

# Managing the remains of citizen soldiers: France and its war dead in 1914 and 1915

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## Abstract

The aim of this article is to shed light on the conditions under which the funerary management of human remains was carried out by the French authorities during the early years of the First World War. It seeks to understand how the urgent need to clear the battlefield as quickly as possible came into conflict with the aspiration to give all deceased an individualised, or at the very least dignified, burial. Old military funerary practices were overturned and reconfigured to incorporate an ideal that sought the individual identification of citizen soldiers. The years 1914–15 were thus profoundly marked by a clash between the pragmatism of public health authorities obsessed with hygiene, the infancy of emerging forensic science, the aching desire of the nation to see its children buried individually and various political and military imperatives related to the conduct of the war.

**Key words:** identification, corpses, soldiers, First World War

## Introduction

With over ten million military deaths, the First World War represented an unprecedented challenge in funerary terms for the countries involved.<sup>1</sup> The French army alone lost nearly 1.5 million soldiers (18.75 per cent of its numbers). The concentration of fighting and of troops, primarily due to the war of position that dominated the Western Front, explains the massive presence on the battlefield of corpses and scattered body parts – one in two corpses could not be identified – that, as far as possible, were to be given a dignified burial.<sup>2</sup> This management of human remains responded above all to a public health imperative: measures had to be taken quickly to prevent the spread of epidemics.<sup>3</sup> It was also well understood

that the accumulation of corpses on the battlefield had a detrimental effect on the troops forced to fight in these areas of mass graves: 'these nightmarish visions, and their feverish frequency, ate away inexorably at the soldiers' morale'.<sup>4</sup> This was exacerbated by the unending procession of bad news that preceded the return of soldiers' remains to their families, in those cases where this was possible.<sup>5</sup> Removing corpses from areas of fighting and paying them the respect owed to their sacrifice by giving them a dignified burial clearly resulted from the need to maintain at all costs the solidarity of a nation that was fully engaged in the conflict, and to come together in mourning the war.<sup>6</sup> Finally, from a strictly legal point of view, the armed forces had a responsibility to identify and bury their soldiers and to deal with the corpses of allies and enemies killed in action.<sup>7</sup>

The history of the handling of the dead in the Great War therefore sits at the crossroads of several histories. Recent research has furthered the social history of the onerous process of 'demobilising' the dead. French historian Béatrix Pau details multiple cases and scandals, and explains the tireless efforts of families to retrieve the remains of their loved ones, as well as the ingenuity of the unscrupulous profiteers they came up against.<sup>8</sup> Recent archaeological excavations have also shed light on funerary rituals and practices implemented close to the battlefields.<sup>9</sup> These studies, based on material evidence, supplement historical approaches that uncover the anthropological upheavals caused by mass death.<sup>10</sup> The study of the military handling of soldiers' corpses, previously explored by the historian Vincent Viet,<sup>11</sup> reveals the tensions arising from the public health, cultural and legal imperatives relating to the death of soldiers at the front. But, rather than the scientific progress made by the clearance teams, this article seeks to understand the influence of public health imperatives on the production of funerary norms and practices. The handling of corpses, from the development of (sometimes amended) protocols to their implementation on the battlefield, therefore provides a window onto the early stages of a shift towards formalised management of human remains in a context of mass death.

The colossal logistical and public health challenge posed by the management of these cartloads of corpses was evident ever since 'the appalling losses of the early weeks of combat'.<sup>12</sup> In addition to the issues posed by the huge volume of human remains to be dealt with, the length of the conflict and the wide range of contexts in which soldiers met their death largely explain the trial-and-error nature of funerary practices. As such, we felt that within the limited space of this article it would be useful to focus on the first two years of the conflict. This short period allows us to look at the procedures for managing corpses while these were still in a confused and incomplete state, at a time when there was an urgent need to implement protocols that had been thought up during peacetime.

Most of the men assigned to this task were attached to the French Military Health Service (*Service de Santé des Armées*). Military chemists, physicians, pharmacists and gravediggers had to urgently implement protocols for handling the endlessly renewed supply of human remains. The entanglement and scattering of bodies on the battlefield resulted in a chaotic mess from which human remains had to be individualised and identified as far as possible. The task of identifying soldiers was beset

by severe limitations, both technical and logistical. These dynamics point to the individualisation of methods within forensic expertise, a process that gathered pace during and after the Second World War.<sup>13</sup>

### **Public health emergency versus the imperatives of identification and dignified burial**

The handling of the large number of corpses produced by the conflict responded both to a public health emergency and to social, cultural and political imperatives. Many families assumed that bodies would be exhumed, identified and eventually brought back to their place of origin, or, failing that, buried in an individual grave in the local cemetery. But this was not directly stated in international law.<sup>14</sup> Neither the 1864 Geneva Convention nor the Hague Conventions of 1899 and 1907 specified how the remains of enemy soldiers killed on the battlefield should be handled. At most, the Hague Conventions and the 1906 Convention for the Amelioration of the Condition of the Wounded and Sick in Armies in the Field stipulated that armies must mutually inform one another of the deaths of injured soldiers or prisoners of war. Similarly, dead prisoners of war should be buried 'on the same conditions as for soldiers of the national army'.<sup>15</sup>

Instructions on the attitude to take towards those who died on the battlefield had in fact been drawn up in 1880 in the *Laws of War on Land*, a manual written by the Swiss jurist Gustave Moynier on behalf of the Institute of International Law in Oxford. However, when war broke out, these instructions had not been incorporated into legally binding texts. In an international public law treatise written fifteen years after this manual was published, the French jurist Henry Bonfils distinguished between three obligations that fell to the warring parties, and in particular to the party with control of the battlefield after the end of fighting: first, they must ensure respect for corpses and personal items; second, remains must be identified prior to any burial; and third, armies must bury soldiers killed on the battlefield.<sup>16</sup>

### **'General instructions' developed in peacetime<sup>17</sup>**

The political and military authorities had long been aware of the public health risks posed by inadequate burial.<sup>18</sup> The Military Health Service regulations issued in 1913 set out the procedure to follow for battlefield clearance.<sup>19</sup> The complex design of the graves and the detailed nature of the procedure envisaged in these regulations demonstrate a methodical approach to burial that would turn out to be difficult to reconcile with the devastation that was to follow. The proposed approach, which symbolised a desire to rationalise the management of bodies in both administrative and public health terms, was clearly influenced by what had been learned from the Franco-Prussian War.<sup>20</sup>

A physician was required to confirm the death before an administrative officer from the Health Service could produce the death certificate. The identity tag worn by soldiers around their neck had to be sent to the army records and intelligence

office in the same parcel as their military passbook. The Health Service was responsible for choosing the burial site, which was to be located close to where the soldier had fallen, while following certain public health requirements (distance from water sources and dwelling places). Soldiers were required to dig graves 10 m in length and 2 m in width, with support from the local civilian population if required. These graves were intended to contain sixty to eighty corpses in three or four stacked layers. To prevent the graves from becoming overly damp, which would hasten the decomposition of the corpses, a drainage system was envisaged to enable water to flow away, and a duct and a chimney were also included in the plans to allow for the release of gases.<sup>21</sup>

The regulations concerning the 'hygiene and preventive measures applicable' to exhumations and the transportation of the bodies of the deceased were emphasised by the Ministry of the Interior in a note sent to prefects on 15 July 1914.<sup>22</sup> There was a particular need to 'adopt uniform rules based on the most recent scientific data,' to be shared across the civil and military authorities, since until that point 'sometimes very different measures [had been] taken in such matters by municipalities and by the military authorities, in the colonies or abroad.'<sup>23</sup>

A set of 'special precautions in the interests of public health' were therefore issued, influenced by the French High Council for Public Hygiene (Conseil Supérieur d'Hygiène Publique de France, CSHPF) – a consultative body of public health experts founded in 1848 and placed under the authority of the Ministry of Labour and Social Welfare in 1906. Their scope included 'the persons responsible for the operation [... and ...] the use of appropriate disinfectants.'<sup>24</sup>

The 'General Instructions of Dr Henry Thierry' – himself a member of the CSHPF, as well as head of the technical hygiene services and public health officer for the city of Paris – detailed these measures in relation to 'battlefield clearance'.<sup>25</sup> They included measures for the protection and disinfection of personnel (wearing rubber gloves, procedure for cleaning canvas uniforms, and provision of soft soap and cresol disinfectant).<sup>26</sup> Waiting periods were specified for exhumation operations involving the bodies of people who had died from infectious diseases, but not for the human remains of those who had died 'following injuries received in a military engagement'. Battlefield operations therefore had to be prompt.

Two observations can be gleaned from examining the guidelines drawn up prior to the war. First, they show that the anthropological rupture described by the historian Stéphane Tison,<sup>27</sup> and characterised by the individualisation of war graves that took place during the conflict, was by no means a given when the war broke out, at least among the military. Neither the instructions issued to the armed forces, nor the legal texts on which they were based, emphasised the necessity of ensuring that soldiers received an individual burial – quite the opposite. Second, these guidelines demonstrate a certain sophistication that shows not only how seriously the public health risk was taken, but also the certainty that the coming war would be a war of movement, giving the army left in control of the battlefield the necessary time for the meticulous handling of the dead. This second point shows how the conduct of the war influenced the handling of the dead.

## The River Dhuis operation (winter 1914–15): a model example?

In September 1914 the Race to the Sea between the Allied and German armies left the Marne utterly devastated in its wake. Once the front was established, the region lay behind French lines. Ravaged by the fighting, the Marne *département* – Reims, its main city, is situated 150 km to the east of Paris, in the Champagne region – had ‘seven communes ... that were entirely destroyed, while several thousand hectares of land were never returned to pasture.’<sup>28</sup> At nearly 100 km<sup>2</sup>, the area of operation was vast.<sup>29</sup> The basin of the River Dhuis, which covered the west of the *département* from Epernay, was particularly badly affected. The area was scattered with buried corpses that were contaminating the land as they decomposed. Some corpses were covered by just ‘0.20 or 0.25 cm of earth’, while others, isolated, lay rotting on hilly ground, where they might easily seep into water runoff.<sup>30</sup> The city of Paris had a particular need to get the Dhuis aqueduct back into operation in order to provide the capital with 20,000 m<sup>3</sup> of water on a daily basis.<sup>31</sup>

The works were guided by the instructions and burial protocols previously drawn up by Dr Henry Thierry.<sup>32</sup> These measures were applied to the ten communes ‘within the region supplying water’ to the Dhuis diversion basin.<sup>33</sup> The planned works were enormous in scale, consisting of 4,320 hours of earthworks. They involved first backfilling the cemetery graves and cleaning them, then clearing ‘their passage through the communes with iron sulphate and cresol’.

After locating the bodies, and following a huge operation to gather ante-mortem information and undertake preparatory measures, the exhumation began in winter 1915.<sup>34</sup> The tools provided to the operational teams included trowels, shovels and pincers. They were also equipped with sprayers.<sup>35</sup> Clearance trenches were dug, and lime was scattered in them to disinfect the soil.<sup>36</sup>

The operation consisted in finding the corpses, exhuming them and putting them in coffins, and then reinterring them in nearby burial areas or cemeteries.<sup>37</sup> Work at the Dhuis site ultimately resulted in the exhumation and identification of the remains of 111 French soldiers and 37 German soldiers.

## Away from Paris, less consistency in practices

The detailed protocols drawn up by the Military Health Service should not mask the political dimension of funerary management, which was inconsistent and sometimes even dangerous. The Dhuis operation, a model example of burial management, took place under specific circumstances and appears to have been rarely possible to reproduce. As Edouard-Alfred Martel – a member of the CSHPF and an expert in both hydrology and public hygiene – explained: ‘The team from the Ministry of the Interior [that] was present at the start of this undertaking ... was able to observe the material quasi-impossibility of carrying out across all battlefields an operation of such a general scale as was fortunately possible in relation to the Dhuis for the City of Paris, due to its financial resources, appropriate equipment, and above all the trained and dedicated personnel at its disposal.’<sup>38</sup> According to Martel, no fewer than 350 tons of lime were required for this operation. The length

of the conflict and its standstill in the trenches made the work of the Health Service considerably more difficult.

A report produced in late September 1915 by the Director General of the Health Service of the Operational Army Group, Medical Inspector Chavasse, describes the sanitation measures taken in the trenches, where the problems involved in handling human and animal remains were compounded by the difficulties posed by refuse and excrement.<sup>39</sup> Under these conditions, there were few opportunities to bury the dead in line with the guidance issued.

The majority of the bodies of those who died behind French lines received an individual burial, either in existing cemeteries near the front line or in newly created cemeteries.<sup>40</sup> But the hostilities made burial operations challenging and disrupted the proper conduct of funerary procedures. The report states that 'When, during violent and prolonged fighting, losses are high and the immediate recovery of corpses is impossible and must be postponed for several days, putrefying corpses are to be buried nearby.'<sup>41</sup> The operations were most challenging and dangerous when soldiers fell in front of the French lines. Sometimes it was possible to quickly bury these bodies on the battlefield itself, under cover of night or fog. When such an undertaking was impossible due to enemy fire, attempts were made to recover the corpses using gaffs and harpoons. Failing that, soldiers sprayed the bodies from a distance with the anti-putrefaction agents at their disposal, such as chlorinated lime, to mitigate the effects of decomposition.

Amid the heaps of rubble and debris, trench excavations also led to gruesome discoveries:<sup>42</sup> 'the digging work and the upheaval of trenches by shells or mine explosions often uncover corpses or human remains.'<sup>43</sup> In such circumstances, anti-putrefaction agents were again spread over the bodies, and where possible these were exhumed and reinterred in the local cemetery, or, failing that, in a nearby grave. During the fighting, the management of corpses was so onerous that in May 1915 the sub-prefect of the arrondissement of Verdun suggested organising a truce with the enemy in order to give the armies time to clear what he described as a 'foul charnel house'.<sup>44</sup> The exchange, which was given little consideration by the General Headquarters of the Armies of the East, demonstrates the differences of opinion between the civil and military authorities. The Directorate of the Rear appears to have had little time for this outlandish suggestion, with a note in the same file stating: 'It is necessary ... to draw the attention of the Minister of the Interior to the frame of mind of the sub-prefect of Verdun, whose report reveals a certain ignorance of the conditions imposed by the war situation.'<sup>45</sup>

On many occasions, therefore, bodies were neither buried nor properly identified. In the view of Edouard-Alfred Martel, who wrote a report on the issue, 'the battlefields of north-east France should be considered as charnel houses or wastelands'.<sup>46</sup> They posed a risk to public health and led to concerns about disruption to farming.

One of the jobs of the Health Service thus consisted in locating, at a later date, the scattered graves and bodies spread across the areas of fighting, in identifying them and in reinterring them under the specified conditions, where possible. This operation, undertaken after the fighting, resulted in a precise division of labour between

the military and civil authorities, which enshrined the pre-eminence of the former over the latter: 'The civil authority will limit itself to assisting the military authority ... Where [the identification of graves] has already been carried out by the prefectoral administration, it will make the plans available to the military authority.'<sup>47</sup>

One of the most arduous tasks was to identify soldiers whose bodies lay on or in the immediate vicinity of the battlefield. In a report on battlefield clearance, Henry Thierry provided a procedure to follow. This began by locating the graves or places where the bodies were buried. This location work, carried out by civil engineers or surveyors, was to be mapped onto a cadastral map. The location of soldiers' graves could also be indicated using numbered stakes in order to make them easier to find. The procedure also required identifying information to be held in an 'investigation and identity registry'.<sup>48</sup> This consisted, for each grave (whether individual or collective), of listing any distinctive signs or objects that might help to identify the bodies (tags, wedding rings, watches, name bracelets, letters, etc.). Post-exhumation identification was therefore based on the observation of taphonomic and funerary indicators.<sup>49</sup> This work assisted the state registrars, who were responsible for certifying the identity of the body. They filled out the identification forms, recording information that painted a rough global picture of the unidentified soldier.<sup>50</sup> Weapons, meanwhile, had to be returned to the military authority. Information gathered in this way was to be cross-checked against the details obtained from enquiries among the residents and municipal authorities, with the latter retaining a duplicate copy of each identification form.<sup>51</sup>

In order to facilitate the identification of British soldiers, the Commonwealth also set up its own funerary operations on the continent. A delegation of clergymen representing all faiths was sent to France tasked with reintering British soldiers.<sup>52</sup> This small group was assisted by representatives from the Red Cross in order to certify the identification measures. These operations became so extensive that in 1915 the Grave Registration Commission was set up. This militarised unit within the British Red Cross became the Imperial War Graves Commission in May 1917.<sup>53</sup>

After information on identifying details had been gathered, the remains were placed in lightweight coffins made watertight by lining the base with bitumen roofing felt. Sawdust, peat and chlorinated lime were also sometimes used.<sup>54</sup> The coffins of Allied soldiers were to be marked in order to enable them to be identified. Dr Thierry advised using three metal numbers with perforated figures (on the inside and outside of the coffin and on the cross) to mark the collective graves and the number of bodies they contained.<sup>55</sup>

After the Dhuis operation, corpses were managed in a somewhat inconsistent manner. The nature of the fighting and the early measures urgently taken to prevent a public health disaster made meticulous application of the protocols difficult, particularly as the resources available to the teams tasked with this work were by no means on a par with those deployed during the Dhuis operation. Priority was therefore given to corpses that posed a public health risk. Although flawed and patchy, these operations demonstrate collaboration between the military sphere and the civil authorities, which was evident on the ground from the very first weeks of the war, tempering the statement that 'the military rules on burial issued to the

armed forces had been developed without reference to civil regulations.<sup>56</sup> On 13 September 1914, for example, the sub-prefect of Arcis-sur-Aube – a town located around 100 km south of Reims – asked the mayors of the communes in the canton of Mailly to ‘take immediate public health measures and to form teams to bury soldiers killed within the territory of [their] communes.’<sup>57</sup> They were also asked to ‘carefully gather identity tags from the dead.’<sup>58</sup> Where individualised burial was problematic due to the difficulty of identifying the bodies and human remains, there was a great temptation to dispose of them through burning.

### **What to do with the unidentifiable? Cremation and incineration, an inconceivable panacea**

Burning the bodies of unidentified soldiers killed on the battlefield was quickly posed as a solution to the gruesome desolation generated by the First World War. This solution was not wholly unprecedented. Following the Battle of Sedan (1871), the chemist Créteur had reduced the mass of common graves by three-quarters by smearing the human remains with tar and coal and setting fire to them with straw.<sup>59</sup> Incineration practices were also observed in Manchuria during the Russo-Japanese War (1904–5), where cremation pits made of brick were sometimes quietly set up not far from health centres.<sup>60</sup>

In the spring of 1915, the abundance of barely buried bodies provoked criticism in the German press.<sup>61</sup> A symbol of poor French funerary management, the abandonment of the dead on the battlefield affected the morale of the populations at war.

In March 1915, the deputy Lucien Dumont – himself a surgeon – submitted a Bill in support of incineration during wartime, setting aside the sepulchral practices that had previously been advocated.<sup>62</sup> Cremation was presented as a panacea, protecting populations from contamination.<sup>63</sup> It also had other advantages; incineration provided a way to limit the exhumation and transfer of bodies, thus reducing the risk of epidemics and the costs incurred by the logistics of such operations.

Despite the major reluctance that this Bill faced in parliament, a Special Commission on Public Hygiene from the Health Service set up an initial experiment on incineration.<sup>64</sup> On 14 June 1915, two German soldiers were burned, followed by the carcass of a horse. The individuals in charge of the experiment, Dr Bordas – an eminent toxicologist who had studied the putrefaction process – and Dr Thierry, built the pyres. They calculated the depths of the pits (1.50 m) in the shape of upside-down truncated pyramids, and they measured the topography of the terrain in order to avoid contaminating the soil with their activities. From 9.30 a.m. to 2.00 p.m., the two men assessed the reactions of the bodies, which had been set on fire and doused in colloidal tar. At the end of the experiment, the physicians reported that ‘the remains were completely turned to ash; it was no longer possible to recognise any part of the skeleton.’<sup>65</sup>

On 18 June 1915, the results of the incineration procedures were approved by the Chamber of Deputies. The incineration of unidentified human corpses thus became ‘an operation that may be carried out on the ground with makeshift resources.’<sup>66</sup>

The adoption of the Bill on 18 June 1915 gave Dr Bréchet and Dr Troussaint the legal framework to test their mobile incinerator. On 30 July 1915, the two physicians used their incinerator to destroy one corpse in sixteen minutes from cold, followed by a further four in twenty-five minutes.<sup>67</sup> They reported superior performance to that of the crematorium at the Père-Lachaise cemetery (one corpse in fifty-five minutes), and emphasised the effectiveness of their device to support the Bill in favour of wartime incineration.<sup>68</sup>

Lucien Dumont's Bill, adopted by the National Assembly on 18 June 1915, was ultimately rejected by the Senate in late 1915.<sup>69</sup> This decision was driven by a number of arguments. Speaking on behalf of the Army Commission, senator Cazeneuve noted first of all that no epidemic had been attributed to rotting corpses. (As Vincent Viet explains, one explanation for this is the effectiveness of vaccines against typhoid and paratyphoid.<sup>70</sup>) Second, incineration was impossible to carry out during fighting, and when the fighting ceased, it was easier to inter the corpses. In short, incineration was a 'lengthy and costly' operation. Finally, burial had the benefit of allowing for possible identification.<sup>71</sup> For the French political authorities, it was therefore the norm that should be followed in the funerary management of corpses.

Throughout the conflict, exhumation and reinterment were in fact carried out only when they were required for public health reasons. According to a note published in *Le Parisien* and cited by Martel, 'this decision was taken out of a desire for fairness, so that any family unfavoured by fortune did not have to endure the further suffering of being unable to do what was possible for others.'<sup>72</sup> In short, the bodies of soldiers who died at a distance from water tables and who were buried under sufficient earth had little chance of being exhumed and reinterred in a cemetery or returned to their families.

For areas where the massive presence of corpses posed a public health risk, the problem remained. In an undated note, Dr Bordas took stock of the possibilities open to the army for resolving this issue. He argued that incinerations were costly and involved 'almost insurmountable' material difficulties.<sup>73</sup> They also 'offended the sentiments of part of the population.'<sup>74</sup> Exhumations and reinterment were, in the physician's opinion, a 'preferred option', but were difficult to carry out. In a note read out during a session of the CSHPF in 1916, Bordas reported on the incineration experiments carried out in June 1915. While judging the method to be feasible, he concluded that 'the question of the destruction of corpses buried in the trenches, and of battlefield clearance, remains unresolved, and the experiments we have just summarised do not provide an answer.'<sup>75</sup> Bordas sought to promote a third solution based on the research he had carried out on putrefaction before the war.<sup>76</sup> This technique was designed to accelerate the putrefaction of bodies by spraying them with a microbial culture. They would then be reinterred 'without transportation elsewhere, under special conditions that are able, by hastening the decomposition already begun by nature, to free the terrain within just a few months, thus making possible the recovery of bones that can easily be transported to ossuaries dedicated to the memory of our Fallen Heroes.'<sup>77</sup>

To support his proposal, Bordas reported findings from laboratory experiments in which a 700 kg horse was reduced to a skeleton in a fortnight. Bordas's note

appears to have been received favourably by his superiors. On 29 October 1915, measures were taken to allow Bordas to carry out experiments ‘with human corpses covered in their clothing’ at the front.<sup>78</sup> The communication specified that these experiments would be made on the Second Army front, ‘on human corpses to be buried in a common grave and on horse cadavers.’<sup>79</sup> However, the bodies of soldiers who had died at aid stations, which were placed in coffins before burial, were not to be handled in this way.

Bordas’s method in fact went against the techniques that had been used previously, as it rejected the use of anti-putrefaction agents. Although these agents had the merit of alleviating odours, they had ‘the disadvantage not only of hampering the phenomena of putrefaction, but also of completely paralysing the work of necrophagous insects.’<sup>80</sup> It also meant no longer using coffins. What happened subsequently with these experiments is unknown. However, we might assume that this solution was not particularly well received by the families, who continued to call for the bodies of their loved ones to be identified and returned to them.<sup>81</sup>

After the war, their impatience became more insistent, leading to the drafting of a military graves Bill in 1919. After four long years of conflict, this had become a burning issue, particularly as some families were resorting to clandestine exhumations.<sup>82</sup> The Bill thus sought to respond to public opinion and to align with the practices of foreign armies. It was seen as unthinkable for the graves of the French war dead to remain in ‘a temporary state of upkeep, in distressing contrast to those erected by our British allies for their soldiers.’ The Bill thus provided for an inventory of temporary graves, both individual and collective, and, where appropriate, the exhumation and identification of the dead and their transportation to their final resting place, if possible close to the regions where the soldiers had been killed. Article 6 also provided for the erection of commemorative monuments or the inscription of the names of the soldiers who had died defending their country.

## Conclusion

The management of corpses in the First World War resulted in a great deal of trial and error. This was primarily because the procedures that had been developed in peacetime were simply impossible to implement in the heat of battle. They also failed to meet the expectations of families, who wanted soldiers’ remains to be returned to family vaults. The army was clearly unprepared for managing such a vast quantity of corpses across fronts that were fixed for several months, and it had obviously not anticipated the wishes of families and public feeling more generally in relation to this issue. These two failings resulted in the application on the ground of continually amended public health directives and, in political terms, in a certain legislative ferment.

Far from revealing a power struggle pitting public hygiene specialists in favour of cremation against civil authorities supported by public opinion and mindful of the need to respect cultural sensitivities concerning death and mourning, the examination of the documents retained by the French Military Historical Service reveals a more nuanced picture. First, the initial protocols drawn up by the Health Service

had little to say about the individual handling of the dead, even before the possibility of incineration was considered. Second, cremation was abandoned as a solution, as much due to the material difficulties it involved as to the sensitivities it might offend. Tellingly, there are no traces of the use of cremation for animal corpses after the Bill was rejected by parliament. Finally, the abandonment of incineration did not, unfortunately, guarantee the individualisation and identification of remains. Proof of this lies in the experiments carried out by Bordas, who, although somewhat sceptical about cremation, proposed a method that was itself designed to destroy corpses as quickly as possible. Since it preserved only the bones, this method would clearly make future identification of the bodies impossible. It was also difficult to reconcile with customary funerary practices, such as the use of coffins.

It is impossible, however, to conclude that there was a clear opposition between civil and military culture in the management of the dead, given the extent of the collaboration between the two spheres. The Dhuis operation demonstrates a genuine desire to individualise the funerary process. The efforts made to identify corpses, and the use of coffins, reflect the importance accorded to the deceased. While led by a civil official, Dr Thierry's operation was also characterised by the significant financial resources at the physician's disposal. Yet it was the same Dr Thierry who only a few months later carried out experiments on incineration. Similarly, the civil official Lucien Dumont, a surgeon by profession, seems an unlikely candidate for drawing up a Bill in support of cremation.

The individualisation of graves was therefore held back not only by the nature of the war and the persistence of the fighting, but also by competing forms of funerary management. One of these was cremation, whose advocates had created a society for its promotion in 1880. Collective graves or ossuaries were another,<sup>83</sup> largely fostered by the political necessity to recognise the human sacrifice made by the population.

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## Notes

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