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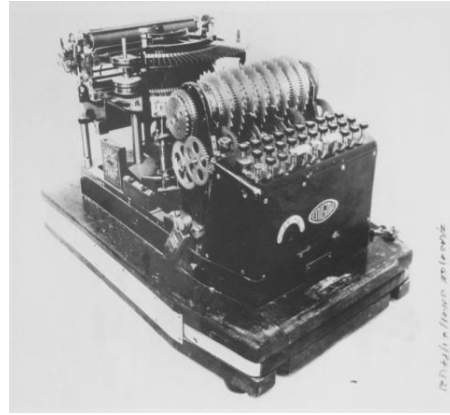
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This image depicts the interior of an Enigma Machine—one of the devices which gave Hitler an upper hand during the early part of World War II. Click on the image for a much-better view. [Image online](#), courtesy the Crypto Museum website.

Onboard [Lemp's ship](#) was a small, portable encryption device used by [U-boats](#) to communicate with the German high command. Receiving coded messages on the location of enemy ships, prowling U-boats were constantly on the attack.

British supply ships were especially hard hit. The loss of men and supplies was causing a massive strain on Britain's war efforts.

What was this encryption device? In 1923, Arthur Scherbius, a German engineer, introduced a [new product](#) designed to help businesses conduct secure overseas communication. His company was incorporated as *Chiffriermaschinen Aktiengesellschaft*.

Although the German military would have been a potential customer for [Scherbius](#), the military wasn't interested initially. By the time [Hitler and his party](#) were elected to lead Germany, however, Scherbius had a buyer for all the machines he could make.

Soon the encryption device—called [Enigma](#)—was no longer [commercially available](#) to anyone outside the German military. Ideal for portable military use, Enigma was also simple to use.

Its genius was the coupling of letters: they were [constantly changed](#) so the encrypted messages were never the same, making the code (with its billions of possible combinations) nearly impossible to break.

(Follow this link to an on-line [Enigma simulator](#) where you can experience [how it works](#). Be sure to click on the lower keyboard first; then type in a message in the space provided; then click on trace diagram to view the electrical circuitry of your message.)

Hitler, and many of his commanders, believed Enigma was invincible. They were wrong.

See [Alignments to State and Common Core standards for this story online at:](#)

<http://www.awesomestories.com/asset/AcademicAlignment/U-BOAT-CODES-U-571>

See [Learning Tasks for this story online at:](#)

<http://www.awesomestories.com/asset/AcademicActivities/U-BOAT-CODES-U-571>

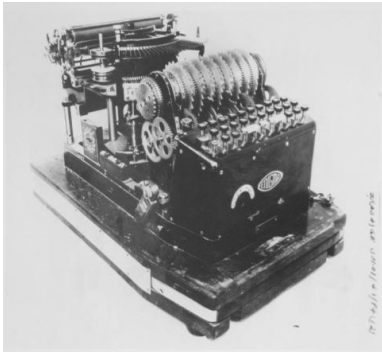


Arthur Scherbius

Image online, courtesy the [Enigma](#) website.

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View this asset at: <http://www.awesomestories.com/asset/view/Arthur-Scherbius>



Enigma Machine Photo - View Inside

Image online, courtesy the [Crypto Museum](#) website.

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Hitler - National Socialist Party

Image Online, courtesy German Archives.

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Enigma Machine - German Codes in WWII

From *The Code Book* (with Simon Singh). Online, courtesy Simon Singh. Copyright, Simon Singh, all rights reserved. Clip provided here as fair use for educational purposes and to acquaint new viewers with the [five-part television series](#).

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Fritz-Julius Lemp - Enigma Codes from U-110

Clip from *AufTauchen zeigt*, a German-language production about diving and U-boats. Online, courtesy YouTube.

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World at War - On the Sea

German-language, historical-footage newsreel online, courtesy YouTube.

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