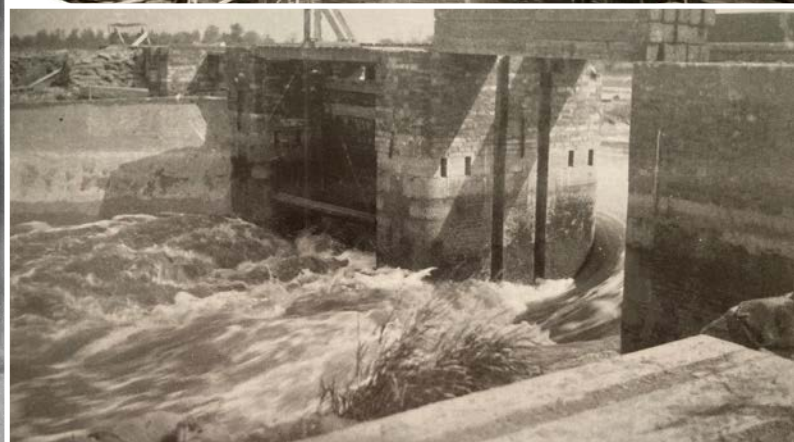


BELGIAN MILITARY DIVERS IN WORLD WAR I

FEATURE **PATRICK VAN HOESERLANDE**

Helmet diving had its risks during peacetime. In times of war, the work became even more dangerous. The diver was completely dependent on his surface crew, making him extra vulnerable.





L-R: Helmet Diver (1915); A helmet diver descends from the hull damaged by a torpedo by the English auxiliary cruiser, the 'Bladarat' (place unknown, 1917), photo by Spaarnestad; The power of water.

In October 1914, the exhausted Belgian army stood with its back to the French border, with the North Sea to its left. The German steamroller threatened to take over the last piece of national territory. At that crucial moment, a handful of engineering officers and soldiers aided by a few local civilians, managed to flood the IJzer (Yser) plain. And miraculously, the water stopped the invaders.

The floods of the Yser are a well-known achievement from the First World War, even more so a hundred years later. The details live on in the history books, but the floodings of the Creek of Nieuwendamme and those of the Yser plain via the spillway of the Noordvaart, enabled our weary troops to stop the German advances. Although these manoeuvres saved our country from complete occupation, the operation is incorrectly identified as the 'Inundations of the Yser'. This operation was much more than these initial activities: it was the management of the water level to avoid the flooding of our defensive lines, the maintenance of the desired levels required, the construction of emergency dikes with millions of sandbags, the maintenance and repair of the hydraulic establishments undermined by the water which was destroyed by German artillery. The activities to support the flooding continued for four years.

The author Mignolet ends his book with the flooding of the Yser Plain described in the last paragraph. It was as if his message was addressed to me, because I did indeed have this narrow view of the whole operation. My great-grandfather and his brother may have fought at that watery front, but my knowledge of the fight with and against the water was very limited. I was convinced I had paid close attention during this part in my military history course. I was disillusioned.

I don't aim to earn redemption for my gap in knowledge by informing you, the reader, via this article about the complexity and scope of this operation, nor to tell you about known civilian heroes such as Karel Cogge or Hendrik Geerart. My purpose in sharing this article, is to highlight the unknown helmet divers who did all the heroic underwater work. Like so many soldiers, their names, their individual exploits and their sacrifices gradually faded away like the poppies on Flanders fields. I just want to blow away the dust of time to make these divers shine.

What I initially thought was an easy task, turned out to be much harder. Information about the military helmet divers turned out to be very limited. Inquiries at the Defence Library, the Royal Museum of Military History, and even the Royal Military School yielded

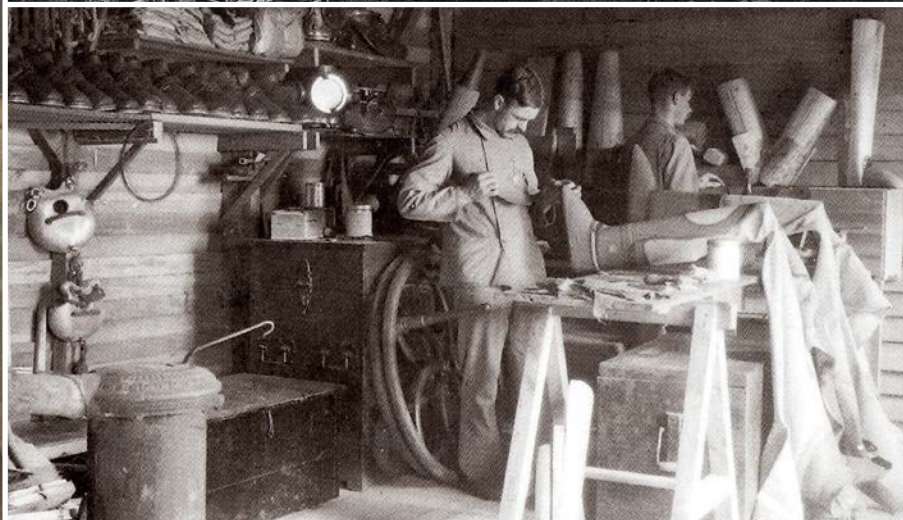
little information.

MILITARY HELMET DIVERS

The first mention of divers dates from 1902. Divers were part of the special 'Compagnie Pontonniers' in the Saint-Anna barracks in Antwerp. From 1913, there were three sections of helmet divers working in the 'Compagnie Sapeurs' near the fortifications of Antwerp. In 1915, after the surrender of the Antwerp fortresses in 1914, these divers were deployed in Calais with the newly formed 'Compagnie Pontonniers'. However, it is the three teams of helmet divers at the 'Compagnie Sapeurs-Mariniers', founded on September 1, 1915, who carried out the dives on the locks and performed other hydraulic works.

The start of the operation might have stopped the German army – this did not mean that the engineering unit responsible for its execution received full support. During the years of war, Commandant Robert Thys and his men usually had to improvise to carry out their missions. In the helmet divers' workshop in Veurne, repairs were made with homemade tools and recovered machines were entrusted to Private Matthys, a specialist in the field.

A feat of ingenuity was the installation of a telephone device in the diving helmets. As far as I could find out, this was a first. Thanks to



L-R: Commandant Robert Thys; The flooded Yser Plain (October 1914) from the Collection of the (Belgian) Royal Museum of the Armed Forces and Military History; The divers workshop.

the competencies of Commandant Umé of the telegraph operators, it became possible to maintain permanent verbal contact between the diver and the surface crew. This happened for the first time on April 15, 1915 during the underwater checks at the Gemeentebrug and the Perebrug on the track from Houthem to Ghyvelde. This allowed the diver to immediately report his discoveries and carry out instructions from the chief without having to surface. This meant a gain in time, and in times of war, it lowered risks.

The hydraulic infrastructure such as locks, dams, and dikes wore out much faster than planned as they were not designed for continuous operations or the unplanned direction of the water's flow. Divers had to regularly check the structures for cracks, fissures, seepage, etc. When they identified problems, they usually also had to take care of the repairs.

We can determine the kind of work divers were used for from the Commandant's diary: (October 12, 1915) 'Helmet divers notice a large crack in the abutment of the Ypres lock on the Yser, and immediately started making a 40cm concrete slab.'

(October 18, 1915) 'During an inspection at the lock in Veurne, helmet divers notice seepage at low tide. During the next few days,

they seal the cracks with concrete.'

Helmet diving had its risks during peacetime. In times of war, the work became even more dangerous. The diver was completely dependent on his surface crew, making him extra vulnerable.

The risk from diving activities during war was nicely outlined by a piece written by Commandant Thys:

'Imagine a dark night, two officers and a few divers [note: members of the dive crew were clearly all divers themselves] having to feel their way across the immense lock walls more than six metres high, in a complicated tangle of wooden beams, twisted pieces of iron, masonry rubble, and between countless funnels.

The gloomy night is disrupted by artillery fire and suddenly lit by flares. Bullets from machine guns pierce the air with a whistling sound. The slightest move can reveal our location. There is a formal ban on smoking or even covertly lighting a match.

We dress the diver; we place the lead weight on him, put the brass helmet on; thus transformed into an amphibian monster whose impressive profile stands out against the night sky, the diver descends into the water while the men at the pump supply him with

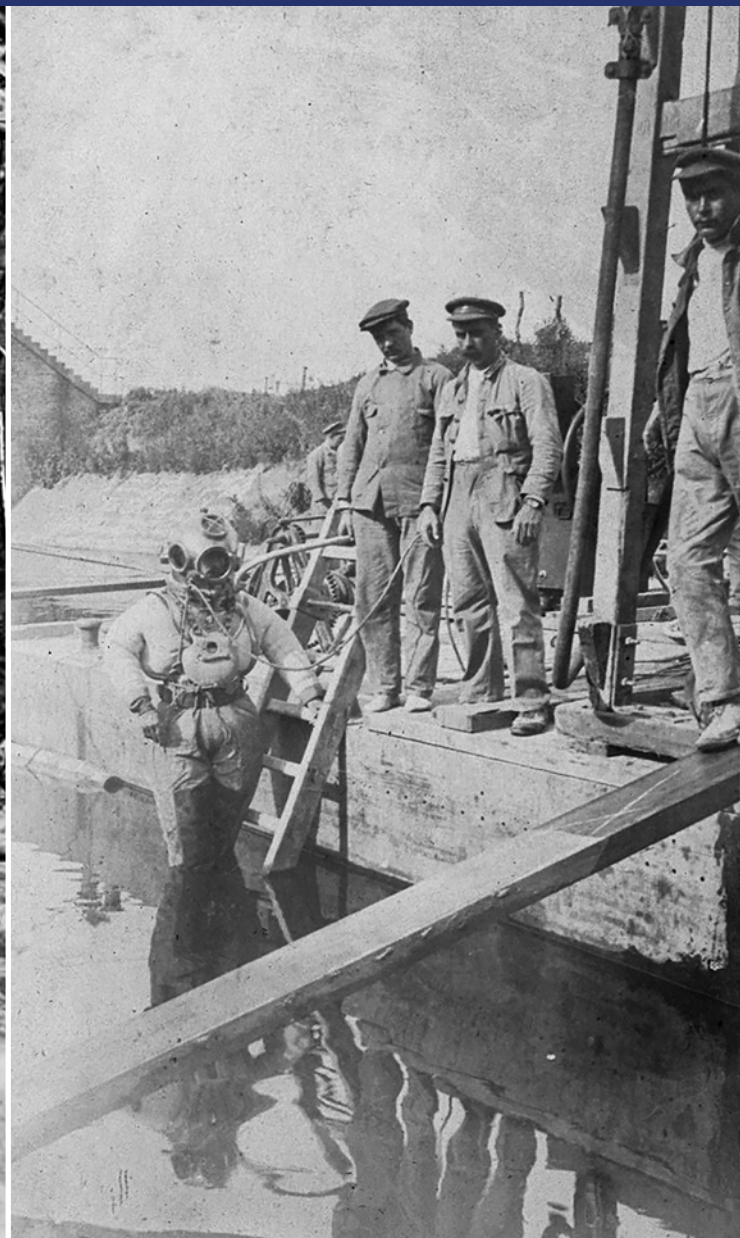
the necessities of life; a grenade explodes and hits his brothers-in-arms, a gas attack begins [note: the team members above water could protect themselves against gas, but the air pump was not equipped with a filter], and suddenly he finds himself lost underwater, to die in the most terrible torment!'

The company attached screens to locks and gates to block the view of the ongoing works. This did not stop general shelling but did ensure that the diving crew did not come under targeted fire during the operation. Planned bombings of the water infrastructure had been rather limited as it could cause unwanted flooding. Controlled floodings were not easily planned, unplanned ones were all the more dangerous, for friend and foe. Of course, if the other side saw activity on a lock, the crew would come under direct fire.

On March 26, 1915, the Yser lock was badly damaged from a bombing shell. It destroyed the track bridge over the lock. After repairs were carried out with shot beams, the Germans bombed the lock again, causing cracks in the floor. Helmet divers had to go into the water to fill the cracks with concrete.

THE DIVE ACCIDENT

Only one dive accident was reported. On November 5, 1915, diver and soldier, 2nd Class



ABOVE: Military Diver with communication device (April 1918) photo by De Patrouilleurs; WWI Military Helmet Diver. **OPPOSITE PAGE:** Automatic gates of the locks at the Noordvaart that were used for the second flooding, photo from the Deguent archives.

Van der Vrecken F. was killed while working on the lock on the Yser:

This tragedy was narrated by Commandant Thys:

"The lieutenant sends the Sergeant-Chief of the divers upstream of the lock to make sure there is no current. The water is completely still; the sergeant throws a stake in the canal just to be sure: the piece of wood does not indicate surface current. The betrayal is flawless. The greatest expert would be caught up in it.

Diver Van der Vrecken descends the ladder with slow movements. The silence is impressive; but the men, despite their tension, laugh at "friend Fritz" who regularly shoots at the bridges every five or six minutes. The diver is almost submerged up to the shoulders; the huge round bronze helmet glitters in the night and will soon disappear...

Suddenly, there is an unexpected tug on the

signal cord: the emergency cable slips through the hands of the terrified men; they are braced and resist with all their might the risk of being pulled into the lock. The diver has just been swept away by an undertow; a poorly closed valve sucked up the suit swollen with air; and the diver could not fight the stream. The drama is set in deep water...

However, the men do not want to admit that their comrade is lost. After a few moments of nervousness and surprise, realising the impossibility of retrieving the unfortunate soldier upstream, they let the rope slide in an attempt to pull him downstream onto dry land. Dangerous carelessness is committed, miracles are accomplished purely on strength.

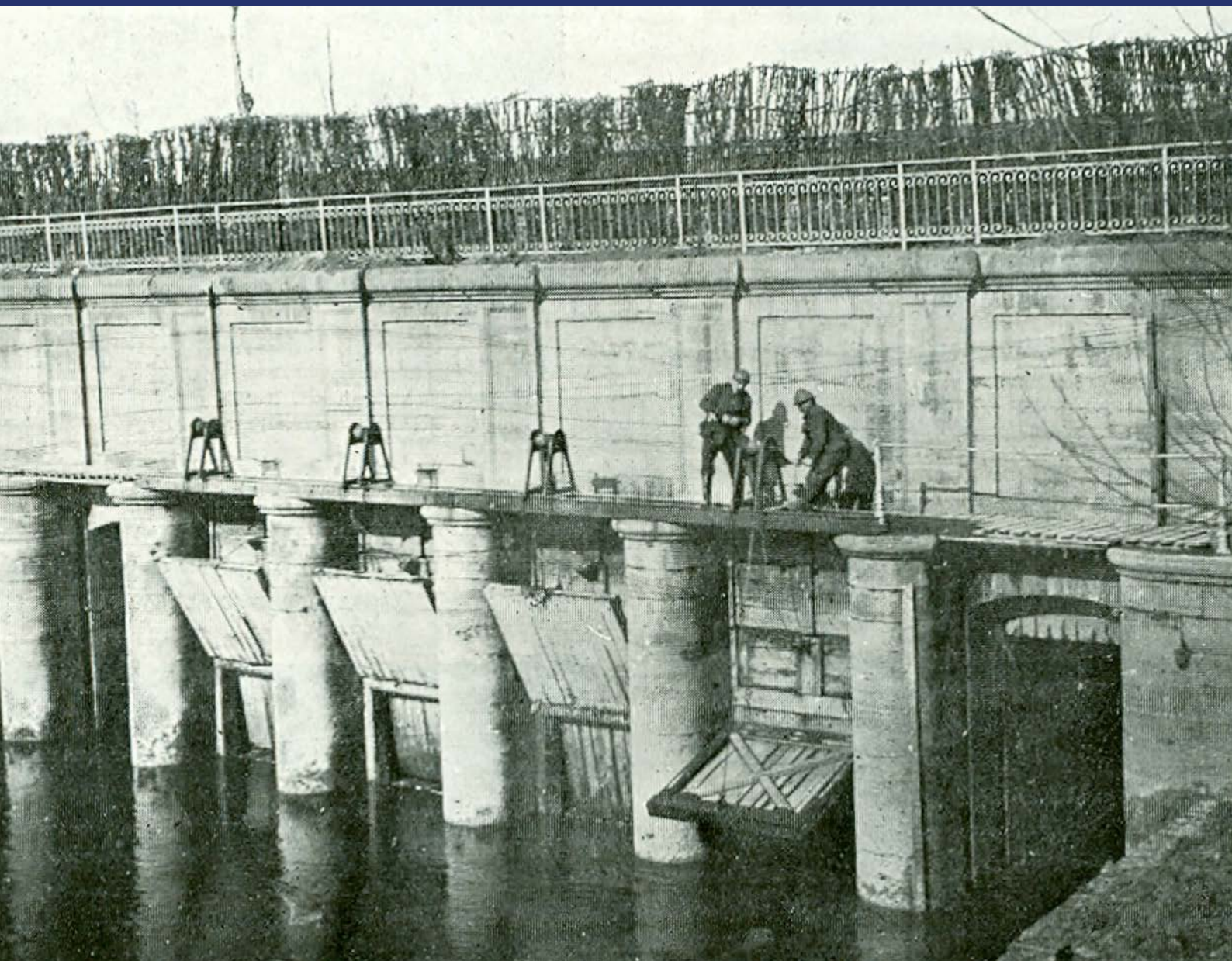
Finally the body has appeared, but sinister and pale: the diver's helmet was torn off as he passed under the valve, and his naked face is scarred by spasms of pain. The war has drained our energies and hardened our hearts; a

terrible emotion grips us in the face of this terrible death!

The lieutenant cuts or tears off the clothes and has the body transported to the hiding place of the lock in Veurne; we practice, in spite of everything, artificial respiration, friction, rhythmic pulling movements of the tongue. We are constantly taking turns in this desperate battle. Nevertheless, the body becomes stiffer and colder; the movements more difficult. For more than an hour, the efforts go on idly; the men are literally exhausted. Aware of the fixed fate, I give the order to stop.

The next day, work on the Yser resumes as usual, and another helmet diver descends into the lock. The war shows us such traits of heroism every day!"

The fatal accident led to a number of improvements to prevent similar events happening in the future. On November 10, 1916, Major Marchal asked to check all the



cords ordered by Commandant Thys before putting them into service. He also wanted to know when these cords were delivered, and why the cord broke on the second day after being put into service.

As a result from the investigation after the accident, only diving helmets that were attached to the suit by bolts could be used. Before starting, the Sergeant in charge had to ensure that there were no dangerous currents at the dive site. The lock keeper responsible for the lock where the work would be carried out, had to be present. The upper parts of the retrieval mechanism had to be painted white to increase its visibility for the diver. Finally, the equipment had to be thoroughly checked before any dive operation could take place.

To protect against wear and tear, divers had to wear a leather-lined linen suit over their diving suit. After a day's work, the dive suits had to be dried inside and out, away from the heat of the sun. The helmet had to be cleaned and lubricated weekly. Each section appointed had an equipment manager assigned to it.

The final fact that I could find in the limited sources at my disposal was that on May 21, 1916 the helmet divers transferred with their company to the Battalion Pontonniers located at Nieuwpoort. I was convinced that a detailed search in the field diaries of the various units with divers would yield more material.

In the archive 'Moskow' of the Belgian Royal Museum of the Army and Military History, they found Box 1178 (186-14-2842 Field Diaries of the 2nd Battalion Pontonniers (engineers, inundations), 1914-1919. In support of writing this article, they searched for information about divers in two of the files in that box. In the two files with nine field diaries of at least 80 pages each, they found no noteworthy facts. Browsing through all the field diaries in the box would mean painstaking work worthy of a historical investigation. This does not mean that diving activities ceased during the last years of the war, or that diving was safe. Diver and soldier, Isodore Tas was a victim of a gas attack on August 18, 1917. All considered, divers were soldiers too, and as such, exposed to the same daily horrors of war.

What very few people know is that in August and September of 1914, Belgian military engineers and their pontooniers carried out extensive and complex floodings around Antwerp. All in all, those floods took up more than double the area the engineers flooded on the Yser in four years.

This 'Antwerp' operation is virtually unknown to the outside world.

The Belgian Military Floodings Around the Fortified Site of Antwerp in August and September 1914 – A Historical-Geographical Reconstruction by Paul Van Pul.

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