



A pair of 12 bore double barreled percussion rifles by Charles Lancaster made for the Maharajah of Joudhpoor in 1861.

The romance of *THE DOUBLE RIFLE*

By Tony Sanchez-Ariño

The author is still an active professional hunter and yet is old enough to have been involved in culling and control of buffalo, rhino and elephant in the years following World War II. He is therefore well qualified to point out the advantages of the double rifle but here he also traces the history and development of what many people regard as the most desirable of weapons.

Despite my forty-six years as a professional elephant hunter in Africa, having seen hundreds of weapons and used many of them, every time that I get in my hands a double rifle my mind always asks the same silent question: "What fantastic histories would tell to us if he were able to speak...?"

No doubt that the double rifles are the most sporting and romantic rifles among all the weapons employed by the yesterday and today's big game hunter, amateur or professional, specially developed for sporting hunting purposes with no connection with military weapons, like the bolt action for instance.

The double barrelled rifle was created and established in Britain between 1830 and 1840, when deerstalking became fashionable in Scotland. Until then the single barrel rifle was exclusively used but, recognising the need of a quick second shot in case of a wounded animal, the gunmakers turned to the double-barrelled rifle built on similar lines to the double-barrelled shotgun already in current use. Thus was born the weapon which has been the test of the gunmaker's skill ever since and which has displayed the highest talent of the gunmaker throughout its development. The history of the double rifle has always been closely allied to that of the shotgun, although two steps behind it.

When the double rifle first appeared it was a percussion muzzle loader, as were all the weapons at the time. Loading was quite a lengthy process: First the powder, then the wadding followed by the bullet and finally all were duly rammed home with a loading rod. Percussion caps were then fitted to the nipples of the breech which connected directly with the powder charge. The percussion cap was similar to a minute copper thimble and contained in its base a compound which exploded when struck by the external hammers of the rifle.

The popular term of "Express", which is the normal designation for the double rifle, originated with the famous London gunmaker James Purdey "The Younger", who was constantly making innovations and improvements to rifled weapons. In 1856 he began building weapons which were rifled with only two opposing deep

grooves (the "Purdey Two-Groove Rifle") mostly in the .400 and .500 bore. This system allowed for a great increase in the velocity of the bullet by using a heavier powder charge as the grooves were wide and deep enough to prevent the lead stripping the rifling, as had formerly occurred with bullets travelling too fast up the barrel to be held by the rifling. This great increase in velocity and consequent flattening of the bullet's trajectory coincided with the introduction on the railways of the so called "Express Train", which was also much faster than its contemporaries, and the term of "Express" was applied to single and double barrelled sporting rifles capable of firing accurate shots at long range with flat trajectories. With the introduction of the magazine repeating rifle in the 1890's the term "Express" was confined mainly to double rifles, a tradition which has lasted ever since. Originally the entire term "Express Train Rifle" was used, but soon it became foreshortened to the single term of "Express", which we still use today for the general designation of the double rifles.

Guns which opened at the breech and dropped the barrels downward to allow a cartridge to be inserted had been invented by the Paris gunmakers Houillier and Casimir Lefauchaux but, these guns, because of their fragility, could not be fired with heavy loads and therefore could only be built as shotguns. The cartridge consisted of a simple cardboard tube in a completely closed metal base from which a pin protruded on one side, the other end being seated in a percussion cap detonator. When the gun was loaded the pins fitted into notches in the upper edge of the breech and the gun, when closed, holding them upright in the way that the hammer of the gun struck down on the pin, which was pushed into the base of the percussion cap, setting off the detonation and the cartridge charge. The early pinfire breechloaders made little impact on the sporting scene at the time as they were crudely built, expensive and still in the experimental stage, whereas the percussion muzzle-loader had reached the pinnacle of perfection.

However, the possibilities of the pinfire system had been recognised by the British gunmakers, starting with Joseph Lang

who saw and studied the guns brought over to the 1851 Great Exhibition in London by Lefauchaux. Within a few months he had produced a double barrelled pinfire gun with tilting barrels which was a vast improvement on everything that had gone before, and the other gunmakers quickly took up the challenge. During all this time the classic percussion muzzle-loading rifle continued in use because the sportsmen were reluctant to give up a weapon which had been employed for a long time with positive results, accurate and powerful, for one which was so far firing the comparatively weak pinfire cartridges and for which the referred cartridges had to be specially provided, instead of the easily available powder, wadding and bullet required for the percussion rifle.

This situation held for another decade, until 1861, when George Daw introduced the centre-fire cartridge which completely revolutionised the world of sporting and military weapons. The new system predominated to such an extent that muzzle-loading firearms were quickly rendered obsolete by it. The enormous competition between gunmakers to design something new was in full swing at this time, with the result that within forty years the percussion muzzle-loading rifles had been replaced by modern hammerless ejector double rifles, more or less as we know them today.

For dangerous big game hunting muzzle-loading rifles were still produced even through the 1860's, usually 8-bore and 4-bore which allowed the use of enormous powder charges. In general the 8-bore was in more common use, while the 4-bore was employed almost exclusively for elephant hunting. The first metallic cartridge of the 4, 8 and 10-bore rifles appeared in 1870. The cases were made of brass and were available with a variety of bullets to suit the type of game hunted. This really marked the end of the muzzle-loading era, although a few die-hards continued to use them for a number of years afterwards, like the famous hunter-naturalist Selous who continued using the 4-bore gun for many years more.

The new breech loading guns became the traditional rifle for dangerous game in Africa and Asia due also to a double cir-

cumstance: In those days the heavy and powerful bolt action rifle didn't exist at all and for the other hand the double barrelled rifles came to perfection at the same time as the great era of exploration, colonial conquerors and great tropical hunts leaving behind them the most vivid tales of their use and success in the pursuit of elephant, tiger, rhino, buffalo, etc., which was the base for the romantic aura always present with the double barrel rifles. Who has not dreamed when perusing old hunting books showing the hunter on top of a big elephant or by the side of two dead tigers with his double rifle in a prominent position in the picture?

As pointed out earlier the development of the sporting double rifle tended to follow those of the shotgun but always some years behind, due to the higher pressures involved in rifles and the consequent necessity for the proper strength and expected reliability. In 1871 the gunsmith Theophilus Murcott introduced the first hammerless double barrel gun of significance and, even though superb hammer

weapons continued to be made for another twenty years, their heyday was over by 1890 and the hammerless gun had come to stay.

In the middle 1890's double rifle design divided into boxlock and sidelock types, the latter being reserved for the best quality weapons while the boxlock actions were used for rifles of lower prices. While boxlock rifles can stand up to hard use, in sidelocks the trigger pulls are often crisper and more easily adjusted and the locks are more accessible for cleaning and general overhauling, not to mention the beauty of the gun where the artist can do the most fantastic engravings.

From about 1900 the double rifle has hardly altered in any essential detail. The style of finishing has changed a little, but the basic mechanism has remained the same. Examples of design change are the modern use of short ribs for mounting the foresight and rearsight instead of the full length broad file-cut rib which has always been fitted in the early days, the use of a trapped box in the pistol grip which con-

tains a spare foresight and the Anson push-rod system fitted to fore-ends instead of the lever fore-end which was current until the turn of the century.

The basic hammerless sidelock gun was developed by the firm W&C. Scott & Son of Birmingham (England) in 1878, maybe with the help of the invention introduced by Murcott in 1871 with the first hammerless double gun. The new system was such a great innovation that it was taken immediately by the famous gunmakers Holland & Holland of London who, after adapting and improving it, marketed it in 1879 as the "Climax Safety Hammerless Gun". Then in 1885 they introduced the "Royal Hammerless Gun", which by 1893 was fitted with ejectors. By the turn of the century the definitive "Royal" was being built and this, with minor modifications, is essentially the same gun that Holland & Holland builds today, both shotguns and double barrel rifles.

The "Boxlock Hammerless Action" or "Anson & Deeley" system was patented in 1875, named after its two inventors Mr.

A 12 bore double barrelled centre fire rifle made in the pinfire style by Westley Richards. c1870.





A .450/400 nitro Boxlock ejector rifle by W.J. Jeffrey. Made around 1920.

W. Anson and Mr. John Deeley, who were both at the time employed by Westley Richards, the famous Birmingham gunmakers who contributed so much to the development of sporting ammunition, guns and rifles, like the first reliable safety catch and ejector mechanism, a selective single-trigger and a special extractor enabling the ejection of the cases of "rimless" ammunition from double rifles and the magnificent hand-detachable locks which could be removed from the body of the action in seconds and without tools for inspection, cleaning, etc. The "Boxlock Action" was always very popular and many weapons, both shotguns and double rifles, from the best to the worst, have been built in this system up to the present day.

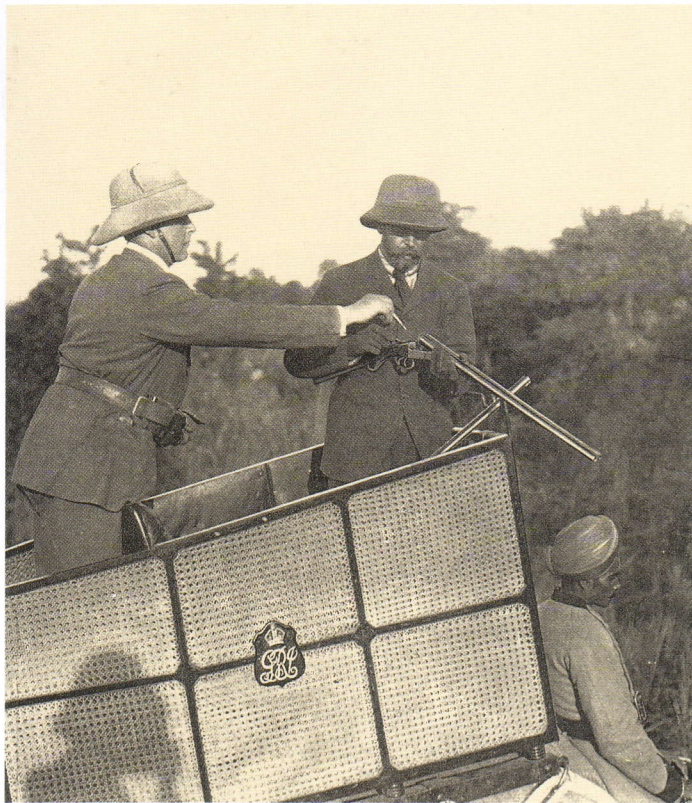
The building of doubles rifles, independent of the system, involves a wide range of challenges, varying from obtaining the right materials to the extreme care needed

in their manufacture, as they must be able to withstand the constant use of high-powered cartridges under all conditions. The main problem in the side-by-side double rifles is to regulate the barrels so that they will both shoot to the same point of aim and to ensure that close grouping can be maintained at normal ranges for all the practical purposes.

To own a double rifle is the "golden dream" of every devoted hunter. With perfect balance it handles with the ease of a shotgun and can be aimed and fired almost without looking for the sights, as it comes into the shoulder so naturally that one can point it instinctively. The mechanism is simple and utterly reliable and failure is practically impossible, at least with the rifles produced by the well known gunmakers with long experience in this particular field. In fact the double rifle is two single rifles put together, each one with its independent mechanism, and

so easy to work that they are "fool proof" according the old saying. Time and again experience has shown that a good double rifle fitted with automatic ejectors is the best life insurance a hunter can have when facing wounded dangerous animals, when it is essential to have two shots available rapidly without having to lower the weapon for reloading and not to lose the animal from sight. The "Express" rifle has continued in present day Africa, with dense bush populated by dangerous big game, to be as necessary as it has been for the last hundred years. Calibres may change but that does not affect the necessity of a double rifle under such particular conditions. This type of rifle was, is and will be the right weapon for use in dense cover with low visibility.

As far as big calibres are concerned, compared to the number of gunmakers, there have been few rifles makers involved in building double rifles over .400 calibre,



From Charles Lancaster's catalogue.
 "H.I.M. The King Emperor with his Lancaster .280 Hammerless Rifle". Nepal 1911.



.700 rifle by Holland & Holland. Built in 1992.

because they are more difficult to make and because of the implied responsibility of the maker of a weapon designed for use against dangerous game, when failure of the rifle at a critical moment could have very serious consequences. In general the best large-bore double rifles have always been British, with such famous names as Holland & Holland, John Rigby, James Purdey, Jeffery, Westley Richards, Joseph Lang, Charles Lancaster, George Gibbs, Hollis & Son, John Wilkes, Thomas Bland, Daniel Fraser, Scott, Evans and Boss. In the rest of Europe, Belgium has also a long tradition in building heavy double rifles used in the former Belgian Congo, like Francotte, Mahillon and Dumoulin to mention only some few gun-makers. Very fine double barrel rifles are produced also in Austria, Italy, Germany and Spain, in top quality, plus some few more in the United States.

The demand for double rifles is constant for both new and second hand weapons, with their ammunition readily available in any calibre thanks to several well known companies loading them, like the traditional and famous Kynoch in England, back in the business after many years,

which reconfirms that the legendary double barrel rifle is more alive than ever.

Not all double rifles are in "African Calibres", there are also a wide range of light and medium bores excellent for hunting in Europe and North America where two quick shots are imperative in timbered areas, like the old and always popular 9.3 x 74R, perfect for all the big game animals found in the two above referred continents.

The larger bores have always been the choice of experienced hunters, as can be seen in the following list showing the favourite double rifles used by well known professional elephant hunters in Africa:

"Deaf" Banks577
Pete Pearson577
"Mickey" Norton577
Bill Buckley500 and .577
James Sutherland577
George Rushby.....	.577
John Hunter	475 no.2 and .500
"Samaki" Salmon.....	.470
Tony Sanchez-Ariño465 and .577
"Andy" Anderson.....	.470 and .577
Bill Pridham600

Bert Schultz450 and .450 no.2
 John Taylor465
 Bob Foster470
 Personally I'd like to say that despite the fact that in the last twenty years I've been using specially the bolt action rifles, the .416 Rigby and more recently the .500 Jeffery, I'm a great lover of double barrel rifles having shot many hundreds of elephant with my .465 Nitro Holland & Holland Royal and the .577 Nitro by Hollis & Son, plus around thousand buffalo in the most satisfactory way, and I would dearly wish to turn the clock back to relive those great memorable days under the African Sun with those glorious rifles...

Today, in 1998, we are very far from the "happy old days" and nobody can even dream to shoot some few hundreds of buffalo or elephant as we used to do not so long ago, but the present hunter will experience the same pleasure with a double barrel rifle in his hands when shooting the elephant or the buffalo "of his life", full of the romance it represents, and they will enjoy the use of this particular type of weapon as much as James Sutherland, John Hunter or myself did. □



A modern example of the rifle maker's art.
 .465/500 'Royal' Hammerless Ejector rifle by Holland & Holland.