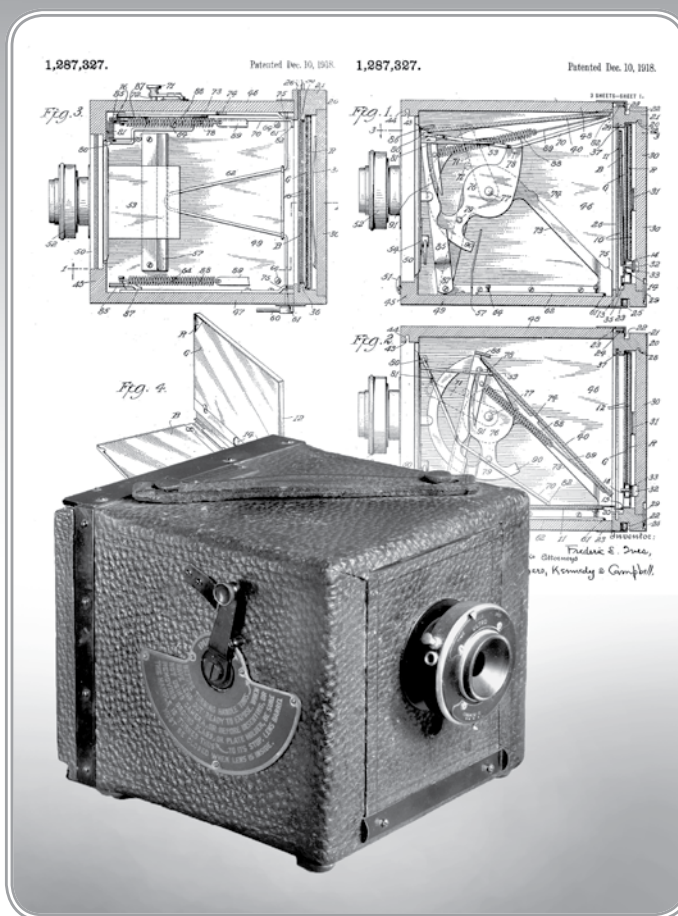
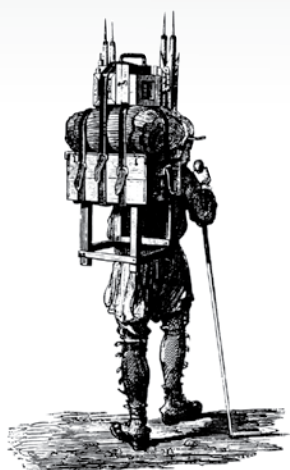


PHOTOGRAPHIC CANADIANA

Volume 38 Number 1

May – June 2012



CAMERA IMAGE BY ROBERT LANSDALE - PATENT DRAWINGS COURTESY OF U.S. PATENT OFFICE

THE INTERNATIONAL HICRO CAMERA ca 1915

THE PHOTOGRAPHIC HISTORICAL SOCIETY OF CANADA

PHOTOGRAPHIC CANADIANA

JOURNAL OF THE PHOTOGRAPHIC HISTORICAL SOCIETY OF CANADA

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To publicize events, notices, advertising, writing articles or if requesting information already published in *Photographic Canadiana*, please write directly to the Editor at 18 Ashfield Drive, Etobicoke, Ontario, M9C 4T6 or e-mail: bob.lansdale@1staccess.ca

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IN THIS ISSUE

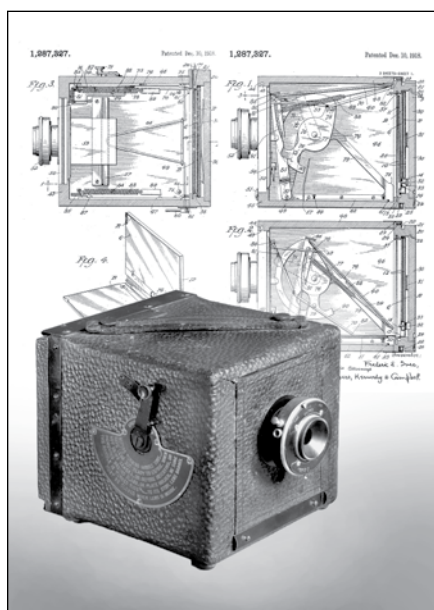
- | | | | |
|----|---|----|---|
| 2 | PC Index Our Cover | 16 | A Minimum of Sentiment: the Military Hospitals Commission's glass lantern slides: A treasure from Library and Archives Canada –Amy Tector |
| 3 | President's Message The Society, Executive and PC Editorial Board | 20 | Browsing through our Exchanges –George Dunbar |
| 4 | Wither Softlight of the 1930s – Fred P. Peel, ARPS | | |
| 5 | On Finding A Micro At A Trade Show –Robert Lansdale | | |
| 14 | Toronto Notes: January, February and March 2012 meetings –Mark Singer | | |

PC Supplement Sheet

- | | |
|---|----------------------------|
| 1 | Schedule for May/June 2012 |
| 2 | Coming Events & Want Ads |

OUR COVER

Our cover depicts a small camera from 1915 wherein Henry Hess and Frederic E. Ives tried to introduce a more simplified colour camera to the market. It produced three separate B&W separation negatives through a most ingenious system of mirror of tri-pak plates. It came to an end when America entered the First World War in 1917. See the full revelation starting on page 5. 📷



PHOTOGRAPH BY ROBERT LANSDALE



President's Message

Clint Hryhorijiw



PORTRAIT BY ROBERT LANSDALE

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The PHSC was founded in Toronto in 1974 for people interested in photographic history. It was incorporated as a non-profit organization in Canada four years later. All activities are undertaken by unpaid volunteers.

We help camera and image collectors and those interested in the diverse aspects of photographic history, sharing in their enthusiasm and knowledge.

We promote public interest in photographic history through talks, awards, publications, fairs, auctions and the internet.

The majority of our 260 members are camera or image collectors, photographic researchers & writers, and professional photographers in Canada. Included are many libraries, archives, museums and other photographic societies.

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It's been another good year!

We hope to see you all at our PHSC Photographica Fair on May 27th at the Soccer Centre north of Toronto. No car? No problem! Just meet our shuttle-bus at the Kipling subway station at 9:30AM. Don't forget this is the biggest photography fair in this part of North America. The variety is so huge, there's something for everyone! And this year we'll have a celebrity in our midst; our own John Kantymir, one of the stars from the TV series PAWNATHON, will be on hand to boost the show.

Now that we are coming up to June, we are looking forward to a summer recess during which we can recharge our spirits for the Fall session. To keep up with your interest in things photographic, and because of the success of the event last year, we are pleased to say that we will be running the Larry Boccioletti Memorial Summer Yard Sale once again in July. It was very enjoyable last year with plenty of great items, amazing deals and lots of shade. So pull out all you goodies (even the heavy stuff) and make it a memorable day. You can pre-book a spot for your car by calling 416-919-9617.

To honour some of the dedicated writers who have supported this journal, we will be awarding several grants in the coming months. Under the Awards and Grants Program, we will honour Alana West for her research paper on *Eli Palmer, Toronto Photographer 1849* which was prepared while a student at the Ryerson University. We hope this will encourage other students to prepare essays or monographs on any aspects of Canadian photographic history.

Additionally, we will honour one of our current members, Irwin Reichstein of Ottawa, who has authored a number of authoritative articles on Canadian photographic personalities. We hope to announce further awards in this category in the near future.

Have a great summer!

A handwritten signature of Clint Hryhorijiw in black ink.

CLINT HRYHORIJIW, PRESIDENT
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CALL FOR RESEARCH AND PUBLICATION SUBMISSIONS

The PHSC Grants committee reminds members that applications are considered for grants towards original research or publication of Canadian photographic history.

Up to \$500 research grant is awarded annually to a current PHSC member. An outline proposal (maximum one page) should indicate the topic, reason for choice, usefulness of the material, intended research sources & techniques and expected output.

A grant of up to \$1000 is available to a current PHSC member to aid in the publication, in book or monograph form, of original research into Canada's photographic history. A one page written proposal should outline topic, format, print run, cost and timing, and should be accompanied with a copy of the material (if available) and a sample of any previous published work. The submission will be judged on the criteria of extent to which the material expands existing knowledge or facilitates application of existing knowledge and its relevance to Canada.

An award of up to \$500 may be awarded to a student for the best essay or monograph on any aspect of Canadian photographic history.

Queries and application rules contact: PHSC Awards Chairman, www.phsc.ca

Wither Softlight of the 1930s...

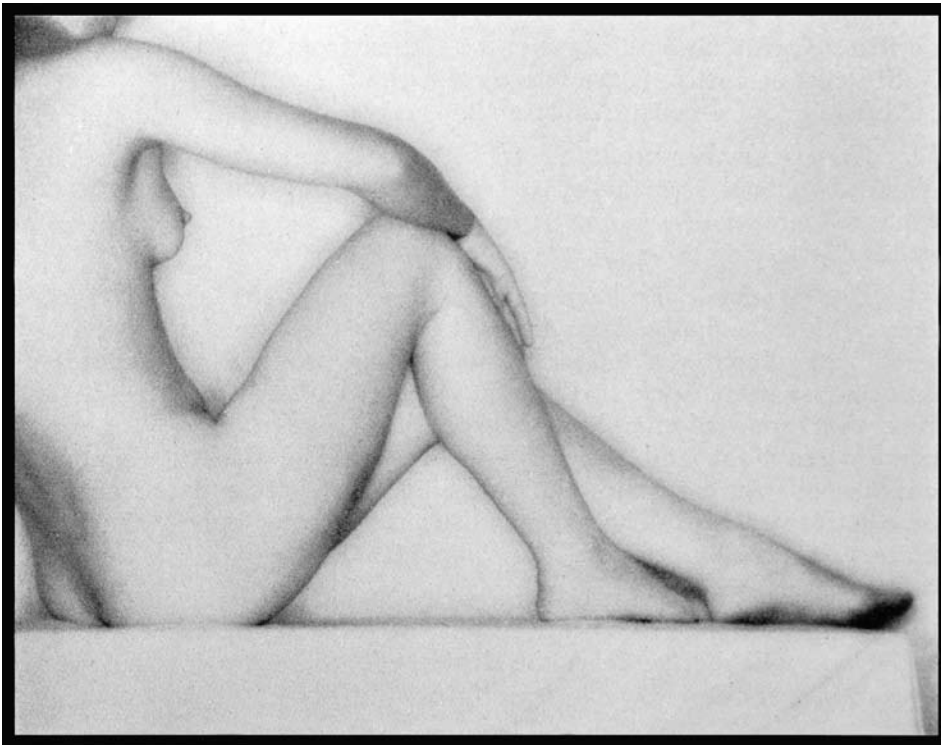
by Fred P. Peel, ARPS

I've been perplexed for years by certain lighting of nudes during the pictorial period. I don't make any great study of nudes but such pictures, as per the sample, urge me to question of HOW WAS IT DONE?

I know it must be flat lighting but it looks like some special effect has been applied to the image such as the sabatier process.

I was trolling through a newly acquired copy of a 1933 issue of Camera Craft magazine when suddenly I was confronted with another example of this technique. And to my joy the author of the accompanying article, Fred P. Peel, ARPS, explained the whole process of his "Shadowless Lighting."

ILLUSTRATIONS FROM CAMERA CRAFT DECEMBER 1933



Fred explained: "My ambition was to produce extremely high key photographs without recourse to pencil. It was obvious I must use flat lighting. This meant that the lights must be placed near the camera. So I proceeded to bank several spots and floods about the lens. The results were not bad however there were uneven shadows in the background and uneven light on the object that I did not like. It was these defects that gave me the simple idea of a continuous circular light about the center of the lens which some call the doughnut lamp but which I call my Shadowless Light.

"The lamp is made up of a 'U' shaped circle of tin with twelve lamp sockets evenly spaced in a circle. The outside diameter is 18" while the depth is 6". The lens of the camera is placed in the center. The two feeding circuits are so wired through a double-pole-double-throw switch that the bulbs may burn on 55 volts or 110 volts. The bulbs, when

operating on 55 volts will burn for one thousand hours. The high voltage is only used for the short interval of the exposure and there is no fear as to the ability of the wires and switches to stand the load.

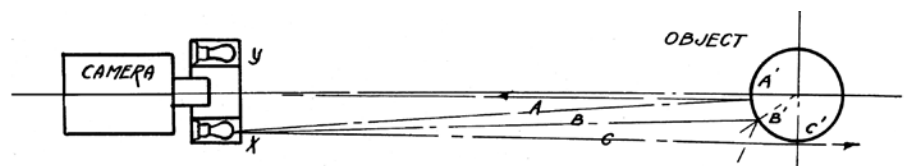
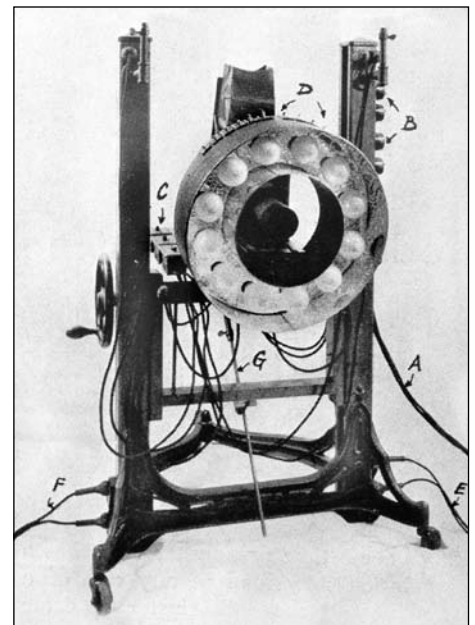
"By throwing the change-over switch, however, the light increases from 1200 watts to 9000 watts. I'm told this is too much light. However, I need all the light on some occasions. My camera must be equipped with a lens of a rather long focus to procure proper results. This brings me back far enough so that the lens beam and the tangent light beam are almost parallel (see drawing). If working with short or wide angle lens the light would be too close and you would not achieve the dark outline of the object.

"In the diagram imagine the 'object' as the cross section of a sphere. If you follow the light ray from 'A' from the bulb 'X' you will note that it strikes the object at the point A' and is reflected almost directly back into the lens. This will cause a highlight at this point. Now follow the ray 'B' to a point about half way around to the side of the object and you will note that is reflected to the side at an angle equal to the angle of the incidence. Thus the point B' will be illuminated with an intensity equal to about half the beam of light.

"Following the ray of light 'C' you will observe that it is tangent to the circle and thus the light passes on to the background and the point C', being un-illuminated, becomes a dark line. And so each of the innumerable rays from 'A' to 'C' will diminish from 100% to 0%, depending at which point on the circle it falls.

"Should only a white background be used and placed quite near the object then a dark halo will surround the object due to the light from the bulb 'Y' crossing over to the opposite side at a decided angle to ray 'C'. This can be corrected by using a background made up of a sheet stretched

CONTINUED ON PAGE 20.



ON FINDING A HICRO AT A TRADE SHOW?

by Robert Lansdale



PHOTO BY ROBERT LANSDALE

The floor of the PhotoHistory Symposium Trade Show in Rochester October 23, 2011 where the Hicro camera was found.

Boy! Have I got a great story to tell you. Its got all the bits and details that a collector can hope to obtain when he acquires a new prize for his collection.

It began at the PhotoHistory Symposium last fall in Rochester - at their Trade Show that is the final phase of a three-day event.

I had spent my allotted money, as usual on books and magazines as every editor needs reference material to lead him onto further stories.

It is a great place the find treasures as many old-time collectors are downsizing their personal collections and you can select some of the best items to carry them onwards for the next tenure of time. You can only hold onto those treasures so long.

But I digress.....

Having finished my shopping at the Symposium Trade Show, I was perusing through the collection of cameras as if visiting a museum and learning as much as possible from the array of photographica throughout the room. It was interesting to engage the dealers in conversation as to when and where they acquired some of their collection.

I was running my eyes over a bunch of dusty black-leather cameras that seemed to have no meaning at all. Every trade show seems to have such orphans. I was attracted to a little white label that tagged one camera with information. I flipped it over and was astonished to read "HICRO CAMERA." Now I had written a story several years ago based on colour photography systems in vogue in the early 1900s. Part of that story gave a meager description of the Hicro camera based on articles I had found in 1915 photographic journals. It carried a sketchy B&W illustration. So here was a true representative camera of that very image.

I knew very well that I wanted the camera but was hesitant that I might be buying something of a dog. I don't know cameras and my knowledge in that field is limited. But what could I do about it as I had spent all my money and was down to pennies to get home!

After careful studying the camera, which is more important for its inside guts than its exterior, I decided to take a chance and buy it. That meant I had to find a good Canadian friend that still had some cash to bankroll my purchase. Bob Wilson became my financial supporter and I successfully acquired the prize.

Dealer Steven Rudd said that he had acquired it through the auctions of the Eaton Lothrop estate. That was nice to know that it had come from a most esteemed collector. But that little white label on the camera had other information. It read: "Jan. 15,'76, Matt Isenberg [sic], LXY." Supposedly Lothrop had placed it there as a way of identifying where and when he had obtained it. Indeed it had come from Matt and he offered much to the provenance of the camera.

Isenberg relates the story: "In late 1974 or early '75 I went to a trade show in Manhattan, run by the New York Photo Historical Society. In those early days dealers ("pickers") came in with boxes of "junk" and loaded down their tables. What a paradise for camera collectors! One of the dealers, (I don't remember who) had a large cardboard box that apparently had been in a partially flooded cellar. It contained more than a dozen Hicro cameras. The price for the whole box was less than \$100.00. Three of them were perfect including the original boxes they came in. The rest ran the gamut from crushed mush to only slightly damaged. I kept the best one for myself, the next two were for trade and then I let friends like Eaton rummage through the box and make a good one out of two or three damaged ones. Eaton took a yellow filter from the extra parts since the one in his camera was broken and there were good ones in the box. Eventually I threw out the left over pieces with the water-stained box. That is how Eaton ended up with his Hicro. All my color cameras were sold by Tepper in 1979 except the high end ones that went to Leif Preuss in Norway."

Steven remembers there were several of Eaton's cameras that "I was excited to bid on, and I was pleased to be the high bidder on many items. There were two different auctions, as I recall, the items that did not sell in the first auction were re-offered with little or no reserve at the second auction. Many of the cameras were grouped together in mass lots. I was again high bidder on several of these group lots during the second auction. The lot in question contained 24 cameras, mostly Kodaks, which is my main category of collecting. The description did mention the Hicro but they featured an Ansco folder and a Jiffy Kodak. So you see, the Hicro did not really fit into any of my personal categories and thus was a camera I was happy to pass along to a fellow collector. I am thus especially excited that it ended up in your hands!"

Steven added that I could probably still search the Lothrop auction results on the "iGAVEL" website even though the auctions ended a year ago. Well, I was curious and did search the web site. It was quite tedious as I could not identify the lot. But finally by going through them slowly, item-by-item, I came to item 1853934. Folders predominated and my little Hicro was tucked down, almost hidden, at the far right

shown on its side on the web site. I immediately contacted Steven if it was so and was it available? Steven could offer no information as the cameras were at his Mother-in-law's home in New Jersey. Eventually he did come back with the data that it indeed was a bigger Hicro but sadly all the internal mechanism had been taken out to convert it to a normal camera. I passed on it – close but not close enough!



THE HICRO CAMERA

PHOTOS OF CAMERA AND DETAILS BY ROBERT LANSDALE

corner. Nothing to give it identity or pride of position. I am sure Steven didn't even consider it. But what did I see right beside my Hicro, most visible from its size, was a bigger brother to my little camera, a 3 1/4 x 5 1/2 (post card size) Hicro with bellows adjustment. I could recognize it easily from illustrations I had seen, even though it was

Well now, I wanted to find out just what I had. The camera 5" x 5" x 6" in black leather for 3 1/4 x 4 1/4 pictures, has an F16 fixed-focus lens in an Ultra shutter. This somewhat gawky lens is mounted on a reversible lens board so that for convenient travel you can store the lens inside. A ground glass panel is an accessory mounted on the back. No holder came with my camera.



COURTESY OF iGAVEL

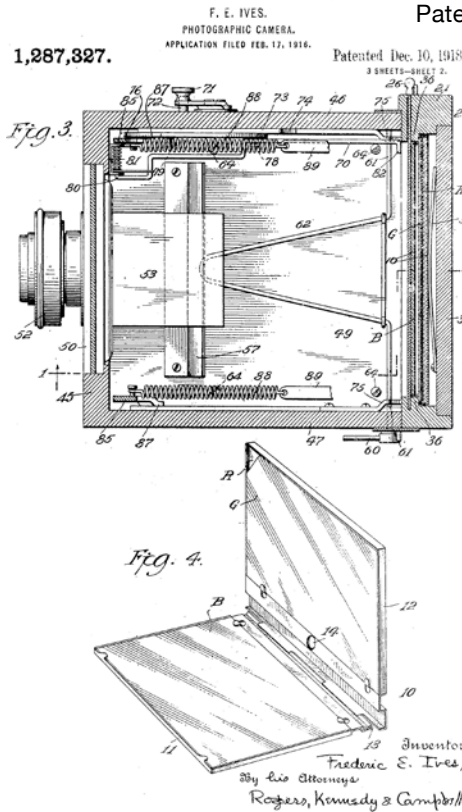
Lot 1853934 with my Hicro lost in upper right corner. Bigger post-card Hicro is to the immediate left of it.

What seems unique about the camera is a crank at the side of the camera body which when unlatched, is rotated counter-clockwise to work the mechanism inside. A large cam slowly lowers down a wire with a bent end then commences to lower a large yellow filter to a 45° angle to the floor of the camera. Its heavy construction denotes precision engineering. A light orange-pink filter covers the back of the lens.

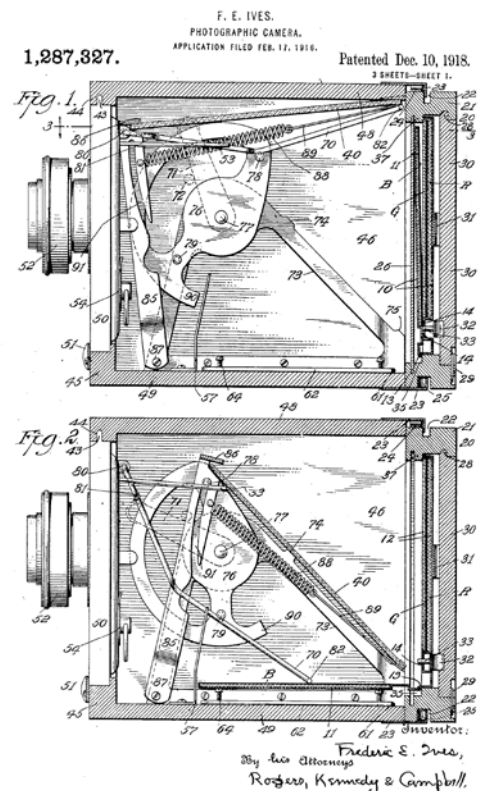
A sign at the side of the camera gives instructions on how and when to operate the handle properly. I learned that this was not on earlier models so it must have been added to alleviate confusion.

So what do all these do. I turned to the patents to understand the fixtures and working of the camera. And by the way I have learned that my Hicro IS complete except for a holder and mirror coatings.

The camera is designed for colour photography utilizing a special photographic plate consisting of "two plates" hinged together with a "film" squeezed in the middle. When this "tripak" is unveiled in the camera (slide removed), the front plate hinges down (falls forward) to the floor of the camera. The wire with a bent hook on coming down makes sure that the plate is fixed in its proper place. Only after this plate is in position can the yellow filter/reflector hinge down into position. This plate will receive a reflected image off the front-glass surface of the yellow filter. Since the plate is only sensitive to blue light, then it records only the blue image. There is some discussion that the front surface of the glass was



Patents for the Universal Hicro, 1,287,327



The large cam is revolved by the exterior crank and is seen at its halfway point where the wire with a hook, having caught the first plate, locks it in place on the floor of the camera. Then the yellow filter is brought down to 45° angle as part mirror and filter for the image.



Crank with label on procedures for moving mirror and exposing the plates.

coated with a dichroic filter to enhance the blue ray reflection.

Light passing through the yellow filter will be minus the blue rays. The image then strikes the "film" which is sensitive to the green spectrum then passes through a coating of red or orange dye and onto the final plate which is red sensitive.

With the mirror and wire retracted an extra wire (lever) on the floor of the camera helps lift the first plate back into the holder and the slide is returned. Turning the camera on its back assists in this operation.

Other details include a filter that covers the inside of the lens. The orange-pink colour reduces the actinic effect of the blue rays and to better equalize the photographic effects upon the three sensitive plates.

The plate holder holds only one tripak plate and is loaded from its back with pressure plates to hold it securely in place.

A baffle at the front of the camera on the floor prevents extraneous light from reflecting onto the plates during exposure. A hood that covers the lens (when stored) must be raised during the exposure – this acts also to prevent extraneous light reflections.

The camera was offered by the Hess-Ives Corporation of Philadelphia ca. 1915 but manufactured under contract by the Hawk-Eye Works of the Eastman Kodak Company. Henry Hess, the financial backer of the project, was in the steel and ball bearing industries. Federic Eugene Ives was the prolific inventor of many image processes. More noted in photographic history for his Kromskop camera and viewer of 1895, he had 71 U.S. patents as listed in his autobiography. The list includes a notable Half-tone process of 1881 and improvements in later years, a tri-colour camera of 1899 that pre-empted the identically-designed "Jos-Pe" camera, the binocular microscope of 1901, various colour printing and colour camera systems of the 1899 through 1915, and a number of patents pertaining to cine colour-print

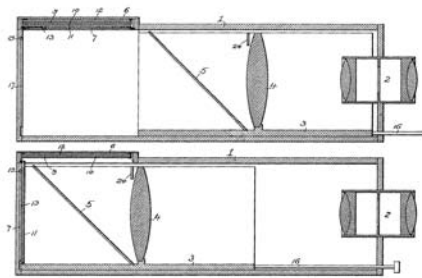
processes (Technicolor). His inventions were medalled by Franklin Institute and the Royal Photographic Society.

We will concentrate on the patents when he turned his attention to making coloured transparencies and coloured images on paper. The magic lantern of the day called for full colour scenery and subjects. The successful Lumiere's Autochrome filled that need but produced only single (unique) exposures. But there was a need for a way to produce multiple photographs from one primary image. There also existed a desire to produce colour pictures on paper without going through an elaborate costly process to achieve the same (three-colour carbon).

OTHER COMPETITORS

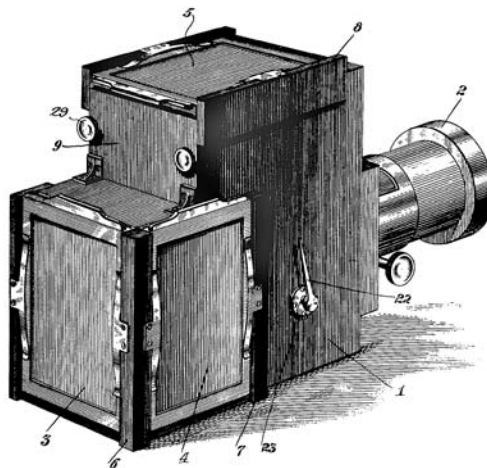
There were competing apparatus on the market prior to Ives's inventions: A Sanger-Shepherd camera of 1902 which had two reflectors behind the lens which directed light to plates on either side of the camera; light passing through them reached a third plate in the back. A 1907 version used prisms to split the light into three images on a single plate. Bennetto's camera reflected light upwards to a bipack of a blue and a green sensitive plate(s) while passing the image through a red glass to a red sensitive plate at the back of the camera. The more sophisticated Butler camera sent images to three individual plates: "A" through a red filter to a red sensitive plate on top of the camera, "B" through a blue filter to a blue sensitive plate also on the top, and "C" to a green sensitive plate at the rear. It used two glass reflector - cyan and yellow to assist in separating the colours.

Ives capitalized much on his research for the Kromskop camera and in 1911 patented a trichromatic camera (U.S. patent 980,961) that resembled a long tube. The Tripak plates (U.S. patent 927,244, July 6, 1909) were inserted at the top of the camera at the rear. On pulling the slide, the front plate was allowed to fall into the camera by gravity. A secondary lens and reflector within an inner box is slid to the back of the camera, entrapping this plate. The exposure is divided by the reflecting glass to the blue and green sensitive plates within the holder (at the top of the camera) and the red sensitive plate at the back of the camera. The lens and reflector assembly are withdrawn and the plate at the back of camera is dropped back into the holder by tipping the camera on its top. The secondary lens was considered necessary to "parallelize" the diverg-



Long tube colour camera, patent 980,961
ing cone of rays from the objective lens.

Then there was a triple plate camera patented in Sept. 14, 1915 No. 1,153,229. It featured two mirrors to split the image onto three plates (as shown below) but the front mirror was silvered in stripes; this to secure a more equitable exposure for upper first plate. The mirror was required to be moved sideways during the exposure, twice the width of the stripe, to guarantee shadowless exposures on the upper plate.



Triple plate camera, patent 1,153,229

Ives even experimented with a film holder to hold three plates. Patent 1,089,445 of June 2, 1914 provided means whereby each separation negative could be exposed one after the other without disturbing the camera too much.

In patent 1,238,775 Sept. 4, 1917, Ives describes a dichroic filter being applied to the front of the glass reflector. "It is much more efficient than plain glass reflectors." A coal-tar dye (eosin) in alcoholic solution is applied to a perfectly clean glass and allowed to dry. We were unable to see such a coating on my camera reflector but Eaton Lothrop in assembling the camera from a variety of parts may have wiped this coating to clean it. But there is some skepticism as to whether a dichroic filter is part of the system. In the patent 1,287,327 which describes the parts and workings of the camera, there is no reference to a dichroic filter. A dichroic filter

would increase the quantity of the blue exposure by double -from 10% up to 20% according to figures contained in patent 1,238,775. But the inclusion in the system of a filter, just behind the lens, of a "orange-pink color for the purpose of reducing the actinic effect of the blue, and some extent the green, rays of light, so as to give a better equalization of photographic results upon the three sensitive plates." So the plus of a dichroic filter would be contrary to the minus factor of the orange-pink filter. The two don't mix.

But there is a rather blatant red label in the back of my camera that warns:

CAUTION

To avoid injury the coated side of the reflector (side to top of camera) must under no circumstances be rubbed.

To remove dust, use a soft camel's hair brush. The uncoated side may be cleaned with soft cloth.

So we have the perplexing question as to what is coated on the filter/reflector that must not be rubbed. We may have to wait to find other Hicro cameras with untouched reflectors.

THE HICRO CAMERA

Now we come to the camera under discussion as seen in patent 1,287,327 of December 10, 1918. Such patent was applied for February 17, 1916 which is a closer date when it came to market. Brian Coe in *Color Photography First Hundred Years* says that the Hicro Universal camera was introduced commercially in 1914 (?).

Ives describes it in his patent "to afford a more simple and effective multiple camera." It is the object to improve the camera of patent 980,961 which is his long tube camera of 1911. The internal mechanism to lower the mirror into place was most novel and precise. The camera is brought down to compact size with the aim of attracting more photographers to colour photography. It emulated closely one of George Eastman's push-button Kodaks.

The camera came to market with a series of artful ads in 1915. The *National Geographic* magazine for August, September and October were first to run the ads with leading headline of *You Can Now Make Photographs in Color, Color is the life of the picture and Nature's Colorings in Your Photographs*. A picture of the Universal Hicro decorated the bottom of the ad. *Outing* magazine carried the same ads.

The October and December issues of *National Geographic* switched to a

half-page ad featuring a portrait of a woman and the more sumptuous 5x7 Hicro camera with extended bellows and more professional Rapid Rectilinear lens. They noted it was the invention of F. E. Ives. They were switching their advertising to a more appealing level using professional equipment and content.

The December 1915 *American Photography* went one better with a full page ad of the above with the subtle wording: "A Christmas color camera will prove most acceptable." In addition they carried a full-color frontispiece of a fruit-and-wine still life that was marked "Reproduced from Hicrome Photograph on Paper." An editorial comment is include:

With the co-operation of the Hess-Ives Company of Philadelphia we have prepared a Christmas present for the readers of AMERICAN PHOTOGRAPHY in the shape of a Van Dyck photogravure reproduction of a Hichrome print in natural colors. Man proposes and the printer disposes, however, and as we are closing the text forms of the magazine there is some doubt as to whether these color inserts will arrive in time to be bound in the December issue. If this is not the case, we will have to insert them in the January, together with an article descriptive of this process, which arrived too late for our December issue. Mean while those interested in color photography are referred to the advertising pages of this issue.

Evidently they did make it in time. The colour reproduction is very vibrant and must have utilized the skills of the engravers to enhance the image. (See special colour supplement).



Nature's Colorings in Your Photograph

WHY are flowers, the beautiful of subject photographed so seldom? For the very life and interest subject is its color. The Hess-Ives Hicro Camera makes possible the photograph of this or any other subject in full the portrait of a human face in perfection of flesh tints, the home garden, a bouquet of flowers—subject—in its natural colorings. The Hess-Ives Hicro Camera process give you as many print want. A process that may be alike by amateurs or professionals that may also be used for transparencies or for black and white, as any camera.

Write today for catalogue and prices
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1201 Race St.
Philadelphia




You Can Now Make Photographs in Color

How much more interesting the photograph would be if the color, as well as the form of the subject, were preserved. This is now made possible by the greatest photographic development since the days of Daguerre—the Hess-Ives Hicro Camera

As many prints as you want, faithfully reproducing any subject in full color. A camera and process invented by Frederick E. Ives, the father of the three-color process—that may be handled by amateur or professional to make print after print, uniform in color values. Makes transparencies also, or may be used for black and white, like an ordinary camera. Full instructions with the camera

Write today for catalogue and prices
Hess-Ives Corporation
1201 Race St.
Philadelphia



Color is the life of the picture

HICROGRAPHY is the art by which everyone with even a rudimentary knowledge of photography can make direct color photographs (or hicromes)—one, or a hundred alike. The Hess-Ives Hicro Camera which is the invention of F. E. Ives, is the crowning work of one whose genius has vivified and beautified the printed page by making practical the art of half-tone illustration. It is a development that has come through patient delving, sleepless nights and tireless days. It preserves, as a permanent memento, any subject—the human face—flowers—landscapes—in all of Nature's colorings, recalling vividly to your friends happily spent hours and days.

The Hess-Ives Corporation
1201 Race St.
Philadelphia

We shall take pleasure in sending you a catalogue of Hicro Cameras




Advertisements from the *National Geographic* of August, September and November 1915

Meanwhile the company was hard at work trying to get editorial comment and stories within the many American photo magazines.

Their success seemed to evolve around how much advertising they placed in each magazine.

The noted portraitist Elias Goldensky was commissioned to make a series of portraits in colour to prove its adaptability to the professional portrait field. (See special colour supplement). Samples of Goldensky's Hicro prints are at the George Eastman House Library.

Lejaren Hiller relates his experience making a colour cover for *The American Magazine* with the very slow plates. "Mr. Hess came up from Philadelphia to give last minute advice and instructions. The subject chosen was a baseball player and his best girl. On the roof of my studio, I set up a plain background painted emerald green. The girl had on a screaming red dress, the baseball player had his mitt. Between them and the background I placed a flash-pan holding four ounces of magnesium powder; on both sides of them [were pans with] six ounces each and above the camera another six ounces. They were all wired up to go off simultaneously. Having given the proper warning, I let 'er fly. It wasn't that anyone was hurt but we had a little trouble to find everything — the background for

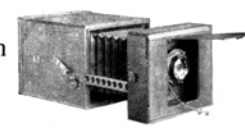


Nature's Color Preserved Directly by Camera

AS a delicately painted miniature is to the tintype, so is a Hicrome (Hess-Ives color photograph) to a black and white photograph. With this—photography's fullest development—amateur as well as professional can make print after print, holding fast all of nature's color charm. The Hess-Ives Hicro Camera preserves in portrait—making the fidelity to feature and expression of the best of ordinary photography, and then adds that charm of color heretofore reserved for the master painter's skillful brush. Best of all, so simple is the camera and the process that the amateur is certain of pleasing results, and the artist photographer of full play for his individuality in as many prints as may be desired. You may use a Hicro Camera with equal facility for color or black and white photography.

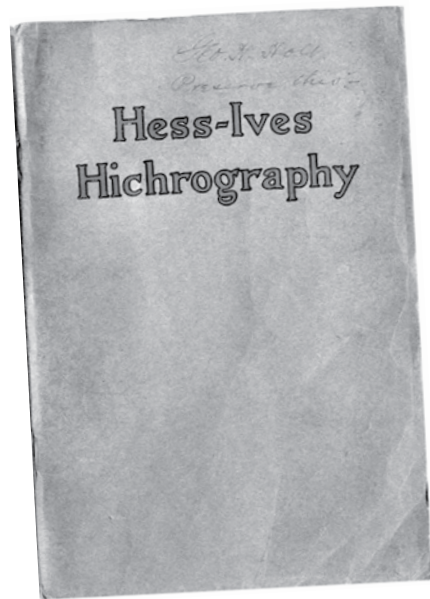
A Christmas color camera will prove most acceptable. Let us send you a Hicro Camera catalogue.

Hess-Ives Corporation
1205 Race Street
Philadelphia, Pa.

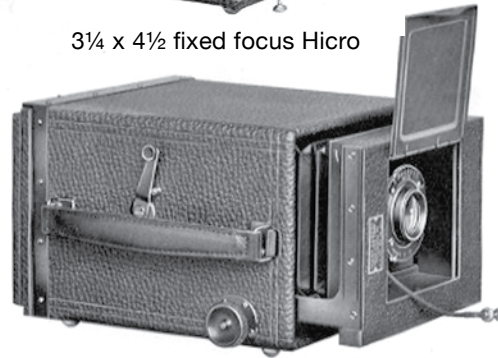


National Geographic December 1915

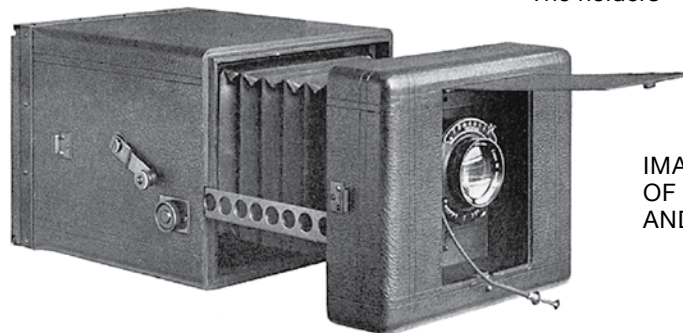
instance. I managed to grab the end of the tripod while the camera was hopping away, so everything was hunky-dory. Across the street the members of the Lambs Club were hanging out the windows and likewise the transients of the Bellmore Hotel next door. I sent the separation negatives to Mr. Hess and in the course of time received the finished print with the suggestion that I use a trifle more light." *-A Half Century of Color* by Louis Walton Sipley.



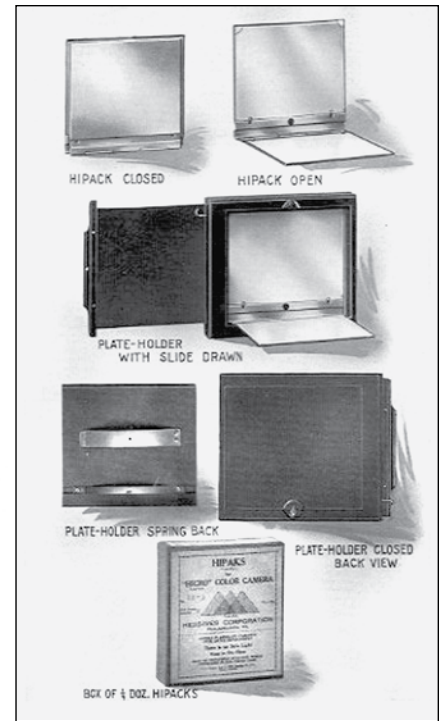
3/4 x 4 1/2 fixed focus Hicro



3/4 x 5 1/2 post card Hicro with bellows

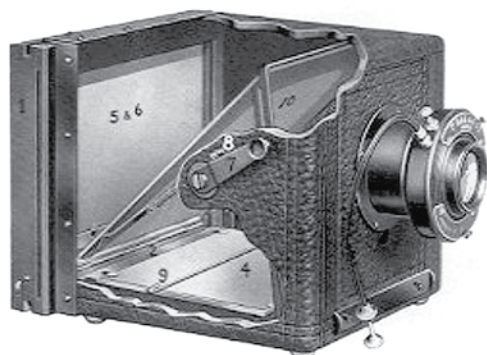
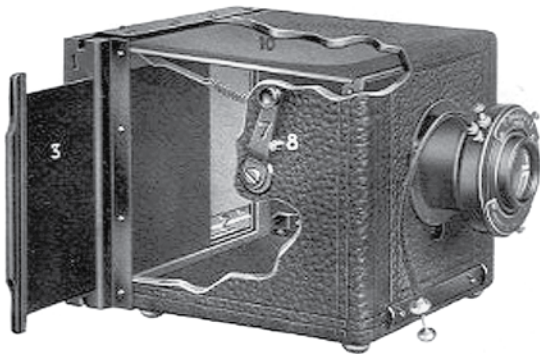


The 5x7 Hicro with bellows adjustment and F8 R.R. lens

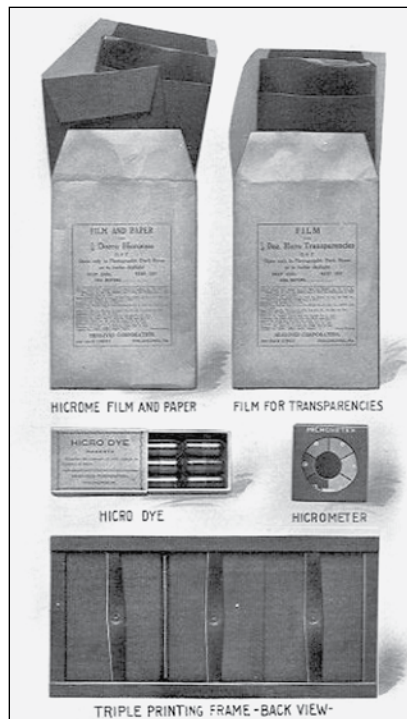


The holders – how to load

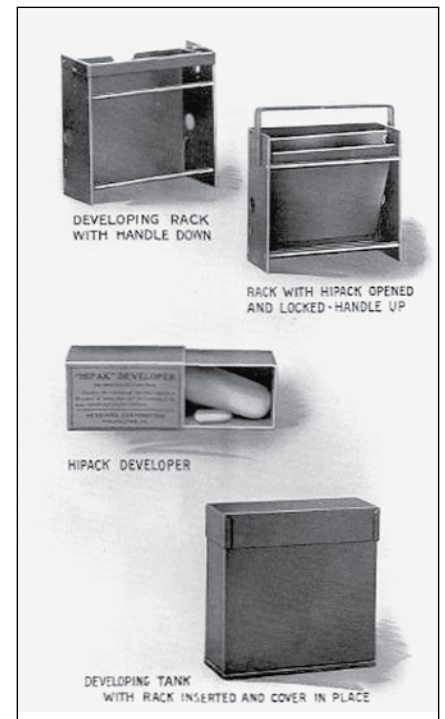
IMAGES COURTESY OF ANDREW CAHAN



Dissection of the Universal Hicro camera



Packaging of plates and paper etc



Processing tanks and chemicals

The advertisements constantly mention that a catalogue or booklet was available on request. The George Eastman Library has a booklet *Hess-Ives Hichrography* that is stamped RECEIVED OCT 13 1915. Its 12 pages give a cursory description of the process with a few pictures. Andrew Cahan, bookseller in Akron, Ohio kindly sent a more elaborate 34 page brochure that was commissioned the next year in "February Ninteen-Sixteen." It contained pictures of the cameras, prices, loading of the plates, processing of the film, and the prices for prints should you wish the Hess-Ives Corporation to make Hicrome prints or transparencies for you. Prices of the cameras varied from \$25.00 for the smallest to \$75.00 for the 5x7 camera.

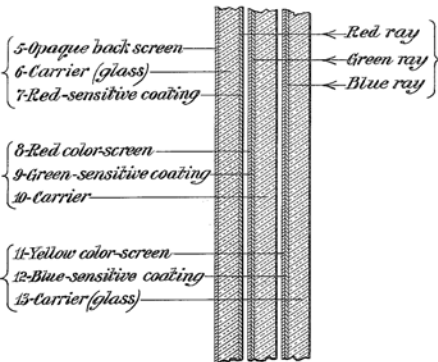
Hess-Ives increased their advertising for the year 1916 and 1917 and started to impress the editors of the photo magazine who published short notices and full stories. *Popular Science* magazine gave it good play with headlines: *-Is This Actual Color Photography at Last?* or *-Three Plates and Three Color Screens Used in New Color Photography* or *-PHOTOGRAPHS IN NATURAL COLORS: New Process Makes Reproduction of Unlimited Number of Prints Practicable for the First Time.*

THE HIBLOCK SYSTEM

But a new term was entering the Hess-Ives ads. This was the "Hiblock" system which was a new product and direct competition to sell the colour camera. Ives had further developed the Tripak so that it could be exposed as a single plate, referring to it as a plate-pack. Now, the exposure could be made in any large camera in sizes 5x7, 8x10 and even 11x14. Described in Patent 1,173,429 of February 29, 1916, Ives had overcome the problem of making the red and green sensitive plates with identical gradation-giving qualities. This he achieved by taking half of his supply of green-sensitized plates and soaking them in a weak solution of pinachrome or pinacyanol dye to make that batch sensitive also to the red spectrum. Since the

two batches are of the same emulsion they will have the same gradation tones – often unachieved by other colour inventors. Since the red sensitized plate continues to be sensitive to green, a red filter screen is coated thereon to eliminate green rays from reaching the red sensitive emulsion.

For a Hiblock you commence first with an ordinary plate that is blue sensitive, the support glass base faces the lens, a yellow colour screen (filter) is coated on the back-side of the emulsion layer so blue light will not travel back to the other plates; next you have a green film with emulsion coated on the back side of the support, a red colour screen (filter) is coated on this layer to prevent any green rays from travelling to the red plate; then you have the red sensitive plate at the rear of the Hiblock with emulsion on the front surface. All are bound together as a single unit to go in the Hiblock holder, one of which was supplied with the



Cross section of the Hiblock plate-pack

Portraiture in Color

The Hicrome A Portrait in True Color made by the Hess-Ives Process.

The Hiblock A plate, film and color-screen unit or block which gives the three necessary negatives at ONE exposure in any studio or portable camera with your regular lens.

The Hess-Ives Process permits of faithful color reproduction in any quantity from the original negatives. You look at the picture instead of through it. This picture, seen by reflected instead of transmitted light, we call the Hicrome.

The Hiblock comes ready prepared and you make the three necessary negatives at one exposure in any studio or portable camera without any alteration at all of your apparatus. The Hiblock is supplied in 5 x 7, 8 x 10 or 11 x 14 size.

Make as many copies as you want—one or a dozen or more—from the original Hiblock negatives and mount them with all of the facility of the usual paper print, using such mounting as your patrons prefer.

The same skill in making portraits in your regular work will ensure thoroughly artistic and color-true Hicromes.

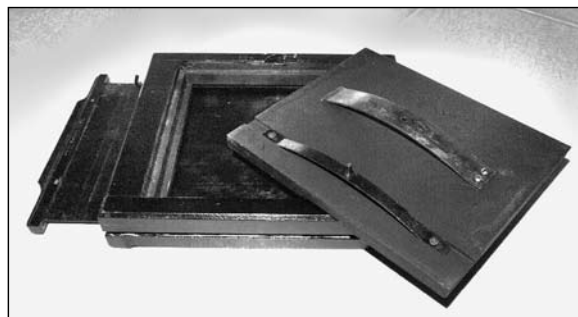
The process, beyond the making of the negatives, which in itself is the same as making an ordinary negative, is simple and within the ability of your assistants. Or, if you prefer, we will do your initial printing for you.

If you did not see our Exhibit at the Cleveland Convention or in the Official Picture Section, then ask some of your friends who did and in whose judgment you have confidence.

Literature upon request.

The Hess-Ives Corporation

1203 RACE STREET :: :: PHILADELPHIA, PA.



Hicrom plate holder with loading back removed.



The Hicrom box

HICROGRAPHY
HESS-IVES COLOR PHOTOGRAPHY

No special apparatus is needed to make Color Photographs—Hicromes

The Hiblock, the Hess-Ives triple effect plate, is given a single exposure in your regular lens; its plates and one film, like any panchromatic material—"the simply the familiar treated with potassium iodide and process devised furnished in 5 x 7, 8 x 10, and 11 x 14 sizes, in accordance with light and density of d a half minutes in flaming arc lamp is

HICROGRAPHY
HESS-IVES COLOR PHOTOGRAPHY

Color Photography for amateur as well as professional with the Hiblock

Though the previous issues of this series have dealt more especially with the use of the Hiblock by the professional photographer, we desire in this letter to deal more with its use by the amateur. We are receiving Hiblocks who are delighted with are obtaining. It seemed these amateurs to realize application of this invention to their own camera and obgraphs. Heretofore, the purchase of a special camera many, but now that all the Hiblock, the number are determined to get color photographs is multiplying. For the benefit of the amateurs who have had color photography and within their grasp, let us re bound together posed film. One is to blue, the film into our special plate holder and fit your camera is needed and yo prints in color as ; on has reduced co simplest terms. rs as well as profes country will ma camera campaign block. They can with which they the cost of specia e Hiblock obtain o they desire or use ind white. oklet describing i lock and its opera ree upon request.

HICROGRAPHY
HESS-IVES COLOR PHOTOGRAPHY

Think of this—You can now photograph in color, using your own camera

Think of taking a pack composed of two plates and a sensitized film, slipping it like an ordinary single plate into your camera whatever the make of that camera may be, and taking a photograph in color of which you may make as many reproductions as you want. This is what has been made possible to amateur and professional alike by

The Hiblock

Many felt that color photography was to them a forbidden field so long as a special camera was required. But the Hiblock does away with all that. Here, bound together, are two sensitized blue and red plates with a green film interposed. One exposure only, as usual, and you have the colors separated and held by the three plates. Like every large epoch-making development, it is marvelously simple and it is just as simple for you to perfect yourself in its use. Why restrict yourself to black and white work when Hess-Ives Hicrography has opened to you a new vista—the dream of the photographers for generations? We will gladly send you a booklet telling you fully about the Hiblock and its possibilities—a subject that no progressive photographer whether he be professional or amateur should pass by without full investigation. Simply a line, and this literature is yours for the asking.

Respectfully,
THE HESS-IVES CORPORATION
N.W. Cor.
12th & Race
Philadelphia
Pa.
Feb. 15, 1917

Series of ads from *American Photography* of 1917 and the *Bulletin of Photography* 1916

first order of plates. The filters were washed away during processing. Ives further improved the product by coating an opaque backing on the backside of the red plate to prevent halation. After processing this coating had to be removed with benzol.

Frederic Ives was kept busy promoting the new product giving addresses to various photographers gatherings. The company was in attendance at the annual convention of the Professional Photographers of America in Milwaukee. A full page ad explained that Mr. Ives could not go personally to every event nor could they send a representative so they would rely on giving their monthly message through their ads or editorial reports.

Noted pictorialist photographer Karl Struss was assigned to take photographs with the Hiblock system; Struss was a



The Butterfly by Karl Struss

specialist in nude female photography. He subsequently reported his experience in the *American Photography* magazine, August 1917 issue, with eight pages of text and two full colour illustrations. (See special colour supplement) Struss took great care to explain the full process from shooting to processing and finishing of the final colour prints.

Struss lamented that many deplored the lack of originality in the pictorial studies hung at the annual exhibitions. It seemed that every possible combination of gum, platinum, carbon, single and multiple

prints, even photogravure had been tried with the same venerable and academic subjects and compositions. It seemed the possibilities of the medium had become exhausted. He welcomed the newest form of colour photography by the Hess-Ives method with unlimited reproduction. The Lumière Autochrome and the similar Paget process gave adequate results, but unfortunately the inability to print on paper and the relatively long exposures required, made these processes impractical from the pictorial point of view.

Struss commented on the choice of lens. Since the process produced soft images, then choosing a pictorial soft lens, particularly in the telephoto, would, in his estimation, be unwise. The speed of the Hiblock is 6½ American Photography and 6 Burroughs-Wellcome, and it is always better to over-expose when in doubt. The development of the Hiblock is in Hitol developer as supplied. In the dark the paper ends holding the plates together are removed and the red-sensitive plate put in a light tight box. Under red safe light the front plate is developed for 2¼ minutes and the green sensitive film is developed for 4½ minutes. The back red-sensitive plate is then developed in total darkness for 2½ minutes.

For the print-films (positives) the negatives are printed by contact onto bichromate film through their celluloid base. Intense arc lamps are recommended for the exposure to shorten timing of 2 to 5 minutes. A varnish coating is removed with benzol and the films are developed in water at 95 degrees until highlights are clear. The films after drying are then dyed up in their respective blue, magenta and yellow dyes (Ives insisted on calling them cyan, magenta and yellow but here I am using Struss' description). The "peacock blue" film while still wet is then pressed down on a piece of dampened backing paper with a roller while the magenta and yellow are hung up to dry. The blue film can be peeled off after about five minutes leaving a blue transfer-print. The blue film could be used again for additional prints. Subsequently the magenta film and then the yellow film was registered on the dried blue base-print and held in register with lantern slide tape and clips. The combination is then lowered into an amyl acetate bath then pressed with a squeegee roller between blotters or run through an elastic roller press to remove all bubbles. After a short while, under pressure, the print is finished and can be varnished or colour retouched to im-

prove imperfections. Later the process called for all three images to be transferred as dye images to the soft gelatin paper – dye imbibition process.

An editorial comment on the assignment commented:

Over two hundred negatives were made of ten of the best female models as selected. Of these, forty-eight were retained for [his] portfolio. The models were selected and posed by a group of three artists. Karl Struss whose pictorial work is so well known, made the color plates and prints. As a result of the effort of these pictorial workers, the pictures are on a very high plane, and the engraver has retained the values and spirit of the originals remarkably well. In his article on the Hess-Ives color process in this issue, Mr. Struss lays emphasis on the value of that process for reproduction by printing in three colors; his statement seems amply justified by the two studies reproduced.



Frederic E. Ives

The accolades ran on such as the editorial of the *New Photo Miniature Vol. 13*: "It is only necessary to give the name of its inventor, Mr. F. E. Ives, to provide the assurance that is on a theoretically right principles. Mr. Ives is recognized throughout the world as the leading investigator and authority in color-photography. But in this new process, the 'Hicro,' he has done a good deal more than provide the theoretically right; he has reduced the practice to such a degree of simplicity and certain that the making of prints and diapositives in natural colors calls for little more skill than ordinary photography."

But was it successful? The ads petered out during 1917. After the sinking of seven U.S. merchant ships by submarines and the publication of the Zimmerman telegram, the U.S. Congress declared war on Germany on 6 April 1917. America's industry and populace turned to war.

WHO WAS HENRY HESS

Trying to assess the biography of Henry Hess becomes a difficult problem from time and space. He was the partner and the financial backer to the Hess-Ives Corporation which promoted the Hico camera.

Henry Hess was born in Darmstadt, Germany on 10 January 1863, coming to the United States shortly thereafter. He received his education in the New York schools, with several additional years of schooling in Germany. In America he worked for several top steel companies and spent several years in Germany as consulting engineer and managing director of the German Niles Tool Works Company of Berlin. In 1904 he founded The Hess-Bright Manufacturing Company, inaugurating the American heavy ball bearing industry. He was a leading expert in the manufacture and design of ball bearings. He disposed of these interests in 1913 and formed The Hess Steel Castings Company and The Hess-Ives Company. The Hess Steel Casting Company perfected the manufacture of the purest wrought iron material into castings via the electric furnace. Such steel was needed for electrical equipment where high magnetic permeability is essential and for manufactured steel items that withstood corrosion, high pressure and high temperature. It seemed the rising car industry heavily associated itself with Hess-Bright bearings as the *creme-de-la-creme* of bearings.

In 1917 the S.K.F. Administrative Company was formed to manage the Hess-Bright manufacturing Co, and the S.K.F. Ball Bearing Company. American shareholders bought out the minority interest in the Hess-Bright Company before the break with Germany occurred. Seemingly this was a public relations gesture to eliminate ties with Germany and to make it easier to gain future government contracts during the war.

But Henry Hess and his companies seem to have gotten into hard times. In August 23, 1920 the Baltimore Trust Co filed a petition to have the Hess Steel Corporation placed in the hands of a receiver. A lawsuit in 1920 harkens back to a contract with the U.S. government during the war years to deliver 24 tons of electric steel ingots, later reduced to 13,145 pounds. The company was suing for 16 nine inch ingots and experimental work that became part of that order. They were scrambling for \$2,327.54.

But as part of the records it is reported that the Hess Steel Corporation was indebted to the War Credits Board to the sum of \$100,000 and it had not been paid.

Mr. Henry Hess died in 1922.

Frederic Eugene Ives wrote his autobiography and had it published for his heirs to appreciate his accomplishments and not rely on history to give a tarnished version. He systematically went through his lifetime touching on his 70 patents. Through the 98 pages of text supplemented with an additional 19 pages of reference notes he gives particular arguments to his detractors and naysayers.

"The exploitation of the Tripak system was taken up by Mr. Henry Hess, in Philadelphia, but proved unprofitable as managed, and after Mr. Hess' death, I sold some of the patent rights to the Eastman Kodak Company, and with part of the proceeds cleared off a considerable indebtedness of the corporation and made a new contract with the stockholders which placed upon my shoulders the burden of undertaking to realize something from the remaining patent rights, which had to do chiefly with color cinematography."

Excerpt from *Autobiography of an Amateur Inventor* by Frederic E. Ives.

But when it comes to the Hess-Ives company and the whole Hico camera episode he has but one short paragraph to dispose of the matter:

The exploitation of the Tripak system was taken up by Mr. Henry Hess, in Philadelphia, but proved unprofitable as managed, and after Mr. Hess' death, I sold some of the patent rights to the Eastman Kodak Company, and with part of the proceeds cleared of a considerable indebtedness of the corporation and made a new contract with the shareholders which placed upon my shoulders the burden of undertaking to realize something from the remaining patent rights, which had to do chiefly with color cinematography.

Obviously it was an unpleasant experience during years of triumph. But was it an expression to defend his personal ego or was it revulsion at the downward demise and loss of his friend, Henry Hess? He did quote further details in the reference notes.

Photographers had shied from the three-image colour process as *Wilson's Photographic Magazine* commented: "Many felt that color photography was to them a forbidden field so long as a special camera was required. But the Hiblock did away with all that."

The *American Annual of Photography* for 1918 said: "The prints on paper give the impression of wooliness – or fuzziness. They are not crisp and sharp, owing to the manner in which they are produced, and the amateur who looks to count the hair of Fido's tail in a color print has a large and varied surprise in store for him." For portraiture or pictorial photographs it seemed quite acceptable.

The consensus was that the camera was sold too cheaply in a limited market and the processing services could not sustain themselves catering to the few specialists.

Colour photography went on to favour the one-shot tricolor cameras such as the Berm-pohl, Vivex, Devin and National Photocolor using one and two mirrors.

It is a sad tale that the cameras should end up in a "pickers" box of junk. As saved by Matt Isenburg, the water-stained cardboard box with a dozen Hico cameras may have been the last vestiges of this enterprise. Three cameras were still perfect to continue on to tell of the dream of early three-colour photography, the rest were but crushed mush or slightly damaged.

ACKNOWLEDGEMENT

My thanks to the many who took the time and interest to help pull the details together for this story: Chris Holmquist, Scott Bilotta, Robert Wilson, Rob McElroy, Todd Gustavson, Steve Rudd, Matthew Isenburg, Peter Kitchingman, Marcel Safier and Andrew Cahan.

Toronto Notes

reported by Mark Singer

THE JANUARY MEETING

The January meeting was one of education about how to get your photographs published. Our teacher was Roy Ramsay publisher/editor of *Outdoor Photography Canada*. The magazine started in April 2007 and is distributed throughout North America.

He first showed a short slide show highlighting the works of the nine photographers in the magazine. They were beautiful images of both wildlife and nature scenes. The relationship between the photographer is special and that is how he chose the images for the magazine.

He then gave tips on how to get their photographs published. There are many places to get photographs published such as magazines, newspapers and greeting cards. Each editor views photographs differently and has a different criteria for accepting the photograph to be published. He showed some insider tips on how to get noticed easier and quicker.

Point number one is knowing the type of magazine or newspaper you want to get published in. Study the magazine and see the type of pictures already published. Submit according to the wish list, which sometimes the editor will provide. Also you can submit to a particular theme in the magazine such as seasons or activities. Ask what the lead-time on the magazine is to meet submission deadlines. It can be six months or more. Get it to the editor on time.

Put your best foot forward and follow the guidelines of the magazine or paper. You can submit either by snail mail or the web. If you submit by mail and you have photographs and text, put the text in the middle and photographs on either side facing outwards so when it is opened they will see the photographs first. The photographs you submit must have that wow factor. If you submit by e-mail, already have a web site that has your images on it. Make sure the web site has pictures related to the subject you are submitting and send a link to the editor.

If the subject is time sensitive, such



ROY RAMSAY

as events, news etc, it usually is by coincidence that you catch it so always have your gear ready. He gave an example that he was driving by and saw Brampton police on bicycles and captured a shot of one policeman riding down a set of stairs. He submitted it to the Mississauga News and got paid \$50.00 for the shot.

You should be patient. Wait two or three weeks before contacting the editor or art director about your submission. You also have to develop a thick skin. Keep submitting to any print



Our tour guide of the AGO photo gallery was Sophie Hackett who curated the exhibit

media that uses photographs – even calendars. Even great photographers get rejected. If you submit to one media, do not submit the same photograph to other media at the same time.

He gave his address for submitting photographs to his publication and thanked the audience. His magazine is still in print and he is thinking of going to a digital version but since his audience is mostly over 45, he will always keep a print edition. He also gave prices he pays for images submitted and published in his magazine from \$600.00 for a cover shot to \$50.00 for a shot under a 1/4 page. The photographs submitted should be in JPEG or RGB mode and at least 300dpi and manipulated to the way you want it. It is then changed to a CMYK or a TIFF file for publication. You keep the RAW data.

THE FEBRUARY MEETING

The location for February meeting was moved because of the threat of a strike at the Memorial Hall. We had a 2-week notice so we called in a favour and met at The Art Gallery of Ontario. There happened to be an exhibit of historical industrial photographs from 1858 to the present era with images contributed by members of the society.

Our guide for the evening was Sophie Hackett, curator of the exhibition. It is in the permanent section dedicated to photography since the gallery's renovations in 2008. The impetus for the exhibition came when a selection of George Hunter's photographs were donated in 2010. The gallery already had some industrial photographs from earlier times but George's collection from the 1950s and 60s filled a gap and so the exhibition was born.

PORTRAIT BY ROBERT LANGDALE

Sophie surveyed the other industrial photographs in the AGO collection and realized that the perception of the images had changed over the years. For example smokestacks with billowing smoke meant progress in the early part of the 1900s but now means polluted landscapes, disease and environmental impact. Each photograph was a product of its own time and only the relevance changed. There are approximately 100 photographs in the exhibition. The first part has Mr. Hunter's pictures in colour which are mostly aerial views and black and white that were taken in various mines. There is also a video interview with George.

The rest of the show consists of bridges taken by various photographers and displayed in no chronological order. Also covered are the logging industry and railroads. The railroad was a large part in the building and expansion of Canada. Since it is a large country, without the railroad, the country would not have grown so fast. A number of the bridges are connected to the railroad and Bob Wilson loaned stereographs on the building of *The Victoria Bridge* in Montreal. The stereos showed the source for the illustrations that were in the book that was in the display case. William Notman was the official photographer during the construction phase. He took large format as well as the relatively new stereo views to give intimate details of the bridge during construction up to the opening ceremonies. On the opposite wall is a segmented set of photos made in the 1970s of *The Jacques Cartier Bridge* made by Bill Vazan. The images show the whole bridge in a panoramic style but you have to put the picture together in your minds eye.

As an added treat George Hunter was present and gave recollections as an industrial photographer. He related how his photographs came to be in the gallery's collection. He was visiting the AGO and was introduced to Maia Sutnik, head curator of photography. She wanted to see his photographs and arranged for her and Sophie to visit his studio. They looked at his prints studiously but nothing happened. A few weeks later, she returned and acquired 58 prints for their collection.

THE MARCH MEETING

The March meeting was an eye-opening journey into the world of the people with intellectual disabilities. Our guide was photographer Vincenzo Pietropaulo, who has been an award-winning professional photographer for years. He last spoke to the PHSC a few years ago on his book *Harvest*

Pilgrims that documented migrant farm workers in Ontario. He documents the social conditions of people around the world.

He recently published the book titled *Invisible No More* which documents people with intellectual difficulties in "normal" situations all across Canada. It was initiated by a request from The Canadian Association for Community Living who wanted something to commemorate their 50th Anniversary. It was published in the U.S. because he could not find a Canadian publisher even though *Community Living*



VINCE PIETROPAULO

was going to buy at least 2000 copies of it. An exhibit of the photographs, is on view at The McMichael Centre in Kleinberg, Ontario.

The beginning of the talk was a slide show, which highlighted a number of pictures from the book. He found the subject hard to approach at the beginning because he knew very little about such people and was worried about the moral and ethical uses of photography for it only captures a moment. He had known of people with intellectual difficulties throughout his life; he had paid them little attention rendering them almost invisible to him. He realized

such people had been kept away from society in homes and institutions.

At one location he did not know who was the person with an intellectual disability and it dawned on him that we all have some form of a disability but most do not show it. While photographing these people, he also wrote 35 small stories of his experiences and their effect on him, as well as his interpretation of "the moment." The publisher originally did not want to publish the stories as it was a photography book; so Mr. Pietropaulo wrote an explanation of the stories. He read a few of the stories, at the meeting.

This was the first book he did using digitally produced photographs but because it was printed in China he had little control of the printing process and was a little unhappy with the quality of the photographs. He was late into digital photography but sometimes the immediacy of seeing the picture can cause the subject to want to edit the image right there so he sometimes covers the viewer. He uses Canon cameras because he can use the older lenses on his digital camera body. The one thing he does not like is that many of the newer wide-angle lenses are large especially with the lens hood on, so he takes it off to get a bit more intimacy. The one thing good about digital is that it allows him to use available light, but he carries a flash, just in case. All the pictures in the book were taken with available light. The bad thing is that it has made him lazy and less disciplined because he has the ability to take

almost an unlimited number of shots and is sometimes overwhelmed by the technology of taking a picture because the cameras are so sophisticated.

He is working on a book of the history of Toronto through photographs and is looking for material. Toronto became a city at the birth of photography and had many photographers over the years. He also has been photographing the Good Friday parade in Little Italy in Toronto for over 40 years and hopes to someday publish a book on it.

/Mark Singer

Over the years while collecting for Library and Archives Canada, LAC photo archivists have been equally impressed at finding special items which tell a rare and telling story.

A treasure from Library and Archives Canada

A Minimum of Sentiment: the Military Hospitals Commission's glass lantern slides

by Amy Tector



Library and Archives Canada, e-10963522

The MHC liked to remind the magic lantern slide viewers that the men they were seeing in the hospital beds were once soldiers, whose injuries were earned on the battlefield. This wounded man, en route to a battlefield first aid station exemplified the type of cheerful bravery the MHC wanted to convey.

When I first started working at Library and Archives Canada I was lucky enough to be assigned a fascinating task: create a finding aid for our collection of 833 Veterans Affairs glass lantern slides (Accession 1974-258), which documented the rehabilitation of First World War soldiers. Wearing white gloves and carefully examining every slide over a layer of bubble wrap to minimize any damage to the brittle glass that a slip might cause, the work was my introduction not only to the wonders of the photographic medium, but to the bravery and pain faced by soldiers in the aftermath of the Great War. As I stared at the men who were photographed in a variety of poses, from clowning for the camera in a communal garden, to lying in a ward bed, looking wan and weak, I was struck by what these men had endured, and would continue to endure, as they tried to rehabilitate themselves in postwar Canada.

When I got over the emotional shock of looking at countless images of men in distress, I began to wonder about the collection. What was its history and what were the photographs used for? Doing some digging, I learned that in the early months of 1915 Canada's first wounded soldiers began to return from overseas. Initially a committee of officers were appointed by the department of Militia and Defense to provide convalescence homes as needed. The volume of the returning wounded soon rendered this ad hoc approach insufficient. In October 1915 the Military Hospitals Commission (MHC) was empowered to



The MHC believed in keeping men busy, worrying that idleness would produce discontent and discipline problems. Men who were too ill to learn a vocation were taught handicrafts. Illustrating that the men were working, even at previously “feminine” work, was a key part of the MHC’s propagandist message.

give active treatment to soldiers, provide vocational training and deal with returned soldiers’ employment issues. By 1918 the MHC underwent a further transformation and its duties were placed under the Department of Soldier Civil Re-Establishment. Over 130,000 Canadian men were injured or made ill by their service in the military in the course of the war, and MHC’s duty was to care for, rehabilitate, train and help employ them when they reached Canadian soil.

With this background I returned to the images, wondering why the images were created in the first place. The medium of the message, the glass lantern slide, offered an important clue about what the

MHC used the images for. Glass lantern slides were first introduced in 1849, a mere ten years after the invention of photography. The early slides had an albumen coating, gradually switching over to wet collodian before the introduction of dry plates, which were produced for the mass market. These mass market dry plates are undoubtedly what the MHC glass lantern slides are on.

The lantern slide was immensely popular in its day, because it allowed photographs to be viewed by a wide audience at the same time. The ability to project the slide for a bigger group of people substantially altered how photography was viewed, changing it from an intimate medium, to one that could be employed

for educational or entertainment purposes¹. The MHC undoubtedly used the slides for educational purposes, the question now became, whom were they trying to educate, and what were they trying to convey?

In looking at the images what immediately struck me was the relentlessly cheerful message of the photographs. They reassured the viewer that war wounds weren’t too terrible, and that the men were being well cared for. I started to wonder if that was really what happened. This curiosity eventually led me to write a dissertation on how disability was represented in Canadian fiction about the First World War. In doing my research I learned that the images

presented by the Military Hospitals Commission were more complicated than first appeared.

The key to understanding the slides was to understand the government context in which they were created. Even before the war was over, the Canadian government understood that it must treat its wounded soldiers with respect, but was concerned about the costs of such esteem. Although they were the nation's heroes, politicians feared that caring for the wounded could become an immense financial burden. Government leaders were leery of the "pension evil" that had flowered in the United States after the American Civil War, when at one point money spent on veterans consumed one fifth of American national revenue.² Penny-pinching politicians faced a dilemma. While the mortality rates in the First World War were high, advances in medical technology meant that a much greater number of men survived their wounds or war-related illnesses. These medical advances saved the men, but were not sufficiently developed to effect complete cures. As such, a great many soldiers required continued and expensive care long after the war was over. The increased number of invalided men meant that the two traditional methods of dealing with the wounded, cure or institutionalization, were not practical: totally healing men was impossible, but there were also too many wounded to confine in sanatoria or hospitals.

Instead, the Canadian government adopted the concept of rehabilitation. This program meant training disabled men for employment and removing their dependence on federal dollars. The state's concern was with helping the disabled adjust to civilian, able-bodied life, while containing the costs of such adjustments. Ernest Scammell, secretary of the Military Hospitals Commission said, "There must be a minimum of sentiment and a maximum of hard business sense concerning the future of the returned soldier to civil life."³

Although the state's pecuniary fears had motivated it to explore rehabilita-

tion, its insistence that disabled people could work was revolutionary. Prior to the concept of rehabilitation, to become disabled often meant to become improv-

soldiers find their feet in the post-war world, but this enthusiasm gradually faded. Morton describes how "a generalized public sympathy for suffering heroes



Library and Archives Canada, e-10963529

Many images showed amputees, although only a small percentage of Canada's disabled soldiers had lost limbs. The amputee was still a potent symbol of what had been lost in the war, and what was possible through rehabilitation.

erished. Once the concept was accepted, however, people with disabilities had hope that they too could be retrained to earn a living. One of the architects of the Canadian rehabilitation scheme, J.L. Todd, said, "Everyone must understand that armless, legless men can become self-supporting.⁴ Todd's emphasis on the word "can," illustrates that up to this point, the common assumption was that such a man could not be self-sustaining. Indeed, as the Military Hospitals Commission made explicit, its purpose was not only to physically help the soldiers, but also to "arouse the enthusiasm of the men for this opportunity of improving themselves during their period of convalescence."⁵

During the war, the Canadian people were very supportive of helping injured

rapidly gave way to suspicions of malinger, self-indulgence, hypochondria, and self-pity."⁶ The MHC was aware of this change in attitude. One of their own internal memos notes that "the work of the Commission was being hampered by unjust and embarrassing criticism."⁷ To counter those criticisms they mounted a propaganda campaign to convince Canadians of the importance of their work and the worthiness of the soldiers. In 1917 the MHC estimated that approximately 40 to 50 news items a week were being published in Canada about its activities.⁸ As Jeffrey Keshen notes, this "extensive" campaign was designed to "reassur[e] citizens that generous pensions, employment opportunities and first rate retraining methods were being made available" to the soldiers.⁹

The lantern slides were a vital part of the MHC's campaign. The Commission saw its role as bridge building: "One very important task before the publicity branch is to dispel popular misconceptions, to forestall criticism, and effectively to contradict false statements and expose fictitious grievances."¹⁰ A key part of the push to promote their work was the use of actual images of the work being done. As one memo on publicity for the MHC notes:

Photographs have been used extensively, as illustrations of the Commission's work, in newspapers and other periodicals. Window displays of the work of the pupils in the vocational training classes have been supported by enlargement of some of the best

pictures available and this method of publicity is being encouraged ...The pictures are also used for making lantern slides, which are assembled into groups accompanied by notes for lectures and are circulated through the rural communities which are not so easily reached by newspaper publicity.¹¹

Unfortunately I have not been able to locate the notes that accompanied the images; nonetheless the photographs evoke the MHC's aims. As the author of the memo notes, the images were particularly useful in getting the public to support the program. The photographs were a concrete illustration and justification of the MHC's activities, as well as a haunting reminder of the war's toll, and the

Canadian people's debt to the soldiers. The fact that the images were of brave soldiers, stoically enduring pain and relearning economically beneficial skills was just a further support for the cause. LAC accession 1974-258 offers a fascinating glimpse into medical practices, post-war attitudes and the bravery of men enduring ongoing pain. The glass lantern slides are more than a window into the MHC's activities, but also document Canadian society at an important point in our nation's history. ✪



"Private Pat" was a fictional character invented by the MHC to broadcast its optimistic, pro-rehabilitation message. A widely distributed pamphlet, *A Little Chat with Private Pat* emphasized the "can do" spirit that infused the magic lantern show.

REFERENCES

1. See "Lantern Slides: History and Manufacture," Library of Congress, <http://memory.loc.gov/ammem/collections/landscape/lanternhistory.html> Consulted January 19, 2012.
2. Morton, Desmond. *When Your Numbers Up: The Canadian Soldier in the First World War*. Toronto: Random House, 1993. 255.
3. Ibid 257.
4. Ibid 258
5. Anonymous, Report to the President, Military Hospitals Commission, LAC RG 38 Vol. 226, File MHC Minutes of Meetings. Vol. 2. 14 November, 1917. 1.
6. Desmond Morton, *Fight or Pay: Soldiers' Families in the Great War*. Vancouver: UBC Press, 2004. 138.
7. Anonymous, Report to the President, Military Hospitals Commission, LAC RG 38 Vol. 226, File MHC Minutes of Meetings. Vol. 2. 14 November, 1917. 4.
8. Ibid 3.
9. Jeffrey Keshen, "Getting it Right the Second Time Around: The Reintegration of Canadian Veterans of World War II," *The Veterans' Charter and Post World War II Canada*. Eds. Peter Neary and J.L. Granatstein. Montreal: McGill Queens UP, 1999. 63.
10. Kennedy, JA. Report to the Secretary Military Hospitals Commission, Library and Archives Canada, RG 38. Vol. 226. File MHC Minutes of Meetings Vol. 2. 14 November, 1917. 4.
11. Ibid.

tightly to a light frame and with a lamp placed just behind it and in line with the object. By so placing the light the back illumination will highlight the outlines of the subject. By keeping the ground only just far enough back to be out of focus and the rear light in very close to the ground then the subject will, before the front lights are turned on, look as though it had a halo around it. This light halo should be only just strong enough to balance the dark halo caused by the front light.” ❦

The Daguerreian Society Quarterly - Jan/March 2012. A most interesting feature article, by James S. Jensen, describes the controversy surrounding the proposal to honour Daguerre with a significant memorial (In Honour of Daguerre: The Daguerre Memorial in Washington, DC). In 1889, the *Photographers Association of America* (PAA) suggested that there was need to commemorate the 50th anniversary of Daguerre’s contribution to photography. Many forms of celebration were proposed including medals, badges and sculptures and this article reviews much of the debate that ensued. There was controversy over the exclusion of Niépce and debates were prolonged by matters of taste and fund-raising. Since this monument was to be installed in Washington, there was plenty of political interference and funding became a major issue. This is a wonderful story of a photographic/national/political “happening.”

Photographica World (Journal of the Photographic Collectors Club of Great Britain) - No. 139, 2012/1. This exquisite British magazine contains many, excellent articles but I’ll can only mention a few. I knew nothing of “Early Cut Film Cameras” until I read the article by Bob White and viewed the many illustrations. It seems that ‘celluloid coated with emulsion’ became a reality c.1888 and immediately many camera manufacturers introduced intricate mechanisms for handling the new light-sensitive product. Some ingenious methods were invented to allow multiple cut-films to be loaded and manipulated within the cameras. We have descriptions of these methods as well as nice photos of many camera products during the era (1888-1910).

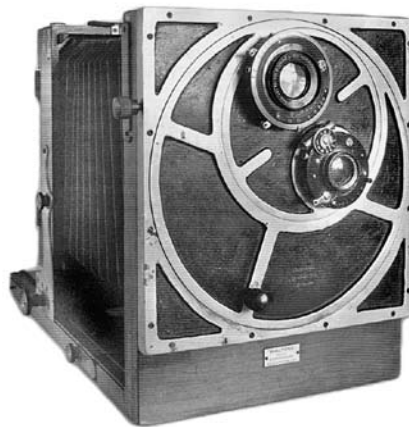
The article, “What Still Cameras Owe to Ciné Cameras,” is certainly enlighten-

As Reported by George Dunbar....

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• publications from photographic societies are received and reviewed for your interest. To borrow single items or collections, contact Librarian Gerry Loban - phone (905) 477-3382.

ing. We learn how the early ciné film-size of 35 mm was adapted to many cameras, notably the Leica (apparently, Leica was not the first!). Following the introduction of 16 mm film by Kodak in 1923, cameras became available to use the same format for still photography. Most surprising of all (to me, at any rate), was the notion that 8 mm film would be used in at least three still cameras. They are shown and described in a fascinating article.



WALTON'S COMMERCIAL CAMERA

The story of an inventor and his unique camera is quite fascinating - “Walton’s Patent Commercial Camera.” Tom Walton designed an amazing machine (ca.1935) of which there was only one known example. Its rediscovery in 2011 and the facts behind the patent and recent ownership will be appreciated by most collectors of rare cameras.

A letter-to-the-editor about the difference between solarization and the Sabattier effect was certainly educational.

Nikon Journal - Dec/2011 and March/2012. These two issues have extensive coverage of the Nikon flash systems known as the “B.C.B.” and “Waltz for Nikon” including many photos of the products and accessories. A

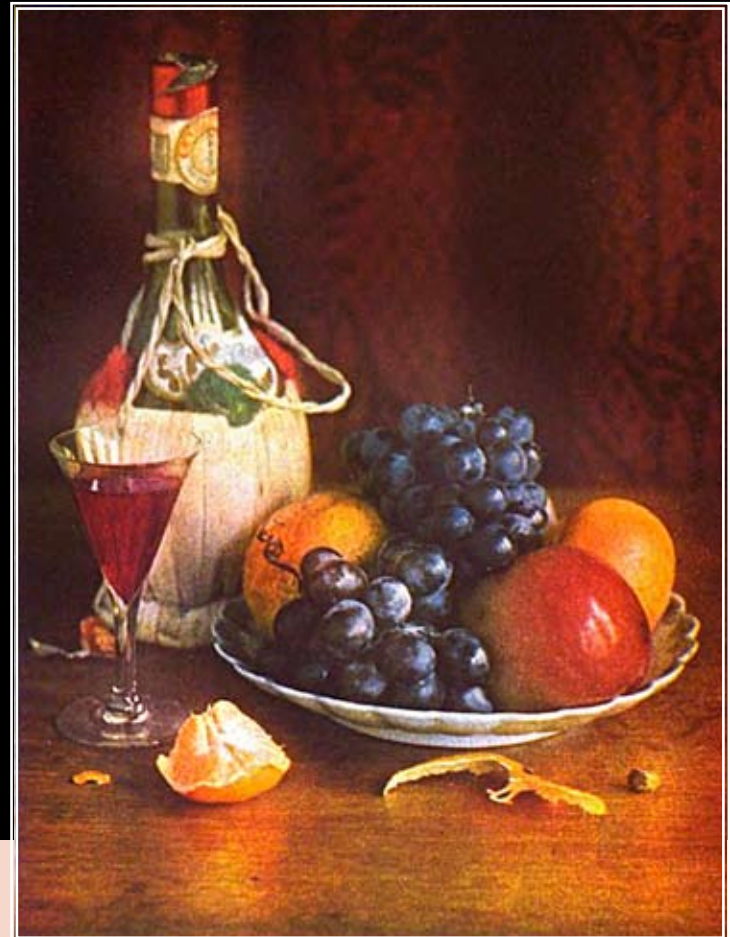
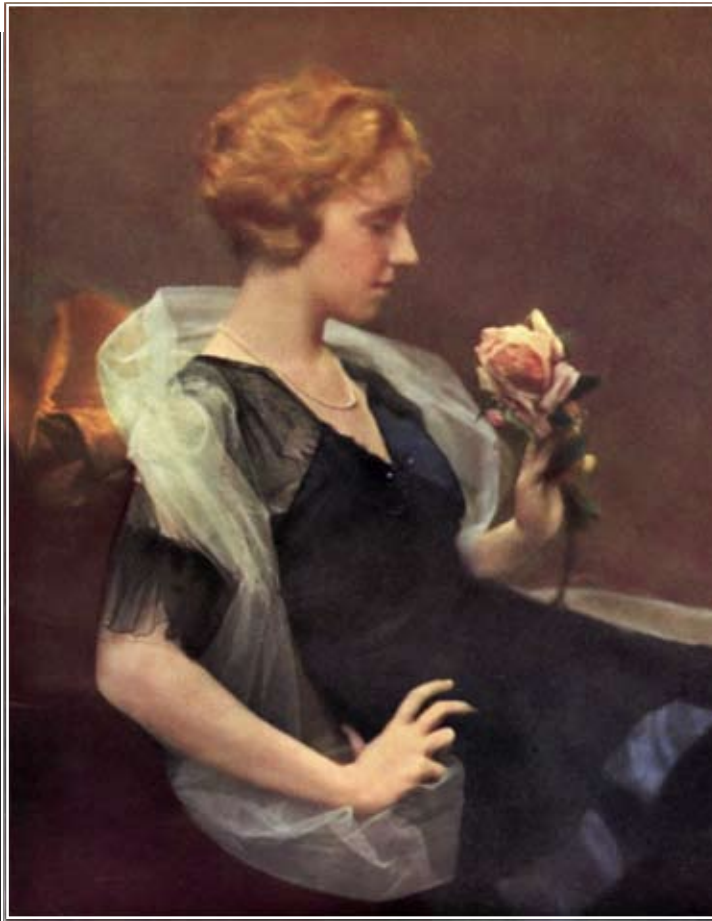
couple of news clips reveal a mysterious ban on Nikon imports to the US which may have existed c.1950. The NHS Convention will be in Paris, June 1.

Objektiv (Dansk Fotohistorisk Selskab) - April, 2012. This Danish-language publication provides an extensive history of photography in Japan with beautiful illustrations - many vintage images and photos of manufacturing. A history of the Ricoh Company is also featured. Other articles feature Minox, Edixa, Bausch & Lomb, Kodak, Graflex and Argus.

snap shots (Photographic Historical Society of New England) - Jan. to April, 2012. Various items: 1) “Highest sale price ever recorded for an image” - a photo of the Rhine River by Andreas Gursky auctioned by Christie’s for \$4.3 million. 2) A brief history and the reorganization of bankrupt Eastman Kodak Co. 3) Interesting suggestion: “Collecting digitals - time to start?” 4) Detective cameras in walking-sticks, watches and opera glasses.

Stereo World (National Stereoscopic Association) - (Nov/Dec 2011 and Jan/Feb 2012). Those interested in the history of American Presidents will thoroughly enjoy the two-part series on Warren G. Harding. Along with more than two dozen stereo-pairs, Richard C. Ryder has written a fine report of the life and times of “The Man Who Looked Like a President.” Replete with tales of illicit sex in the White House, this history will certainly be enjoyed by many readers. A couple of the historic images reveal Harding “driving the last spike” on an Alaskan railway and a brief visit to Vancouver. Upcoming event: The 38th NSA convention will be held in Costa Mesa, CA, July 25-30. ❦

Colour by the Hicrome and Hiblock systems



We've collected a number of images that are marked as having been done with the Hicrome system to show that it was a viable system. The still life of fruit and wine was commissioned for the December 1915 issue of *American Photography* magazine as a tip-in. Although credited as "Reproduced from Hicrome Photograph on Paper," its sharpness and vibrant colours seem to indicate the overwork of the graphic artist.

The portrait (above) by Elias Goldensky was engraved directly from the original colour print. It represents the best rendition we have seen in several books and magazines of this picture.

The cigar smoking mug shot is by Edward Steichen. It is unknown how deeply he was involved with the Hicrome system.

Portrait of girl - *Colour Photography - the First Hundred Years*, Brian Coe.

SUPPLEMENTARY COLOUR SHEET FOR
PHOTOGRAPHIC CANADIANA Vol. 38 #1

The nude photograph is by Karl Struss. He was commissioned to produce the picture to encourage other pictorialists to make use of the process. A specialist in nude photography, the results were reproduced in *American Photography* magazine with a full report accompanying two images about his shooting, processing and printing of the photographs. The pictures, as reproduced in the magazine, were very low in contrast and overly orange in colour.

The consensus was that the pictures were too "fuzzy" for general acceptance – OK for portraiture. The poor reproduction of colour in magazines, at the time, didn't bode well for the general acceptance of the process.

At the far right, the equipment illustrations show the "orange-pink" filter behind the lens, the Hicro camera, the yellow reflector/filter inside the camera and the instruction panel on the side of the camera.

