In choosing this title for my talk I had in mind those early London makers of the 17th century about whom little has been written and in fact very little known other than the



W. Keith Neal, Warminster, England

evidence of some fine examples of their work and skill that have been left to us to tell the tale.

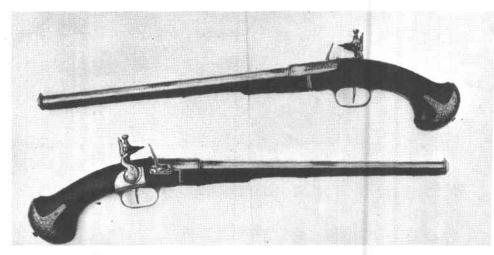
Until the time of Charles the first, the gunmaking industry of Britain had consisted principally of the making of essential military weapons. These were roughly made, and expendable, very few have survived. Luxury arms for the relatively few who could afford them, were for the most part imported from France or Germany, but the turning point in this state of affairs can be said to date from roughly the time when the gunmakers received their Charter from the King in 1638

and formed themselves into the Worshipful Company of the Mistery of Gunmakers. This really put gunmaking on the map in Britain, until then the only City Guilds in London which accepted gunmakers were the Blacksmiths and the Armourers. Now with a guild of their own they were not long in taking full advantage of their position, and soon fine arms were being made in London that could compete with the best work of the continental makers. One of the most colourful of these gunsmiths was Harman Barne, said to be of Dutch extraction, and a man of great skill and genius who hadhis shop in St. Clements Danes in the City. There is no doubt whatever that he had learnt the art of gunmaking abroad, and was familiar with the most advanced designs of both Dutch and French makers. Armed with so much skill it was not long before he was making a great name for himself and had attracted the patronage of the Royal Family. Both Charles the Ist and Charles the II had firearms made by him, and the king's nephew Prince Rupert a man with considerable scientific knowledge and a fine taste and curiosity into all matters concerning shooting was a great patron and admirer of Harman Barne. Prince Rupert himself was a very fine shot and it is recorded that on the occasion of the Royal Army halting at Stafford during the Civil War on Sept. 13th, 1642 he showed his skill as a marksman by firing with a screwed horseman's pistol and a single bullet at the weathercock on the steeple of St. Mary's Church while standing in a garden some sixty paces from the foot of the church tower. His first shot pierced the tail of the weathercock, and upon his uncle. King Charles declaring that such a shot could only be achieved by a lucky chance, he immediately repeated it with his second pistol. History does not relate who made the pistols but I think it is more than an even chance Harman Barne made them. His markmanship stood him in good stead when staying in Paris in 1654 he was set upon by three desperadoes who fired at him from behind with their pistols. Rupert though taken by surprise whipped out his pistols and shot one of them dead and seriously wounded the second whereupon the third bolted leaving him master of the field.

Truthful anecdotes such as these produce a lively curiosity as to just how good Harman

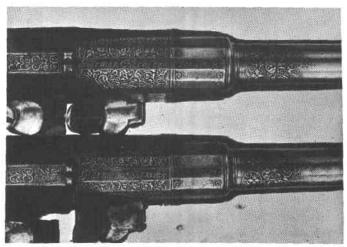
Barnes pistols were that could produce such accuracy three hundred years ago. I had to wait

a long time for this answer as no examples of his screw barrel pistols were known to exist in England Then the al most impossible happened and a w onderful pair came to light in Sweden as a re-



PAIR OF HARMAN BARNE FLINT PISTOLS
Possibly Prince Rupert Pistols

sult of the late Dr. Lenk's activity, and he duly photographed them and illustrated them in his invaluable work "Flintlaset". Some time later they changed hands, and this gave me hope as there was just a chance they might do so again! A visit to Gothenburg was the result and when



TOP VIEW OF BARRELS OF BARNE PISTOLS SHOWING SIGNATURE IN GOLD AND GOLD DECORATION

I saw the pistols I could hardly believe my eyes. Long graceful screw barrel rifled English pistols the barrels and mounts richly damascined and inlaid with gold and in wonderful preservation. Nothing like this existed in England and here surely were the royal Harman Barne pistols of either Charles II or Prince Rupert. And what more likely that they should have come to the Continent as both Charles II and Prince Rupert escaped after the Civil War to Holland and travelled considerably in their efforts to raise support

for the royalist cause and restoration of the monarchy. My theory is that these wonderful pistols were probably given by Charles or Rupert as a political gift during the time of their exile and that they may well be the actual pistols which Rupert shot at the weathercock, is more than a likely chance. Since the discovery of these pistols another pair similar in design but quite plain have been discovered at Goodwood, the home of the Duke of Richmond and Gordon. These pistols by tradition belonged to Charles II and were given by him to one of the Dukes ancestors. That these pistols almost certainly belonged to Rupert is a fair surmise as it was Ruperts patronage of Harman Barne which helped him to success, and what more natural that Barne should make his best effort for the Prince by producing these exceptional weapons. A description of the pistols is of interest. The barrels are 16 inches in length including the chamber. Rifled with eight deep grooves the rifling makes a complete turn in fourteen inches. The breech is chambered to take an oversize bullet and will accomodate a charge of 40 grains of

powder. Even allowing for the fact that powder in those days was not as good as today, that was still a very high velocity load in a 45 calibre barrel and capable of piercing a steel breastplate. The breech is heavily reinforced then necked down for the main barrel and finishing with a muzzle ring on which is mounted the foresight. The position of the backsight gives a sight base of 16 1/4 inches. They were in fact pocket high velocity rifles. The locks are of great interest, built up on the steel frame of the pistol, they have intercepting scears at half cock. To release the locking catch to allow the barrel to be unscrewed to load, the trigger is pulled while the lock is in the half cock position, the mechanism is so constructed that the trigger operates this locking bolt, withdrawing it while the cock remains at half cock, duly intercepted by the split scear. As soon as the pistol is full cocked the scear comes into full operation and the breech remains fully locked. For sheer strength these pistols are superbly constructed. The steel frame of the stock reaches almost to the butt cap both top and bottom and is screwed through for extra strength. There is no apparent way to dismount the action or disclose how the mistery of the mechanism operates. A carefully disguised heart shaped taper pin goes right through the butt cap, so well concealed by the gold inlay that it is extremely difficult to discover, and by driving this out in a certain way the stock can be removed and the whole of the mechanism disclosed. Harman Barne was not giving his secrets away, they were to be the property of himself and his noble patron only. And the secret was well kept, because a design so advanced as this and mechanically and ballistically so sound could have revolutionised hand firearms had it become known. Harman Barne had a checkered career. He was living and working in London throughout the Civil War when that city was in the hands of the parliamentary forces, yet he still managed to carry on his business as a gunsmith, concealing much of his production and smuggling it out to the royalist side. He was imprisoned and had his stock confiscated, yet so great was his skill he was soon out again and once more practising his trade, and when the Commonwealth period ended and the monarchy was restored Harman Barne petitioned for the place of hand gun maker to the King reciting his loyalty to his Father and himself, as well as repeated imprisonment and confiscation of goods endured in the royalist cause. The request was granted very promptly Harman Barne becoming gunsmith to his Majesty in August 1660, an office he held for life. This great gunmaker did not live long to enjoy his well earned privilege and died just over a year later. Up to date I have been able to discover not more than a dozen surviving examples of his work. The pair of gold mounted pistols must represent one if not the finest of his productions. The pair of long double barrel wender pistols which I show also have great merit. As an ingenious feature the ramrods are concealed in the butts and are telescopic, when drawn out each section is given a quick turn which locks it, the result being a full length metal ramrod. The wender gun which almost goes en suite with the pistols is of exceptionally fine workmanship. Of his other known works, one is the fine repeating gun on the Kalthoff principle and illustrated in Georges English Guns and Rifles. One single screw barrel pistol in a private collection in England and a muzzle loading pistol of a size for the belt with the frizzen spring concealed on the inside of the lock plate. A small pocket pistol, the only one I know of, is in a well known private collection in America, it is the one illustrated in Georges English Pistols and Revolvers. One plain English early dog-lock musket of simple military pattern, the lock marked H.B. makes the total of all the Harman Barne pieces which I have been able to discover. No doubt there will be many others hidden or unlocated but the ten pieces I have referred to show a good cross section of this remarkable gunsmiths work.

Following the example set up by Harman Barne, other good London gunsmiths were quick to develop their talents in the production of fine quality arms. With the restoration of the monarchy came a demand and the importation of weapons from abroad was discouraged by the activity of the Gunmakers Company. This had two effects immediately, one was to put the

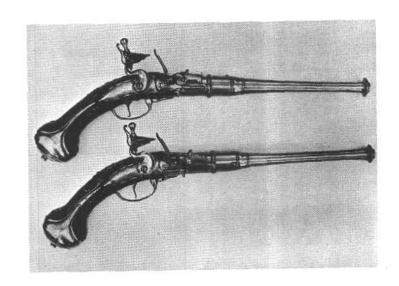
London makers on their metal and the other was to introduce more skilled labour from abroad where the production of fine quality arms was better understood. Two outstanding London gunsmiths who followed Harman Barne were Andrew Dolep and Gorgo. Little is known of either of these mens background, and both must have been of foreign extraction. Andrew Dolep was made a Freeman of The Gunmakers Company in 1686 and without doubt had been working here for some time previously. Gorgo must have been Italian and from the similarity of style and work must have been either a friend or partner of Dolep.



SIDE view showing action of Barne Pistols

These makers between them have left behind some of the most remarkable of the English 17th century weapons. First and foremost are the pair of three shot repeating pistols signed Gorgo at London which are well known through being illustrated in the book by Jackson on European Hand Firearms. As masterpieces they stand out away ahead of their time in every respect. Hand revolved, screw barrels turning off on a fast square thread. Shooting down a funnel from the three chambers bored in the breech, no gas escape except down the barrel. Priming for three charges is operated from a horizontal magazine which has a rotary tap with a kicker which is opened and closed by the action of the pancover. A safety device below the feather spring can shut off the magazine in such a way as to prevent the priming trickling back into the magazine when the pistols are in a muzzle downwards position and being jolted in a holster. To operate these pistols, the three chambers were loaded with powder and either ball or shot. The chambers are three inches in depth and .400 calibre. They could have been loaded with two or even three round bullets in a column. If one ball only had been used the charge would have produced an express rifle velocity as at least 75 grains of powder can be put in easily. The magazine was then filled from the front and the spring cover snapped home. All that was necessary then was to hold the pistols with barrels pointing up in the half cock position and they were ready to fire. If however, the pistols were to remain loaded with the barrels pointed down then the safety stop cutting off the magazine had to be pushed home by hand. This safety stop was automatically pushed off as the pistol was fired by the compression of the top armof the featherspring. The butt contains the folding ramrod which has two functions. The loading the chambers and the the other with a sharp edge for scouring out the fouling. A small tension spring concealed between the flat inner sides of this rod make it a tight press in fit in the butt doing away with any need for unscrewing it and thus making the withdrawal of it an instant operation. To fire the second and third shots, the trigger guard had to be pressed and the barrel turned by hand through 120 degrees. The exposed touch holes being duly covered by metal hands as soon as the breech was in its locked firing position. Another ingenious touch to this remarkable pair of pistols is that one is rifled and the other smooth bore, being deliberately made this way. The rifled barrel is cut with six deep grooves and has a very slow twist making only one eighth of a turn in the nine inch barrel an interesting contrast to the quick

twist of the Barne pistols. This pistol has an R. engraved both on the breech and the barrel to distinguish it from the other, which bieng smooth and of the same bore was presumabley intended to fire small shot. Of the greatest interest is a third pistol of this kind, so similar that it seems almost impossible to believe that it is not by the same maker, yet marked Dolep. Design, decoration, calibre are identical, the barrel only differs in length being eight instead of nine inches. The Dolep pistol is rifled in the same way with six deep grooves of very slow turn. Of other examples of Gorgo's work I can show one other breech leader. It is a screw barrel sporting rifle. A fine robust weapon the stock of unusually beautiful figured root wood. There is however in The Tower of London a fine two shot gun by Gorgo. This has a double fixed chamber breech and locks on either side. The barrel unscrews to load and again the principle is that of firing each shot guided by the taper into the same barrel. Once more I can tie up these makers by showing another fixed breech double shot gun of the same date this one signed Dolep. Unlike the Gorgo gun in the Tower with locks on either side, it has a simgle lock with a pan to hold two primings, the lower level being opened by a hinged cover after the first shot had been fired. Many more examples of Andrew Doleps



PAIR OF THREE SHOT REPEATING PISTOLS
BY "GORGO AT LONDON"



ACTION OF THE THREE SHOT FLINT PISTOL BY GORGO.



THREE SHOT BREECH OF GORGO PISTOLS

work have survived and I have never seen anything that was not good, made by him

I have two pairs of pistols, both silver mounted and inlaid with silver wire. A feature of his arms was the superb figure wood that he put into the stocks. Also a long and graceful steel mounted fowling piece which in balance could not be excelled. He also made air guns with flintlocks that could be fired by both compressed air and powder. He produced most splendid blunderbusses of the same superb quality as his pistols, always with steel barrels. I can find no record of his death but from the guns I have examined his working life can be placed between about 1680 and 1710.

By spending so much time on these gunmakers, I am fully aware that there were others who were most skillful and working in London at this same time. To mention only a few, John Cookson, Edmund Truelock, Edward Nicholson, John Dafte, Humphrey Pickfatt and William Palmer were all in the first class and turning out exceedingly fine guns. With so much skill exhibited in the latter part of the 17th century by the London gunmakers it is no wonder that the 18th century should have established England as one of the leading nations in Europe in the gunmaking field. These makers who followed on reaped a rich harvest from the legacy left behind by these great men. The great days of invention and endeavour however seem to have passed, and English makers settled down in most cases to first class sound straight forward gunmaking. The so called Queen Anne pistol came into its own as an accepted type It was breech loading, hard hitting and strong. Even so the the inventors did not leave it quite alone. James Freeman apprenticed to Henry Anthonison in 1704 obtained his Freedom

of the Gunmakers Company in 1716, and was Master in 1732. He specialized in these Queen Anne pistols and apart from a great number which he made of formal design, he invented two varities. One of these fired two shots from the same barrel, the loads being superimposed and the charges fired by the same lock using a second priming controlled by a cut-off. This system was not new, but that it could be quite safe and satisfactory is without doubt correct as a cupped leather washer was placed between the two charges which expanded with the recoil of the first and sealed off the back charge. Like everything else this system depended on carefulloading and a clean barrel. Re-loading in a hurry might be disastrous. His other variaty is much rarer. It is a breechloader with tip up action barrel. This pistol had its own steel cartridge and was self priming. A number of loaded spare cartridges could be carried in a bandolier ready for instant use. From an examination of the priming magazine, sufficient for only three shots is provided, which would suggest that only three cartridges to each pistols were carried. Even so, armed with a brace of these pistols a man had the equivalent of a six shooter. Freeman made sporting guns also on this principle and a number of examples exist, his work was always of the best and he was one of the principle luxury gunsmiths in London

London of his day. A charming pair of his Queen Anne pistols with locks arranged on right and left hand with grooved barrels to assist in unscrewing are good examples of his versatility. Another great contemporary was Barbar, both father and son. Lewis Barbar the father was a Freeman of the G. C. in 1704 and became Master in 1718 his son James was apprenticed to him in 1714 and he duly obtained his Freedom in 1722 and became Master in 1742. Both these men turned out the very best work, they specialized in luxury silver mounted guns and pistols, turned out double ignition pistols and developed a fine type of under and over pistol with locks on either side and springwork outside for added strength and neatness. Another exceptional man was Joseph Clarkson. He obtained his Freedom in 1715 and was in every way equal to both Freeman and Barbar in his skill and inventiveness. He again specialized in Queen Anne Pistols and was the first of the English makers to appreciate the value of the so called Ferguson action breech. I can show examples of his silver mounted pistols on this principle as well as a gun. Joseph Clarkson was making this action prior to 1750, but all his weapons so made were smooth bore. It was Colonel Patrick Ferguson who saw the possibilities of this action combined with a military rifle and adopted it. The original invention of the ten thread screw plug as adapted to firearms was made by a Frenchman, LaChaumette, he turned out examples of these as early as 1720 for Marshal Saxe. They became known as the "Amusette de Marshal Saxe."

Following the history of the gunmakers in England shows how one learnt from another but not always did their secrets survive or "take on." In many cases they were before their time, or else the skill and demand together were not forthcoming. Few inventions can be credited to one man alone, and a good example in point is the remarkable six shot revolving gun made by Nicolas Paris of Warwick about 1700. This masterpiece has a self priming magazine working on the same basis linked principle of the Collier of more than a hundred years later.

Before I close one other great 18th century gunsmith must be mentioned, he is Joseph Griffin. He was apprenticed to Samuel Blanckley in 1741 obtained his Freedom in 1750 and became Master in 1762. His works were uniformly good all through and he rose to the place of principle luxury gunmaker having his premises in Bond St. Other great men followed him, notably John Twigg of Piccadilly, Wogdon, Egg the Manton brothers James Purdey and so on. Many of these were to become famous and go down in history as great gunsmiths. But they owed a lot to the past and the men who had worked so zealously and handed on so many of their secrets. The dawn of the 19th century brough tremendous success to the gunmakers of England they became rich and prosperous, they were extorted to the skies by writers such as Colonel Hawker. They have remained great in the eyes of present day collectors because they were written up and praised in their day. The 18th century and even more so those of the 17th century relied entirely on the good-ness of their work, and word of mouth recommendation for their success, they were "Johnsons" without a "Boswell" and have been forgotten and much neglected ever since. Human nature tends to take credit for what it does without giving too much thought to those who have gone before, in giving this story and review of the gunmakers of the past I have tried to draw up a fair picture and show how this great craft developed in England and the men who made it famous.

EDITORS NOTE....All pistols shown are from the Keith Neal Collection.