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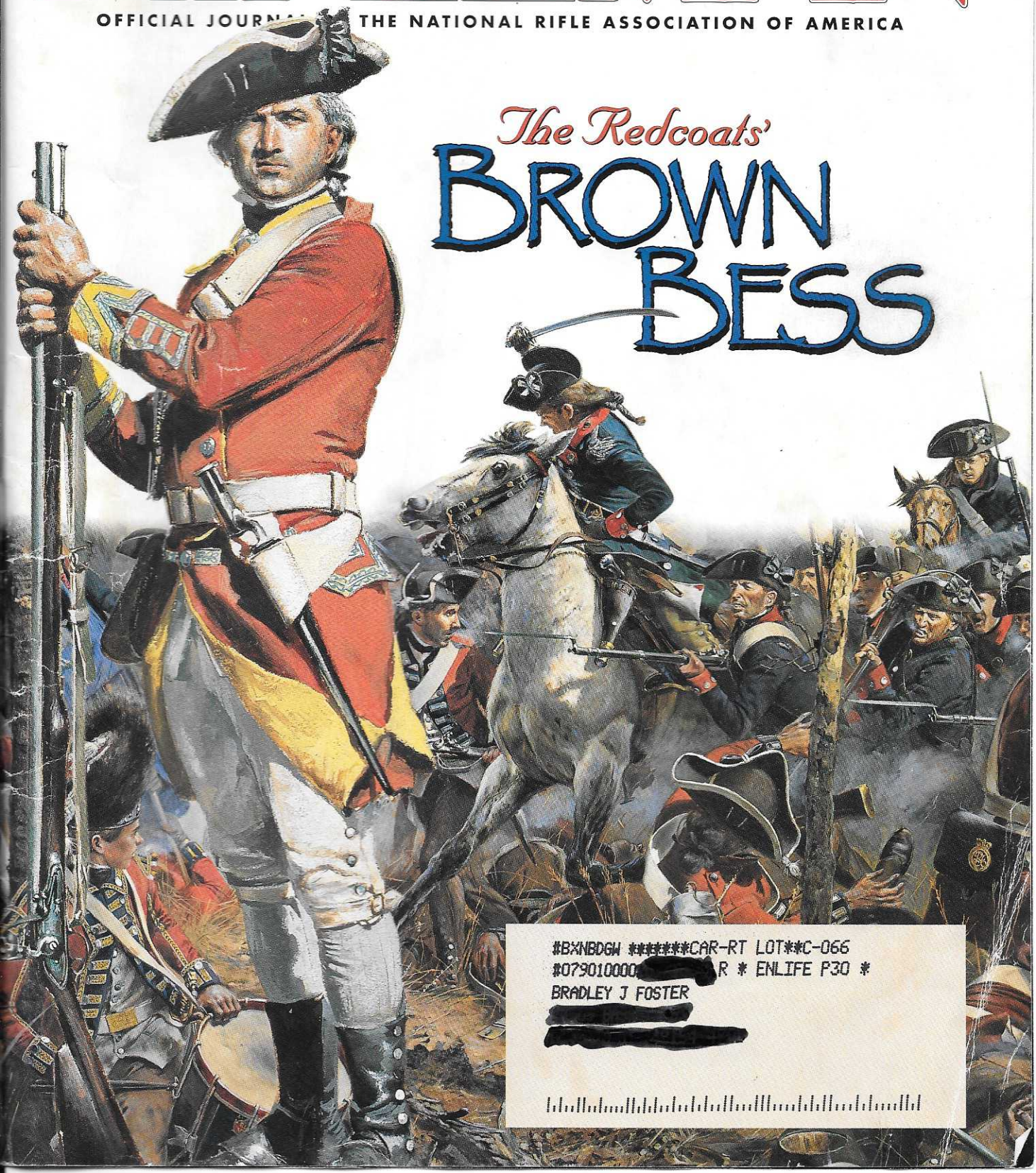

The Redcoats' BROWN BESS

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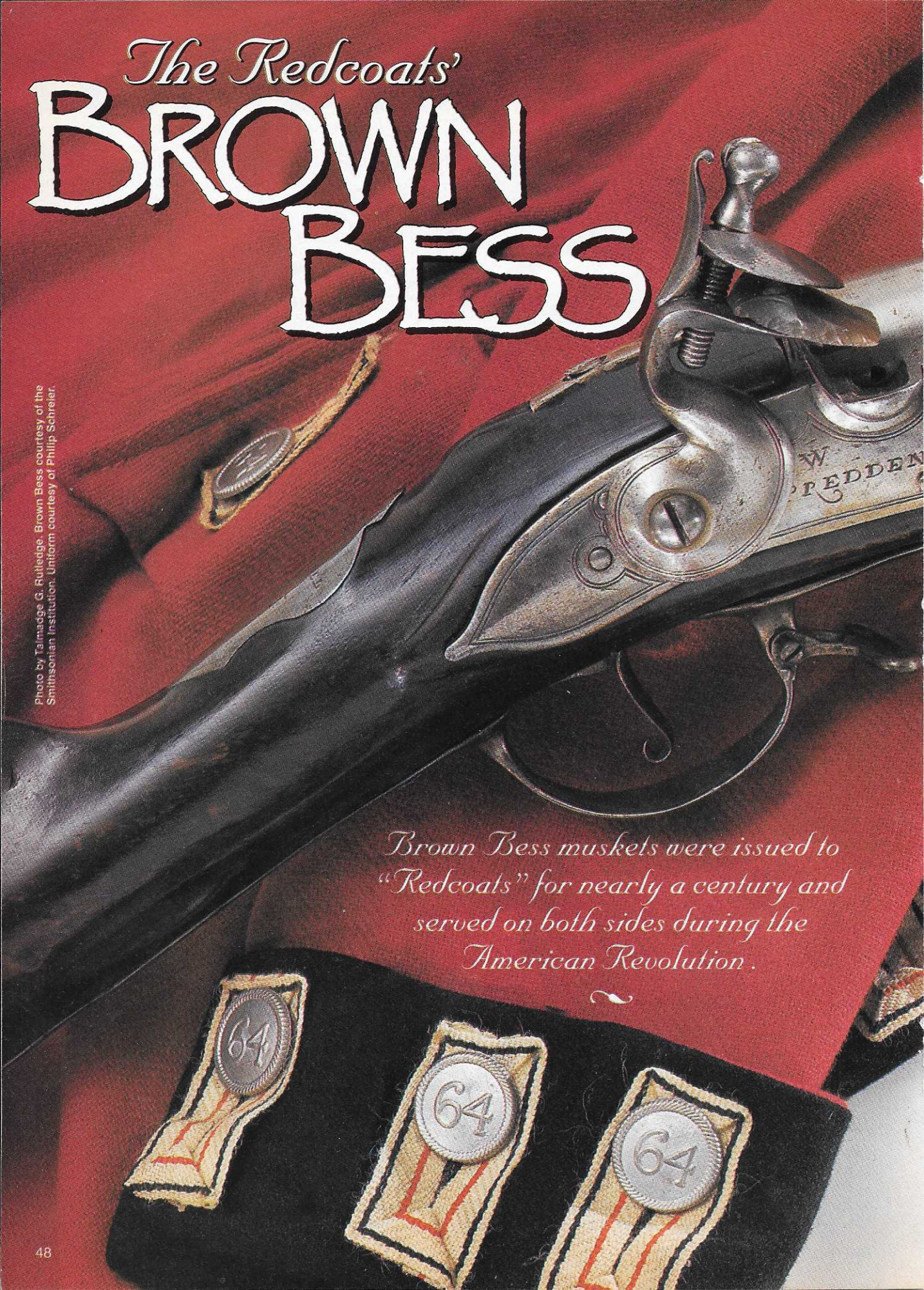


Photo by Talmadge G. Rutledge. Brown Bess courtesy of the Smithsonian Institution. Uniform courtesy of Philip Schreier.

Brown Bess muskets were issued to "Redcoats" for nearly a century and served on both sides during the American Revolution.

Before the 1730 Long Land Pattern—the first "Brown Bess"—was adopted, regimental colonels had wide discretion in the specifications of the arms purchased for their regiments. This developing pre-Brown Bess (c. 1715) is marked "W PREDDEN" on its lockplate, and it is a fine example of the private contract muskets made under the old system. Its escutcheon is marked "COLL. CAMPBELL 24."

BY GEORGE C. NEUMANN

It began with a contract by Britain's Royal Board of Ordnance dated September 15, 1714. The document's purpose was not to authorize additional arms, but to develop a system of manufacture and control. The board would accumulate components of a new standard longarm pattern and inventory them at the Tower of London armory for release to private contractors in time of need. They, in turn, would provide the stocking and finishing of the final arms in conformity with a prototype musket (usually bearing an official wax seal). Locks, barrels and other iron components were to originate largely from Birmingham, while most brass furniture, stocking and assembly would be centered in London. All of the parts would then be subjected to close quality and tolerance inspections by the Board of Ordnance.

The new procedure was a brave attempt to remedy the chaos of arms diversity that England faced at the conclusion of the war of the Spanish Succession in 1713. Unfortunately, it challenged some of the most powerful groups in highly stratified English society. The majority of army regiments were controlled by colonels who were important private individuals with established economic and political power. Each would be given governmental funds to recruit, equip and maintain a regiment. Any money remaining was considered his to keep. Prior to this date, the colonel was constrained only by vague requirements limiting barrel length and bore size for his regiment's longarms. As a result, he arbitrarily chose among a wide range of domestic and foreign patterns of varying quality and price.

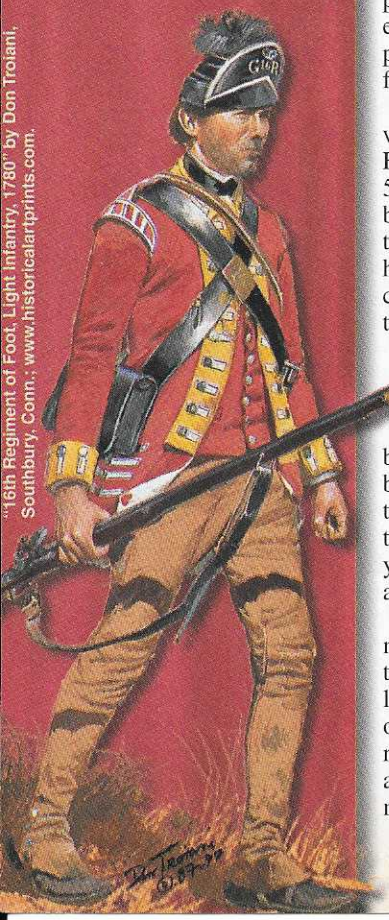
Further opposition came from the entrenched, private London Gunmakers' Company that saw this change as a threat to its traditional control of the design, specification and production of England's existing arms industry.

"British Grenadier, 33rd Regiment of Foot, 1776," by Don Troiani. Courtesy of Historical Art Prints (Dept. AR), P.O. Box 660, Southbury, CT 06488; (203) 262-6680; www.historicalartprints.com.

The Redcoats' BROWN BESS

As might be expected, the new system was strongly opposed and then deliberately ignored. Nevertheless, the board's patient yet focused efforts finally resulted in a new musket design in 1722 called the "King's Pattern." Resistance to the new discipline along with the absence of wartime pressures delayed its production until 1728. The new standard musket that ushered in England's organized ordnance control was first issued in 1730 as the "Long Land" pattern. It was the beginning of the famed "Brown Bess" series that would become a legend through its contribution to the winning of Britain's empire and to America's eventual freedom.

Brown Bess muskets became the workhorses that were instrumental in determining the future of North America and the world.



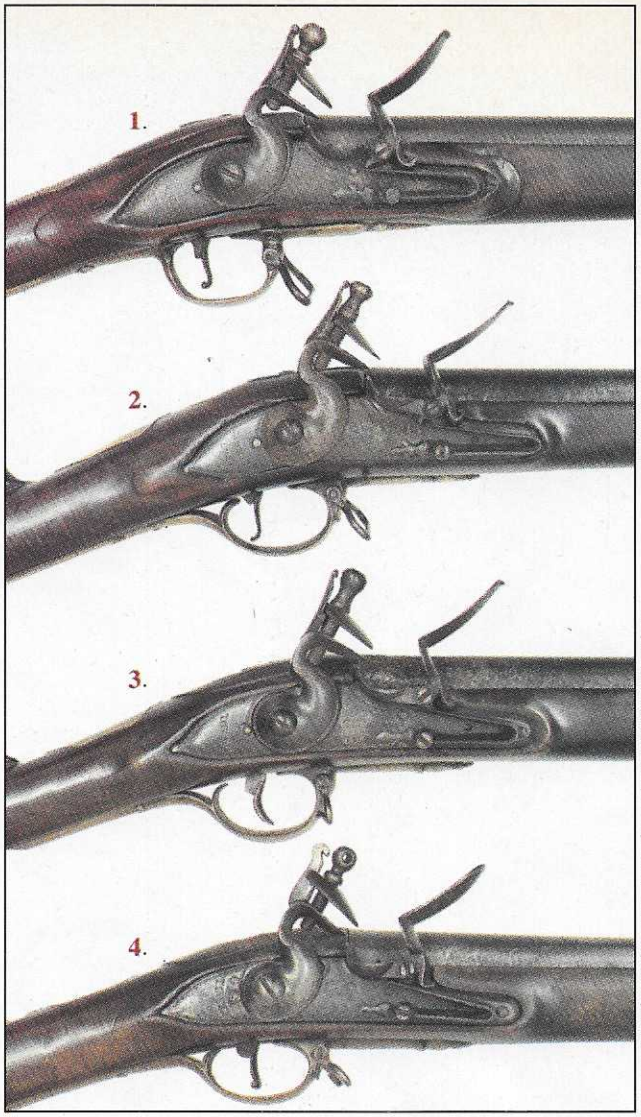
"16th Regiment of Foot, Light Infantry, 1780" by Don Troiani, Southbury, Conn.; www.historicalartprints.com.

FIREARMS CAPABILITIES: The 18th century musket was essentially a large smoothbore shotgun. After loading from the muzzle with loose blackpowder and a round lead bullet from a cylindrical, paper-wrapped cartridge, the musket was fired by the flintlock action above the trigger. A rotating cock holding a piece of flint snapped forward to strike a pivoting L-shaped frizzen or "steel." That action created sparks that ignited a small portion of priming powder in a projecting flashpan sending flame through the barrel's touch hole to reach the main charge. Obviously, it would not perform in the rain and depended upon a sharpened flint and properly hardened steel frizzen for reliability.

The real problem, however, was the blackpowder quality. Following each firing, roughly 55 percent would remain as a black sludge that built up inside the barrel clogging the touch hole and coating the lock. To cope with this fouling residue, the average ball was four to six hundreds of an inch smaller than bore size. Upon ignition, the undersized ball bounced and skidded up the barrel and proceeded in a direction determined by its last contact with the bore. Beyond 60 yds., the ball would lose its reliability to hit a man-size target.

These limitations determined 18th century battle tactics, which employed long lines of men trained for speed of loading rather than accuracy. They were expected to average four rounds per minute. The soldiers typically pointed their arms and fired in controlled volleys at enemy troops positioned 50 to 60 yds. away. The typical battle was decided by a disciplined bayonet charge ending in a hand-to-hand melee.

To meet these combat conditions, the new British Brown Bess standard musket was designed to deliver a large bullet at low velocity. It employed



Photos by J.C. Devine, Inc. Arms from the author's collection.

The original Brown Bess Lock (c. 1730) used a two-screw, rounded-surface, banana-shaped lock (No. 1) having a flat-backed swansneck cock, round flashpan without an exterior bridle, and a frizzen spring ending in a three-fingered finial plus a length covering the end of the forward lock screw. The next Long Land in 1742 (No. 2) added a bridle to the shallower flashpan and introduced a split in the trigger bow's rear strut, while the raised stock carving was reduced. Engravings on the tail identify the maker and date, "FARMER 1745." This Long Land 1756 pattern (No. 3) replaced the curved banana lock with a straight form and further modified the wood carving. The lock design continued until 1777. Note its typical markings of a crown above "GR" (King George I-III) and a crown/broad arrow (indicating government ownership) under the flashpan. "TOWER" on the tail replaced the earlier maker's name in 1764. In 1777, a less expensive lock (No. 4) was substituted in the Short Land pattern. Two screw ends are visible behind the cock, the frizzen spring has a lobe-shaped finial and terminates short of the forward lock screw's end. Note, too, that the cock's upper post is rectangular with a notch in its forward edge, while the upper jaw wraps around the post and has a lateral hole in the jaw screw. The shaded letters in "TOWER" on the tail indicate this example as probably one of the Liege contract muskets.

a sturdy stock for use as a club in close fighting and had an overall length that combined with a long, socket bayonet to create a spear or pike for impacting an enemy's line. It was also designed to be durable and to withstand the rigors of years of active campaigning. The Brown Bess was to successfully fulfill all of these demands.

THE BROWN BESS PATTERN: Britain's military long arms during the 18th century were officially considered in two groups: Land Service and Sea Service. We are concerned with the former. The unofficial term, "Brown Bess," has various claims for its origin, but a mention in the April 2-9, 1771 issue of the *Connecticut Courant* verifies the name's acceptance in America preceding our War for Independence.

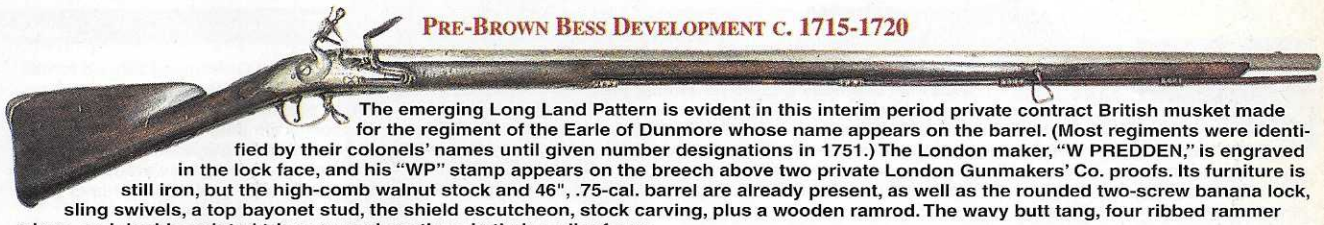
The basic Brown Bess musket mounted a round, smoothbore, .75-cal. barrel on a walnut "heart wood" stock held by a vertical screw through the breech plug tang plus lateral cross-pins that pierced tenons brazed to its underside. The upper stock terminated 4" below the muzzle to permit attaching a bayonet. A rectangular top stud behind the muzzle secured the bayonet after sliding through slots in the socket and also functioned as an aiming guide. There was no rear sight.

Its butt included a round wrist extending back to a handrail form beneath the comb. The ramrod, in turn, slid into a bottom stock channel and was retained by four pipes. Just below the bottom pipe was a stock swell intended as a forward "hand hold." All of the attached accessories (or "furniture") were of cast brass. The two-screw lock had a rounded base plate that mounted a swansneck cock. Two swivels for a shoulder sling were also included. Its weight totaled 10 to 11 lbs.

Like the soldiers who fired them, traditional British arms designs were known for their consistency. These fundamental features would persist until the late years of the 18th cen-

Evolution of the British Brown Bess Muskets 1715-1783

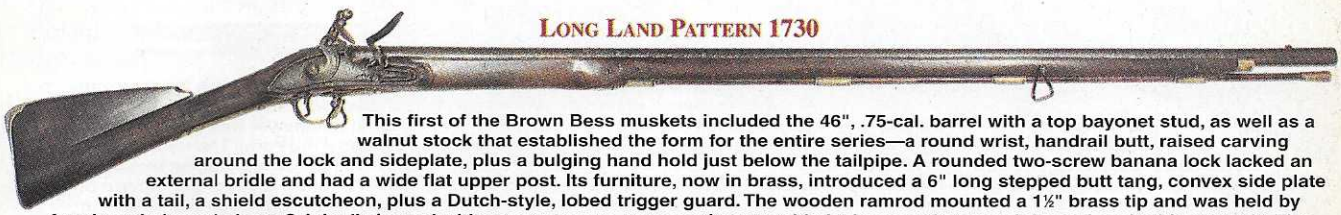
PRE-BROWN BESS DEVELOPMENT C. 1715-1720



The emerging Long Land Pattern is evident in this interim period private contract British musket made for the regiment of the Earle of Dunmore whose name appears on the barrel. (Most regiments were identified by their colonels' names until given number designations in 1751.) The London maker, "W PREDDEN," is engraved in the lock face, and his "WP" stamp appears on the breech above two private London Gunmakers' Co. proofs. Its furniture is still iron, but the high-comb walnut stock and 46", .75-cal. barrel are already present, as well as the rounded two-screw banana lock, sling swivels, a top bayonet stud, the shield escutcheon, stock carving, plus a wooden ramrod. The wavy butt tang, four ribbed rammer pipes, and double-pointed trigger guard continue in their earlier forms.

Length: 62"	**Lock: 6¼"x1⅜"**	**Butt Tang: 5¾"**	**Furniture: Iron**
Barrel: 45¾", .77 cal.	**Trigger Guard: 11½"**	**Side Plate: 6½"**	**Weight: 9.3 lbs**

LONG LAND PATTERN 1730



This first of the Brown Bess muskets included the 46", .75-cal. barrel with a top bayonet stud, as well as a walnut stock that established the form for the entire series—a round wrist, handrail butt, raised carving around the lock and sideplate, plus a bulging hand hold just below the tailpipe. A rounded two-screw banana lock lacked an external bridle and had a wide flat upper post. Its furniture, now in brass, introduced a 6" long stepped butt tang, convex side plate with a tail, a shield escutcheon, plus a Dutch-style, lobed trigger guard. The wooden ramrod mounted a 1½" brass tip and was held by four barrel-shaped pipes. Originally issued without a nose cap, some regiments added a brass strip around the end, as in this example. The large sling swivels had inside measurements of 2" wide for the upper one and 1¾" for the lower.

Length: 62½"	**Lock: 6¾"x1⅛"**	**Butt Tang: 6"**	**Furniture: Brass**
Barrel: 46", .76 cal.	**Trigger Guard: 11¼"**	**Side Plate: 6¼"**	**Weight: 9.0 lbs.**

LONG LAND PATTERN 1742

Several alterations were incorporated at this time although the basic pattern continued intact. A new brass trigger guard introduced a split in the trigger bow's rear strut and added a hazelnut shaped forward tip. The stock's border carving and hand hold were reduced while the raised beavertail form surrounding the barrel tank was established and would continue as such into the 19th century. Its banana lock added an exterior bridle that joined its now shallower flashpan to the frizzen screw. The tail, in turn, is engraved with the name of the maker and the date of manufacture, "FARMER 1745." Its fore-end continued to support the wooden ramrod in four brass, barrel-shaped pipes and had no end cap.

Length: 61¾"	**Lock: 6⅞"x1¼"**	**Butt Tang: 6"**	**Furniture: Brass**
Barrel: 45¾", .77 cal.	**Trigger Guard: 11¼"**	**Side Plate: 6¼"**	**Weight: 8.6 lbs.**

LONG LAND PATTERN 1756

Further upgrades appeared in this third and last of the official Long Land patterns with their 46" barrels. Conversion of existing muskets from wooden to steel button-headed ramrods began in 1748 and became a standard component of this new issue. Accompanying that change was the substitution of a longer 4" upper pipe having a flared mouth while all rammer pipe diameters were reduced for the thinner metal rod. The curved banana lock, in turn, was now straight and mounted a shorter frizzen spring, which no longer covered the end of the forward lock screw. Its stock and all carving were also thinner, and a new cast brass fore-end cap was finally adopted as standard. This design was the principal arm for most British regiments during the early years of the War for Independence.

Length: 61⅞"	**Lock: 7"x1¼"**	**Butt Tang: 5¾"**	**Furniture: Brass**
Barrel: 46", .78 cal.	**Trigger Guard: 11¼"**	**Side Plate: 6⅛"**	**Weight: 10.5 lbs.**

Arms from the author's collection.

tury despite an interim reduction in length and a gradual simplification of the lock and furniture. Official control and proofing sources for the King's arms were the Board of Ordnance at the Tower of London and the less disciplined Dublin Castle armory supplying troops in the "Irish Establishment." During wartime, supplementary contracts were often made with continental European manufacturers. Similar muskets approximating this design were also ordered directly from private contractors in England by some British regimental colonels, local militias, private trade organizations and various American colonies.

The Brown Bess patterns employed in the Revolutionary War are best considered in two categories that are most easily identified by their barrel lengths: the 46" "Long Land" and the 42" "Short Land" muskets. They are also named by some modern collectors as the "First" and "Second" patterns. (A "Third" pattern is often included, but refers to a 39"-barreled musket privately produced in England for the East India Co. Army in India. It did not officially reach America during the Revolution, but it was finally adopted by the British government in the 1790s.)

LONG LAND BROWN BESS ("FIRST PATTERN"): There were three fundamental variations of this first category: the 1730, 1742 and 1756 patterns.

LONG LAND PATTERN 1730: Considered the first of the Brown Bess series, it included a 46" barrel (.75 cal.) with a baluster-shaped breech pinned to a walnut stock, a curved

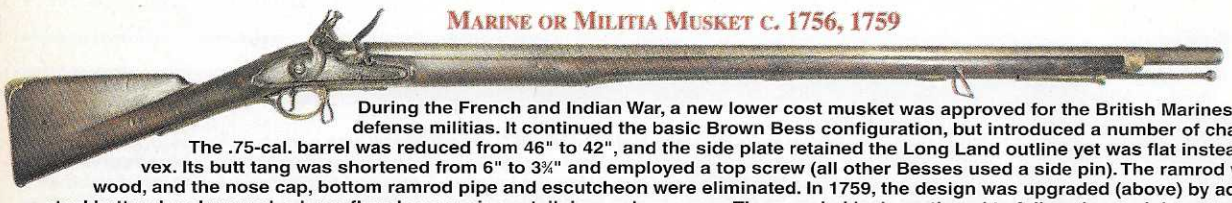
Evolution of the British Brown Bess Muskets 1715-1783

PRIVATE COMMERCIAL LONG LAND PATTERN C. 1736-1746

While the official Brown Bess muskets were being issued through the Board of Ordnance to Royal forces, a parallel business existed for similar patterns being produced and sold by private British contractors to individual regimental colonels, trading companies, local English defense units and to provincial colonies, towns and militias in North America. They normally included a reliable lock and barrel, but would reduce or simplify the furniture and other components to remain competitive in price. This example has a full-length .75-cal. barrel and a typical banana lock marked by its London maker, "J HALL." Yet it reduced cost by providing a low-grade walnut stock and wooden ramrod, plus an abbreviated butt tang, side plate and trigger guard. The tail pipe, escutcheon and nose cap, in turn, have been omitted. Even the usual British cast ramrod pipes were changed to rolled sheet brass.

Length: 61⅜"	**Lock: 7"x1¼"**	**Butt Tang: 2½"**	**Furniture: Brass**
Barrel: 45¼", .78 cal.	**Trigger Guard: 8⅞"**	**Side Plate: 4"**	**Weight: 9.1 lbs.**

MARINE OR MILITIA MUSKET C. 1756, 1759



During the French and Indian War, a new lower cost musket was approved for the British Marines and defense militias. It continued the basic Brown Bess configuration, but introduced a number of changes. The .75-cal. barrel was reduced from 46" to 42", and the side plate retained the Long Land outline yet was flat instead of convex. Its butt tang was shortened from 6" to 3¾" and employed a top screw (all other Besses used a side pin). The ramrod was wood, and the nose cap, bottom ramrod pipe and escutcheon were eliminated. In 1759, the design was upgraded (above) by adding a steel button-head ramrod, a long, flared upper pipe, a tailpipe and nose cap. The rounded lock continued to follow the straight pattern of the 1756 Long Land. Its tail is engraved by the maker, "GRICE 1761." This design continued in use by the British Marines through the American Revolution. (Bailey, Ref. 1, 2)

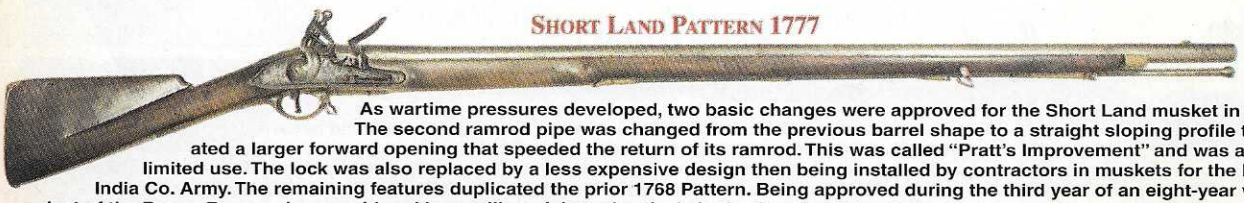
Length: 57⅜"	**Lock: 7"x1¼"**	**Butt Tang: 3¾"**	**Furniture: Brass**
Barrel: 41½", .79 cal.	**Trigger Guard: 11¼"**	**Side Plate: 6⅜"**	**Weight: 10.0 lbs.**

SHORT LAND PATTERN 1768

Impressed by its experience with the Marine or Militia design, the Board of Ordnance approved a similar pattern during 1768 for issue beginning in 1769 as the new standard infantry arm. It adopted the shorter 42" (.75-cal.) barrel length as well as the flat side plate and reduced butt tang (no top screw), yet kept the straight double-bridled lock, steel ramrod, cast nose cap, escutcheon, four rammer pipes and hazelnut trigger guard of the 1756 Long Land (above). Limited production of Long Land muskets would continue for specific units until 1790. This new Short Land arm was issued gradually as earlier inventories were depleted. The regulation bayonet (4" socket; 17" blade) continued. The example shown is marked on the barrel, "71 REGT 1T B," for Fraser's 71st (Highland) Regiment of Foot (1775-1783).

Length: 58"	**Lock: 7"x1¼"**	**Butt Tang: 3¾"**	**Furniture: Brass**
Barrel: 42", .77 cal.	**Trigger guard: 11¼"**	**Side Plate: 6¼"**	**Weight: 10.2 lbs.**

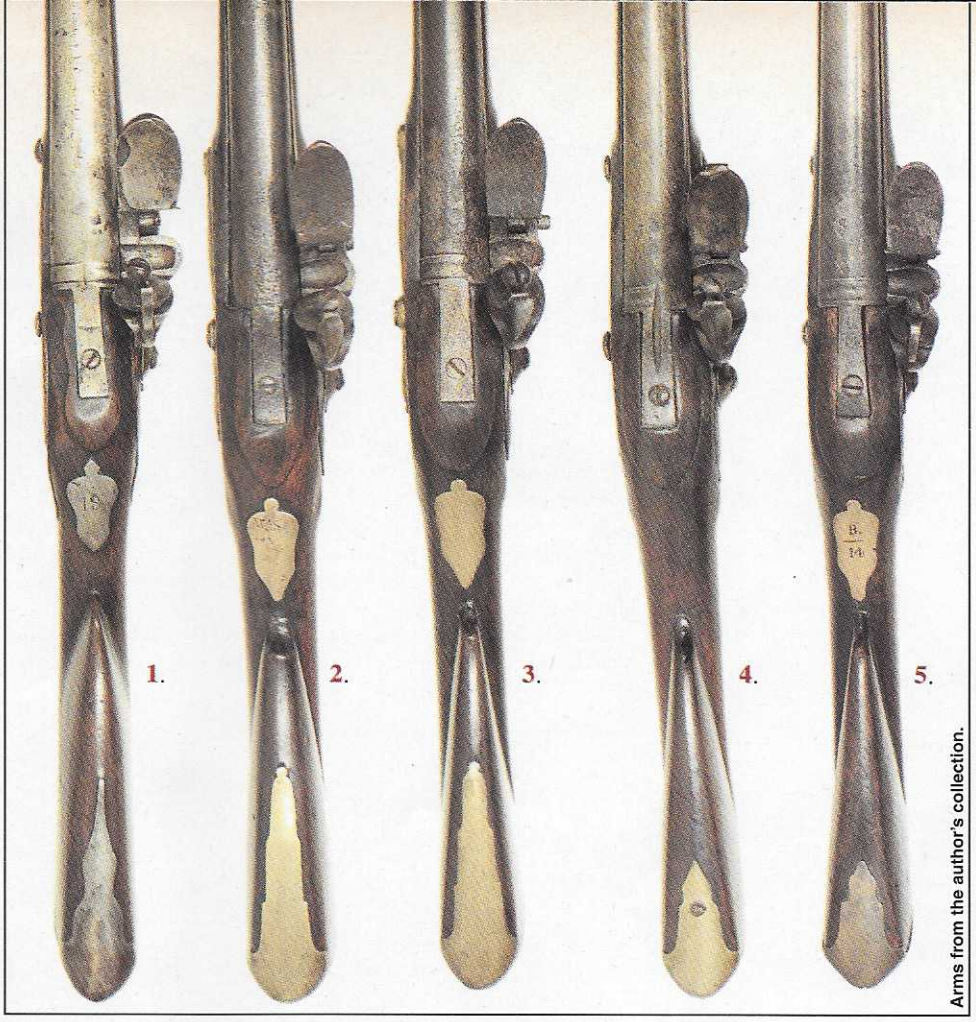
SHORT LAND PATTERN 1777



As wartime pressures developed, two basic changes were approved for the Short Land musket in 1777. The second ramrod pipe was changed from the previous barrel shape to a straight sloping profile that created a larger forward opening that speeded the return of its ramrod. This was called "Pratt's Improvement" and was already in limited use. The lock was also replaced by a less expensive design then being installed by contractors in muskets for the East India Co. Army. The remaining features duplicated the prior 1768 Pattern. Being approved during the third year of an eight-year war, this last of the Brown Bess series considered here still participated actively in the American Revolution.

Length: 57¾"	**Lock: 6⅞"x1¼"**	**Butt Tang: 3¾"**	**Furniture: Brass**
Barrel: 42", .78 cal.	**Trigger guard: 11¼"**	**Side Plate: 6¼"**	**Weight: 10.0 lbs.**

Arms from the author's collection.



Arms from the author's collection.

The walnut buttstocks of Brown Besses showed little change from 1730 through the 1790s. A circa 1715-1720 evolving pre-Bess pattern by Predden (No. 1) has iron furniture, a wavy butt tang, and undeveloped beavertail carving around the barrel tang. The 1730 and 1742 Long Lands (No. 2) introduced a 6" stepped brass butt tang and had a thick comb. By the time of the 1756 pattern (No. 3), the beavertail carving was established and the comb narrowed. The shortened barrel (42") Marine or Militia design (No. 4.) adopted a reduced 3¾" butt tang having a top screw and omitted an escutcheon. In 1768, the new Short Land standard infantry pattern (No. 5) kept both the reduced butt tang (without a top screw) and the escutcheon whose British marking, "B/14", signifies Unit B, musket No. 14.

banana-shaped, rounded lock bearing a single (internal) bridle, heavy brass furniture, a wooden ramrod, plus raised stock carving around the lock and sideplate. The arm was issued without a nosecap, although some regiments added a brass end band. Its total length was approximately 62". After the War of Jenkins Ear commenced in 1739, a special effort was made to replace most of the remaining non-conforming "colonel's" muskets with this 1730 design.

LONG LAND PATTERN 1742: As the fighting expanded into the War of the Austrian Succession (ending in 1748), this updated version added an exterior bridle joining the lock's flashpan and frizzen screw, introduced a new trigger guard, reduced the raised stock carving, and defined the final beavertail shape carved around the barrel tang. Its basic form remained unchanged. These 1730 and 1742 Patterns were the primary British infantry firearms used in America during the French and Indian War (1754-1763).

LONG LAND PATTERN 1756: In the late 1740s, further improvements were initiated based upon wartime experience. They were incorporated into this last of the three Long Land Brown Besses and included: a steel button-head ramrod now accompanied by a lengthened 4" upper rammer pipe having a flared front opening; the former banana-shaped lock was straightened along its bottom edge; and the raised stock carvings (including the forward hand hold) were further reduced. A cast brass nose cap at the end of the fore-end was also adopted. The 1756 Long Land musket experienced most of its North American usage in the Revolutionary War.

SHORT LAND BROWN BESS ("SECOND PATTERN"): This second and shorter of the two Land Pattern categories is best defined in three stages: The Marine or Militia, 1768 and 1777 patterns.

MARINE OR MILITIA PATTERN 1756 AND 1759: The need for a lower cost musket to arm the Marines and English militia led to the adoption of this arm in 1756. It retained the Brown Bess form, but reduced the barrel to 42" (still in .75 cal.), used a wooden ramrod and economized further by omitting the nose cap, tail pipe and escutcheon. Moreover, the rounded sideplate shape of the Long Land design was now flattened while the prior 6" long brass butt tang was shortened to 3¾" and included a distinctive upper screw head.

continued on p. 87

Brown Bess

continued from p. 53

In 1759, it was upgraded by replacing the earlier version's wooden ramrod with a steel button-head form and adding a tailpipe, nose cap and lengthened upper pipe.

SHORT LAND PATTERN 1768: The British infantry was already leaning toward a shorter arm. (Many 4" sections of sawed-off Long Land barrels have been excavated from French and Indian War sites.) Impressed with the success of the Marine or Militia musket, they adopted the 42" barrel to create a new Short Land standard infantry Brown Bess in 1768. This configuration retained many features of the previous Long Land Pattern 1756 design, but with the reduced 42" barrel length, flattened side plate, shortened butt tang (no top screw) and reduced stock carving.

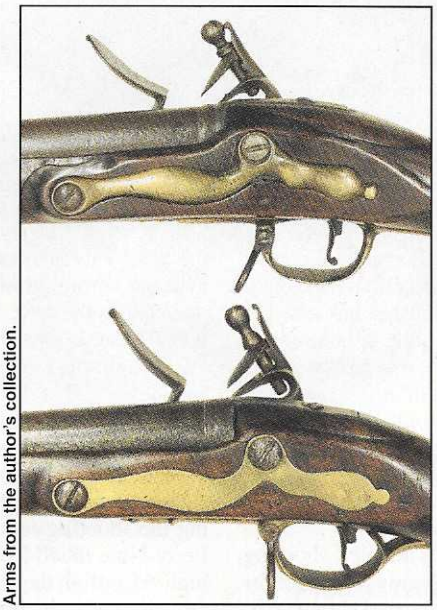
SHORT LAND PATTERN 1777: As an adjustment to wartime demands, two changes were authorized for the Short Land Brown Bess in 1777. A less expensive lock then specified for the private East India Co. was adopted and the second ramrod pipe was changed from the previous barrel shape to a straight sloping profile with an expanded front opening ("Pratt's Improvement") already in use.

THE BROWN BESS'S ROLE IN THE AMERICAN REVOLUTION:

As with any country suddenly involved in a war, the American Colonies in 1775 had to acquire a great number of arms quickly. Their immediate supply was already in the militia system of each state that required men from 16 to 60 years of age to own a longarm plus a bladed secondary arm such as a sword, bayonet or belt axe. Those and other flintlocks they pressed into service included a broad mixture of various locally made hunting and military designs using assorted old and new parts, commercial arms contracted from private makers, inventories of provincial arsenals, confiscated Loyalist arms, state purchases of spare guns from civilians, surplus supplies from European dealers and muskets issued here by the British during prior wars. These latter arms were largely obsolete and repaired arms, and in many cases were vintage Dutch, Liege and other European cast-offs. Thus, the few Brown Besses initially in American hands were usually worn versions of the early Long Land 1730 and 1742 designs, which were later supplemented by at least 17,000 more recent patterns captured during the conflict (Moller, Ref. 5).

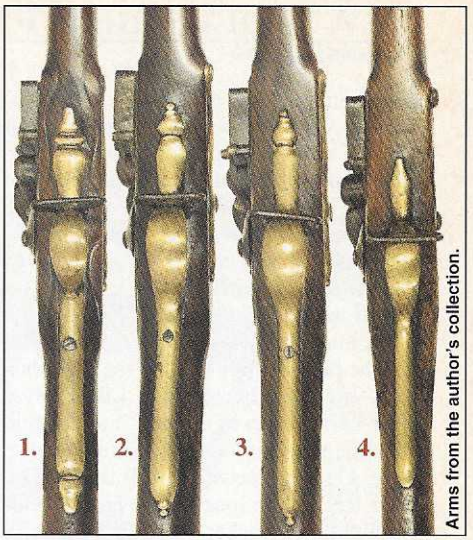
The majority of locally manufactured rebel arms followed the English pinned barrel format prior to the heavy import of French and other European military aid beginning in 1777, which supplied most of the Continental Line for the remainder of the war. Yet the Brown Bess remained a major share of the arms carried by provincial forces through 1783—both as complete muskets and as surviving components remounted on the large number of locally assembled American arms.

At the beginning of hostilities, the Royal forces had at least 5,200 muskets in storage mostly in New York and Quebec (Bailey, Ref. 1,2). They were primarily wooden ramrod Long Land 1730s and 1742s. Most active British regiments here were equipped with the later 1756 version having the steel ramrod. Through the war's first two years, the Long Land remained the primary British arm in America, and earlier wooden ramrod patterns were normally given to Loyalist units or as replacements to Hessian troops. Some Short Land muskets arrived early with a few of the new regiments from Britain, and they became the British army's principal arm after 1777. The English carbines and fusils, although not covered in this article, usually adopted the Brown Bess configuration in reduced dimensions.



Arms from the author's collection.

The convex brass side plate shape (top) with its distinctive tail appeared on all three Long Land patterns (1730 example shown). Beginning with the Marine or Militia musket in 1756 and through the subsequent Short Land configurations, the original design (bottom) continued but with a flat surface.



Arms from the author's collection.

Brown Bess Trigger Guards include the first type (1.) as used on the Long Land Pattern 1730 guns, which still retained the early Dutch influence with lobed finials at each end. The next form (1742) standardized the hazelnut forward end design (2.). The following Long Land 1756 pattern (3.) thinned the shape to its final dimensions, which would continue through the Short Land series. (Note the visible rear screw passed through the stock's wrist to secure the escutcheon.) Finally, a simplistic form was used on many of the private English commercial muskets (4.) to economize in brass and inletting costs.

During the American Revolution's eight years, England produced more than 218,000 Land Service longarms and contracted for another 100,000 of the Short Land Pattern 1777 from Liege and German sources after France entered the hostilities in 1778 (Bailey, Ref, 1,2). Created as the beginning of a new system for standardization and quality control, these venerable Brown Bess muskets became the workhorse that was instrumental in determining the future of North America and much of the world. Today, they remain as icons reminding us as collectors and historians of the courage and sacrifices during those formative years of our heritage.

Special appreciation is extended to Joseph C. Devine for his generosity in photographing the arms for this article at his J.C. Devine, Inc., facilities.

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