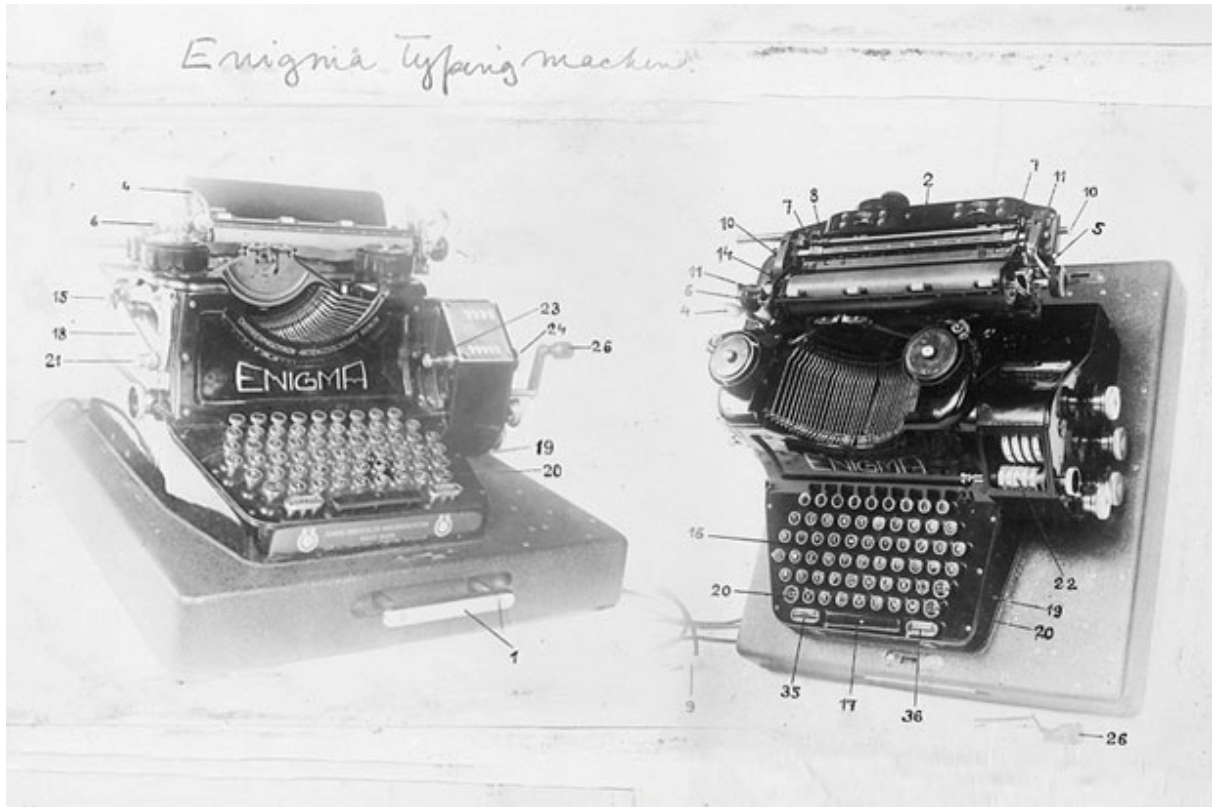


The German Enigma Machine

Catalogue ref: HW 25/6



What is this source?

This is a photograph of an Enigma machine. Similar (but far more complicated) apparatus was used by the German navy to 'encrypt' or code the messages they sent to and from their ships in order to keep them secret.

Enigma worked like a typewriter except that it typed messages in code. The person receiving the message needed the key to the code to understand the message. It was supposed to be unbreakable.

ATLANTIC 1939–1945: THE BATTLE OF THE ATLANTIC

What's the background to this source?

From 1940 onwards the greatest danger for Britain in WW2 was that German forces could cut off supplies of troops, food, medicine and equipment from Canada and the USA. This was exactly what the Germans tried to do. This campaign became known as the Battle of the Atlantic. The Germans used submarines (U-boats), aircraft and surface ships to attack shipping bound for Britain. U-Boats received information about targets and also about where to meet up with supply ships by radio. The Germans thought that their messages were safe because they were sent using the Enigma code.

In fact, British code breakers cracked the code, helping convoys to avoid attack. It also helped Allied ships and aircraft to hunt down U-Boats. The key development in cracking Enigma came when a British ship captured a U-Boat in May 1941. A team of code breakers led by Alan Turing based at Bletchley Park, near present day Milton Keynes, developed machinery like the Colossus to help do this.

It's worth knowing that...

The work of Turing and his colleagues played a key role in helping scientists and engineers to develop modern computers.

The information gained by Bletchley Park by reading decoded German messages was called 'Ultra'. It is often suggested that the use of Ultra shortened the war by at least a year.

How will you use this source?

1. Describe the Colossus machine. Are modern machines this complicated?
2. Does the Colossus suggest that the British government invested a lot of resources in technology and intelligence?
3. What do you notice about the operators of Colossus?
4. Is the Enigma machine a valuable piece of historical evidence?
5. Do these sources help you to explain why the Battle of the Atlantic was so significant?