The South African War 1899 - 1902

(Email's note: This article was originally published in the Quarterly Bulletin of the South African Library, Dec. 1968. We publish this condensed version by special permission of the South African Library.)

By Neal Dubrey

Stereograms of the South African War provide a useful photographic record of events and their background. They are one of the largest and most comprehensive series of photographs of the period and, whilst fast disappearing, are by no means rare.

By the turn of the century, one publisher alone was producing 30,000 stereogram cards per day. This publisher was Underwood and Underwood, based in America but active also in many other countries. The young Underwood brothers, still in their early twenties, had conceived the idea of using college students as part-time door-to-door salesmen, to endorse by their prepared manner and speech the educational value of the product. This was an idea later to be done to death in the merchandising of encyclopedias, but when new to the public it sold stereo views by the million. The Underwoods searched continually for new subjects.

This point in time, this grand flowering of stereoscopy, happened to coincide with the South African War. A few stereograms had been made of the American Civil War, there had been one or two series portraying other minor affrays. The clear skies and the photogenic quality of the terrain, together with the general distantness of events to most viewers in Europe and America, made these pictures of the South African War a great success.

Underwood and Underwood issued their South African War stereograms either loose or in boxed sets. These boxes were ingeniously constructed and bound to resemble books, and were titled "The South African War through the Stereoscope". Two boxfuls made a set of one hundred and fifty "views", now worth about one hundred dollars in America, where there are a few collectors specialising in historical stereos.

As new titles were added, so were older ones dropped. This means that many more than one hundred and fifty titles were actually issued, and that no two "complete" boxed sets found today are likely to be identical. It was usual to sequence the cards at the time of boxing by embossing a number, but such embossed numbers are not an identification. The same number can appear on many different titles.

An interesting point is that all Underwood stereo negatives were sold to Keystone in 1912, who re-issued a number of the South African titles after that date under their own catalogue numbers. These Keystone reissues are generally of good photographic quality with good black tones, the sepia finish of the original Underwoods having tended to fade towards yellow over the years.

The Underwoods were unusual among stereo publishers of the period in seldom printing the name of the photographer under the caption. Pictures taken by their own photographers, several of whom came to South Africa, cannot be distinguished (Cont. on page 11)
HOLOGRAPHY

By Brandt Rowles

Holography is a photographic process as unusual and amazing to modern man as the first glass stereoscopic slides must have been to an untutored rustic. As with stereoscopic photography of the 1850's, holography is toddling through its infancy. However, as holography matures, it will include a much broader range of uses and applications.

Looking at a standard hologram is exactly like observing an object through a small window. The person looking at the holographic plate (window) will see objects appear behind it at the same distance at which they were originally photographed. As one moves his head in front of the window and changes his viewing angle, the objects change their position and perspective exactly as they would if they were really there. The holographic picture, thus, has true depth and parallax. Imagine looking at a 3-D picture of a Christmas tree and observing Santa Claus appear from behind it as you change your viewing angle! While our mutual hobby of stereoscopy provides flat images that fool the brain with an illusion of depth, holography provides the real thing - true 3-D images, viewable at many angles.

This article will provide a brief overview of the history, basic theory, varieties, source of supply, relative cost and a few present and future applications of holography.

The term "holography" means "the whole picture" and is derived from the Greek "holos", meaning whole. The British scientist, Dr. Dennis Gabor, coined the term to describe a new process that he explored while trying to improve the resolution of electron microscopy. His discovery, a novel method of recording reconstructed wavefronts of light, was first published in Nature, 161, 777 (1948). Many years ahead of its time, the principle of holography languished until the early 1960's and the development of a coherent source of light called the laser (Light Amplification by Simulated Emission of Radiation). It was at that time that two University of Michigan scientists, Leith and Upatnick, produced 3-D holograms using Dr. Gabor's principles and a gas laser. Their work sparked an intense period of scientific interest which continues to this day. Holography has been described as a technological marvel rivaling the very discovery of the photographic process.

An overview of holography may be considered to be a special type of photography, there are some very basic differences. While the traditional convex lenses used in photography are used in holography, they serve only as laser beam spreaders, and are not required. The hologram is recorded on a very fine grain photographic emulsion, but the holographic images on the film show up as an apparently incoherent series of fine lines and smears. No "picture" will appear until the pattern is decoded with a proper light source. A very strange fact about a hologram is that every part of the emulsion contains coded information to reproduce the whole (hologos) picture. Cutting a hologram in half will produce two smaller, but complete, images of somewhat reduced resolution and clarity. Further cutting of the hologram will result in smaller whole pictures. The objects still appear, in toto, behind smaller windows. To view a standard hologram, a source of coherent light is necessary to recreate the original object-reflected light wavefront from the diffraction patterns on the photographic emulsion. The 3-D images then appear to be behind, rather than on, the emulsion. Truly, this is unusual photography!

The ordinary photographic process only records part of the light wavefront information that the photographed object sends to the film. Ordinary white light is composed of amplitudes (intensities) and frequencies (wavelengths, phases) and it may be compared to the march of a differently clad, disorganized, heterogeneous and fractious army. The photographic emulsion will record the amplitudes (areas of intensity) of the army, accounting for the light and dark areas seen on the negative. The depth information, however, is essentially lost. Color may be chemically recaptured, but the frequency component is essentially not recorded. The lack of coherence of the wavefront army is manifest by individual waves being variously out of phase, or step, and by lines or areas of bright or dark where waves augment or cancel each other out. Such variables are nearly infinite and cannot be recorded on contemporary film. The result is that traditional photography loses frequency (depth) response and photographs are not three-dimensional. Indeed, the retina of the eye is little better than film at recording depth messages from an object-reflected light wavefront. The brain creates "depth" by receiving and integrating simultaneous images from the slightly separated eyes. It is by this same process that we are able to perceive depth from stereoscopic pictures. Thus it is seen that traditional processes of photography cannot capture true depth, as the frequencies of the reflected wavefronts are not recorded.

An Overview

about $6.00 each. A filter allowing the use of a slide projector as the light source is available for about $1.00. I believe that this represents an inexpensive opportunity for the stereo hobbyist to obtain samples for his collection. (One of the most interesting holograms offered is that of a magnifying glass placed partially in front of a watch. Changing viewing angles results in according changes of magnified sections of the watch - an amazing sensation! If one were to become especially interested in this field, there is progressively more sophisticated viewing equipment available, to a price of about $100.

Holograms other than transmission holograms are outside the financial interests of most collectors, and may run upwards of $5,000, including specialized viewing equipment. One of the most interesting varieties is the suspended (projection) hologram, where a 3-D transparent image is projected in mid-air. To see one of these eerie images bouncing about in a room is strongly reminiscent of the visions of Ebenezer Scrooge or of our childhood conceptions of ghosts. One is tempted to purchase projection holographic equipment and go into the medium business, using holographic images to conjure up real money from real people.

Using cylindrical holograms, a 360° view of an object may be created. The resulting product is more similar to a statue than a photograph. Color holograms are available, as well as changing-image holograms, featuring multiple separate images on a single plate. Simply changing viewing angles causes each 3-D image to appear and disappear in mysterious fashion. Such entertaining facets of holograms have been used by commercial displays to draw attention to their wares.

The obvious entertainment value of holography, however, pales in comparison with its scientific values. Its potential is just beginning to be realized and there seems to be no limit to its scientific applications. As holography is extremely sensitive to movement or deformation, it may be used to detect stress patterns in an object. There is even a variety of holography called acoustical holography, where coherent sound waves, rather than laser light, are used. For example, the tire industry has made reference holograms of undisturbed tires and superimposed holograms of those tires made under set stress conditions. The interference patterns formed on the hologram clearly outlined areas and patterns of stress and weakness, the applications of such non-destructive (Cont. on page 8)
TRADE FAIR

By John Waldsmith

Put together enthusiastic stereo collectors, thousands of views, dozens of viewers and cameras, a display of some of the best stereo collectible items, a dynamic speaker, a fascinating auction and you have a short description of what happened at the first N.S.A. joint trade fair in Columbus, May 24-26. It was dynamite!

As early as Thursday afternoon, the N.S.A. members began to arrive in Columbus, anxiously looking forward to a weekend which for many became an exciting weekend they will never forget. Friday evening I missed the “Hospitality Hour” but did see some new friends being made and trades being generated when I bounced in during my efforts to get our N.S.A. display together in an adjoining room.

Thanks to Gordon Hoffman, Rick Russack, Pam and Dick Oestreicher, Tom and Pam Heseltine, and others, we assembled the competitive display on Friday evening. Saturday morning was a hot, humid day and the displays quickly realized that the air conditioning had broken down in the ballroom. The heat did not slow the exciting rush to buy treasures put forth on tables by expectant dealers. “I have never seen so much stereo stuff for sale,” was a typical exclamation.

For many, the air conditioned display area was a relief from the stifling ballroom. For a large number of photographecica collectors, this was their first opportunity to see some outstanding stereo items on display. Their comments tell it all: “An excellent exhibition,” “Super!” “Fantastic!”, “Great!”, and “A real 6 credit course in photographecica.”

Even though our ballot was a bit confusing for some, Saturday’s visitors made their choices for the best in category and best of show overall. (See Competition Results on page 7.)

The high point of the entire weekend was Matt Isenberg’s presentation of a 12 chapter stroll through stereo history, which followed the banquet dinner on Saturday night. A delighted audience was treated to 90 minutes of Isenberg magic. We saw the stereo camera and viewer mature from the primitive beginnings to the fine wood and brass instruments of the mid and late 19th Century, and then bringing us to the metal “hardware” of the 20th Century. Several hundred hours of preparation, with visits to major collections, and a well researched commentary combined to make Matt Isenberg’s presentation an unforgettable experience. (See a complete story of Mr. Isenberg’s presentation on page 6.)

On Sunday, the “heated” ballroom did not slow down the tuned-on stereo enthusiasts. They crowded into the ballroom to pick up where they had left off on Saturday afternoon. They visited the display area and re-examined the items, many which had been featured in Matt Isenberg’s presentation. The red, white and blue “Best in Category” ribbons were on display, indicating the choices of Saturday’s visitors. Brandt Rowles set up his Holography display and for many was their first glimpse at the stereo of the future.

Sunday afternoon we held the N.S.A. business meeting. Rick Russack pointed out some of our goals and accomplishments. He reported that membership has now reached 400 and is still growing rapidly. Rick announced the N.S.A.’s proposed insurance plan which received many favorable comments at the show. He restated our hope for a stereo research library and museum and reported on our financial situation. John Waldsmith reported on the “Stereo World” and how it has progressed and thanked those who have provided articles and comments. Gordon Hoffman expressed his impressions of the show and it was tentatively decided to hold the next N.S.A. joint show in July, 1976 at Cleveland, Ohio. Other sights were discussed as alternates, including St. Louis, Chicago, Wisconsin Dells or Niagara Falls. We introduced our new member of the Board of Directors, Dr. Brandt Rowles of Big Rapids, Mich. He replaces Dr. Michael Swanson, who resigned but will remain active in N.S.A. It was an interesting meeting and hopefully it allowed some ideas and comments to be aired.

Sunday evening we presented a 3½ hour photographic auction, led by our Director, Rick Russack, assisted by Karl and Lynn Koogle and Jack Price. Rick and Karl shared the auctioneer duties and it ran like clockwork. We can not thank enough those N.S.A. members who pitched in and helped the auction run smoothly. It was a fantastic sale.

Monday was a busy day in the ballroom, as prices dropped and trades were finalized. The strain of three days of non-stop stereomania was beginning to show on the weary faces. What made it all worthwhile for me was overhearing one dealers comment on Monday afternoon, “I had a fabulous time, this was my best show.”

A Great Show

The N.S.A. Board of Directors. Standing L to R Gordon Hoffman, John Waldsmith, Seated L to R Richard Russack, Brandt Rowles. The fifth member, Francine Russack was not present. (Turn to page to find how you may obtain this view plus two others.)

Photographed by Nick Graver.)
The stereo Show
1975

From these pictures, we hope N.S.A. members who did not attend, may have some idea of the activities and displays at the May Show. We gratefully thank all those who attended and helped make the O.C.C.S.-N.S.A. Joint Trade Show a success.

We look forward to even a greater crowd at our next show, tentatively set for July, 1976 at Cleveland, Ohio.

Photographs by James Waldsmith
Jean Boehme and her daughter Lisa Black discuss one of the panels of views.

A section of panels, displaying some of the winning views.

Visitors looking at and enjoying the stereo display.

Alan Cotter’s Stereo Auto-Graflex—Best Camera overall

Marvin Kreisman’s rosewood Becker’s-type floor model viewer.
**CATALOGS**

Make all checks payable to National Stereoscopic Association and send your orders to 475 Chauncy St., Mansfield, Mass. 02048.

S.R. Stoddard, Glens Falls, N.Y., 1877—An interesting 15 page catalog by this well known New York State photographer. The list only includes "the principal views" in areas such as: the Adirondack Mountains, Ausable Chasm, Clinton Prison, Fort Ticonderoga, and other New York State scenery. Price is $2.50 plus 50¢ postage and handling. *  

Brady & Co., June 1864—A most important catalog of Civil War stereo views and photographs. The listing includes "Lt. Grant’s Late Campaign" and starts at No. 8891. The highest number in the catalog is 11,042. Not all numbers in between are accounted for but the 6 page catalog is an excellent listing of views published under Brady’s name only. Price is $2.50 plus 50¢ postage and handling. *  

Alexander Gardner, Washington, D.C., Sept. 1863—A 28 page catalog which is a must for those interested in the Civil War period. The value of this catalog lies in the fact that each and every negative is credited to the photographer who took the picture. It includes names such as Barnard, O’Sullivan, Gardner, Wood, and Gibson. This is not a complete listing of the "Photographic Incidents of the War" but the numbers do run into the high 600s. Price is $3.00 plus 50¢ postage and handling. *  

C.W. Woodward, Rochester, N.Y., June 1876—This is an interesting 40 page catalog by a major publisher of the period. It lists views of Rochester, New York State, New York City, New England, a large listing of Pennsylvania, including the Oil Regions, Western subjects and some foreign. The catalog also includes a very useful reference item: a listing of the total number of views issued in 48 different categories prior to June 1876, along with prices per dozen of the different categories. Price is $3.50 plus 50¢ postage and handling. *  

H.C. White, Bennington, VT, 1907—This is a 116 page catalog plus a 16 page supplement. It is a superb reference item and checklist for collectors of H.C. White views or curved mount views in general. The scope of the subject matter covered is very broad, including dozens of foreign countries plus thousands of American subjects. The catalog lists the views in each set and describes each view. It also includes "sales pitches" for each set. In addition this important catalog includes a numerical index through view No. 16,953. Price is $4.50 plus 50¢ postage and handling. *  

Still Available  

Langenheim Brothers, Philadelphia, 1861—Available again, this 36 page catalog of the pioneer American firm of stereo producers. Price is $2.50 plus 50¢ postage and handling. *  

E. & H.T. Anthony, New York, c.1867—This 104 page catalog is one of the most important in the field. Price is $4.00 plus 50¢ postage and handling.  

The Government Survey views of W.H. Jackson—This 81 page catalog was issued in 1875 by the Government Printing Office which lists William H. Jackson’s photographs taken while he was employed on the Government Surveys. Price is $4.50 plus 50¢ postage and handling. *  

Thomas Houseworth, c. 1869—A 93 page catalog including lists of the Central Pacific R.R., hydraulic mining, placer mining, San Francisco, Stockton, Sacramento, Nevada and many other views. Price is $3.50 plus 50¢ postage and handling. *  

Please note: If ordering more than three catalogs, include $1.50 postage and we will mail the book rate. **BOXES**

Storage is possibly one of the greatest problems for stereo view collectors. We have received several requests from members asking for help and we hope we have found an answer. After careful study we have found an excellent storage box, designed specifically for the archival storage of stereo views.  

The boxes measure 8-1/4" wide, 12-3/4" high, and 5" deep. They will accommodate any size stereo view up to 5 x 7 inches. The boxes are made of high quality, acid-free solid fibre-board with metal reinforced corners. They have full telescoping lids with a thumb cut in the sides.  

The capacity is about 150 views stored in Kodak transparent sleeves, or about 200 unsleeved. (Several members have written asking about the sleeves. These are available from major photo dealers at about $5.00 a hundred.)  

The boxes cost $2.50 each plus 25¢ each for shipping (in most cases by United Parcel). As far as we know these boxes are being made available only by the N.S.A. to its members with no restrictions on quantity ordered. Send all orders to the attention of John Waldsmith, 1345 Tiverton Sq., N. Columbus, Ohio 43229. Make checks payable to National Stereoscopic Association.

_Isenberg: High Point of Show_  
By John Waldsmith

As mentioned in the Show report, the high point of the three day event was the outstanding presentation by Matt Isenberg, following the banquet on Saturday night. It was a superb visual delight. With expertly synchronized slides, we saw cameras move, lights light, and stereo history literally come alive.

Matt had spent several hundred hours researching, photographing, and visiting major collections, including those of Paul Wing and Richard Russack. We saw Wheatstone’s conception of stereoscopy, Brewster’s earliest viewers, Holmes’ revolutionary “skeleton” stereoscope, produced for the masses, as well as the multiple viewing devices, the Becker’s and the Taxiphote.

After a few minutes, the spectators realized they were seeing stereoscopy as they had never seen it presented before. In twelve chapters, Mr. Isenberg led us through a history of personalities and the equipment and images they produced. We saw the stereo camera mature and become more refined. The reaction to seeing the early single lens stereo camera "move" into position for the second exposure was pure Isenberg magic.

In addition to the finest in cameras and viewers, we saw the views which have now become the classics. These included the Claudet stereo daguerreotypes, Mascher’s and Stull stereo cases, the earliest known Langenheims, the magnificently tinted views of the Japanese Embassies and a rare view of Edweard Muybridge standing with a group of guides and Indians.

For the stereo enthusiast, it ended too soon. We came away with a new appreciation for our own collections and a renewed commitment to preserve these treasures of photographic history.

**Announcement**

We received a good response to our Disaster list. It is now hoped that we can compile a similar type list of views of American Indians. We would like to limit the list to views of Indians before 1900. When sending your list of Indian views in your collection, please note the titles, names of photographers or publishers and any information which may help in completing this list. We will begin publishing the list in the next "Stereo World." Again Rick Russack will be compiling the list and please direct correspondence to 475 Chauncy St., Mansfield, Mass. 02048.
Competition Results

To pick the “Best” became a real problem for visitors who visited the competitive exhibit at the May Show. The quality and visual appeal of the displays were so fine that to pick and choose a winner was a difficult task. The competition did not draw as many competitors as had been expected but the quality of the entries submitted made up for any lack in quantity. There were some interesting surprises. Out of 31 categories, only 22 received entries. Some very popular collecting areas were totally unrepresented, such as views of Natural Wonders, The West, Tissues, Photographic Subjects, Military and War views, and Views of Canada. We had a nice representative group of viewers but only had four cameras entered.

Gordon Hoffman received the plaque for the best panel of views, “Union Leaders of the Civil War.” To show how competitive the voting went, 15 other panels finished within 5 votes in the overall balloting.

Paul Jones received the plaque for the best viewer. His viewer was featured on page 20 of the May-June “Stereo World.” Paul also received the Best of Show overall plaque.

Alan Cotter received the plaque for the best camera. It is a beautiful stereo Auto-Graflex with accessories and the original box.

Official Results

Competitive stereo display, May 24-26, 1975

Stereoscopic Views

Pioneer views (including glass), published prior to 1861—Richard Russack, “Langenheim.”

Views of a State or Region in the U.S.—John Waldsmith, “Ohio in Retrospect.”

Views of a City or Town in the U.S.—John Waldsmith, “Cincinnati, the Queen City.”

Famous Personalities—Gordon Hoffman, “Union Leaders of the Civil War.”


Transportation—Gordon Hoffman, “Portraits of the Iron Horse.”


American Indians—Richard and Pam Oestreich, “Hillier’s Indian views taken on the Powell Survey.”

Occupational views—Richard and Pam Oestreich, “Lumbering.”


Views by a Particular Photographer

Tom and Pam Heseltine, “Views by F. Jay Haynes.”


Foreign, other than Canada—Lynn Koogle, “Monte Carlo, Inside and Out.”

Comics and Sentimentals—Lynn Koogle, “Character Sketches.”


Open—Gordon Hoffman, “Lincoln’s Assassination and Events which followed.”

Stereoscopic Viewers

Pioneer (Pre-1861)—John David Laird, French Combination Viewer and Stereoscope.

Table models—Paul Jones, Wood Huddersford English wood and brass viewer.

Hand Held—Marvin Kreisman, Mother of-Pearl Brewster w/brass focusing knob.

Floor models—Marvin Kreisman, Rosewood, Becker’s type.

Cameraw

Camera manufactured from 1900 to present—Alan Cotter, Stereo Auto-Graflex with accessories and original box.

Open—Horace (Gene) Brown, Folding Blair Stereo.

A special Director’s ribbon was awarded to Dr. Brandt Rowles for his Holography display.

* A ribbon was awarded to Marvin Kreisman for display of the original entry of the Graflex which he traded to Mr. Cotter just prior to the Show.

Stereo View Offer

In response to many requests, we are offering a special commemorative set of three black and white stereo views as a souvenir of the 1975 Joint Trade Fair. Mr. Nick Graver of Rochester, N.Y., has prepared 100 sets of three views with special descriptive labels. The views include (1) The N.S.A. Board of Directors, Richard Russack, John Waldsmith, Gordon Hoffman and Brandt Rowles. (See page 3). (2) The stereo display workers, John and Tom Waldsmith and Gordon Hoffman, taken in the display area. (3) Alan Cotter and the Best Camera of the Show.

The views may be purchased for $5 each or a set of three for $12. Make checks payable to N.S.A. and send to 475 Chauncey St., Mansfield, Mass. 02048.

The quantity of 100 sets should go quickly, so do not delay. Only the N.S.A. will be offering this special set with descriptive commemorative labels.

Q AND A

“Does any member know anywhere that one can purchase card stock for mounting of your own views?” John Steffen, Oshawa, Ontario, Can.

Prices

These are the prices realized in Len & Carol Anne Ances’ auction which was inserted in the May-June “Stereo World.” They reported an incredible amount of activity on the two cave lots. Numbers not listed did not receive bids.

<table>
<thead>
<tr>
<th>Lot No.</th>
<th>Price Realized</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$ 6.00</td>
</tr>
<tr>
<td>2</td>
<td>6.00</td>
</tr>
<tr>
<td>3</td>
<td>6.00</td>
</tr>
<tr>
<td>4</td>
<td>6.00</td>
</tr>
<tr>
<td>5</td>
<td>6.00</td>
</tr>
<tr>
<td>6</td>
<td>6.00</td>
</tr>
<tr>
<td>7</td>
<td>6.00</td>
</tr>
<tr>
<td>8</td>
<td>6.00</td>
</tr>
<tr>
<td>9</td>
<td>6.00</td>
</tr>
<tr>
<td>10</td>
<td>6.00</td>
</tr>
<tr>
<td>11</td>
<td>10.00</td>
</tr>
<tr>
<td>12</td>
<td>2.33</td>
</tr>
<tr>
<td>13</td>
<td>1.25</td>
</tr>
<tr>
<td>14</td>
<td>6.17</td>
</tr>
<tr>
<td>15</td>
<td>4.44</td>
</tr>
<tr>
<td>16</td>
<td>3.69</td>
</tr>
<tr>
<td>17</td>
<td>9.00</td>
</tr>
<tr>
<td>18</td>
<td>3.69</td>
</tr>
<tr>
<td>19</td>
<td>4.50</td>
</tr>
<tr>
<td>20</td>
<td>3.25</td>
</tr>
<tr>
<td>21</td>
<td>3.25</td>
</tr>
<tr>
<td>22</td>
<td>Withdrawn</td>
</tr>
<tr>
<td>23</td>
<td>4.88</td>
</tr>
<tr>
<td>24</td>
<td>5.01</td>
</tr>
<tr>
<td>25</td>
<td>6.69</td>
</tr>
<tr>
<td>27</td>
<td>11.30</td>
</tr>
<tr>
<td>28</td>
<td>8.25</td>
</tr>
<tr>
<td>29</td>
<td>8.25</td>
</tr>
<tr>
<td>30</td>
<td>8.25</td>
</tr>
<tr>
<td>31</td>
<td>12.80</td>
</tr>
<tr>
<td>32</td>
<td>14.88</td>
</tr>
<tr>
<td>33</td>
<td>14.88</td>
</tr>
<tr>
<td>34</td>
<td>5.65</td>
</tr>
<tr>
<td>35</td>
<td>5.25</td>
</tr>
<tr>
<td>36</td>
<td>4.69</td>
</tr>
<tr>
<td>37</td>
<td>2.51</td>
</tr>
<tr>
<td>38</td>
<td>2.40</td>
</tr>
<tr>
<td>39</td>
<td>1.65</td>
</tr>
<tr>
<td>40</td>
<td>3.21</td>
</tr>
<tr>
<td>41</td>
<td>1.50</td>
</tr>
<tr>
<td>42</td>
<td>.75</td>
</tr>
<tr>
<td>44</td>
<td>2.69</td>
</tr>
</tbody>
</table>

In the last issue we left out the following prices realized in Gordon Hoffman’s auction.

49    23.00
51    6.60
52    6.88
53    5.50
54    6.11
55    39.05
57    5.89
REVIEW

By Ray A. Walker

John Rogers, the People’s Sculptor

The absorbing story of John Rogers as related by David Wallace covers in detail the career of this nineteenth century portrayer of history, theatre and domestic life in statuettes of gray clay from his birth, through the years that produced nearly 90,000 examples of his art, to his death in 1904. Collectors of early stereographs, especially those of Rogers Groups, will find Wallace’s research of extreme interest and value.

One seldom finds a book so perfectly designed to help the collector. Although most thorough in answering any questions a hunter of Rogers Group stereographs could ask, there is still the possibility additional information may turn up in existing collections despite the author’s intensive research...

Charts listing statue titles with the names of photographers and publishers to whom copies are credited, alone yield data that makes this book a must for every Rogers enthusiast.

The fifteen listed makers of Rogers stereographs only provide the reader with incentive to discover others, and this possibility is one reason for the Wallace book’s appeal.

The number of photographers, publishers and, yes, advertisers who found it profitable to picture these delightful story-telling images attests the tremendous popularity of Rogers figures during the Victorian years.

By John Waldsmith

Stereoscopic Eye on the Frontier West, by Jeffrey P. Grosscup, in the Spring, 1975 issue of Montana, the Magazine of Western History, published by The Montana Historical Society.

The Montana Historical Society, in their Spring 1975 issue, presented an in depth look at one of the great forgotten Western photographers, William H. Illingworth. The article is condensed from a paper written by Jeffrey P. Grosscup, as part of his thesis requirement for his M.A. (Edi-


events

In the Brackett-Clark gallery of the International Museum of Photography, Rochester, N.Y., is an exhibition of 200 movie stills entitled COMING ATTRACTIONS. Much of the material in the exhibition has been drawn from motion picture still photography collections generously donated to IMP/GEH by Warner Bros., Culver Picture Service, the Gannett Rochester Newspapers, and Theodore Huff. The exhibit will run through Sept. 28, 1975. For further information contact: Christine Hawrylak at (716) 271-3361 ext. 12.

The Photographic Historical Society of the Western Reserve will hold their annual Trade Fair July 12 and 13 at the Stanfill’s Somerset Inn, 3550 Northfield Rd., Shaker Heights, Oh. For more information, write 934 Delaware Ave., Erie, Pa. 16505.

Stereo Exhibit

The Hall of Science, Flushing Meadows Park, Queens, N.Y. has opened “The History of Stereo,” the first in a series of special “rotating” photographic exhibits. This show traces the roots of stereo photography back to its beginnings in the early 1840’s, when it developed side-by-side with single lens photography.

Prepared under the direction of N.S.A. member Fred Spirra and Spiratone, Inc., of Flushing, New York, the exhibit highlights such early items as Negretti and Zambra stereo viewers from the 1850’s and stereo daguerreotypes and ambrotypes from the same period.

Holography

(Cont. from page 2)

front are lost.

Holography has the ability to freeze an entire wavefront message on a photographic plate. The primary reason why Dr. Gabor was not able to produce quality holograms or further develop his process in 1948 was that the most coherent (in-phase) source of light available to him was from a mercury arc lamp; a primitive source to modern technology. The problem with the beam of light given off by his lamp was that it was not “organized” enough to regiment into the patterns necessary to produce a hologram.

The development of the laser allowed science a powerful and concentrated beam of monochromatic (one wavelength) light entirely in phase, much as an army of identical soldiers marching precisely in step. Laser beams are entirely coherent, with every crest and trough of every wave being in phase.

Such light can produce interference effects stable in time, making holographic photography feasible.

A simplified explanation of how the laser is used to produce a hologram is in order. A laser beam is split into two beams, each identical to the other. The first beam (object beam) is spread by a lens and directed to the object to be recorded. This beam interacts with the object and the reflected wavefront is allowed to fall on a precisely placed film plate. The second beam (reference beam) is also spread by a lens and allowed to fall on the film plate. Under proper conditions of placement and distance, the beams mix and leave

(Cont. on page 12)

COMING

—Gary N. Chamberlin’s article on Franklin White.
—T.K. Treadwell’s article on stereo blind-stamps.
Mr. Borda's camera sent attractive pictures—pictures that showed care in every one of the steps from the clean glass plate to the silver print neatly mounted. His education fitted him for careful research. He contributed to the current photographic literature, and was the ardent advocate of the dry processes that were then beginning to attract attention; he, over the name of Siccus, contending with the advocate of the wet collodion, there being more than one follower of Humidus in the contest that gained for Mr. Borda the name of the fighting member. He came by this legitimately, having borne his sword in his country's trouble in 1848, when both in February and June, as captain in the staff of the National Guard, he participated in many of the labor troubles were settled and the render of the insurgents, after General Lamoriciere made an opening to the troops in the Faubourg, St. Antoine, by blowing up the houses and barricades which stood at the entrance of it. We confess to a fondness for accounts of the stirring history of France, whether told under the guise of fiction by Dumas, or events seen by our Borda. He directed his mines in the Faubourg, St. Antoine, by blowing up the houses and barricades which stood at the entrance of it. We confess to a fondness for accounts of the stirring history of France, whether told under the guise of fiction by Dumas, or events seen by our Borda. He directed his mines in the Faubourg, St. Antoine, by blowing up the houses and barricades which stood at the entrance of it.

By Coleman Sellers

Mr. Elly was a photographic pioneer who plied his art with a desire to learn recognizes in the power exerted to-day by the sun's rays the same power that laid the coal beds of the world in the bosom of the earth, when it beat on the now unknown rank vegetation of the ages long ago. As to the good that can be obtained from the practice of photography by amateurs, apart from the pleasure it gives to the operator and his friend, some may in time find it to their advantage to turn the art into profit by following it for a living. The amateur who does good work can only do so by and through habits of neatness and care. By reason of his hands, that enable him to master all things. It is but right and proper that much attention shall be given to the education of these hands in the manners that the education of his brain conducted—by practice and use. It is certain that the education of our children in the use of the machines used in the mechanical arts, would take a volume to describe. It has become the means of copying drawings in all large and many small machine shops. An engraving may flat- ter in describing a machine. A photograph shows us the thing as it is, and is next in value to seeing the workmanship itself.

We are sorry it is not in our power to give the names of all who took part at one time or another in this first Amateur Exchange Club. Besides the names given in the first list of the club, there was in a later list John M. Masterton, Charles de Rham, James Hunter, Dr. Williams Mead, Dr. John Dean, of Providence, R.I., who wrote the Smithsonian paper on the nerves, illustrating it with micro-photographs of sections of the medulla oblongata. Dr. Leeds, who had in 1863 just returned from Mexico with a fine lot of tannin negatives. Later Mr. Titian R. Peale, of Washington, introduced Rev. Dr. Charles H. Hall. Hugh Davids came into the club, making 8 x 10 pictures, and soon after all the members gave up their stereoscopic cameras and took to larger sizes. T.H. Brettton, of Pittsburgh, joined at the same time. The name of Henry T. Martin, of Albany, N.Y., was the last name given to us. In September of 1863 we were told that we could get the new salt, double sulphate of iron and ammonia, ready for use, from Messrs. E. & H.T. Anthony, so we know that the two brothers had become partners, but as yet without any company to the end of the name.

"STEREO WORLD" is published bi-monthly by the National Stereoscopic Association, 475 Chauncy St., Boston, address. Annual dues $10. ($12, outside the U.S. and Canada.) Closing date is three weeks prior to publication date.
CLASSIFIEDS

As part of their membership dues, all members receive 100 words of FREE classified advertising. Free ads are limited to a maximum of three (3) a year, with a maximum of 35 words per ad. Additional ads may be inserted at 10¢ per word. Please include payments with ads. Display ad rate is $25. per page. "Camera Ready" (to be reproduced exactly as submitted.) Other size ad rates are subject to request. Deadline for Classified ads is three weeks prior to publication date. Notice of display ads must be received within three weeks before publication date, but the actual ad copy can be received up to two weeks before publication date.

FOR SALE

ISSUE OCCASIONAL LISTS with hundreds of views and viewers for sale. Send address and 10¢ stamp to be put on mailing list. Jim Benton, 3242 Sawtelle Apt. 2, Los Angeles, Ca. 90066.

FOR SALE OR TRADE: Polyorama Panoptique. Very Good to Excellent condition, no parts missing. Five very good tissue slides. Each slide is two pictures in one; one viewed by direct light and one by indirect. John Carson, 16208 SE 31st St., Bellevue, Wash. 98008.

FOR SALE: Dramatic multiple exposure color stereo of winged creatures and chimera; signed by photographer; will be one of the most exciting stereos in your collection. $5. Arthur Chandler, 123 Walnut Ave., Mill Valley, Ca. 94941.

FOR SALE: Two large (23 x 15) stereo posters, red and blue, one of Victorian angel guarding sleeping children, another of Indians at home; beautiful borders, recessed stereo lettering; $10 for both (includes red-blue glasses). Wayne Pope, 123 Keith, Berkeley, Ca.

STEREO VIEWS in paper and glass. Viewers, cameras and all other antique photographic material. Write for free mailings. Leon Jacobson, 161 Genesee Park Drive, Syracuse, N.Y. 13224.

STEREO VIEWS for your inspection and purchase at Hillside Antiques, 7 miles outside Showlow, Arizona. Off the Heber Highway and Lone Pine Rd. Halfway up the hill from the square dance center. Open Daily.

SELLING—Assorted stereo views, priced singly and in sets. Also two table model viewers. SASE for list. P.O. Box 62, North Sutton, New Hampshire 03260.

TRADE

TRADE OR BUY: Risque, Franklin White or views of Skaneateles, N.Y. Send me your want list, etc. Brandt Rowles, Rt. 4, Box 198, Big Rapids, Michigan 49307.

WILL TRADE unused, excellent condition Kodak Brownie 1A folding camera with original box, also Kodak 2A folding Pocket Brownie camera for stereo views. John Steffen, 573 King St., E., Oshawa, Ontario, Canada L1H 1G3.


WANTED

BRADY AND E. ANTHONY "War for the Union" stereo views, also want Civil War stereos by Tipton, Mumpur, Tyson, Weaver, Soule, Bierstadt, Moulton. John A. Hess, 659 Waverly, No. Andover, Mass. 01845.

WANTED set of views showing construction of ZRS-5 Goodyear-Zeppelin by L. Skeels of Ohio; other views of lighter-than-air. Need high-quality 6 x 13 transposing printing frame for roll film. Nate Skipper, 4782 Crestview Court, Birmingham, Mich. 48010.

WANTED-

WANTED-

WANTED-


WANTED FOR RESEARCH: Any and all information on Civil War photographer James F. Gibson. Photographs taken, names, dates, biographical information, as well as reprints of documents or letters concerning the above mentioned. Tom Waldsmith, 1345 Tiverton Sq., N., Columbus, Ohio 43229.

Standard Terms


WANTED FOR RESEARCH: Any and all information on Civil War photographer James F. Gibson. Photographs taken, names, dates, biographical information, as well as reprints of documents or letters concerning the above mentioned. Tom Waldsmith, 1345 Tiverton Sq., N., Columbus, Ohio 43229.

Standard Terms


WANTED FOR RESEARCH: Any and all information on Civil War photographer James F. Gibson. Photographs taken, names, dates, biographical information, as well as reprints of documents or letters concerning the above mentioned. Tom Waldsmith, 1345 Tiverton Sq., N., Columbus, Ohio 43229.

Views

An "Excellent" view is a clear, sharp image on a clean, undamaged mount. "Very good" is used to describe a view slightly less perfect than the above. There will be no major defects in the view or mount. A "Good" view is in about average collectable condition. An image may be slightly faded, corners may be rubbed or the mount may be stained. Please state if views have folded or damaged mounts.

Cameras

"New" — Equipment as shipped from the manufacturer, "Mint" — 100 per cent original finish, everything perfect, in new condition in every respect. "Excellent" — 80 per cent to 100 per cent original finish, similar to new, used little, no noticeable marring of wood or leather, little or no brassing, lens clean and clear, all mechanical parts in perfect working order. "Very good" — 60 per cent original finish, item complete but wood or leather slightly scratched, scuffed or marred, metal worn but no corrosion or pitmarks. "Good" — 45 per cent original finish, minor wear on exposed surfaces, no major broken parts but may be in need of minor replacement parts, metal rusted or pitted in places but cleanable, leather scuffed and/or aged. "Fair" — 25 per cent original condition, well used and worn, in need of parts replacement and refinishing.

Page Ten
African War

(Cont. from page 1)

from those bought by them from local photographers. All were made up and captioned to the standard Underwood product, to meet the steady demand. Negatives were bought on both sides of the lines, and photographers of Boer Commandos in the field are among the most interesting in the whole series.

Another interesting picture is the famous studio portrait of Generals De Wet, De la Rey, and Botha, taken in 1902. This photograph as reproduced in the book De la Rey, Lion of the West by Johannes Meinjies, shows the inscription “Duffus Bros. Artists, Cape Town” in one corner. In the identical Underwood photograph, in stereo, this imprint has been cut out.

A few South African photographers did publish their own stereo cards. These can be described as “rubber-stamp” issues, this being the usual method used for marking the back of the card. Invariably, only the name and address of the photographer were given. Sometimes a handwritten serial number and title are found, but these must always be suspected as they have usually been added later by some collector. Consequently, these small issues are most difficult to date, and to identify on subject matter.

Underwood titles are in the main accurate, full, and factual, and often include the date to the day on which the picture was taken. Where the only dating is by copyright year, it should be remembered that this is the date of publication. A picture taken late in 1900 can be marked “Copyright 1901”.

Army units are invariably identified, as are persons of note. All of this is most useful to the historian. Localities are also accurately described, although some contemporary descriptions such as “New Zealand Hill” or local names such as “Honey Nest Kloof” are difficult to identify.

As a side point of interest, titles are often re-printed on the backs of Underwood cards in six languages. This shows the range of distribution.

For ease of classification, stereograms of the South African War may be divided into six groups.

(1) Records of Action

Genuine action shots are understandably rare. Most are of heavy guns firing on “such a such a position” and even then it is the caption which makes the action. Nothing in the pictures distinguishes them from practice shots.

One example of real action shows British Scouts firing on a Boer patrol near Colesberg. In this picture the patrol can be clearly seen. Another interesting point about this particular card is that two versions are known, one showing the Boer horsemen much closer than they are in the other. It can be assumed that two plates were made of this particular scene, the reverse being brought into use after some damage to the original. This use of an alternative negative, taken from the same viewpoint but differing slightly in content, is encountered quite frequently.

(2) Posed

Battlefield scenes which have obviously been posed are quite common. There is an element of staging in even the best of them which gives the game away, while imparting sentimental functions. The dramatic pose of “The dying bugler’s last call” with a background of twisted “corpses” littering the veld, is a typical example. These posed pictures must have been fun to make, and obviously helped to kill time in the dreary camps behind the lines. They do have some value in showing in close-up detail the uniforms and equipment of the soldiers. The faces and, in some cases, their realism of stereoscopic reproduction are extremely lifelike, and gives us some insight into the type of men they were.

(3) Famous People

The penetrating realism of the stereoscopic camera also shows to advantage the famous men of the time. Roberts (haggard), Baden-Power (jaunty), Cronje (pathetic) and Joubert (confident). Most of the main participants in the war are represented. One particularly revealing picture shows a bare-headed Lord Roberts sitting in an old chair on the stoop of a farmhouse, poring over a map while the staff officers stand waiting around him.

(4) Documentary

These show historical events, such as the entry into a town or the crossing of a particular river. The photographer was able to anticipate the occurrence, and placed himself into a position to record it.

(5) Record Pictures

Under this category fall the pictures of camp life, troopships, war damage to bridges and buildings, hospitals, etc., etc. All the general background, but not specific events.

(6) Non-War

While in South Africa, the Underwood photographers took the opportunity of photographing towns and scenes in all parts of the country. Often the caption was “stretched” to make the picture fit the war series. (“Port Elizabeth, one of the British Army’s ports of entry.”) These pictures are now among the most interesting of the whole series, particularly the views of early Johannesburg and of Cape Town docks, and the glimpses of Native life.

Page Eleven
The viewer pictured here is from Richard Russack's collection. It is a nickel-plated Holmes-type viewer on a beautifully turned metal stand. It has a red velvet base and hood. This viewer was patented May 19, 1885. This type of viewer was popular from the late 1860's to the end of the 19th century. Many versions of table models on stands exist, dating back to the early Brewster-types in the 1850's. Do we have any other N.S.A. members with unusual viewers of this type?

Holography
(Cont. from page 12)

a complex coded interference pattern (diffraction grating) on the emulsion. Although color is lost unless very special and complex arrangements are made, the actual phase and amplitude of the object beam is recorded. As the reference beam is also recorded, and came from the same laser source, it is possible to compare the object wave with a wave of known and reproducible characteristics. After developing the film, a strange wavy pattern results. It appears as if no picture or any reasonable image could be coded within such an unusual interference pattern. However, when the diffraction grating on the film is illuminated from behind with a laser or monochromatic light, the original waveform reflected from the object is recreated for viewing. In other words, the object actually appears to be there, at about the same distance from the window as it was photographed originally. Since the object wave is recreated in entirety, every message transmitted from the object is made available for the eye. Further, every part of the hologram contains the "whole picture", as discussed previously. It is seen that the development of the laser with its coherent and reproducible light made the process of holography feasible.

If one were to take a standard hologram and illuminate it with a strong source of white light, he might observe an eerie and misshapen object composed of light and dark lines, shifting spectral colors and poor resolution. A powerful source of monochromatic light (even a slide projector with a filter) would decode the hologram and allow the object to appear quite clearly. Laser light would reveal the object in all its original appearance and clarity.

There are several varieties of holograms. The window arrangement described earlier is the standard "transmission" hologram. This variety is the most common, least expensive and readily obtainable. To my knowledge, the Holox Corporation, 2544 West Main Street, Norristown, PA 19401 is the only manufacturer of commercially available holograms. Several scientific supply houses sell their product, but I recommend that interested readers write the Holox Corporation directly for their price list and further information. (I purchased a hologram from one such supply house and paid about 33% more than the Holox Corporation charges for the same item.) Upwards of 20 holograms, measuring 4.5 x 4.5 inches and laminated in clear plastic, are available at testing of solid objects are revolutionary. Areas such as mechanics, construction engineering and even product development are just beginning to utilize this process of holographic interferometry.

The future will certainly hold currently undreamt-of applications. It has been suggested that acoustic holography might be developed to the point where most exploratory surgery could become unnecessary - a holographic interferometry technique would be used to pinpoint certain disease processes. The dentist could use interference holography to better design dentures. The architect and engineer could use computer designed holograms to test objects which have never before existed. Electron microscopy and holography might be combined so that we may even be able to observe a single atom. The pulsing ruby-laser beams might be employed to make instantaneous stop-action holograms of quickly occurring complex reactions. Three-dimensional movies and television are now possible and eventually may become commonplace. Entire museums might be hologrammed and projected with special classroom equipment. It is estimated that, even now, the entire contents of any set of encyclopedia could be stored on a 1 inch square of thick photographic film. Such capacity is far beyond the storage requirements of any modern computer. The only limitations of holography appear to be those associated with non-stereoscopic imaginations.

I would like to thank the Holox Corporation for the useful information which they provided. I am certain that any NSA member requesting information from them will find them as courteous and helpful as I did.