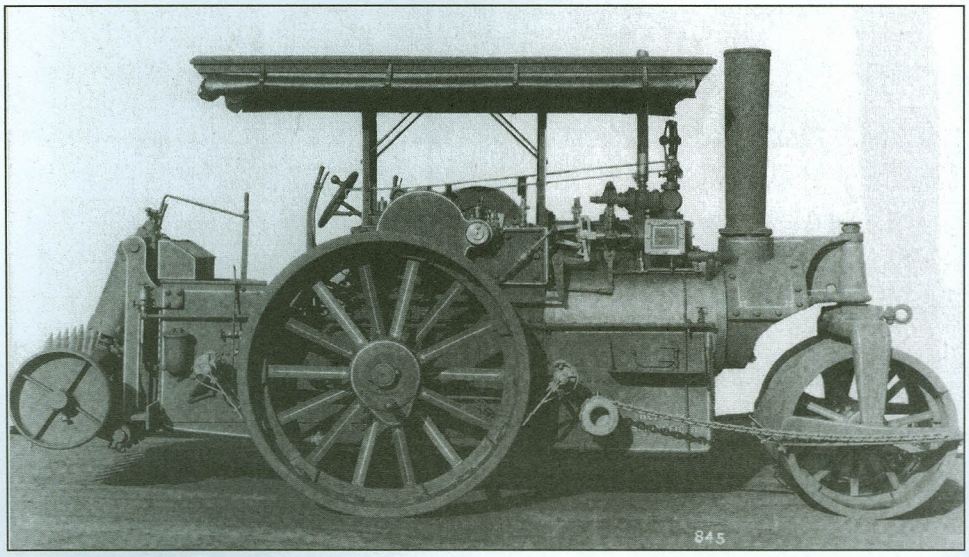
THE COMPACTION INDUSTRY COLOSSUS, BUFFALO-SPRINGFIELD:

FROM THE TWILIGHT OF STEAM TO THE TWENTY-FIRST CENTURY

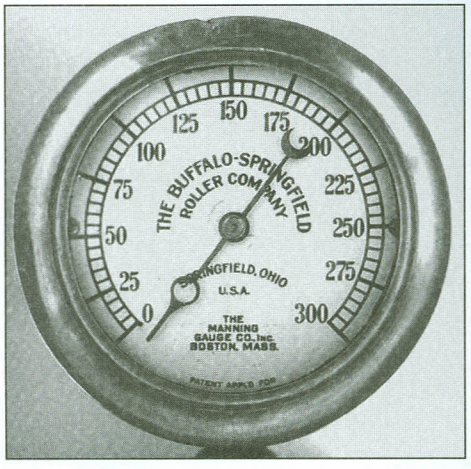
By: Raymond L. Drake and Robert T. Rhode

The biggest name in the annals of steamroller history is indisputably Buffalo-Springfield. Part of the firm's colossal success arose from serendipity: a fortunate concurrence of events. In 1913, the federal government announced the ambitious project of constructing more than fifty thousand miles of highways, and, in early November of 1916, Kelly-Springfield Road Roller Company of Springfield, Ohio, and the Buffalo Steam Roller Company of Buffalo, New York, merged. The union of such successful firms at a time when the building of roads had become a national priority spawned the titanic Buffalo-Springfield Company.

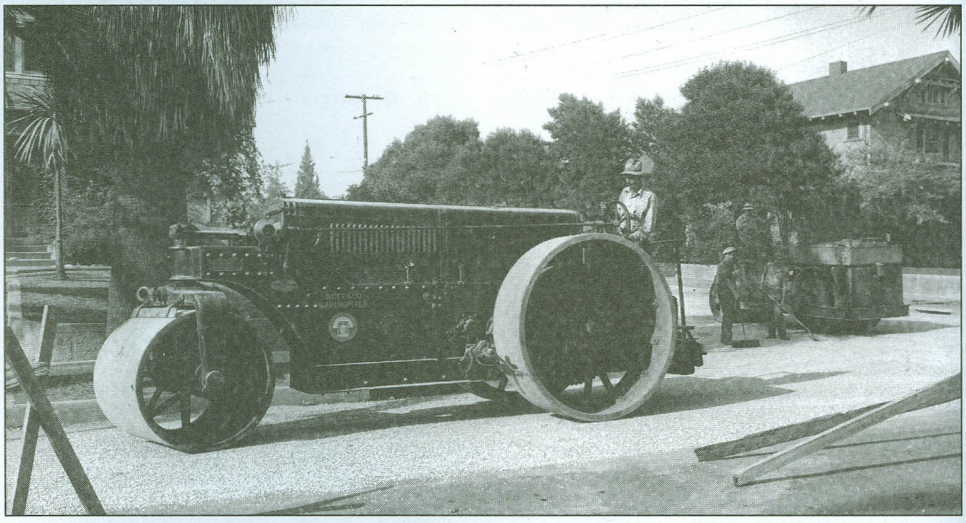
Around 1890, both Kelly-Springfield and Buffalo Pitts were manufacturing steamrollers. During the next twenty-five years, both firms came up with numerous innovations and improvements. On October 21, 1907, Kelly-Springfield built an experimental roller, Serial Number 1769, that employed a four-cylinder gasoline engine installed on a three-wheeled chassis. On December 19, 1908, Kelly-Springfield built a tandem roller, Serial Number 1951, with a two-cylinder



The SM36 "Extolled" ten-ton roller was introduced in January of 1925. The first three-speed models began with Serial Number 12741. They were used only on ten-ton machines, which, incidentally, weighed 25,130 pounds empty and 27,750 pounds loaded. Except for a few early single-speed models, most Buffalo rollers had been equipped with two-speed transmissions; the three-speed Buffalo-Springfield transmissions provided a "high" gear to move between job sites at speeds up to ten miles per hour. Author Raymond Drake says that he once opened his roller, Serial Number 12760, in third gear and has no plans to repeat the experience, as steamrollers are not equipped with brakes and an emergency stop could be problematic.



This steam gauge once graced a Buffalo-Springfield steamroller. Courtesy Barry Lee David, author of *The Antique American Steam Gauge: A Collector's Guide.*



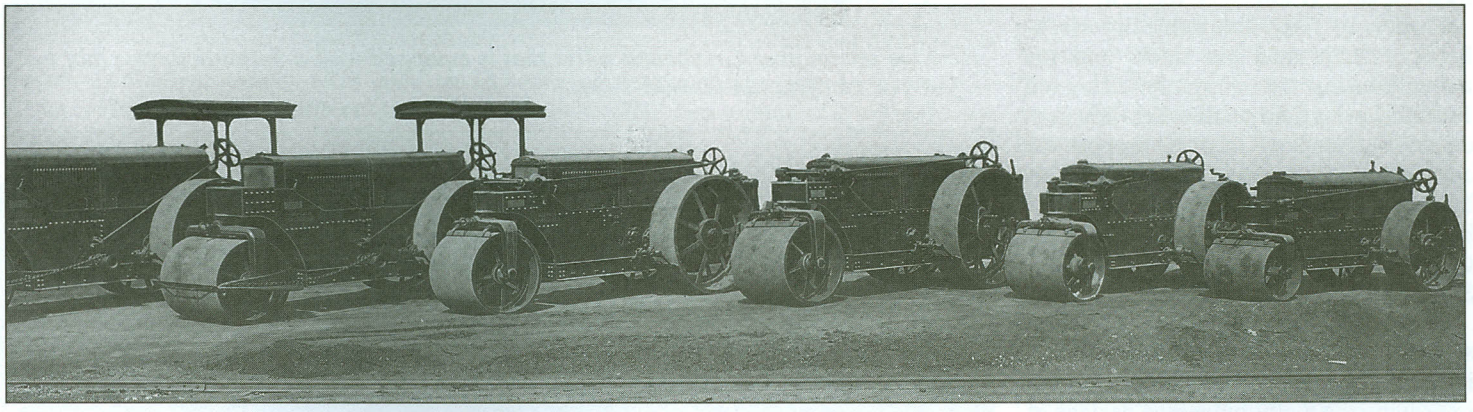
In 1927, Buffalo-Springfield introduced a new design of road roller called the Greyhound line. Here we see one of these rollers smoothing a street in the city of Alhambra, California. Note that, in the background, an early Kelly two-cylinder gasoline roller can also be seen.

gasoline engine. It was not until April of 1910 that the first order was received for the Kelly-Springfield gasoline roller. This machine was Serial Number 2281, and it was sold to the city of Minneapolis, Minnesota. Such a modest beginning hardly foretold that, within the next two decades, rollers with gasoline-powered internal combustion engines would drive steamrollers into oblivion, but there may have been telltale signs of such a future; for example, in 1914, Kelly-Springfield announced a price cut in gasoline- and diesel-powered road rollers.

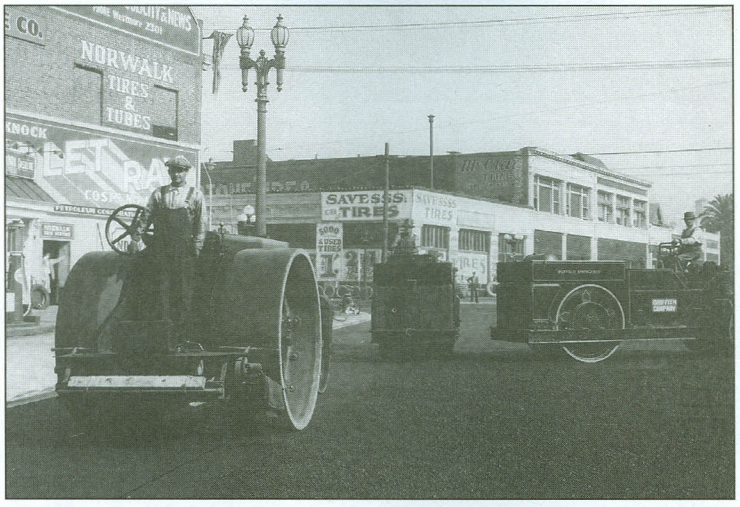
Many enthusiasts recognize Buffalo-Springfield as being the premier manufacturer of steamrollers but are not aware that this firm produced huge volumes of gasoline-powered machines and is, in fact, still engaged in the building of rollers powered by internal combustion engines.

In previous articles in this series devoted to steamroller history, facts have been brought to light that show that Kelly-Springfield and Buffalo Pitts had business associations that reached far back into the 1800s. It comes as no surprise that the first steamroller to be manufactured at the Springfield plant using Buffalo Pitts components was Serial Number 2724, built on January 18, 1913, which was three years prior to the official merger of the two firms. The first roller built at the Springfield factory that bore the Buffalo name was Serial Number 3422, a five-ton tandem roller completed on March 25, 1916. The merger of these two giants of the compaction industry was primarily engineered by Charles Greiner, who was a long-time officer of the Buffalo Pitts firm. At the time of the merger, he became president of the new Buffalo-Springfield corporation—a position that he held for the next thirty years. An interesting anecdote regarding Greiner is that, in 1947, a road builder from New Hampshire telephoned the Springfield factory one evening in hopes of having a part expressed to him early the next day. The factory was closed, except for the fact that Greiner was in his office and took the call himself. His comments were most revealing: he congratulated the contractor on still using all steam-powered road rollers and went on to state that he felt that the new gasoline-powered rollers did not have the same heart and soul that the old steamers had.

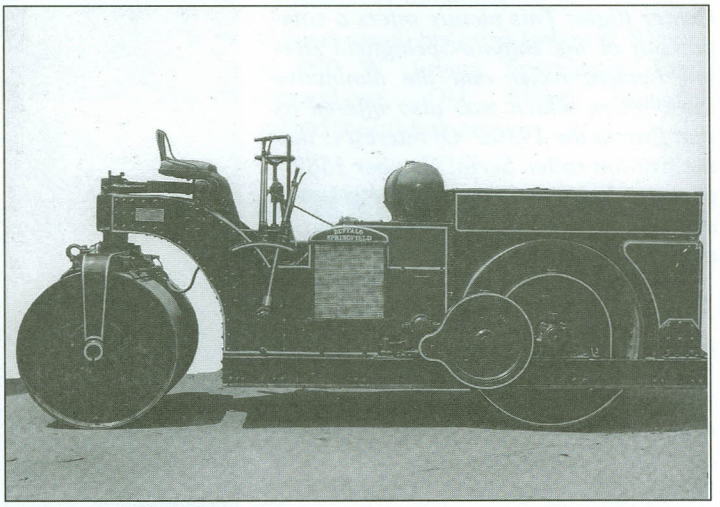
Jeffers Foster Richardson, who served with the First New York Cavalry on the Mexican border beginning in 1916, was named the sales manager of the merged companies in 1917. On the 10th of



This photo shows a lineup of six different sizes of Greyhound rollers taken at the factory in 1927.



This scene from 1935 shows three rollers belonging to the Griffith Paving Company of Los Angeles. They are laying down new pavement on Santa Monica Blvd. Seen at the left is one of the newly designed Greyhound rollers, and to the middle and right are two early designed two-cylinder tandem rollers.

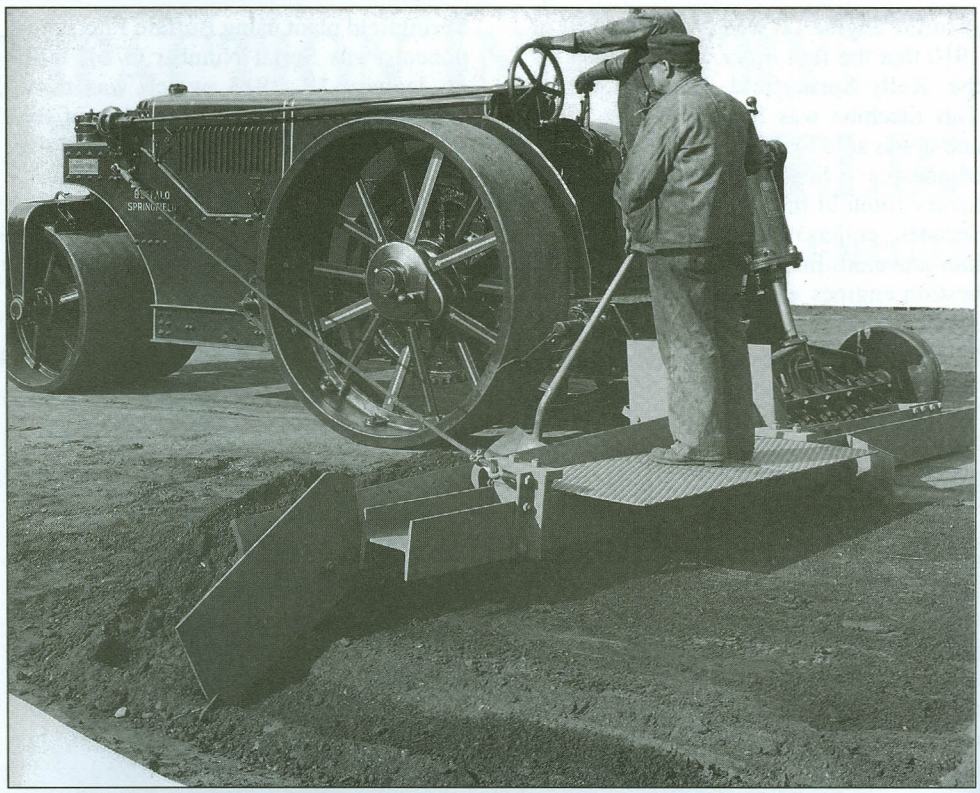


In our previous article on the Kelly-Springfield tandem rollers, we showed the company's pioneering two-cylinder design of 1908. As we stated, in the 1920s, the two-cylinder engine was replaced with a four-cylinder Waukesha engine. This photo shows the mid-1920s design.

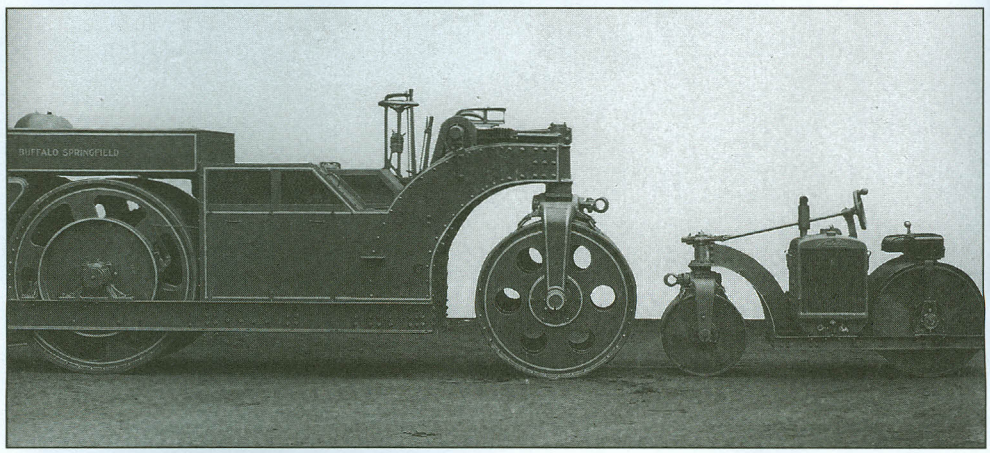
December in that year, the consolidated firms increased the capital stock from $125,000 to $500,000. Even though the new name Buffalo Springfield was applied to advertisements promoting the products of the merged companies, Richardson most likely found himself in a bit of a proverbial pickle when it came to selling so-called Buffalo-Springfield rollers. An anecdote that has gained considerable currency among historians suggests that an obstinate Buffalo stockholder's refusal to endorse the consolidation thrust both companies into a delicate compromise: namely, the building of Kelly-Springfield and Buffalo Pitts road rollers under the same roof in Springfield. A strike in 1919 added to the company's woes. On the 7th of April in 1920, blacksmiths and machinists who demanded higher wages were locked out and blacklisted. The boilermakers, painters, and sheet-metal workers did not join the machinists and blacksmiths, several of whom found jobs elsewhere. The company eventually reemployed the rest.

Finally, in 1921, the refractory stockholder relinquished his stock, and the manufacturing of uniquely designed Buffalo-Springfield steamrollers began in earnest. Company records support the anecdote about the stubborn stockholder; batches of rollers produced in Springfield in 1921 bore the name Buffalo Pitts on the earliest rollers and the name Buffalo-Springfield on the latest rollers.

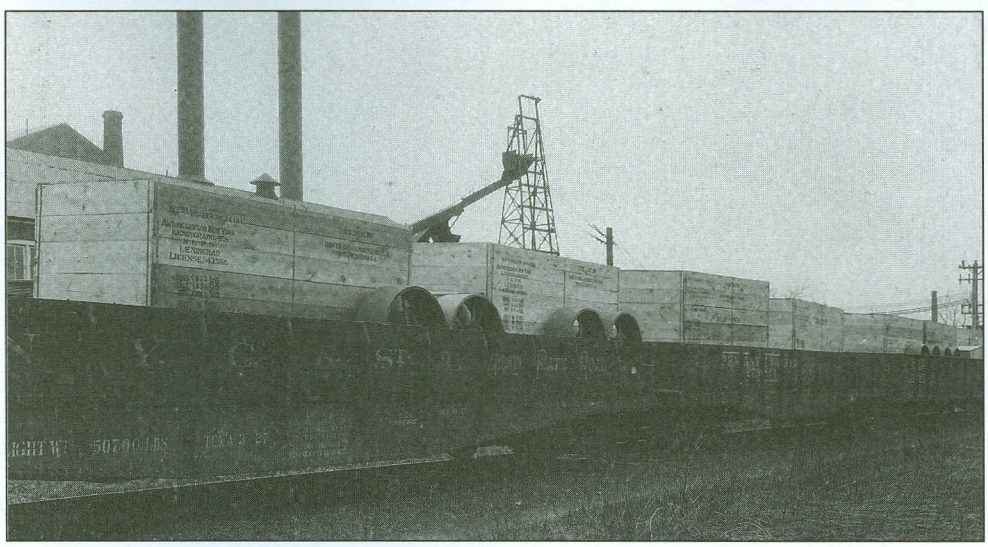
The newly formed company clearly saw that steam power was fading fast and immediately began developing and improving the Kelly-pioneered designs of



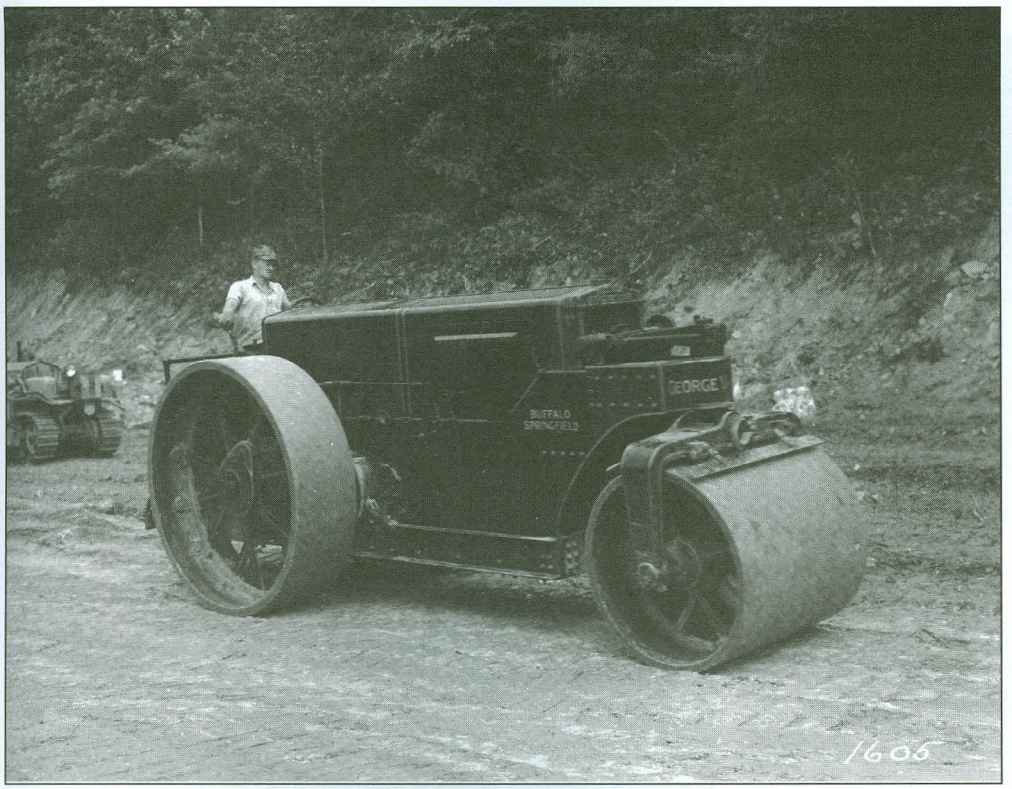
Here we see another Greyhound roller that is equipped with a berming device that was offered as an option in the mid-1930s.



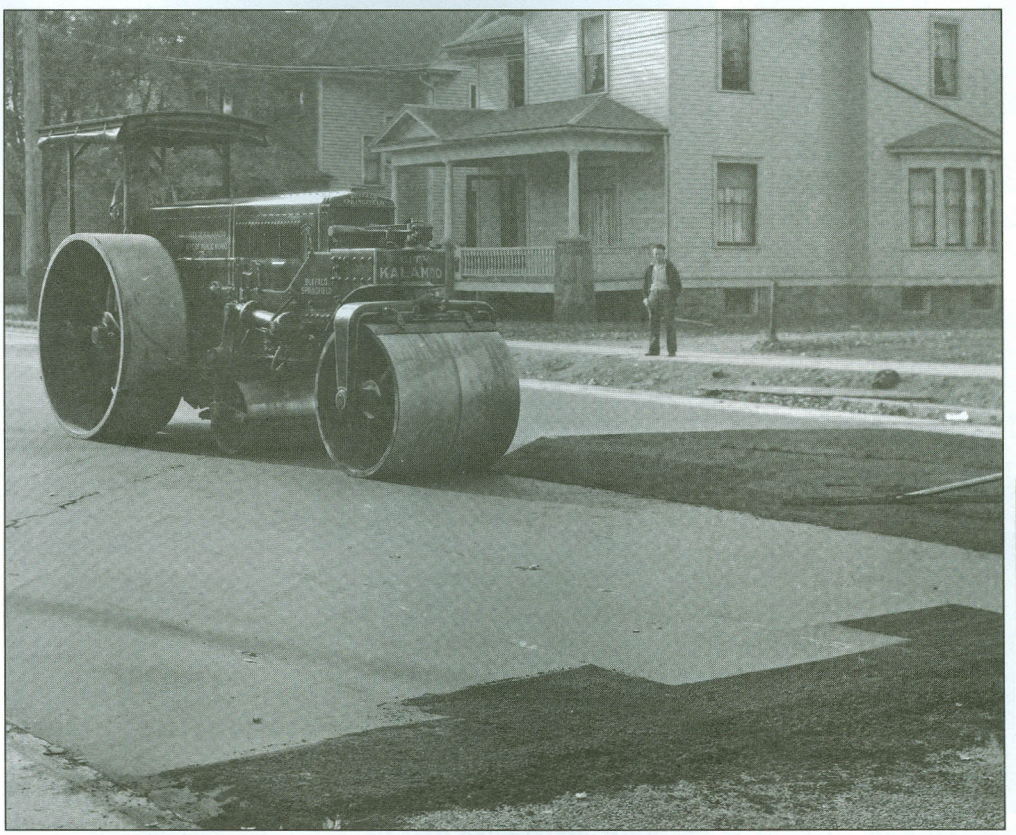
Center Right: This picture offers a comparison of the Buffalo-Springfield five-ton tandem roller and the diminutive lawn roller, which was also offered by that firm in the 1930s. Of interest is that the five-ton roller, Serial Number 15829, was produced in August of 1931 and exported to Japan, where it was sold to the Mitsui Corporation.



Right: This 1934 photograph depicts a group of railroad flatcars that are loaded with five-ton Greyhound type rollers, which are being shipped to Leningrad (St. Petersburg), Russia. Buffalo-Springfield always did a brisk business in exported rollers. In this case, though, as the Soviet Union had a less-than-stellar reputation for paying for foreign purchases, it can only be hoped that Buffalo-Springfield received advance payment for these machines.



Buffalo-Springfield rollers were used on virtually all road-building projects during the 1930s. This 1939 photo shows another Greyhound roller being employed to build the Pennsylvania Turnpike.



As highway speeds began to increase, there was a move to try to make road beds as smooth as possible. One of the methods used to accomplish this was to add a third roll to the existing designs. Here we see a Greyhound roller belonging to the city of Kalamazoo, Michigan, which employs the third-roll type of design.

rollers that were powered by gasoline. While sales of steamrollers remained strong through the mid-1920s, it was clear by 1926 that gasoline rollers were making huge inroads into the sales figures of the Buffalo-Springfield Company. In 1927, the Greyhound line of gasoline road rollers was introduced. This successful design stayed in production for the next thirty years. By 1929, the last boilers were produced for steamrollers, and, while a few steam-powered rollers were sold as late as 1934, these were, in fact, assembled from components that were in inventory as far back as 1929. During the 1930s, many new and innovative designs were introduced, some of which gained wide acceptance.

Through the latter part of the twentieth century, the Buffalo-Springfield Company continued to be the giant of the compaction industry. Approximately twenty-five years ago, a German firm named Bomag invented a new design of vibratory roller. Buffalo-Springfield purchased Bomag and chose to adopt the Bomag moniker as the name of the new firm. To this day, Dynapac and Hypac road rollers are sold world-wide. We are tempted to wonder if purchasers of these machines know that the roots of Bomag extend well back into the nineteenth century.

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