

**Manouchehr Moshtagh Khorasani**

Frankfurt School of Finance and Management

e-mail: [manouchehr@moshtaghkhorasani.com](mailto:manouchehr@moshtaghkhorasani.com)

 <https://orcid.org/0000-0002-7663-1963>

# A Comprehensive Examination of the 1852 Persian Military Manual: 'General Regulations for the Exercises and Marches of the Infantry of the Esteemed Government of Iran'

**Summary:** This article deals with the study and analysis of an important Persian military manual, entitled 'General Regulations for the Exercises and Marches of the Infantry of the Esteemed Government of Iran' (قواعد کلیه از برای مشق و حرکات پیاده نظام دولت علیه ایران). The manual, a historical artefact of considerable importance, is dated Ramadan 1268 Hijra, corresponding to June 1852 CE, a period marked by the reign of Nāssereldin Shāh Qajar. The manual is a testament to the modernisation efforts initiated by Crown Prince Abbās Mirzā during the early Qajar era. It provides a unique insight into the military strategies and training methods of the time, reflecting the transformative changes within the Iranian military. Comprising 51 pages and adorned with 35 illustrations, the manual provides a comprehensive guide to training exercises for armed and unarmed infantry troops. It provides insight into the rigorous training regimes and tactical manoeuvres of the Persian infantry in the mid-19<sup>th</sup> century. Thus, the manual is not merely a military guide but a historical document that provides information on the evolution of Persian military tactics in response to the modernisation efforts of the time.

**Keywords:** Military handbook, Iran, Persia, Marching, Military exercises



## Introduction

The presented article deals with a Persian manual from the Qajar era, entitled '*General Regulations for the Exercises and Marches of the Infantry of the Esteemed Government of Iran*' (قواعد کلیه از برای مشق و حرکات پیاده نظام دولت علیه ایران).<sup>1</sup> The manual was written in Ramadan 1268 Hijra, corresponding to June 1852 CE, during the reign of Nāssereldin Shāh Qajar. The Shah, whose life spanned from July 17, 1831, to May 1, 1896, was on the throne from September 5, 1848, until his death. A preserved copy of this historic document, inventory number 2672, is kept in the National Library of Iran. The manual, written in the elegant Naste'aliq script, consists of 51 pages and contains 35 colour illustrations depicting Qajar soldiers in various poses, wielding muskets, waving banners and holding sabres.

Iran's rich history is steeped in the tradition of military manual writing, covering a wide range of topics from military strategy and sword classification to archery manuals and crucible steel production. The tradition of writing manuals on firearms, cannon making and military training dates back at least to the Safavid period. Notable examples include an untitled Safavid manuscript on bronze cannon casting attributed to Soleymān, the treatise on rockets written by Mohammad Rezā Tabrizi,<sup>2</sup> and the treatise on the arsenal (*Resāle-ye Qurxāne*) written by Mohammad Bāqer Tabrizi in 1257 hijra (1841 CE).<sup>3</sup> This analysis aims to shed light on the military practices and strategies of the Qajar era, as well as the broader historical context of military manual production in Iran. The study of this manual offers a unique window into the military history of Iran, providing valuable insights into the evolution of warfare tactics, weaponry and military training in the region.

One of the main difficulties in studying Persian military manuals is the lack of modern translations for many Persian words and terms of the period. This is further complicated by the lack of knowledge regarding period firearms in Iran. To navigate this linguistic and historical maze, it was necessary to examine numerous European manuscripts of the same era to identify equivalent terms. The word *fešang* (فشنگ) is an excellent example. In contemporary Persian, it translates as 'bullet'. In the historical context, however, it was used to denote a 'rocket.' This is a significant semantic shift. Furthermore, there are cases where a single Persian term is used to describe a variety of weapons. The term *xompāre* (خمپاره) serves as a prime example of this, as it is used interchangeably to describe a 'bullet body', a 'mortar', or a 'grenade'. The true nuances of these terms only become apparent when compared to contemporary

1 NLAIRI, no. 2672.

2 NLAIRI, no. 1055. See: Moshtagh Khorasani M. 2018, 15.

3 NLAIRI, no. 1766. See: Moshtagh Khorasani M. 2018, 15.

European manuscripts describing the same type of weapon. This comparative approach reveals the subtle differences and aids in the accurate interpretation of these historical Persian military manuals.

### Historical background

The esteemed military Manual, '*General Regulations for Exercises and Marches of the Infantry of the Esteemed Government of Iran*' (قواعد کلیه از برای مشق و حرکات پیاده نظام دولت علیه ایران) comes from the era of Nāssereldin Shāh Qajar – July 17, 1831, to May 1, 1896, CE). This historical document, which shows Iranian soldiers in European uniforms, provides a fascinating insight into the period when Iran began to incorporate European military models into its armed forces. The genesis of these military reforms can be traced back to the reign of Fath Ali Shāh Qājār (1797–1834 CE). In 1802, Edward Scott Warning, a British observer, gave a detailed account of the state of the Persian military. His journey took him to Bushehr in 1802, and his experiences were later published in his book *Tour to Shiraz* in London in 1807.<sup>4</sup> Warning's vivid descriptions portray Persian soldiers heavily laden with an array of weapons. He noted that each soldier was fully armed, and their horses struggled under the weight of their weapons. The soldiers' arsenal included a pair of pistols in leather holsters, a sling on their belts, a carabineer or long musket, a sabre, a dagger and a long lance. Each weapon was accompanied by its black powder flask, bullet containers and a ramrod. The clanking of their equipment, which could weigh as much as eighty pounds, was a distinctive sound as they approached. Despite the heavy load, Warning observed that the Persian soldiers' equipment was lighter than that of their Turkish counterparts. He also noted the superior quality of their weapons, especially their swords. The Persian swords, with their watered blades, were of higher quality than those used by the Turks. Warning's account provides a clear indication that Persian soldiers of the time were equipped with a mixture of traditional and modern weapons.<sup>5</sup> This historical context is crucial to understanding the evolution of Iran's military reforms, particularly the adoption of European models.

In his 1807 work, Warning meticulously detailed the structure and operations of the Persian military, revealing an organised and disciplined force that served the king. Each military unit consisted of a thousand men under the command of a *minbāshi* (نیمباشی), a hundred men led by a *yuzbāshi* (یوزباشی), and a group of ten men led by an *unbāshi* (اونباشی). To ensure his sovereignty, the king ingeniously kept one son from each tribal unit, or even himself, within the confines of his court. This strategic move not only guaranteed his royal authority but also fostered a sense of unity and

<sup>4</sup> Warning E.S. 1807, 192.

<sup>5</sup> Warning E.S. 1807, 192.

loyalty among the various tribal units. The Persian military was predominantly cavalry-based, a testament to their strategic preference for speed and mobility. However, their tactical versatility was evident in their ability to assemble infantry units when the situation demanded it, such as during a siege of a city or fortress. The Iranian soldiers were renowned for their bravery and discipline, drawing parallels with the Italian soldiers who were known for their relentless fighting spirit and remarkable ability to sustain zero casualties throughout the day.<sup>6</sup>

It should be noted, however, that the quality of infantry soldiers was considered inferior to that of cavalry soldiers. The primary role of the infantry was to bombard a city or fortress for an extended period with the goal of creating a breach in the wall to gain entry. In their military confrontations against the Turks, the Iranians often emerged victorious, and they even triumphed in a war against India. Their remarkable speed of movement was a key factor in their military success. They were capable of covering forty to fifty miles<sup>7</sup> a day, and in times of emergency, they could cover seventy miles<sup>8</sup> a day for three consecutive days.<sup>9</sup> In the early skirmishes with the Russian army, the Iranian forces demonstrated remarkable prowess. A monumental painting, measuring 9 by 5½ meters and housed in the National Museum of Iran (Iran Bastan Museum), captures one such encounter. This magnificent work of art depicts Fath Ali Shāh Qajar, the second Shah of the Qajar dynasty, engaged in a fierce battle with the Russians.

The museum refers to this historical depiction as the *Battle of Ganja*, a title echoed in several publications, including Āryāi's 2018 work.<sup>10</sup> However, a faction of scholars, including Diba<sup>11</sup> and Nechitailov,<sup>12</sup> argue that the painting more accurately represents the *Battle of Yerevan* of June 1804 and suggest that the artwork should more appropriately be termed the *Siege of Yerevan*. The siege of Yerevan, which the painting may illustrate, lasted from July to September 1804. General Pavel Tsitsianov initially managed to lay siege to Yerevan, albeit with considerable difficulty. However, the Iranian forces within the citadel of Yerevan successfully thwarted Russian attempts at a direct assault. In the early skirmishes with the Russian army, the Iranian forces demonstrated remarkable prowess. Furthermore, the Iranian troops stationed beyond the citadel's perimeter effectively encircled the Russian army, disrupting its supply lines. Under the strategic leadership of Crown Prince Abbās Mirzā and King Fath Ali Shāh Qajar, the Iranian forces triumphed over the Russian army, a victory noted by

6 Warning E.S. 1807, 203–204.

7 Circa 64–89.5 km.

8 Circa 113 km.

9 Warning E.S. 1807, 205–206.

10 Āryāi M. 2018.

11 Diba L. 2006, 98.

12 Krugov A., Nechitailov M. 2016, 164.

Atkin<sup>13</sup> and Kettenhofen.<sup>14</sup> In the aftermath of this defeat, Tsitsianov, in a desperate attempt to divert attention from his shortcomings, sought to shift the blame onto others. His primary scapegoat was General and Prince Dmitri Mikhailovich Volkonsky, whom he accused of failing to adequately supply his troops. Tsitsianov conveniently overlooked the fact that the entire region from Yerevan to Georgia was under the control of Iranian forces, a fact confirmed by Atkin.<sup>15</sup> This strategic oversight on Tsitsianov's part further underscored his incompetence as a military leader.

Despite the inherent strengths of the Iranian army, they were outmatched in several battles against the Russians. This necessitated a significant overhaul of their military strategies and capabilities to regain their competitive edge. As a result, the crown prince of Fath Ali Shāh Qājār, Abbās Mirzā (1789–1833), embarked on a comprehensive reform of the Iranian army. Beyg Danbali, a historian of the Qājār period, provides an account of these reforms in his book, *Māsar al Soltāniye*. He reports that Abbās Mirzā sent a group of Iranian artisans to England with the mission of mastering the art of making muskets according to British designs. These artisans spent approximately four to five years in England, perfecting their skills and acquiring knowledge. Upon their return to Iran, they demonstrated an exceptional level of proficiency, producing flint-lock muskets and gun accessories of such high quality surpassing those of their British mentors. Danbali estimates that these skilled Iranian gunsmiths produced some 20,000 new muskets, greatly increasing the firepower of the Persian army.<sup>16</sup>

Hence, during the Qājār era, a significant military reform was initiated under the leadership of Crown Prince Abbās Mirzā. Further, as reported by Beyg Danbali in 1820, a military order was issued to select brave young men from Azerbaijan in Iran for specialised training. These men were trained by French and English military advisors in the latest techniques of warfare. Over two years, an impressive force of 12,000 soldiers was trained, receiving instructions in agility, mass shooting, marksmanship and basic military principles. This rigorous training ensured the loading and firing of muskets with regularity and precision.<sup>17</sup> This period marked a significant advancement in the military prowess of the Persian forces, with the integration of modern warfare techniques and the use of finely crafted weapons.

To be more specific, following the Russian military pressure and their expansionist policies from the north, Fath Ali Shāh Qajar and especially his crown prince Abbās Mirzā had already seen a necessity to conduct a major military reorganization to withstand the Russian incursions. Abbās Mirzā believed that Iran could only

13 Atkin M. 1980, 99.

14 Kettenhofen E. et al. 1988, 542–551.

15 Atkin M. 1980, 76–77.

16 Moshtagh Khorasani M. 2018, 22.

17 Beyg Danbali A. 1820, 132.

face a European military power by imitating its structure, organization, and tactics.<sup>18</sup> To reach his goal, he first invited French and then British military advisors. He then sent Iranian students to military academies abroad, attempted to create a standing infantry and artillery, and introduced a conscription system. But even before these reforms, some Russian deserters to Iran had already been forming and drilling some Iranian battalions based on European models. These exercises included drilling, marching, and handling the muskets. The first French mission took place under General Claude Matthieu de Gardane (1766–1818) in 1807. As a consequence, Iran entered an alliance with Napoleonic France against Britain and Russia.<sup>19</sup>

These military advances initiated by Abbās Mirzā did not go unnoticed and caused concern for General Aleksey Petrovich Yermolov, the commander-in-chief of the Russian forces in Georgia. Yermolov, who had close ties to Abbas Mirzā's opponents, closely observed the crown prince's activities and frequently reported his observations to St. Petersburg, highlighting Iran's growing military capabilities. His reports, however, were largely dismissed in Russia. His rivals, and even Russian Emperor Nicholas I, regarded Yermolov's warnings as exaggerations designed to serve his personal interests and to justify a second invasion of Iran. The prevailing belief was that the Iranians had learned their lesson from the power of Russian military might in the previous Caucasian War and would abide by the Treaty of Golestan. As such, another war was considered unnecessary and potentially detrimental to Imperial Russia's interests. In particular, Tsar Nicholas I was anxious to maintain peace with Iran, fearing that any aggression might drive the Iranians closer to the British, Russia's regional rivals.<sup>20</sup>

In his diplomatic correspondence with Count Karl Nesselrode, the Russian Foreign Minister, Yermolov wrote a detailed account of his observations and concerns regarding the actions of Crown Prince Abbās Mirzā. He wrote: 'Not only do I see no good will or willingness in Abbās Mirzā to respect our interests... but he is not even able to hide his dissatisfaction at seeing our dominance over their lost provinces.' Yermolov then proceeded to detail the military advances initiated and overseen by the Crown Prince that further substantiated his fears. He reported:

[...] with the help of British, he is successfully implementing broad and significant reforms in every aspect of the country. He is organising regular military units on the basis of sound principles. The artillery is in a very satisfactory condition, and its numbers are rapidly increasing. There is a remarkable metal-smelting factory, as well as an armory, working day and night to replenish the armories and arsenals of

18 Cronin S. 2012.

19 Cronin S. 2012.

20 Moshtagh Khorasani M. 2018, 22–23.

Persia. They built citadels and fortresses based on European models. They exploit their mines for copper, lead, and iron.<sup>21</sup>

Yermelov also noted the financial constraints that Abbās Mirzā faced because of his frugal father, King Fath-Ali Shāh Qajar. He wrote: 'Abbās Mirzā's efforts are somewhat restricted by the limited resources provided by his frugal father. However, through his personal thrift and contentment, he has managed to allocate most of his income to military expenditures and maintenance.' Yermelov's observations revealed that Abbās Mirzā had amassed thirty battalions of 1,000 men each, equipped with 100 field artillery pieces. He warned: 'Abbās Mirzā's reforms are being rapidly implemented in all aspects of the military, and it will not be long before the Persian infantry rivals the best European counterparts.'<sup>22</sup>

But due to a changing European context and power-shifting after Napoleon and the tsar signed the Treaty of Tilsit (July 7–9, 1807), the influence of France started to vanish, Fath Ali Shāh accepted to allow a British mission comprising 50 British officers and Indian sepoys from Britain and India.<sup>23</sup> The British mission replaced the French-supplied equipment with British muskets and sabres. The reform was then continued by the English military advisors Major Christie and Lieutenant Lindsay of the Indian Army, who were part of Sir John Malcolm's entourage on his diplomatic mission to the Persian court. Their contributions to the Persian military were equally commendable. They formed the Persian infantry, which included a bodyguard unit stationed at a garrison in Tehran. This unit was tasked with accompanying the Shāh on his travels. Uniformity was maintained in the armament of the infantrymen, although their uniforms varied. This detailed account underscores the profound influence of Abbās Mirzā's reforms on the Persian military, a legacy that lasted well into the reign of Nassereldin Shāh Qājār. Dressed in white trousers and a red waistcoat with blue sleeves and collar, the bodyguard was distinguished from the provincial troops, whose waistcoats were of various colours. The Persian artillery, known for being the most disciplined unit, boasted an impressive array of finely crafted field pieces and well-horsed ammunition wagons.<sup>24</sup>

It is unclear which military manuals the British used to train Iranian soldiers; however, *The Manual Exercise, as Ordered by His Majesty in 1764*, had been in use for some time. The 1764 Drill Manual, a comprehensive guide to military operations, served as the cornerstone of the Continental Army's tactical approach until 1778. British soldiers were deeply engaged in regular military drills. This manual was a familiar

21 Moshtagh Khorasani M. 2018, 23.

22 Akty. 1875, 178–179.

23 Wright D. 1977, 50.

24 Jennerich E.J. 1973.

reference for members of both armies, offering profound insight into the functioning of an 18<sup>th</sup>-century military force (*The Manual Exercise, as Ordered by His Majesty in 1764*). Additionally, efforts were made to modify Iranian military uniforms to align their aesthetic with that of the British forces. Nevertheless, the reality of this transition fell short of a complete overhaul; the only distinctly European element incorporated into the Iranian uniform was the jacket, a contribution from the French advisors. Beyond this, the uniform preserved its traditional Iranian essence, featuring wide trousers or pantaloons, a staple of local attire, alongside the iconic sheepskin hat. Officers, in particular, seemed to view their uniform as merely a formalised version of their regular attire. The British allowed officers to maintain the privilege of sporting beards while requiring ordinary soldiers to shave; however, the soldiers adhered to their traditional grooming style, which involved a shaved head adorned with a top knot and side curls. This unique blend of British, French, and Iranian elements produced a uniform that symbolised cultural identity as much as it marked military service.<sup>25</sup> The British also utilised other military manuals. Another notable manual was *Rules and Regulations for the Formations, Field Exercise and Movements of His Majesty's Forces* (1792), which played a key role in developing general rules and regulations for the United States Military.

However, some adaptations were necessary. For example, the rugged terrain of Persia, with its mountainous landscapes, required a unique approach to warfare. The Persians ingeniously mounted smaller 3–4-inch calibre cannons on the backs of camels. These swivel cannons, or *zanburaks*, allowed for greater mobility in the difficult topography. The irregular component of the Persian army, though not a permanent fixture, was mobilised during extraordinary circumstances. Every Persian male was trained in the arts of weaponry and horsemanship from a tender age. This early exposure to martial skills, coupled with their tribal affiliations, fostered a sense of bravery and unity among the irregular forces, making them a formidable force in their own right.<sup>26</sup>

After the war between Iran and Russia concluded with the signing of the Golestan Treaty in October 1813, a third agreement between Iran and Britain, the 1814 Anglo-Persian Treaty, was established. However, during the Anglo-Russian alliance of 1812–1813, Britain began to scale back its military missions and commitments in Iran.<sup>27</sup> By 1819, British officers serving in Iran gradually withdrew, leaving only Captain Isaac Hart in charge of 'Abbās Mirzā's bodyguard. This period was marked by a growing scepticism, not only from contemporary observers but also from the officers of the military missions themselves. They questioned the extent to which Iran was truly

25 Kibovski A., Yegorov V. 1966.

26 Jennerich E.J. 1973.

27 Cronin S. 2012.



reaping benefits from its experimentation with European military models and the incorporation of European officers into its ranks.<sup>28</sup> European observers had always perceived Iran's military strength to be rooted in its irregular cavalry supplied by the tribal khans. This force had demonstrated its effectiveness through swift raids and defensive skirmishing. In contrast, the *nezām* troops, despite their European training, did not inspire the same level of confidence. The question that arose was whether Iran's attempts to modernise its military by adopting European models and employing European officers were truly beneficial. The scepticism was not unfounded. The irregular cavalry, with its tribal roots and unconventional tactics, had proven to be a formidable force. The *nezām* troops, despite their training and discipline, did not seem to match up to the effectiveness of the irregular cavalry.<sup>29</sup> However, this army could prove its strength against the Ottoman Empire in campaigns of 1821–1823, destroying the Ottoman army in the battle of Erzurum in 1821.<sup>30</sup> However, the Persian army was not successful in another war against Russian forces when Russians entered Tabriz in November 1827, culminating in the Treaty of Turkmanchay.<sup>31</sup>

After the British military advisors left Iran, Abbās Mirzā hired European military advisors on an individual basis. These advisors came from various countries, including France, Italy, and Spain, and were seeking new opportunities after the end of the Napoleonic Wars.<sup>32</sup> Later, due to concerns in London and Calcutta about a Russian threat to India, Abbās Mirzā managed to convince Britain to send a second British mission. The officers arrived in Iran at the end of 1833. After the deaths of Abbās Mirzā in October 1833 and Faṭḥ Ali Shah in October 1834, the British officers were primarily responsible for drilling and training Iranian troops, but they faced significant hostility from their Iranian counterparts.<sup>33</sup> Mohammad Shah Qajar ascended to the throne on October 23, 1834 and ruled until September 5, 1848.<sup>34</sup>

In 1836, Moḥammad Shah found himself increasingly drawn towards the political and diplomatic allure of Russia. This growing affinity led to a rather abrupt dismissal of all British officers from his summer encampment. This marked the end of Britain's second attempt to establish a foothold in Iran, an endeavour that proved even less fruitful than their first mission. The final nail in the coffin of this British experiment was the political and diplomatic fallout triggered by Moḥammad Shah's attack on Herat in 1837. This event not only strained the already tenuous relationship between Britain and Iran but also led to its complete disintegration. In 1838, Britain

28 Cronin S. 2012.

29 Cronin S. 2012.

30 Williamson G. 2008.

31 Cronin S. 2012.

32 Cronin S. 2012.

33 Cronin S. 2012.

34 Cronin S. 2012.

took a decisive step by severing all diplomatic ties with Iran and ordering all its officers serving under the Shah to leave the country.<sup>35</sup>

Despite the less-than-satisfactory outcome of his experience with the British military mission, Mohammad Shah remained undeterred in his quest for foreign aid to support his military reforms. The strained relations with Britain and the deep-seated mistrust towards Russia made him turn towards France again. The French agreed to Mohammad Shah's proposal. They pledged to provide Persia with weaponry and a cadre of experienced military instructors to replace the British. Thus, in September 1839, a mission led by Edouard de Sercey embarked from Paris, reaching the city of Tabriz by January 1840. However, the French mission's tenure in Iran was short-lived, lasting less than four years. Their efforts to reform the Persian military were largely unsuccessful, hampered by a myriad of challenges as their mission was met with a lukewarm response from the Iranian government itself.<sup>36</sup>

In the annals of Iranian history, the reign of Nāssereldin Shāh Qajar (1848–1896) is distinguished as a period of significant military development. The lasting impact of Abbās Mirzā's transformative reforms was profoundly evident in a European article published in 1857. The reforms meticulously dissected the composition of the Persian army, revealing a dichotomy of forces: the regular troops, disciplined according to European military systems, and the irregular troops, mobilised only in times of crisis. The genesis of the regular troops can be found in the first Napoleonic era in France. In 1808, a cadre of intelligence officers was sent to Persia to modernise the army. Their efforts yielded positive results, as evidenced by the significant progress made in the Persian military structure.<sup>37</sup>

The new king initiated a new phase of military reforms with the help of his new chief minister, Mirzā Taqi Khan Amir-e Kabir, who established *Dar al-Fonun* as an elite military and technical college.<sup>38</sup> Amir-e Kabir turned to Europe to find further support for his reform efforts, especially for the teaching of the *Dar al-Fonun*. As he did not trust the British, French, or Russians, Amir-e Kabir asked the Habsburg Empire (Austria) for assistance. In November 1851, an Austrian mission reached Tehran, but Amir-e Kabir had fallen from power 11 days before their arrival. However, the Austrians did not receive a warm welcome and started to face difficulties. A group of Italian officers also arrived in 1850, further complicating the work of Austrian officers.<sup>39</sup>

As previously mentioned, this article explores the intricacies of a manual from this era entitled *General Regulations for the Exercises and Marches of the Infantry of the Esteemed Government of Iran*, written in 1852. This manual is a testament to the

35 Cronin S. 2012.

36 Cronin S. 2012.

37 Jennerich E.J. 1973.

38 Cronin S. 2012.

39 Jennerich E.J. 1973.

military advances of the time and reflects the influence of European military strategies on Persian warfare. During the reign of Nāssereldin Shāh Qajar, a plethora of Persian manuscripts on warfare were written, and numerous European military texts were translated into Persian. These translations covered a range of European languages, including English, French, German and Russian, indicating a broad spectrum of influence and knowledge exchange. In the *Book of Ahmad*, dated 1894, Tabrizi emphasises the paramount importance of military science. He asserts that military science is the most important of all sciences and highlights the need for its proper teaching. Tabrizi's argument is founded on the changing nature of warfare, which had evolved from an era of bows, arrows, swords and spears to one dominated by advanced weaponry.<sup>40</sup>

Tabrizi discusses the power of modern weapons such as the Krupp rifle, the Lebel rifle, the Mauser rifle and the Mannlicher rifle. These weapons, he notes, can fire a bullet at a range of 5000 *zar*<sup>41</sup> and eliminate 30 to 50 people per minute. He also emphasises the destructive power of naval guns, which weigh 300 *xarvār*<sup>42</sup> without a shot and can destroy a large port city within hours with their two *xarvār* rounds fired from armoured ships. Tabrizi proceeded to emphasise the huge gap in military prowess between Asian and European nations, noting that Asian nations can barely fathom the combat efficiency of their European counterparts. He attributes this disparity to the power of military science, which involves studying the military history of previous centuries and examining battle manoeuvres to optimise the use of military forces on the battlefield against the enemy. Tabrizi's historical account reveals a fascinating social norm prevalent in his time. He recounts a period when the youth were actively encouraged to wear military uniforms, a practice that was not merely a fashion statement but a strategic move to promote discipline. It was a deliberate attempt to prepare them for a possible future in the military. This fascinating insight into the social norms of his time is documented in Tabrizi's work.<sup>43</sup>

The advent of European innovation and military expertise led to the introduction of flintlock muskets, a significant development in the history of warfare. These flintlock muskets, a testament to the technological advancements of the time, are prominently featured in the esteemed publication, *General Regulations for the Exercises and Marches of the Infantry of the Esteemed Government of Iran*. During the Qājār era, from

40 Tabrizi A.A. 1894, 145.

41 As will be shown later in the translation and annotation of Congreve's manuscript Mohammad Rezā Tabrizi (NLAIIRI. no. 1055) uses the term *zar* for the term yard used by Congreve (Congrave W. 1810, 1). However, The Digital Lexicon of Dehxodā states that one *zar* is equal to two meters, whereas one yard equals 36 inches (0.9144 m). To add more to the confusion, the maximum firing range of Lebel rifle was 1800 m (1644 yards), <https://www.parsi.wiki/fa/wiki/447623/%d8%b2%d8%b1%d8%b9>.

42 Based on Nāzēm al-Otabā, The Digital Lexicon of Dehxodā states that one *xarvār* equals one hundred man of Tabriz. See: <https://www.parsi.wiki/fa/wiki/233569/%d8%ae%d8%b1%d9%88%d8%a7%d8%b1>.

43 Tabrizi A.A. 1894, 146.

1794 to 1925, these imported flintlocks bore the mark of the East India Company (E.I.C.). This powerful entity played a pivotal role in shaping global trade and politics. In the Persian language, these flintlocks were called either *čaxmāq-e engirizi*, which translates to English flintlock, or *čaxmāq-e farangi*, which means European flintlock.<sup>44</sup>

In Persian handbooks, the craftsman known as the *čaxmāqsāz*, or flintlock maker, played an important role. This guild was once teeming with members at a time when the stone flintlock was a common sight, while its European or foreign counterparts were rare. These craftsmen were renowned for their exceptional work on *čaxmāqhā-ye engirizi*, or English flintlocks, each of which commanded a price of 15,000 dinār. During the reign of the *King of Kings*, the esteemed Ostād Mohammad Isfahāni Čaxmāqsāz sold each flintlock for three *tumān*, a sum equivalent to a respectable year's salary for a young man at the end of the 19<sup>th</sup> century. In Europe, the creation of a flintlock was a collaborative effort, with each component made by a different guild. The quenching of the *qorxoloq*, or trigger guard, and the construction of the firing mechanism were tasks reserved for the most experienced craftsmen. In Isfahan, however, the process was a testament to the skill of the individual craftsman. Ostād Mohammad, for example, was a master of all stages of flintlock creation, a trait shared by other masters of his time. Years previously, most of Isfahan's flintlock makers moved to Tehran. Some, driven by personal ambition, ventured to Khorāsān, Kordestān and Fārs. A handful remained in Isfahan and continued to produce high-quality flintlocks whenever demand arose. These flintlocks, crafted with skill and precision, were sought after in all regions of Iran, a testament to the enduring legacy of the *čaxmāqsāz*.<sup>45</sup>

In addition to the famous Ostād Mohammad, there were other eminent flintlock craftsmen such as Ali, whose work was marked with the inscription *amal-e Ali* (the work of Ali). This mark was found on a flintlock mechanism for a gun with a pattern-welded barrel made by Hosseyn Mollā. Another notable craftsman was Sār Ali, whose work was identified by the mark *amal-e Sār Ali* (the work of Sār Ali). His flintlock, attributed to the Qājār period, is preserved in the Military Museum of Tehrān. These weapons, made with such precision and skill, were used effectively by Persian soldiers.<sup>46</sup>

### **An Analysis of General Regulations for the Exercises and Marches of Infantry of the Esteemed Government of Iran**

An in-depth study of the *General Regulations for the Exercises and Marches of Infantry of the Esteemed Government of Iran* reveals a fascinating insight into the military history of the nation at that time. This historic manual, catalogued under the inventory

44 See: Joqrāfiyā-ye Esfahān (Tahvildār Esfahāni H. 1964, 108).

45 Tahvildār Esfahāni H. 1964, 108.

46 Moshtagh Khorasani M. 2018, 23–24.

number 2672, is preserved in the National Library of Iran. Written in the artful *Naste'aliq* script, the manual comprises a total of 51 pages. It is further embellished with 35 vivid illustrations that bring to life the Qajar soldiers in various postures. The illustrations depict the soldiers in various scenarios, from wielding muskets and waving banners to holding sabres, providing a visual narrative of the military practices of the time. The manuscript begins by explaining that it is divided into five distinct parts. However, it only investigates the first part, leaving the remaining four parts unknown. This first part is further divided into four chapters containing two hundred and fifteen principles. It is plausible that the remaining sections were documented as separate manuals, a common practice at the time. The first part of the manual is devoted to the instruction of new soldiers, providing a comprehensive guide to their training and development. This section serves as an invaluable resource for understanding the military training methods and strategies employed during this period in Iranian history. The following is a brief yet comprehensive overview of the various sections presented in the manual.<sup>47</sup>

**Part One:**  
*The Art of Training Novice Soldiers*

This first section is divided into four comprehensive chapters. These chapters meticulously outline a total of 215 fundamental principles.

**Chapter One:**  
*The Art of Training Unarmed Soldiers*

This chapter, divided into four insightful lessons, begins by emphasizing the first principle: the commander of the troops (*farmānde-ye qošun* فرمانده قشون) is responsible for training his soldiers.

- Lesson One: Understanding Military Postures (*hālat nezāmi* حالت نظامی)  
This lesson provides valuable insights into the various military postures, including the positioning of the legs, arms, shoulders, and the importance of maintaining eye contact. It also introduces Persian command terminologies such as 'Attention Position' (*xabardār* خبردار) and 'Stand at Ease' (*rāhatbāš* راحت باش).
- Lesson Two: The Art of Turning (*gardān* گردان)  
This lesson investigates the techniques of turning and half-turning to the left and right. It also introduces commands such as 'shouldered arms' (*dušfang* دوشفنگ) and 'present arms' (*pišfang* پیشفنگ).
- Lesson Three: The discipline of Slow Marching (*āhaste marš* آهسته مارش).

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<sup>47</sup> The Manual.

This lesson focuses on the discipline of slow marching, introducing commands such as ‘Step Exercise’ (*pāy-e mašq* پای‌مشق), ‘Step Forward’ (*be piš* به‌پیش), and ‘March’ (*mārš* مارش).

– Lesson Four: Mastering Different Steps (*pāhāye moxtalefe* پایاهایمختلفه)

This final lesson of the first chapter explores the different steps in marching, including commands such as (*darjā* درجا), marching (*mārš* مارش), going forward (*be piš* به‌پیش) and (*taraf-e rāst yā čap* طرف‌راست‌یاچپ).

Chapter Two:  
*The Art of Instructing Soldiers in Firearms Mastery*

The chapter is divided into six comprehensive lessons, each designed to equip soldiers with the necessary skills to handle firearms proficiently.

- Lesson One: The Fundamentals of ‘Shouldered Arms’ (*dušfang* دوش‌فنگ). This lesson examines the basic commands such as ‘Present Arms’ (*pišfang* پیش‌فنگ), ‘Support Arms’ (*bāzufang* بازو‌فنگ), and ‘Charge Bayonet’ (*neyzepeš* نیزه‌پیش).
- Lesson Two: The Mechanics of Loading (*porkardan* پرکردن) and Firing (*andāxtan* انداختن). This lesson includes a variety of commands such as ‘Load’ (*porkonfang* پرکن‌فنگ), ‘Grip Cartridge’ (*bekabršang* بکیرشنگ), ‘Tear Cartridge’ (*bedaršang* بدرشنگ), ‘Charge Cartridge’ (*fešangfang* فشنگ‌فنگ), ‘Ram Cartridge’ (*sombekeš* سنبه‌کش), ‘Return Rammer’ (*sombejā* سنبه‌جا), ‘Throw About’ (*hāzerfang* حاظر‌فنگ), ‘Aim’ (*ru* رو), ‘Fire’ (*tir* تیر), ‘Ready from Shoulder Arms’ (*bālāfang* بالا‌فنگ), and ‘Draw the Flintlock’ (*čaqmāqkeš* چقماق‌کش).
- Lesson Three: The Strategy of Slanting Fires (*ātašhāy-e monharefe* آتشهای‌منحرفه).
- Lesson Four: The Second Type of Weapons Exercise (*mašq-e tofang* مشق‌تفنگ). This lesson covers ‘Unfixing the Bayonet’ (*neyzejā* نیزه‌جا), ‘Securing Weapons’ (*baqal-fang* بغل‌فنگ), ‘Bowing’ (*namāzfang* نماز‌فنگ), ‘Holding Weapons in Front’ (*bepišfang* به‌پیش‌فنگ), ‘Shoulder Shift’ (*darrāhfang* در‌رافنگ), ‘Trail Arms’ (*bepāfang* به‌پافنگ), and ‘Inspect Arms’ (*bāzdidfang* باز‌دیدفنگ).
- Lesson Five: This lesson is not included in the manual. It is unclear whether the author misnumbered the lessons or if this section is missing from the current manuscript.
- Lesson Six: The Techniques of ‘Stacking Arms, (*čātme bastan* چاتم‌بستن) and ‘Unpiling Arms’ (*darjāfang* درجا‌فنگ), ‘Marching’ (*mārš* مارش), and ‘Reversing Arms’ (*sar-negunfang* سر‌نگون‌فنگ).

Each lesson is designed to be comprehensive and detailed, providing soldiers with a thorough understanding of firearm handling, from the basic principles to advanced techniques. The aim is to ensure that each soldier is well-equipped to handle any situation that may arise in the field.







Fig. 2. The Art of Instructing Soldiers in Firearms Mastery (Source: NLAIRI, no. 2672, 12)





Fig. 3. 'Shouldering Arms' (*dušfang*) (Source: NLAIRI, no. 2672, 43)



Fig. 4. The Art of Banner Exercise (Source: NLAIRI, no. 2672, 48)





**Fig. 5.** Officers' Sword Training (Source: NLAIRI, no. 2672, 49)

### Chapter Three:

#### *The Art of Training Sergeants and Corporals*

- Lesson One: ‘Gun Exercise’ (mašq-e tofang (مشق تفنگ), explores the various commands that sergeants and corporals must master. These include ‘Shouldered Arms’ (dušfang (دوشفنگ) of sergeants and corporals, where the rifle is carried over the shoulder, ‘Support Arms’ (bāzufang (بازوفنگ), a position where the gun is held with the butt facing the ground, ‘Order Arms’ (pahlufang (پهلوفنگ), a command to bring the rifle to a vertical position and ‘Trail Arms’ (bepāfang (بیهپافنگ), a command to place the rifle butt on the ground.
- Lesson Two: ‘On Loading and Firing,’ provides an in-depth understanding of the military commands associated with the operation of a rifle. These include ‘load’ (porkonfang (پرکنفنگ), a command to prepare the rifle for firing, ‘shoulder arms’ (dušfang (دوشفنگ), a command to place the rifle on the shoulder and ‘cast about’ (hāzerfang (حاضر فنگ), a command to change the direction of the rifle.
- Lesson Three: ‘Supporting Arms’ (bāzufang (بازوفنگ) focuses on the commands related to the use of the bayonet. These include ‘Releasing the Bayonet’ (neyzejā (نیزجا), ‘Shouldering Arms’ (dušfang (دوشفنگ), ‘Secure Arms’ (baqalfang (بغل فنگ), a command to secure the rifle and bayonet, ‘Fix Bayonet’ (neyzefang (نیز فنگ), a command to attach the bayonet to the rifle and ‘Shoulder Shift’ (darrāhfang (درراه فنگ), a command to shift the rifle and bayonet from one shoulder to the other.

This chapter is a comprehensive guide, providing a detailed understanding of the commands and operations associated with the use of a gun and bayonet, essential for the training of sergeants and corporals.

### Chapter Four:

#### *The Art of Banner Exercise and Officers' Swordsmanship*

This chapter investigates the intricate disciplines of Banner Exercise (*Mašq-e Beydaq* (مشق بی‌دق) and Officers' Sword Training (*Mašq-e Šamšir-e Sāhebmansabān* (مشق شمشیر صاحب‌منصبان). These two lessons form the backbone of this chapter, each offering a unique perspective on the martial arts of the Middle East.

- Lesson One: The Banner Exercise (*Mašq-e Beydaq* (مشق بی‌دق) introduces the reader to the ancient practice of *Mašq-e Beydaq*, a traditional form of exercise involving the use of banners. This lesson explores the various techniques and commands associated with this discipline, providing a comprehensive guide for those seeking to master this unique form of exercise.
- Lesson Two: Officers' Sword Training (*Mašq-e Šamšir-e Sāhebmansabān* (مشق شمشیر صاحب‌منصبان) explores the art of *Mašq-e Šamšir-e Sāhebmansabān*, a specialised form of sword training designed for officers. This lesson provides an in-depth look at the various techniques

and commands associated with this discipline, offering a detailed guide for those aspiring to master the art of swordsmanship.

This chapter also provides a detailed explanation of various commands associated with these disciplines, including 'The Carry', 'The Recover' and 'The Salute.' Additionally, it explores the techniques involved in carrying a sword, such as 'Prayer Position' (*Namāzfang* نمازفنگ), 'Shouldered Arms' (*Duṣfang* دوشفنگ) and 'Arms Reversed' (*Sarnegunfang* سرنگونفنگ).

Each lesson is designed to provide a comprehensive understanding of these disciplines, offering a detailed guide for those seeking to master these unique forms of exercise and martial arts. Whether it is a novice seeking to learn the basics or an experienced practitioner looking to refine their skills, this chapter offers a wealth of knowledge and insight into the art of Banner Exercise and Officers' Sword Training.

## Conclusion

This article presents an examination of the transformative phase of the Persian military, a process that began during the reign of Fath Ali Shāh Qājār (1797–1834 CE). This era marked a significant shift in the Persian military paradigm as it sought to incorporate European military strategies and techniques, a move facilitated by the invitation of numerous European military advisors. This period of military modernisation was marked by the production of a plethora of Persian military manuals. These comprehensive guides covered a wide range of topics, from the intricate process of casting cannons and the categorisation of firearms to the strategic planning of military formations and exercises. One such manual that stands as a testament to this period of military development is the *General Regulations for the Exercises and Marches of the Infantry of the Esteemed Government of Iran*, dated Ramadan 1268 Hijrā (June 1852 CE). This manual is a compendium of various exercises, both with and without firearms, banner drills and sword drills. The study of Persian manuals from this period promises to be a perfect opportunity for future research, offering a deeper understanding of this fascinating period of military modernisation in Iran. The study of these manuals will undoubtedly illuminate the intricate processes and strategic thinking that underpinned the transformation of the Persian military during the reign of Fath Ali Shāh Qājār.

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