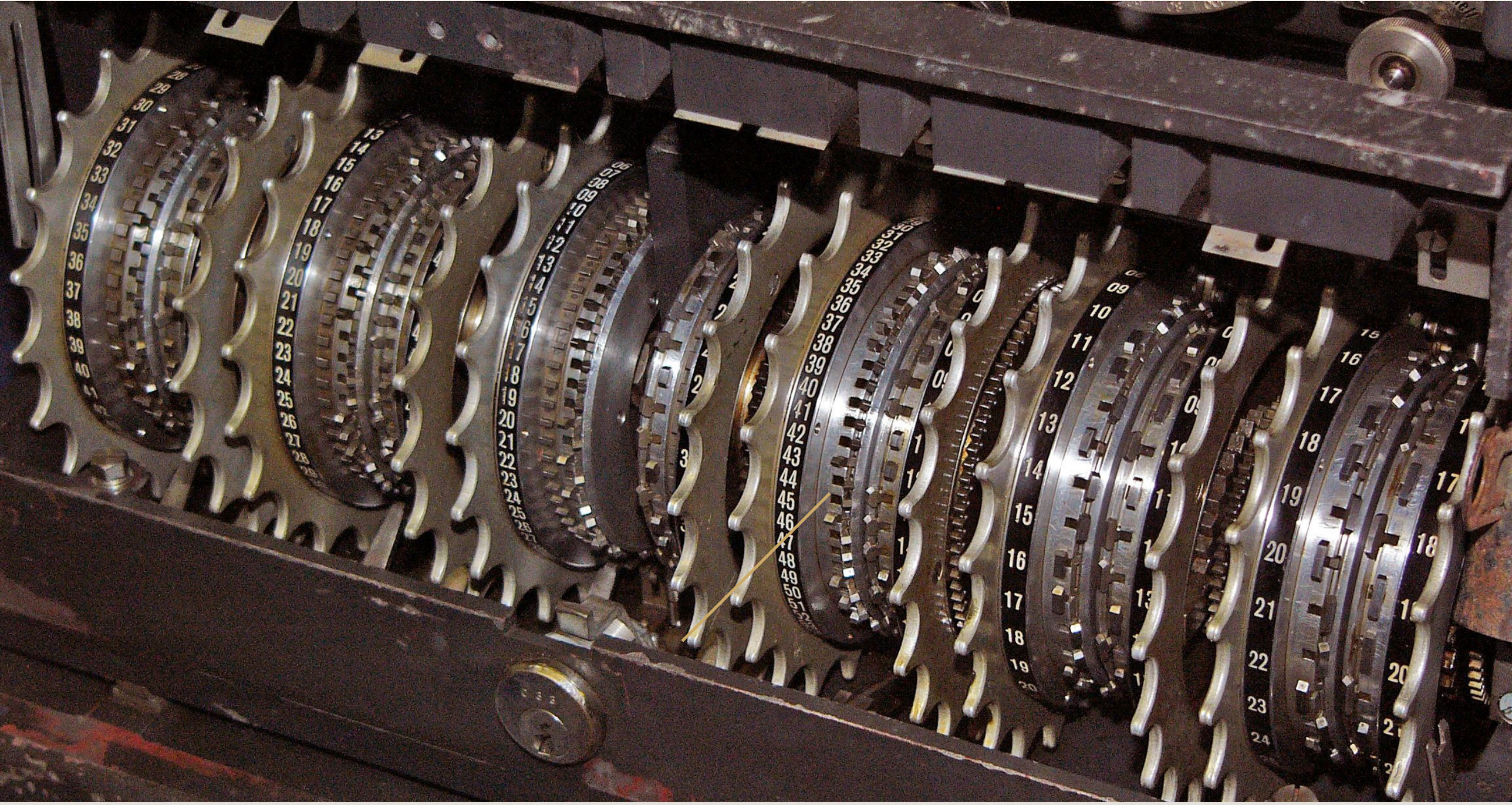
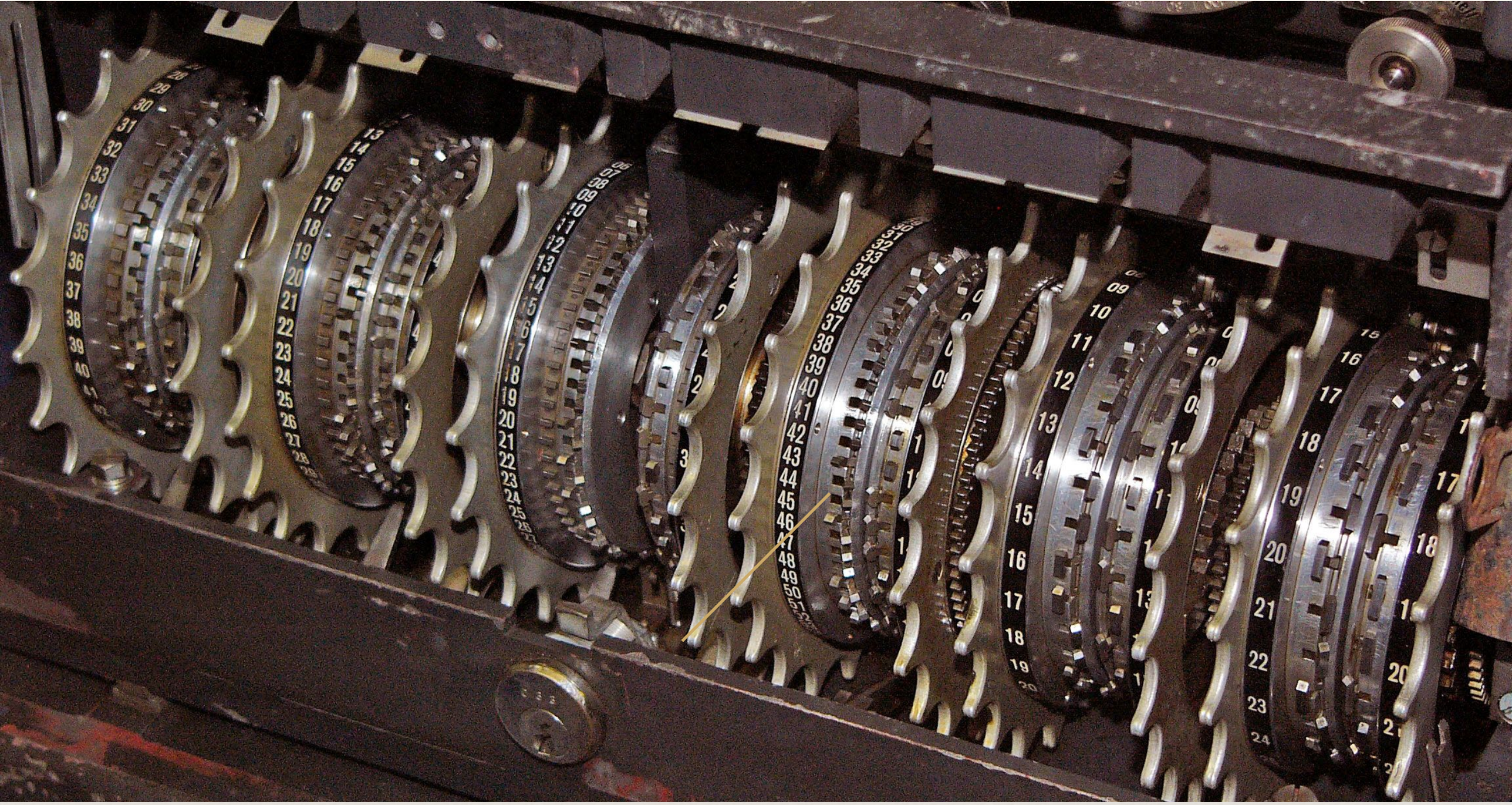
message	S		.	.	x	.	x
key	K		x	.	.	x	x
ciphertext	C		x	.	x	x	.
key	K		x	.	.	x	x
message	S		.	.	x	.	x



ψ-wheels μ-wheels χ-wheels

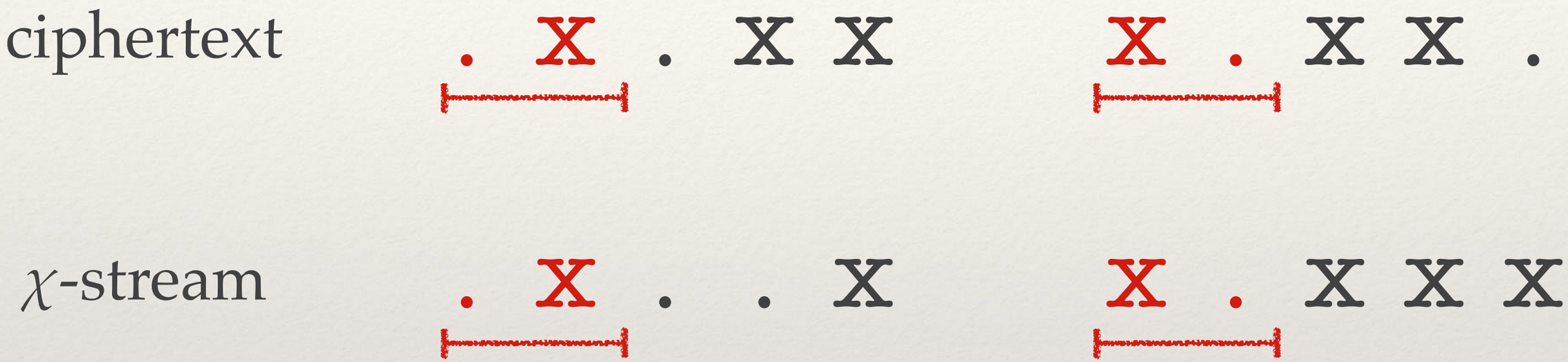


$$\mathbf{key} = \chi\text{-}\mathbf{key} + \psi\text{-}\mathbf{key}$$

Start positions of the χ-wheels

ciphertext	`. x . x x`	`x . x x .`
χ-stream	`. x . . x`	`x . x x x`

Start positions of the χ-wheels



Start positions of the χ-wheels

ciphertext . x . x x x . x x .

χ-stream . x . . x x . x x x

. + x + x + . + . + x + x + . = .

Start positions of the χ-wheels

ciphertext	$M_1 + \chi_1 + \psi_1'$	$M_2 + \chi_2 + \psi_2'$
χ-stream	. x . . x	x . x x x

. + x + x + . + . + x + x + . = .

Start positions of the χ-wheels

ciphertext	$M_1 + \chi_1 + \psi_1'$	$M_2 + \chi_2 + \psi_2'$
χ-stream	χ_1	χ_2

. + x + x + . + . + x + x + . = .

Start positions of the χ-wheels

ciphertext	$M_1 + \chi_1 + \psi_1'$	$M_2 + \chi_2 + \psi_2'$
χ-stream	χ_1	χ_2

$$(M_1 + \chi_1 + \psi_1') + \chi_1 + (M_2 + \chi_2 + \psi_2') + \chi_2$$

Start positions of the χ-wheels

ciphertext	$M_1 + \chi_1 + \psi_1'$	$M_2 + \chi_2 + \psi_2'$
χ-stream	χ_1	χ_2

$$(M_1 + \chi_1 + \psi_1') + \chi_1 + (M_2 + \chi_2 + \psi_2') + \chi_2$$

Start positions of the χ-wheels

ciphertext	$M_1 + \chi_1 + \psi_1'$	$M_2 + \chi_2 + \psi_2'$
χ-stream	χ_1	χ_2

$$(M_1 + \cancel{\chi_1} + \psi_1') + \cancel{\chi_1} + (M_2 + \cancel{\chi_2} + \psi_2') + \cancel{\chi_2}$$

$$= (M_1 + M_2) + (\psi_1' + \psi_2')$$

Start positions of the χ-wheels

ciphertext	$M_1 + \chi_1 + \psi_1'$	$M_2 + \chi_2 + \psi_2'$
χ-stream	χ_1	χ_2

$$(M_1 + \cancel{\chi_1} + \psi_1') + \cancel{\chi_1} + (M_2 + \cancel{\chi_2} + \psi_2') + \cancel{\chi_2}$$

$$= (M_1 + M_2) + (\psi_1' + \psi_2')$$

Start positions of the χ-wheels

ciphertext	$M_1 + \chi_1 + \psi_1'$	$M_2 + \chi_2 + \psi_2'$
χ-stream	χ_1	χ_2

$$(M_1 + \cancel{\chi_1} + \psi_1') + \cancel{\chi_1} + (M_2 + \cancel{\chi_2} + \psi_2') + \cancel{\chi_2}$$

$$= (M_1 + M_2) + \cancel{(\psi_1' + \psi_2')}$$

$$= M_1 + M_2$$

Start positions of the χ-wheels

ciphertext . x . x x x . x x .

χ-stream . x . . x x . x x x

. + x + x + . + . + x + x + . = .