The PHSC E-MAIL

Volume 9-13, Supplement to Photographic Canadiana, April 2010 The Photographic Historical Society of Canada

Wednesday, April 21st, 2010...

Canadian-based journalist Don Long is senior editor for PMA magazine and PMA Newsline Canada. For more than 35 years, this awardwinning writer's work has ranged from the highly technical to consumer oriented, with articles appearing in daily newspapers and consumer and trade magazines. His images have appeared on magazine covers and have illustrated his written work, with several of his giclée prints exhibited in a Toronto gallery.

Don will be attending a major photo show in the USA during March so will be able to report to us on the very latest of equipment and photo technology.

His oddly titled presentation "Whether Pigs Have Wings" will provide: anecdotes, thoughts and observations about photography; the photo business and photo equipment - past, present and future; stories about people, places and things pulled from decades of involvement in the industry; thoughts about the latest products coming to market, as well as some from the past; musings about what could be a glorious future for image-making.



DON LONG

Meetings in the Gold Room, (basement) of the North York Central Library, 5120 Yonge Street. Handy TTC Subway stop and underground parking.

The public is welcome - so please join us.

PHSC SPRING FAIR - MAY 16, 2010 - SOCCER CENTRE 7601 Martin Grove Rd., Woodbridge, Ontario, 10 AM to 3 PM

TO PHSC MEMBERS...

If by chance you have not renewed your membership then please send \$35.00 right away. It makes it much easier for the Membership Secretary to complete his duties rather than chase stragglers for the money.

PHSC Monthly Meetings

are held on the third Wednesday from September to June in the Gold Room, of Memorial Hall in the basement of the North York Central Library, 5120 Yonge St., North York, Ontario. The meeting officially begins at 8:00 p.m. but is preceded by a Buy & Sell and social gathering from 7:00 p.m. onwards. For information contact the PHSC or Felix Russo, 33 Indian Rd. Cres., Toronto, ON, M6P 2E9, Phone (416) 532-7780.

Programming Schedule:

April 21st, 2010

-Don Long returns from a major U.S. Trade Show to report on the latest trends in photography.

Sunday, May, 16th 2010 -the PHSC Spring Fair opens its doors again at the Soccer Centre in Woodbridge, Ontario. Time to buy!

May 19th, 2010

-Toronto photographer Richard Bell will bring us up-to-date on the workings of the Niagara School of Imaging which is staged at Brock University each August with top professional instructors.

June 16th, 2010 -Carl Mills will be our speaker.

Offer program suggestions to Felix Russo at (416) 532-7780 or e-mail to felix@photoed.ca. We are always interested in hearing new and different suggestions.

FOR PROGRAM UPDATES www.phsc.ca

our E-mail address is info@phsc.ca

Robert A. Carter - Webmaster

Toronto Notes

Reported by Robert Carter

COME ENJOY OUR NEXT MEETING ON WEDNESDAY. APRIL 21ST. 2010

Andrzej Maciejewski has worked as an artist and commercial photographer for more than 20 years with exhibitions in Canada and his native

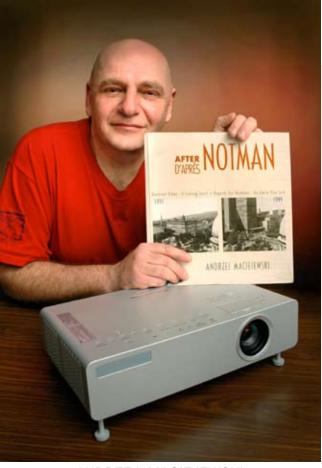
Poland. He has published books of his photography: After Notman and Toronto Parks while his work has appeared in numerous magazines and can be found in collections of the Metro Toronto Parks Department. the McCord Museum, the Virtual Museum of Canada, the Canadian Museum Contemporary Photography as well as in private collections. He lives with his family in Yarker. a little village in Ontario near Kingston. There he runs his photographic studio, Klotzek Studio and the Out in the Sticks Cultural Centre which includes an art gallery. He intends to do another rephotography project, called The Link - about the City of Kingston, the Rideau Canal and Ottawa.

Tonight's program, comparing photographs taken from identical spots over a century apart (and ideally at the same time of day and season), is called rephotography. This process was introduced by Mark Klettinthe 1977 Rephotographic Survey project. It was based on some 120 sites of government survey photographs from the American West taken in the

1870s. Klett and his team rephotographed the same locations a century later from the same precise location. The old and new photographs were published in a book titled Second View, The Rephotographic Survey Project. Along with the photographs, Klett wrote an article on the methodology used and the problems he encountered.

For his first project, Andrzej chose the city of Montreal using the well documented 19th century pool of Notman photographs. It took him a long time and much research to select suitable photographs, locate the exact spot to set up his tripod, and determine the proper season, time of day, and quality of light. Using calculations

to compare each Notman photograph with a Polaroid test shot, he was able to determine almost to the inch the correct camera position. He notes



ANDRZEJ MACIEJEWSKI

that for an artist, the down side of a rephotography project is that he has little say in the image. He must follow the decisions of the original photographer (position, view, exposure) whether he agrees with them or not. He cannot add his own views.

The choice of Montreal and Notman was well founded. Notman arrived in Montreal in the mid 1800s and quickly became very successful. While best known for his portraits, he also did landscapes and city views. Fortunately McGill's McCord Museum houses about 500,000 of the Notman Studio's photographs - mostly with the glass plate negatives. The photographs are of a consistent good quality and well documented. However,

one cannot tell if a photograph was taken by Notman or another photographer in his studio. Andrzej noted It would be almost impossible to do a

> similar project in Toronto as 19th century photographs of the city were taken by a great many photographers and studios using a variety of different cameras, lenses, settings, etc.

Tonight's presentation was based on Andrzej's 2003 book, *After Notman* (now out of print). His *After Notman* version began in 1998/9 and took about three years to complete. A Canada Council grant helped open doors for him at places like McGill's McCord Museum. At the McCord, Andrzej worked closely with Nora Hague, well known for her considerable knowledge of Notman's work.

Andrzej's project predated the powerful computers of today and involved many long hours of research and darkroom work. Only a few of the many Notman prints he selected were suitable for rephotography - some views were blocked by new construction whie old buildings were torn down - both those photographed and those serving as a platform for Notman's camera. Andrzej was allowed access to almost every building and roof for his project in

Montreal's characteristic delightfully casual approach. Once a photograph was deemed suitable for rephotographing, Andrzej took a 4x5 Polaroid shot with his Sinar camera. A series of reference points were marked on the original print and the Polaroid. If the ratios matched, he took a second version on film at the correct time of day. If not, he recalculated the position and took another test Polaroid and repeated the analysis. The negative was projected on the old photograph and carefully scaled and cropped so at least three reference landmarks - like chimneys, roof peaks, and towers lined up, only then was the negative printed.



Presenting recent issues of Photographic Canadiana to speaker Andrzej Maciejewski after his digital slide show on the images of Montreal's famous William Notman, is President Clint Hryhorijiw (left) and Program Chairman Felix Russo (right).

Readers of the book must compare the old and new photographs by eye to see the changes. For tonight's presentation, Andrzej used the magic of the computer to show an animated gif which slowly fades back and forth between the two images.

For each pair of images he identified the location and any difficulties he had rephotographing it. For example, the old Montreal Stock Exchange is now the Centaur Theatre and It took many visits to find out that the place where Notman's photograph was taken, is now a movie theatre (a wall

of windows in the old Exchange was bricked over on the inside leaving the stock-exchange exterior unchanged).

Andrzej credited Nora Hague for her help pinpointing many of the locations since Notman did not include such details in his notes. Nor did his records show more than the year for most of the photographs (some showed snow or leaf-covered trees, hinting at the season). For almost all the rephotographs, Andrzej used shadows from objects in each original photograph to judge the time of day and time of year when it was taken.

The photographs Andrzej took along with the matching Notman photographs are available for viewing on the McCord website in a virtual museum section called *Urban Life through Two Lenses*. The photographs are augmented by sound tracks, historical notes, and secondary photographs by Notman. Also this summer an exhibit of 25 prints will be displayed along the main road entering McGill University grounds through Roddick Gate off Sherbrooke Street.

You can view many of the images on Andrzej's Klotzek Studio site (www. klotzekstudio.com).

The Out In The Sticks Cultural Centre at 2838 County Road 6 in Yarker will conduct a seminar on April 10th, Saturday, 3 PM on "Pinhole Photography – Build your own camera." Guy Glorieux of Montreal and Andrzej will lecture. World Pinhole Day is coming up on April 25th, 2010.

Check out: www.outinthesticks. ca/phantasmagoria.html for information on an annual 3-day arts festival which includes open-air concerts, film and art slide shows, exhibitions and installation shows. Submissions requested.

A Second Look - GIRLING IMAGES NOW ONLINE IN BRITISH COLUMBIA

M. Lindsay Lambert of Ottawa sends clippings from west coast newspapers: the Times Colonist and the Saanich News to bring us up-to-date on an article in Vol 34-4 Photographic Canadiana of Feb-Mar-Apr 2009. Lambert had received 900 images ca 1912 by amateur photographer Anne Alice Girling while he was a student at the University of Victoria. He preserved them for a quarter century before donating negatives and prints to the Saanich Archives. Now the photos are available online through the Saanich Archives website: www.saanicharchives.ca



M. Lindsay Lambert, at right, during his theater-student days at U.of Victoria. He was cast as a photographer since he could supply the equipment. On the last day Lindsay took backstage images – this photo was of himself reflected in a mirror.





PORTRAIT OF M. LINDSAY LAMBERT BY M. LINDSAY LAMBER

THE PHSC AUCTION... a great success!



Searching the lots before bidding starts Thoughful bidders





Doug Napier's intro



Auction team starts the bids rolling.



Judy Rauliuk and John Morden sorting



Audience awaits start of the auction.



Lining up to pay for winning bids.

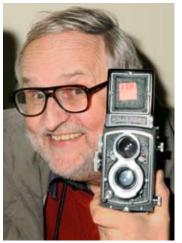






THE SMILES TELL IT ALL... big bargains - great lots.

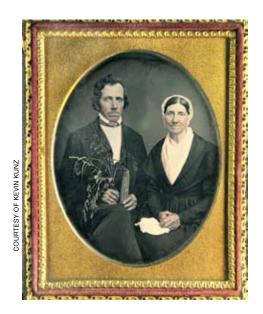








REMEMBER THE CORN-ON-THE-COB DAGUERREOTYPE?



Well, we haven't come up with any true evidence as to what the cob of corn and the weedy bouquet means in that daguerreotype found two years ago. Our original citation in an 1882 newspaper referred to it as a proposal of marriage. (See PC journal 34-4 of Feb 2009). Gina Proctor cited a late Victorian book (ca 1870) The Language of Flowers, where corn is referred to as "Riches" while corn-straw denoted "Agreement." Gina feels that the man in the daguerreotype "looks more like an indoor worker, i.e. botanist than he does an actual farmer. He doesn't seem to have a deep tan one would expect in a farmer. His fingers do look rough so perhaps he was working indoors developing new strains of corn."

We've lately received a note from Louise Freyburger, Publicity Coordinator, with the Friends of the Canadian Collections of the Royal Ontario Museum.

Louise writes: "I did come across a similar image on a local history web site, which also shows a couple where the man proudly holds up a surprising agricultural product in much the same manner and position as the daguerreotype's mystery weed.

"Go to the Kalamazoo Public Library site for the whole story at: http://www.kpl.gov/local-history/ business/celery.aspx

"Even though I was already aware of that city's former fame as the 'Celery City of Michigan,' had I come upon this particular image un-captioned and out of context, I might still have been puzzled by the presence of such a unlikely vegetable in the photograph of the couple. Except for the obviously apparent fact that what the man in the photograph holds is undeniably an outstandingly fine example of a head of celery, one indeed worthy of great pride for its grower. This is not so immediately obvious in the case of the corn-cob man's



Mr. & Mrs. Jake Moyer, celery farmers, Vicksburg, Michigan, undated, ca 1900.

proffered weedy bouquet, although his cob of corn merits a reasonable degree of admiration from anyone like myself who has never managed to grow even a less perfect ear of corn without losing the whole crop to squirrelly varmints.

"I think it would probably help to get that weedy-looking plant's identity pinned down in case it really is in fact a prize-worthy specimen of some unexpected local agricultural specialty. For instance, it might be a dyestuff or a momentarily fashionable medicinal herb or the like.

One of the plants in the man's hand in the daguerreotype really does resemble a form of celery now called variously smallage, leaf celery, wild celery and more. I think it's part of the parsley family. It has an astonishing history appearing in myriad forms serving a wide variety of uses, culinary, medicinal, even religious. Cultivated celery first noted by French horticulturalist Olivier de Serres in 1623.

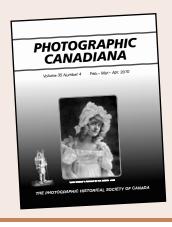
"Anyway, the couple in the daguerreotype do not look like folks possessed of any overwhelming wryness of wit, but one never knows for sure, I guess."

IF you like reading this E-Mail newsletter then you'll thoroughly enjoy our hard copy Photographic Canadiana which is delivered by mail to PHSC members, 4 times/year.

PHOTOGRAPHIC CANADIANA VOL 35-4

Fewer and fewer societies are still able to produce printed journals; ours has twenty B&W pages of in-depth research for only \$35.00 per year. For more information check out www. phsc.ca/member_form.PDF.

In volume 35-4 we cover a variety of historic topics: cameras, projectors and flash photography. We even have a second visit to the mysterious Gordon camera.



FROM THE 'NET

Sarah Gilbert in *Daily Finance* wrote this insightful article on the rebirth of Polaroid film which has finally reached the market:

When Florian Kaps, one of the founders of The Impossible Project, tries to explain just how they've managed to reinvent instant analog film – the type that works in Polaroid instant cameras – he says he limits himself to using the word "magic" only five times per presentation. By his count, he's managed to keep it down to four.

Had he put a limit for himself on another word, it would have been "crazy." Kaps, the project's head of marketing and distribution, uses that one far more than four times, to describe himself, to describe his whole team, to describe the former Polaroid employees in Enschede, Netherlands, who almost without reservation said "yes" when asked to ioin this passionate group on a (yes) crazy project that had a high likelihood of failure: re-engineering almost from scratch the film packs that work in the 300 million stillfunctional Polaroid cameras which can be found in cabinets, shelves, attics and eBay listings worldwide.

Magic craziness doesn't work very often in business, but perhaps that's because so few companies allow the crazy magicians to do their work unhindered. At The Impossible Project, mild forms of insanity mix with enchantment in a way that has thrived despite everything.

Kaps opens a pack with a flourish after Head of Research and Production André Bosman explains a little bit about the film's complexity. He takes a photo of Bosman with his stylish old SX-70 to the sounds of cheers, applause and the clicks of many other camera shutters (digital, video, 35mm, perhaps a Polaroid or two). The blackand-white film is now on sale, along with the PX 600 version to fit 600-style Polaroids, for \$22 a pack.

This reinvented photographic magic is different than that made, up until 2008, by the company which now calls itself PLR IP Holdings. That old magic included chemicals made just for Polaroid which have since been discontinued entirely. For example, a special sort of titanium dioxide which was made only by a DuPont plant in DeLisle, Miss., was wiped out by Hurricane Katrina. "Color film," says Bosman, "has to ripen, mature, develop the flavor for two years, like a wine. There was no wine."

There was no wine, because in 2006, Polaroid's management



could only see the downward slope of the instant film's sales figures. Kaps had argued in great detail that production and sales expectations should be adjusted to reflect how the photography world was changing. His arguments were supported by sketches of how the company's last operating factory could work and his estimate of the market's bottom -- 10 million film packs a year. Yes, said Kaps, the digital revolution had swept the 35mm film world by storm and had nearly wiped out the use of Polaroid cameras for casual snapshots. Yes, the economics of the market had changed so that only artists and creative hobbyists found it worth the investment of more than a dollar per image. But that niche market existed, and its citizens were loyal to the iconic film in

ways Polaroid's management (in constant turmoil since the late 1990s, with two bankruptcies and "a reorganization every year") could not comprehend.

Polaroid decided it would shutter its Enschede plant when its 10-year lease expired in early 2008. Bosman, who had been the head of the factory, says he felt "a mixture of sadness and relief" when he was told the news. Sadness because the film was a technological wonder, and a market for it still existed, if not at the 100 million film-packs-a-year level of production it had in 2007. Relief because it had been such a hard road. Every year from 1999 until the decision to close the factory, he'd had to let go long-time employees who he considered part of his family."

In February 2008, Polaroid held a closing ceremony for the factory. Bosman had been told he was to destroy the machines, though plans to tear the factory down to build a housing complex had been derailed by the worldwide collapse of the real estate market. Talks with other companies, like llford Harman Technology, to take over the equipment had failed. "The machines were intimidating," said Rod Parsons of Harman. "We would have had to transfer them all from the plant in the Netherlands to the U.K. and start basically from scratch." The British film company had declined to pursue it further.

At the last minute, Kaps had contacted Polaroid from Austria with the idea of taking over the lease for the building, buying the equipment and starting the machines up again - despite it all. Management had humored him a little - said he could come to the ceremony - then told Bosman to meet with him and give him a categorical message: It could not be done. "It was impossible," Bosman remembers. On the day of the ceremony, he looked around for this Florian Kaps person, and saw one man he didn't know: A man with a ponytail, wearing the look of someone who believes in impossible things.

The two shook hands and that was as good as any contract. No, better. "We continued talking to late in that night and into the next morning," said Bosman. "And then, I went to the demolishing team and told them not to do it." The soon-to-be-ex-employees, all of whom had been at the factory for many, many years, were stunned: The factory had been headed towards closure for two years; now, at the eleventh hour, were they really being given a reprieve?

Two weeks later, as Bosman and Kaps and a few others furiously began work contacting suppliers and potential partners and working out the probability of making a go of their plans. ("The chance that we would fail was huge," Bosman says). The management at Polaroid got fed up. "Stop this crazy work, or hand in your resignation!" was the message from corporate headquarters. Bosman handed in his resignation, and the look on his face when he describes that moment is like flving: "The feeling of handing in your resignation after having been waiting for it for so long as a victim," he says, "is a feeling of power. I was back in control of my life."

Kaps and Bosman eventually convinced Polaroid to let The Impossible Project have the building and the equipment. They and a third partner, Head of Finance and Administration Marwan Saba, hired eight other employees back; between them, they had 300 years worth of experience in running the machines.

Over the past two years, they worked to recalibrate the fantastically complex piece of technology that is an instant film. Not only does each piece of film have six distinct layers (mask, receiving sheet, developer, negative, rail, mask), but each layer is made up of six or eight or 10 components, each of which must be used with extreme precision. If your proportions are as much as 0.05% off, says Bosman, the whole thing is useless.

"Photographic materials are extremely sensitive," he says, displaying on a projector the many parts of that "mask" layer, which include COF lacquer, white ink, primer, metalised PET, heat seal, and anti-static layer. "That's pretty difficult. But," he pauses, "we got it right."

The meaning of "Right" is, to begin with, two types of blackand-white film which the press event attendees immediately began testing with something between reverence and hedonism. PX 100 and PX 600 will, in the summer, be joined by colour versions to fit both SX-70 and 600type cameras. About 1 million film packs will be produced in 2010; over the coming several years, that production will increase to 10 million a year, a level both Kaps and Bosman agree is still the size of worldwide demand.

There are other things, marks of the whimsy and joy and freedom that is engendered by marrying magic, craziness and some serious brilliance. Instead of expiration dates, the new packs will be marked with production dates. "It's a little like a wine," says Kaps. "There is a lot of handwork; it's slow production." Each vintage is unique and who can say when a wine is done for? You have to taste it.

The blank plastic sheets that spit out of the camera when you insert a new cartridge are imprinted with quirky sayings: The one Kaps produces reads "Smells like teen spirit." Others quips include "Explain the color orange" and "Dance without money."

The film looks blue when it comes out of the camera, instead of white like the old Polaroid film. "We don't want to copy," Kaps says. When there are mistakes, when a film run doesn't go as planned or the team devises a new "flavor" of film that doesn't seem quite right, these will be sold anyway. "We don't want to tell you how to feel!" says Kaps. "We want you to feel the magic on your own."

The best results from Polaroid cameras are often described as having a luminous quality, as if the light source is otherworldly. These images do not disappoint. They glow with a silvery sheen, part of the chemistry of the films. But the film is more sensitive to heat and, as the photo develops, direct light, than the original Polaroid products. For best results, Kaps suggests, a photo should be put in your pocket for a few minutes after emerging from the camera. And the probable results of shooting in the cold, Bosman remarks, will be photos that are almost whitewashed.

A test pack shot by a British photographer demonstrates just how sensitive this new film is. The images taken outside in the cold are mostly white; inside shots manipulated through pressure ("caressing," Kaps calls it) during developing are the most "viewable." As Olivier Laurent writes, "my initial impressions are that PX100 behaves like a expired pack of 669 or Time-Zero. You're never sure of what you will get." It's a film most surely intended for use by those photographic artists who have learned to trust the hands which chance and chemical processes have dealt them.

The film is available starting last Thursday for purchase in the U.S., Canada and Europe via the Impossible website. A few retail shops will begin carrying it next week, and more will come on board as the team develops distribution agreements. As soon as the company can offer the film in Asia with the same prices and shipping times as the U.S. and Europe, it will; Kaps is very stern when it comes to international equality.

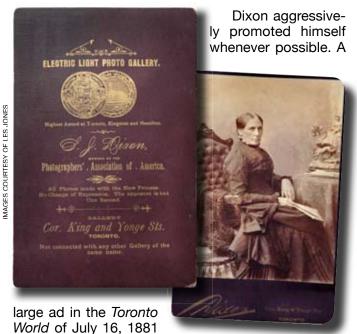
But the rest of the time, he and his team are animated: They smile until the joy reaches their ears. They are "a little proud," Kaps says. No, not a little. This is the sort of pride in one's craft that you almost never see anymore. This is crazy!

Pictures can be viewed at http://www.the-impossible-project.com/projects/8x10 **

Information Gleaned from Cabinet Cards and Newspaper Advertisements...

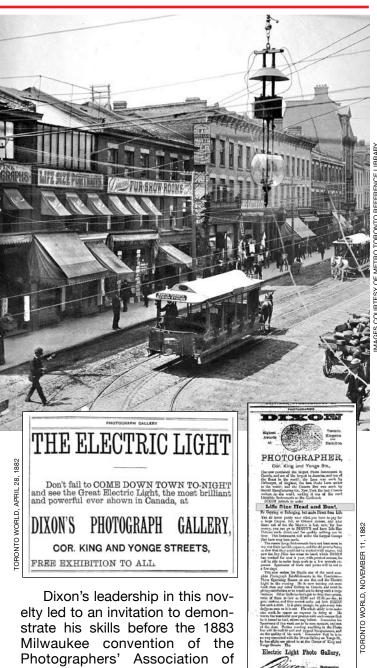
Studying the information on the back of Cabinet cards can lead to better understanding of what the photographer was promoting.

Photographer Samuel J. Dixon is first noticed in Toronto listings for 1876 on Yonge up near Gould Street. It took some years to locate closer to the prime shopping district in 1880 by renting third floor rooms at 4 King Street West (north-west corner of King and Yonge). Photographers preferred the south side of King (Yonge to Jarvis) to gain the soft north light flooding in from the open street.



invited citizens to visit and see his newly installed north light which gave him two operating rooms - one for tintypes and the other arranged for the "Latest Style." Yet he says he was able to produce the "very best effects through the last ten months under the worst kind of an EAST LIGHT." Our view of Yonge Street (with King crossing in the foreground) shows the Dixon glass studio in the upper left. Harsh morning sunlight would have shone directly into the studio unless offset by thick shutters to allow only reflected north light to enter. An odd pipe framework, surmounting the roof might have carried curtains or baffles to shade the glass roof portion.

The photograph is informative as it shows the glass ball and fixture of an arc lamp hanging over the cross roads, indicating that electric power had been introduced to the downtown area. The horse drawn streetcars have yet to be converted to electricity. Dixon took advantage of the availability of the DC current to install an electric light in order to take photographs in the evening and dull days (or on a more convenient lower floor or basement). The April 28, 1882 issue of the Toronto World ran the above ad suggesting everyone come at night to see "the most brilliant and powerful [light] ever shown in Canada..." He is credited as being the first to successfully produce photographs in Canada by electric light.



America. The demo fizzled when specially strung cables failed to supply power strong enough over

the extra distance for the arc lamps to work properly.

Dixon also readily adapted to emulsion-coated dry plates introduced commercially ca. 1880 causing much consternation amongst established photographers using the long-established wet plate process. The turmoil was equivalent to the arrival of digital photography in our modern era. When Dixon won awards for his photography he was quick to promote his winnings on the back of his cards and in newspaper advertising. Newly won medals required revisions to his backstamp.

S. J. Dixon is more noted for having walked the wire across the Niagara River in 1890 and 1891 - but it all ended when he drowned October 2nd, 1891. *

Totes from Ev:

by Everett Roseborough

SHEDDING A LITTLE LIGHT

A few notes on exposure from the 1950s may be historically interesting because today's camera users require little or no knowledge of it but still obtain, usually, a good result.

Black-and-white negatives (if you can remember such things) have a long straight line of 128 visually discernible densities.

An exposure somewhere near the center of the line (to within three or four stops) results in a printable film image - that is called latitude.

Not so with colour transparency film which demands exact exposure, ±1/3 stop for optimum results. Print making from colour negatives allows more latitude.

Perhaps we should look back on all this "stop" business because our modern zoom lenses change f value with a change in focal length.

The American, Continental and British lens makers had differing viewpoints over time.

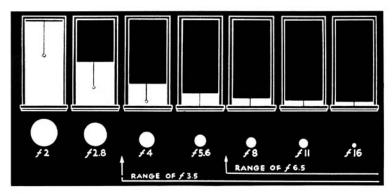
On the continent, wide adoption of the Zeiss f4.5 Tessar, or similar formulas (about 1905) made it the optimum speed for hundreds of manufacturers. This means that the fully open diaphragm measures to the focal length, divided by $\sqrt{2}$.

Some American, Continental and British photographers, since 1866, had been using rectilinear lenses with aperture of f8 - halving the exposure for each stop gave the series of f8, 11, 16 --. As glass and optical formulas were developed, in-between apertures were inserted, mainly as selling points. Many had little practical effect and suffered from loss of light at more airglass surfaces.

Remember that changes in light intensity at the film are geometric. Smaller apertures increase depth of field if you need it. This still holds for modern zooms.

The famous motion-picture scientist Harris B. Tuttle provided the above diagrams in a 1950 paper – the window blind illustration is especially arresting.

On a modern topic, it seems QUANTUMFILM may replace the prominence of CMOS image sensors in the camera phone world. The new technology was developed by University of Toronto professor Ted Sargent. It involves suspending lead-sulfide nanoparticles in a polymer matrix to form a new class of semiconducting poly-



Window shade illustrates reduction in light admitted by various diaphragm openings.



Diaphragm openings show relative f-values.

	TABLE OF DIAPHRAGM MARKINGS*								
f-values	f/2	f/2.8	f/4	f/5.6	f/8	f/11	f/16	f/22**	f/32**
Squares of f-values	4	7.84	16	31.36	64	121	256	484	1024
Full 2X steps	4	8	16	32	64	128	256	512	1024
Geometric values	1	1/2	1/4	1/8	1/16	1/32	1/64	1/128	1/256

*The area of a circular aperture is proportional to the square of the radius, if we reduce the diameter to one-half, we alter the area by a factor of four. If we reduce the diameter by the factor of the square root of two, or make it about seven-tenths the size, we reduce the area, and consequently the light transmission, to one-half the former

amount. This, in fact, is the exact ratio of the diameters used, and as a result each succeeding stop transmits, in most cases, exactly half that of the next larger stop.

**Standard 1-inch lens diaphragm scales stop at f/16.
Telephoto lenses are usually calibrated to f/22 and often

mer. QuantumFilms can image scenes at higher pixel resolutions and are four times more sensitive than the finest grained photographic film. Conventional digital cameras would gain much higher resolution sensors by using quantumfilm material.

Being developed by a start-up company *Invisage* in California, the polymer is put on a low-cost wafer that has the electrode array for super-dense, high pixelcount images. It is cheaper to produce than CMOS photo-detectors that make up the bulk of conventional digital camera sensors.

A quantum-dot layer is sandwiched between conventional image sensor technology. One side is conventional circuitry for reading data off an image sensor, while the other is the colour filter array that means each pixel receives only red, blue, or green light.

Silicon is sensitive to light, but more to infrared and red light and not well to green and even worse to blue. The QuantumFilm is much more sensitive to all visible colours, and not hidden behind two layers of metal within the chip.

InVisage has plenty of ambitions for future products but first plans to prove itself with its narrower smartphone agenda. 🤏

Coming Events & Want Ads

Annual Photography Seminar in Burlington, Ontario

April 17 & 18, 2010 is the date for the popular annual seminar and field session put on by the Latow Photographers Guild. This year their speaker will be Darwin Wiggett. Canada's Travel Photographer of the Year in 2008. The event features a professional photographer who teaches his techniques and insights into photography. The seminar is held at the Burlington Art Centre, 1333 Lakeshore Rd. in Burlington, Ontario. Typically, there are over 250 attendees from Ontario and New York State. For updates on tickets and club details check their web site: http://latow.com/ and click the Seminar button.

For Sale

Sheldon Chen has published a

book of Karsh images. All Things Karsh is a high quality, limited edition book in a presentation box plus a modern Karsh portrait from the original negative. Priced at \$400.00 list.



shelchen9210@aol.com

Sunday, April 11, 2010 The 46th Montreal Camera Show, Holiday Inn Pointe-Claire, 6700 Trans Canada Hwy., Pointe-Claire, Quebec, 10 AM to 3 PM.

TORONTO INTERNATIONAL CAMERA SHOW

Sunday, April 18, 2010 at the Thornhill Community Centre, 7755 Bayview Ave., Thornhill. Doors open 10:00 AM until 3:00 PM. Admission \$7.00. Contact Sue Wootten at suewootten@hotmail.com for tables. Bring this coupon for a \$2.00 discount off the \$7.00 admission price.

Sunday, April 25, 2010 The Vancouver Camera Show will be held at the Cameron Community Centre in Burnaby, B.C.

PHSC SPRING FAIR Sunday, May 16th, 2010

The Annual PHSC Spring Fair opens its doors at the Soccer Centre in Woodbridge, Ont., 7601 Martin Grove Rd. starting at 10 AM for eager buyers. For table information contact: Clint Hryhorijiw, Fair Chairman, TEL: 416-622-9494 or E-mail to: 1956canada@gmail. com. Admission \$7.00 – free to students with school ID.

The Daguerreian Society 22nd Symposium will be October 21-24, 2010 at the DoubleTree Hotel in Atlanta Buckhead, 3342 Peachtree Rd., NE, Atlanta, Georgia.

Wanted

Larry Gubas, of Zeiss Historica needs materials relating to the earliest Zeiss/Ica companies. Prime attention are firms of Huettig, Dr. Kruegener, Wuensche, Zeiss Palmos and, of course, Zulauf of Switzerland. He wants images of cameras, ads or catalogs and is willing to purchase but also happy to receive copies or scans. Send to: larrygubas@gmail.com

For Sale

Stephen Shuart has moved to Massacheusetts and reminds us he still supplies ground glass to size. Also has truck loads of photo materials in storage for sale. Try: r.stephenshuart@verison.net

Fort George Photos Wanted

Clark Bernat of the Niagara Historical Society Museum sends a request from old Fort George which is under renovation for "1812" celebrations. Needed are reconstruction photos of the Fort from the 1930s and 40s. Tel: 905-468-3912 or Fax: 905-468-1728 or ClarkBernat@niagarahistorocal.museum

For Sale

Early Photography in Kingston (biographies of 60 photographers) by Jennifer McKendry. Available at \$15 plus \$3 for shipping. For copies contact: J. McKendry, 1 Baiden St., Kingston, ON, K7M 2J7

Wanted

Cash paid for collections, liquidations and estates containing cameras, lenses, photographs, documents, books, negatives etc. Please call Tom for no obligation evaluation 416-888-5828.

Wanted

Ed James is looking for Russian F.E.D. and Zorki 35mm type cameras, NO Zenits! Contact: Ed James, P.O. Box 69, Elkhorn, Manitoba, R0M 0N0, Tel: 204-845-2630.

Buying or Consignment

Vintage cameras wanted by experienced eBay seller. Professionally presented with pictures and description. Contact at 905-994-0515 or douglas@dugwerks.com

For Sale

CD ROM of Biographical Index of

Dagerreotypists in Canada 1839-1871 by Graham Garrett is available for research. Great source for earliest photo process in



Canada. Available thru *Archived Books* at www.archivedbooks. ca/acdbcanada.html OR go to www.se-photo.com.

Wanted

Bicycle & Motorcycle photography – all related items. Contact Lorne

Shields, P.O. Box 87588, 300 John St. P.O., Thornhill, ON., L3T 7R3, lorne-shields@ rogers.com.



Wanted

Stan White has a request via James McTammany & Co who seek an 8mm projector (not Super 8). Hope to beg, borrow or buy to view family films to see if they are in condition worth putting on DVD. If anyone has such a projector please e-mail to Stan at: stanon@sympatico.ca

For Sale

Boris Spremo has limited edition poster of *Toronto Sequicentennial* 1834-1984 which bears one of his photos. Contact Boris at boris-spremo@rogers.com