

THE GUN CLUB

DURING the Federal War in the United States,* a new and highly influential club opened its doors in the town of Baltimore, in the heart of Maryland. Now, who does not know with what energy the military instinct flourished at the time amongst that people of shipowners, merchants, and engineers?* Ordinary shopkeepers leapt over their counters and changed into captains, colonels, and generals, without undergoing any military training at West Point. In 'the art of war',* they quickly proved a match for their counterparts of the Old Continent and, like them, they won victories by using lavish amounts of cannonballs, money, and men.

But where the Americans proved markedly superior to their European colleagues was in the science of gunnery. Not that the weapons they produced were more advanced, but they came in unusual dimensions, which meant that their ranges exceeded anything that had been witnessed before. As regards grazing and plunging fire, direct shelling, oblique, raking, and reverse-ricochet artillery fire, the British, French, and Prussians have nothing further to learn. But their cannons, howitzers, and mortars are not much more than pocket pistols compared with the mighty field-guns of the American artillery.

This should come as a surprise to no one. The Yankees—the finest artificers in the world—are engineers in the way the Italians are musicians and the Germans are metaphysicians: it is their birthright. So nothing could be more natural than to see them apply their daring inventiveness to the science of ballistics. Hence the gigantic cannons which, though far less useful than sewing machines, were no less astonishing—and even more admired. Among them, the prodigies of Parrott, Dahlgren, and Rodman¹ are well known and the likes of Armstrong, Palliser, and Treuille de Beaulieu were left with no choice but to yield to their transatlantic rivals.

As a result, in that terrible struggle between North and South, the gunners lorded it over the rest: the Union's journalists saluted their

¹ Details of authentic proper names, except where they are directly relevant to the Explanatory Notes, are grouped together in Appendix 2: 'Proper Names Cited by Verne'.

inventions with enthusiasm and there was no shopkeeper so mean, no booby so naive, but racked his brains night and day calculating preposterous trajectories.

Now when an American gets an idea, he looks round for another American to share it with. If there are three of them, they elect a chairman and two secretaries. When there are four, they appoint a clerk to keep the records and the office can function. If there are five, they call a general meeting and the club comes into proper existence. And so it came to pass in Baltimore. The first man to invent a new gun joined forces with the man who cast it and the man who bored out the barrel. This was the nucleus of the Gun Club. A month after it was set up, it had 1,833 full members and 30,575 corresponding subscribers.

One indispensable condition was imposed on anyone applying to join the association, which was that he should have designed a cannon, or at least improved the design of one. Or if not a cannon, then some other kind of firearm. To be frank, inventors of fifteen-shot revolvers, swivel guns, and combined pistol-sabres got short shrift. Artillery men were given precedence in every circumstance.

‘The regard in which they are held’, said one of the most learned members of the Gun Club, varies according to ‘the bore of their cannon’ and ‘in direct ratio to the square of the distances attained by the shells they have fired’.

Anything more and it would have been Newton’s law of universal gravitation* applied to the world of human affairs.

Once the Gun Club was established, what the inventive genius of the Americans produced may easily be imagined. Field guns attained colossal proportions and their projectiles exceeded permitted limits and sliced harmless walkers in half. All these inventions far outperformed the modest weapons used by European artillery. The reader may judge just how far from the following figures.

Once, ‘in the good old days’, at a range of 300 feet, a 36-pounder could cut through sixty-eight men and thirty-six horses side by side. But that was nothing. Since then, missiles have made huge strides. The Rodman gun, capable of firing a cannonball weighing half a ton over a distance of seven miles, could without difficulty account for 150 horse and 300 men. It was even mooted at the Gun Club that a full test-firing should be staged. But if the horses readily agreed to take part, the men unfortunately failed to step up to the mark.

Be that as it may, the impact of these guns was deadly and with every shot fired, swathes of combatants were mown down like grass beneath the scythe. Compared with such missiles, what is there to say about the famous cannonball which put twenty-five men out of action at Coutras in 1587, or the projectile which killed forty infantrymen at Zorndorf in 1758, or indeed about the Austrian cannon at Kesselsdorf in 1742, which flattened seventy enemies each time it was fired?* What to add about those amazing types of guns at Iena or Austerlitz* which decided the outcome of the battles in question? But a good many other guns were seen in action during the Federal War. At the Battle of Gettysburg,* a conical projectile fired by a rifled cannon mowed down 173 Confederate soldiers; and at the Crossing of the Potomac,* a single Rodman cannonball dispatched 215 Southerners into the next and evidently better world. Mention should also be made of a formidable mortar invented by J. T. Maston,* a member of the Gun Club and its permanent secretary, the effect of which was lethal to a greater degree because, when first tested, it killed 337—by blowing up, it is true.

What more is there to say when these figures speak so eloquently for themselves? Nothing. And so we accept without demur the following calculation made by the statistician Pitcairn: dividing the number of victims killed by cannon fire by the number of members of the Gun Club, he found that each of them for his part had killed 'on average' 2,375 and a fraction men.

When we consider such a figure, it is perfectly clear that the sole concern of that learned society was the destruction of humanity, with a philanthropic end in view, namely the perfecting of weapons of war deemed to be instruments of civilization. It was a consortium of Exterminating Angels,* and they were in fact the nicest fellows you could hope to meet.

We should add that these Yankees, fearless in the face of any danger, did not confine themselves to theory but paid for their inventions with their lives. Among their number were officers of every rank, from lieutenants to generals, soldiers of all ages, some just setting out on their army careers and others growing old at their posts. Many had found their last resting places on the field of battle with their names inscribed on the Gun Club's roll of honour. Of those who returned, most bore the marks of their undeniable valour. Crutches, wooden legs, articulated arms, hooks for hands, rubber jaws, silver skulls,

platinum noses, all were represented in the collection, and the aforementioned Pitcairn further calculated that in the Gun Club there was not quite one arm for every four men, and just two legs between every six of them.

But those dauntless gunners did not dwell on such things and felt justifiably proud whenever news of a battle reported lists of casualties that were ten times greater than the number of missiles fired.

But on one sad, grim day, peace was signed by the survivors of the conflict. The sound of explosions slowly died away, the mortars fell silent, howitzers were muzzled indefinitely and down-at-mouth cannons were returned to artillery depots, missiles were piled high in parks, memories of bloodshed faded, the cotton plants flourished in well-fertilized fields, mourning clothes were finally worn out together with the grieving, and the Gun Club was plunged into a state of profound idleness.

Some keen types, of the beavering sort, went on devoting themselves to ballistic calculations. They continued to dream of gigantic bombs, of shells in a class of their own. But without field trials, what was the point of their paper prototypes? As a result, meeting rooms became deserted, servants dozed in antechambers, newspapers were left to moulder on tables, dark corners rumbled with disconsolate snores, and the members of the Gun Club, once so exuberant but henceforth reduced to silence by the disaster that was peace, nodded off into dreams of Platonic forms of artillery.

'It's so depressing,' said good Tom Hunter one evening as his wooden legs slowly charred in the fire of the smoking room. 'Nothing to do! Nothing to look forward to! Life is so tedious! Whatever happened to the time when you were woken each morning by the noise of cannon-fire that gladdened the heart?'

'Long gone,' answered the dashing Bilsby as he tried to stretch arms he no longer had. 'Those were the days! You invented your shell and no sooner was it cast than off you trotted to test it on the enemy. Then you came back with a pat on the back from Sherman or McClellan!* But today, the generals are back behind their shop counters and instead of missiles they just dispatch harmless bales of cotton! By Jove, there's no future for guns and gunners in America!'

'Quite right, Bilsby,' exclaimed Colonel Blomsberry. 'It's all a cruel let-down. One day you abandon your quiet way of life, are trained to handle weapons, swap Baltimore for battlefields, behave like heroes

and two or three years later, you reap none of the benefits of your efforts and have to slumber in a slough of god-awful indolence and keep your hands in your pockets!'

For all his talk, the valiant Colonel would have been quite unable to enact his indolence in that precise way, though it was not in pockets that he was deficient.

'And no sign of a war in prospect?' said the celebrated J. T. Maston as he used his iron hook to scratch his gutta-percha cranium. 'Not a cloud on the horizon despite there being so much still to be done in the science of ballistics! But I tell you now that this very morning I completed a design—with plan, section and elevation—for a mortar which will change the laws of war!'

'Really?' said Tom Hunter, as the thought of the last test conducted by the honourable J. T. Maston swam unbidden into his mind.

'Really!' came the reply. 'But what is the point of all these ideas even when they are tested successfully and all the problems have been ironed out? Is all the effort not an utter waste of time? The peoples of the New World seem to have come round to the view that we should live in peace, and the belligerent *Tribune* is already predicting imminent disaster caused by the scandalous growth of population!'

'Yet, Maston,' said Colonel Blomsberry, 'they are still going to war over in Europe to defend the idea of the nation.'

'Your point?'

'My point is that there may be an opening for us over there, and if our services were accepted . . .'

'Are you serious?' exclaimed Bilsby. 'You want us to continue working on ballistics so that foreigners can reap the benefit?'

'Better than abandoning ballistic work altogether!' retorted the colonel.

'Agreed,' said J. T. Maston, 'it would be better. But such a course of action is not to be contemplated.'

'And why not?' asked the Colonel.

'Because back in the Old World they have ideas about progress which are completely different to our American way of doing things. Over there, they cannot conceive that a man can become general-in-chief unless he has first served as a second lieutenant, which amounts to saying that a man cannot point a cannon unless he's cast it himself! So it's quite simply . . .'

'Absurd!' retorted Tom Hunter, whittling away at the arms of his easy chair with his Bowie knife.* 'But if that's the way things are, all that's left for us to do is plant tobacco or distil whale-oil.'

'What?' boomed J. T. Maston. 'Not spend the last years of our lives trying to make better firearms? Not have any new opportunity of testing how far our missiles will carry? Not light up the sky with the lightning of our cannons? Not have an international crisis that would allow us to declare war on some transatlantic power? Not witness the French sinking one of our steamships, or the British riding rough-shod over the law of nations, and hanging three of our nationals?'

'No, Maston,' answered Colonel Blomsberry. 'We'll have no such luck! No! Not one of those eventualities will arise and were it to, we should not gain by it. America's susceptibility is diminishing with every day that passes. We're going to the dogs!'

'Yes, we are doing ourselves down!' said Bilsby.

'We are being done down by others!' said Tom Hunter.

'All that is only too true,' replied J. T. Maston with renewed passion. 'There are many reasons these days for fighting and yet we are not fighting anybody! We have to make do without arms and legs and who has benefited? Why, those who already have more of both than they know what to do with! Look, I'm not scratching round for a reason for going to war, but did North America not once belong to the British?'

'Sure did,' said Tom Hunter as he poked the fire savagely with the end of his crutch.

'Well,' resumed J. T. Maston, 'why shouldn't it be Britain's turn to belong to the Americans?'

'That would be only right and fair,' said Colonel Blomsberry.

'But just you try telling that to the President of the United States,' cried J. T. Maston, 'and see how far you get!'

'Not very far at all,' muttered Bilsby, gritting the four teeth he had managed to bring back from the field of battle.

'By God!' said J. T. Maston, 'he can't count on my vote when election time comes round!'

'Nor on mine,' chorused the disabled veterans with one voice.

'In the meantime,' said J. T. Maston, 'and to conclude, if I am not given permission to try out my new mortar in a real battle, I shall resign as a member of the Gun Club, and go and bury myself in the grasslands of Arkansas!'

'And we'll follow you,' answered the audience of the intrepid J. T. Maston.

Things having reached that point, tempers rose higher and higher until the Club was staring imminent closure in the face when a totally unexpected event arose which averted that most unfortunate disaster.

The very day after this discussion took place, each Club member received a circular worded as follows:

Baltimore, 3 October,

The President of the Gun Club has the honour of giving notice to colleagues that at the meeting scheduled for the 5th instant, he will lay before them a matter which will be of considerable interest to all. Accordingly, he asks them to set aside all other business and accept the invitation to attend which is extended by this note.

Their faithful colleague,

Impey Barbicane*

President of the Gun Club

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PRESIDENT BARBICANE'S ADDRESS

ON 5 October, at 8 p.m., a great press of people crowded into the assembly rooms of the Gun Club at 21 Union Square. All the members who lived in Baltimore had responded to the invitation issued by their president. As for out-of-town members, express trains released them by the hundred onto the city's streets. But large as it was, the auditorium could not accommodate so numerous an influx of scientific experts. They overflowed into adjoining rooms, occupied hallways, and spilled out into outside courtyards. There they rubbed shoulders with ordinary citizens who crowded round the doors, each straining to get to the front* and all eager to hear President Barbicane's important statement, pushing, jostling, crushing each other with that freedom of action which characterizes the populace when it is raised on the idea of 'self-government'.

That evening, a casual stranger finding himself in Baltimore would not have been able at any price to get into the main hall, which was reserved for the exclusive use of members living locally or out of town. No one else was allowed in, and even the city's leading citizens,

its councillors and elected officers had no choice but to join the throng of those they governed if they were to catch any stray crumb of whatever would be said inside.

However, the vast chamber alone was a most impressive spectacle. An immense space, it was magnificently suited to the purpose for which it was built. Tall columns made of cannons stacked one upon the other and resting on a base of heavy mortars supported the delicate ceiling arches, a series of exquisitely worked panels of cast-iron lacework. Ornate displays of blunderbusses, musketoons, arquebuses, carbines, and all manner of firearms ancient and modern were arranged trophy-like on the walls in eye-catching displays. Gaslight flared from innumerable revolvers got up to look like gasoliers while chandeliers made of pistols and candelabras formed of sheaves of muskets reinforced the intensity of the lighting. Models of cannons, specimens of bronze castings, gunsights dented by bullets, sections of steel plate pierced by Gun Club shot, assorted rammers and barrel brushes, racks of bombs, strings of missiles, garlands of shells, in short all the tools of the artilleryman's trade so struck the eye in this staggering exhibition that it prompted the thought that their ultimate function was more decorative than lethal.

In the place of honour, inside a splendid glass case, was part of a breech, shivered and twisted by gunpowder blast, a sacred relic of J. T. Maston's cannon.

At the far end of the hall, the president and four secretaries occupied a wide raised platform. His chair, set upon a carved gun-carriage, gave a general impression of the powerful outlines of a 32-inch mortar. It was set at an angle of 90° and suspended on trunnions in such a way that the president could, as with a rocking chair, set it seesawing in the most agreeable manner when the weather was hot. On his desk—an immense rectangle of sheet iron supported on six carriagades—could be seen an inkstand of exquisite taste made out of a prettily chased cartridge case, and a shot-warning signal which, as and when required, would go off like a revolver. When discussions grew heated, however, this new-style bell could barely be heard over the voices of a company of over-excited gunners.

In front of the desk, rows of seats in zigzag formation—like the circumvallations of an entrenchment—made a succession of bastions and curtains where the members of the Gun Club took their seats, so it could be truly said that the place was bulging at the seams. The

president was sufficiently well known for it to be clear to all that he would not have put colleagues to the inconvenience of attending without some very good reason indeed.

Impey Barbicane was a man of forty years of age, calm, cool, and austere, eminently serious and reserved; punctual as a stopwatch,* of imperturbable temperament and unshakeable character; not intrepid yet adventurous and applying practical ideas even to the riskiest enterprises. He was the embodiment of the New Englander, a Northern settler, a descendant of the Roundheads who had spelled death to the Stuarts, and the implacable foe of Southern gentlemen—the sometime Cavaliers* of the mother-country. In short, a Yankee through and through.

Barbicane had made a large fortune in the timber trade. Promoted to Director of Artillery during the Civil War, he had shown considerable inventiveness. Bold in his ideas, he made a massive contribution to the development of that branch of the armed services and gave unparalleled backing for experimental research in that area.

He was a man of average height and—a rare exception in the Gun Club—still had a full set of limbs. His strongly-marked features might have been made using a set square and a ruling-pen, and if it is true that a man's character may be known by examining his profile, then Barbicane, viewed from that angle, displayed the clearest signs of energy, boldness, and self-possession.

At that moment, he was sitting perfectly still in his chair, silent, engrossed, entirely lost in his thoughts under a tall top hat, one of those black silk cylinders which always look as if they have been screwed onto American heads.

Around him his colleagues were talking noisily but failing to catch his attention. They were asking questions of each other, launching into fields of speculation, and eyed their president as they tried—in vain—to penetrate the riddle of his inscrutable face.

But when the clock in the great hall thunderously sounded eight, Barbicane was suddenly on his feet as if released by some hidden spring. A general hush descended and the orator, affecting a somewhat formal tone of voice, began to speak in these terms:

‘Esteemed colleagues, for too long now a barren peace has driven members of the Gun Club into a regrettable state of forced inactivity. After a period of a few years full of incident, we have been obliged to abandon our labours, brought to a standstill on the road to progress.

I do not hesitate to state publicly that any war which would call us to take up arms would be welcome . . .'

'Yes! War!' cried the combustible J. T. Maston.

'Quiet! Just listen!' he was told on all sides.

'But war,' said Barbicane, 'war is out of the question in the current climate. Whatever hopes my honourable heckler might have, many long years will pass before our cannons can thunder once more on the field of battle. We must therefore accept what we cannot change and seek another area of operations to satisfy our hunger for action.'

The entire room sensed that its President was about to reach the crux of his address and became increasingly attentive.

'For some months now, dear colleagues,' Barbicane resumed, 'I have been asking myself if, while staying within our area of specialization, we might not undertake some great venture worthy of the nineteenth century, and whether our advances in the science of ballistics might not allow us to make that venture a reality. I have therefore reflected, worked, and calculated and my studies have led me to the conclusion that we can succeed in an enterprise which would appear impossible to any other nation. This project, which has been long in the making, is the subject of my address. It is worthy of you, worthy of the Gun Club's history, and it will not fail to make some noise in the world.'

'A great noise?' cried one doting gunner.

'A very great noise—in the true sense of the word,' replied Barbicane.

'Stop interrupting!' came several voices.

'Please, colleagues,' resumed the President, 'please give me your full attention!'

A tremor ran through the audience. After settling his hat on his head with a swift gesture using one hand, Barbicane went on coolly with his speech:

'There is not one among you, colleagues, who has never seen the Moon, or at any rate heard of it. Do not be surprised if I now turn to talk to you about the Eye of Night. It could well be that we have been chosen to be the Christopher Columbuses of that unknown world. Listen closely to what I say, back me to the hilt, and I will lead you to its conquest and its name shall be added to those of the thirty-six states* that make up our great Union!'

'Three cheers for the Moon!' cried the Gun Club with a common accord.

EXPLANATORY NOTES

1 *the Federal War in the United States*: (12 April 1861–26 May 1865), fought mainly over the abolition of slavery and the secession of the South from the Union. [Selected parts of the critical material are due to appear in W.B.'s edition of *The Moon* for Gallimard (in press).]

that people of shipowners, merchants, and engineers: for Verne, America is the land of engineers, where 'practical difficulties melt away before they even arise' (p. 000), and who dream of 'plant[ing] on its highest peak the star-spangled banner of the United States of America' (p. 000).

'*the art of war*': without capital letters, perhaps nonetheless a reference to the treatise on military strategy of that name by Sun Tzu (544–496 BC), translated into French in the 18th century; the title was also used by Machiavelli in 1521.

8 *Newton's law of universal gravitation*: the force of gravity between two masses is proportional to each mass and inversely proportional to the square of the distance, law enunciated by physicist Isaac Newton (1643–1727).

9 *Coutras . . . Kesselsdorf . . . each time it was fired*: in all three cases, the cannons did indeed make a decisive contribution. At Coutras, north-west of Bordeaux, an outnumbered Protestant force defeated Catholics. At Zorndorf in Poland, the Prussians overcame the Russians. Kesselsdorf was a Prussian victory over Saxons and Austrians, in fact in 1745.

Iena or Austerlitz: victories by Napoleon I over respectively Prussia (1806) and Austria and Russia (1805).

Gettysburg: decisive Union victory (1863), which saw the Confederates retreat across the Potomac.

J. T. Maston: from *masse-tonne*? In *Sans dessus dessous* (1889) he is called James T. Maston.

Exterminating Angels: four angels sent to avenge the violation of God's law, who introduce the tenth plague to Egypt (Exodus 11: 1–12).

10 *Sherman or McClellan*: Unionist generals: William Tecumseh Sherman (1820–91), a bold officer who took Atlanta; George Brinton McClellan (1826–85), cautious commander-in-chief of the Army from November 1861 to March 1862, later a politician.

11 *Bowie knife*: popularized by Colonel James Bowie (1796–1836).

13 *Impey Barbicane*: authentic first name, perhaps taken from the geologist and cartographer Roderick Impey Murchison (1792–1871). *Barbicane* may be an anglicized form of *barbacane* (fortified gateway) or *barbican* (a type of bird).

straining to get to the front: the manuscript (henceforth ms) of *From the Earth to the Moon* adds 'with typically American intrepidity'. (Reminder: text

common to the base text and a source or a different version of the work appears in italics; text not in the base edition, in roman.)

15 *punctual as a stopwatch*: the ms adds: 'even in the most minor matters'.

Roundheads . . . Cœvilians: Roundheads was the informal name given to the Puritans, supporters of Parliament, headed by Oliver Cromwell in the First English Revolution (1642–51), which led to the execution of Charles I, a Stuart. The royalists, of ornate appearance, were nicknamed Cavaliers. This contrast, between the Protestant farmer-artisans of the North-East and the aristocratic rentiers of the South, is often seen in contemporary commentaries.

16 *the thirty-six states*: in the ms Verne writes: ' . . . of the thirty-four states that make up *our great Union*'. Hetzel scribbles 'what union' and largely illegible words; and Verne crosses out this phrase and replaces it with: 'thirty-four . . . the *Union* and we will talk about the State of the Moon, as we talk about the State of Louisiana!'

17 *David Fabricius*: (1564–1617), German theologian who, along with his son Johannes, was the first to note the existence of sunspots and the rotation of the sun on its axis. Flammarion says: '*David Fabricius . . . claimed to have seen with his own eyes inhabitants of the Moon*' (p. 29). The list of voyages to the Moon that follows is highly selective; all reach the Moon by fanciful means—birds, heated light bulbs, fireworks—and all discover inhabitants. (Until the beginning of the 19th century it was believed that there was an atmosphere between the Earth and the Moon.)

the New York American . . . Herschel: this Democrat newspaper, established in 1819, merged with the *New York Courier* in about 1846. Philosopher Sir John Herschel (1792–1871) wrote *A Treatise on Astronomy* (1833).

Locke: the six articles by Richard Adams Locke (1800–71), called 'The Great Moon Hoax', in fact appeared in *The Sun* in New York in 1835, before being reprinted as a brochure. Painter, art critic, and revolutionary Gabriel Laviron (1806–49) translated and published Locke's work (Lyon: Aimé, 1835).

18 *Hans Pfaall*: in Edgar Allan Poe's 'Unparalleled Adventure of One Hans Pfaall' (1835, translated by Baudelaire in 1856), a balloon filled with an ultra-light gas is propelled by gunpowder, with Pfaall carrying pure oxygen. Verne analysed the hoax in 'Edgar Poe and his works' (*Musée des Familles*, 1864), declaring the means used to reach the Moon 'too implausible'.

colossal geometrical shapes using luminous reflectors: the idea of Karl Gauss (1777–1855), who did not in fact propose using illuminated shapes. Verne's source may be Flammarion: 'Arago recounted . . . [the idea] of a German geometer . . . on the immense steppes of Siberia a team of scientists charged with arranging . . . geometric shapes . . . mirrors . . . reflectors' (p. 258).—Famous physicist and liberal politician François Arago (1786–1853) measured a terrestrial meridian and worked on electricity and optics. His