ON THE LAZY BENCH

Penn Brad Oil Museum strives to preserve the history of the Bradford Oil Field and the unique culture that developed along with it. The Museum also honors the people and their families whose lives contributed to making Bradford the "**Highgrade Oil Metropolis of the World**." A Quarterly Newsletter

The Year 2021 in Review

by Thomas A. Miller, Museum Board President

The museum enjoyed a successful year with a large number of visitors and a few groups.

Numerous capital improvements were accomplished. These included clearing and grading of the north lot with construction of an approach. A new handicappedaccessible entrance ramp to the museum was built. In the process of construction of the entrance ramp, four foundation piers for the toolhouse were replaced.

A new thirty-foot stainless steel flagpole was donated by Desk and Derrick Club. It will be erected in the spring and lighting installed.

The theater was modified to make it more user-friendly and a DVD player was added to give it more versatility.

Of course, the most notable improvement was the removal of the old standard rig and its replacement with a magnificent new rig built with durable materials that should last generations.

The glycerin plant steam engines that had been in the Trail parking lot were moved to a new display next to the toolhouse.

There were seven monthly Fireside Pumpers breakfasts with speakers of interest, held from May through November.

The annual Golubock Memorial Clay Shoot was held in August and the Henry Oilman's Rifle Raffle was drawn in conjunction with Derrick Day in September. Both were successful fundraisers.

While not a fundraiser, the first attempt at "Movie Night at the Museum" was held in October and was enjoyed by all who attended.

In preparation for the celebration in September, much effort was expended and many meetings were held to tend to the details. A new mural depicting Bradford Oil Field history was created and installed in the lobby and new Oil 150 and Penn Brad Oil Museum 50 logos were created. Several items of new merchandise bearing the museum logo were obtained for the gift shop.

The year was highlighted with the celebration of Oil 150/50 on September 18, including a lecture series at the Bradford library, well shot, stilt-walker, choral group, lectures and displays, mural dedication, machinery exhibit, drill bit dressing and food vendors. The Celebration culminated on September 19 with a memorial and dedication of the new standard rig to Willard Cline.

Gratitude is owed to the many people who contributed in any way to the remarkable accomplishments of Penn Brad Oil Museum in 2021, whether their contributions were large or small.

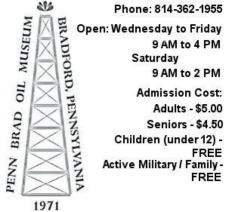
Double-sided Lighter Celebrates Two Anniversaries



From the design work of Museum Manager Fran Bottone and employees at ARG, a unique double-sided lighter was created by Zippo in celebration of the 150th anniversary of the Bradford oil field and the 50th anniversary of Penn Brad Oil Museum. The lighters were generously donated to the museum by the Blaisdell Foundation.

PENN BRAD OIL M U S E U M

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Old American Glycerine Plant - Steam Engine Relocation Project

by Fran Bottone, Museum Manager

This story is ultimately about the relocation, preservation, and history of three vertical steam engines and a duplex pump that were originally used in the manufacturing of nitroglycerine at the old American Glycerine Plant's 5 acre site on Droney Road, near Lewis Run, Pa.



This plant started operations in 1925 and ran until 1953. It was also the location of a controversial EPA superfund clean-up in the early 1990s.



Steam engines (fed by a remote boiler location) were retained to mix nitro long after natural gas engines were adopted at most other places in the Bradford Oil Fields. This was due to the fact that they required no magneto and thus had no risk of a spark, which for obvious reasons would have been a bad thing. Just for double redundancy, generally a belt was run from another building to the mixing vats. The vats themselves were lead-lined with wooden paddles, also to eliminate the chance of a spark.

Nitroglycerine by nature is what I call a substance with 'voodoo' properties. Three ingredients, nitric acid, sulfuric acid, and glycerin, which when mixed together, form nitroglycerine and their properties change radically.

Nitroglycerine is very temperature sensitive and will overheat if not kept moving while mixing. If the belt broke or the steam engine quit in the plant, the mixing vats had two hand cranks fitted and the workers had better get cranking and not tire out. If they did, the nitro would overheat, signaled by a sinister red vapor that would rise from the surface. When this happened, they had about 30 seconds to get out of the plant and as far away as possible before complete hell broke loose.



Surviving boiler house w/ nitro mixing vat - by Tom Huntoon

When a plant blew up, it would break windows in buildings up to 10 or more miles away. They were also known to knock houses off their foundations. Several nitro plants blew up over the years, one in Tarport, one in Irvine's Mill near Limestone, NY, and this American Glycerine Plant at Droney, according to a friend of mine who lives in Cyclone. He told me that when this nitro plant blew up, windows were broken in the old boarding house (which is still there) at the intersection of Bingham Road and Route 646 all the way up in Cyclone.

Here is an account of exactly this happening, from a Mrs. Alford who was the only woman to ever own a nitroglycerine plant, one that she inherited when her husband died. This plant was in nearby Eldred, Pa.

Mrs. Alford's manufacturing plant consisted of 12 cheaply built and unpainted wood buildings located outside of Eldred, PA. Brick buildings would have

been prettier, she told a New York newspaper, but it would cost more to replace them. "The owner of a nitroglycerin factory never knows beforehand when it's going to blow up or afterward why it did blow up. There is never anyone to explain how it happened."

In 1899, the manufacture of nitroglycerin was a primitive, temperature-sensitive cautious, churning of nitric and sulfuric acids with glycerin. Knowing the temperature was vital. "On the accuracy of the thermometer depend the lives of the employees," Mrs. Alford said. "When the mixing is done, the liquid is the color of milk," she added. "It is drawn off into a wooden tank in which there is 18 inches of cold water. As the milky fluid strikes the water, red fumes light the surface and there is a sound like the hissing of geese."

Mrs. Alford maintained that if people were kind to nitroglycerin, they could live with it for a long time, despite her own close call. She lived with her husband and daughter only about 80 yards from their factory. One evening, an employee may have absentmindedly lit a match or otherwise The factory and erred. the Alford's home were obliterated and the family was buried under the debris. Neighbors dug them out to find they were not seriously injured. They rebuilt and started again.

This cycle of nitro plants blowing up and being rebuilt was fairly common in the Bradford oil fields as there was a strong demand for nitroglycerine from around 1867 up to at least the late 1970s.

Back to a little history and

chronology on these historic steam engines. According to our resident expert on all things related to oil field engines, Mike Fuoco of the Bradford Landmark Society, these engines would have been fed by a boiler in a separate building and run from a common line shaft. The largest was built by the Messinger Mfg. Company (founded in 1857) in Tamany, PA, and was known as the Empire Portable Steam Engine. It ran at 250 RPM and made a whopping 7 horsepower. This engine stood about 6 feet tall and weighed approximately 1000 lbs.



Jumping ahead to fairly recent times, these engines were transported in the late 1980s from said nitro plant to the Crook Farm, where they languished for some time back along the woods until Bradford Landmark director Sally Costik decided they should rightfully be at the Oil Museum.



She arranged to have them transported to our location around 2006 and they landed in our far south parking lot where they sat unceremoniously for about the last 15 years. No matter the scenic route they took to get here, we are grateful that they were saved and that we have them.



We recently decided that they deserved a better and more secure location, so Tom Miller and myself took a day and relocated them to a space near the tool house where eventually they would have their own display area.



Our rig contractors from Kinley Construction were kind enough to move them for us with their big telehandler machine.



***story continues on page 4

A Look at Future Goals for Penn Brad Oil Museum

by Thomas A. Miller, Museum Board President

There are several capital improvement projects that are planned at the Penn Brad Oil Museum.

Two projects of immediate concern, that hopefully will be accomplished early in the season, are installation of railings on the new entrance ramp and erection of the new first-class flagpole that has been donated to the museum by Desk and Derrick Club. This would also include lighting of the flagpole and possibly lighting of the new derrick.

Parking for the museum is now in either the north lot or the Tuna Valley Trail lot. We have discontinued use of the parking lot in front of the museum building. Proximity to the highway presented considerable danger both for those walking and for backing vehicles onto the road. Also, the old steps were an accessibility and safety concern for people going to and from the lot. We hope to create an attractive oilfield display in that area.

The lease house is suffering some foundation and settling problems that will need to be addressed in the near future.

Eventually, we hope to build a roof over the new derrick floor to protect the artifacts there. We also need to build a walkway to the crank, pitman and sand reel.

As an ongoing future project, outdoor exhibits will be added to the north lot that was cleared last season, hopefully to eventually include a working central power.

It is obvious that the new Willard M. Cline standard rig was constructed at a right angle to the

position of the old rig. The reason for this is to make room for an exhibition hall between the museum proper and the rig. The continuous design would enable the manager to more easily oversee and control access to the museum and provide necessary security.

Having been in existence for over 150 years and being the oldest giant oil field in the world, the Bradford Field is in a unique position for saving the memories and artifacts of this great historical era. There are still a considerable number of these items out there, but they are diminishing rapidly as are the people with the knowledge of their operation and purpose. This is the reason that there is an urgent need for a place to exhibit and preserve these treasures before they are lost forever. Whether it be a simple pole barn or something more sophisticated, we hope that such a building can be in our near future.

There have been several historical pieces of machinery already offered to the museum, pending provision of a place to exhibit them. In addition to floor exhibits and an indoor work area, a building would also provide wall space for other items to be displayed. There has been several thousand dollars in seed money pledged to the project. It will, however, require that a considerable amount of additional funds be raised. Any donations would be gratefully accepted.

In addition to a general cleanup of the grounds, the summer

season's mowing, trimming, and maintenance can be a major project in itself. We are so grateful to the volunteers who have donated their time to maintain and improve our museum and its grounds, but we could use some more help in this regard.

The museum is sorely in need of more volunteers to put these goals into action. If you would like to help in some way or have a particular skill set that you feel would be valuable to the museum, we would love to have you join our team. If you or someone you know would be interested, please leave a message at 814-362-1955 or contact Fran at

pennbrad.oilmuseum@yahoo.com.

Thank you for your support of Penn Brad Oil Museum.



Glycerine Plant continued

Our plans are to finish giving them all a fresh coat of paint and eventually a placard with their history. Special Thanks to Tom Huntoon for the photos of the old plant remains, Susan Gould from the Penn Brad Museum and Sally Costik and Mike Fuoco of the Bradford Landmark for assisting with information, and Tom Miller and Kinley Corp for help in moving the engines.





Whether you're a collector of Zippo or oil memorabilia, or you just want a pretty lighter to keep handy, the Penn Brad Oil Museum now carries this great series. The Seasons of Oil lighters include: Spring – Drake Well, Summer – Custer City, Autumn – Lewis Run Pump Jack, Winter – Active Well.

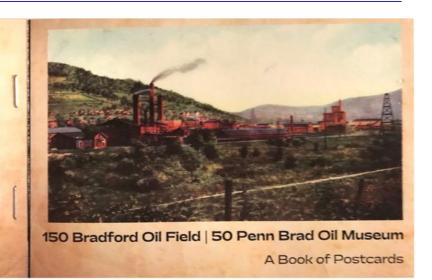
The images used on the lighters are reproductions of paintings of Pennsylvania oil country. The Spring painting is the iconic Drake Well near Titusville. The Summer painting is hanging in the museum's lease house. The Autumn painting is the Kendall #24 well on the Edmonds lease in Custer City. The artist was Betty Bottone, who donated it to the refinery in 1956. It hung in their lobby for years, but was recently found in storage. Bob Esch had the painting repaired and donated it to the museum, where it now hangs. The Winter painting was donated to the museum by Ron Moyer in honor of Susan Gould winning the Yellow Dog Award.

Each Zippo, including the 50/150 Anniversary lighter, is available for \$20 in the museum's gift shop.

Postcard Booklet Reminds Us of Bradford's History

by Isabelle Champlin, Corresponding Secretary

A collection of 15 vintage postcards was compiled into a bound booklet to commemorate the 150th anniversary of the discovery of the Bradford Oil Field, as well as the 50th anniversary of the founding of the Penn Brad Oil Museum. The specially designed logos of both celebrations are printed on the back of each card.



Besides several postcards of spewing gushers and standard wooden rigs, there are scenes of pump jacks and storage tanks, men filling a torpedo and men hoping for a strike, street scenes and country vistas, the Dresser mansion, the Kendall refinery, a burning oil tank, a nitroglycerin factory, the Kinzua Viaduct and a country club.

Nine of these postcards were originally photographed by Frank Robbins (1846 – 1924), who was a prolific producer of stereoscopic views of the oilfields of Oil City, Bradford, and Olean, from the 1860s through the 1880s. He owned Robbins Photographic Art Studio at 83 Main Street in Bradford as well as another studio in Oil City, PA.

The postcard booklets are available in the musuem's gift shop for \$10.



Book Review

<u>The Church on Quintuple Mountain</u> Franklin Classics Trade Press, 2018 (Originally published in 1912 by Foss, Stradley & Butler, Southern Pines, NC) by Bion H. Butler

Book Review by Rick Lutz

Two century turns ago, the Bradford area was bursting with energy, growth, and ambition. The novel "The Church on Quintuple Mountain" is a literary time capsule preserving the exuberance of the era. Penned in 1912 by Bion H. Butler, an early editor of the <u>Bradford Era</u> and <u>Kane Leader</u>, the novel is a worthy read for anyone interested in local history. The book has been reprinted by the Harvard library because, according to the back cover, it "has been selected by scholars as being culturally important." Besides being "important," it is fun to read and may even tempt you to "drink to Brother Watson's new church."

The town of Quintuple (i.e. Bradford) is growing and prospering, and a few successful, influential citizens decide the town needs a church, "a salvation shop" of any denomination. The ecumenical process of how the church is planned, funded, built, and attended is the story. "Everybody had money in Quintuple." Keep in mind, this is a novel. The selection of a preacher ("sermon juggler") is one of the focal issues of the plot. Cap Watson, owner of the Valhalla Faro Saloon, tries to persuade a reluctant Rev. Edward Clark, "If you don't want the people, you might as well preach to the derricks up on Mt. Raub. You can't convert hemlocks. And as far as where the money came that built it... the brick and stone in it never hurt anybody." Mr. Perkins, who runs the exclusive Devonian Bar, adds his support, "I sell gin, Parson, but see that arm? I'll tie knots in the ears of any man that throws off on you." They believed Rev. Clark had a "backbone like a joint of six-inch casing." The colorful dialogue is packed with entertaining metaphors to gambling, oil wildcatting, railroads, and drinking. And philosophical defenses are argued for a few vices - gambling, in particular (a timely topic).

The book's subtitle, "A Story of Pennsylvania Oil Country Life, Possibly a Trifle Exaggerated in Spots," justifies a few oil field "Tall Tales" sprinkled into the narrative. Davy Logan, an oil field laborer, was lowering a nitro torpedo down a well casing to blast the bottom sand when the rope went slack. Most readers of this newsletter know what that means . . . Even the notorious Ben Hogan makes a cameo. Some of the phrasing seems odd now: "So they sent <u>down</u> to Buffalo and brought up an architect." Typical of literature of the time, racist language makes the narrative more realistic, and the plot turns soap-operatic. "The Church on Quintuple Mountain" makes one wonder what other forgotten "culturally important" local literary gems might be out there. A copy of this novel is in the museum's Kinley Library.

The museum will be opening April 6th for its new season. An Old-Fashioned Ice Cream Social will take place on April 9th, 11am to 2pm. Admission is FREE with complimentary ice cream sundaes, popcorn, sloppy joes, and coffee. There will be tours of the new standard derrick, oil field films in the Dog House Theater, and engines running in the Tool House. We hope to see you there!

Fireside Pumper's Breakfast

The museum welcomes the public to the Fireside Pumper's breakfast meetings, held the 2nd Wednesday of the month at 7:30 a.m. at Togi's Banquet Room, 412-422 E. Main St., Bradford. The breakfast buffet is \$15, with a portion of that going toward museum improvements. Check the Bradford Era the Monday before each meeting for details or changes in the schedule.

May 11, 2022

Jeff Pierson A Nitroglycerin Factory Virtual Tour

June 8, 2022

Larry Kilmer Early Local Railroads and Streetcars

July 13, 2022

Stan Pecora

Go-Devil! A Novel by Marguerite Eyssen

August 10, 2022

Kelly Lounsberry Archeological Investigations at the Smith Site: A Chautauqua-McFate Hillfort in Southwestern New York

September 14, 2022

Matt Kropf The New STEM Building - UPB

October 12, 2022

Bill Robertson Haunted House Guide Book Series

November 9, 2022

Fran Bottone Penn Brad Oil Museum: The Year in Pictures

Board Of Directors

The Penn Brad Oil Museum Board of Directors is as follows:

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Interior of old boiler house - American Glycerine Plant - Tom Huntoon

Memorial Gifts

In	Memory	Of:

Given	By:

William Larson American Refining Group				
Braxx Price-Edmundson	n Joyce Cline			
Samuel Slocum	Clair Pusateri			
Daniel Palmer PA In	dependent Petro Producers			
Sid Stahlman	Candy Tingley			
Kerry Snow	. American Refining Group			

A Donation by Giardini Brothers

Engraved personalized paving bricks can be purchased to surround the base of the new flag pole that will be erected in the near future. The bricks can be used as a way of honoring people who have been involved in the oil industry or as a memorial to a deceased person. Bricks can also be purchased

personally to show your su	apport for the museum.
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In Memory of Eli McCloskey	Shawn Keane	Loving Memory Bonnalyn M. Fesenmyer
With Love To Daniel Zinsner	Jessica Milne 3/6/97	Wayne & Elizabeth Fesenmyer Minard Run Oil

Remember or Honor a Loved One with a Gift to the Penn Brad Oil Museum

Memorials received after February 10 will appear in the next newsletter.

Memorials are available by calling 814-368-6824, or by mailing the coupon below to: Penn Brad Oil Museum, P.O. Box 163, Bradford, PA 16701. If ordering a brick, please call the number for more details or print out the order form available on our website. A notice will be sent to the recipient. Penn Brad Oil Museum is a 501(c)(3) entity and all donations are tax deductible.

Clip and Mail Coupon

(PLEASE CHOOSE IN MEMORY OF OR IN HONOR OF)	Memorial/Honoring Gifts	(PLEASE PRINT)
IN MEMORY OF	IN HONOR OF	
SEND CARD TO	FROM	
STREET	STREET	
CITY/STATE/ZIP	CITY/STATE/ZIP	

Proceed with Caution – Nitroglycerin Artifacts

by Fran Bottone, Museum Manager

A nitroglycerin can is made from exactly 3 square feet of sheet copper and weighs 3 pounds empty. The capacity of the most commonly used can is slightly more than 10 quarts. Unfortunately for many victims, when empty, with a uniform residual coating of nitroglycerin inside, these cans become one of the most effective close-proximity fragmentation grenades ever devised. If it were not for their

bulk (6.25" x 6.25" x 15.25"), they surely would have been adopted by the armed forces.

Beware of cans offered at flea markets and elsewhere - they may be deadly.





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