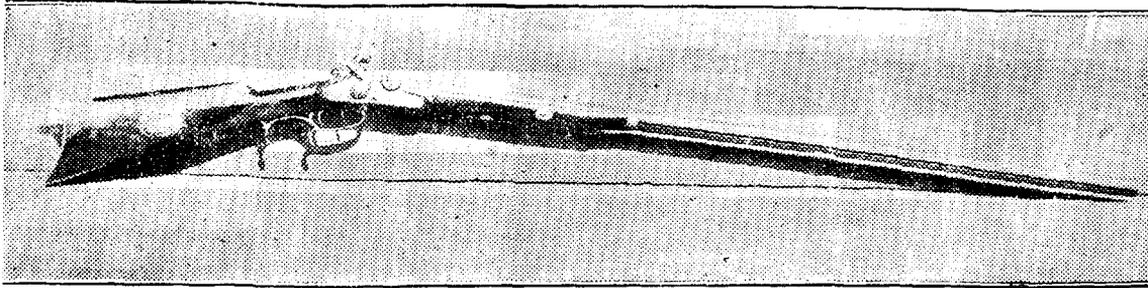


Henry E. Leman, Riflemaker

By HERBERT H. BECK, Sc.D.



RIFLE MADE BY HENRY E. LEMAN, AND PRESENTED BY HIM IN 1872 TO THE
BECK FAMILY SCHOOL.

Henry E. Leman is worthy of special record by the Lancaster County Historical Society. William U. Hensel, Frank R. Dffenferfer and David F. Magee have incidentally mentioned him in their papers on Lancaster County's gunsmiths,* but none of these authors has given him the space his national fame deserves. More than any of a long line of expert craftsmen, who won for Lancaster County the honored title of "Birthplace of the American Rifle,"† Leman was nationally famous. Martin Meylin, who in West Lampeter Township bored the first rifled barrel in America; William Henry and others whose skilled hands helped the revolutionary cause by patterning an arm which shot straighter and farther than that coming from the British arsenals; local experts who made the famous Kentucky rifles of pioneer days and armed the Lewis and Clark expedition; these are all given full credit by the Society's authors and by authoritative Captain John G. Dillin, for their

* See Vol. IX, page 59; Vol. IX, page 67; and Vol. XXX, page 47, in the Proceedings of the Lancaster County Historical Society.

† Captain John G. Dillin, in his book on "The American Rifle," which is officially recognized by the National Rifle Association of America, gives this title to Lancaster County. He personally told the writer that "from many angles evidence converges into Lancaster County as the earliest center of rifle making." He urged that a bronze statue of a colonial pioneer, carrying a rifle be placed along the Lincoln Highway immediately east of Lancaster to commemorate this fact.

importance in helping to build the new nation.* But none of these historically famous gunsmiths had a range of recognition to equal that of Leman. As were those of none of his predecessors, his rifles were used from the Atlantic to the Pacific. Furthermore, he not only made far greater numbers of superior rifles than any of our gunsmiths,—and that at a time when the states were first all being generally settled, but he never failed to stamp the barrels and locks of his pieces—H. E. Leman, Lancaster, Pa. Most of our other makers, if they marked their guns at all, and many of them did not, used their names only, without their town. Leman was an advertiser of his rifles and of Lancaster. Thus properly identified, Leman rifles are still treasured in California and Oregon, as well as in Maine and Florida, handed down from fathers who prized them, as the best of their period, for squirrels, deer, buffaloes or battle.

Henry E. Leman's business career, 1834 to 1887, covered an important transition period in the evolution of fire-arms. That dynamic mixture of charcoal, sulphur and saltpeter—gunpowder—was first used in warfare at the battle of Crecy in 1346. For centuries the devices for igniting it, to discharge the loaded barrel, were imperfect and uncertain. The matchlocks and flintlocks, which were used, often failed to ignite the powder, particularly in wet weather. If the powder, which was poured into the priming pan of the flintlock, became moist, the gun would not go off at the

* David F. Magee in his paper "The So-Called 'Kentucky Rifle' as made in Lancaster County," (Vol. XXX, p. 58), lists 94 gunsmiths who were active in Lancaster County, the majority prior to the introduction of percussion guns. To this list may be added Andrew Albright of Lititz, (1718-1802); W. C. Buchmiller of Lancaster, of the percussion period and later. His large factory was on Market street aside of the Franklin House stables; Frederick Farnot, Robert Jones, and Phillip Wolfheimer all about 1775; and Gumpfs and Haverstick of the more recent periods. The famous William Henry sent his son William Henry, 2nd, to Lititz as an apprentice in Andrew Albright's shop. William Henry was a Moravian himself, and he liked the sheltered Lititz Moravian Community for his son. When young Henry set up a factory of his own, on the Bushkill Creek, three miles northeast of Nazareth, he named his small settlement Boulton, in honor of his father's friend in Great Britain. Boulton was a business partner of James Watt, of steam engine fame, whom his father had visited. These facts on Boulton were given the writer by a descendant of William Henry, the present William Henry, of Nazareth.

trigger pull. And yet many of the world's most important wars, those of the Napoleonic period, the American Revolution, the Thirty Years' War and others prior to 1846, were fought with these crude and uncertain igniters. There is a curious chronological turn of Fate in the fact that certain and precise ignition of gunpowder was first used in warfare exactly five hundred years after men began killing each other with the explosive mixture. Mercuric fulminate, a compound which detonates with percussion and instantaneously ignites the powder, through a nipple against which the hammer strikes, came into use in a Polish uprising against Prussia in 1846. For five centuries, since the battle of Crecy in 1346, officers had been commanding and exhorting their men on the battlefield to "keep the priming powder dry."

Henry E. Leman started his business career making flintlocks. Soon he changed to the muzzle-loading, percussion-cap rifles which made him famous; and he long outlived the year when in the Franco-Prussian War of 1870, the modern cartridge breech-loading guns came into general battlefield use.

When Leman began making flintlocks in 1834 percussion cap guns were in use for field hunting, though the choice of the two methods of ignition was still debatable. In an article in the "Cabinet of Natural History and American Field Sports," published in Philadelphia in 1830, the writer, who had "shot for three seasons with a double-barreled detonator" cites the fallacy of an "anti-percussionist" who claimed that in the percussion gun "the explosion takes place so instantaneously that the whole of the powder is not ignited and a portion is not exploded." And another author in the same book, under the title "Chesapeake Duck Shooting," writes "of the advantages of the percussion over the common gun, where wet days are the most successful (for duck shooting) nothing need be said as to the greater certainty of explosion; its merits are so well known, that in two years there will probably be few flint guns on the bay." In the same article, written in 1830, there are mentioned four facts which are germane to our subject, and also of considerable historical interest today. The use of wooden decoys was in its experimental stage; several guns, which poured pounds of shot into rafts of ducks on the water at night, were

used increasingly; retrieving was done by a cross between a Newfoundland dog and a water spaniel; and ducks were not half as plentiful as they had been fifteen years earlier. Today practically all the duck shooting on the Chesapeake is done over wooden decoys; illegal "big gunning" at night is still carried on; the cross strain retriever of 1830 is officially recognized as the Chesapeake Bay dog—and the wildfowl which John Alsop in 1660 found on the Susquehanna Flats in "millionous multitudes" are reduced to a poor remnant.

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Henry Eichholtz Leman was born in Lancaster on March 8, 1812.* His ancestors on his father's side were French Huguenots, who had come to what is now Lancaster County as early as 1716 and had settled in the Paradise Township region. Several of these were gunsmiths about the middle of the eighteenth century. His father, Jacob, who died in 1835, was a farmer near Lancaster and a brewer in the town. He had served as a private in the Pequea rangers during the Revolutionary War. Henry's mother was a daughter of Leonard Eichholtz. Therefore, Henry E. Leman was a nephew of our illustrious artist, Jacob Eichholtz. One of the distinguished painter's masterpieces, and critics say it was his best canvas, is Henry E. Leman at the age of about twenty-one. This valuable picture, which belonged to the Clark collection, was temporarily loaned to the Philadelphia Art Museum, where it was given a place of honor on the walls. It evidently is a superbly painted likeness of a very good-looking young man. To the writer it appeared really beautiful in subject and in treatment.

The name Leman was and still is pronounced in three different ways. Occasionally it was Lehman; more frequently, Leamon. Henry E. said the latter pronunciation was correct, and he had cousins in Lancaster County who spelled their name Leaman. However, he was regularly called "lemon" by his local contemporaries, and his descendants still retain that name. As a child of

* James C. Leman, a son of the riflemaker, furnished valuable data on the life of his father, and also many technical facts on his business career.

three, the writer, who at that time liked lemonade, could not understand why his father's most prized gun should be called the "lemon rifle." Nor can he remember anything among the household articles which aroused his childhood interest as much as did that rifle.

Henry obtained a practical business education in the private schools of the city. When he was sixteen he entered the establishment of Melchoir Fordney, then a well-known gun manufacturer, to learn the business. Having fairly mastered the details of gunsmithing in three years, but wishing to perfect himself on the finer branches of the art, he went to Philadelphia, where he worked from 1831 to 1834 for George W. Tryon, a successful manufacturer of fire-arms. The Tryon Gun Shop is still carried on in Philadelphia under the name of Edward K. Tryon Company, athletic goods. During 1834 he returned to his native town, and started business for himself.

His first factory, which was on Mifflin Street, west of Duke, was a part of his father's brewery. The forge and rifle mill of his establishment were in Upper Leacock Township, on the east bank of the Conestoga, about a hundred yards above the Lititz Creek confluence. It was near the village of Catfish, now called Oregon. Its picturesque ruin is still standing against the stream which furnished its water power, and the houses in which its workmen lived are still along the nearby road on the higher land of the west bank. In this mill the forging, welding and planing of the barrels were done. A flat bar of Norway iron was forged with a trip hammer, and curled lengthwise around a steel rod of the proper calibre. Then it was solidly welded together, and brought to proper shape. The barrel thus formed was planed and the spiral groovings of its rifling were cut into it by hand-worked machines.* The woodwork on the stocks and ramrods, the finer machine work on locks, triggers, sights, escutcheons and other parts, and the final assembling, was done at the factory on Mifflin Street.

* For excellent, illustrated descriptions of the technical details of early rifle making, see "The American Rifle," by Capt. John G. Dillin.

During these early periods, Henry Leman lived near his factory at Catfish. His former residence, immediately below the Lititz Creek, on the west side of the Conestoga, has recently been enlarged into the present home of William Shand. The map of Manheim Township of 1853 shows on its borders the pictures of its prominent residences within the chartered tract. Among these is "Cedar Hill, The Country Seat of Henry E. Leman." This house changed hands in 1859.

From the first, Leman's skilled craftsmanship was placed upon his products, and he was immediately successful. During his first year he manufactured about two hundred and fifty rifles which included a large order of fifty from John N. Lane, a prominent merchant of Lancaster, whose trade extended to the southwestern parts of the United States. This lot was sent to St. Louis for the Indian trade. This order brought many others, for the rifles were found to be of such excellent quality that their fame soon spread, and orders began to pour in from almost every state and territory in the Union, especially from those of the south and west. Soon Leman rifles were known everywhere in America, and the Leman factory was busy. In 1837, during Van Buren's administration, Leman got his first contract from the government. It was for 1000 rifles; and annually after that, until 1860, he filled similar contracts. In 1861, Secretary of War, Simon Cameron, offered him a contract for 250,000 rifles. He declined this because he could not see how the hurried and expensive enlargement of his factories was justified by the uncertainty of the continuance of the war. However, he did take a contract at this time to alter old flintlocks to percussion rifles, and enlarge their calibres. This made thousands of arms serviceable.

By this time, 1861, increased business had long since brought about necessary changes in the place and equipment of Leman's factories. In fact, the boring mill near Catfish was not used after 1850. In that year he started a factory at East Walnut and Cherry Streets and did his heavy machine work by steam power. This building is still standing, though today it is divided into five residences, numbered from 115 to 123 East Walnut Street. The office of the factory was in the building now designated as number 115.

Some of the workmen employed here lived around the corner on Cherry Street. Their houses, eight in number, are still standing and in use, as numbers 113 to 127 North Cherry Street. They were known in earlier days as "gunmakers' row." A shop on the same street, now removed, was the barrel factory in which were the forge and steam engine equipment for welding, planing and rifling the barrels. There was also a file works, for making the filing tools required. The gunsmiths employed here were almost all of German descent. They worked "by piece." Twelve dollars a week was considered very good money, and fifteen exceptional.

About the time Mr. Lemman started his factory at Walnut and Cherry Streets, he purchased the old brick building on North Duke Street, the center of which, number 307, is now owned and occupied by the Lancaster County Historical Society. He moved into the southern end of this row, number 305. This was his residence most of his life, and here all his children were born.

In 1873, on account of rapidly increasing business, Henry Lemman moved his trade into a larger factory at the southeast corner of James and Christian Streets. He made rifles here until 1887, his business gradually dwindling under the competitive pressure of breech-loading guns. While he had started his career making flintlocks, and had won fame with his percussions, he never undertook the manufacture of breechloaders, which even before 1887, had come into general use.

It was this factory at James and Christian Streets that is best remembered by James C. Lemman, who was born in 1865. For some years he worked here as a stock finisher. He remembers the welded barrels being hammered into octagonal form, and the details of the somewhat crude but efficient hand-rifling machine. Some of the parts, such as patch boxes and butt-plates, were made in a small brass foundry connected with the plant. Maple wood for the gun stocks came from Tennessee in carload lots. The hickory for the ramrods was obtained locally. Many of these in later years were made in the bending works of Philip Lebzelter and Son on North Queen Street. The barrels were all made in the Lemman's factory until about 1875, when he began to purchase these parts at Mohnsville, in lower Berks County.

Mr. Leman was well qualified as an overseer of his workmen, for he himself was an expert craftsman in all the branches of the trade. He could make all the parts of a rifle, even the engravings on the plates and escutcheons, about as well as they could be made. He took pains to have all the guns which left his factory as nearly perfect as possible, and efficient and accurate in action. Every piece was carefully inspected by him after it was finished.

The prices of the rifles ranged from eight to fifty dollars, depending upon the material and the work in and on each piece. The more expensive were highly ornamental, sometimes with silver plates and front sights. All of the finer rifles were made with hair triggers.

Shotguns and other arms were made by special order. As early as 1839 an advertisement appeared in the Lancaster Intelligencer, which discloses this fact. On July 16th of that year, under the caption "Rifles and Rifle Barrels," local readers were informed: "The subscriber has constantly on hand several hundred Rifles, of every description, and particularly calls the attention of persons removing to the west. Also double and single barrel shotguns, Armstrong duelling pistols, Rifle barrels, etc., all of which are warranted. Henry E. Leman." This advertisement indicates that Leman made some barrels for other gunsmiths.

Calibres of rifles varied from squirrel to buffalo sizes. James Leman remembers a special order for shooting matches in the South, in which a .22 calibre bullet was fired through a long barrel weighing about fifteen pounds. Obviously, these rifles were shot from a rest.

The bullet molds were forged by hand up to the time malleable iron came into general use, when they were made from it. The "cherries," which fashioned the cavities in the molds, were forged by hand from steel, which was filed into proper size and shape, and then tempered. The sights were all placed by gauge according to the length of the barrel, and tested as to accuracy and alignment.

The manufacture of powder horns and flasks was a separate business, conducted outside of the main factory.

The total number of rifles which were manufactured in the three different factories of H. E. Leman can only be estimated, for the account books were not preserved. However, these numbers were so much greater than those of any of Lancaster County's earlier or contemporary makers that they probably nearly equalled the total output of all the others. He was in business for fifty-three years, and from 1835 to 1880 his factory was turning out enormous numbers of rifles. James Leman remembers times when there were ten stock makers at work. Each of these men made two stocks a day, which was at the rate about six thousand a year. This rate of production, with slight variations, probably covered the forty-five years of Leman's greatest business activity.

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Henry Leman took pride in his products, and all of his well-made rifles were stamped "H. E. Leman, Lancaster, Pa." If he was obliged to take orders for cheap, inferior arms, or if any of his standard pieces had flaws, he marked these "Conestoga Rifle Works." This trade title was also used on special orders on which, for one reason or another, he did not care to place his name. Typical of this is a trapgun now in the Landis Brothers' Collection, at Landis Valley. This gun, which is set on a block, has an eight-inch barrel of about .50 calibre. Its hair trigger could be touched off by a mechanism extending in front of the muzzle and a little below it. The delicately adjusted plate at the end of this mechanism might be baited for game or sprung by a moving object like, perchance, the opening door of a smokehouse or a chicken coop. This sinister piece is marked "Conestoga Rifle Works."

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Leman's rifles probably killed more American buffaloes than any other arm in history. For a long period he made a specialty of short-barreled, large-calibred pieces designed for these great animals. He occasionally received buffalo meat and skins in trade for them. These Lancaster guns were immensely popular during the last period of the bison's great abundance in the plains of the West. In his "Report on the American Bison," William T. Hornaday designates 1730 to 1830 as the period of desultory destruction, 1830 to 1888 as the period of systematic slaughter. He says that

as late as 1872 there were thousands of buffaloes within ten miles of Wichita, Southeastern Kansas. Leman's busiest years, 1835 to 1880, nearly cover this second period. His rifles were used by innumerable plainsmen and cowboys, when the market on buffalo robes was at its height, and were singularly the favorite weapons of the Western Indians.

Frank R. Diffenderffer, always a close observer as well as an accurate historian, notes this: "Between 1857 and 1870 I was engaged in trades over the West and Southwest, making trips across the plains from Missouri to Mexico, and also from the Gulf of Mexico into Arizona. During that time it was my fortune to meet many tribes of Indians,—Apaches, Navajos, Comanches, Cheyennes, Kaws and Arapahoes, and most of them carried guns as well as bows and arrows. When occasion offered, I took pains to look at the names of the makers stamped on the weapons. By far the largest number were Leman rifles, and inquiry always revealed the preference of these Indians for the Lancaster-made guns over all others. It was possible to barter with the Indians for almost any of their possessions, but never for a Leman rifle."

The efficiency and value of these fine rifles had been recognized in the far West long before the rush started toward Sutter's gold in 1849, though this mad stampede did much to scatter them over the Pacific states.

Lingering evidence of the great use of Leman rifles during fifty years of the last century still comes to Lancaster. Not infrequently letters come in from wide-ranged points inquiring about old rifles marked "H. E. Leman, Lancaster, Pa." One was found on the Kildeer Mountain battlefield, near Gladstone, North Dakota, where there had been a fight between General Sully's cavalry and Sioux Indians in 1862. The writer of this letter says, "The lock is flintlock and of most superior workmanship, as is also the barrel, the latter having been so well blued, bronzed or otherwise treated as to preclude rusting to a great extent."

Another was found near Akron, Colorado, where, about 1860, there had been a skirmish between United States troops and Indians. This also was a flintlock "of a calibre about .55."

From Southern Saskatchewan there came an inquiry about a Leman rifle, parts of which had been found there.

And there was one of peculiar interest, which was found hidden in a crevice in the mountains of northern Mexico. This rifle, which on account of the arid climate of the region, was picked up, after fifty or seventy-five years of exposure, in nearly perfect condition, evidently belonged to a bandit who was proud of his record. The desperado seems to have driven a brass tack into the maple stock for each man he had shot, and there were seventeen tacks in the woodwork and a few holes where some of them had been lost. This descriptive letter came from B. E. Norvell, of Houston, Texas.

Among the thousands of these excellent rifles still scattered over North America, treasured as family heirlooms and in collections of fire-arms, the writer inherited probably the finest. At least Captain Dillin, upon inspecting it, told him that "it is the most beautifully made and best preserved example of the rifles of its period that he has ever seen."

In mentioning this superb Leman rifle, which the writer hopes will never leave the county where its maker became famous, the author takes this means of qualifying to write on his subject, and also of adding a few facts of historical interest.

The writer was born in the Beck Family School at Lititz, which was conducted by his father, Abraham R. Beck (1833-1928) from 1865 until 1895. The school succeeded John Beck's Academy of Lititz, in which more than twenty-two hundred boys and young men were educated between 1815 and 1865.* Now one of the major pastimes in the Beck Family School was rifle shooting. It came down to the institution from Lancaster County's famous gunsmith, William Henry, of Revolutionary days; for Granville Henry, of the fourth generation of gunsmiths, who conducted a factory at Boulton, was a close and life-long friend of Abraham R. Beck and not only stimulated in him an interest in fire-arms, but kept him

* See "John Beck: The Eminent Teacher," by Simon P. Eby. Vol. II, p. 111.

supplied with guns. The first shotgun the writer used afield, as a small boy, was a single-barrel muzzle loader, made by Granville Henry.

In the Beck Family School there were always rifle matches, often at suspended oranges, on rainy, free afternoons. The writer started pulling the trigger of a Flobert breech loader when he was six years old, and by the time he was nine he had shot his first game bird, a sandpiper on a mud bank, with a rifle. Since then he has spent many thrilling hours afield in upland small game and waterfowl hunting, and has used many kinds of rifles and shot-guns. In further explanation, he has always valued the game he has brought to the table, and of late years he has taken an active part, as a conservationist, in the necessary effort to save some of our best game birds, especially the wild fowl, from the extinction with which the enormously increased number of hunters threatens them.*

In the early spring of 1873, the Beck Family School received an application from Henry E. Leman to enter his son, James. Abraham Beck had never taken into his school a boy under eight years of age, and James was only seven. However, this application seemed worthy of special consideration. Henry Leman was a prominent citizen of a nearby town; he had just lost his wife and the young, motherless boy needed attention. So Mr. Beck made an exception and took the boy into his school. In return for this, Mr. Leman presented Mr. Beck with a rifle, especially made for its purpose; and it was the finest piece his shop could make, everything about it reflecting the deep appreciation of a master craftsman for an act of kindness toward him.

This rifle is still in perfect condition. Such good care was always taken of the Leman rifle that it looks to-day as if it had come from the factory only yesterday. The piece is about .30

* In 1935 there were more than 7,000,000 licensed shotguns in the United States.

calibre. Its total length is 51½ inches. Its octagonal barrel, which is 36 inches, was so carefully bronzed with aqua fortis,* that it has been rustproof for sixty-three years. Its stock, made of carefully selected curly maple, and having a cheek plate, is beautifully turned, finished and varnished, and is to-day without a scratch. Its decorated buttplate and escutcheons are silver; the trigger guard and patch box German silver. At the nipple, around the barrel, there are two insets, one of silver the other of gold. The front sight is silver.† There is a hair trigger, which is genuinely delicate to the touch. Above the trigger is a silver gift plate, "Jas. C. Leman to A. R. Beck, Esq." The firing voice of this rifle has a sweet, sonorous quality to it. Among the happy memories of the writer's boyhood days were the ringing shots of the Leman rifle. However, even these memories were scattered and infrequent, for the inconvenience of muzzle loading a rifle, when there were fifteen boys anxiously waiting their turns to shoot, and there were several quicker loading cartridge guns at hand, soon sent the always honored Leman rifle into the museum. Here, and in similar well-guarded places, it has rested, always treasured as the masterpiece of Lancaster's nationally famous rifle-maker, Henry E. Leman.

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Henry E. Leman was married in 1851 to Anna DuBois, of Newburgh, New York. They had five children, of which three, Henry E., Jr., Adelia and James C., are still living. During his last years he lived at 427 North Duke Street. Here he died on May 12th, 1887, in his seventy-sixth year.

And again Fate ordered something of her own curious pattern. Henry E. Leman, distinguished riflemaker, was buried in the Lancaster Cemetery near the grave of our General John F. Reynolds, who had been killed at Gettysburg by a rifle ball.

* James Leman said this, nitric acid, was used on the barrels.

† James Leman says these sights were cut from silver dollars.