

PROLOGUE: “AN UNLOVELY OBJECT”

NOVEMBER 20, 1917

Brilliant shards of crimson and gold pierced the eastern sky as dawn broke over Cambrai. The French city was a vital supply point for the German army positioned twenty-five miles from the Belgian border. On the dewy grass of a nearby hillside, Private Percy Clare of the 7th Battalion, East Surrey Regiment, was lying on his belly next to his commanding officer, awaiting the signal to advance.

Thirty minutes earlier, he had watched as hundreds of tanks rumbled over the soggy terrain toward the wire entanglement surrounding the German defense line. Under the cover of darkness, British troops had gained ground. But what had the appearance of a victory soon deteriorated into a hellish massacre for both sides. As Clare prepared himself for this dawn attack, he could already see the motionless, broken bodies of other soldiers scattered across the blasted landscape. “I rather wondered if I should even see another sun rise over the trenches,” he later recorded in tightly lettered script in his diary.

The thirty-six-year-old soldier was no stranger to death. A year earlier, he had been holed up in the trenches of the Somme, where tedious stretches of inactivity were punctuated by frenzied bouts

of terror. Every few days, wagons arrived to exchange rations for corpses. But the sheer number of bodies made it impossible to keep up. "They lay in trenches where they'd fallen," one soldier remembered. "Not only would you see them, but you'd be walking on them, slipping and sliding."

These rotting bodies became structural fixtures, lining trench walls and narrowing passageways. Arms and legs protruded out of the breastwork. Corpses were even used to fill in blasted roads that were essential for military vehicles. One man recalled that "they just shovelled everything into the crater and covered it over [with] dead horses, dead bodies . . . anything to fill up and cover it over and keep the traffic going." Common decencies were abandoned as burial parties tried to keep pace with the body count. The dead hung like laundry over barbed wire, covered inches deep with a black fur of flies. "The worst," remembered one infantryman, "was the bubbling mass of countless worms which oozed from the corpses."

The horror of these sights was exacerbated by the stench that accompanied them. The sickly-sweet scent of rotting flesh permeated the air for miles in all directions. A soldier could smell the front before he could see it. The stink clung to the stale bread he ate, the stagnant water he drank, the tattered uniform he wore. "Did you ever smell a dead mouse?" asked Lieutenant Robert C. Hoffman, a veteran of the First World War, when warning Americans against involvement in the second a little over two decades later. "This will give you about as much idea of what a group of long-dead soldiers smell like as will one grain of sand give you an idea of Atlantic City's beaches." Even after the dead were buried, Hoffman recalled, they "smelled so horribly that some of the officers became extremely sick."

Clare had grown accustomed to the dead, but not to the dying. The tremendous amount of suffering he had witnessed was etched into his mind. Once, he had stumbled upon two Germans cowering

in a trench, their chests ripped open by shrapnel. The soldiers bore an uncanny resemblance to each other, leading Clare to conclude that they were father and son. The sight of their faces—"ghastly white, their features livid and quivering, their eyes so full of pain, horror and terror, perhaps each on account of the other"—haunted him. Clare had stood guard over the wounded men, hoping that medical assistance would arrive soon, but eventually he was forced to move on. Only later did he discover that a friend named Bean had thrust his bayonet into their bellies after Clare had quit the scene. "My indignation consumed me," Clare wrote in his diary. "I told him he would never survive this action; that I didn't believe God would suffer so cowardly and cruel a deed to go unpunished." Shortly afterward, Clare came upon his friend's decomposing remains in a trench.

Now, as he peered out over Cambrai's battlefield from his position on the hillside, Clare wondered what fresh horrors awaited him. In the distance, he could hear the faint staccato of the machine guns, and the whistle of shells as they sailed through the air. Clare wrote that upon impact, the "earth seemed to quake, at first with a jerk, like a giant startled out of sleep; afterwards with a continuous trembling communicated to us through our bodies lying there in contact with it." Shortly after the shelling began, his commanding officer gave the signal.

It was time.

Clare fixed his bayonet to his rifle and cautiously rose to his feet along with the other men in his platoon. He began marching down the exposed hillside. Along the way, he passed a stream of wounded men, their faces blanched with terror. Suddenly, a shell burst overhead, temporarily obscuring the scene with a cloud of smoke. Once it cleared, Clare saw that the platoon ahead of his own had been destroyed. "A few minutes later we moved on, stepping over the mutilated bodies of our poor comrades," he wrote. One corpse in particular drew his attention. It was a dead soldier

who was entirely naked, “every stitch of clothing blown from the body . . . a curious effect of [a] high explosive burst.”

Clare’s own platoon continued to advance, passing through the carnage on the way to its intended target: a strongly fortified trench protected by a wide belt of barbed wire. As they drew closer, the Germans began raking them with bullets, their machine gunners and riflemen firing from several positions at once. Suddenly, Clare felt woefully underprepared. “[H]ow absurd it seemed to be advancing just one thin line of khaki, against the immensely strong entrenchment from which now belched a continuously increasing rifle fire.”

Clare inched forward, weighed down by the heavy pack of supplies that all infantrymen were required to carry. These packs, which could weigh as much as sixty pounds, contained everything from ammunition and hand grenades to gas masks, goggles, shovels, and water. Clare negotiated tangles of barbed wire, keeping low to the ground to avoid the shower of bullets flying overhead.

Then, seven hundred yards from the trench, he felt a sharp blow to the side of his face. A single bullet had torn through both his cheeks. Blood cascaded from his mouth and nostrils, soaking the front of his uniform. Clare opened his mouth to scream, but no sound escaped. His face was too badly maimed to even arrange itself into a grimace of pain.

From the moment that the first machine gun rang out over the Western Front, one thing was clear: Europe’s military technology had wildly surpassed its medical capabilities. Bullets tore through the air at terrifying speeds. Shells and mortar bombs exploded with a force that flung men around the battlefield like rag dolls. Ammunition containing magnesium fuses ignited when lodged in flesh. And a new threat, in the form of hot chunks of shrapnel, often covered in

bacteria-laden mud, wrought terrible injuries on its victims. Bodies were battered, gouged, and hacked, but wounds to the face could be especially traumatic. Noses were blown off, jaws were shattered, tongues were torn out, and eyeballs were dislodged. In some cases, entire faces were obliterated. In the words of one battlefield nurse, "[T]he science of healing stood baffled before the science of destroying."

The nature of trench warfare led to high rates of facial injuries. Many combatants were shot in the face simply because they'd had no idea what to expect. "They seemed to think they could pop their heads up over a trench and move quickly enough to dodge the hail of machine-gun bullets," wrote one surgeon. Others, like Clare, sustained their injuries as they advanced across the battlefield. Men were maimed, burned, and gassed. Some were even kicked in the face by horses. Before the war was over, 280,000 men from France, Germany, and Britain alone would suffer some form of facial trauma. In addition to causing death and dismemberment, the war was also an efficient machine for producing millions of walking wounded.

The loss of life was also greater than in any previous war, due in part to the development of new technologies that enabled slaughter to occur on an industrial scale. Automatic weapons allowed soldiers to fire hundreds of rounds a minute at distant targets. Artillery became so advanced that some long-range weapons required their operators to take the curvature of the earth into consideration in order to remain accurate. The Germans' largest siege cannon, the dreaded "Paris Gun," pummeled the French capital with two-hundred-pound shells from a distance of seventy-five miles. Infantry weapons had also advanced considerably in the years leading up to the First World War, providing many times the rate of fire of those used in previous wars. The military historian Leo van Bergen notes that this, in combination with advances in artillery,

meant that a company of just three hundred men in 1914 could “deploy firepower equivalent to that of the entire 60,000 strong army commanded by the Duke of Wellington at the Battle of Waterloo.”

Beyond developments in the traditional hardware of guns, bullets, and shells were two ghastly innovations brought on by scientific advances. The first was the *Flammenwerfer*, or flamethrower, which produced an appalling shock for the uninitiated. It was first used by the Germans, most notably against the British at Hooze in 1915. The portable device belched forth a stream of burning oil that destroyed everything within range, sending men scurrying from the trenches like mice from burning haystacks. Its jets of liquid fire left victims with severe burns over their entire bodies. One soldier watched in horror as flames seared a fellow comrade: “his face [was] black and charred like a cinder and the upper part of his body scorched and cooked.”

The second and perhaps more psychologically devastating innovation was chemical weapons. The first large-scale lethal gas attack came on April 22, 1915, when members of a special unit of the German army released 160 tons of chlorine gas over the battlefield at Ypres, in Belgium. Within minutes, over one thousand French and Algerian soldiers were killed, and a further four thousand wounded. Most of the survivors fled the battlefield with their lungs burning, leaving a large hole in the trench line. One soldier witnessed the horror from afar: “Then there staggered into our midst French soldiers, blinded, coughing, chests heaving, faces an ugly purple color, lips speechless with agony, and behind them in the gas-soaked trenches, we learned that they had left hundreds of dead and dying comrades.” Even as gas masks were rushed to the front, offering varying degrees of protection, these chemical weapons became immediately synonymous with the savagery of World War I.

Tanks were also a new addition to the battlefield. First developed by the British, they were given their name in an attempt to conceal their true purpose from the enemy. Under the pretense of

their being water tanks, these steel beasts were meant to protect those inside as they advanced their cannons and cargo inexorably toward enemy lines. In reality, they were vulnerable to shell fire, leaving their crews susceptible to all kinds of injuries, including burns from unprotected gas tanks that could ignite when hit.

Like Percy Clare, Captain Jono Wilson fought on the first day at Cambrai. He commanded a division of three tanks. Partway into his advance, Wilson's own tank ran out of fuel. He jumped out of the stalled vehicle, ran to the second tank in the formation, and climbed inside. Suddenly, that tank received a direct hit just as he was tying a message to a carrier pigeon. As the shell exploded, the vehicle toppled over onto its side, and fire erupted within. Before everyone could escape, the tank was hit again. The driver was killed, and Wilson's face was struck by white-hot shrapnel. While blood poured from the ragged crater where his nose had once been, he scrambled out of the tank and took cover in a shell hole, fortifying himself with a swig of rum from his canteen. He was eventually carried off the field by four German prisoners.

Meanwhile, in the skies above, pilots were engaged in dogfights or were taking fire from ground forces while flying reconnaissance missions. The planes—made of wood, wire, and canvas—were not bulletproof, and most airmen were just as vulnerable as their comrades on the ground. Air combat was in its infancy when the war began. It had been a little over a decade since the Wright brothers made the first successful powered flight, and airplanes were still primitive machines. Without parachutes, pilots were forced to crash-land burning aircraft or bail out and die. One pilot escaped with his body intact, but his face was so charred that none of his features was distinguishable. Most airmen carried a revolver or pistol, not to shoot the enemy but to end their own lives if their plane caught fire. So dangerous was flying in those days that many pilots were killed during training, before they ever had a chance to lay eyes on the enemy. These early airmen sometimes referred

to themselves collectively as the “20-Minute Club”—the average time it took to shoot down a new pilot.

Yet for all these technological advancements, many of which were supposed to insulate the combatant from direct contact with the enemy, war was just as basic and brutal as it had been for centuries. Hand-to-hand combat broke out in scenes that would haunt survivors long after the war had ended. John Kirkham of the Manchester Battalion recalled the moment during the Battle of the Somme that he struck a German soldier with a trench club. This was a crude weapon, more redolent of medieval warfare than of the “modern” slaughter of the First World War. The standard-issue version was usually a kind of mace, or a lead-cored truncheon studded with hobnails, although they were sometimes improvised weapons cobbled together from various materials in the trenches. “It sank deep into his forehead,” Kirkham recounted. “In the scuffle, his helmet flew off, and I saw that he was a bald-headed old man. I have never forgotten that bald head, and I don’t suppose I ever will, poor devil.”

Alongside the blunt clubs used in stealthy raids was the altogether sharper bayonet. None was more feared than the German sawback bayonet—nicknamed the “butcher’s blade.” Soldiers used its serrated edge to yank out the entrails of their enemies, causing slow and agonizing death for those on the receiving end. It was so loathed that the French and British armies warned the Germans that any man caught with one would be tortured and executed. By 1917, it had been widely outlawed in battle. But the invention and customization of weapons continued throughout the war, often with gruesome results.

Even discarded jam tins were made deadly early in the war as soldiers began improvising bombs by filling them with explosives and scrap iron and fitting them with fuses. Given the unprecedented proliferation of efficient ways to kill en masse, it is hardly

surprising that the battlefield became a wasteland. In the words of one man, "there was not a sign of life of any sort . . . Not a tree, save a few dead stumps which looked strange in the moonlight at night. Not a bird; not even a rat, or a blade of grass . . . Death was written large everywhere."

These were just a handful of the horrors inflicted by the first of two global wars that would define the twentieth century. The conflict's human wreckage was inescapable. It was strewn across battlefields and crammed into makeshift hospitals all over Europe and beyond. Between eight and ten million soldiers died during the war, and over twice as many were wounded, often seriously. Many survived, only to be sent back into battle. Others were sent home with lasting disabilities. Those who sustained facial injuries—like Percy Clare—presented some of the greatest challenges to front-line medicine.

Unlike amputees, men whose facial features were disfigured were not necessarily celebrated as heroes. Whereas a missing leg might elicit sympathy and respect, a damaged face often caused feelings of revulsion and disgust. In newspapers of the time, maxillofacial wounds—injuries to the face and jaw—were portrayed as the worst of the worst, reflecting long-held prejudices against those with facial differences. The *Manchester Evening Chronicle* wrote that the disfigured soldier "knows that he can turn on to grieving relatives or to wondering, inquisitive strangers only a more or less repulsive mask where there was once a handsome or welcome face." Indeed, the historian Joanna Bourke has shown that "very severe facial disfigurement" was among the few injuries that the British War Office believed warranted a full pension, along with loss of multiple limbs, total paralysis, and "lunacy"—or shell shock, the mental disorder suffered by war-traumatized soldiers.

It's not surprising that disfigured soldiers were viewed differently from their comrades who sustained other types of injuries. For centuries, a marked face was interpreted as an outward sign of moral or intellectual degeneracy. People often associated facial irregularities with the devastating effects of disease, such as leprosy or syphilis, or with corporal punishment, wickedness, and sin. In fact, disfigurement carried with it such a stigma that French combatants who sustained such wounds during the Napoleonic Wars were sometimes killed by their comrades, who justified their actions with the rationalization that they were sparing these injured men from further misery. The misguided belief that disfigurement was "a fate worse than death" was still alive and well on the eve of the First World War.

A face is usually the first thing we notice about a person. It can signify gender, age, and ethnicity—all important components of an identity. It can also convey personality and help us communicate with one another. The infinite subtleties and variety of human expression comprise an emotional language of their own. So, when a face is obliterated, these key signifiers can disappear with it.

The importance of the face as a register of feelings or intent is even reflected in our language. We may attempt to "save face" or not to "lose face." If a person is trustworthy, their word can be taken at "face value." A liar might be considered "barefaced," "bald-faced," or even "two-faced." Someone might "cut off his nose to spite his face"—which brings to mind both metaphorical and literal disfigurement. The list goes on.

Disfigured soldiers often suffered self-imposed isolation from society following their return from war. The abrupt transformation from "typical" to "disfigured" was not only a shock to the patient, but also to his friends and family. Fiancées broke off engagements. Children fled at the sight of their fathers. One man recalled the time a doctor refused to look at him due to the severity of his wounds. He later remarked, "I supposed he [the doctor]

thought it was only a matter of a few hours then I would pass out of existence." These reactions by outsiders could be painful. Robert Tait McKenzie, an inspector of convalescent hospitals for the Royal Army Medical Corps during the war, wrote that disfigured soldiers often became "victims of despondency, of melancholia, leading, in some cases, even to suicide."

These soldiers' lives were often left as shattered as their faces. Robbed of their very identities, such men came to symbolize the worst of a new, mechanized form of war. In France, they were called *les gueules cassées* (the broken faces), while in Germany they were commonly described as *das Gesichts entstellten* (twisted faces) or *Menschen ohne Gesicht* (men without faces). In Britain, they were known simply as the "Loneliest of Tommies"—the most tragic of all war victims—strangers even to themselves.

At Cambrai, Private Percy Clare was about to join their ranks.

After the bullet ripped through his face, Clare's first thought was that the wound was fatal. He wobbled on his feet for a moment before sinking to his knees, incredulous at the idea that he might die. "I had been through so many perilous times that I had unconsciously come to look upon myself as immune," he later recorded in his diary.

His mind began drifting to memories of his wife and child, when an officer named Rawson came to his aid. Shaken by the sight of Clare's ravaged face, Rawson tore out the packet of emergency field dressings that was sewn inside his own tunic. It contained lint, bandages, and a small bottle of iodine all rolled up in waterproof rubber. Rawson panicked when he was unable to determine the source of the bleeding and stuffed the entire packet into Clare's mouth before rushing back to the line to join his men. At that moment, Clare realized a man could easily drown from the torrent of blood caused by the rupture of major arteries in the face and neck. "Perhaps he . . . thought he could dam the outlet and thus stop the flow [of blood]," Clare later recalled. "As it was he only succeeded

in nearly choking me, and I had hastily to gulp down the blood until I could snatch it out again.”

Clare knew time was of the essence when his fingers began to tingle from the blood loss. He gathered what little strength he had and began crawling across the battlefield toward a road in the distance where he felt he had a better hope of being found. His limbs felt heavy, as though “a load of iron chains [were] about me,” and he eventually collapsed before reaching his destination. There he lay, contemplating the nature of his own grave should he die: “I imagined the burial parties who perhaps tonight, perhaps tomorrow, would come along and find me, for this unsightly clay would be found eventually by strangers and buried in a shallow grave dug on the battlefield where I had fallen, as I, myself, had often buried others.” He pulled a small Bible out of his pocket and clutched it to his chest, hoping that whoever found his body would post it back home to his mother.

As he drifted in and out of consciousness, he prayed that medical help would arrive soon. But Clare knew that the chances of a quick extraction from the battlefield were slim. Many men died waiting for the stretcher-bearers to arrive. A soldier named Ernest Wordsworth, who was injured in the first minutes of the first day of the Somme offensive, remained on the battlefield with blood streaming down his face for days before he was eventually rescued.

Encumbering the rescue process was the fact that stretcher-bearers couldn’t step onto the battlefield without becoming targets themselves. During the Battle of Loos in the autumn of 1915, three men were killed and another four injured while trying to save a company commander named Samson, who had been shot just twenty yards from the trench. When a medical orderly finally reached him, Samson sent back a message that he was no longer worth saving. After the guns had quieted, his comrades found him dead, shot in seventeen places. His fist was jammed into his mouth

so that his cries would not prompt any more men to risk their lives to save his. Tragic stories like this were far from uncommon.

Unsurprisingly, many soldiers died on the battlefield before ever receiving medical assistance. Attracting the attention of rescuers could be challenging, especially for those whose faces had been torn apart. The ghastliness of this type of injury could elicit terror in even the most battle-hardened warrior. The socialist activist Louis Barthas remembered the moment when one of his comrades was wounded. "We stood there a moment, horrified," he wrote. "[T]he man had almost no face left; a bullet had hit his mouth and exploded, blasting through his cheeks, shattering his jaws, ripping out his tongue, a bit of which was hanging down, and the blood gushed abundantly from these horrible wounds." The soldier was still alive, but no one in his squad recognized him without his face, prompting Barthas to wonder, "[W]ould even his own mother have recognized him in a state like that?"

In this respect, at least, Percy Clare was lucky. Despite the severity of his injury, he was still recognizable to a passing friend named Weyman. He heard a voice from above: "Hello, Perc, poor old fellow, how are you getting on?" Clare signaled with his hand that he thought the end was near. Weyman crouched down to assess the situation before alerting a stretcher-bearer. By then, the blood had started to congeal on Clare's hands and his face, even as it continued to trickle from the holes in his cheeks. The medical orderly just shook his head before ordering his men to push on. "[T]hat sort always dies soon," he muttered.

Weyman wasn't so easily deterred, however. He went in search of other stretcher-bearers as the shelling from enemy lines intensified. They, too, assumed Clare would die, and so they refused to carry him off the field. Clare was weakening by the minute and could hardly begrudge their decision. "I was so soaked with blood and looked so sorry a case that they probably were justified [in believing] that their long tramp . . . would be futile," he wrote.

To pick up a man like Clare, who seemed certain to die, meant leaving on the battlefield others with a better chance to survive, so decisions had to be considered carefully. Return journeys with the wounded were not only dangerous, but also physically taxing. Rescue equipment proved mostly useless in battle. Dogs trained to locate casualties were driven mad by shellfire. Wheeled carts designed to transport the injured were often useless on the blasted and furrowed ground. As a result, most stretcher-bearers had to carry men to safety with the stretcher on their shoulders. It sometimes took as many as eight people to move a single man. Nothing was easy, and nothing was quick. After Private W. Lugg picked up a man during the Battle of Passchendaele, it took him ten hours to travel through the mud before he reached help. Even when the extraction was a success, it was sometimes too little, too late. Jack Brown, a medic with the Royal Army Medical Corps, recalled that “it was then just a question of us lighting them a fag [cigarette] and saying a few words about the family at home until they died.”

Given the location of his wound, Percy Clare faced another danger. Many soldiers who sustained facial injuries suffocated after they were placed flat on their backs. Blood and mucus blocked their airways, or their tongues slipped down their throats, choking them. One soldier recalled feeling a “smack” and then a dull thud as a bullet smashed through his face and lodged itself in his shoulder. “I was rendered speechless [*sic*] . . . My friends looked at me in horror and did not expect me to live many moments.” They quickly bandaged his wounds but “were unable to stop the flow of blood in my mouth which was nearly choking me.” He remained in the trenches, spitting up blood for hours, before finally being rescued.

Early in the war, the dental surgeon William Kelsey Fry discovered the challenges that facial injuries posed after he assisted a young man whose jaw had been blown apart during a night

raid. Kelsey Fry instructed the soldier to lean his head forward to prevent his airway from becoming obstructed. After leading him through the trenches and into the hands of medics, Kelsey Fry turned around and began making his way back up the line. He hadn't gone fifty yards when a message was relayed to him that the soldier had already asphyxiated after being laid onto a stretcher. The experience stuck with Kelsey Fry for the rest of his life: "I well remember wrapping him in a blanket and burying him that night, and I made up my mind that if I had an opportunity of teaching that lesson to others, I would do so." Only later in the war did experienced medical officers like Kelsey Fry issue an official recommendation that soldiers with facial injuries be carried facedown with their head hanging over the end of the stretcher to avoid accidental suffocation.

In spite of all the daunting obstacles to rescue, Weyman was finally able to convince a third party of stretcher-bearers to take his friend off the field. Clare had lost a tremendous amount of blood by the time he was finally lifted onto a stretcher. He later referred to the wound in his diary as a "Blighty One"—demanding specialized treatment that would require his return to Britain, or "Old Blighty."

Any relief Clare might have felt at that moment, however, was short-lived. The next time he saw his face in a mirror, he received a shock. With a heavy heart, he concluded, "I was an unlovely object."

For Clare, the war might have been over, but the battle to recover had only just begun. Advances in transportation during the war had made it easier to remove injured soldiers quickly and efficiently from the battlefield. This, coupled with developments in wound management, meant that a large number of men were both sustaining and

surviving injuries, including direct hits to the face. Improvements to sanitation within hospitals also meant that disease posed less of a threat to soldiers than in previous wars.

Injured men first received treatment at a regimental aid post, which was positioned immediately behind the fighting, in a relatively sheltered spot, or in a trench itself. They were then sent to a mobile medical unit known as a field ambulance, before being transported to a casualty clearing station a greater distance from the front. Although some casualty clearing stations were situated in permanent buildings—such as schools, convents, or factories—many consisted of large tented areas or wooden huts often covering half a square mile.

These facilities, which functioned as fully equipped hospitals, could be chaotic—especially at the start of the war. The British journalist Fritz August Voigt described one harrowing scene:

The operating theatre looked like a butcher's shop. There were big pools and splashes of blood on the floor. Bits of flesh and skin and bone were littered everywhere. The gowns of the orderlies were stained and bespattered with blood and yellow picric acid [an antiseptic]. Each bucket was full of blood-sodden towels, splints, and bandages, with a foot, or a hand, or a severed knee joint overhanging the rim.

It was at a casualty clearing station that wounded men were stabilized and treated before being transferred by ambulance trains, road convoys, or canal barges to base hospitals along the French coast, some of which had as many as twenty-five hundred beds and were fully staffed with specialist doctors and nurses. Journeys to these facilities could take as long as two and a half days, depending on the mode of transport.