secretary in Australia) and had been a pen-pal of Robertson in Melbourne. Stereoscopic society members around the world have a long tradition of welcoming each other with open arms.

Winnifred Markley’s last foreign trip was an American Museum of Natural History Indonesian Cruise, retracing their steps of a trip taken thirty years before, and ending with the Barrier Reef and their fifth trip to Australia. She had done that, and foreign trips to Morocco and Yugoslavia, after being diagnosed with cancer of the spleen.

She was a great traveler! She insisted on one more motor trip, to the Pacific Northwest. She died in Sunnyside, Washington on July 29, 1989.

Miles and Richard Markley (at ages 92 and 83 respectively) continue to look ahead as active members of the Stereoscopic Society of America. Richard reports, “Both Miles and I have Realists just back from the shop and ready, we hope, for more years of service.”

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October 22
Charlotte Area Photo Fair, Government House Hotel, I-277 at 4th St., Charlotte, NC. Call Steve Biggs, 704-377-3492, fax 331-9894.

October 22
New York City Camera Show, Park Inn, 440 W. 57th St., New York, NY. Contact NY City Camera Show, 25 Leary Ave., Bloomingdale, NJ 07403, 201-838-4301.

October 22
Boston Antique Photographic Image Show, Westford Regency, Westford, MA. Contact Russell Norton, Box 1070, New Haven, CT 06504, 203-562-7800.

October 28-29
Photographica '95, Hillcrest Exposition Center, 220 Bear Hill Road, Waltham, MA. Contact Photographic Historical Society of New England, Box 199, West Newton, MA 02165, 617-965-0807.

November 19
Fall NSA/ISU STEREO NEW ENGLAND meeting, Cambridge, MA. Mini-Trade-Fair, Show&Tell, Stereo projection. "3-D Inside a Grateful Dead Concert" by Franklin Flocks and "Explorations of the Third Dimension" by Jon Golden. For hours and location, contact Stereo New England, c/o David Berenson, 32 Colwell Ave., Brighton, MA 02135, 617-254-1565 eves.

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..... for an exhibition of stereo photographs at the Viewpoint Gallery in Sacramento, CA
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KEYSTONE OAK CABINET for stereoviews, c. 1910. 12 drawers for 1200 views and 3 drawers for storage of viewers, etc. $550. R.W. Patterson, 714 W. Washington St., Napoleon, OH (419) 592-2836.

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STEREO WORLD MAGS: Issues 19-1 through 19-12. Includes 11 pages of superb anaglyphs, YUV, RGB, or RGBS) $1,000. Some liquid crystals, adhesives, mounts and sleeves included. Excellent to stereo photography and is a mine of information on making 3-D pictures and viewing them. Written in non-technical language and profusely illustrated with B&W drawings as well as 11 pages of superb anaglyphs, this book is a must for the serious stereoscopician. Now available from NSA Book Service, 4201 Nagle Rd., Bryan, TX 77801. Price (including halogen); $30. Contact G. Themelis, 10243 Echo Hill Dr., Brecksville, OH 44141. or call (419) 927-2930. A ratesheet for storage of viewers, etc. $550. R.W. Patterson, 714 W. Washington St., Napoleon, OH (419) 592-2836.

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AMERICA'S CUP - wanted to beg, borrow, buy or steal (not really) stereo views of the various America's Cup Defenders & Challengers, etc. Larry Rochette, 169 Woodland Dr., Marlborough, MA 01752, (508) 481-3204 evenings.

ANY MEMBER who has solved the enigma of the Kodak camera's depth of field scale! I'm at wits end. Please write. Gil Van Horn, PO Box 207, Llano, CA 93544.

ARIZONA TERRITORY. All pre-1920 stereo views, post cards, images, documents of Arizona stage stations, stage coaches, Cochise County towns including Cochise Dragon, Tombstone, Willcox, Pearce, Bisbee. Send price and copy to: Brad Smith, Box 1093, Cochise, AZ 85606.

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Assignment 3-D (Continued from Inside Front Cover)

mind that images will be reproduced in black and white.) Include all relevant cap-
tion 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 profession-
al, is eligible. Stereos which have won
Steroscopic 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 photographic.

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Stereo by Doane Gregory. © 1994 TRISTAR PICTURES.