

THE PATCH LOCK: A BRIEF HISTORY, AND A CASED EXAMPLE BY SAMUEL NOCK WITH A GRIP SAFETY.

by Matthew Schneiderman

About forty years ago I suffered a severe Adverse Collecting Experience. Those were simple times. I had a telephone (what we now call a “land line”), but I’ve always been a bit phone-phobic. I had no internet and no email. I communicated with far-off people using a pen (Figure 1) and paper, sent via the US Postal Service as a “letter”. I subscribed to antique arms dealers’ mailing lists. The English dealer Paul Downey offered a great cased patch lock single gun by the London gunmaker Samuel Nock. It was in fine condition, and the case contained a label, a large group of accessories, and a set of specialized removable hammer noses that carried the patch primers. I wrote for more information and a photo, which arrived. I wrote back saying I wanted to buy the set, and after some time received a reply: it had been sold, I was an idiot, and if I ever wanted something in the future I should telephone. I kept the photo as a lesson and as penance (Figure 1).

Recently, though, I was able to purchase a similar set: patch lock, a double gun this time, with an added special feature; same maker; a case label; and a somewhat different but still complete group of accessories. In celebration, I’m going to show you this gun and its casing, tell you the story of the invention and perfection of the patch lock, and explore the mysterious origins of the grip safety.

Alexander Forsyth

I have sworn and I have kept a solemn oath: every talk I give and every article I write will include the only known image of

Alexander Forsyth, whether appropriate for the project or not (Figure 2).¹ For this topic it fits. With hard work and many experiments, Forsyth found a way to use fulminates² for firearms ignition. His British patent #3032 of April 11, 1807 claimed this core concept, allowing him to successfully sue multiple competitors for patent infringement. The patent covers almost all firearms through the present day. Forsyth constructed a lock (Figure 2) to use fulminate in powder form, a good start but not the most convenient approach. Other gunmakers knew that containing the fulminate, rather than using it as loose powder, would make the new percussion primers more manageable. Pills, pellets, discs, wafers, capsules, sticks, tubes, tapes, and patches followed. The copper cap, invented by Joseph Egg, proved the most popular. (Figure 3.)

Collinson Hall

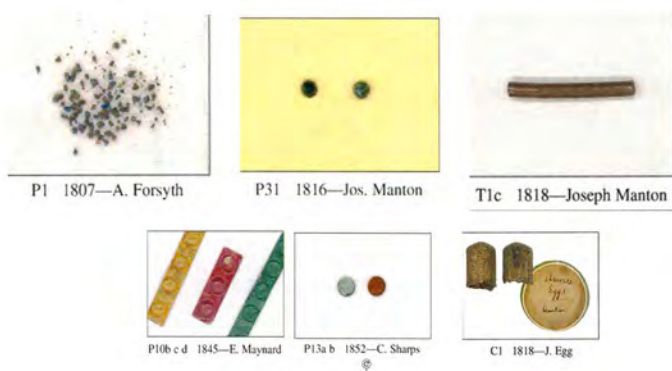
Collinson Hall was a London gunmaker working on High Street, Marylebone. In 1817 he entered the new world of fulminate ignition by inventing the patch lock. He used a hammer³ similar to Forsyth’s (see Figure 2), but he scooped out the nose, creating a round depression large enough to accept, with a push-in fit, a paper patch primer of his design. “*The detonating [pellet in paper, which Hall called a “patch”]...is applied to a cavity countersunk in the head of the hammer, to which it adheres by means of ...wax, and is thus preserved from the effect of wet*”.⁴ Needing a simple structure to detonate his patch and a channel to carry the flash into



Figure 1. Left: Image source: Freepik.com. Right: A major failure-to-buy. Note the round container for the hammer noses, with a cover (photo by Paul Downey).



Figure 2. The Reverend Alexander Forsyth in old age. Forsyth's roller-primer lock. See Gooding1 for image source and further reading.



FORSYTH POWDER, MANTON PELLETS AND A MANTON TUBE, MAYNARD TAPES, SHARPS PELLET DISCS, AND THE EARLIEST COPPER CAPS BY JOSEPH EGG.

Figure 3. A selection of percussion primers. The letter/number combinations are part of Jim Gooding's primer classification scheme, still used by collectors. See Gooding1 for image source; photo grouping by the author.

the main charge in the breech, he also invented and named the percussion nipple. He didn't patent either, but he received the Silver Medal for 1818 from the Royal Society for the Encouragement of the Arts, Manufactures, and Commerce. The Royal Society published a description of Hall's invention, with an illustration (Figure 4). We remember Hall's claim to the patch but not to the nipple, a more lasting accomplishment.

To make a fulminate paste Hall used finely-ground oxymuriate of potash (potassium chlorate) 63%, sulfur 22%, fine powdered charcoal 11%, and gum Arabic 4%.⁵ The chemicals were to be mixed together in a wooden mortar with a wooden pestle, "taking care to keep [the paste] moist during that operation lest it should explode". The paste was formed into pellets in a mould, the gum Arabic keeping the whole thing stuck together. Round paper patches were cut out with a punch, one side covered with bee's wax and tallow, a pellet pressed into the center of the waxed side and then covered with a second piece of paper (Figure 5).¹

Hall was sued by Forsyth for patent infringement, lost, and had to pay damages of 300 pounds. He continued to work as a gun-maker until 1835. In decades of collecting English civilian fire-

arms, I've seen one firearm by him, a copper cap gun. As far as I know, there are no surviving examples of his original patch lock system, though the three percussion primer collectors I know have examples of his patches.

Whom Do We Have to Thank for the Removeable, Replaceable, Re-Primable Hammer Nose?

Joseph Manton, of course. With British patent #3985 of February 29, 1816, which resulted in yet another patent infringement lawsuit victory for Forsyth, Joseph introduced this little wonder, his pellet lock. (Figure 6.) Here's the lineup.

THE HAMMER: Different from Forsyth's and Hall's, similar to Samuel Nock's, with a fat body and a spring for retaining the nose.

THE HAMMER NOSE, called the "tube" in the patent (not to be confused with the later tube primer), pushed into or pulled out of the hammer by hand and held in place by the spring.

THE FIRING PIN,⁶ called the "wire" in the patent, placed inside the hammer nose

THE PELLET PRIMER, also placed inside the hammer nose.

THE STRIKING SURFACE, flat (let's call it the anvil), including the touch hole, but without a nipple, which had NOT YET BEEN INVENTED! A missed opportunity for Joseph. Without a nipple, you need the firing pin to detonate the primer. With a nipple, you can just put the primer there or on the end of the nose, much easier.

How does this system work? The hammer nose is open at the back end that fits inside the hammer (Figure 7 far right) and closed at the front end, except for a small hole for passage of the ignition flame (second from the right). This end sits or lands over the touch hole in the anvil.

STEP 1: Drop a pellet (Figure 6, upper left) into the rear of the hammer nose. It's wider than the small opening at the front, so it sits inside.

STEP 2: Insert the firing pin (Figure 7, center image) into the nose. One end sits on the pellet, the other end protrudes out the back (second image from the left).

W. C. Hall's Percussion Gun Lock. Pl. 8.

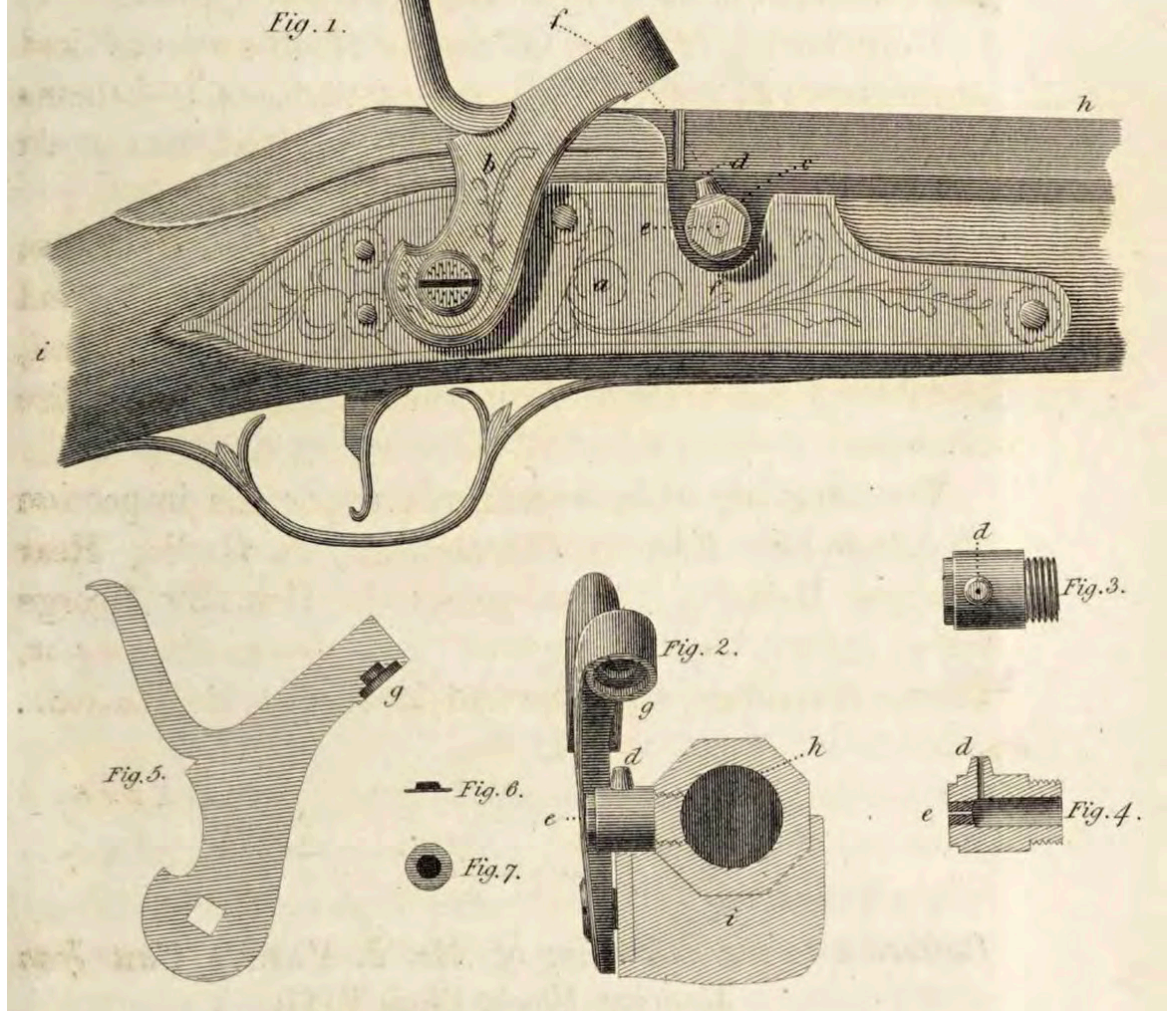


Figure 4. Hall's illustration of his patch lock. Note the hammer, looking a lot like Forsyth's, but with a depression in the tip to hold the patch. The patch, top and side views, and its fit are illustrated. See also the short nipple and the ignition channel.

- STEP 3: Insert the nose into the hammer.
- STEP 4: Cock and fire. The firing pin detonates the fulminate pellet.
- STEP 5: Remove the nose, disassemble, and repeat.



Figure 5. A group of Hall's patches. You can see the central blob of fulminate. See Gooding1 for image source.

P19 1817—Hall

Your servant brings multiple primed and assembled hammer noses on the hunt, carried in a small bag or in his pocket. The pellet lock was too complex, and almost all of Manton's original guns were eventually converted to copper cap. In a March 13, 2026

email, David de M. Williams showed me a signed Joseph Manton receipt documenting work done for a nobleman between 1821 and 1823. Included were two "bottles of pellets", revealing how they were packaged and their continued sale in the early 1820s. Manton charged over 10 pounds to "alter" his client's double gun #8048 to copper cap, and about a pound for 500 copper caps. Sic transit the pellet lock.

Sometime between 1818 and 1821, someone combined and improved Manton's and Hall's ideas. They kept Manton's removable, replaceable, re-primable hammer nose, but now redesigned with a wide mouth for a patch primer and a closed end (Figure 8); his fat hammer with its spring; and Hall's nipple as the receiver of the strike. They omitted the firing pin, the flat anvil as the location of the touch hole, the pellet primer, and Hall's complex, hard-to-make patch, which had to be scraped out and replaced in the nose after each shot. They invented a new, simpler patch primer (details unclear), easier to make and easy to place on the end of the nose. Finally, they designed a small case in which to carry the extra, prepared noses.

The most likely candidate for that "someone" is Thomas Cartmell of Doncaster, a well-known provincial maker who worked



Figure 6. Joseph Manton's patent pellet lock ignition system. From the right, the hammer; the hammer nose; the firing pin; the lockplate showing the nose in place and the anvil; two Manton detonating pellets. See Gooding¹ for image source, arranged by the author.

on High Street on his own from 1817 to 1827 (Figure 9), and then with his son until his (Senior's) death in 1831. In an 1821 letter,⁷ Dr. W.H. Wollaston, discussing the new percussion system and the various "detonators" [primers] available², says *"I have not hitherto tried anything but the patch. The application of the little patch is at best tardy and in cold or windy weather somewhat difficult. Cartmell's (of Doncaster) method of preparing a set of pegs [hammer noses] at home with patches ready for the field is neat and effectual, but I think I should prefer the cap or other primer to be thrown away to pocketing the empty pegs."*⁸ An 1824 Doncaster newspaper advertisement placed by Thomas Cartmell offers "a very excellent DOUBLE BARRELLED GUN by HANSON, altered to CARTMELL'S APPROVED PEG PRINCIPLE."

We can conclude that patch locks were popular in the 1820s. How long did sportsmen use them? In 1832 Thomas Cartmell Junior, having taken over the business of his late father, advertised *"continued supplies of Powder, Shot, Caps, and Patches."*¹⁰ Patches still had a following, though they're listed after caps. Today many loose hammer noses or "pegs" survive, and some cases with sets of them.

Samuel Nock.

Samuel Nock was Henry Nock's nephew, one of his apprentices, and at least by blood relationship and last name his successor (Figure 10).¹¹ He ran his own gun making business at various addresses in London for fifty years, thirty of those years at 43 Regent Circus. He rose in the Gunmakers Company to be Assistant and later Master, and was Gunmaker-in-Ordinary to three kings and one queen.¹²

Samuel did not claim to have modified the patch lock to use the more convenient updated hammer noses, but he clearly favored that type of firearm and popularized it. He's the gunmaker whom collectors think of when they see those noses, even though other makers used them. I track and collect Samuel Nock serial numbers. One quarter of all his numbered firearms I've found use patch lock ignition, and one third of all the percussion ones. All use replaceable/reusable hammer noses except one pair of pistols, which have knobs on their hammers' striking surfaces and ignite a patch pushed into a platinum-lined cup above the ignition channel (Figure 11).



Figure 7. From right, the hammer nose without the firing pin, rear end (note the indentation for the spring); the hammer nose front end, with the ignition flame passage; the firing pin; the hammer nose on its side, with the firing pin inserted; the hammer nose on its side, without the firing pin. Photos by and collection of Will Adye-White.

A Cased English Patch Lock Double Gun by Samuel Nock, London, sn 6859 Circa 1825, With a Wyatt-Patent Grip Safety and a Small Cased Set of Extra Hammer Noses.

Here's a view of my gun (Figure 12). It's 17 bore (.66 caliber),¹⁷ with 27" barrels and an overall length of 42". It's cased with powder flask, shot flask, T-tool, main spring clamp, three-part cleaning rod. Dixon & Sons oil bottle, wad cutter, and a small cased set of hammer noses. The trade label (Figure 13) includes, at the bottom, a complaint and a warning: "*A NUMBER OF GUNS & PISTOLS HAVING BEEN MADE OF A VERY INFERIOR DESCRIPTION MARKED NOCK OR H. NOCK. NONE ARE GENUINE BUT WHAT HAVE SAMUEL NOCK ENGRAVED THEREON.*"



Figure 8. A variety of mature patch lock hammer noses. The mouth is now wider and the end is closed. The indentations near the tail remain, allowing the hammer spring to keep them in place. See Gooding¹ for image source.

The back-action locks (Figures 14) say SAMUEL NOCK at the bottom edge and PATENT in front of the hammer, and are decorated with a long-beaked shore bird. There's a rabbit on the breech (Figure 15). The butt tang shows a bird in a leafy setting. The long barrel tang includes a small empty rectangular silver escutcheon. The barrel rib reads SAMUEL NOCK REGt CIRCUS PIC-

CADILLY LONDON GUNMAKER to his MAJESTY, and on the underside of each barrel there are London proof and view marks, 17 (the bore size), and the serial number 6859. The serial number also appears on the breeches and above the butt plate screw.

The set of hammer noses is a special treat, and a rarity in such a casing (Figure 16). This one is a small rectangular leather case with a clasp, different from the set from forty years ago (see Figure 1). There are holes for 24 noses (8x3). Two are empty, probably meant for the two in place on the gun. Two are shrouded for use with copper caps, and the rest have varying bits of ancient patches. The noses are inserted and removed by hand, their indentations engaging the spring in the body of the hammer.

The Matthew Cotes Wyatt Grip Safety, British Patent #4218, February 3, 1818.

Over the years I have thought about why the word "patent" appears on firearms when the gunmaker has no relevant patent. This is not rare. Possible explanations include: there is a patent, but it's not listed in any of the standard patent books and references (unlikely); there is no patent, but the maker wanted to make people think there was as part of a marketing strategy; the maker has taken out a Registered Design but has written "*patent*" because that's more impressive and competitors will think the feature is protected for fourteen years rather than three;¹⁵ or the maker has licensed someone else's patent. This last must be the reason on this gun, since the grip safety itself is marked SAMUEL NOCK PATENT (Figure 17) and the word PATENT appears on the lockplates. The patent is titled "*Safeguard to Prevent Accidental Discharge of Firearms*". Here's a side view (Figure 17, bottom), and here

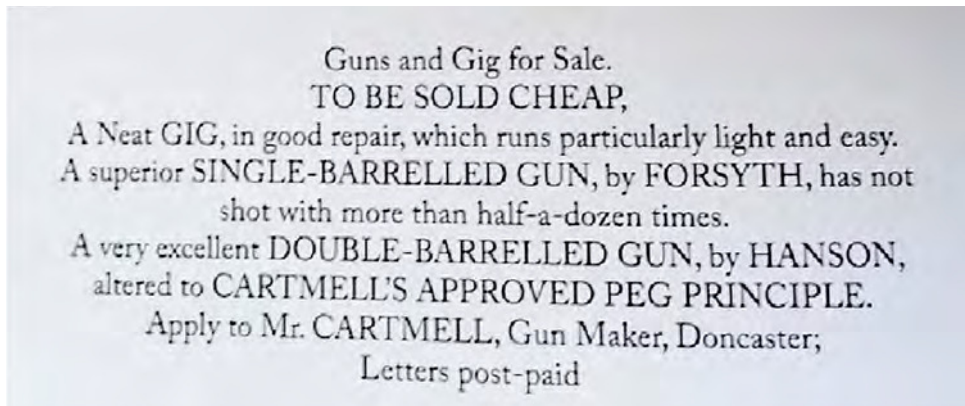
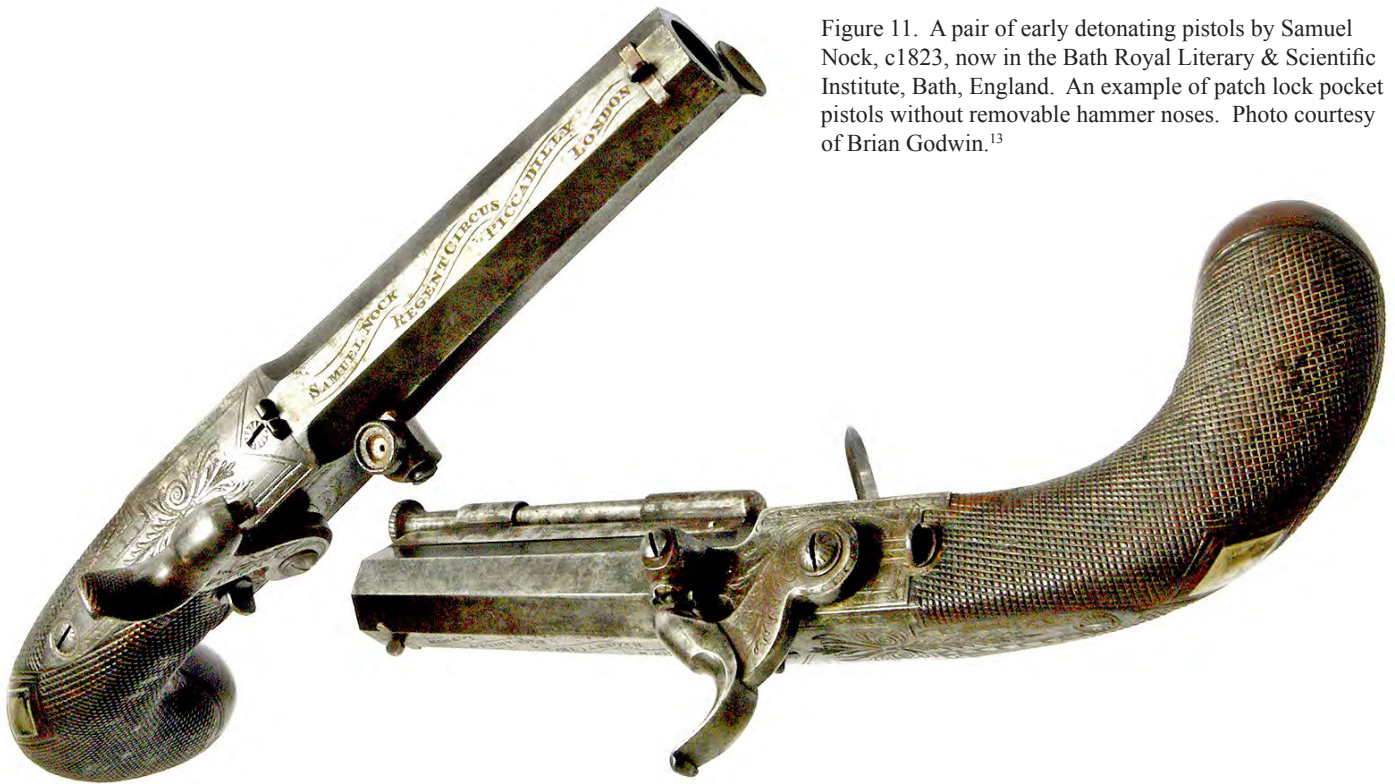


Figure 9. Thomas Cartmell's trade label (left) and Thomas Cartmell's advertisement. See Mawson⁹ for image source.



Figure 10. An announcement by Samuel Nock from the Morning Post, London, September 30, 1806 (left). Courtesy of David Harding and David J. Williams. Note Samuel's warning about firearms marked with the dead Henry Nock's illegally-used name (as Nock or H. Nock). Samuel Nock's shop at 43 Regent Circus. From John Tallis' London Street Views 1838-1840 (right). Courtesy of Keith Dill.

Figure 11. A pair of early detonating pistols by Samuel Nock, c1823, now in the Bath Royal Literary & Scientific Institute, Bath, England. An example of patch lock pocket pistols without removable hammer noses. Photo courtesy of Brian Godwin.¹³



are the patent drawings (Figure 18). I have seen the Wyatt “*safeguard*” on Elisha Collier’s copper cap revolving gun #181.¹⁶ and it’s reported on Samuel Nock double barrel guns SN’s 6595 and 6605 and a pair of single barrel guns SN 6891.¹⁷

There were many grip safety designs throughout the 19th century and into the early 20th.¹⁸ A wide variety of safety systems have appeared on firearms since at least the 1680s.¹⁹ “*In the 1790s and later, Joseph Manton used a safety guard that consisted of a pivoted lever over the tang of the trigger guard to bolt the trigger*”.²⁰ However, this device was not patented, and the Wyatt patent is the earliest

for what collectors call the grip safety. I don’t know whether “*grip safety*” was ever a contemporary term of use or only a collecting-era phrase, but it is quite descriptive. The less specific “*safeguard*” was the word used in the first quarter of the 19th century, and “*safety gun lock*” appears on some James Purdey trade labels.²¹ The Wyatt design is safer than Manton’s because it not only locks the triggers but also locks the cocks at half-cock. The latter are released by moving to full cock. Gripping the safety bar releases the trigger lock and allows firing. That bar is just below the wrist, a place one tends to grip during the hunt even when not firing, or simply when handling the gun—presumably one of this safeguard’s little imperfections.



Figure 12. An overall view of the Samuel Nock patch lock double gun (top). Note the unusual hammer with a built-in spring, the nose, and the back-action lock. Photo by the author. This is what we call a nice set (bottom). Note the grip safety below the wrist. The small hammer nose case is at middle far left. Photo by Jiri Velharticky.

Figure 13. Samuel Nock's trade label with the Regent Circus address. Photo by Jiri Velharticky.



Figure 14. The left-hand lock. I have added a close-up view of the hammer nose showing ribbing for gripping, the indentation to engage the hammer spring, and some residual bits of patch. For comparison, the Manton patent nose. Photos by Jiri Velharticky.





Figure 15. The still-living rabbit on the breech (top left). On the butt tang, a flower and a bird hiding in leaves (top right). The long, engraved barrel tang with a small silver escutcheon (middle). Photos by the author. The name, address, and royal patronage on the rib. Photo by Jiri Velharticky.



Figure 16. The cased set of hammer noses. Note various residual bits of patch. The small rectangular image that includes the copper cap noses is a superimposition.

It's worth asking, "Why Matthew Cotes Wyatt?" He was not a gunmaker. This is his only British patent, not just for firearms but for anything, so he was not a patent agent. He was a painter and sculptor, with a lifespan 1777-1862. He was employed at Windsor Castle, the maker of a few somewhat well-known Victorian large sculptures. Here's a photograph taken by his son in 1861 (Figure 19). Look again at the drawings for patent #4218, "Fig.3" in our Figure 18. The lockplate says PURDEY. Blackmore believes James Purdey the Elder (Figure 20) developed the technical details, and notes that many Purdey guns have this safeguard.²² Did Purdey invent this device? Why is Wyatt's name on the patent? It's time for a brief debate.

YES, Purdey invented it. Multiple newspapers credit Purdey with at least the technical details: in an advertisement for prominent makers' guns, we see "*Purdey's with his much-admired safeguard*"²⁴; and in a report, "*an ingenious gun-smith, named Purdey, has invented a safeguard for preventing accidental discharge of guns, which is highly spoken of by sportsmen*".²⁵ An article in The Sporting Magazine of November 1818 is titled "*Purdey's Patent Safeguard*" and quotes an advertising hand bill circulated by Purdey.¹⁹



Figure 17. "Samuel Nock Patent" on the gun's safeguard (top). Side view of the safeguard (bottom). Photo by the author.

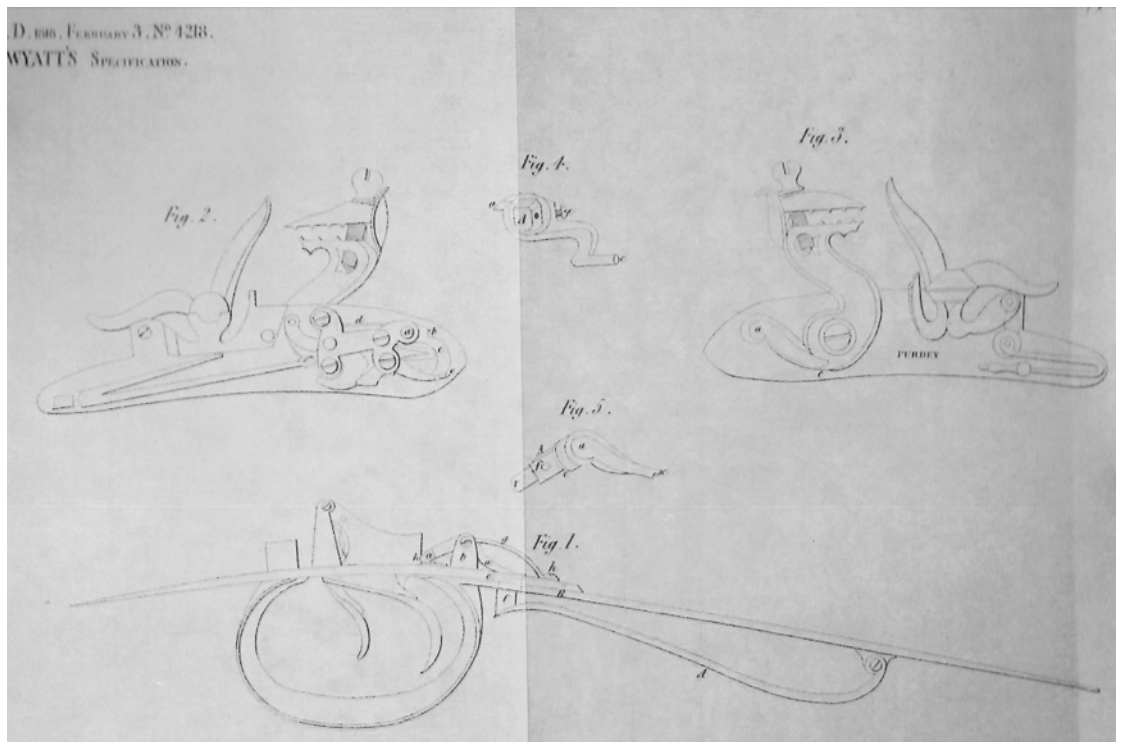


Figure 18. The drawings from Patent #4218.

NO, Purdey didn't invent it. Purdey records don't exist prior to 1823. James the Elder took out no patents, and only one Registered Design (for a bullet). James the Younger took out patents only for his own inventions. This being the family's unwritten rule, we can conclude that if the Elder had invented it he would have patented it, and there would be no reason to use Wyatt's name. One

reasonable hypothesis suggests that Wyatt was a shooter,²⁶ and perhaps a customer of Purdey's business. In this line of thought, Wyatt brought the idea for the safeguard to Purdey, who developed the technical details and placed the resulting safety system on some guns. Wyatt would have paid for the patent up front (the process was expensive), and presumably was later paid either a lump sum

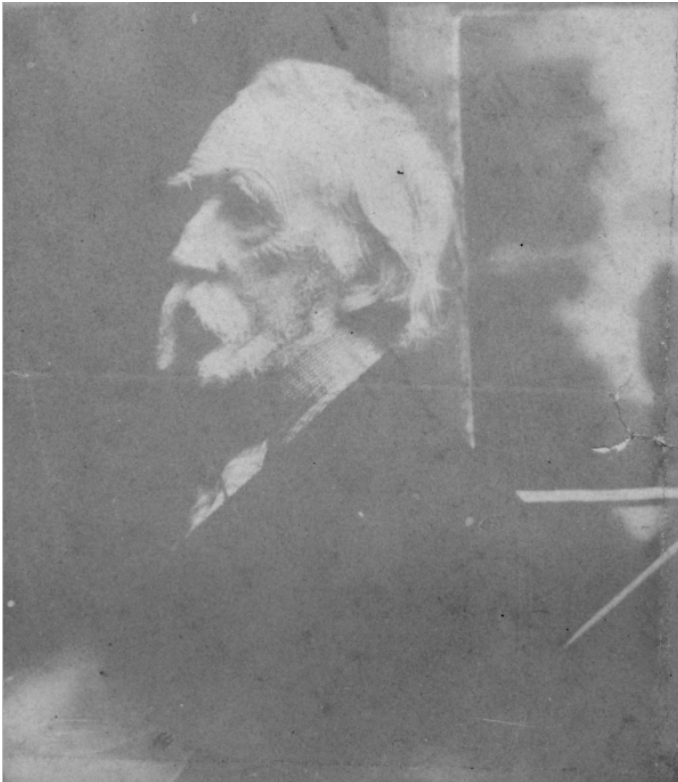


Figure 19. Matthew Cotes Wyatt in 1981, photographed by his son James Wyatt (1808-1893).

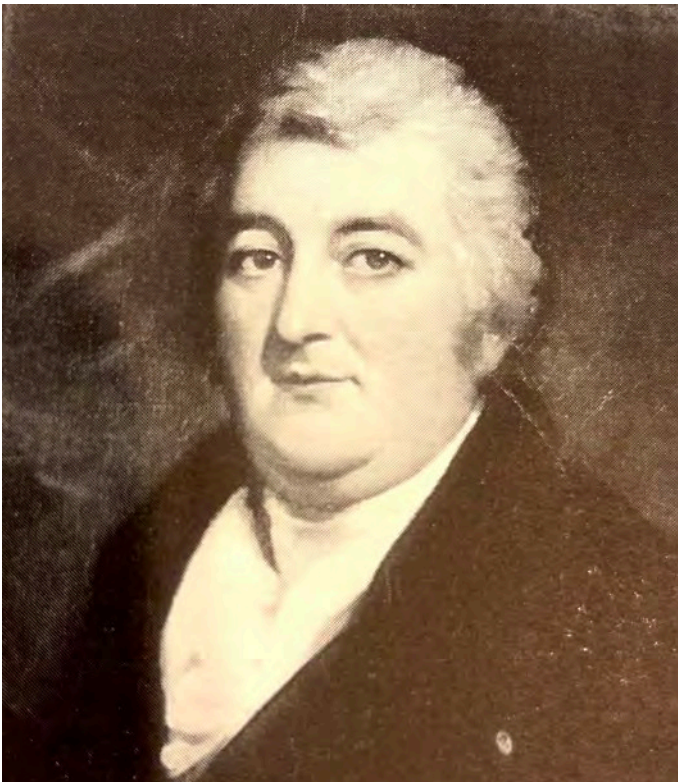


Figure 20. A portrait of James Purdey the Elder. Blackmore.²³

or royalties.²⁷ On my gun Samuel Nock acknowledges licensing the patent, but there is no patent-tracking number.

Personally, I agree with NO, since otherwise the involvement of Wyatt is totally inexplicable. Let me know what you think.

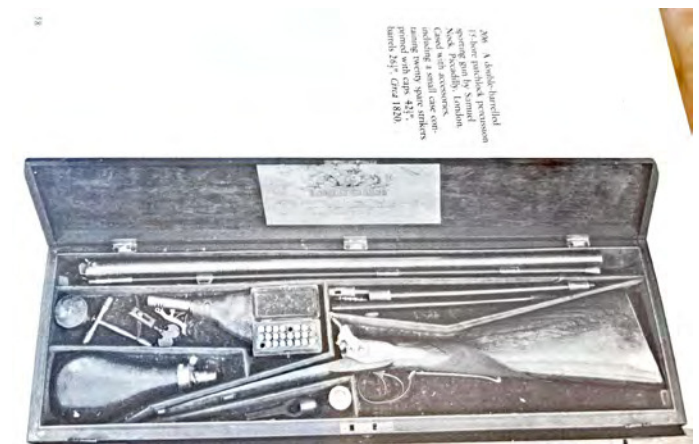


Figure 21. My Samuel Nock set 57 years ago.²⁸

An Unexpected Appearance.

Recently a friend gave me a short, old antique arms picture book outlining the broad expanse of arms development from “A—Z”.²⁸ I was pleased to see my Samuel Nock set as image 206 on page 58 (Figure 21). Even better, since then nothing is missing from the case, including no theft of hammer noses, a mild surprise.

Closing Words of Wisdom.

All collectors make mistakes, of commission and, like me, of omission. It’s part of the game, part of the challenge—but sometimes stuff, or stuff’s cousin, comes around again. There’s always hope.

ACKNOWLEDGMENTS:

Thanks for research help, discussion, education, and assistance to Will Adye-White, Fred Bienvenu, Keith Dill, Brian Godwin, David Harding, Nicholas Harlow, Mike Helms, Steve Helsley, Steve Lodding, Peter McGowan, John McLean, Aaron Newcomer, Craig and Mary Ann Ross, Chris Schotz, Merrie Suydam, Jiri Velharticky, David J. Williams, and David J. de M. Williams.

AUTHORS’ NOTE:

The author is a retired primary care internal medicine physician living in Los Angeles, California. Being born in Montreal, Canada, and raised and schooled there until age 14, helps explain his focus on early civilian firearms of Great Britain and Ireland, which he’s collected since age 11 and researched and written about for over forty years. He has a special interest in unusual systems and designs.

As always, I welcome comments and questions at schneiderman615@gmail.com

Endnotes

- ¹ Gooding, S. James, *Early Percussion Primer Identification*. Museum Restoration Service, Bloomfield, Ontario, Canada, 2005. Here's a link to the book:
<https://americansocietyofarmscollectors.org/wp-content/uploads/2025/05/Early-Percussion-Primers-S.-J.-Gooding-compressed.pdf>
It's on the ASAC website, <https://americansocietyofarmscollectors.org> under ASAC RESOURCES, dropping down to RESEARCH REPORTS BY ASAC MEMBERS.
See also Schneiderman, Matthew, "A Brief History of Primer Magazines, Including William Needham's Patent Percussion Double Gun". *American Society of Arms Collectors Bulletin* No. 127, June 2023, pages 3-18 for discussion of Forsyth's lock and other percussion primer systems. <https://americansocietyofarmscollectors.org/wp-content/uploads/2024/03/Primer-magazines-development-of-SCHNEIDERMAN-v127.pdf>
- ² Fulminates are chemical compounds that detonate when struck. Detonation differs from explosion. A detonation is virtually instantaneous, and may be over in 1/10,000 second. An explosion is merely fast, and may last 1/100 second. 19th century writing about the percussion system refers to it using the word "*detonation*" and its variations. See C. Robinson, *Explosions—Their Anatomy and Destructiveness*, McGraw-Hill, New York and London, 1944, page 2.
- ³ Even with snaphances, before the invention of the flintlock, in Great Britain the word "hammer" referred to what we call the frizzen, the part struck by the flint to produce sparks for ignition. The earliest use of the word I've found is from 1590. The reason for this meaning eludes me, since the word also meant the tool we still use to drive nails, work metal, etc. Why use the word for a striking object to refer to an object struck? In any case, the part holding the flint was called the cock until the percussion era. "Hammer" in the modern firearms sense first appears in Forsyth's 1807 patent, and also in Collinson Hall's 1818 description of his patch lock. Of note, the Matthew Cotes Wyatt grip safety patent of 1818 (see the text) also uses "hammer" to mean frizzen.
- ⁴ *Transactions of the Society Instituted at London for the Encouragement of Arts, Manufactures, and Commerce, Volume XXXVI, London, 1819*, covering inventions of 1818. The section "Mechanics", pages 80-84.
- ⁵ Forsyth used the same active compounds for his priming powder, without the gum Arabic: potash 75%, sulfur 12½%, and charcoal 12½%. Gunpowder contains sulfur and charcoal, but uses potassium nitrate (saltpeter) instead of potassium chlorate (potash).
- ⁶ Forsyth's roller-primer design used the first-ever firing pin. I would think that's where Joseph Manton got the idea.
- ⁷ Dr. Wollaston's letter of September 13, 1821, to Sir Thomas Frankland, Bart., was printed 83+ years later in the February 1905 issue of the magazine *Arms and Explosives*.
- ⁸ An early example of refusal to recycle.
- ⁹ Mawson, Paul, *The Doncaster Gun Trade 1567-2012 Including the Baxter Gate Explosion*. Self-published, 2013. Pp. 41 and 46.
- ¹⁰ Ibid. Full reference.
- ¹¹ In 1805 several newspaper announcements advertised the auctioning of the late Henry Nock's premises and machinery, so neither Samuel nor James Wilkinson actually took over Henry's physical business. Wilkinson claimed to be Henry's "son-in-law and successor", which clearly irritated Samuel, one of whose trade labels says "Nephew, Successor, and only Relative to the Late Mr. H. Nock". Careful research by others has found no evidence that Henry Nock had a daughter. Note also Samuel's warning about firearms marked with the dead Henry Nock's name.
- ¹² Information about Samuel Nock from Blackmore, Howard L. *A Dictionary of London Gunmakers 1350-1850*. Phaidon/Christie's, Oxford, 1986, pages 149-150.
- ¹³ Godwin, Brian, "By Mr Nock of London: A Pair of Early Detonating Pistols". *Classic Arms & Militaria* Volume XVII #3 (June-July 2010), pages 28-30. I can supply this article if needed.
- ¹⁴ Caliber measures the internal diameter of the barrel at the muzzle. In Great Britain the same information is expressed with the term "bore" or "bore size", though indirectly. The bore, 17 for my gun, is the number of precisely-fitting balls required to weight one pound. Somewhat counterintuitively, the higher the bore size the smaller the caliber, and vice-versa. The bore number is the same as the gauge on a shotgun with the same diameter barrel(s).
- ¹⁵ For an introduction to Registered Designs and a list of arms-related ones, see Gooding, S. James. "The British Design Acts—1839-1883", *Arms Collecting* Volume 36 #2 (May 1998), pages 49-54. I can supply this article if needed.
- ¹⁶ See *Clockwork Basilisk The Early Revolvers of Elisha Collier & Artemas Wheeler*, by Ben Nicholson. *Volume II The Catalogue Raisonne* by Ben Nicholson & Frank Graves, Headstamp Publishing, Nashville, TN, 2023, page 478.
- ¹⁷ Noted in a Samuel Nock serial number list supplied by Peter McGowan on March 24, 2026.
- ¹⁸ For example, British patent #5026 of November 4, 1824, by the Reverend John Somerville, for the prevention of accidental discharge. Rather than specifying a particular mechanical design, the patent emphasizes "*requiring the use of the left hand [releasing a safeguard] as well as the right [via trigger pull] to discharge it*". Thanks to Steve Helsley for discussion of 19th and early 20th century grip safeties.

- ¹⁹ See, for example, the English Isaac de Seret carbine from the 1680s, with a slide safety in the form of a Green Man. *Early Firearms of Great Britain and Ireland From the Collection of Clay P. Bedford*. The Metropolitan Museum of Art, New York, 1971, pages 127-129 (item #133).
- ²⁰ Dallas, Donald. *James Purdey & Sons, Gun and Rifle Makers—Two Hundred Years of Excellence*. Quiller, Stroud, UK, 2013, page 37.
- ²¹ Ibid, p 38.
- ²² Blackmore, Howard L. *Gunmakers of London Supplement 1350-1850*. Museum Restoration Service, Bloomfield, Ontario, 1999, page 118.
- ²³ Ibid, p 163.
- ²⁴ From the *Morning Post*, London, October 11, 1819. Courtesy of John McLean.
- ²⁵ This appears in two newspapers, the *Cambridge Chronicle and Journal* of December 4, 1818, and the *Shrewsbury Chronicle* of December 11, 1818. Both courtesy of John McLean.
- ²⁶ It appears to me that everyone in England was a shooter. We know for sure that Alexander Forsyth was.
- ²⁷ In this paragraph the facts and the hypothesis are courtesy of Nicholas Harlow, the current Gun Room Manager at Purdey's, in an email of March 3, 2026.
- ²⁸ Fryer, Douglas J., *Antique Weapons A—Z*. Thomas Nelson, New York, 1969.
- ²⁹ Case plundering and disappearance is one of my side interests. It's not that unusual— I've got stories. I'm glad the Samuel Nock set didn't join the list.

