

THE HISTORY OF BLAKELY & GRAY GEARLESS ROWBOAT MOTORS

In 1965, when I started my career working for a Muskegon, Michigan automobile parts manufacturer, I heard rumors from the old timers that in the early 1900s, outboard motors and automobiles were once built in Muskegon. These were rumors, not facts, so I didn't pursue the issue. I guess we need some grey hair before we get interested in history.

The illustration of a unique Gray Gearless Detachable Rowboat Motor on page 59 of the June 2009 issue of the "Antique Outboarder Magazine" caught my eye, especially when I saw it was patented by Edward B. Blakely of MUSKEGON, MI. About that time I was introduced to Carl Hodgson who proudly showed me his rare Gray Gearless Motor. Since I live in Muskegon, I decided to find out where in Muskegon his engine was built and also research the history of Edward Bradford Blakely and his "Blakely Engine Co.". I started by asking my friend Dick Gorz to get a copy for me of E. B. Blakely's patent #1,139,631 covering his gearless lower unit. Because of the January 1914 Patent application date and early 1914 Gray Gearless motor advertisements, it is generally accepted as fact that Blakely and Gray Gearless motor production started in early 1914.

Since I knew so little about these gearless motors, I called AOMCI member and rowboat motor authority Jack Craib from Woodstock, Ct., who patiently described the various Blakely designed models as such: The Blakely Gearless and the Gray Gearless motors differ only by the cast Gray Motor Co. name on the Gray flywheels.

Three identical versions of Blakely designed vertical drive shaft motors were marketed: the Blakely was sold directly by Blakely Engine Co., the Anderson (badge motor) was sold by Anderson Engine Co. of Chicago, IL.; and the Admiral (badge motor) was distributed by Affiliated Manufacturers of Milwaukee, WI. All five models share the same power heads.

Next I searched the 1911-1918 Muskegon County records in the Museum archives, the property ownership records in the Register of Deeds office files, the Muskegon Business Directories and scanned files and micro films of the Grand Haven Tribune, the Muskegon Times and Chronicles but found nothing of E. B. Blakely or the Blakely Engine Co. Finally, at the suggestion of a sympathetic librarian, I checked the 1914 Muskegon Directory and located an Edward B. Blakely living at 219 Pine St. who was employed as Manager of Lyons Machine & Mfg. Co. in Muskegon, MI.

My efforts were quickly redirected to a study of Lyons Machine & Mfg. Co. This was the first published connection I found of E. B. Blakely to Lyons Machine & Mfg. Co.

In reviewing my progress with AOMCI friend Dick Gorz, he soon realized I hadn't heard of Arlan Carter's new book "The American Rowboat Motor". Dick graciously loaned his copy of the book to me. The Book is great and has been very helpful to me, especially the E. B. Blakely autobiography section which Arlan credits to Professional Genealogist, Jane Schapka from Muskegon, MI. I now have my own copy of the book .

By using the card index files in the Muskegon Hackley Library Historical section, I found several references and old newspaper articles about Lyons Machine & Mfg. Co. Although financed by Muskegon business men and banks, the company was established in Lyons MI. on March 26, 1912. This location was chosen due to an incentive of free electricity from the Lyons city-owned power dam on the Grand River. The four original officers were Wm Odell, Oscar Bloomberg, Ray Hill and Wm Halderman. They were all originally in prominent plant management positions at the Muskegon Continental Motor Co. with each having considerable engine building experience.

Lyons, MI. is located 80 miles east of Muskegon with Grand Rapids and Sparta centered between them. The new company's stated objective was to do tooling, machining, and manufacturing job shop work for the many stationary engine and automotive engine manufacturers in the Grand Rapids area. During 1912 to 1913 Lyons sales personnel contacted these engine manufacturers soliciting work. This included the Sears Roebuck stationary engine plant in Sparta, MI.

In 1912 Edward B. Blakely left International Harvester Co. and joined Sears Roebuck as a consulting engineer and was soon promoted to Chief Engineer. He later became the Plant Superintendent at their Sparta, MI. stationary engine plant and from this position E. B. Blakely established working relationships with many Grand Rapids area sources of tooling, patterns, castings, forgings and machining which likely included Lyons Machine & Mfg. Co.

In mid 1913, because of limited engine manufacturing capacity at the Sparta plant, Sears began transferring all of the Sparta engine production equipment and moveable assets to their new larger manufacturing facility in Evansville, IN. This move was completed by early fall of 1913. As Plant Superintendent, Blakely was certainly made aware of this impending move months ahead of time, and some time during this mid 1913 period he resigned from Sears and completed the design of his unique Blakely Gearless Rowboat Motor. His connection with Grand Rapids area suppliers was beneficial in doing the pre-production work including selection of a tooling, machining and manufacturing partner, Lyons Machine & Mfg. Co.

According to a May 1913 press release, Lyons Machine & Mfg. Co. began transferring their operation from Lyons, MI. to a vacant plant at 656 Nims St. in Muskegon, MI. The

50'X450' Nims St. building was previously the site of Gary Car Co. in 1909 and the Henry Motor Car Co. in 1910-1911, both defunct. This confirms the rumors I had heard in 1965 of early 1900s automobile production in Muskegon, MI. The large plant gave Lyons excess floor space beyond their machine shop requirements.

In the fall of 1913 after resigning from Sears, E. B. Blakely moved to Muskegon, MI. In November of 1913, Lyons Machine & Mfg. Co. completed their move from Lyons, MI. to Muskegon, MI. During this transition period the four Lyons officers resigned and were replaced by other stockholders namely: G. Neumeister, President; A. Harnau, Vice President; F.W. Garber, Treasurer; and R. Fisher, Secretary and Plant Manager.

E. B. Blakely hit the ground running when he arrived in Muskegon. On January 9, 1914 he applied for U S patent #1,139,631 on his gearless flexible shaft lower unit design. In February he applied for a copyright of the "Blakely Engine Company" name. By March he had sold and assigned the gearless patent rights to Gray Motor Co. The April 1914 issues of Popular Mechanics and Yachting Magazines carried advertisements for the Gray Gearless Rowboat motors.

During the initial production period in the Spring of 1914, they produced an unknown quantity of Blakely Gearless and Gray Gearless Rowboat Motors which began showing up in customers hands in the summer of 1914, about four months after the start of production! This amazing achievement was only possible if E. B. Blakely's tooling, machining, and manufacturing partner had been involved months before January 1914. To the best of my knowledge this was Lyons Machine & Mfg. Co. but they were still not publicly mentioned anywhere.

In all of this research, I never found a street address listed for Blakely Engine Co. Instead, the address was always given as "Blakely Engine Co. Muskegon, Mich." What was the function of Blakely Engine Co.? Assembly? Sales? I found no clues.

Once again my progress stalled until early August 1914 when the three local newspapers began promoting a Detachable Rowboat Motor Race scheduled for August 8th on Muskegon Lake. On the day of the race, E. B. Blakely finally surfaced by writing an article in the Morning Chronicle titled, "Built in Muskegon", extolling the features of his Blakely Rowboat Motors. Again he failed to name the manufacturer of the motors or where they were built and assembled.

All three local newspapers printed this statement: "Representatives from the Milwaukee and Detroit firms that make Rowboat Motors will be here to take part in the event".

The fact that five or more of the eleven entries were production people or officers from Lyons Machine & Mfg. Co. indicated their keen interest in Blakely designed motors:

J. Hartman, Lyons Purchasing Agent;

F.W. Garber, Lyons Treasurer;

H.R. Young, Lyons Tool Maker;

C.F. Daggett, Lyons Tool Maker and a friend of E.B. Blakely;

E.B. Daggett? E.B. Blawely? Each of these names is likely an alias for E.B. Blakely.

Race Results:

An Evinrude motor driven by C. H. Wenslow won 1st place, an Admiral motor driven by B. Clark took 2nd place and a Gray Gearless motor driven by F. Daggett ran in 3rd place. This was the first mention of an Admiral motor and it was likely an early production motor. This whole race charade was more of a Lyons Company picnic than a real boat race, but it was the second published connection between E. B. Blakely and the Lyons Machine and Mfg. Co.

About this time I read a 1915 Rudder Magazine article which covered the 1915 Chicago Motor Boat Show where Anderson Engine Co. (badge motor), Blakely Engine Co. and Lyons Machine & Mfg. Co. were all listed as exhibitors. This was the third published connection between Lyons Machine & Mfg. Co. and E. B. Blakely.

The 1914 Blakely Gearless Motor owner's manual states: "It's designers and builders are men who have been prominently identified with the gasoline engine business for fourteen years." To me this could only mean the four original officers of Lyons Machine & Mfg. Co. plus E. B. Blakely who had 14 years engine building experience.

With this fourth direct connection between Blakely and Lyons Machine & Mfg. Co. I was now convinced that all the Blakely designed motors, or at least the power heads, were built by Lyons Machine & Mfg. Co. Jack Craib estimated the total engine production volume to be less than 1000 motors, thus the duplication of the tooling costs by splitting power head production between Gray and Lyons would not seem feasible. The manufacturing sources of gearless and vertical shaft lower units is unclear although a Gray Gearless Motor Co. ad states: "The Flexible shaft is manufactured by Chicago Flexible Shaft Co."

Early and late Gray Motor Co. advertisements clearly have contradictions.

A 1914 Gray Gearless ad states: "Built by the world's largest Manufacturer of two cycle engines." - - Meaning built by Gray Motor Co.

A 1915 Gray Gearless ad states: "Made by a responsible and experienced marine engine building concern." - - Meaning built by Lyons Machine & Mfg. Co.

Thus the interpretations by owners and writers differ depending on which as they read.

Now the plot really thickens:

While scanning a 1914 Muskegon Chronicle, I came across this surprise:

“On September 25, 1914 Lyons Machine & Mfg. Co. filed for voluntary bankruptcy in the Grand Rapids U. S. Court through its president G. H. Neumeister.”

The Statement of Financial Condition showed assets of \$62,396, some of which are encumbered, and Liabilities of \$46,513. It also listed their creditors including banks, board members, casting, forging and parts suppliers, etc. It is noteworthy that one of the largest creditors for \$2,360, was Cross Gear and Engine Co. of Detroit, MI., a bronze casting and machining company (Lower Units maybe?). Neither Edward B. Blakely nor the Blakely Engine Co. were named in the Bankruptcy!

The October 1914 issue of “Michigan Manufacturer and Financial Record” also reported the Lyons bankruptcy which further damaged their reputation in the boating industry. In an effort to recoup their positive image, “Edward B. Blakely of Lyons Machine and Mfg. Co.” announced in later issues of the same publication, that they would market new single, twin and four cylinder canoe motors mounted in canoes and speed boats. These prototype motors were built and displayed at the January 1915 New York Motor Boat Show and the February 1915 Chicago Motor Boat Show, but there was no record of Lyons having built them on a production basis.

On a lighter note:

In June of 1915 the North Muskegon Improvement Association put several advance articles in a local paper promoting their Summer Festival & Racing Boat Regatta scheduled to take place on Bear Lake on June 20, 1915. The event was to include a “Detachable Rowboat Motor race. The headline of the Monday newspaper read:

“BLAKELY WINS RACE”

“The outboard Race drew four entries and was won by E. B. Blakely in a light clinker boat equipped with one of his own engines. Christie’s “Good Bread“, Dr. C.H. Lefevre’s “Coffee Grinder” and R.D. Bennett’s “Biscuit” tried gamely to keep up with the inventor in his new boat, and succeeded mainly because Blakely’s motor stopped once. Blakely rounded the buoy while the “Good Bread” and the Biscuit” were trying to disentangle each other. The “Coffee Grinder” kept grinding in the meantime and was rewarded for its efforts by coming in tied with the “Biscuit” for third and fourth honors. “Good Bread” sneaked in second right behind the “Admiral”, the name of the Blakely craft.”
(You have to love a reporter like this! R.D.)

As I was now certain that Lyons Machine Mfg. Co. was the builder of the Blakely designed motors, my efforts were finally directed toward locating a descendant of a person that worked at Lyons Machine & Mfg. Co. during 1914-1916 when Edward B. Blakely was there. My early genealogy studies of the families of two Lyons board members produced no usable results .

A toolmaker named Henry R. Young was the first employee hired by Lyons Machine & Mfg. Co. at the Muskegon plant. From the sidelines, he witnessed the hectic early Blakely Engine production period leading up to the Sept 1914 Lyons Machine & Mfg. Co. bankruptcy. In late 1914 the company was reorganized and in 1915 Henry was promoted to General Superintendent leading the effort to bring the company out of their early financial problems. Henry R. Young was soon a board member and stock holder and by 1928 he became the President of the renamed Lyons Machine & Tool Co.

Using the Muskegon Industrial Directories I was able to do this bit of genealogy:
1928~1961 Henry R. Young: Lyons Machine & Tool Co., President
~1961~1978 Albert J. Young: Lyons Machine & Tool Co., President
~1978-1989 Gregory A. Young: Lyons Integrated Technology., President
In 1990 Lyons Integrated Technology Co. was no longer listed in the directory.

I found a Gregory A. Young listing in an area phone book, but before calling him, I chose my words very carefully to avoid that dreaded loud click on the other end. After explaining that I was doing antique outboard motor research which lead to the Lyons plant he replied ,“I’m happy to hear from you as I recall my grandfather talking about outboard motor production at Lyons and that Blakely name sure rings a bell“. BINGO ! After all this effort, we have first hand proof of who built the Blakely designed motors!

Greg and I got together and reviewed all this information- - I had a great time listening as he talked about his grandfather’s stories of E. B. Blakely and outboard motor production at the Lyons factory. Greg recalled a large hand written book of 1912-1920 Lyons Board meeting minutes which he thought might still be in his storage area. About a month later he located the old book and loaned it to me. The book is a treasure for the Young family and it provided us with many facts about the 1914-1916 time period when Blakely designed motors were produced at Lyons Machine & Mfg. Co.

The following is a brief summary of the Lyons Board Meeting Minutes paraphrasing highlights from selected pages that pertain to the Blakely designed engines:

Jan 1914 : A contract proposal was made by Blakely Engine Co. for Lyons Machine & Mfg. Co. to build complete outboard motors patented by

E. B. Blakely and Chas. F. Daggett for \$30.00 Each -- Reviewed

Lyons forwarded \$1,000.00 to Blakely Engine Co. to enable them to pay their indebtedness occurred perfecting the motor. --approved

Feb 1914: The revised contract between Blakely Engine Co. and Lyons Co. was read and modified for Blakely Engine Co. to build boxes and ship the motors --approved
A proposition was made to build 100 motors - - AT ONCE -- approved

Mar 1914: The contract between Blakely Engine Co. and Gray motor Co. was reviewed - - approved

May 1914 through August 1914 - - no board meeting minutes were recorded !

Sept 1914: The board Secretary who was also the Plant Manager was fired for gross mismanagement and irregularities contributing to the Lyons bankruptcy. Edward B. Blakely was appointed Manager of Lyons Machine and Mfg. Co! -- approved

Mar 1915: Affiliated Mfrs. Co.(Admiral) proposed this new three year contract. No other motor will conflict in appearance with the Admiral motors
The standard color will be 'Blue Ribbon' blue.
The motors complete with battery or Magneto ignition, painted, fitted with bronze prop and boxed -- shall be sold for the sum of \$29.00 each.
A reasonable extra charge for the Deluxe model will be agreed upon and the reversing clutch features will not be manufactured for any other party.
(Reference: E. B. Blakely's Forward-Neutral-Reverse patent No 1,192,377 - R.D.)
Lyons President, G. Neumunster's response: The contract did not embody his idea of what was in the best interest of Lyons Machine & Mfg. Co. --meeting adjourned

Mar 1915: Treasurers report -- money received from:
Hoefer Mfg. Co. (Speedaway) for motor stock -- \$1993.65
Affiliated Mfrs. Co. (Admiral) for motor stock-- \$929.50

May 1915: E.B. Blakely reported that Gray Motor Co. asked for 100-200 motors without tail shafts and that he had named a price.
Ferro People rejected 90 pistons as the heads were too thin. - - 4000 pistons are on hand.
Blakely reported that Affiliated Manufacturers Co. (Admiral) was bankrupt !

July 1915: Edward B. Blakely reported that he would be leaving the employ of Lyons on July 17, 1915 and he would like to collect royalties due him of \$.50 each for the 100 motors they were making for Gray Motor Co. !

Nov 1915; Superintendent Henry R. Young reported that Gray Motor Co. had complained that a great many engines had come back to them for repairs.

Nov 1915: Henry R. Young reported that a settlement had been reached with Gray Motor Co. concerning their \$200 claim for engine repairs .

All connections with Gray Motor Co. were severed !

January 1916: Lyons Machine & Mfg. Co. discontinued all engine work while concentrating their efforts on tooling work. (End of board meeting minutes summary.)

After leaving Lyons, Edward B. Blakely returned to Sears Roebuck and by June 1916 he was again the Chief Engineer. The 1920 prestigious Gold Cup Race was run on the Detroit River and competing with Gar Wood in his hydro "Miss America" was the Hacker Craft Hydro "IMP II", piloted by none other than E. B. Blakely

In 1921 The Wisconsin Rapids Tribune reported: "Smiling Ned Blakely upset his hydroplane at 60 mph off shore from Milwaukee and was rescued by an air-plane crew. In June at Chicago, he went down with his boat 'Rosita' and derrick men saved his life. Two weeks later he upset his boat 'Miss Toronto' on the turbulent Niagara River and swam ashore as his boat sunk." (No one could make up this story! R.D.)

On December 3, 2011 new members Chris and Mike Ter Bush hosted a Wolverine Chapter meet at their Muskegon, MI. M C Marine show room. Jane Schapka, the person who wrote the life story of E. B. Blakely in Arlan Carter's book, gave a rousing talk on how she put it all together. Our other special guests were Greg Young along with his son Sean and grandson Mykel. Greg stole the show with his presentation about his grandfather Henry R. Young's recollections of the days when Ed Blakely was at the Lyons factory. To top off the meet, Jack Craib displayed his Blakely Gearless and Blakely vertical shaft motors plus Carl and Dave Hodgson displayed their Gray Gearless motor. Not to be out done, Mark Majcher actually ran his Blakely power head mounted on a wooden frame and driving a water pump. Several AOMCI members put a lot of effort into making this a memorable meet.

In the afternoon, we toured the 113 year old 656 Nims St. plant where all the Blakely engines were built. It is now in need of major repairs and is used only for storage. Greg Young, who had not seen the building since he sold it more than 20 years ago, was our

expert tour guide. What a treat! The rumors I heard back in 1965 were true, outboard motors were manufactured during the early 1900s in Muskegon, Michigan.

I worked closely with Jack Craib on this project and he now has all the sources and supporting data I used in this article plus his wealth of knowledge about rowboat motors including the Blakely design motors. He can answer your questions much better than I. You should feel free to contact him at: jack.craib@gmail.com or see his great website at www.caille.8m.com

Acknowledgements for technical, historical, computer and writing assistance are:
Greg Young, Jack Craib, Dick Gorz, Carl & Dave Hodgson, Mark Majcher, Dennis Trevathan, Jim Wildgen, Arlan Carter, Jane Schapka, Peter Hunn, Jay Walls, Carter Whiting, Dave Hoyle, Muskegon Museum Archivist Beryl Gabel, Hackley Library Genealogy & History Room Personnel plus my best friend and lovely wife Blanche.
THANKS ALL! Rog Dykehouse January 20,2012 ph 231865 7668