Andrew Burgess
Gun Designer
1867-1906

By

Elmer Burgess
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Andrew Burgess,

This strange, mysterious man, on today – some of his famed

ANDREW Burgess was awarded 599 patents for magazine firearms. More magazine firearms were made from Burgess patents, or improvements on his patents, than from those of any other American or European designer.[1] To this day, the Marlin Firearms Company of New Haven use Burgess patents, and the Hepburn improvements of Burgess patents, in their famous 22 and high power lever action models. Marlin has not made a rifle, other than bolt action and semi-automatic models, that doesn't use one or more Burgess patents or principles. This great firearms company established an empire in the lever action field, based on their 1881 model, and the improved models by Hepburn, which are primarily Burgess bolt lock return patents.

But this is getting ahead of the story. Let's go back to 1855, when the Burgess saga begins.

That year Andrew and his brother William joined one Mathew Brady as photographic apprentices,[2] a strange occupation for a man who would be busy designing firearms some 20 years later. At this time Brady's eyesight was beginning to fail (his thick lenses were usually blue from the silver salts used to coat the wet plates) and he knew that soon or late he would be unable to take pictures himself. He wanted young intelligent men, with good sharp eyes, to take over for him.

It is not too strange, though, that the Burgess boys went to work for Brady; the Brady and Burgess family farms lay next to each other at Dresden, New York.

When 1858 rolled around Brady's eyes were so bad that he rarely was seen behind the camera. By 1860 both Burgess brothers had become journeymen photographers and, by the time Fort Sumter was fired upon and the armies of the North and the South became engaged in the great Civil War, Mathew Brady had gathered together the greatest photographers of the time — Andrew Burgess, William Burgess, James Gardner, Alexander Gardner, J. F. Coonley, C. N. Barnard, and Tim O'Sullivan.

For the first two years of the war, while Brady's other men photographed the course of war with the western armies and the Army of the Potomac, Coonley, Barnard and the Burgesses helped Brady run the New York and Washington galleries, as well as journeying into the battlefield. While it is true that Brady did direct most of that photography, he himself took relatively few of the Civil War pictures.

In 1863, after the Gardners quit Brady, to set up their own business, Andrew Burgess became Brady's partner.[3] William Burgess joined the Mormon Church and went west.[4] One of the most famous pictures of President Lincoln, made on February 9, 1864, is reproduced on a five-dollar bill. This was taken in Brady's Washington gallery, as was the almost as well known picture of Tad and Lincoln. Both were made by Andrew Burgess, for at this time Brady was in the field with C. N. Barnard.

With the prospect of war developing in Mexico between Juarez and the Archduke Maximilian of Austria, Brady and Burgess felt impelled to record the coming

Gun Inventor

a genius of gun design, lives patents are still being used.

by ELMER BURGESS and LYNN T. WAKELING

troubles. In the latter part of 1864 Andrew Burgess left for Mexico, photographing the devastation of the southern states as he traveled southward. In Mexico City Andrew set up shop and is known to have taken at least five of the six pictures of Maximilian and Carlotta. Of these pictures only one survives, so far as is known, and that picture is in the Library of Congress.

Burgess furnished the United States government with photographic proofs of the French occupation and, after the defeat of Maximilian, the re-entry of the Juarez government. These wet-plate pictures, along with many more Burgess-Brady plates, were acquired by the federal government in 1876, but because of improper storage a great many were lost through flooding and breakage. Andrew returned to the United States in 1867, deeming the Mexican business a failure, and resumed his partnership in the Brady Galleries.

In 1870 the U. S. Naval Observatory sent a team of scientists to Sicily to observe the solar eclipse. Because of his fame as a photographer, Andrew Burgess was chosen to accompany the expedition.

Reaching Sicily in December of 1870, the group set up their equipment near Syracuse. Burgess contracted a fever almost immediately but, though seriously ill for two weeks, recovered enough to coat the wet plates and get the rest of the photographic equipment ready for the eclipse of the sun on December 22.

Because of his health, Burgess remained in Syracuse for a time after the rest of the expedition went back to the United States. Later he traveled extensively in Europe.

At this time the Franco-Prussian War was going on and Andrew doubtless visited the fighting areas, perhaps also recording them with his camera.

In Dresden (Prussia) he talked with distant relatives about his grandfather, who had been born there. Conscripted into the Prussian army in 1776, John Burgus (the spelling of the family name at that time) was placed among the Hessian troops hired by the British and sent to the colonies. Deserting almost as soon as he set foot ashore, Andrew's grandfather joined Washington's army — here he was free to exercise his political belief, to talk without fear of persecution or reprisal.[5]

Opposite page — The grip-operated Burgess pump gun, here seen in its hinged, riot gun form.

Left — Andrew Burgess about 1865.

Right — The Burgess riot gun folded for carrying concealed or in its special holster.

Few men, if any, contributed more to the world of shooting — and to collecting, now — than Andrew Burgess. Hunters and riflemen owe a debt to this great inventor, more so than most of them realize, for even today Burgess's basic patents and ideas are used in a variety of guns.

Little is actually known of Andrew's early years, as a photographer, for the name of Mathew Brady overshadows every other photographer of the era. Few people realize the diversified fields that Burgess entered into, and the facts are hard to come by. Little by little the data are emerging, though, and someday we'll have the truth. We hear of a bit of information and try to get the facts documented; in some cases it can't be done, for the records are locked up in Washington. In this category is the trip to Mexico during the 1865 Mexican revolution, and the trips to Cuba prior to the Spanish-American War.

The easiest job was the search of the patent records and the countless enjoyable hours spent in doing so. We hope that the reader gets as much pleasure from the article as we did in putting it together.

During his travels in Europe Andrew stopped at many of the armories and talked to the designers there, men whose skills and abilities were becoming more interesting to him with each passing day. During the preceding ten years Andrew had witnessed three wars, wars that were fought, in the main, by soldiers ill-equipped to give battle.

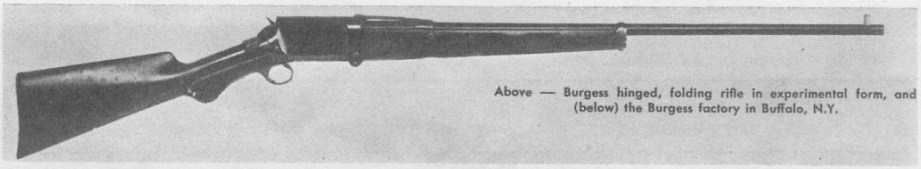
The increased firepower of the breechloader over the muzzle-loaders had been decisively shown in the Civil War and in the Franco-Prussian War, where the Germans used the Dreyse-actioned weapon against the French. Burgess, however, was thinking ahead — let the European gun designers concern themselves with breechloading mechanisms as such. Andrew's interest lay in magazine firearms, for even greater firepower.

When Andrew returned to the United States in April of 1871, he went to work designing an improvement of both the Werndl and the Peabody rifles. He felt these two weapons were probably the best available; they were the strongest, with straight line locking, needing only some slight improvement and a magazine. His first patent, 119,115, an improvement on the Peabody rifle, was issued September 19, 1871. This was for a side-mounted magazine. Andrew's second patent, 119,218, improved the Werndl rifle in the same manner.

Andrew's patents, from his first to his last, were all for magazine firearms; 599 patents were for lever-pump- and bolt action magazine arms, 295 patents were for recoil- and gas-operated arms. Some of Andrew's later designs, like patent 663,954, involve drum magazines like those in the 1928 Thompson; others, especially for his automatic rifles, use magazine followers similar to those of the MI Garand. (See Burgess patent 715,971.)

In September, 1871, Andrew Burgess and Eudora Tiffany were married. Eudora's grandfather, Charles Lewis Tiffany, had founded the Tiffany Jewelry firm of New York; her father, Austin Tiffany, was a partner in the firm and would from time to time sign patent papers for Andrew and help him in his patent fights. The Burgesses moved from Lake George to Owego, New York. Andrew continued as Brady's partner, but he also set up a workshop at Owego and hired two machinists, T.B. Mosher and Alexander F. Roberts, to work on his patent models and the arms using his patents.

July 16, 1872, patent 129,523 for a lever action arm was issued to Andrew Burgess, first of many lever action patents. One of the most inter-

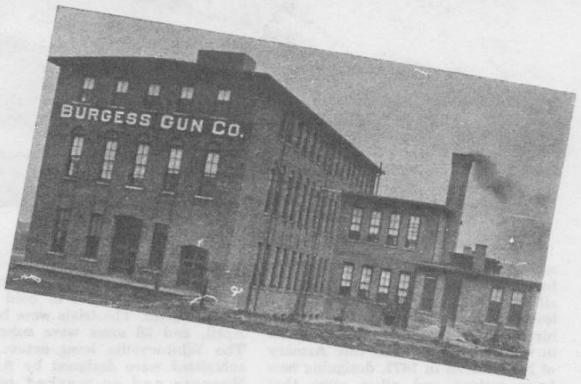


Above — Burgess hinged, folding rifle in experimental form, and (below) the Burgess factory in Buffalo, N.Y.

esting things about this design is the fact that the lever and the bolt are one piece, and lock against the rear of the receiver. Almost all of the Burgess patents utilize this feature of locking against the rear of the receiver frame. One other thing of note is that most Burgess-designed arms, produced with power tools, were made with less effort than other arms.

On January 7, 1873, Burgess was issued patent 134,589. This was Andrew's most promising patent to date, for in the years to come elements of this design would be found not only in the arms Andrew made in Owego, but in the Whitneyville-Burgess guns also, in the G.W. Morse and Kennedy lever actions, in the Colt-Burgess arms and in the Marlin Model 1881.

Mathew Brady, meanwhile, was having financial problems because of the credit extended to him during the

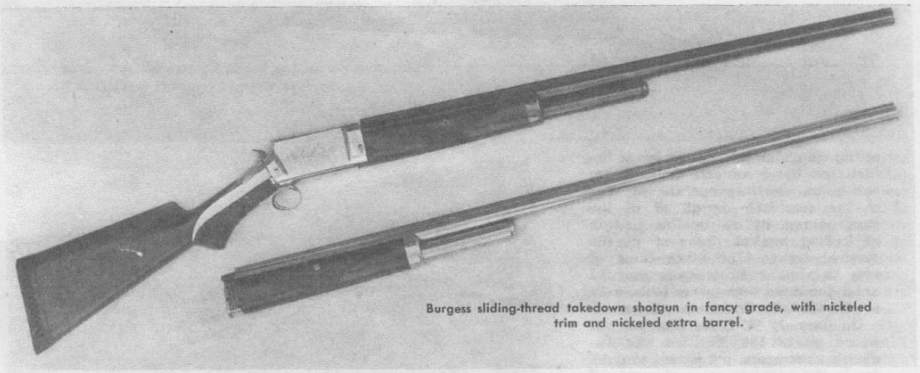


Left — Charles Dammon demonstrating rapidity of fire of a Burgess shotgun. Note ejected shell case above action; in the original photograph six cases are shown in the air.

Opposite page — The Burgess "folding gun" in short barrel form, as offered in a Burgess catalog of about 1896.

Civil War. To insure that Brady would not lose his half of the business at 627 Pennsylvania Avenue, Andrew bought out Brady in 1874.[6] The gallery still ran under the Brady name, but the pictures were marked "Burgess, late Brady and Co." Andrew and Brady continued as partners while Brady tried to regain some of his Civil War losses from Congress. In 1875, Congressman Butler and General Garfield, speaking on behalf of Brady, at last induced the government to pay Brady $25,000 for his wartime work. The 43rd Congress paid Mathew Brady that amount for plates valued at $150,000.

In the Owego workshop Andrew was busy turning out experimental and limited production firearms. Prior to turning the business back to Brady in 1876, Andrew was issued patent 168,966 on October 19, 1875, an improvement on both of his earlier lever action patents. Andrew then combined this design and his January 7, 1873 patent to produce various arms for the coming Philadelphia Centennial Exposition of 1876; three different models are known to have been displayed there. These were a lever action based on his 1872 patent, 129,523; a reverse trapdoor model based on patents 168,829 and 169,083, and a lever action derived from patents 134,589 and 168,966. Hotchkiss, at the same exposition, displayed his French-made bolt action single shot rifle, patent 169,641. Both Andrew's lever action and Hotchkiss' bolt action were destined to make history in the firearms field. Winchester, looking for an



Burgess sliding-thread takedown shotgun in fancy grade, with nickeled trim and nickeled extra barrel.

arm that would accept the 45-70 military cartridge, adopted the Hotchkiss rifle. Eli Whitney, looking for a good lever action to round out his line, hired Andrew Burgess. Andrew went to work at the Whitneyville Armory of New Haven in 1877, designing new lever actions and other guns that Whitney thought desirable.

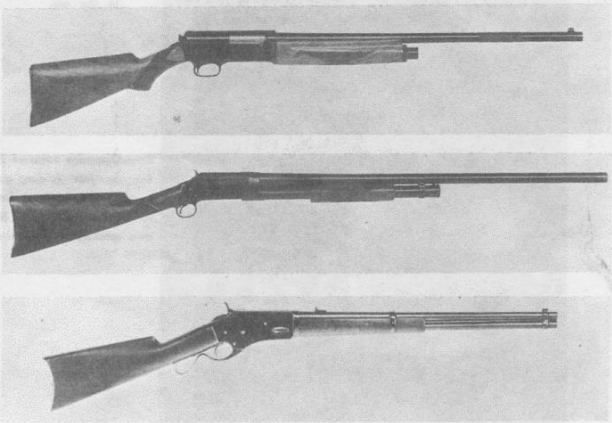
Patent Troubles

Early in 1878 Burgess and W. W. Wetmore became entangled in an infringement fight.[7] William Bartlett, brother of Brad Bartlett, was the patent examiner and, at the first hearing, because of the statements of Eli Whitney, Frank Tiesing and Samuel Kennedy, the patent was awarded Burgess. Whitney, Tiesing and Kennedy testified that Burgess, after Whitney had asked him what kind of bolt action arm he was working on, had furnished drawings in December, 1876, or January, 1877, for a bolt action arm of the Russian (Colt) or German (Mauser) type with a magazine in the forestock. They also swore that they had made arms using his patent application without Andrew's consent or knowledge, prior to his patent application.* W. W. Wetmore, employed by Winchester at this time, filed an appeal. At the appeal hearing the Commissioner of Patents reversed the prior ruling. He said that unless Burgess actually had made an arm, or had had one made under his direction, using the contested part, then all of the testimony of Whitney, Tiesing, and Kennedy concerning their improvements on the Burgess drawings did not help Burgess, but could be used by Burgess as evidence against them.

In the same year, 1878, the U.S. Army was authorized to hold trials for new arms. The trials were held in April, and 28 arms were submitted. The Whitneyville lever action rifles submitted were designed by Andrew Burgess and so marked on the tang, yet on the barrel they bore this marking: "G. W. MORSE — Pat'd Oct. 28, 1856." The George Woodward Morse patent of that date, 15,995, is for a percussion cartridge arm with a two-piece bolt, with a protrusion on the face of the bolt extending into the rear of the chamber, thus sealing the cartridge off to make the barrel gas- and water tight. Morse had made arms during the Civil War for the State Rifle Works at Greenville, S.C., during 1863-64. In 1875 Morse had lost an infringement suit against the United States government. He had claimed that the trapdoor Springfield was an infringement of his design and had asked for $5.00 for every one made since 1865. Morse lost the fight for two reasons: he had made arms under his patent for the Confederacy, and it was felt that his patent lacked sufficient value to warrant an extension.

In 1878 Morse filed an appeal, and at the same time asked Whitney to apply his 1856 patent to the Whitney arms that were to be submitted in the coming April government trials. Morse and Whitney made an agreement wherein Morse contracted for 2000 arms to be made using the bolt protrusion of the Morse patent; Whitney then applied the Morse patent to the Burgess rifle then in production. (The lowest serial number

Three guns which incorporated Burgess design or patent features — top, Winchester Model 11 autoloading shotgun; next, Winchester Model 1897 slide action smoothbore and, last, the Whitney-Kennedy carbine (also made in rifle style).



*This was the first inkling that Andrew had concerning the men at Whitneyville Armory and their efforts to improve his patents to such a point that he would receive less and less royalties. An inevitability, perhaps, in the patent and design field, but Burgess may well have wondered why he wasn't told about these "improvements." The same thing would happen again and again, of course.

500, the highest 1546.) At the same time Winchester approached Burgess and made royalty arrangements for his June 25, 1872 patent 128,208 for a magazine feed in the stock. This date appears on all the Hotchkiss bolt action rifles produced by Winchester. Of all the leading arms submitted to the April, 1878, trials the two most favored were the Hotchkiss bolt action and the Whitney-G.W. Morse. The government bought 100 Hotchkiss rifles. Had the government bought any of the Whitney arms, G.W. Morse would have won his appeal then, but they did not. Winchester made the Hotchkiss rifles and carbines from 1878 to 1899, but did not succeed in getting the design adopted by the Army.

Whitney-Burgess Designs

From 1879 to 1887 Whitney entered three Burgess arms into the competitive field. The first of these was the Burgess-Morse lever action mentioned above, made in 45-70 caliber only, and in sporting, military and carbine models. The second was the same gun but with the Kennedy carrier (U.S. patent 215,227), which used all of the handgun cartridges such as 44-40, etc., and the shorter rifle cartridges like the 45-75, etc.

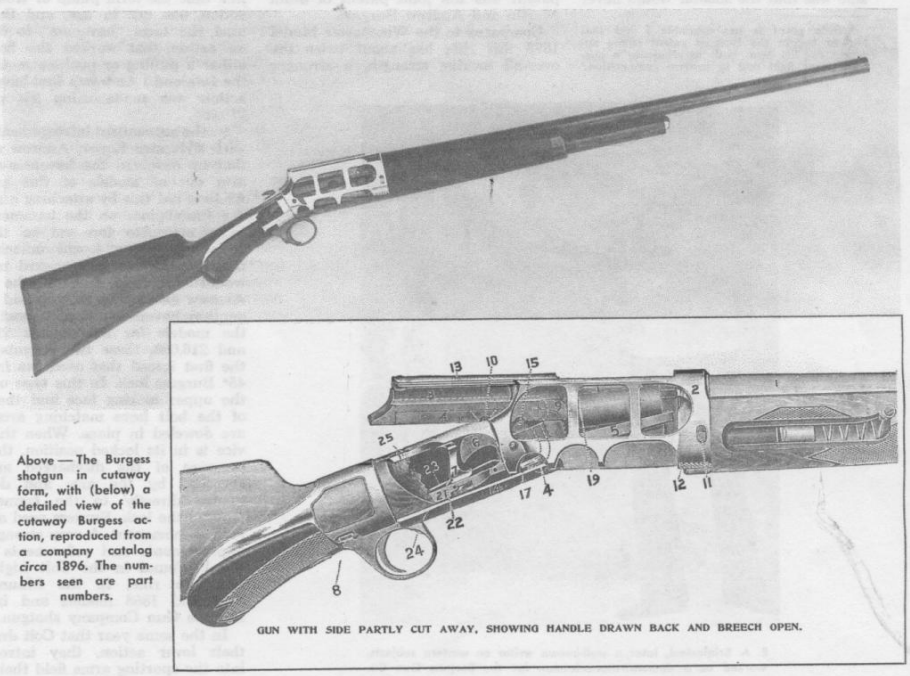
Out of the court fight with Wetmore, Andrew emerged with two new desirable patents: the first, 210,182, issued November 26, 1878, was for a bolt action arm with a magazine in the stock where the cartridges were manually moved up a ramp and into the chamber; the second, 217,987 of July 29, 1879, was for a bolt action arm of the Russian (Colt) and German (Mauser) types with a magazine under the barrel. Both of these patents in the next five years were to see service in military arms. Andrew Burgess was the first inventor to successfully combine the tube magazine and the bolt action into a usable arm.

First to manufacture an arm of this type was Steyr in Austria, the rifle the earliest Mannlicher bolt action, made in 1880. The first of many Mannlicher arms to be made by Steyr, the Mannlicher drawings and the Burgess patent papers bear a strong resemblance.

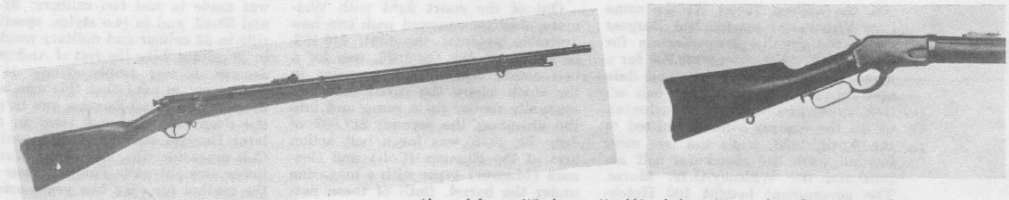
The last arm Whitneyville introduced before Winchester bought them out in 1889 was the 1886 Whitney-Burgess lever action; the patents used were those of January 7, 1873, (134,589); October 19, 1875 (168,966); December 7, 1880 (235,204), and December 18, 1883 (290,393). The arm was made in just two calibers: 32-20 and 38-40, and in two styles; sporting rifle in 32 caliber and military musket in 38 caliber. Like the rest of Andrew's designs, it was amply strong. It is interesting to note that this arm was the first actual all-Burgess gun to use the drop lock that was used in the later Burgess shotgun, in the earlier Colt magazine rifle, and in the Mannlicher straight pull. This arm was on the market for only two years before Winchester removed it.

In 1880 John Marlin asked Burgess to design a lever action for the Marlin company. Andrew already had five patents that he felt were usable, two of which (210,091 and 210,181 of November 19 and 26, 1878) he favored most. Burgess was not, however, happy with the carrier design, so Marlin and Burgess redesigned it and applied for a joint patent. This patent was issued December 13, 1881 as 250,825, a number which will be found on guns made from 1881 on.

There are parts of the Burgess patents used in this model 1881 that can be found in the newest Marlin lever action of today. Marlin made this rifle first in 45-70 and 40-60 Marlin, then in 1884 they made a smaller and narrower version to handle the 32-40 Ballard cartridge. In 1886 they



Above — The Burgess shotgun in cutaway form, with (below) a detailed view of the cutaway Burgess action, reproduced from a company catalog *circa* 1896. The numbers seen are part numbers.



Above left — Winchester Hotchkiss bolt action musket, first type, with one-piece stock. Center — Whitney-Burgess lever action musket. Right —

brought it out in the famous 38-55 Ballard cartridge. The Marlin Firearms Company established their lever action empire using this gun and the later Hepburn improvements.

Peter Paul Mauser, in the latter part of 1880, constructed a bolt action rifle with a tube magazine in the fore-end based on the Burgess patent 217,987. Mauser applied for and was granted U.S. patent 249,967 in November, 1881. This arm was later a great success with the growing German Army. The main difference between these Burgess and Mauser patents is that Mauser incorporated a magazine cutoff.*

The same year Josef Schulhof of Vienna bought Burgess patent 210,182 for his mechanized stock feed. Schulhof's theory in utilizing the box magazine was that the shooter would never have an empty rifle. In 1881 Josef Schulhof was granted patent 267,265 for his firearm and started to manufacture them. It was not very successful, however, and was soon dropped from the competitive arms field.

In 1882 Colt decided to re-enter the long arms field and sought out Andrew Burgess to design a lever action for them. The lever action model that Andrew submitted and that Colt approved of was the improved Whitney-Burgess design with a solid link at top, rather than the split link lock. This gun used six patents of Andrew Burgess: those of January 7, 1873 (134,589); October 19, 1875 (168,966); April 1, 1879 (213,865); December 7, 1880 (235,204); December 13, 1881, (250,825) and January 3, 1882 (251,694). The December 13, 1881, patent was the joint patent of John Marlin and Andrew Burgess.

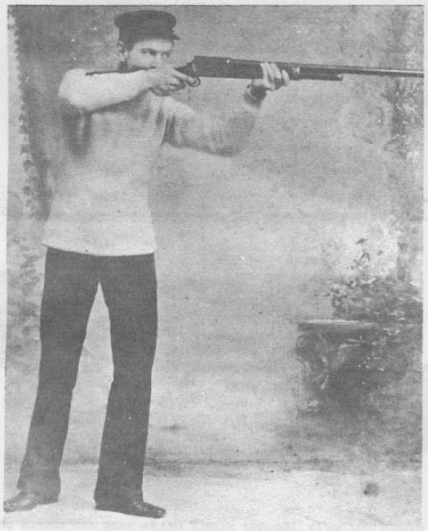
Compared to the Winchester Model 1873 this rifle has about twice the over-all locking strength, a stronger design, a more sturdy bolt and a stronger bolt lock. In November, 1883, Colt released the new lever action in carbine and three rifle models. Winchester, recognizing the threat to their 1873 model, with its inherent weakness, bought Burgess's improvement on their 1873 model (patent 290,848 of December 25, 1883). Armed with the Burgess patent, which was also an improvement on the Colt arm, plus having fine handguns ready to be made designed by Borchardt, Winchester was able to persuade Colt to drop the lever action from their line of arms in 1884. There were only 6403 of these Colts made, of which the rarest is the half-round, half-octagonal barreled rifle.

Andrew was at this time working on pump or "haveness" action. (At this time the term pump or trombone action was not in use, and Burgess used the term "haveness" to denote an action that worked the bolt by either a pulling or pushing motion of the fore-end.) Andrew's first haveness-action was made using his patent 210,091.

In the subsequent infringement fight with Sylvester Roper, Andrew stated that he devolved the haveness-action arm out of models of this patent. Andrew did this by attaching a rod to the thumbpiece on the hammer and to a moveable fore-end so that a rearward motion would unlock, extract and eject; the forward motion would load, close, and lock the arm.[a] Andrew also stated that he had made another haveness-action derived from the models for his patents 213,866 and 216,080, these two patents were the first issued that used the famous 45° Burgess lock. In this type of lock the upper locking face and the rear of the bolt have matching arcs and are doweled in place. When this device is in its locked position, the full pressure of the discharged arm is absorbed by the arcs and dowels, thence directly to the frame. To operate the lock, Burgess used a pull-foward movement. A very strong lock, improvements and refinements of it can be found in the Colt Lightning magazine rifle, in the Mannlicher 1886 and 1888 models and in the Burgess Gun Company shotgun.

In the same year that Colt dropped their lever action, they introduced into the sporting arms field their new

*While proof is not available I feel that Mauser bought the Burgess patent before applying for his own, both to eliminate a possible court fight and to prevent competition.



E. A. Brininstool, later a well-known writer on western subjects, worked as a demonstrator-salesman for the Burgess Gun Co.

The third type of Hotchkiss, made with two-piece stock. Each of these guns pays tribute to the design ability of Andrew Burgess.

Lightning magazine rifles. Designed by W.H. Elliot, these were made using his patents 278,324 of May 29, 1883 and 285,020 of September 18, 1883, and at the same time were the first production rifles to use the Burgess 45° drop lock — though exactly opposite the Burgess usage. The main difference in the two patents is in the lock location; in the Elliot gun the lock is on the floorplate, with two screws retaining it, while in the Burgess patents and the later guns, the locking surface is the rear of the receiver. Colt produced this arm from 1884 until 1903 in all of the popular calibers.

By 1884 the European armies were armed with repeating rifles. The Prussians were using the 71/84 Mauser, the Austrian-Hungarian empire was using the Werndl rifle, the Mannlicher rifle and the Schulhof rifle.

Despite these developments of the magazine rifle in various forms, our government still clung to the trapdoor Springfield.

Sylvester H. Roper, the partner of Christopher M. Spencer of Civil War repeating rifle fame, applied for a patent in August, 1883. This patent was an improvement on his earlier patent of April 4, 1882, 255,894. At the time of this Roper application Andrew Burgess filed a claim of infringement. Testimony taken established that Andrew Burgess had priority on the pump- or haveness-action, wherein the action is worked by a single bar connecting the fore-end and action; that Burgess had made haveness-actions from patents 210,091, 213,866, 216,080, and 289,792; that he had also made haveness-arms from the Colt-Burgess design and had put them up for sale at Owego, New York.[8] The outcome of Burgess's suit was decided before it started, really, for the *earlier* Roper patents used the same type of pump action. Andrew, who lost the case on this one point, might well have won the suit had he filed an infringement suit on the earlier Roper and Spencer patents. It is interesting to note that when Francis Bannerman took over the Spencer shotgun and brought an infringement suit against Winchester (Bannerman vs Stanford), citing their 90 and 93 model shotguns, he could have saved himself a lot of money if he had known about this case.

In 1885 Ritter Von Mannlicher contracted under a royalty basis with Andrew for his 45° drop lock patents 213,866 of April 1, 1879; 216,080 of June 3, 1879 and 290,393, issued December 18, 1883. These patents and the improved bolt action by Mannlicher were introduced into the Austrian Army in 1886. This arm uses a straight pull bolt with a cam that actuates the 45° drop lock. It is 11mm Mannlicher caliber and a vast improvement on the old Werndl 11mm cartridge. The old cartridge had a muzzle velocity of 1470 fps while the new cartridge had a velocity of 1700 fps. This arm was used by the Austrian Army until the new model in 8mm was produced in 1888. The model 1888 saw action in the first World War.

Burgess and Marlin

By this time John Marlin had hired a designer named Lewis Hepburn. Hepburn started to improve the Burgess-design lever action that Marlin was making. The first improvement was patented December 7, 1886, the second on October 11, 1887; both incorporate the Burgess bolt return. These were first used in the 1888 Marlin, made in rifle style only. The M1888 filled a gap in their sporting line, for up to this time they had not made a magazine sporting rifle for the popular handgun cartridges. Marlin made the 1888 for only a year, producing about 6000 of these top ejector arms.[9]

In 1889 Marlin brought out their second Hepburn improvement, the 1889 carbine. This, like the 1888 type, was made for the handgun cartridges, but it was the first of their famous side ejection safety models. The M1889, like the rest of the famous Marlin firearms to follow, were designed by Hepburn. He did not, however, use a single new idea (other than his lock block for the high power rifles and his side ejection system) that weren't first invented by and patented by Andrew Burgess. Burgess, Hepburn and Marlin were truly the guiding geniuses responsible for the vast empire that the Marlin Firearms Company has built and held to this day.

Andrew Burgess was a great basic idea man; Hepburn was a designer and detailer who would rework and redesign until he had a functioning arm; John Marlin, a combination of both Burgess and Hepburn, had an additional ability — he was a businessman without equal.

In 1891 Marlin produced their first 22 lever action, a solid-frame model that used the Burgess lock found in the 1881 Marlin. This 22, designed by Hepburn with his characteristic side ejection, was made also in 32 rimfire. The 1892 model, brought out the following year, used the same solid frame and Burgess lock. Made in 22 and 32 rimfire as well as 32 centerfire, it used the novel interchangeable firing pins for the two 32 calibers.

Winchester, in 1888, bought out the Whitneyville Armory, gained control of the patents and removed the arms from the competitive field. The most important of these was the Burgess 45-70 lever action, the first successful lever action capable of handling the government cartridge. It was in direct competition with the new 1886 Winchester and was cutting into its sales. Earlier, Winchester had seemingly forced Colt to drop their Burgess rifle and now the only source of revenue that Andrew had coming in was from Marlin.

Winchester was also planning to release a new pump action shotgun designed by John M. Browning. This, the model 1893, used an improved Burgess 45° lock, similar to the lock used in the 1881 Marlin lever action, but combining the carrier and the lock.

The Burgess Gun Co.

It was at this time, when Andrew's financial future looked the darkest, that he organized the Burgess Gun Company of Buffalo, New York. The ground was purchased, buildings completed and manufacturing started by 1893.[10] The first arm made, a 12-gauge shotgun (see the catalog illustrations), was semi-automatic in the best sense of the word. To load, the moveable pistol grip was carried back, then forward; on firing, at the instant of maximum recoil an enertia lock unlocked and the residual pressure in the chamber opened the action and ejected the empty. The shooter had only to slide the grip forward, loading a fresh round and it was ready to fire again. Made in several grades, the Burgess grip-action gun could be had

with very fancy engraving and special wood down to plain models with American walnut stocks. All were available with a choice of chokes and extra barrels. The chokes, even today, show exceptional quality and hold very close patterns at 40 and 50 yards.

It was the custom of that day for the gun companies to hire shooters to demonstrate their products; Andrew sought out the best shots of the day, Brad Bartlett and Charles (Left

Hand Charlie) Dammon. Both had been friends of the Burgesses for years.[11] Brad Bartlett and his brother William had witnessed patent papers for Andrew, and William Bartlett was Andrew's lawyer in Washington, D.C. Charlie Dammon lived in the area and had gone hunting with Andrew from time to time. A great deal of the earlier success of the company rests with these two men and the methods they used to show off the guns. One of their favorite stunts demonstrated the speed and operating ease of the trap guns; in this, an assistant sent six clays up at once, and all six were dusted before they hit the ground. Another was to work the action so fast that all six shells were in the air at one time. It was Charlie Dammon who, in 1895, walked into Theodore Roosevelt's office, when he was the president of the police board of New York City, and blasted off six blank cartridges before the startled Roosevelt could utter a word. This was one of the many startling demonstrations made with the new folding riot gun — a gun that could be easily concealed beneath a coat, a gun that was designed primarily for police and messenger service, where close work needed speed and sureness. Dammon's demonstration for Roosevelt induced the New York Penal Institution to buy over 100 of the folding riot guns for their guards. In 1920 the prison system changed to a newer riot gun. Their Burgesses were sold at public auction in Canada, and a few trickled back to the United States.

Above — The Brad Bartlett family of exhibition shooters, shown with Winchester and Stevens rifles about 1895, before they went to work for the Burgess Gun Company.

Left — An early Burgess lever action rifle, made on his patent issued 19 October, 1875. From the collection of Thomas Bish.

Charles Loomis had become a partner of Andrew Burgess in 1894. Andrew would furnish the building and the barrels, while Loomis was to make the actions and furnish the machinery. The gun, a double barreled hammerless shotgun known as the Loomis, was made in small numbers from 1895 to 1899; when the Burgess Gun Company was sold they disappeared from the market. Both the Burgess Gun Company gun and the Loomis shotgun used the highest quality Damascus barrels, imported from Liege, Belgium.

Andrew and Eudora, at this period, were visiting the South on occasion, notably Havana, Cuba. Andrew, in fact, was quite fluent in Spanish. In view of the War Department having found use for Burgess's talents in the past, is it too much to imagine that he may have had a mission in Cuba? Precisely what Andrew may have done is not known, yet two years later Cuba was free.

The Burgess Gun Company in 1896 brought out a rifle having the same action as the shotgun; later versions used a smaller receiver. In 1897 Andrew introduced his famous folding rifle. Only a few of these were made; the known calibers are 30-30, 44-40, and 30-40 Burgess.

Andrew's health was failing now, with frequent recurring attacks of the Roman fever contracted during the Eclipse Expedition. Winchester, at this time, brought out their improved 1893 shotgun. Feeling the economic pinch, perhaps, of the Burgess Gun Company, they started to negotiate for the purchase of the firm from

Andrew. They had succeeded with these tactics with all but one American company using Burgess patents, and one or two others. Colt had been induced, one way or another, to abandon their lever action; then Whitneyville was purchased in 1889 by Winchester, the guns and patents withdrawn from the sporting field; in this instance three Burgess guns were shelved. Marlin and the European arms companies, at least, were economically strong enough to resist Winchester. Andrew resisted for two years but, his health failing, he knew that he would be unable to run the firm with as strong a hand as he would like. Too, by selling now he could devote more of his time to the automatics and the machine guns that he had been patenting for years. Burgess sold out to Winchester in 1899, and one of the greatest guns ever to be offered was abandoned.

The last Andrew Burgess patent was issued on June 5, 1906; this patent, No. 822,851, covers a gas-operated automatic pistol with a locked breech, and made with a folding shoulder stock.

In 1907 Marlin introduced their first trombone action 22. Though designed by Hepburn, it used the same Burgess lock found in the 1887 Whitney rifle and the Burgess shotgun. This was to be the last arm manufactured during Andrew's lifetime that used a Burgess invention.

Andrew Burgess died on December 19, 1908, quietly at his St. Augustine home in Florida. He had been seriously sick, off and on, from 1904, at which time he had entered a sanitarium.

* * *

Andrew Burgess was dead, but his ideas were not. Marlin in 1910 introduced their Models 27 and 27S in 25 rimfire, 25-20 and 32-20, using the same action as the earlier 22 trombone action Model 20. Winchester could not circumvent Browning patents for an automatic shotgun, but his patent of 1894 (520,753) for a recoil-operated magazine gun could be improved and repatented. T.C. Johnson of Winchester did this with his patents for the 1911 automatic shotgun. Johnson had designed self-loading arms for Winchester from 1900. Johnson's main improvement on the Burgess patent was the recoil spring and the method of unlocking the bolt. The lock and method of attaching the recoil rod, plus the bolt design, were duplicates of the Burgess patent. There were improvements in the carrier design and the method of unlocking the arm, yet in the Burgess and Johnson patent drawings there are many duplications.

At the same time Stevens-Savage brought out a new Browning pump action shotgun, the 520/620. The takedown system is the same as that used in the Burgess shotgun. Marlin via Hepburn, ever faithful to Burgess, in 1913 brought out a new Model 31 shotgun, using principles that Andrew invented and patented in 1872, 1873, and 1875: the two-piece bolt that hinges and locks in the rear against the receiver. This is the same action as the Whitneyville-Burgess, but pump actuated rather than lever operated.[12] The Marlin Models 32 and 38, introduced in 1914, are concealed hammer versions of the Models 20 and 27.

To this day Marlin makes guns using Burgess patents or the improved patents by Hepburn; their Models 39 and 39A use the Burgess patent of November 19, 1878 (210,091), and the earlier models were so-marked. This was the original patent issued for the 1881 Marlin lever action, a patent that has been in use for more years than the man who designed it lived.

Some of the U. S. Patents on Firearms Issued to A. Burgess of Owego, N. Y.

1871	Sept.	19	119115	
	Sept.	26	119218	
1872	June	11	127737	
	June	25	128208	
	July	16	129523	
1873	Jan.	7	134589	
1875	Oct.	19	168829	
			168966	
	Oct.	26	169083	
1878	June	18	8288	reissue
	Nov.	19	210091	
	Nov.	26	210181	
			210182	
			210294	
			210295	
1879	Apr.	1	213865	
			213866	
			213867	
			213868	
			213869	
	June	3	216080	
	July	29	217987	
	Nov.	25	222008	
1880	Mar.	2	224994	
	Dec.	7	235204	
1881	Dec.	13	250825	
			250880	
1882	Jan.	3	251694	
1883	Dec.	11	289972	
	Dec.	18	290393	
			290394	
			290529	
	Dec.	25	290848	
			290968	
1884	Aug.	12	303262	
1885	Feb.	3	10555	reissue
1886	Mar.	2	337239	
1887	Feb.	8	357458	
			357459	
			357460	
			357461	
			357462	
			357517	
			357518	
			357519	
	July	12	366558	
			366559	
			366560	
			366561	
			366562	
			366563	
			366564	
			366565	
1887	Nov.	22	373438	
1891	Aug.	25	458333	
	Nov.	17	463225	
1892	June	7	476246	
	July	5	478220	
			478221	
			478222	
1894	Mar.	27	517024	
	May	29	520559	
			520752	
			520753	
	June	12	521202	
	Aug.	21	524800	
1896	Mar.	31	557358	
			557359	
			557360	
1897	Aug.	31	589117	
			589118	
			589119	
			589120	
	Oct.	12	591525	
1899	Oct.	31	636196	
1900	Dec.	18	663954	
			663955	
			663956	
1901	Jan.	15	666084	
	Nov.	26	687448	
1902	Feb.	11	693105	
			693106	
	Dec.	16	715971	
1903	Apr.	28	726399	
1906	May	29	821921	
			821922	
	June	5	822851	

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Reference was also made to U.S. Patents granted from 1860-1880.

Notes

1 Andrew Burgess held 894 patents, 599 for magazine firearms, the rest for single shots and automatics. John M. Browning held 950 patents, the majority for automatic weapons.

2 Related by Grover Burgess, a nephew of Andrew Burgess.

3 Diary of Francis B. Carpenter, who made a portrait of Abraham Lincoln from a photograph that Andrew Burgess took in 1864.

4 Burgess family records.

5 Burgess family tree.

6 City tax records and city license department, Washington, D.C.

7 Burgess *vs.* Wetmore, Patent Office Official Gazette, Vol. 16, 1878.

8 Burgess *vs.* Roper. The fact that Andrew lost this fight does not change the vast evidence and the facts related in the trial.

9 Marlin records owned by Arthur Sherman of Sacramento, Calif.

10 County tax records of Buffalo, N.Y.

11 Mrs. Georgia Dammon McKinley, Charles Dammon's daughter.

12 Correspondence with Marlin Firearms Company and H.H. Treator.

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