



FIGURE 1. Examples of the basic model types. Left, four barrel pistols, top to bottom: large frame holster pistol (.455 Rev., serial no. 7205); small frame holster pistol (.380 Long, serial no. 8186); small frame pocket pistol (special order .380 Long, serial no. 7381). Right, two barrel pistols, top to bottom: large frame holster pistol (.577 c.f. for special order 1½ inch cartridge case, serial no. 8407); small frame holster pistol (.476 Rev., serial no. 8042, with ring type cocking trigger).

Lancaster Multi-Barrel Pistols

David E. Cooley

My subject is the two and four barrel pistols made by Charles Lancaster of London, England, in the closing years of the 19th Century.

Both the two and four barrel types were based on patents issued to Henry A. A. Thorn in 1881 and 1882. In total, about 712 of all models of the four barrel version were produced over a 15 year period beginning in 1882, 80% of them in the first five years. There were two frame sizes of the four barrel pistols. The larger, more popular size was chambered for the .455 and the .476 revolver cartridges, almost always with 6¼ inch barrels. These we shall refer to as large frame holster pistols. The smaller frame version came in two barrel lengths, the 5¼ inch barrel holster pistol size being chambered for the .380 Long rifle or revolver cartridge, and the 3¼ inch barrel pocket pistol size being chambered for the .380 Short revolver cartridge. About 234 of the two barrel models were produced in total, beginning in 1885. Production lasted about 12 years, with 80% being made in the first five or six. Again, there were two basic frame sizes. The large frame holster pistols were chambered for the .577 revolver cartridge and had 6¼ inch barrels. The small frame holster pistols were chambered for the .455 or the .476 revolver cartridge, again with 6¼ inch barrels. The same frame size was used for the few .380 Long caliber holster pistols and .380 Short caliber pocket pistols produced. These six basic models are listed in Table I and illustrated in Figures 1 and 2. Figures 3 and 4 show the relative size of the large and small frames on the four and two barrel pistols.

As may be seen from Table I, fewer Lancaster pistols of all models were produced than were Colt "Walker" revolvers. In view of their seemingly anachronistic pepper-box design, perhaps even this number is unexpectedly large. Their obvious high quality, unusual but appealing configuration and great "feel" make them more popular with collectors today than one might expect, but why would anyone have bought one in the 1880s and 1890s? In fact, the Lancaster pistols did have some select advantages over the competing handguns of the day, most of which were mentioned in their advertising (Figures 5 and 6). The most significant of these are:

1. Significantly better performance (about 25%) in terms of "stopping power" than any revolver using the same cartridge because there is no cylinder gap from which propellant gasses can escape.



2. Virtually sealed mechanism which greatly reduces the number of projections to snag clothing, etc. and the number of holes and joints into which dirt, gunpowder fouling, water, etc. can enter to foul the lockwork.
3. Oval bore rifling (more of which later) with its ease of cleaning, accuracy with bullets and ability to shoot shot or buckshot well.
4. In the instance of the largest (.577) size of the two barrel pistols, greater performance from a more compact and lighter weapon than was otherwise available (Howdah pistols).

There was some loss of firepower with only four shots instead of six. After four shots had been fired, however, the Lancaster, with its automatic extractor and open breech face for loading, was better than many of the revolvers of the day. This was particularly true in the case of the standard military issue revolver at the time (the .476 Enfield Mark II) which loaded singly and had a very poor extraction system. The failings of the Enfield certainly improved sales of Lancasters to military men headed off to such places as Africa and India to fight in the many colonial wars going on at the time.

Last, but perhaps to many not least, is the difference in "feel" between the Lancaster pistols and revolvers. The Lancaster has a hand filling grip and a "chunky," perhaps sometimes muzzle heavy feel which, when combined with the sight of multiple barrels, makes it somehow more authoritative than a revolver. This and their obvious high quality make them appealing to many collectors today and almost undoubtedly had the same effect when they were new. Study of the Lancaster records indicates among other

Table I
Basic Model Definition

Four Barrel Pistols	712 Total
Large Frame Holster Pistols 476 Rev. or 455 Rev. cartridge 6-1/4" barrels	(85%)
Small Frame Holster Pistols 380 Long or 360 No. 5 cartridge 5-5/8" barrels	(10%)
Small Frame Pocket Pistols 380 Short cartridge 3-5/8" to 4-1/8" barrels Smaller grip	(5%)
Two Barrel Pistols	234 Total
Large Frame Holster Pistols 577 Rev. cartridge 6-1/4" barrels	(39%)
Small Frame Holster Pistols 476 Rev., 455 Rev., or 380 Long cartridge 6-1/4" barrels	(51%)
Small Frame Pocket Pistols 380 Short cartridge 3" to 4-1/8" barrels Smaller grip	(10%)
Total Four and Two Barrel Pistols	946

things that there were a few customers who bought an example of every model made, a phenomenon which may sound familiar.

Some consideration of the nature of these advantages makes it readily understandable why the Lancaster pistols became obsolete with the advent of smokeless powder and the semi-automatic pistol at the turn of the century. These new weapons offered much increased rapidity of fire as well as reduced weight and, in the case of pocket pistols, more compact form. Although many of the new semi-automatics were more ungainly and more vulnerable to incapacitation from intrusion of dirt, etc., they did a much better job of supplementing the revolver than the Lancaster could possibly do. Study of the Lancaster records show the sale of a great many Mauser semi-automatic pistols and very few Lancaster pistols from 1899 forward. Had smoke-

less powder and the semi-automatic pistol been invented 20 years earlier, there would have been very little need for the Lancaster pistols.

After a brief review of the history of the Lancaster firm, I shall consider the pistols themselves in greater detail. This includes the patents on which they were based, their manufacture and the more significant design changes through their production history.

There are many sources on which these observations are based. They include data from about 20 years of collecting, studying and observing pistols I have had the opportunity to examine personally; from auction catalogs, examples in museums, and from the literature. Certainly the most important single source, and certainly the greatest contribution toward understanding and organizing the empirical data, is the extensive personal access I had to the Lancaster records a number of years ago. For this last I owe a great debt of gratitude to Don Masters. He most graciously allowed me this access while he had the records as part of the firm of Atkin, Grant, Lang and Churchill, which he owned until some time in 1982.

A Brief History of the Firm

The founder of the firm, Charles Lancaster, began his career as a barrel maker in London in the year 1811. He was soon recognized as the best barrel maker of the day, supplying barrels to such makers as Joseph Manton, John Manton and James Purdey. His barrels may be identified by his initials, "C.L.," stamped under the breech. In 1826 he expanded his business to become a gunmaker and at that time moved his shop to 151 New Bond Street, London, the address found on all of the Lancaster pistols. He was soon recognized as one of the best gunmakers in London, supplying the finest weapons to the finest families, including royalty. After the founder's death in 1847, the firm continued operation under the direction of his two sons, Charles William and Alfred Lancaster. Alfred left to do business under his own name in 1860. Charles William Lancaster continued to run his father's business until his death in 1878, during which time he maintained the highest standards of quality and accumulated several registered designs and patents, including the Pillar Breech (1848), Oval Bore Rifling (1850) and the Gas Check Bullet (1851).

Henry Alfred Alexander Thorn, who had been an apprentice of Charles William Lancaster from 1870 to 1876, had only just completed his apprenticeship when C.W. Lancaster died in 1878. The two had plans for a partnership, and when Mr. Lancaster died, Mr. Thorn purchased the balance of the business which in 1879 became Charles Lancaster and Co. So absorbed was Mr. Thorn by the significance of the Charles Lancaster name that he virtually assumed it as his own. He used it in business and as a "nom



FIGURE 2. Two barrel small frame pocket pistol. .380 Rev., serial no. 7858, with $4\frac{1}{8}$ inch barrels (courtesy of the National Rifle Association).

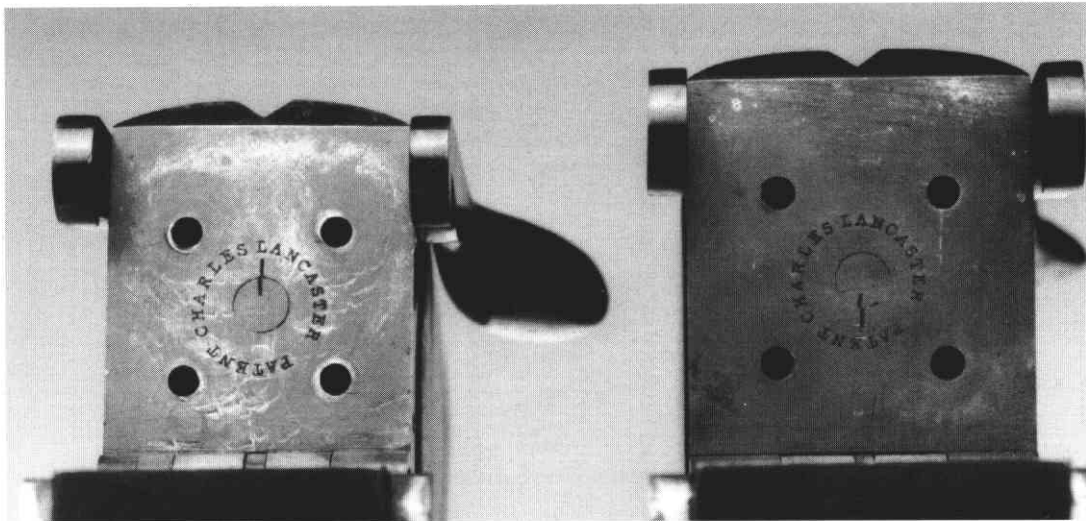


FIGURE 3. Four barrel pistol breech faces. Small frame (1.17 inches wide x 1.27 inches high, serial no. 8186); large frame (1.32 inches wide x 1.44 inches high, serial no. 8342).

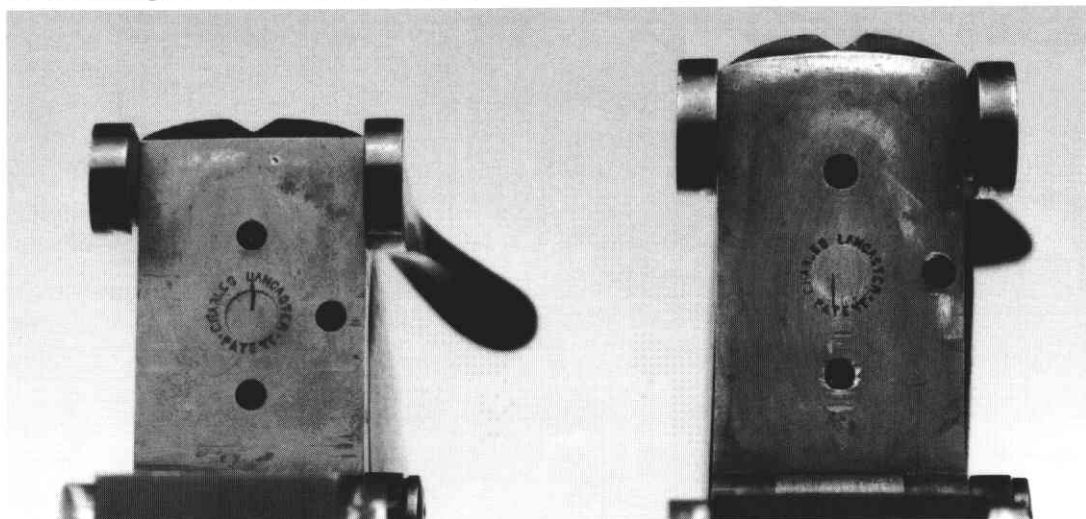
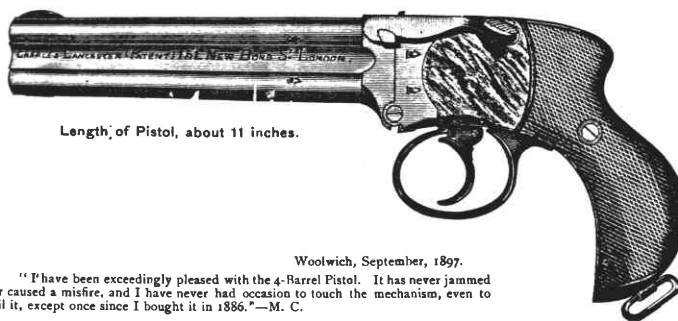


FIGURE 4. Two barrel pistol breech faces. Small frame (0.93 inch wide x 1.39 inches high, serial no. 8042); large frame (1.01 inches wide x 1.73 inches high, serial no. 8407).

CHARLES LANCASTER

INVENTOR AND PATENTEE
OF THE
FOUR-BARREL BREECH LOADING HAMMERLESS PISTOL.

Weight about 2 lbs. 6oz. Bore .455, C.F.



Length of Pistol, about 11 inches.

Woolwich, September, 1897.

"I have been exceedingly pleased with the 4-Barrel Pistol. It has never jammed or caused a misfire, and I have never had occasion to touch the mechanism, even to oil it, except once since I bought it in 1886."—M. C.

FROM "THE FIELD," 10th JUNE, 1882.

"The advantages which these new Pistols possess over the old form of Revolver are, chiefly, increased accuracy and strength of shooting, owing to its dispensing with the escape between the revolving chambers and the stationary barrel—which not only acted prejudicially in the above directions, but made it impossible to rest the weapon on the left hand when aiming, except at the risk of serious injury.

"There is in these Pistols no opening through which any gas can escape; so the weapon can be used like a gun when aiming (that is to say, with the left hand on the barrels); and there are no screws, hammers, or projections to catch the clothing, reins, &c..

"Above all there is no fear of a jam, or the weapon becoming unserviceable from over-heating or other accident. The mechanism is covered up, and dirt, damp, wet, and ill-usage hardly affect these Pistols at all.

"The Pistol will take the ordinary Government .455 bore central-fire cartridge, and shoots with great force and accuracy. It is constructed with a hinge at the bottom of the breech, and held in position by side connections on the top barrels, which are worked by a lever placed on the left-hand side, being the most convenient position, as the thumb in grasping readily works the lever to allow the clip connections to be lifted, and so causes the barrels to drop. The extractor is self-acting, and ejects all the fired cartridges at once. The lockwork is constructed on the same principle as that of Charles Lancaster's patent four-barrel gun, described in *The Field* of January 14th, and has, like it, a rebounding lock, rendering it safe to carry. The barrels are 6in. long, and the weight of pistol is 2lb. 6oz. The lockwork is well made, and, being well finished, it has a neat and serviceable appearance."

THE BARRELS DO NOT REVOLVE, ONLY THE INSIDE STRIKER.

These Pistols being rifled on my celebrated non-fouling smooth oval-bore system, shot cartridges can be used from them.

These Pistols can be supplied with a Folding-under or Cocking Trigger so as to reduce the draft, for Target Shooting, at an extra cost of 10/-

Plain Finish and Blued	£8	0	0
" " Nickel-plated	8	11	0
Highly Engraved and Blued	9	1	0
" " Nickel-plated	9	11	0
" " Electro Gilt, with ivory stock, &c., &c.	18	0	0

These Pistols are made in one quality only, viz., the best; the prices varying according to the style of finish. Every Pistol is tested in shooting, and, if not approved of, can be exchanged.

Walnut Wood Case, chased brass corners, lined with best velvet, for electro-gilt, and ivory stocked pistol (for presentation), complete with ivory and gilt fittings, and best Russia leather cover for same	10	0	0
Solid Leather Case, with oil bottle, turnscrew, and cleaning apparatus	1	8	6
Oak Case	1	1	0
Holster, Fouch, and Belt (best quality)	0	15	0
" with brass studs and plain leather sling	0	10	0
Short Pattern Frog Holster, with sling	0	9	6
Detached Skeleton Shoulder Stock (folding)	0	9	6
Recapping Tools, &c., per set	0	18	0
Conical Bullet Mould, .476	0	10	0
Cord Sling, with steel swivel	0	3	3
Solid Drawn Brass Cartridges, .455, C.F. per 100	0	8	6
" " " loaded with shot, per 100	0	8	0
Solid Drawn Empty Cartridge Cases, .455 and .476, per 100	0	3	8
Bullets, .455, per 100	0	2	3
Caps and Anvils, per Box of 500	0	3	0

These Cartridges are made to Government regulation size, and can be obtained from the Stores of any Government Depôt.

The above are Cash Prices, for Terms see page 2.

FIGURE 5. Page from Lancaster Catalog of ca. 1900 showing four barrel large frame holster pistol of ca. 1886-89.

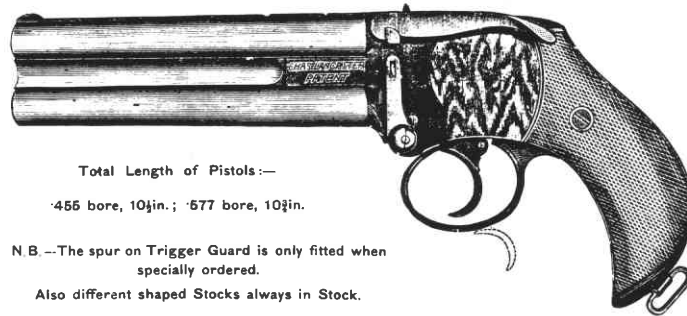
de plume" for his book, *The Art of Shooting*, which has gone through 14 editions from 1889 to 1985 and is still in print. He was the inventor of the action upon which the Lancaster breech loading multi-barrel pistols and long guns are built. When Alfred Lancaster died in 1890, Mr. Thorn bought the assets of that firm and folded them into the Charles Lancaster and Co. firm. In 1904 the firm moved to 11 Pantton Street and became Charles Lancaster Ltd. In 1925 the firm moved again to Mount Street and in 1932 Charles Lancaster Ltd. was bought by and absorbed into Stephen Grant and Joseph Lang. I have not found the date of H. A. A. Thorn's death or of his departure from the firm, but it was after 1913 and could well have coincided with the move to Mount Street in 1925.

The Thorn's patent pistols were produced during the golden years of the firm, when Lancaster was still producing highest quality weapons for the royal families and nobility of the world, as well as such customers as Annie Oakley and Walter Winans. The advent of smokeless powder seems to have signalled the beginning of the decline of the firm as well as the end of the Lancaster multi-barrel pistols.

The Patents and Operation of Thorn Patent Weapons **Oval Bore Rifling: Charles W. Lancaster Patent No. 13,161 of July 3, 1850**

Virtually all rifled weapons sold by Lancaster other than those purchased for resale (e.g. Mauser semi-automatic pistols) used the oval bore rifling. It is basically two groove rifling with the grooves broadened and smoothed

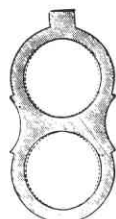
CHARLES LANCASTER'S
DOUBLE-BARREL BREECH-LOADING HAMMERLESS PISTOL.
 PATENT.



Total Length of Pistols:—
 .455 bore, 10½ in.; .577 bore, 10¾ in.

N.B.—The spur on Trigger Guard is only fitted when specially ordered.

Also different shaped Stocks always in Stock.



.577 BORE
 FIG. II.
 Weight, 2lb. 7oz.



.455 BORE.
 FIG. III.
 Weight, 1lb. 14oz.



.577 BORE C.F.
 FIG. IV.
 28 grs. Powder, 450 grs. Bullet,



FIG. V.
 18 grs. Powder, 265 grs. Bullet.

IN introducing this Pistol to the notice of Naval and Military gentlemen, I beg to draw attention to the following advantages that it has over all other double-barrel B.L. Pistols now generally sold, viz.:—

That it is hammerless, and consequently that there are no screws, hammers, or projections to catch in the clothing, reins, etc.; also that, being constructed with one barrel under the other, it allows the pistol to lie closer to the body.

Fig. I. shows the general outline of pistol, side view.

Figs. II and III, illustrate the exact size of the muzzles of the respective bores.

Figs. IV. and V. are the exact size of the cartridges and section of bullet, together with their weights, etc.

The lockwork is constructed on the same principle as Charles Lancaster's latest four-barrel gun-lock, which was described in *The Field, Land and Water*, etc., except that the pistols have only one side of that lockwork, and, like it, have a hammer cylinder, which is caused to oscillate from the top to the bottom barrel in turn, and *vice versa*, the striker being hinged to the front of the hammer cylinder, so as to prevent any jamming of the striker, and the lock being rebounding, it is rendered perfectly safe to carry.

The lockwork is well made, and the pistol throughout being well finished, it has a neat and serviceable appearance.

FIGURE 6. Page from Lancaster Catalog of ca. 1900 showing two barrel large frame holster pistol of ca. 1885.

into the bore in such a manner that the bore is actually oval in cross section. The result is a bore which is smooth and does not appear to be rifled but which in fact has a difference of about .015 inch between bore and groove diameters. This patent and another which follows it actually has more to do with the process and machinery used in cutting and rounding the grooves than with the shape of the bore. The reason for this is most likely that the oval bore itself was not Lancaster's invention. It had been in occasional use on the European Continent since sometime in the 18th Century (Figure 7), and had been patented earlier in England by John Beaver in 1825 (No. 5305). Henry A. A. Thorn was a firm believer in oval bore rifling, claiming superb accuracy and, since there were no sharp edges to

wear out, extremely long life as well. Because there are no "corners," oval bores are much easier to clean than conventionally rifled bores, and they also will shoot bullets every bit as well and shot or buckshot with less scatter. It was not uncommon for military men to use buckshot in the larger bore pistols. The job of rifling the bores at Lancaster was done by one man, a Mr. Carol, from 1854 until at least 1900, so he most likely rifled all of the Lancaster pistols.

Lock Mechanism: Henry A. A. Thorn Patents No. 1241 of March 21, 1881 and No. 213 of January 16, 1882.

Both of these patents are pertinent to the pistols, but they show only long guns in the patent drawings and mention pistols only in passing. The first covers the lockwork

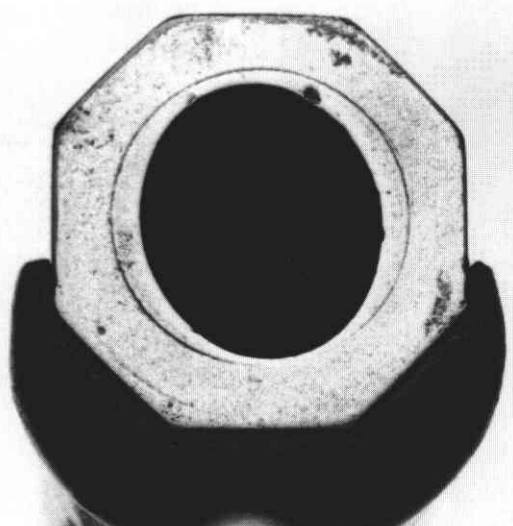


FIGURE 7. Oval bore rifle barrel on Bavarian flint-lock Jaeger rifle by Selkopf, ca. 1760.



FIGURE 8. Interior views of Thorn patent pistols. Upper: Two barrel small frame holster pistol (.476 Rev., serial no. 8099). Lower: Four barrel large frame holster pistol (.476 Rev., serial no. 8342).

mechanism and the second covers the cocking lever/double trigger mechanism. The lockwork of a two and a four barrel pistol is shown in Figure 8. Figure 9 represents a four barrel pistol mechanism with the basic Thorn patent lockwork specified in Patent No. 1241 of March 21, 1881, which may be described as follows: a cylindrical "striker block" (S) is mounted on a rod which is fixed on the inside of the breech face at the center of and parallel to the axes of the bores. The striker block is free to rotate and move axially on this rod. The rear section of this striker block is formed as a collar into which is mounted the U-shaped head of the "hammer" (H). When the trigger (T) is pulled back, the hammer is forced back against the mainspring by a sear link (L). When the trigger is all the way back, the link is forced out of the hammer notch and the striker falls forward, propelled by the hammer and mainspring. At the edge of the forward face of the striker block is a striker lug (SL) which on the earliest models struck a floating firing pin in the breech face. On virtually all other pistols, however, the striker lug also holds a single firing pin which goes through a hole in the breech face to strike the primer. Rotation of the striker block is achieved by means of camming grooves cut into the outside surface of the cylindrical striker block. When the striker block is retracted by pulling back on the trigger, an index finger (F) mounted to the frame rides in the spiral camming groove (CG), causing the striker block to rotate a quarter of a revolution (90°). When the block falls forward to fire, the finger rides in the straight or axial groove (SG) and the block does not rotate. Each time the trigger is pulled all the way back, the striker block rotates a quarter of a turn (90°), so when the block drops, the firing pin pokes through the next hole until the four barrels are fired.

This system had to be modified to fire the two barrel pistols because it is not feasible to rotate the striker block a full half turn (180°) with such a short axial displacement. The two barrel modification utilizes a striker lug which is enlarged to a full quadrant with two firing pins, one mounted at each of the outside "corners," 90° from each other. The striker block is then rotated 90° on each pull of the trigger as before, but in the opposite direction each time. Each time the striker block falls, one firing pin is lined up with either the upper or lower barrel and the other goes through a hole at the left side of the breech face between the barrels and into a blind hole in the barrel breech face (Figures 4 and 10).

Both of these locks are rebounding in the sense that the striker block is withdrawn after the shot is fired. In the earlier models this is accomplished by direct pressure of the lower arm of the mainspring on a spur at the base of the hammer which contacts the mainspring at the instant the firing pin begins to protrude from the breech face. On

the later models it is done by a rebound lever beneath the mainspring which not only contacts a lug at the base of the hammer but also continues forward to bear on the trigger, replacing the trigger spring. In the earlier type, the firing pin is retracted instantly and in the later version it is retracted as the trigger is allowed to move forward after firing.

The system for the four barrel weapons is described fully in the first patent, including mention of the first type of rebound system. The system for two barrel weapons described in this patent was never used, apparently having been discarded in favor of the one described above. The system actually used for the two barrel pistols was never patented, probably because it was largely captive to the already patented four barrel system. The second type of rebound system utilizing a lever under the mainspring was not a Thorn patent. It is one of the specifications of H. Webley and J. Carter's Patent No. 4070 of 1885 for revolvers but appears to have been used by others, including Francotte on the Continent and Pryse in England at or before that date.¹

Cocking Trigger

Patent No. 213 of January 16, 1882, refers to Patent No. 1241 of 1881 and is concerned solely with the "cocking trigger" mechanism. The more common "single trigger" pistols are cocked and fired by one continuous pull on the trigger, much as a modern double action revolver is fired without cocking the hammer first. The "double trigger" or cocking trigger pistols may be recognized by the presence of a ring or folding trigger projecting through a slot in the bottom of the trigger guard. This device enabled the shooter to take more deliberate aim than was possible while drawing the trigger on the single trigger model all the way back against the heavy mainspring with the trigger finger alone. The lower "trigger" is in reality a cocking lever which one draws all the way back and holds against a stop with the middle finger, thereby "cocking" the lockwork. The actual trigger is sheathed within the cocking lever in the normal trigger position inside the trigger guard (Figure 8, No. 8342). When the cocking lever is drawn back fully, a projection of the sear link within the cocking lever contacts the trigger and causes it to move forward slightly. A light pull on the trigger then forces the sear link off the hammer notch and the striker block falls, firing the pistol. The pistol may also be fired by pulling back on the cocking lever and trigger simultaneously, just as the single trigger model is fired by drawing the trigger all the way back. Students of English revolvers will observe that the operation of this cocking trigger is the same as the cocking trigger patented by William Tranter (No. 212 of January 28, 1853). As a matter of fact, the author is unable to discern any real difference between the mechanics of the two systems, and is at a

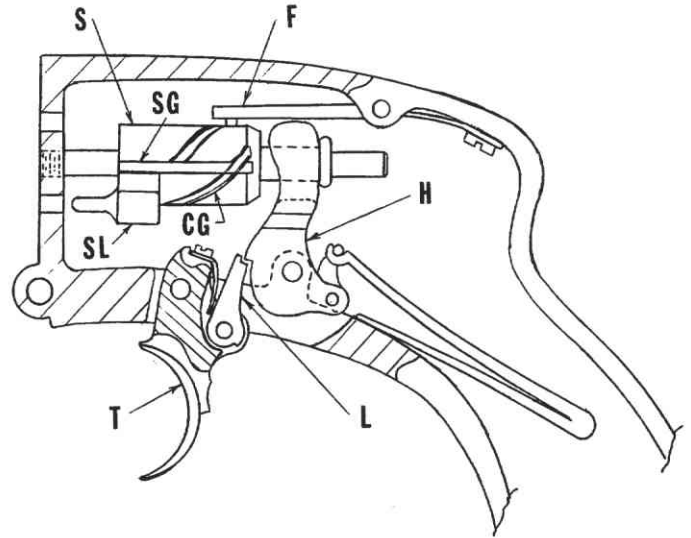


FIGURE 9. Simplified four barrel pistol mechanism (rebound lever not shown).

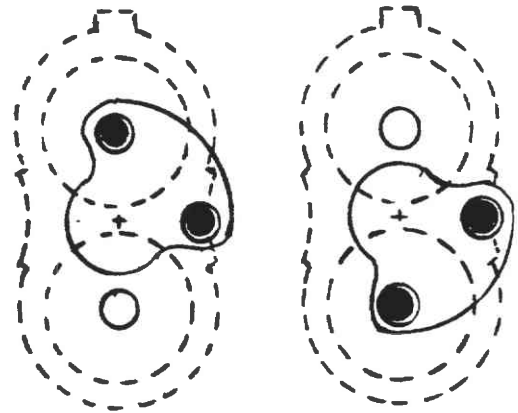


FIGURE 10. Two views facing the striker lug of a two barrel pistol showing the two firing positions.

bit of a loss as to why the patent was applied for or granted.

Gunmaking and the Lancaster Record Book Data

In order to understand the record book entries and their limitations it is important to be aware of the nature of the gunmaking business in England in the late 19th Century. As was the case with most of the highest quality "gunmakers," Charles Lancaster did not actually manufacture every firearm they sold, even if they engraved their name on it. This is obviously the case when we find Winchesters, etc. with the names of London gunmakers on them. It is also true in varying degree with virtually all the weapons they sold. The "maker" would almost always "finish" the guns, which would include fitting of gun stocks, custom features such as sights, etc. in addition to engraving

ing, surface polish and finishes, casings, etc. Depending on the maker, they might manufacture a particular part or parts such as frames, barrels, etc., but normally at least some if not most of the weapon would be manufactured by a "workshop." In the case of Lancaster, they probably did most of the manufacturing of their highest quality guns and rifles and, since it was a proprietary system, they probably did all the "oval bore" rifling. The "workshops" were most often located in an industrial area such as Birmingham, and the larger ones would normally supply several "gunmakers." Their product could be parts (locks, barrels, frames, etc.) or virtually complete weapons shipped "in the white" depending on the preference of the "maker." Although Lancaster could produce complete weapons of the highest quality to sell at high prices, they could not produce the pistols either in the volume required or at a cost low enough to be competitive in what was a lower tier market than that for their "best guns." The pistols were therefore contracted out to a "workshop" to be furnished "in the white," probably in a nearly complete state, ready to be rifled, proofed and finished. The identity of the workshop or workshops which manufactured the Lancaster pistols has not been determined.

As a result of this system each Lancaster pistol has two numbers associated with it. The first is that stamped on most of the major parts by the workshop and the second is the number engraved on the pistol by Lancaster. The workshop number is used by both the workshop and Lancaster to keep track of production and deliveries and to provide a way to reassociate parts of the same weapon during assembly and finishing. In the case of the Lancaster pistols these numbers normally range from 0 to 100 and are found most easily on the frame and barrel group near the hinge. What we would normally think of as being the serial number is engraved on the pistol by Lancaster after finishing and at only one location, usually on the trigger guard bow or, when a cocking trigger is present, on the lower grip tang. This number is assigned to the weapon on the basis of what number is available in the record book, usually at the time the weapon is finished. The workshop number may or may not be included in the record book entry depending on the whim of the person making the entry, but most often it is not.

The relationship between the numbers of pistols produced and serial numbers is greatly complicated by the fact that not only are all models of the pistols in the same serial number sequence, but also many other types of weapons as well. With the exception of two hybrid pistols made up in 1942, all of the two and four barrel Thorn patent pistols fall between serial numbers 7100 and 9283. This is a total of 2184 assigned numbers, yet only 946 of these numbers

were assigned to all models of these pistols, the other 1238 numbers having been assigned to rook rifles, revolvers bought for resale, etc. This means that even though there may appear to be a significant gap between two Thorn patent pistols, a large part or all of that gap may be other kinds of weapons. Although this may be an extreme example, the next .577 caliber double barrel pistol after No. 8562 is No. 8995, and the next Thorn patent two or four barrel pistol of any model is No. 8572, a four barrel in .360 No. 5 caliber. Serial numbers cannot be used as they are in the study of American weapons where not only each type of weapon but usually each model has its own series of numbers. The fact that two .380 caliber four barrel pistols have serial numbers which are 82 numbers apart cannot be taken to mean that there are 82 like pistols between them as it can with 1849 Colt Pocket Model Revolvers for instance.

Fortunately the quantities involved in the Thorn patent pistols are low enough that it is feasible to go through the records and do such things as count the number of pistols of each caliber and type. Generally an effort was made to record such features as cocking triggers, unusual barrel lengths, nickel plating and so forth, so a count of these is assumed to be a fairly accurate estimate. The short barrel version of the .380 four barrel pistol also seems to be recorded regularly and accurately enough to be used for a count of this model. In all these counts which require special mention, any error will most likely be omission, so the count may be taken as a minimum estimate. Large or special orders were likely to be assigned a sequence of serial numbers. Any retrofitting such as updating the lockwork or adding a cocking trigger to a pistol sold earlier seems to be faithfully recorded. Occasionally design changes and such are mentioned but usually cryptically with such notations as "new pattern" or "two clip." The records must therefore be augmented with a knowledge of the configuration and features of the pistols themselves, a knowledge which those who made entries in the record book took for granted. The best way to gain familiarity and gather data is of course by personal inspection of the pistols, but much data may also be collected from entries and photographs in museum catalogs, auction catalogs, periodicals, arms books, etc. These empirical data are then cross referenced with entries from the record book in a continuing process to identify the nature, sequence and timing of design changes.

The only dates ever given in any of the entries is the date of sale and the date of any subsequent retrofitting work done. The date of manufacture was never recorded. The approximate date of manufacture of a pistol or of a change in characteristics associated with a range of serial

numbers can at least be estimated by the sales dates. Obviously a pistol was not manufactured after it was sold, so the sales date represents the latest possible date of manufacture. If it is possible to identify a group of like pistols in proximity to the one in question (workshop numbers can be helpful) then the date of manufacture is probably no later than the earliest sales date in the group. When sales were brisk, the sales date recorded is probably not too long after the date of manufacture. In slow times or in the case of an occasional wallflower, a pistol may not have been sold for months or even years after it was manufactured and there are many instances of this happening.

Benson and Company for Spain

The Lancaster records include an allocation of serial numbers “7500 to 7620” (121 numbers in total) to four barrel pistols of .455 caliber for “Benson and Company for Spain.” There is no date entered, but by the date for the entries before and after this one, it was probably late 1884 or early 1885. Benson and Company was a dealer and several other entries with their name precede and follow this entry. The order being as large as it is, it seems quite likely that it was for the Spanish Government and not just for commercial resale from a Spanish subsidiary or the like. The author has not found any other reference to this sale, any record or observation of the Spanish Government ever having or using these weapons or any positive identification of one of them by serial number. Since the order represents 17% of four barrel pistol production, one might have expected to encounter at least one of the pistols. However, at this point we must assume they were actually produced as stated by the record book, and continue the search for more information on them.

Other Weapons Built Using Pistol Frames

An entry was found in the record book for one single barrel pistol which appears to have been built using the Thorn patent system, probably on a large size two barrel frame. It was sold in January, 1889, and is listed as being 28 gauge, and since it used a “spherical ball,” it most probably was rifled. There is also a listing for a four barrel carbine in “.44 Winchester” caliber with 18 inch barrels sold in January, 1886. All of the other Thorn patent long guns were built on a significantly larger shotgun size frame and are listed in a different book. Since this is listed and numbered along with the pistols, it almost undoubtedly was built on a pistol frame.

Dunlap² claims that a Thorn patent single shot pistol “has been examined,” but the author has not otherwise seen or heard of one of these or of a long gun of any kind on a pistol size frame.

Tables II and III

Tables II and III (next page) provide a detailed accounting of the production totals of the six models of Lancaster pistols by caliber, including all the special order chamberings and barrel lengths entered in the records.

Markings and Finishes on Four Barrel and Two Barrel Pistols

Serial numbers were always engraved (not stamped) after the pistol had been finished and are found in only one location on each pistol. If the pistol has a simple trigger, the serial number will be found on the outside of the trigger guard bow, and if it has a cocking trigger, the serial number will be found on the front grip tang near the butt.

Workshop numbers were always stamped (not engraved) before the pistol had been finished and are found in many locations on each pistol. The most obvious locations are in the vicinity of the barrel hinge on the bottom side of both the barrel group and the frame. They will also be found inside on most of the major parts and occasionally in pencil on the inside of the grips. They are normally one and two digit numbers but occasionally a three digit number just over 100 or two digits and a letter will be found.

Barrel group markings include the maker’s name and address, caliber, and proof marks in addition to the workshop number (see above). The maker’s marks were engraved at the bottom of the flute between the two top barrels on the four barrel pistols and on the top of the upper barrel (or its rib) on the two barrel pistols. They will be one of several minor variations of: “Charles Lancaster (Patent) 151, New Bond Street, London.” On the short barrel pistols one or two of the elements, “patent,” the address, or “London” is likely to be left out. The caliber designation was engraved on the side with the barrel release lever (almost always left), in the bottom of the flute between the upper and lower barrels near the breech. The markings and their corresponding cartridge designations known to the author are:

20 C.F.	20 Gauge
577 C.F.	.577 Revolver
500 C.F.	.500 Revolver
476 C.F.	.476 “Enfield” Revolver
455 C.F.	.455 Revolver
450 C.F.	.450 Revolver
380 C.F.	.380 Long (holster pistol)
	.380 Short (pocket pistol)
360 No. 5 C.F.	.360 No. 5 Rifle
320 C.F.	.320 Revolver

If the case length is anything other than standard it will be engraved in the barrel flute on the opposite side. On the pistol chambered for the .577 x 1½ inch case, the right side flute is engraved “solid drawn case 1½ inch.” The author has not seen any pistols in the other special order calibers

TABLE II
PRODUCTION BY MODEL AND CARTRIDGE
Four Barrel Pistols

Total entries identified as four barrel pistols:	712
Entries from which neither cartridge nor model can be determined:	<u>22</u>
Known cartridge and model, all varieties	690

LARGE FRAME	CARTRIDGE	BARREL LENGTH	QUANTITY
Standard Holster Pistol			
Military Contract (?)			
"Benson & Co. for Spain"	455 Rev.	6-1/4"	121
Commercial Sales			
	476 Rev.	6-1/4"	245
	455 Rev.	6-1/4"	204
Special Orders (Holster)			
	577 Rev.	6-1/4"	3 ¹
	500 Rev.	6-1/4"	3
	450 Rev.	6-1/4"	4
	45 Colt	6-1/4"	2
	" 44 USA"	6-1/4"	1
	".440"	6-1/4"	1 ²
	".430"	6-1/4"	1 ²
	.410 x 2" (shot)	6-1/4"	2 ³
TOTAL LARGE FRAME PISTOLS:			587
SMALL FRAME	CARTRIDGE	BARREL LENGTH	QUANTITY
Standard Holster Pistol			
(Large grip)	380 Long	5-5/8"	62
	360 No. 5	6-1/4"	9
TOTAL Small Frame Holster Pistols:			71
Standard Pocket Pistol	380 Short	3-5/8 to 4-1/8"	28
(Small grip)			
Special Orders (Pocket)			
	320 Rev.	2-5/8"	4 ⁴
TOTAL Small Frame Pocket Pistols:			32
TOTAL SMALL FRAME PISTOLS:			103

(Footnotes to Table II)

1. To my knowledge, these pistols have never been found. The 577 Rev. cartridge is too large for this frame size, so these three pistols are either on an extra large frame or quite possibly are an entry error which should have read "2 B.P." instead of "4 B.P."
2. Possibly bored to this diameter to be chambered and rifled by the purchaser.
3. Made up in 1942, long after regular production had ceased, using both old and new parts.
4. A group of four (possibly five) pistols made with shorter barrels, no trigger guards and folding simple triggers.

TABLE III
PRODUCTION BY MODEL AND CARTRIDGE
Two Barrel Pistols

Total entries identified as two barrel pistols:	234
Entries from which neither cartridge nor model can be determined:	<u>5</u>
Known cartridge and model, all varieties	229

LARGE FRAME	CARTRIDGE	BARREL LENGTH	QUANTITY
Standard Holster Pistol	577 Rev.	6-1/4"	88
Special Orders (Holster)	20 ga x 1-3/4" (not rifled)	10"	1
	577 x 1-5/8"	6-1/4"	1
TOTAL LARGE FRAME PISTOLS:			90

SMALL FRAME	CARTRIDGE	BARREL LENGTH	QUANTITY
Standard Holster Pistol (Large grip)	476 Rev.	6-1/4"	72
	455 Rev.	6-1/4"	29
	380 Long	6-1/4"(?)	11
Special Orders (Holster)	500 Rev.	6-1/4"	1
	476 Rev.	8"	1 ¹
	450 Rev.	6-1/4"	1
	45 Colt	7"	1 ²
	"44 U.S.A."	6 1/4"	1
TOTAL Small Frame Holster Pistols:			117
Standard Pocket Pistol (Small grip)	380 Short	4 1/8"	6
Special Orders (Pocket)	455 Rev.	5"	2 ³
	450 Rev.	3"	1 ⁴
	380 Short	3"	13 ⁴
TOTAL Small Frame Pocket Pistols:			22
TOTAL SMALL FRAME PISTOLS:			139

(Footnotes to Table III)

1. Cased with detachable shoulder stock.
2. With "Colt's Rifling"
3. Short butts with skeleton extension.
4. Special order from Ramsay and Co., January 1896, with shorter than normal barrels and folding cocking trigger.

(e.g. .45 Colt), so they are not listed above. The proof marks are stamped on each barrel in the vicinity of the chamber. They are always London proofs and the Provisional, View and Definitive proof marks of the period are always present, as would be expected.

Frame markings include a patent marking on the breech face and proof marks in addition to the serial and workshop numbers already mentioned. The breech face marking "Charles Lancaster Patent" is stamped in a circle in the center of the breech face (Figures 3 and 4). On the four barrel pistols this circle is about ½ inch diameter and on the two barrel pistols it is about ⅜ inch. The London "View" proof mark is almost always stamped on both sides of the frame opposite each chamber on the four barrel pistols and on the left side on the two barrel pistols.

Any initials, regimental markings, crests, etc. are usually found engraved in the space on the upper breech tang to the rear of the tang screws.

The standard finish for both the four barrel and the two barrel pistols was blue over a bright polish on the frame and over a slightly duller polish on the barrels. The record entries include special finishes such as nickel plating, gold plating, engraving and ivory grips. Nickel plating is relatively common but the rest of the special finishes are very rare (3% of the four barrel pistols and 1% of the two barrel pistols). Pistols could of course be decorated after they left Lancaster, but judging from the records and the author's experience, there are very few of them in any case.

Today we find a number of the pistols in what are obviously original factory cases, but casing is never mentioned even in the very few instances of decorated pistols.

Unfortunately there is not enough space to permit a discussion of the competing two and four barrel pistols or the long arms made by Lancaster under the Thorn patents. Perhaps for now it is sufficient so say that neither the competing multi-barrel pistols nor the Lancaster long arms did nearly as well as the Lancaster pistols.

It often happens that new leads are uncovered during the course of preparing a document, and such is the case this time. It is also hoped that more leads will turn up as a result of this being published. I would certainly welcome them and they would definitely be incorporated in the forthcoming expanded version of this document. Information and data on both usual and unusual examples of the Lancasters and their competitors would be most appreciated. The competitors include Bland, Martin and Francotte patent multi-barrel pistols (and hopefully some I've never heard of!). The Lancaster long guns are very rare, so anything on them would also be most welcome. I already have many photographs and quite a bit of material which I couldn't include at present, so with existing and potential new leads, there will be much to add.

NOTES

1. Taylerson, A.W.F.; *The Revolver, 1865-1888*, Crown Publishers, Inc., New York, 1961.
2. Dunlap, H.J.; *American, British and Continental Firearms*, Recorder-Sunset Press, San Francisco, CA, 1964, p. 219.

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TO CORRECT AN OMISSION

We regret to note that credit was not given to Dr. James B. Whisker for the use of his photographs in the article, "Long Rifles from the Valley of Virginia" by Edwin N. Gewirtz in *Bulletin* No. 60, Savannah, Georgia, May 3-7, 1989.

Dr. Whisker is noted for his research on and photographs of Pennsylvania longrifles; his most recent books are *Gunsmiths of Bedford, Somerset and Fulton Counties* (Old Bedford Village Press, 1991) and, with Dr. Roy F. Chandler, *Kentucky Rifle Patchboxes*, Volume 2 (Old Bedford Village Press, 1992).

Dr. Whisker should have received credit for figures 3, 4a, 4b, 5 (two photos), 7a, 7b, 8 (three photos), 9, 10, 11a, 11b, 14a, 14b, 18a, 18b, 21a, 21b, and on pages 60/18 and 60/19, figures 3, 8, 9, 10, 11, 21.

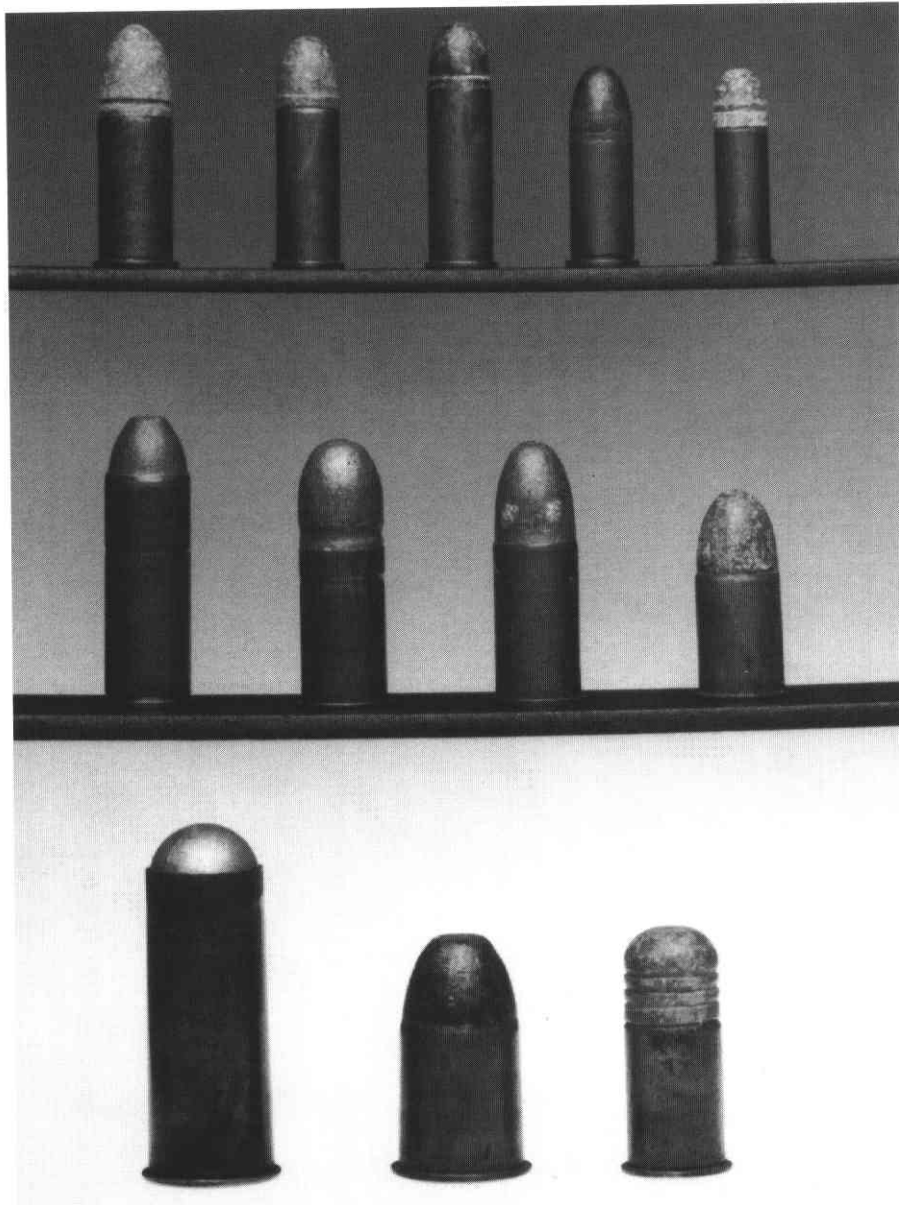


FIGURE 11. Cartridges used in Lancaster pistols. Left to right, Top Row: 44 American ("44 U.S.A." (?)); 380 Long; 360 No. 5; 380 Short; 320 Long. Middle Row: 45 Colt; 476 Enfield (476 Revolver); 455 Revolver (Mark I); 450 Revolver. Bottom Row: 577 x 1 $\frac{1}{2}$ inch; 577 Revolver; 500 Revolver.