# Chapter Four: The Akron Porcelain Company 1930-1945

#### Hard Times 1930-1940

Long lines of grim-faced men waiting outside a makeshift soup kitchen, underfed shabbily-dressed children playing in front of shacks made of orange crates, whole families living in abandoned cars, and people wandering the country in search of work-these are the gray images of America's "hard times." Major industries stopped expanding and production outstripped consumption. Speculation in the unregulated stock market created a top-heavy investment structure that toppled, destroying banks, businesses, and personal savings when obligations could not be met. The whole American economic system was overly dependent on a few huge corporations whose financial structures were flimsily based on layers of credit.<sup>1</sup> It was a recipe for economic disaster, and the Great Depression caught the country "flat-footed" at the peak of the prosperous 1920s.

In the early years of the depression, Akron appeared to be unaffected--some of the city's major buildings were constructed in this period (the YMCA, YWCA, the Polsky Building, the Mayflower Hotel, the First National Tower, the M. O'Neil Building, and the Goodyear Zeppelin Dock). Even though banks were failing along with many other businesses, many people thought that the depression would be short-lived, like the brief downturn of the early twenties. But this time, the economy did not rebound. For the next dozen years, Akron would suffer through the most traumatic era of its history.

On the eve of the Great Depression, the Mogadore Insulator Company anticipated that the 1930s would be the greatest business period of its history. The new building on Cory Avenue, built at a cost of \$86,840, had been completed in 1928. On January 6, 1928, the company was renamed The Akron Porcelain Company.<sup>2</sup> Company officials were optimistic about the future even though the company's profits had declined the past few years, a condition that they attributed to the inadequate facilities in Mogadore.<sup>3</sup> The company's directors took an aggressive stance toward the coming years. At the annual directors' meeting on January 28, 1929, they proceeded with planning of more plant expansions, a new kiln, company offices, and other capital projects.<sup>4</sup>

Among the changes in the late twenties was the first real plan for allowing more employees to own stock in the company. The stock owned by the National City Bank of New York was repurchased "for the purpose of resale or allotment to employees."<sup>5</sup>

Fred Butler Jr. reported by the end of 1929 that sales were considerably ahead of 1928 due to more efficient manufacturing and higher quality. He attributed the upturn to the improved operations at the new plant. The old Mogadore Plant was sold in 1929 to E. Finch for \$5000.

Along with the new buildings, the company slowly began to update its manufacturing equipment, in keeping with Butler's determination to use the most modern processes to produce the highest quality ware. At the time of the move to Kenmore, molding was done in hand-powered handlebar presses. The operator took the pre-mixed dry clay and "pressed" it into shape in steel molds by turning the handlebars. When the pressing was complete, the operator ejected the piece from the mold and put it on a board to be carried to the kiln.<sup>6</sup> The old presses not only required considerable force by the operator, they could be quite dangerous.

"The operator would take a big "U"-shaped

screw handle and spin it around...the screw would come down and by mechanical advantage press the ware. [There would] be a lot of broken noses because people would get too close to the spinning handlebar and it would catch them across the nose. Also, these presses could fall down and catch a finger, because the friction devices that held them up occasionally failed."<sup>7</sup>

Over the years, the company instituted its own changes to these presses, improving efficiency and safety.

Early in 1930, the directors, F.W. Butler Jr., S.H. Stevenson, G.B. Merrill, D.W. Harter, and F.W. Adams, noted that 1929 was the biggest year of profits in the company's forty-year history. By this time, special porcelain ware comprised 85% of the company's sales, while standard porcelain sales had shrunk to 9%. Also reported were 6% sales from "wet process" porcelain, manufactured for high voltage uses (as opposed to the dry process manufacture for low voltage uses).<sup>8</sup> The tremendous increase in sales seemed to promise a great future for the company, but instead, its survival was threatened by the economic catastrophe of the depression.

The dawning of the depression saw another new face on the Board of Directors, D.M. McCann, the ceramics engineer recruited from Ohio State in the mid-twenties. McCann, Butler, and Stevenson were challenged from the outset, but the team proved strong enough to weather the storm of economic pressure that descended on the company. Their concern was evident in the minutes of the annual directors meeting January 26, 1931.

"A general discussion was had by the Directors regarding business conditions, and

ways and means of operating without a loss, if possible, under present business depression. It was the unanimous opinion of those present that the officers of the company directly responsible for its operation had done very well under existing conditions. It was decided that no salaries would be reduced or increased at the present time."<sup>9</sup>

It was a valiant attempt to ride out the storm without lowering salaries and wages, but later the same year the pressure was even greater. In October 1931, the directors were forced to reduce operating costs to offset the losses that had been accumulating each month. Salaries were reduced by 10% and factory wages were cut by 15% in a move that affected everyone in the organization. Even so, the company suffered a net loss of more than \$4,000 for the year 1931. This period was the toughest the company had ever endured: "The company had taken on debts to build the new plant and had just moved into it...they struggled for a couple years trying to keep expenses to a minimum."<sup>10</sup> All talk of expansion was shelved during the early 1930s.

For the next three years Americans continued to grapple with the effects of what was by that time recognized to be the worst depression in history. Franklin D. Roosevelt was elected president in 1932, and when he took office in 1933, he launched the famous "New Deal" programs that gave the country hope (although they did not end the depression).

In Akron, it was the era of the gigantic airships. The Goodyear Zeppelin Company brought national attention to the area in the early 1930s by building the Goodyear Zeppelin Dock, the biggest structure in the world without internal supports. When the U.S.S. Akron was launched in 1931, it had been a cause for tremendous excitement and civic



One of the innovations that increased production and efficiency was the new tunnel kiln. Small rail cars rolled through the kiln, maximizing the volume of ware that could be fired in the shortest amount of time. The Akron Porcelain & Plastics Co.

pride. The All-American Soap Box Derby also came to Akron during this period, creating a tradition that would endure well into the late twentieth century. But underneath the showy accomplishments, the new buildings, and the very visible New Deal projects, Akron was still ailing. When Roosevelt took office in 1933, one of his first acts was to declare a "bank holiday" to allow some banks to reorganize in the face of countless closings.

Akron Porcelain encountered difficulty in

raising working capital in early 1932, and finally was able to borrow \$10,000 from First Central Trust Company only after F.W. Butler Jr. personally signed for it.<sup>11</sup> Not surprisingly, the company suffered its most difficult times during the early 1930s. Although it was never really close to folding, Akron Porcelain did experience net losses in 1931 (\$4,470), 1932 (\$22,640), and 1933 (\$5,317).<sup>12</sup> As the national crisis of confidence hit its deepest valley in 1932, so did the fortunes of Akron Porcelain (although the directors reported that within the industry, the company had actually gained ground). The company's net sales for 1933 totalled only 29% of the volume reported for 1929, the last year before the depression.<sup>13</sup> Dividends were paid in 1933, but were reduced to only five cents per share paid twice that year.<sup>14</sup> The officers all took voluntary pay cuts in an effort to keep costs down.

The company began to rebound from the effects of the depression by 1934, which was essentially a "break-even" year.<sup>15</sup> Sales increased one hundred percent from the previous year, although they were still running much lower than 1929, the last predepression year. Although there was some business in wet process (high voltage) porcelain, the proportion was down to less than three percent, as opposed to nine percent several years earlier.

Akron Porcelain achieved modest success again in 1935, when net profits finally reached a modest figure.<sup>16</sup> By 1936, the worst seemed to be over, as net profits increased by more than two hundred percent and net sales for the first time in the decade eclipsed the levels of the pre-depression days.

Encouraged by the upturn, the directors discussed the advisability of building a new tunnel kiln.

"The meeting was held to discuss the building of a continuous kiln. It was pointed out that all companies in our line which were pro-



These were only a few of the special porcelain pieces that were produced by the Akron Porcelain Company in the 1930s. **The Akron Porcelain & Plastics Co.** 

gressing had found the necessity of continuous kilns which reduce costs and increase quality of ware."<sup>17</sup>

It was through the foresight of D.M. McCann that the company decided to invest in the new kiln. The estimate of cost for the kiln was \$25,000, as quoted by the Allied Engineering Company of Cleveland. The "tunnel kiln" was an improvement on the "beehive kilns" used for many years in the Mogadore and South Main factories. The old beehive kilns had to be heated up from a cold state, kept at firing temperature for a time, and then laboriously cooled down before the ware could be removed (a process that took several days). The new tunnel kilns were kept constantly at firing temperatures and the ware was continuously wheeled through the kiln on small rail cars. The new kilns greatly increased not only the volume of production, but the efficiency of the firing, due to greater control of temperatures.<sup>18</sup>

The tunnel kiln was in use by mid-1937, and because of this the company was a step ahead of the competition, as net profits rose fifty percent from the previous year. The company ceased its experiment



In the finishing room, women smoothed and removed scale and other defects from the finished ware prior to its firing. The molded porcelain ware is visible in the foreground of this c.1930 photograph. The Akron Porcelain & Plastics Co.

with wet process porcelain and concentrated on the dry process ware, which accounted for almost all sales in 1937.<sup>19</sup> By all indications, the company was well on its way to recovery, but there was to be one more economic dip in the thirties. The recession of 1937 had a

delayed effect on the company, probably because of the time lag between orders, and production and delivery of ware.

The "dip" of 1938 amounted to a forty-five percent drop in sales, which contributed to a more

than fifty percent drop in net profits. Still, the company officers did not panic, and this time the downturn was temporary. By 1939, sales were up again, so that net profits again approximated the level attained in 1937. The balance of the company's note at First Central Trust was paid off in 1939, and for the first time since 1929 the company was free of indebtedness. <sup>20</sup>

The growth of the company's business continued to improve in 1940. There was some discussion of securing interest in another factory in a region with lower labor costs, but no action was ever taken on this matter.<sup>21</sup> In keeping with Butler's philosophy of staying ahead in the latest technology, the directors authorized purchase of some new equipment. As the year drew to a close, there was discussion of new insulating materials that the directors feared might someday replace porcelain. They decided that the new materials technology should be investigated as a possible future product for the company. "The Directors decided it would be good business to conserve funds which would be necessary to establish the company in the manufacture of such a product."22 The new material was called "Bakelite," one of the first commercially viable electrical plastics.

As the company began 1941, Butler, Stevenson, and McCann took stock of their company's progress through the recent difficult times and paused to review the company's condition:

"The company now has one of the most efficient plants in the industry. The building of the factory and its operation have been under the supervision of Mr. McCann. Our cost and financial departments have been developed by Mr. Stevenson. Mr. Butler has made contact with our customers and counseled with Mr. Stevenson on all important matters."<sup>23</sup> Profits were running more than sixty percent ahead of the previous year. In anticipation of prosperous times ahead, the directors decided to prepare advertising to attract new accounts. But in December 1941, the Japanese armed forces attacked Pearl Harbor and American industry had to quickly retool for wartime production. Once again, the future of the Akron Porcelain Company was uncertain:

"The Directors discussed at considerable length the disbursement of profits for the current year. All present agreed that it is impossible to foresee how the war may affect the company's business. Everything we make is special, to the customer's blue prints and specifications, most of which, at the present time for civilian use. If our customers are restricted as to the use of metal for the assembly of their porcelain, our sales will certainly be reduced. It was shown that very little porcelain is going directly into the Defense Program. The fact that the bulk of our volume goes to a very few accounts was also considered."<sup>24</sup>

## <u>The War Years</u> 1941-1945

The United States entered World War II united as a people, perhaps more than at any other time in history. The immense problems of assembling, equipping and supplying armed forces had to be dealt with in record time. Almost overnight, factories who had been making automobiles, tires, appliances, and radios had to retool to make ammunition, tanks, planes, guns, and other implements of war. Prices were subject to regulation, raw materials were strictly controlled, and transportation was allotted according to importance to the war effort.

In the midst of all this, Akron Porcelain was



This Patterson Slip Pump was another example of the company's constant upgrading of machinery and processes that allowed it to survive the difficult 1930s. **The Akron Porcelain & Plastics Co.** 

left momentarily without a direction. The directors decided to contact their customers and try to anticipate which markets the company might pursue. F.W. Butler Jr. reported that "sixty to seventy percent of the company's volume has been going indirectly into the Defense Program and that an effort is being made to increase this class of business."<sup>25</sup> But a few months later business had drastically declined. Customers were having trouble getting the metals necessary for assembling porcelain, because these materials were subject to government controls. Since the metals were not available, fewer porcelain parts were needed and

customer orders were curtailed. Although it was determined that the ware that did sell was for the most part going into war equipment, sales for 1942 were half the level of the year before. Even more significant was the ninety-five percent drop in net profits. The company just barely broke even in 1942.<sup>26</sup>

By the second year of the war, the company was able to increase sales (mostly for use in war-related items) modestly and double the profits of the previous year. When the directors met on January 24, 1944, Butler expressed the hope that if the war with Germany ended within the year, perhaps former customers would be able to return to manufacture of their normal pre-war products. But it was not to be, the war lasted through 1944. The company's business suffered further when its biggest customer, Western Electric, deferred shipments for the last two months of the year until early 1945. Wartime government controls added to the problem:

"The necessity of operating eight hours overtime per week at time and one half, in accordance with government regulations, has increased the company's costs approximately \$10,000. The necessity of using inefficient help (which is all that was available) has increased... costs another \$3,000 to \$4,000." <sup>27</sup>

That the company was able to find labor given the military drain on manpower was attributable to hiring practices. Throughout Akron Porcelain's history it had been traditional to recruit labor from the surrounding neighborhoods, preferably drawing from the families of workers already employed by the company. Brothers, sisters, spouses, children--as many as three generations of the same family might be employed with the company at the same time.<sup>28</sup> When the war came, the company replaced men lost to the armed forces with other family members. The company had always employed women (they were favored for the jobs in the finishing room, where smaller hands could reach in narrow openings and smooth smaller parts). By the end of the war, more than half of the work force was female. "I was seventeen when I started. It was because of the war they were hiring more younger women."<sup>29</sup>

By 1944, the price controls set by the Office of Price Administration (OPA) earlier in the war were still unchanged, so while operating expenses were rising, profits were shrinking. Nevertheless, the company managed to maintain its profit position essentially the same as 1943. Overtime and scarcity of labor were cited as continuing problems. The directors worried that the war might last through another year, but fortunately it was all over in August. In October, Butler reported that sales were up and many customers were ordering parts for civilian products again. Also, the labor supply was improving, because the men were coming home from overseas.<sup>30</sup>

Once the war was over in late 1945, the company's officers once again discussed additional manufacturing space, the need for a new machine shop (so the company could build dies instead of buying them), and the necessity of new office space. They anticipated a normal market, but technological advances spurred by the war effort meant that new equipment, manufacturing processes, and even alternative materials would have to be considered to stay competitive in the postwar economy.

Even with some of the innovations the company had introduced before and during the war, it was clear that manufacturing methods needed to be examined in the face of renewed fierce competition.

"When I first went on, we had a quota to make. We made that quota each day and we

quit. We worked in a group, but were paid by piecework. When I started I had older girls working with me that helped me--they let me know if I got behind. There was a punch on the end of a knife, and we scraped the scale out of the holes and edges by hand. If the ware was cracked or soft, we would put it in water, and then sponged it smooth."<sup>31</sup>

Handlebar presses were still in use even in 1945, but were soon to be replaced by hydraulic presses that the company itself developed for this special kind of work (there were presses commercially available, but they were deemed inefficient and expensive).

In the months immediately after the war ended, the company took steps to quickly bring the factory and manufacturing methods up to date. An efficiency expert was retained to study the operations of the finishing department.<sup>32</sup> Another consultant was hired to update the factory's power distribution to increase efficiency and eliminate delays due to power outages.<sup>33</sup> The state board of inspection had served notice that a new elevator for transporting clay from the clay cellar would have to be installed. Also, many routine maintenance problems (like painting) had been postponed to cut costs and now would have to be done.

In the waning days of the war, F.W. Butler Jr. had turned his thoughts to choosing a family member to be his successor running the company. But Fred and Marie Butler had four daughters and no sons. All four of his daughters were married, so he decided that one of his sons-in-law would be the best choice.

"It was a fine opportunity for someone. It happened that one son-in-law was married to Nancy Butler. He was a textile engineer from Georgia Tech who later became chairman of the J.P. Stevenson Company--James D. Finley. A second daughter, Sue, was married to Walter A. Hoyt, who was an orthopedic surgeon, he later became president of the American Orthopedic Society. A third daughter, Betty, was married to J.J. Wilson, also an engineer from Georgia Tech, he was at Firestone, and later founded the Wilson Tire and Supply Company, which operated in Akron and also a branch in Atlanta. That left George H. Lewis, Jr., who was employed at Goodyear at the time. George H. Lewis, Jr. married the fourth daughter, Jean Butler."<sup>34</sup>

George Lewis Jr. had lived a fairly exciting life already. He was born and grew up in Atlanta, Georgia where he attended Georgia Tech, graduating with a degree in mechanical engineering. After college he came to Akron and worked for Goodyear Zeppelin for sixteen years. He worked on the design, construction, and flight-testing of the navy dirigibles Akron and Macon. During part of this time he spent two years in Germany as an observer of that country's airship industry. In the course of his work he made twelve crossings of the Atlantic between Germany and Brazil on the Graf Zeppelin. He also made crossings on the *Hindenburg* between Germany and Lakehurst, New Jersey. He witnessed (from the ground) the tragic crash of the *Hindenburg* as it exploded in flames while approaching the mooring mast at Lakehurst, New Jersey in 1937.35

At around the same time, two other men who would help determine the company's post-war course, joined Akron Porcelain. William Pearch came straight from Ohio State University with a degree in ceramic engineering, and C.F. Tate came from Akron University with a business major. Butler, Stevenson, McCann, Lewis, Pearch, and Tate formed the leadership team of the post-war period.

A glimpse of the future was presented to George Lewis Jr. soon after he started with Akron Porcelain, when he attended a plastics conference in Cleveland. "I was struck with the number of parts they were making that were quite similar to those that we were making out of ceramic."<sup>36</sup> But the company did not turn immediately to plastics, there was still a strong market in porcelain, as attested by the twenty competitors still jousting with each other for their share of the ceramics market.

The history of The Akron Porcelain Company in the 1920s, 30s, and 40s was largely the story of F.W. Butler Jr. His leadership had allowed the company to prosper in the good years and survive through the traumatic depression and war years. George Lewis Jr., perhaps described Butler best:

"He was thoroughly honest with employees and customers alike. He decided early that he was not going to try to have the biggest company, but the best in the ceramics field. As I gradually worked into sales, and called on our customers, I found that without exception they admired Fred Butler...they felt that they could trust him."<sup>37</sup>

# Notes for Chapter Four

1. Norton, et al described what most historians generally agree were the causes for the Great Depression. Norton, et al, *A People and a Nation*, (Boston: Houghton Mifflin Company, 1982), p. 705.

2. Mogadore Insulator Company, "Amendment to the Articles of Incorporation," name change to the Akron Porcelain Company, 6 January 1928.

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3. C.G. Rausch, C.P.A., Financial Report, 26 January 1929.

4. Annual Directors Meeting, 28 January 1929.

5. Directors Meeting, 3 June 1929.

6. This process was described by George H. Lewis Jr., in an interview, 21 July 1989.

7. George H. "Mike" Lewis III, interview, 18 May 1989.

8. C.G. Rausch C.P.A., Financial Report for 1929.

9. Annual Directors Meeting, 26 January 1931.

10. Lewis III, interview 18 May 1989.

11. Annual Directors Meeting, 25 January 1932.

12. C.G. Rausch C.P.A., Financial Report, 18 January 1932.

13. C.G. Rausch C.P.A., Financial Report, 20 January 1934.

14. Special Directors Meeting, 12 June 1933.

15. C.G. Rausch C.P.A., Financial Report, 24 January 1936.

16. C.G. Rausch C.P.A., Financial Report, 24 January 1936.

17. Special Meeting of Directors, 14 October 1936.

18. As described in an interview with George H. Lewis Jr., 21 July 1989.

19. Ninety-nine percent of sales were dry process, the only other sales resulted from die sales and repairs and Michigan slip (clay) sales.

20. Directors Meeting, 14 December 1939.

21. Directors Meeting, 22 January 1940.

22. Directors Meeting, 10 December 1940.

23. Directors Meeting, 27 January 1941.

24. Directors Meeting, 17 December 1941.

25. Directors Meeting, 26 January 1942.

26. The cost of sales was nearly the same as 1941, so when sales went down the difference was drastic.

27. C.G. Rausch C.P.A., Financial Report, 23 January 1943.

28. As related by George H. Lewis Jr., interview, 21 July 1989.

29. Irene Sayre, interview, 1 May 1989.

30. As explained in the minutes of a Directors' Meeting, 1 October 1945.

31. Sayre, interview, 1 May 1989.

32. "The President reported that Mr. W.C. Potthoff, efficiency engineer, has been engaged for a three months' survey, at a cost of \$650.00, to effect greater efficiency in the finishing department." Directors Meeting, 17 December 1945.

33. "The Carle Electric Company had been engaged to



By the 1930s, The Akron Porcelain Company was exhibiting great versatility in the size, shape, and intricacy of parts that could be manufactured--amply illustrated in this trade show exhibit from that era. The Akron Porcelain & Plastics Co.

revamp the power distribution throughout the factory so as to eliminate operation stoppages which have occurred recently..." Directors Meeting, 17 December 1945. 35. As told by George H. Lewis Jr., interview, 21 July 1989.

36. Lewis Jr., interview, 21 July 1989.

34. Lewis Jr., interview, 21 July 1989.

37. Lewis Jr., interview, 21 July 1989.



The Akron Porcelain Company occupied its new Kenmore plant, pictured here in 1929, just in time for the Great Depression. The debt incurred during the construction of the new facility could not be paid off until well into the 1930s, but the new plant kept the company at the forefront of the electrical porcelain field. **The Akron Porcelain & Plastics Co.**