Craig Daniels, of Red Wing Viewer fame, has recently devised a simple, low-tech modification to the Nimslo camera which makes it possible to send color negative film to any commercial processor and get back correctly exposed and sized print pairs for mounting.

Black plastic "wedges" measuring 4.5mm X 22mm are glued to the inner edges of the #2 and #3 frames in the back of the camera, just below the level of the film plane. The resulting sets of images on the film (consisting of one and two-thirds of a Nimslo frame each) are the same overall width as a standard 35mm frame and can be printed as such by any automatic printer. The frame line visible in each print isn't enough to throw off the color balance or exposure, and the partial images from the camera's center lenses are simply trimmed off and discarded.

If you order 3½ X 5" prints, the usable stereo images will be two and three-quarter inches wide each. If you order 4 X 6" prints, the usable stereo images will be three and one-quarter inches wide—ready for trimming to standard 3" wide prints for mounting or insertion in a Q-VU mount.

One problem does remain, however. The spacing of the "full frame" images on the film won't be as even as those from ordinary 35mm cameras. The operator of the color printer will need to jog the film a bit as it runs through the machine—so bring along a stereoscope with sample views and make friends with some key people at your favorite local lab.

Customers of Color Lab (Box 37, Hastings, MN 55033) don't need to bother with the wedges at all, just request "4 inch paper, NIMSLO ENLARGEMENT" and the outer frames will be printed just over 3" wide. (Or each frame from a "Teco Nimslo" will be printed that size.)
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Front Cover:
H. C. White No. 2599, "Steamship
Corinthic in the Great dry dock, -
largest in the world, Liverpool, En-
gland." From Richard C. Ryder's feature
in this issue. The Great Liners of the
North Atlantic
The opportunity to attend the Sixth Congress of the International Stereoscopic Union in Interlaken, Switzerland was truly not something any stereo photography enthusiast should have turned down, if there was any way at all of making the trip. The chance to meet people of similar interests from around the world and to see their work, and, in many cases, the equipment they use or make, is rare enough. This particular congress was made all the more special by the large attendance and the well-organized presentations. No report that would fit in a magazine could give the whole story in complete detail or convey accurately the complex social and emotional interactions of so many people over five days.

One thing that can be done (besides talking to someone who was there and demanding to see the stereos they took) is to subscribe to the ISU journal Stereoscopy. Those who do so this year will be sent, along with two issues, the official Program of the Sixth Congress—an interesting document of the state of stereography in the world as of 1987, and a detailed look at the sequence of shows, exhibits and workshops that went on the first five days of October, 1987.

The success of the event proves the growing interest in stereo imaging of every sort, as well as the interest in international meetings to see those images first hand and talk with the people who made them. If the ISU did not already exist, the interest that brought so many people to Interlaken would probably have been rediscovered at some other congress sometime during the past year or so. Tom Handschin and the ISU officers and crew who ran the congress deserve a literal world of thanks from stereo enthusiasts everywhere. (A complete list of those who were responsible for the success of the congress is another thing to be found in the Congress Program.)

Several NSA members who attended the congress brought with them back issues of Stereo World to sell at a lobby table during breaks in the program. One of the most pleasing things about the whole event is the response to these issues from European stereo enthusiasts. If we hadn’t held back a few for samples to show along with the membership folders, we would have sold out the whole stack in the first couple of hours!

HOW TO VIEW STEREO WORLD

Viewing the various stereographs reproduced in Stereo World requires a stereoscope capable of being held close enough to the page for proper focus, but designed for viewing full size views comprised of images up to 3 inches wide. (See Stereo World, March/April '86, page 2.)

There is now some choice in the small plastic "lorgnette" type viewers which meet these requirements at minimal expense. RCI Group Inc. has recently introduced a viewer with fairly large rectangular lenses designed specifically for viewing hand-held stereographs. (See Stereo World, January/February '87, page 24.) The new viewer works well with the full size vintage views in the magazine and (with a little practice) will also fuse the smaller reproductions of contemporary stereos currently printed in a parallel free viewing format. They are available for $1.00 each including postage from RCI, 2280 U.S. 19 North, Suite 233A, Clearwater, FL 33755.

The more familiar plastic lorgnettes with round lenses and frosted inner edges are available from Mr. Poster, Box 1883, S. Hack, NJ 07606 and Reel 3-D Enterprises, Box 2368, Culver City, CA 90231. (Specify the longer focal length version.)

Even if you free view any and all of the pairs in the magazine, these inexpensive viewers will enable your friends and family to finally see the stereo gems you’ve been enjoying. They can also be mailed with magazines or clippings or other views— or kept in a pocket or car when Stereo World is being taken along to show potentially interested people.
The Search for A. B. Payne

We are eager to find any information we can on the life and work of A. B. Payne, 1867-1953. He was a Worldwide Photographer for Keystone View Co. c.1894-1908, perhaps later.

We are especially interested in additional Keystone Views of the Mount Pelee, Martinique disaster of May 8, 1902, described so vividly in the book “Darkest Hours” by Jay Robert Nash.

The numbers of Keystone Views we have are: 14300, 14303, 14313, 14317, 14326, 14331, 14336, 14343 & 14363.

We would also be interested in finding other pictures taken in Central America, South America and the Southeastern U.S. just before and after May 8, 1902. Our reasoning is that a Keystone View Co. photo around that time would most likely have been taken by A. B. Payne because he was in that area. We know that he travelled all over the world for Keystone, but because of a letter written by his mother we can only be sure the Martinique photographs are his.

We suppose that if there are Keystone Views of the April 18, 1902 earthquake in Guatemala, they would also be his, since the letter indicates he had already “made views of the earthquake ruins” when he received a Cablegram “to go at once to the Volcanic country where there are such terrible eruptions.” Since he had to go by boat, he was probably nearby.

We would be interested in locating views for purchase. However, if they are in collections and not for sale, we would like very much to see them (or have copies if this is done in any way).

We are planning to write articles about this fascinating detective story—"The Search for A. B. Payne, Worldwide Photographer." We might also be interested in using them as illustrations. Locating these pictures is also an integral part of tracing his travels. Of course, a major part of writing this detective story will be about the collectors and experts who have spent years on their interest in the world of stereoscopy and who are helping us. We plan to acknowledge the sources and make their helpfulness part of the story.

Libby & Frank Payne
11 Overhill Lane
Roslyn, NY 11576

The Search for Series 5

As an owner of a Kodak stereo camera, I have been slowly acquiring parts for this camera, among which are filters, this camera taking the series five type. While ordering this series filter from Hirsch Photo in New York, I have been informed by them that Hoya (their supplier) has ceased importation of this series.

To the many owners of Kodak stereo cameras and other stereo cameras that take series five filters, the prospect of now being unable to purchase new filters is another burden that one must now face.

Gary S. Mangiacopra
Milford, CT

And Some Murray Views, Too?

We are writing to you to seek your assistance in our search for suitable material for a Cinema-\nographic Theatre we intend operating at the Port of Echuca.

The historic Port of Echuca is located on the banks of the Murray River, a river which once supported a paddlesteamer trade connecting three Australian States, and was once Australia’s largest inland port.

The wharf is now one of Australia’s leading tourism attractions and has over 100,000 tourists a year visiting.

Currently we are putting together an historic collection of Cinema and Film memorabilia, which we intend making available to the public when they visit the Port. Unfortunately we have been unable to locate and add to our collection items such as Muteoscopes (coin in slot, flicker type machines—penny arcade), and Magic Lantern equipment.

If possible, we would appreciate your assistance and that of your members in locating this type of equipment, and associated memorabilia, to enable us to arrange where possible their purchase and/or some historic information relating to them, for inclusion in our venue.

Norman Sharp
P.O. Box 421, Echuca
Victoria, Australia, 3564

Florida/Alaska View Swap?

I wish to thank you for a most enjoyable July/August '87 issue. Alaska is one of the most beautiful and desirable places I have ever visited and sincerely regret that I visited it before I became enthusiastic about stereography. Would any stereographers from Alaska, or who have visited there, be interested in exchanging for loan stereo views of Alaska for stereo views of Florida? I am primarily interested in Realist format slides, but not to the exclusion of stereo prints.

Roger D. Curry
2321 Camden Ave.
Jacksonville, FL 32207

On Edge

I’m not sure that ragged columns are really easier to read despite the fact that all words are spaced equally. Cast my ballot for justified lines. The flush left stuff looks ragged and a bit amateurish (which Stereo World is not).

Good story on Arch Obler. Too bad it didn’t conclude with “... and Bwana Devil will be making its way around the U.S. in a theater near you.” I’d like to see it again.

Some of the people I talked to at King of Prussia thought free vision is difficult. Maybe each issue of Stereo World should have a paragraph or two on how to free view and how easy it is to train yourself to do it.

I recently ran across a Nordetta 127 rollfilm 3-D camera, a toy. How can I learn more about it and its intended use?

Richard Orr
Omaha, NE

(Continued on page 27)
It is perhaps the single most dramatic and well-known incident in the long history of man's struggle against the sea. A great ship, whose very lines bespeak the arrogance and pride of her builders, crammed with the rich and famous, the cream of Edwardian society, races headlong through the chill North Atlantic night. Suddenly, out of the darkness ahead looms the great ice mountain. What follows during the next few hours is a confused jumble of images, of heroism and cowardice, of the pitifully few lifeboats, of a band that plays to the bitter end, of a millionaire and his valet dressed in their best, prepared to meet death "like gentlemen," of the Carpathia's mad dash to the rescue while another ship, close at hand, turns a blind eye and a deaf ear to repeated appeals for help, of the great stern towering darkly against the star-lit sky before the final plunge, and of thousands of agonizing screams that all too quickly melt into silence in the icy waters.

It is the night of April 14th, 1912, and the ship is of course the Titanic. Seventy-five years and two world wars have not dimmed the events of this night. Its mystique still captivates the mind. But the Titanic is nonetheless only a single incident in a longer, more complex story, that of the transatlantic liner, a peculiarly elegant form of transportation that has now all but succumbed to the dispassionate hand of progress and has, like the steam locomotive, been enshrined as a romantic symbol of a bygone age.

The liner, as it developed by the late nineteenth century, was a culmination of a number of trends in maritime affairs that had long been present on the North Atlantic. In-
THE GREAT LINERS OF THE NORTH ATLANTIC

by Richard C. Ryder

Deed, in one respect the liner may be said to go back to the Mayflower and her contemporaries, for the shipping companies thrived on the immigrant trade, often carrying in a single voyage hundreds of restless souls in the cramped quarters known as "steerage" from the troubles of the old world to the bright if ill-defined promise of the new. The immigrant trade mushroomed as a consequence of the Irish potato famine and social disorders of the 1840's, and it was under this impetus that the first vessels which might be described as prototype ocean liners appeared.

Technically, the liner represented a melding of steam propulsion, regularly scheduled service, and, for first class passengers at least, a sense of luxury. The first vessel to cross the Atlantic largely under steam did so in 1833. She was the Royal William, a 176-foot, 800-ton financial liability that her owners hoped to dump on the European market. Among her stockholders was a young Halifax businessman named Samuel Cunard, who saw in the voyage not just diminished red ink but the wave of the future. By 1840, armed with a lucrative government mail contract, Cunard had a fleet of four large steamers in service between Liverpool and Halifax, and had extended his operations to include Boston.

But if Cunard's ships were reasonably fast and reliable, they were anything but luxurious. Charles Dickens, who travelled on Britannia in 1842, described his cabin as an "utterly impractical, thoroughly hopeless and profoundly preposterous box." As to the bed, "nothing smaller for sleeping in was ever made except coffins."

It was this air of austerity aboard the Cunard vessels that prompted an American, Edward Knight Collins, to set up a rival shipping line. From the first, Collins introduced an element of comfort into vessels that were frankly designed to appeal to the wealthy and business classes. Once again, government support was paramount—and forthcoming. But, after the disastrous losses of the steamers Arctic and Pacific in the mid-1850's, Collins' shipping empire collapsed. Cunard remained master of the North Atlantic, but, spurred by Collins' challenge, began to upgrade the accommodations aboard his ships.

By the 1860's, the screw propeller had begun to replace the paddlewheel, iron (and later steel) to supplant wood in hull construction, and, as engines became more powerful and dependable, the huge masts, yards, and acres of canvas that comprised the auxiliary sailing rig began to dwindle both in size and significance. Once these elements were in place, the basic liner design would change but little. The ships could only get larger, faster, more luxurious.

Size was no object to Isambard Kingdom Brunel, a brilliant if eccentric engineer who built bridges and railways before turning to steamships. His Great Britain, launched in 1843 and astonishingly still in existence, is generally regarded as the first bona fide ocean liner. But Brunel is better known for Great Eastern, a monstrous 693-foot, 19,000-ton behemoth that was years ahead of her time. Great Eastern proved almost impossible to launch, wore out and ultimately killed Brunel, bankrupted a whole succession of owners, and failed miserably as a transatlantic passenger carrier. The problem was that no one was yet capable of producing engines sufficiently powerful to drive her, and Brunel's giant remains something of an aberration in liner history.

In addition to Cunard, a number of other steamship companies emerged to capture a significant chunk of the Atlantic liner trade in the late nineteenth century. The most important were the Hamburg-Amerika Line (established in 1856), North German Lloyd (1858), Compagnie Générale Transatlantique.
(also called CGT or simply the French Line, 1864), and White Star (British registered and run but largely owned after the turn of the century by a consortium of American businessmen headed by financier J. Pierpont Morgan, 1871). Although other companies on occasion produced impressive ships, the "big five" pretty much dominated the North Atlantic throughout most of the liner era.

One measure of a liner's success—perhaps the most conspicuous—was the speed with which it was capable of making the crossing. Although there was never any formal competition, the quest for the fastest passage, known as the Blue Riband of the Atlantic, gradually assumed the proportions of a major sporting event. Some companies exhibited a rather ambivalent attitude toward the title, publicly decrying the competition while at the same time noisily building ever more expensive liners just to have a crack at it. Speed attracted customers, and the Riband usually brought with it the cream of the passenger trade.

Technically, there were two Ribands, one for the eastbound and one for the westbound crossing. Since individual companies employed a variety of departure and arrival points over the years and sailed different tracks, the record was based not on the duration of the crossing but on the average sustained speed.

Cunard's Britannia is generally viewed as the first vessel to hold the Blue Riband, and that company at times seemed to regard the title as something of a private fief. Following Collins' successful challenge in the early 1850's, Cunard recaptured the title with Scotia, their last paddle-wheel, in 1862. During the 1870's, the record bounced back and forth between two relative newcomers, Inman and White Star. The Guion Line held it in the early 1880's (their Alaska being the first to make the crossing in under a week) before the Riband once again passed back into the hands of Cunard. The introduction of twin-screw propulsion allowed Inman's City of New York and City of Paris to push the record to more than 20 knots in 1889. White Star's Teutonic stormed into the record books two years later, but when Cunard regained the title in 1893, both Inman and White Star bowed out of the competition.

Speed was expensive—in construction and operating costs, in the space required for ever more massive engines, and in the increasingly unpleasant vibration those engines produced. It was a case of diminishing returns and Cunard had pushed pretty close to the theoretical limits. Or so it seemed.

Unfortunately, no one had bothered to tell the Germans. With the enthusiastic backing of the Kaiser, who saw large, fast liners as one way to increase national prestige, Germany's premier shipbuilders set out in pursuit of the Riband. First off the mark was North German Lloyd's Kaiser Wilhelm der Grosse, the world's first four-funnel liner, which seized the crown in 1897. She was followed during the next decade by Kronprinz Wilhelm, Kaiser Wilhelm II, and Hamburg-Amerika's Deutschland. The trident seemed to have passed to the Germans.

But Cunard, backed by miffed British pride, was not to be outdone. Fortunately, help was at hand. In 1897, inventor Charles Parsons had electrified the crowds at the Spithead Naval Review with an unauthorized display of maritime bravado, racing his yacht, the Turbinia, through the assembled lines of warships, and playing cat-and-mouse with the destroyer sent to chase him away. The Admiralty was not amused. But the power and efficiency of Parson's steam turbine, so boldly demonstrated, was not lost on Cunard, and in 1907 the giant new Lusitania, driven by four screws and powered by Parsons' turbines, finally dethroned the Germans. This time Cunard would keep the Riband for more than twenty years.

As liners became larger and faster, they also became more luxurious. After Deutschland, Albert Ballin...
the brilliant and innovative chairman of Hamburg-Amerika, began to design ships for comfort and elegance rather than speed. Ballin established a trend when he engaged special interior decorators to furnish the public rooms on Amerika. With the 52,000-ton Imperator in 1912 and her giant successors, Vaterland and Bismarck, Ballin introduced divided funnel uptakes; brought to perfection in France's Normandie in the 1930's, this concept allowed an uninterrupted sweep through a succession of great salons and public rooms on the upper decks. Ballin also elevated liner cuisine to a fine art, employing the renowned César Ritz to supervise Hamburg-Amerika's elegant fare—a far cry from the days when Dickens had complained about the food on Britannia.

With the other lines, the story was similar. While White Star catered to the health and fitness crowd with an on-board gymnasium and swimming pool on Olympic, Cunard imported 300 Arab craftsmen just to
I decorate the paneling in Mauretania's salons. In little more than twenty years, liners had gone from simple plush comfort to an opulence that bordered on hedonistic. Of Mauretania, Rudyard Kipling wrote, "the monstrous, nine-decked city goes to sea." It was an apt comparison, and, for a first-class passenger, it was entirely possible to forget that one was on a ship at all. Unfortunately, the North Atlantic had ways of jogging the memory—and such reminders could be very abrupt.

The list of liner disasters is a long one. Some, like Inman's City of Boston in 1870, simply vanished without trace. Others, in the days before precise navigational aids, ran aground on rocky, inhospitable coasts. Although storms accounted for some ships and fires claimed others, such as CGT's elegant Paris in 1939, most disasters were compounded by fog. This was especially true since many captains believed...
like one grizzled Cunard veteran that the best way of dealing with fog was to cram on all possible speed—the theory being that the faster you went, the sooner you would emerge into clear water.

But if fog was the great bogey of the North Atlantic, ice could be just as treacherous. Cunard's iron-hulled Persia was badly damaged in field ice in January of 1858, about the same time and place that Collins' Pacific mysteriously disappeared. In 1879, Guion's Blue Riband Arizona ran head-on into an iceberg, crushing in her bows; she limped back into port and survived to sail again. Thirty-three years later, it would be amply demonstrated that a glancing blow could be far more deadly.

The situation improved somewhat following Marconi's invention of the wireless, which made its liner debut on Kaiser Wilhelm der Grosse in 1900. Wireless proved its worth in January of 1909 when White Star's Republic was rammed by a collier in the St. Lawrence and sank like a stone. Although the total casualties were less than those on Titanic, Empress of Ireland carried more passengers to their graves than any other liner in peacetime history. This event was soon overshadowed by a greater tragedy.

In August of 1914, war broke out in Europe, and for more than four years travel on the North Atlantic was anything but a pleasure cruise. The beginning of hostilities caught several of the big German liners either at sea or in neutral ports. Hamburg-Amerika's giant Vaterland allowed herself to be interned in New York rather than risk falling into British clutches. At the moment, however, the British were more concerned with the whereabouts of North German Lloyd's Kronprinzzessin Cecilie, at sea with a cargo of some $12 million in gold and silver bullion. With her huge reciprocating engines (the largest in the world) running flat out and rattling her passengers unmercifully, the German liner managed to elude pursuit and eventually turned up off the resort town of Bar Harbor, Maine.

In accordance with long-standing policy, other liners were outfitted either in home ports or in remote anchorages to serve as merchant cruisers. Kaiser Wilhelm der Grosse captured five ships before the British finally tracked her down off the coast of Africa. Kronprinz Wilhelm successfully slipped past the British patrols off New York, armed at sea from a German cruiser, and sank twenty-six Allied ships over a period of eight months before lack of fuel and supplies forced her to seek sanctuary in Chesapeake Bay.

The largest of the British liners, with their mammoth appetites for coal, were quickly recognized as unfit for cruiser warfare. Instead they found their forte as troop transports and hospital ships. Aquitania, Mauretania, Olympic, and Britannic all served in this capacity, the latter being fatally mined in the Aegean in 1918.

Meanwhile, the Lusitania, alone of all the big liners, continued to operate on the old North Atlantic run and neutrals, despite German warnings, continued to sail in her. On May 7, 1915, the giant Cunarder was torpedoed and sunk off the coast of Ireland by a U-boat. One hundred and twenty-four Americans were among the 1200 lost.

Amid vehement anti-German sentiment, President Wilson ordered Germany to clean up its submarine
warfare act—or else. Although other incidents occurred, Germany eventually complied. For a time, the U-boats remained muzzled. Then early in 1917, in a bid to starve Britain into submission before American troops could intervene, Germany resumed unrestricted submarine warfare. The gamble failed. First in a trickle, then in a flood, American troops poured into France, transported largely in Vaterland (now renamed Leviathan) and the other German liners that had been interned in American ports—what Navy Secretary Josephus Daniels gleefully termed "the fleet the Kaiser built for us."

By November 11, 1918, Europe was again at peace. Imperial Germany lay beaten, her liners part of the massive reparations demanded by the victorious Allies. In the postwar division of the spoils, the United States kept Leviathan, while Cunard acquired Imperator (subsequently Berengaria) and White Star got Bismarck, which would enjoy a distinguished career as Majestic.

The 1920's saw a basic shift in liner philosophy. Although the major shipping companies continued as always to cater to the very rich, they suddenly found themselves deprived of their real bread and butter—the "huddled masses" down in steerage "yearning to breathe free." Between 1820 and 1920, more than 35 million immigrants had come to America, mostly by steamship. Now, in 1921, an isolationist United States passed the Emergency Quota Act, effectively slamming the "golden door" and shattering the century-old symbiosis between steamship and immigrant. Revenues plummeted. Then the liners discovered tourism and their fortunes rebounded. Ship after ship was refitted to incorporate a relatively spartan "third class" for those of modest means who had a hankering to visit the "Old Country." Aggressive advertising did the rest.

There was one shipping company that did not fully share in this newfound bounty. The United States Lines had grown out of the wartime United States Shipping Board and all those expropriated German liners. With a heavy congressional subsidy, America planned to carve out for itself a sizable chunk of the lucrative North Atlantic passenger trade. But this was the era of Prohibition and, while others prospered, American hopes literally dried up on the high seas. Not until Prohibition ended and the costly Leviathan was withdrawn from service did the United States Lines measure up to expectations.

Throughout the Twenties and early Thirties, larger, faster, and more elegant liners continued to enter service: CGT's Paris and Ile de France, Holland-America's Statendam, North German Lloyd's Bremen and Europa, and Italia's Rex and Conte di Savoia. Older liners, converted to oil fuel, kept pace. The lessons of the past were conveniently forgotten as ships continued to press for a fast passage despite hazardous conditions, with occasionally embarrassing results, as when Olympic rammed and sank the Nantucket Lightship in May of 1934.

Throughout the 1920's, the Blue Riband was held by Cunard's Mauretania, probably the most beloved liner of all time. She had won the title from her sister, the ill-fated Lusitania, and held it longer—22 years—than any other vessel. Finally, in 1929, she was surpassed by North German Lloyd's brash new Bremen. In an incredible feat of engineering, the "Grand Old Lady," as she was affectionately known, came roaring back and barely missed recapturing the crown. By the time Normandie and Queen Mary engaged in their epic duel in the late 1930's, the record for the Atlantic crossing had dropped below four days.

The Great Depression again brought hard times to the liner fleets. White Star attempted to recoup its shaky fortunes by building a new superliner and instead went

"The Lusitania Leaving Dock in New York City," No. W26101 by Keystone View Company. Torpedoed in May of 1915. Lusitania rolled over and sank so rapidly that it proved impossible to launch many of her lifeboats. Was she carrying munitions, as the Germans claimed? Probably not, although stories to that effect continue to surface with almost boring frequency.
bell up. Cunard, also ailing, required a government bailout and a merger with the moribund White Star in order to complete Queen Mary. Across the Channel, the story was much the same. CGT’s breathtaking new Normandie sailed from Le Havre in 1935 courtesy of the French government. These two elegant rivals, Queen Mary and Normandie, dominated the North Atlantic trade as the world edged ever closer to catastrophe.

In September of 1939, what Winston Churchill called the twenty-year truce came to an end and Europe again plunged into war. For the transatlantic liners, the experience was remarkably similar to that of a generation before. At the outset, Bremen successfully made a daring run for home waters, but North German Lloyd’s Columbus, Germany’s third largest liner, ran afoul of the Royal Navy and tied up next to her compatriot. Both Queen Mary and Queen Elizabeth were soon converted into troopships, subsequently transporting more than 1,577,000 troops to the various combat zones. Because of their great speed, the Queens usually sailed unescorted. There were some close calls and many a U-boat captain seethed with frustration as he watched one of the giant Cunarders steam safely over the horizon. Both ships emerged unscathed, although Queen Mary accidentally rammed and sank the British light cruiser Curacao in 1942.

Many other liners were employed as troopers during the war, including Ile de France, a new Mauretania, and the dazzling new America (launched on the very last day of peace). For Aquitania, this was old hat—she had done all this twenty years before. With American entry into the war, Normandie was earmarked for similar duty, but fate was less kind to her and she burned at her pier during conversion. The war also claimed Bremen (possibly a victim of sabotage), Canadian Pacific’s Empress of Britain (first bombed from the air and then torpedoed by a U-boat), and the Italian speed queens Conte di Savoia and Rex, while Europa survived the war to become a reparations payment, eventually entering French service as Liberté. In June of 1940, Luftwaffe bombers sank the Cunarder Lancastria off the coast of France, killing more than half of the 6,000 troops aboard—the Allies worst sea disaster. The loss of the German liner Wilhelm Gustloff in the Baltic in 1945 claimed almost twice as many lives; tragically, most were refugees.

Many of the smaller British liners were converted into armed merchant cruisers for duty on the convoy lanes of the North Atlantic. Inadequately armed and totally lacking in armor protection, they were no match for a determined German raider, although Rawalpindi and Jervis Bay did manage to achieve an immortality of sorts by gallantly defending their convoys against impossible odds.

With the return of peace, the surviving liners were occupied for several months in repatriating the victorious troops. Then it would be back to business as usual. Or so it was hoped. Actually, although none could know it at the time, only one additional liner would ever capture the coveted Blue Riband.
She was the United States, a sleek, 990-foot-long ocean greyhound, designed by William Francis Gibbs, America's foremost naval architect. Heavy reliance on aluminum and light alloys in her construction allowed her to approach Queen Mary in size while holding her tonnage to less than two-thirds that of the Cunarder. The result was an exceptionally fast ship.

Just how fast was demonstrated in July of 1953 when United States, on her maiden voyage, utterly demolished the old record, knocking more than ten hours off Queen Mary's best time. The Blue Riband thus passed into American hands for the first time since Collins' Baltic had held it briefly a century before.

The early 1950's represented something of a golden twilight for the luxury liner. After years of wartime hazards, Queen Elizabeth had finally entered service as a passenger liner in October of 1946. Together with a revamped Queen Mary, she enabled Cunard to begin their long-promised weekly superliner service between New York and Southampton. The company's profits had never been higher.

But it was not to continue. Already transatlantic airline flights had begun to cut into liner bookings. In 1953, 38% of those making the Atlantic crossing went by air; five years later, when Boeing inaugurated the first transatlantic jet service, the figure jumped to 59%. By 1970, only 4% of those making the trip still went by sea.

For a while the liners tried to hold on by operating part of the year as cruise ships. But the Queens and those like them were too large for the available port facilities and ill-designed for such employment. As government subsidies dwindled, more and more of the large liners were withdrawn from service: Queen Mary in 1967, Queen Elizabeth in 1968, United States in 1969, and CGT's final offering, the superb and relatively new France in 1974.

Liners continued to make headlines throughout these years—when Andrea Doria sank after colliding with the Stockholm in 1956, when Queen Mary was sold to the City Council of Long Beach, California, for use as a floating hotel and maritime museum in 1967, and when the ex-Queen Elizabeth burned and capsized in Hong Kong in 1972. Such headlines were obituary notices, not just for individual ships, but for a whole way of life.
Today, only one full-fledged liner continues to ply the North Atlantic route on a regular basis. She is Cunard's Queen Elizabeth II, completed in 1969 and only half the size of her predecessors. QE2 spends much of the year operating as a cruise ship. But as the spring sun warms the North Atlantic, she once again appears on the old haunts, the sole survivor of a vanished breed. She is the last defender of a long and honored tradition.

Ocean liners never attracted more than a small fraction of the attention that stereo-photographers lavished on warships. Nevertheless, a surprisingly large number of liners are represented in stereo, and a few are quite well documented. Brunel's Great Eastern of course was the subject of numerous stereographs in the late 1850's and 1860's—by Stacy, London Stereoscopic Co., G. W. Wilson, and others, but the kaleidoscope career of this unique vessel demands an article of its own and nothing more will be said about it here.

Of the transitional liners of the 1860's and 1870's, Frisia, Scythia, Russia, and Friesland were all stereographed. A few years later, Inman's Blue Riband City of Paris was stereographed by William H. Rau, while White Star's Teutonic appeared in views by both the American Stereoscopic Co. and Underwood. The American liners St. Louis and St. Paul were pictured by Alfred S. Campbell and William Rau respectively; the latter was also covered in its role as an auxiliary cruiser during the Spanish-American War.

All of the major German liners that vied for the Blue Riband around the turn of the century are represented, most notably Kaiser Wilhelm der Grosse, which was stereographed by C. L. Wasson (International View Co.) in 1902 and in a major series of at least eight views by an unidentified German photographer at the time the liner took the Blue Riband in 1897. This group bears the general inscription "Norddeutscher Lloyd, Bremen, Schnelldampfer Kaiser Wilhelm der Grosse, grösster Schnelldampfer der Welt," which translates as 'North German Lloyd, Bremen, Expressliner Kaiser Wilhelm der Grosse,' the greatest Express liner in the World." Included in the group are a number of magnificent interior shots, as well as views of the vessel's captain and launching the lifeboats.

The prize for stereographing the greatest number of different liners must surely go to H. C. White, which produced views of White Star's Adriatic, Corinthic, and Oceanic, Cunard's Umbria and Lusitania, Hamburg-Amerika's Deutschland, Columbia, Prinzessin Victoria Luise, and Amerika—the latter a particularly poignant view of immigrants huddled on deck, Atlas Line's Siberia, North German Lloyd's Kronprinz Wilhelm, and the Italian liner Lombardia. White issued at least three views of Lusitania, taken in 1907 when the giant Cunarder captured the Blue Riband; one of these was subsequently reissued by Keystone as part of their World War I set. White's coverage of Hamburg-Amerika's Deutschland is particularly good, consisting of six views taken at the time of Prince Henry's departure from the United States after his triumphal tour—his arrival, aboard Kronprinz Wilhelm, having been previously stereographed by Underwood.

White also produced two sets of interest: a "Mid-Ocean" series of twelve views taken aboard Columbia and Lombardia, and a "West Indies Cruise" set of 100 views taken aboard Hamburg-Amerika's Prinzessin Victoria Luise, a relatively small vessel whose Caribbean itinerary included Martinique, where the devastating eruption of Mont Pelée had occurred only a short time before. Among the views that show...
the ship itself are one of lifeboat drill and another of that perpetually unpleasant necessity, coaling ship.

Cruise sets were a popular adjunct to the trip for many globe-trotting tourists. Underwood issued boxed sets of the 1910 Mediterranean cruise of North German Lloyd's Grosser Kurfurst and the round-the-world cruise of Hamburg-Amerika's Cleveland two years later. North German Lloyd subsequently issued its own set of a cruise to several northern locales, including Iceland and Spitzbergen, aboard the liner München.

Talk about tough assignments! To produce such a set, Underwood's stereographer had to sail with the cruise, visiting all the strange and exotic places, and producing a large number of views from which each customer could compile his own individualized set. Although such cruises are only peripheral to the
history of the North Atlantic liners, they are nevertheless of considerable interest because they show a variety of on-board activities, such as dances and deck games, that were typical of the Atlantic crossing but are otherwise poorly documented in stereo.

The only two liners whose First World War activities are recorded appear to be Cunard's Aquitania and Hamburg-Amerika's Vaterland. Underwood issued at least four views of the former serving as a troop transport in her bizarre "dazzle" camouflage rig, while the latter appears in three Keystone views, taken both during her 1914-17 internment on the Hudson and after her seizure by the United States and subsequent renaming as Leviathan. Both W. E. Troutman and Realistic Travels issued views of unidentified liners engaged in trooping activities.

During the inter-war years, Keystone published views of both White Star's veteran Olympic and CGT's revolutionary new Normandie. The former view was also used in the Keystone Junior set on "Ships.

"Great Steamship Oceanic, 705 feet long. Carries over 2,000 Passengers," No. 910 by H. C. White, 1902. Launched in 1899, White Star's Oceanic was the first vessel to exceed Great Eastern in length.

"Steamship 'Corinthic,' in the great dry dock,—largest in the world, Liverpool, England," No. 2599 by H. C. White, 1903. By the turn of the century, it had become an established practice for White Star's ships to bear only names ending in "ic," while Cunard chose only names ending in "ia." This tradition continued until the two companies merged in the 1930's.
There are of course a great many views which show unidentified liners, often taken in the major embarkation ports of Liverpool, Southampton, and New York, or off Queenstown, Ireland, where the liners habitually stopped to take on additional immigrants. Many of these, bearing titles like "On the Landing Stage" or "Off for the New World," show little more than the huge cliff-like side of the ship rising from pierside and are almost impossible to identify. Others are readily identifiable, either because the name of the ship is clearly visible, as in the case of White Star's Oceanic in a view of the "Liverpool Docks" by the Fine-Art Photographers' Publishing Co., a European affiliate of Keystone, or because the liner itself is so distinctive as to rule out any uncertainty, as with North German Lloyd's Europa in an aerial view of "Crossing the Atlantic in Winter,—ploughing through the stormy seas," No. 8116 by H. C. White, 1903. The Italian liner Lombardia pitches into an angry Atlantic swell. Increased size lessened but did not eliminate the dangers. Even Queen Mary on one occasion broached to a particularly mountainous quartering sea and hung for perhaps a minute at a sickening angle before slowly righting herself.

"Crossing the Atlantic in Winter,—ploughing through the stormy seas," No. 8116 by H. C. White, 1903. The Italian liner Lombardia pitches into an angry Atlantic swell. Increased size lessened but did not eliminate the dangers. Even Queen Mary on one occasion broached to a particularly mountainous quartering sea and hung for perhaps a minute at a sickening angle before slowly righting herself.

"Ball on board S.S. Cleveland," No. 8 by Underwood & Underwood, 1913. This view, taken during the Hamburg-Amerika liner's global cruise, suggests some of the conspicuous wealth that was synonymous with the term "first class." (Helen D. Moseley Collection—Holmes Library)
Southampton published by Keystone in the early 1930's. Still others provide more of a challenge. There are also at least two views by Underwood of liners under construction at the great Harland & Wolff shipyards in Belfast, where Titanic was built. And what of Titanic itself? Are there any views of this most celebrated of all ocean liners? Mr. Darrah indicated to me that he thought he had owned one early in his collecting career, probably an Underwood view taken at Southampton, but that he had soon traded it away. If it was an Underwood view, the negative should eventually have found its way into the Keystone-Mast Collection. None has surfaced to date. I have never run across a stereo collector who owned a view of Titanic, nor is Charles Ira Sachs, a well-known collector of steamship memorabilia, aware of any. If Titanic views exist, they are certainly extremely rare.

Liners also appeared in both the Tru-Vue and View-Master formats.

"Sports on board S.S. Cleveland," No. 11 by Underwood & Underwood, 1913. Such cruise sets often depict deck shuffleboard and other passenger activities that were typical of the Atlantic liners. (Helen D. Moseley Collection—Holmes Library)

"Colored Troops returning from France on S.S. Aquitania, New York," No. 14210 by Underwood & Underwood. During the First World War, many liners sported bizarre "dazzle" camouflage schemes designed to make it more difficult for an enemy to ascertain the ship's course and speed. So successful was this that an escort vessel once reportedly had to circle completely around the camouflaged liner to figure out which way she was heading!
documented stereographically of all the pre-war liners, is the only one that still exists.

For more than a century they plied the oceans of the world, great stately ships with an elegance and grace all their own. They were not confined to the North Atlantic. Other

Tru-Vue issued a complete filmstrip [#1805] on Normandie in 1935, as well as scarce color strips on both Ile de France [C-1250] and Queen Mary [C-1251] in 1950. Ile de France enjoyed a spectacular career, highlighted by her timely assistance to the crippled Andrea Doria in 1956, and an equally spectacular demise two years later, when she was partially demolished in the making of a Hollywood disaster epic, "The Last Voyage."

View-Master issued single reels of both Queen Mary [#1102] and Queen Elizabeth [#1103], as well as a three-reel packet on Queen Mary in her current role as a Long Beach tourist attraction [J-31]. It is perhaps ironic that Queen Mary, the best documented stereographically of all the pre-war liners, is the only one that still exists.

For more than a century they plied the oceans of the world, great stately ships with an elegance and grace all their own. They were not confined to the North Atlantic. Other


"The Docks, Southampton, England," No. 34536 by Keystone View Company. North German Lloyd’s Blue Riband liner Europa crosses in the foreground. The aircraft catapult immediately behind the forward funnel was designed to allow the mail to be sent ashore several hours before the liner docked; the scheme proved to be impractical and was discontinued in 1935. The large three-funnel liner at right rear is White Star’s Majestic, the largest liner afloat in the 1920’s and the first to show sound motion pictures.
It was a pleasure meeting and greeting so many of our members who visited the library during the NSA Convention. We sincerely hope it was an enjoyable and informative visit for everyone. If anyone has any stereo pictures taken during the convention, we would appreciate having some for the library collection.

Richard Ryder recently spent an afternoon at the library doing research for this issue's article on ocean liners. Libby and Frank Payne also spent an afternoon with us recently. They are seeking information on Frank's great-uncle, A. B. Payne, who was a Keystone View Co. photographer. One of his assignments was photographing the Martinique disaster.

Latest Acquisitions
We are grateful to the following members for their gifts:
- Paul Wing—Bust of Oliver Wendell Holmes.
- Dorothy O. Crane—Stereo views.
- Craig Daniels—Tru-Vue viewer & strips.
- Neal Bullington—Stereo views and contemporary prints.
- Eric Stott—3-Dimension pictures.
- Raymond M. Haines, Jr.—Cash contribution.

THE GREAT LINERS OF THE NORTH ATLANTIC
(Continued from page 18)

er companies served South America, Africa, and the Orient. Britain's famed P & O Line, for example, was known as the "Cunard of the East;" when the Duke and Duchess of York sailed to Australia in 1901 to open that country's first parliament, P & O's Ophir was commandeered for the trip—and stereographed by George Rose. Nevertheless, it was on the North Atlantic that the liner rose to its greatest glory, experienced its greatest triumphs and greatest tragedies, and entered into the realm of legend. ☀️

Mel Lawson—298 35mm stereo slides from the Ernest Nyden collection: Carrying case and storage boxes for 35mm slides; box of 3-D glasses.
- Richard C. Ryder—The Keepers of Light by William Crawford. (A history and working guide to early photographic processes.); two American History Illustrated magazines.
- Peter Palmquist—Two volumes on California photographers: Darkroom magazine; Journal of California Anthropology; Journal of California & Great Basin Anthropology.
- Tex Treadwell—Stereo View Backlist book.
- Andreas T. Morch, Copenhagen, Denmark—Stereskopie magazine.
- F. Dennis Lessard—American Indian Art magazine.

Purchase Fund Acquisitions
Guide books: Egypt Through the Stereoscope w/Maps, conducted by James Henry Breasted, Copyright 1905; India Through the Stereoscope w/Maps, conducted by James Ricalton, 1907; Niagara Through the Stereoscope, copyright 1902. ☀️

You can contact the Oliver Wendell Holmes Stereoscopic Research Library by writing to Eastern College, St. Davids, PA 19087.
The largest gathering of stereo photographers and 3-D enthusiasts ever to assemble in one place filled the halls and rooms of the ornate convention center in Interlaken, Switzerland over the first four days of October, 1987. The event was the Sixth Congress of the International Stereoscopic Union, attended by members and friends from 16 countries and sponsored in Switzerland by the Swiss Society for Stereoscopy.

Final figures show a total of 513 people attending the congress, with 347 of those registered for all four days. This international 3-D gathering attracted over twice as many people as any previous ISU Congress—a healthy sign of growing interest in stereo imaging virtually all over the planet. That interest has been served and expanded by local and national stereoscopic organizations of various sizes and interests, but all with a concern that international communication and meetings need to be promoted. With no publication of its own functioning in recent years, it was the newsletters and magazines of member clubs which kept awareness of the ISU alive and spread word of the ambitious plans for a grand 6th Congress in Switzerland.

Those with the interest, the funds, the time, and/or the fanatic determination to get themselves to the Congress learned just how grand and full the event would be shortly after arriving at Interlaken’s Congress Center Casino and entering its palatial ballroom for a reception late Thursday morning. Before any official words of greeting were spoken, the sounds of alpen-horns filled the room, drawing all attention to the stage where a trio in traditional Swiss costumes had started playing. The music was both welcoming and haunting—mellow yet exotic—and it set the mood perfectly for the very full and exciting days to follow.

ISU president Thomas Handschin then welcomed everyone and declared the 6th congress open in English, French and German (a...
As they played, the alpen-horn trio faced a nearly constant firing squad of stereographers lined up in front of the stage, eager to record the instruments seemingly DESIGNED with stereo images in mind. During the four days of the congress, nearly every brand of stereo camera could be seen in use, as well as dozens of types of dual camera rigs and spliced SLRs. (All photos by the author, except as marked.)

3-D Projections
A truly dedicated 3-D projection addict could have spent every morning, afternoon and evening of the following four days watching the nearly 50 slide, film or video presentations listed in the program. With breaks for lunch and dinner, the shows ran from 9:30 every morning to sometimes after 11:00 in the evening. Thanks to the descriptive paragraphs about each show in the 48 page English/French/German congress program, people were able to pick the presentations they most wanted to see and select, always with some reluctance, those they were willing to miss in order to give their eyes and posteriors a rest. (Al-

though some people had to be reminded it isn't the intention that everyone see everything when stereo workers from a dozen countries are presenting shows on such a wide variety of subjects—and where "too much" is always the preferred choice over restricting the impressive range of interests and techniques seen in stereoscopic presentations from around the world.

The shows were presented in the large theater hall of the Congress Center Casino, where it had been decided that a rear projection system would be used for all slide presentations—a first at an ISU congress. A large screen was created by taping together three sections of frosted mylar and mounting the material on a frame with enough tension to eliminate any wrinkles or sags. The resulting projected images were very big, very bright and very sharp—all the considerations impor-
When considering the size of the theater and the audience, which at times nearly filled the main floor and much of the center section of the balcony.

While there was very little ghosting allowed by this process, the thin material did let "hot spots" from the projectors show up in the less dense slides. Most people seemed to find this a reasonable trade-off for the large and bright images, however. The wide variety of projectors required for the many formats shown were all positioned on a high platform against the back wall of the stage. The relatively short throw from there to the screen required using the shortest possible lenses available for each projector. Focusing is tricky on a translucent screen, and the projectionist can't fuse the images to check the stereo, since the polarized light isn't being reflected. Careful preparation and alignment before each show or change in format minimized problems in these areas, although communication between narrator and projectionist remained a challenge. Signaling devices for a change of slide helped, but those back on the projection platform found it hard to hear any of the more complex messages regarding out of sequence slides or mis-matched 2 x 2 pairs. Frustrating as it must have been at times, the busy technical crew had the appreciation and sympathy of the audience—who knew it was well worth the wait while a tray was sorted or a changer cleared during the relatively few delays over the four days of projections.

To attempt a review of every show presented would be impossible. Subject matter ranged from sceneries to insect close-ups; from caves to architecture; and from social commentary to flower studies. Most of the shows were narrated in their original language, and no continuous translations were possible for such an extensive program. Fortunately, 3-D is to some extent a universal language and most shows could be easily appreciated regardless of the language being spoken—except for those images involving some interesting looking technical matter or when some humorous comment produced delighted laughter from a third of the audience and confused smiles from the rest.

Some shows did of course make a more obvious impression on those gathered in the theater. The shows dealing with stereoscopy or stereo equipment itself were naturally given close attention. One of these was Paul Wing's "Stereoscopes—an Historical Review" featuring 115 detailed close-ups (inside and out) of assorted viewers from Europe and America from 1838 to the 1930's. Another show featuring some fine view bars was "The Ups and Downs of Stereo Photography" by Hugo de Wijs of Holland. The 100 slide show followed the development, production, maintenance and problems associated with the automatic and coin operated full frame viewers (about 200) Mr. de Wijs has built in his small workshop and fills with his own collection of 30,000 slides. (See Stereo World, Mar. / Apr. '86, page 16).

"Wasps," by Heinz Hennermann from the Munich College of Advanced Technology, explored the construction of a wasp nest, combs and cells through 36 amazing close-up slides. Macrostereographs of wasps from eyes to sting were sharp and dramatic enough to make the most jaded members of the audience jump a bit.

Guler Walter of Switzerland presented "The Little Flyer," a 58 slide series of mostly aerial hyper views tied together in a musical fantasy which included the ever-present image of a small paper airplane and some careful multiple projection. This one had people ready to take up hang gliding as a crude attempt to match the vistas presented in this show.

Abstract formations of 3-D light and shadow filled the screen accompanied only by music for "Reality Beyond Fantasy" by Jan Gjessing of Norway. The 100 slide show is based on Mr. Gjessing's work with much more complex productions involving sound-modulated-controlled stereo images produced by a bank of 20 projectors and sound-to-light liquid cells operated by a crew of four. Called "Dreamscape" in its complete form as seen in Oslo, the work involves no computer generated images—all are of optical origin and depend as much on movement as color or other factors. The limited version shown at Interlaken was enough, however, to produce one of the most enthusiastic audience reactions of the congress and to make "Reality Beyond Fantasy" one of the few shows repeated on the final day of the event.

Just how far beyond the ordinary you can go with aerial, scenic and action stereos was demonstrated by Allan Griffin of Australia with the show, "Report From Down
Brought to the congress by Dr. Dieter Lorenz and the German Aerospace Research Establishment, this modern 12-viewer version of the classic Kaiser-Panorama was set up in the "Rondell" at the back of the theater hall to show the G.A.R.E. exhibit "The Stereo Image in Science and Technology." (See Stereo World, July/Aug. '86, page 36.)

Stan White of Canada has gained a wide reputation with his humorous stereo images, many having won awards in international competitions. But only a lucky few have seen and heard a full, polished production narrated by Stan himself. The 50 slides of his "Beyond the Third Dimension" show gave the congress true relief from any overly heavy concerns with stereo technique and replaced it all with laughter. The cleverly manipulated table-top images of toys, toasters, vegetables, etc. required no translation to earn the show a repeat performance Sunday afternoon. Several of the views seen in the show are now available in a book by the same title, illustrated with View-Master reels. (See review in this issue.)

Another first at this congress was the inclusion of stereo material from Eastern Europe, thanks to the participation of Lajos Hazai of Hungary. He included on the program his show, "Memento," a thoughtful look at the Earth's threatened life systems—including the people who take stereographs. Mr. Hazai also brought along two films about the science of making 3-D films by Hungarian 3-D film pioneer Felix Bodroasy, who died in 1983. These were part of the program at the Cinema Rex, a few blocks away in downtown Interlaken.

The NSA and Stereo World were featured in a special show about our activities and about the contents and production of the magazine. NSA Board Chairman Lou Smaus presented original slides by authors of various articles in which those stereos had been used, including several Scanning Electron Microscope views from "Through the Electron Window" (Mar./Apr. '87) by Norman Patterson. Also seen were original slides from "Captain EO" (Nov./Dec. '86) by David Starkman and Susan Pinsky. These were followed by slides of the editing, layout, and envelope stuffing operations, offering proof to the world stereo community that Stereo World is indeed an all-volunteer, non-profit entity.

One of the most memorable 3-D experiences of the congress may be one some who saw it would rather forget. Of the several 3-D movies shown, the 10 minute "Cataract and Glaucoma," a surgical instruction film, was the most graphic. It deals in sharp, color, close-up stereo with the latest techniques for implanting lenses. Probably more than any other area of surgery, images of slicing and probing inside the eye can be very disturbing, and three people in the audience fainted despite a warning about the contents of the film in the introduction. Often in films like this, made through the observer lenses of a surgical stereo microscope, a left or right image is blocked much of the time by an instrument or a hand. But this one, by Dr. Bernd Forster of Switzerland, is well edited for both clarity of instructional message and for good stereo images.

How do you move a huge panorama viewer through doors and halls? Just lay down some sections of old carpet and ROLL it!

Under"—with slides by Mr. Griffin and other Australian stereographers. The 200 slides included everything from the Outback to Ayers Rock to snow scenes. Views of surf boats suspended over and under waves the size of small mountains were matched in audience response only by the urban aerial hypers taken at night.
"A Three Dimensional Experience" is the modest understatement which serves as the title of what was generally referred to at the congress as "The Pat Whitehouse Show." The paragraph about this show and about Pat Whitehouse herself is the longest one in the program, and for good reason. The hour long show has been evolving for years with its many sequences involving different aspects of natural history in England. Natural sound effects recorded in the field are heard with some, while in others narration or music are heard—but Pat Whitehouse doesn't just run a music track as background for pretty slides. Her images of animals and their habitats flow and change with the music so effectively that in one sequence it seems clear that Handel had set his score to the slides as they appeared on the screen. None of the functions of the ISU are intended as competitions—either between individuals or between countries. But at the conclusion of "A Three Dimensional Experience" the response in the hall quickly grew to a standing ovation. As she was handed a bouquet of deep red roses, there was no question that as far as this audience was concerned she had just earned the Nobel Prize for stereography.

Workshops

Eleven workshops were available during the first half of the lunch breaks during the congress, covering subjects like Macro 3-D techniques, using mono cameras and projectors for stereo work, and several on 3-D cinematography in various formats as used in normal, macro, and underwater applications. The better than expected attendance at the congress resulted in some of the workshop areas (which were partitioned off at the rear of the main theater) filling up to the point where it was hard to see the equipment being displayed—or to move at all. If interest in specialized stereo techniques and devices is as intense as it seemed to be at Interlaken, there may be a need in future congresses to organize workshops on more of an academic seminar basis—or to find a sympathetic institution willing to provide several rooms for these classes.

Sales Area

The sales area was open in the ballroom Saturday and Sunday of the congress, with eager buyers waiting at the doors for the noon opening each day. Ten tables in a double row lined the center of the room, allowing a throng (sometimes four deep) to circle the dealers offering a wide variety of new and used equipment and publications. Interest in some items was so intense that some tables were nearly sold out halfway through the first day. For many, this was the first opportunity to see many of the available items first-hand that they had so far only read about. No great selection of used stereo cameras or projectors was to be seen, as is generally the case in Europe. But there was no shortage of books about stereo and/or in stereo, as well as nearly
was what was easily the biggest and widest selection of 3-D art ever displayed in one place. These included drawings, paintings and photos in side-by-side, over/under, and anaglyph formats as well as lenticular prints. Those requiring optical aids to fusion had the appropriate lenses or prisms on a stand in front of the work, while anaglyphic glasses were available hanging near each exhibit or loose in envelopes, to take with you on a tour of the room. Subject matter ranged from abstract patterns of color to complex line drawings to portraits done with camera and by hand.

One section of wall featured a collection of 3-D photography and drawings (mostly anaglyphic) done for advertising use in magazines and

3-D Art
Around the walls of the ballroom and on the small stage at the front
as for the 20 page special anaglyphic section of the photo magazine Schwiezer Illustrierte. The stunning, full-page stereographs for the publication were taken by Swiss Society for Stereoscopy members Hans Knuchel and Andreas Mullwe-Franz. Also included in each packet was a complete list of the names and addresses of all those registered for the congress, as well as a breakdown of names by country. Anyone who missed a workshop or a person they had wanted to meet, or who simply forgot to ask that one last question in the confused rush of events, was therefore able to later contact the person or company in question.

The congress dinner Sunday night was attended by 224 people—so many that the large dining room in the hotel Beau Rivage filled up and some were seated at tables in the hall. Monday’s glacier trip was almost as well-packed—with 174 camera-laden stereographers filling several busses for the visit to waterfalls and glaciers near Meiringen and Grindelwald.

New Officers
As at every congress, new officers were selected to oversee the operations of the ISU for the next two years. The Executive Committee and the Union Council met in three early morning sessions during the congress to decide a number of questions relating to the finances, production, and distribution of Stereoscopy, the long delayed mag-

(Continued on page 37)
LETTERS (Continued from page 3)

To Justify or Not—
As one of my jobs is to do the typesetting for our own 3-D Catalog, in the past year I have become much more interested in the subject of typography. The subject of readability is a natural concern in this area, and much attention has been devoted to it in Catalog Age, a magazine devoted to catalog producers.

As might be expected, there is no firm agreement on most subjects in this field. There is some general agreement that for long copy a serif typeface, such as used in Stereo World, is a bit easier to follow. And in magazines, the 3 column format seems to be the most commonly used layout. But I'm not sure I personally agree with the recent trend that many magazines, now including Stereo World, are adopting—the ragged right margin.

You already stated the theory that the ragged right edge is easier to read because the spaces between words are even, not arbitrarily spaced to create a flush right margin. This seems to make intuitive sense, and is a perfectly good argument.

On the other hand is the concept of "eyeflow"—how the eye moves across and around a page when reading. As I understand it, and personally agree with, the eyeflow theorists favor the justified right margin, as it gives the eyes a consistent end point to each line for the eyes to "hang" on to before wrapping down to the next line.

It's not a big deal, and the jury is apparently out... Still, I wanted to put in a personal vote in favor of going back to justified right margins, and will be curious to find out if other Stereo World readers feel the same way. I would like to add that I am very pleased with the continual improvement that we are seeing in the current look of Stereo World, thanks, I am sure, to the efforts of the new Art Director Mark Willke. The new cover design is first rate, and it is helpful to have the Volume and Number back on the cover. The stereo slide end markers are a nice touch, and I especially appreciate having Stereo World and the date at the bottom of every page. This is especially nice when making a photocopy of an article to give someone.

David Starkman
"Newviews" editor

Metal Mounts Minimize Mess
The letter in the July-August issue from Frederick Maute of Riverside, N.J. really struck a chord with me. Hey, friend in New Jersey, I know wherefrom you come.

When I got into stereo photography a big four years ago I did the same thing you did—sending my slides to Kodak, convinced that I'd never be able to master the magic that surely must go into mounting those little buggers.

Then I got brave and ordered a buncha slide mounts from those nice people at Reel 3D (this is not a paid ad, by the way). Examining the assortment in their sample pack carefully and being a lazy person by nature, I made a choice you apparently did not.

Instead of going with the cheaper heat-seal cardboard mounts, I figured the metal ones would be easier: no tacking irons to mess with, no messy aligning to do, all kinds of nice assurances on the package about "automatic" and "insures perfect alignment."

And I am a person who thrives on reassurance.

Well, I liked the Sigma mount (the old Realist mount/mask under a new name) and found a camera store in Salt Lake City that still had a dusty supply of Realist mounts on the shelf. I bought a bunch, found a Realist film cutter (that sorting box that came with it is worth its weight in gold twice) and went to it. With trembling hands I cut a roll of slides, inserted two chips just as the instructions said and took a look.

Darned if it didn't work, first crack. When you figure the added cost of Kodak stereo mounting, it was even a bit cheaper.

Things went along swimmingly until this summer when (a) the camera shop finally ran out of the aluminum Realist masks and (b) Reel 3-D said the Sigma mounts were no longer available.

I tell you, I felt as though an old friend had died.

To make things worse, while I was crying on the shoulder (via telephone) of Susan Pinsky at Reel 3-D she told me the futures of View Master and Emde masks are by no means certain either. The machinery used to make them is 30 years old, she said, and nobody can guarantee they will be around in coming decades.

Well, I'm not old, and I was sort of counting on being able to do stereo photography for a while longer. This news did not sit well.

Let's face it—we are newcomers to a hobby that is slowly being abandoned by corporate America. The bottom liners who say there aren't enough of us to generate a large cash flow are in charge. If the day comes when there are enough of us to again make it worth someone's while to crank up the machinery, introduce new stereo mounts or even do commercial mounting on a large scale such as Kodak did, then all that will happen.

Who knows. Someone may even introduce a new camera. Susan Pinsky says Reel 3-D gets about ten new customers every day, and all those dusty Realists can't last forever, so one day that could come about also.

Until then, Fred, my best advice to you is to enjoy.

The historical articles in Stereo World are good for giving a perspective on what 3-D was, and could be again. Several types of stereo mounts are still available, including Emde, so all is not lost. Shoot Kodachrome 64, buy film processing mailers at K-Mart, and if you need the pattern for the Realist film sorting box, drop me a line and I'll Xerox you one off.

Don't be put off by the alleged intricacies of mounting either. It's really very easy and the aluminum masks aren't hard to use if you get a pair of sharp-nosed tweezers. For the near-automation of alignment they give, I'd say they're worth the extra cost. I've never mounted in cardboard, and never missed it.

Charles F. Trentelman
Ogden, UT
This month we feature four views from the collection of Philip Ger¬
mann. The first view, that of a busi-
ness district, appears on an ivory
colored square-cornered mount. At
the immediate left in the view is a
block building that features two sets
of three archways, one set at ground
level and one on a second story. An
unusual feature about these arches
is that they appear to be fashioned
out of variable colored blocks. The
business sign above the ground level
entrance reads “A. & J. Dobinson.”
Near the top of the building is
another marker, “Hall of Com-
merce.” Immediately next door is an
establishment run by “J.E. An-
drews.” There is a short notation on
the reverse side of the card that we
have reproduced here also. Though
basically indecipherable to both
Philip and myself, it appears to
identify the image by both street
and town name. Anyone excel at
reading hieroglyphics?

Next, our photographer has sta-
tioned himself between tracks (and
trains) at a railyard of considerable size. In addition to the two main tracks, there are numerous sidings to both the left and right. The legend beneath the image reads “Western Railroad looking East from Pass(enger)? Depot, Springfield.” Philip has written to Libraries and Historical Societies in a dozen Springfields asking for help. Of the three who responded (Illinois, Missouri, and Massachusetts), none felt the view was likely to have been taken at their locale. Perhaps one of our readers can succeed where others have failed. Can anyone connect up a “Western Railroad” with a particular Springfield?

Our third view is also partially identified by a reverse side script. Entitled “The Speech at the Church,” it was apparently taken by photographer George F. Holmes on July 4, 1876 during the Virgil Semi-Centennial. The celebration was probably a local concern and was evidently well attended. Some 300 people, decked out in their Sunday Finest, socialize amidst temporary seating in front of the church. Many more celebrants may have been mingling just outside the camera’s range. Where was this town of Virgil that had cause for such a 50 year celebratory event in 1876?

Does anyone know of an “Addison Seminary?” That is the handwritten title of our final view that was distributed on an orange mount most likely during the early to mid 1870’s. Shown are three four story structures interlaced with a pair of three story appendages to form a single mansion-like edifice. The image attests to the fact that some students haven’t changed much over the years. Several can be seen hanging from the cupola at the center and one even sits on the crest of the steep roof. Smile for “The Unknowns” column, boys!

(Continued on page 31)
The concept of taking 3-D pictures while riding a motorcycle originated as a combination of my two favorite pastimes: taking stereo pictures and riding motorcycles. What better way of trying to make you feel you are there than with 3-D? I use my dual-camera-helmet rig on occasion to try to capture in stereo the effect of negotiating a curve on a motorcycle. I have also used it to capture the open-air effect one gets. (Last year I took pictures riding through the Avenue of the Giants Highway near Redwood Park in Northern California.)

To prevent blurring of the road, I set the cameras on shutter priority and at infinity focus in order to obtain the fastest shutter speed. With ASA 200 Ektachrome, the shutter speed is $\frac{1}{50}$th or faster. The cameras are both Minolta X-700s. The shutters trip simultaneously via the cable release outlets. These outlets are not of a mechanical nature, but are electrically connected to the same circuit used for the finger activated shutter button. A standard cable release, when used on these cameras, merely makes an electrical contact, or short, across the threaded hole and the "spring plate" at the end of the hole. In order to avoid mechanical delays caused by the movement of the cables, I have replaced the center cores of the cable releases with insulated wires. The wires from each cable release are attached to a double-pull switch. By clicking the switch, I activate both cameras.

The cameras are mounted on my helmet via a wooden bar and plastic base. For easier motorcycle operation, I use motor drives on each camera. The cameras and bracket are bolted to a hollow plastic base. The entire assembly is tapered to the top of the helmet. (Drilling a hole in the helmet will ruin it.) The cameras are aligned by viewing through them at an object 20-30 feet away.

Marg Josephson wearing his 3-D rig—complete with neck stabilizer and "3-D" lens caps (vital for keeping bugs off the lenses on the stretches between shots). The flash is probably only attached when the rig is worn to parties. (Stereo by Ray Zone.)

"Following Jon," Ortega Hwy. 1986. (Helmet stereo by Marv Josephson.)

"Ave. of the Giants, Pete & Norm Trip to Expo," 1986. (Helmet stereo by Marv Josephson.)

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The user's eyes also focus on the object, and the helmet visor is marked with an alignment spot. The assembly is held tight by attaching bungee cords to the wooden bracket. A long set of wires with quick release couplings is used to reach the handlebar switch mounting bracket. A styrofoam reinforced neck brace is used to keep the unit stable and easier to manage. The weight of the unit can be felt, but surprisingly, it is not cumbersome. I am able to hear when the shutters close and the film advances. In addition to the cameras, I also have a voice-activated two-way communication device wired to the inside of the helmet. This enables me to communicate with my subjects (friends) and position them for a good shot.

For the future, I plan on experimenting with more shots along "twisty roads" (when I have the time). I have considered mounting the cameras directly on one of my bikes for a different effect. In this way, the shots wouldn't be taken from so "high up." The bike mounted method would yield a greater lean angle, as one tends to keep one's head as vertical as possible. Someday I would like to mount a 3-D movie or video camera on a bike and really try to emphasize the effect. It would "put you there!"

The Fiji Island view from an issue last Spring that was identified in our last column drew two additional responses. Thank you Bruce Hansen and Roger Jansen for corroborating our previous identification. Bruce did reveal one piece of vital new information. It seems that the location of the photograph was one of the last places where cannibalism was known to have been practiced. That just shows you what risks stereographers are willing to take to get the images they want!

Information has been received on two of the views in our May/June column. The intriguing street scene at the bottom of p. 37 was recognized by both Henry Messing and Brandt Rowles. The town, Montour Falls, N.Y. (formerly Havana), and the falls, Chequaga Falls, even today maintain a strong resemblance to that image captured over a century ago by a Fingerlakes region photographer. The large brick building is the Montour House and still stands basically unchanged. Also, the building on which the photographer stood still stands although the shingled porch roof has given way to a modern aluminum canopy. Yet another long-term survivor is the house visible at the base of the falls. Changes include the replacement of the wooden bridge near the top with a steel span and the growth of an attractive residential area near the falls. The photographer is still unknown, although Brandt feels that G.F. Gates might be a good guess. In addition, Darrah lists a W.D. Gates as a practicing stereographer in Havana during the 1880's and he (a relative of the other Gates?) might also be a reasonable candidate. Henry also noted that Louis Phillips of France was attracted to Chequaga Falls during the period before he became King. The result was a painting of it which supposedly now hangs in the Louvre in Paris.

Eric Stott recognized the first view in that same issue as the old Albany, N.Y. City Hall. It was constructed during the early part of the 19th century from the blueprints of a local architect, Phillip Hooker. The building met its fate in the 1870's, a victim of one of the many fires that all too often scourged the urban areas of that time. That event was also recorded in stereo. Eric feels that this view was probably the work of Churchill and Dennison of Albany.

Several years back, Eric submitted a view that was identified only as "Minnequa House." He has since found the same view on an Erie RR Series mount by W.T. Purviance of Pittsburg. Can any of our Pennsylvanian readers help him to pinpoint the location of a Minnequa House or Minnequa Springs?
PORT ARTHUR BOOK FEATURES SCREENLESS VIEWS

by John Dennis

The Siege at Port Arthur, during the Russo-Japanese War of 1904-1905, was one of the most well documented military actions of the early 20th century in terms of stereographs—especially considering the remote location of that war compared to the widely covered campaign in Cuba a few years earlier. Much of the best of that stereographic history has now been assembled into a book by Australian NSA member Ron Blum titled The Siege at Port Arthur—The Russo-Japanese War Through the Stereoscope.

Each major step in the progress of the war is illustrated using views from the author’s collection which closely follow the well researched text. It was a war which saw the use of a surprise night attack from the sea, torpedoes, mined harbors, war balloons, trench and tunnel warfare, human wave assaults and siege guns capable of hurling 500-lb. shells. The effects of all of the above, as well as many of the weapons themselves, are shown in graphic (often close-up) detail through full stereo views at the bottom of each page, while the top of the page is filled with an enlarged half from the same view.

Many of the 74 views reproduced in the book are truly classic examples of the best work of photographers and publishers like George Rose, H. C. White, George Griffith, Kilburn, Keystone, and Underwood & Underwood. Mr. Blum gives special credit to James Ricalton in the preface for having taken a good number of the views used. The best behind-the-lines shots of soldiers and equipment are heavily weighted on the Japanese side—following, perhaps, not only easier access to the winning side but also the prevailing big power alliances of the day. As mentioned in the text, “Generally speaking, at this time, Britain, the United States and Japan supported each other against France, Germany and Russia in the contest for power in the Far East.”

Not only are there more views to be found showing Japanese troops, equipment and officers, but many of the captions (especially on Underwood & Underwood views) seem to reveal what is today known as a “tilt.” For instance, one fairly typical U&U view of some Russian troops standing at inspection is captioned, “Defenders of the Czar’s Empire in the Far East...” while another U&U view of some Japanese troops is captioned, “Japan’s hardy soldier boys whose battle cry is ‘win or die!’” One Keystone view of massed lines of Japanese troops in spotless uniforms calls them “The Mikado’s Intrepid Soldier Boys.”

The Siege at Port Arthur—The Russo-Japanese War Through the Stereoscope. by Ron Blum. Published by Ron Blum, Oaklands Park, Adelaide, Australia 1987. 103 pages, 74 full stereographs, 74 enlarged stereo halves, viewer included, $25.00 US.
Some very helpful maps are included along with the text, and the book's final chapter covers the amazing career of General Baron Nogi, the victorious hero of Port Arthur. Unfortunately not included is the Underwood view of Kharitina, the Russian woman who followed her husband to Port Arthur, defended the fortifications with a rifle when he was wounded, and died within hours of being photographed at her post. (See Stereo World, Mar./Apr. '85, page 26.)

Look, Ma—No Screen!

Besides being the first book on the Russo-Japanese War illustrated with full stereo views, this is the first book to employ the new "GESH" screenless photo reproduction process to print stereographs on the pages of a book for better results with a magnifying viewer. GESH stands for "grain effect screenless halftone" which means that no screen is used to convert the image into dots at any step in the printing process. Instead, a new litho film developed by the Hanetz company of Rehovot, Israel is exposed to the original picture and processed by a patented method which produces tiny grain clumps (or "dots") whose size is determined completely by the tone in that area of the original photo. Light areas will have smaller dots and dark areas will have larger ones, but the dots are produced by the developing action in the film itself—not by any intervening screen. This means that dots can be nearly as small as the smallest detail in the photo. The printed resolution of GESH is in excess of 600 lines per inch, compared to usual halftone screens which range from 65 to 300 lines per inch, whether created with a camera screen or a laser scanner. Normal screens of much over 200 lines per inch can require a higher quality of plate, paper, and press but GESH images are said to be compatible with any plate, paper, ink, or press.

The sharpness and fine grain of the illustrations in The Siege at Port Arthur offer proof of the claims made for the GESH process. The views are presented in reduced (most just over 5¾" wide overall) size. The short focal length lorgnette viewer supplied with the book makes the grain visible, but it's nothing like the wall of dots presented by even the finest halftone screen when magnified to this degree. At worst, in unsharp or foggy originals, the effect is that of viewing a pair made on grainy film. At best, the smallest blades of grass stand out nearly as if one were viewing an original contact print—blades of grass that would have disappeared between the dots of a regular halftone.

The effect is similar to the best of the old gravure process reproductions, and some of the same anomalies can occur. Very small high contrast details can take on the look of having been actually drawn in with a super fine pen, thanks to the action of the self-forming grains. And faces can look rather swarthy if shadows cause the grain to form in mid-tone size, right at that point. (Even though the grain making up the face is smaller than any regular screen, the very sharpness of the detail in small features sometimes results in disturbing visual effects which other reproduction methods would have hidden behind a coarse—and sometimes all-forgiving—screen of dots.)

The small print in captions on view mounts can be read easily, thanks to the GESH process—except on those mounts just dark enough to trigger the film's grains into forming a nearly solid black area. With the GESH process, greys can go to black and clear skies to grainy grey unless the processing is halted at just the right density. Differences can be seen between sky areas in some full views and the same areas in the enlargements right above them. And some Underwood mounts are a perfect even grey with sharp captions while others are as dark as H. C. White mounts in places. All of these are probably things which improvements in the process could fix, given enough interest in this most practical screenless printing method yet devised. Views reproduced full size (in, say, a publication like Stereo World) by this process would probably be very impressive when viewed through the longer (10") focal length lorgnette. Depending on the expense, it may be possible to arrange to run a sample GESH view for readers to evaluate in a coming issue.

The book may be ordered directly from Ron Blum, 2 Hussey Ave., Oaklands Park S.A. 5046, AUSTRALIA. The price is $25.00 U.S. including seemail and packing. Air-mail orders add $4.00 per book. (International money orders or bank checks for Australian equivalent are preferred.)
Major New 3-D Products Introduced at ISU

Although programs were the main attraction of the ISU Congress, it was also an opportunity to see some new items in the world of 3-D equipment.

By far the most ambitious and interesting item was the "OSP" stereo projector, designed and produced by Eckhart Oehmichen (pronounced Oomishen). This is a fully automatic stereo projector for Stereo Realist format 3-D slides (with outside dimensions of 1 3/8" X 4" or 41mm X 101mm). I was a bit skeptical at first, but having helped to set up two slide shows, which were both projected with this machine, I was convinced that this could seriously be the projector that Realist format slide shooters have been wishing for.

It features a 50 slide straight tray, which is loaded right side up with the viewing side of the slide facing you, just the way a slide is put into a hand viewer. After all the slides are loaded a metal lid is slid into place and the whole tray, with lid, is turned over and inserted into position on top of the projector. After this everything works pretty much like any modern slide projector. Advancing may be done by a remote control or by a built-in timer. There is independent auto focus on each image, to assure razor sharpness. Manual focus, vertical and horizontal adjustment are also available.

Slides drop into place by gravity feed, but are consistently positioned by an electromagnet. Slide change is under one second, with a built-in fast fade-in and fade-out of each slide using Triacs. The lamps will only light up when a slide is in the gate.

Brightness is extremely good, using two 24 Volt, 250 Watt halogen lamps, apparently borrowing the optical system from the German-made Kodak Extagraphic projector—known for its brightness.

For further brightness the lamp positions are adjustable in three planes for optimum output.

Three different fans offer efficient cooling of the projector and slides. Other features include sockets for tape recorder control and dissolve unit capability in conjunction with a second OSP stereo projector, a built-in timer for automatic slide advance, and an optional wireless infrared remote control. Lenses are of the same barrel diameter as is commonly used on numerous European projectors, so a wide selection of speeds and focal lengths would be available, including zooms.

All of this is in a clean compact metal housing measuring approximately 14.5" X 5.5" X 10.5". In short, a fully modern stereo slide projector!

That's the good news. The bad news is that full production models will not be available until the middle of next year, and the price is expected to be in the range of $1,500.00.

That price may or may not include the lenses, and does not include shipping from West Germany. For further information contact Eckhart Oehmichen, Mannspergerstr. 96, 7000 Stuttgart 75, WEST GERMANY.

New Plastic Stereo Slide Mount

Not content to design just a new stereo slide projector, Mr. Oehmichen also felt that a modern plastic stereo slide mount to go with the projector was essential. Having taken all of the design essentials into consideration he has produced the first really new design and improvement to the 1 3/8" X 4" (41mm X 101mm) format stereo mounts since the 1950's.

This is a glassless 3mm thick slide mount in which the front half (white plastic) and the rear half (black plastic) simply snap together. Needless to say, the windows are clean and accurate, with two window sizes available: 23mm X 22mm (Stereo Realist format) or 23mm by 28mm (European format), both with window center to center distances of 62mm. This is slightly smaller than the 62.4mm of the EMDE/Sig-
ma/Realist brands, and nearly identical to the 62.1mm of the EMDE Busch European mask. It really makes more sense to have the centers be exactly the same for both formats, to reduce the need for horizontal adjustment when projecting both formats.

The best part of the mount, however, is in the film placement design. Each film chip is positioned by a separate plastic sprocket rail which snaps into a channel either above or below the film aperture. Horizontal adjustment is easily made by sliding the rail in its channel. Even vertical adjustment may be done in 0.1mm increments from 0.1 to 0.4mm offset, based on which way the rails are put into the channel, and which channel is used.

Mr. Oehmichen has also designed and included a clever way for making automatic and consistent horizontal adjustment, based on the theory of maintaining a constant infinity point separation in the mounting. Included with the sprocket rails is an "H" shaped piece of plastic, which will fit sideways onto an open half of the mount so that the long sides of the "H" lay in the sprocket rail channels. Indentations at the top and bottom center of the mask position and center the "H" the same way every time. A sample film pair should be mounted on the sprocket rails such that the infinity points fall at the desired separation (about 61.5mm). Then the "H" piece is marked so that the long arms are trimmed to butt up against the sprocket rails when they are at the point where the infinity points are where you want them. Now, if you continue to use the same stereo camera, you can position the sprocket rails in advance by butting them up against the plastic "H" guide, and your infinity points will be consistently mounted.

Currently these mounts are available only directly from the maker, Mr. Oehmichen, whose address has been given already. Price is about DM 60.—(US $30.00) for 100 pieces, plus shipping.

New SLR 3-D Camera Introduced

The French company HECTRON displayed its latest custom built 3-D camera, the HECTRON H3. Made from two modern SLR cameras (brand unknown), the result looks like a factory built SLR with all of the expected features: single lens reflex design with 24 by 36mm film format. Uses aperture priority with speeds to 1/1000 second, with exposure information indicated by L.E.D.'s in

The "No Hectrons" report in last issue's Newviews was only partly correct. While the previous models spliced from two Nikons are no longer made, this new model H3 was introduced in Interlaken. The smooth top and centered hot shoe make it look like a production model camera.
the viewfinder. Exposure may be manually adjusted +/−.

Lens mounts are standard K (Pentax) mounts, with a lens base of 75.8mm. Exposure range from ASA 25 to 1600. No sample slides were shown. Price is approximately $1500 for the body without lenses. For more information contact Hectron Cameras, 25 Avenue Pierre Emmanuel, 06000 Nice, FRANCE.

New 3-D Book Introduced
3-D BOOK PRODUCTIONS of Holland introduced its latest View-Master illustrated 3-D book (in English), entitled “Beyond the Third Dimension” by Stan White of Canada.

This delightful 36 page book explores creativity in 3-D photography, and the author backs up his ideas with 21 of the most beautiful and innovative 3-D slides that you’ve probably ever seen.

Besides the introduction, there is a page or so devoted to each image, giving some background philosophy and/or humor, and a technical paragraph explaining camera used, lighting, setup, etc. But the star of this book is the reels, showing Stan’s creative touch in full color 3-D. I won’t even try to describe the images, as it would take away from the fun, and from Stan’s own descriptions, humor, and use of the English language. This is No. 1 of a planned series of View-Master illustrated books to be called “3-D HIGHLIGHTS.”

The book is available from 3-D Book Productions, P.O. Box 19, 9530 AA Borger, Holland. In the U.S.A. it is available for $14.95 plus $2.60 postage & handling from Reel 3-D Enterprises, P.O. Box 2368, Culver City, CA 90231.

3-D Camcorder
Toshiba has announced development of the first stereoscopic video camera/recorder. The unit looks much like any other camcorder, except for the two relatively small lenses on the dual camera section at the front. These CCD microcamera heads feed images serially onto a VHS tape at 60 frames per second. For viewing, a converter repeats each image twice at a rate of 120 frames per second while the screen image is synchronized with a pair of liquid crystal shuttering glasses for a non-flickering 3-D picture. According to the press release from Toshiba, the 3-D tape can be played directly into a monitor through a converter from the camera, or used with a VCR, a converter, and an ordinary TV set. Some uncertainty still exists about whether or not the system will function without flicker on any TV, as the release mentions using 120 scan rate monitors in some places, and conventional sets in others. Watch this space for further details.

Zones to Watch For

Two coming 3-D comics from publisher Ray Zone may be of interest to a number of stereo enthusiasts beyond comic fans. The December 3-D Zone number 11 “3-D Danse Macabre” is a history in 3-D of terror tales, from woodcuts to comic books. A bonus section features stereographic Diableries from French tissue views of 1880—one of which is reproduced in color and 3-D on the back cover.

The other, 3-D Zone number 12, titled “The 3-D Presidents,” will feature rare and historic stereographs of several U.S. presidents including Lincoln, Grant, Wilson, both Roosevelts, and others. Included are illustrated stories on the American Revolution and the Civil War. Aerial hypers of Washington D.C. and a color aerial 3-D view of the Statue of Liberty are also included.

Check your local comic store or, for mail order information, contact Ray Zone, 333 N. Hobart Place, Los Angeles, CA 90004.
The New 3-D Toyota

Unless you were living in a cave somewhere during the last week of October, you probably at least heard of the folding stereoscopes included with the Toyota ads in People, Time, and Cosmopolitan magazines. If you were like a number of stereo enthusiasts, you bought several copies of one or more of the publications to try the viewer and to have a couple on hand to show around, as well as one to keep preserved in mint condition. The 14 million viewers assembled to go with the four-page ads (although not every copy on the stands included a viewer) set a record for promotional viewers, and except for View-Master, probably set a record for the most transparency viewers of one type ever made.

Most people have been impressed with the result of what could, like other less ambitious 3-D ad schemes in the past, have been a disaster. The plastic lenses are just good enough to see the image clearly, the folding body holds things in alignment just well enough, and the milk-white diffuser avoids hot spots in most room light situations. Like the talking dog, the wonder of a viewer made in the millions for insertion in magazines isn't that it works well . . .

According to a story in the Rochester NY Democrat & Chronicle (via Nick Graver) Kodak supplied the transparencies on Eastman movie print film (102 miles of it) as well as the 28 million lenses. Working three shifts, 1,200 Kodak workers then are reported to have assembled the viewers in 39 days of round-the-clock effort starting Sept. 8. Other Rochester companies are credited with parts of the viewer: cardboard blanks, DeRidder Thurston Inc.; printing, Case-Hoyt Corp.; diffusers, Tapecon Inc.

Just what the unit cost of the devices was is one of the questions yet to be answered—as well as details about the design and the photography. Newviews will attempt to learn more about this milestone project, and any others in the works, for future issues.

ISU 6 (Continued from page 26)

zine of the ISU which had published an issue shortly before the congress. (See Stereo World, Sept./Oct. '87, page 31.)

Current Stereoscopie Editor Karl-Heinz Hatle of W. Germany was elected new ISU President to lead the organization for the two years leading up to the 1989 Congress in West Germany. Elected Vice President was Pierre Tavlitzki of France, where the 1991 Congress will be held. Judy Fentress and Frederick Dudey will retain their positions as Secretary and Treasurer, respectively.

After more discussion, it was decided to reduce the previously announced Stereoscopie subscription rates to $16.00 U.S. for which ISU members will get three issues a year. Those subscribing in 1987 will be sent the #29/30 double issue mentioned above, the program from the 6th Congress, the anaglyphic magazine section from Schweizer Illustrierte, and issue #31 of Stereoscopie to be published in December '87.

The international mailing address of the ISU will remain at P.O. Box 2319, CH-3001 Berne, Switzerland. For subscriptions from the U.S. send $16.00 to ISU c/o Paul Wing, 50 Floret Circle, Hingham, MA 02043.

Midway through a twisting mountain pass near the Wetterhorn, busses on the Monday glacier trip made another stop for the ecstatic stereographers, who quickly scaled the heights of a nearby hill to record the scene and each other.
FOR SALE
THE RED WING VIEWER, a fine stereoScope
handcrafted in walnut, leather, brass, and
glass. $79 includes stand and US shipping.
For ordering or more information: Welch Vil-
lage Woodworking, Rt. 2, Box 18, Welch, MN
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365-3733.

3-D EQUIPMENT, View-Master reels, books,
magazines and instructions. Lists available
on request. Specify preferences. Francois
Beaulieu, 3157 Lacombe, Montreal, Quebec,
H3T 1L6 Canada.

EXTREMELY RARE VIEW-MASTER
packets and reels for sale or trade, including
movie preview reels, DR reels, plant tour reels,
and Meopta nude reels. Also View-Master coun-
ter displays, posters, model D viewers
(brown), and lighted model C viewers in their
original stereoset presentation boxes. Send
want or trade list to: Barry Andrews, Moun-
tain Road, RD #1, Box 1051, Saylorsburg, PA
18353-9659.

ANAGLYPH 3-D FOR SALE. Send LSASE for
"3-D News and Views" #34. Rare and unusual
3-D items from the 1950s to 1980s. Greg
Anglin, 7410 Farmstead Rd., Liverpool, NY
13086.

BOOK "The Siege at Port Arthur"—history of
the RussoJapanese War through the stereo-
scope. Hardback, 112 pages with over 70
stereoscopic views of this famous battle.
Printed by a new screenless process which
gives finer resolution of detail than other
methods. Book with 3-D viewer is $25 includ-
ing cellar and packaging. Add $4 for air-
mail. Ron Blum, 2 Hussey Ave., Oaklands
Park, So. Australia 5046.

TALKING VIEW-MASTER, original model,
boxed, with 5 reels, $25 postpaid. Also Euro-
pean Model 11 viewer, like new with demo
reel, $12 postpaid.

PRINT VIEW MOUNTING SERVICE: Yes, fi-
nally. Write to RMWCo, 1234 Phelps, Red
Wing, MN 55066 for details.

As part of their membership, NSA members
are offered free use of classified advertising.
Members may use 100 words per year, divid-
ed into three ads with a maximum of 35
words per ad. Additional words and addi-
tional ads may be inserted at the rate of 20c
per word. Please include payments with ads.
Deadline is the 10th of the month preceding
publication date. Send ads to the National
Steroscopic Association, P.O. Box 14801,
Columbus, OH 43214, or call (419)
927-2930. A rate sheet for display ads is
available upon request.

CORTESCOPE STEREOSCOPE. Rare metal
folding stereo viewer, c. 1914 in Ex. collecti-
ble condition. $80. Gerry Loban, 64 Fonthill
Blvd., Unionville, Ont. L3R 1W7 Canada. Phone
(416) 477-3382.

PPD. H. H. BENNETT STEREO VIEWS, Win-
necobao Indians, #440 Thunder Cloud holding
instrument. Close sitting View VG #42. #483
Square tanning deerskin, full view VG #38.
Both $75. Mickey Brooks, 142 Fembank Ave,
Delmor, NY 12054.

AVIATION, BLACK HISTORY, Military,
Expo-
sitions, historic sites, Railroad, Sports,
Space, States-Cities-Towns, Wildlife, Women.
Stereos, documents, photos and medals.
LSASE for list. Joe MacDonald's. 1316 NE
113th, Portland, OR 97220, (503) 255-7256.

WANTED
STEREO VIEWS OF MOONERS, NY. Also In-
formation and/or beach views of Charlotte,
NY. Mickey Brooks, 142 Fernbank Ave., Del-
mar, NY 12054.

WILL PAY WELL for the following complete:
View-Master packets in excellent condition:
Dogs and Cats (B-820), Laplanders and their
Reindeer (C-539), King Baudouin visits De
Gaulle (C-76), The Dog Family (788), The
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In-
structional Swimming (B-956). Write to: Bar-
ry Andrews, Mountain Road, RD #1, Box 1051,
Saylorsburg, PA 18353-9659.

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prices paid for glass negatives and positives,
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tographs. Debboas, c/o Julie Khoury Martin,
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COLLECT, TRADE, BUY & SELL: 19th Cen-
tury images (Cased, stereo, CDV, Cabinet &
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mining equipment, etc. Also wanted anything
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operations. Send photocopies with price and
description, or send for my approval. I will
respond quickly. David Sundman, Littleton
Coin Company, 253 Union St., Littleton, NH
03561.

J. J. HAWES, Southworth & Hawes, A. F.
Hawes and G. E. Hawes stereo views, CDVs and
cabinet cards: Anything related. Send cop-
dies and wants. Ken Appollo, 2415 NW Love-
joy, Portland, OR 97210.

FLORIDA STEREOs of historical value, espe-
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Kennedy Space Center, FL 32815.

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STEREO VIEWERS (any format) that hold
multiple slides or views. Table models, hand-
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Nord projector. Hansen, Box 89437,
Honolulu, HI 96830-9437.

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also Olentangy Park, stereo views, photos or
anything connected with this park. Sandy
Andromeda, PO. Box 131, Brice, OH 43109.

NEW YORK CITY STEREOs, 1860-1930; also
Greenwood-wood Cemetery. Please send pho-
copies with description of condition and price
to: Jeffrey Richman, 52 Harriet Lane,
Huntington, NY 11743. Highest prices paid.

PHOTOS OR NEGATIVES of street cars or
street railways in Scranton, PA. Also, stereo
views of Scranton showing streets. Also
Charles Wroblewski, Box 963, Scranton, PA
18501.
### December 6 (VA)
Barone Camera Swap Meet, Crystal City Holiday Inn, Arlington, VA. Contact Camera Swap Meet, c/o Barone & Co., PO Box 18043, Oxon Hill, MD 20745. Call 703-768-2231.

### WANTED

J. B. SILVIS photographs, CDVs and stereos needed for a research project. I will take reproduction or photocopies, both sides please if you do not wish to sell yours. Barry Swackhamer, 1482 Hamilton Way, San Jose, CA 95125.


WOODWORKING TOOL views: Factories, wooden plane makers, occupational showing tools. Firms such as Stanley, Chapin, Stratton, Greenfield, Sandusky, etc. Woodworking tool and Alaska Ephemera. Alaska views too! Richard Wood, PO Box 22165, Juneau, AK 99802.

SARATOGA SPRINGS WANTED! Especially early views, describe, price. Also buying Catkill Mountains, Albany street views, and thoroughbred horse racing tracks. All offers answered promptly. Ralph Gosse, Box 5351, Albany, NY 12205.

A Stereo Documentary

on Transporter Bridges is being developed by the Stereo-Club Francais. Views of such bridges in Chicago, Duluth, or other places are needed. Please contact

Jean Soulas
46 avenue de Suffren
75015 Paris, France

### December 6 (IL)
Chicagoland's Camera and Photo Show, Holiday Inn, Rolling Meadows, IL. Write PO Box 72695, Roselle, IL 60172. Call 312-894-2406.

### December 6 (CA)
Bagnall's Anaheim Camera Expo, Brookhurst Center, 2271 W. Crescent Ave., Anaheim, CA. Call 714-786-6644 or 714-786-8183.

### December 6 (NJ)

### December 13 (MI)

### January 4 (MN)
5th Minnesota PWUC Camera and Computer Swap Meet and Sale, Eisenhower Community Center, Minneapolis, MN. Contact K. B. Erickson, 5020 Richmond Dr., Minneapolis, MN 55436. Call 612-929-5245.

### January 9 (CA)
2nd Los Angeles Photorama USA, Glendale Civic Auditorium, Glendale, CA. Contact Sam Vinegar, 20219 Mack Ave., Grosse Pointe Woods, MI 48236. Call 313-884-2242.

### January 10 (CA)
7th Annual Santa Barbara Camera Show and Sale, Earl Warren Showgrounds, Santa Barbara, CA. Contact SBCS, 1321 Alameda Padre Serra, Santa Barbara, CA 93103. Call 805-965-8664 days, 805-482-5331 eves.

### January 16 (CA)
NSA REGIONAL MEETING, 7:30 PM in Exposition Hall, Santa Clara County Fairgrounds, San Jose, CA. Held in conjunction with the 12th annual Photo Fair going on there, the 16th and 17th. Contact Roger May, P.O. Box 1271, Grass Valley, CA 95945.

### January 23, 24 (NV)
4th Las Vegas Photo Trade Fair, Sahara Hotel, 2535 Las Vegas, NV. Contact Sam Vinegar, 20219 Mack Ave., Grosse Pointe Woods, MI 48236. Call 313-884-2242.

### January 30 (CA)

### January 31 (CA)
8th Mirada Photorama USA, Gateway Holiday Inn, La Mirada, CA. Contact Sam Vinegar, 20219 Mack Ave., Grosse Pointe Woods, MI 48236. Call 313-884-2242.

### February 13, 14 (FL)
Florida Photocollectors 12th Camera & Photographic Show & NSA REGIONAL CONFERENCE. North Miami Armory. Contact FPC, PO Box 15224, Plantation, FL 33318. Call 305-473-1596.
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An appropriately grand opening to an impressive and well-staged international event: alpen-horns announce the start of the Sixth ISU Congress in the grand ballroom of Interlaken's Congress Center Casino. Coverage of ISU 6 begins on page 20 of this issue.