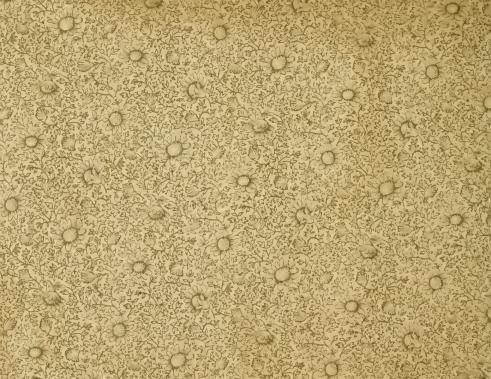
## CIPHER, LETTER.

AND

## TELEGRAPH CODE

LARRABEE,









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## LARRABEE'S CIPHER

AND

### SECRET LETTER AND TELEGRAPH CODE,

WITH HOGG'S IMPROVEMENTS.

THE MOST PERFECT SECRET CODE EVER INVENTED OR DISCOVERED.

IMPOSSIBLE TO BE READ WITHOUT THE KEY. INVALUABLE FOR SECRET, MILITARY, NAVAL, AND

DIPLOMATIC SERVICES, AS WELL AS FOR BROKERS, BANKERS, AND MERCHANTS.

### BY CHARLES S. LARRABEE,

THE ORIGINAL INVENTOR OF THE SYSTEM.

### PATENTED AND COPYRIGHT SECURED.

SECOND EDITION.

### NEW YORK:

D. VAN NOSTRAND, PUBLISHER, 23 MURRAY AND 27 WARREN STREET. 1884.

### PREFACE.

Mx attention was first called to the importance of Secret Cipher writing while employed upon some special service for the U. S. Government in 1863.

I very soon discovered the imperfect character of the then existing systems, and set myself to work to devise a better. After a great deal of labor and many unsatisfactory experiments, I hit upon this system, the idea first striking me from the "Key-word Lock." Other occupations compelled me to temporarily defer the publication, and not until the winter of 1869–70 did I fully perfect the code which I herewith present to the American public.

Pending arrangements for its publication, I learned that Mr. G. Hogg, of London, had published a code almost identical with my own. After some correspondence on the subject, he very honorably acknowledged my right to the main features of the code, while I admitted that the part relating to figures was unquestionably his. I claim to be the original discoverer of this system, which I call the "Key-word System."

CHARLES S. LARRABEE.

NEW YORK. January 1st, 1871.

## INTRODUCTION.

This Secret Code may be used by any one. It is so perfect that no message written by it can possibly be read without knowing the particular key-word used.

In most of the Cipher systems a mere changing of the order of the alphabet, or certain signs for certain letters, has been used, and in consequence of the same letter being always represented by the same cipher, an expert could easily read any message. In this system the constant change of cipher for every letter makes the message perfectly secret.

By its use any number of persons may write the same message, and each be unintelligible save for those intended. It is very simple, and with ordinary care there can be no mistake or misunderstanding. Your message can be written in any language.

## INSTRUCTIONS.

Fix upon a key-word which communicate to your correspondent; any word may be adopted, and it is judicious to select one that can be remembered by both parties; care must be taken that it is spelled alike by both, else the message could not be read as intended.

To Convert a Message into Cipher.—A key-word having been arranged between yourself and receiver, first write down plainly and distinctly the message to be sent; then write the key-word over the message, repeating it as often as necessary to the end of the message. Find the ciphers thus: Take the first letter of the key-word and the first letter of the message and find the same letters in exactly the same position in Table I. The letter underneath is the first cipher. Repeat this process with all the letters, taking the second letter of key-word and the second letter of the message, the third letter of key-word and the third letter of the message, and so on to the conclusion.

To Convert Ciphers into the Message.—First write down the ciphers as received, then write over them the particular key-word between yourself and correspondent, repeating it as often as necessary till each cipher has a letter of the key-word over it; take the first letter of the key-word and the first cipher, and find the same letters in exactly the same position in Table II.; the letter which is under them is the first letter of the message. Repeat this process with all the others, taking second letter of key-word and second cipher, and finding second letter of message, and so on till the ciphers are all translated.

## EXAMPLES.

1.

### A MESSAGE CONVERTED INTO CIPHERS.

	Key-word, "Jo	ve."			
Key-word		J O V E	JOVEJOV	EJ	OVEJO
Message to be sent		MOVE	FORWARD	1  N	FORCE
Cipher to be sent		V C Q I	OCMAJFY	MW	TJVLS
*					

### II.

neg-wortt, nope.	
Key-word	HOPEHOPEHO
Message S E L L	EVERYTHING
Cipher to be sent	LJTVFHWMUU

Four aroud " Hone" "

### III.

### CIPHERS CONVERTED INTO A MESSAGE.

## Key-word, "Decatur."

Key-word	DECATUR D	
Ciphers received	HHKAMYC B	
Message reads	EDIATEL Y	

### IV.

### Key-word, "Lodi."

Keyword L O D	ILODILODI	LODILO DI
Ciphers received E V H	XCSVQOSQB	ZFGMCG LB
Message readsT H E	PRESIDENT	ORDERSIT

## Instructions for Messages containing Figures.

Let the letters	A	В	C	D	Е	F	G	H	I	J
Stand for the figures.	1	2	6	4	5	6	7	8	9 (	0

When writing your message down first on paper, substitute the above letters for figures, as A H G A for 1871. But prefix such letters by the letter Q, and such other letter from A to I as shall indicate the number of letters following, which are to be read-as figures. Thu:

Q A F.	. 6
Q B I J	. 90
Q C B C D	. 234
QEAEEJJ	.15500

Having written down your message as directed, proceed to convert the whole of it into ciphers in the usual way.

(The letter Q is never found in any part of a word unless in conjunction with the letter U, and therefore it is the only letter that can be selected as a sign.)

## Examples relating to Messages containing Figures.

Ι.

A	MESSAGE	CONVERTED	INTO	CIPHERS.
---	---------	-----------	------	----------

Original Message.  To be written thus	
Key-word, "Hanover"	,
Key-word	.HANOVERHANOVERHANO
Message	REMITQDCGEJDOLLARS
Ciphers	YEZWOUUJGRXYSCSAEG
II. TO CONVERT CIPHER INTO MES	
Key-word, "Hero."	
Key-word	HEROHEROHE
Ciphers received	VRCMXHSSQN
Message reads first	
	or, "Only 2,500."

## TABLE I.

Letter of Key-word A	A A A A A A A A A A A A A A A A A A A
Letter of Message	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Cipher Letter	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Letter of Key-word B	B B B B B B B B B B B B B B B B B B B
Letter of Message	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Cipher	B C D E F G H I J K L M N O P Q R S T U V W X Y Z A
Letter of Key-word C	cccccccccccccccccccccc
Letter of Message	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Cipher	
Letter of Key-word	
Letter of Message	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Cipher	DEFGHIJKLMNOPQRSTUVWXYZABC
Letter of Key-word	EEEEEEEEEEEEEEEEEEE
Letter of Message	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Cipher	EFGHIJKLMNOPQRSTUVWXYZABCD
Letter of Key-word F	FFFFFFFFFFFFFFFFFFFFFFF
Letter of Message	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Cipher	FGHIJKLMNOPQRSTUVWXYZABCDE

-	
Letter of Key-word G	G G G G G G G G G G G G G G G G G G G
Letter of Message	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Cipher	GHIJKLMNOPQRSTUVWXYZABCDEF
Letter of Key-word II	инниннинии и и и и и и и и и и и и и и
Letter of Message	. A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Cipher	HIJKLMNOPQRSTUVWXYZABCDEFG
	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Cipiler	IJKLMNOPQRSTIVWXYZABCDEFGH
Letter of Key-word J	
Letter of Message	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Cipher	J K L M N O P Q R S T U V W X Y Z A B C D E F G H I
Letter of Keyword K	KKKKKKKKKKKKKKKKKKKKKK
Letter of Message	A B C D E F G H I J K L M X O P Q R S T U V W X Y Z
Cipher	
Letter of Key-word L	LLLLLLLLLLLLLLLLLLLLLLLLLLLL
Letter of Message	ABCDEFGHIJKLMNOPQRSTUVWXYZ
Cipher	
Capiter	IN NOT QUE TO THE TEXA BOD ET GILL TO K
Letter of Key-word M	MM MMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMM
Letter of Message	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Cipher	1

## TABLE I.-Continued.

the second secon		The second secon
Letter of Key-word	N	N N N N N N N N N N N N N N N N N N N
Letter of Message		ABCDEFGHIJKLMNOPQRSTUVWXYZ
Cipher		NOPQRSTUVWXYZABCDEFGHIJKLM
Letter of Key-word	0	000000000000000000000000000000000000000
Letter of Message		A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Cipher		OPQRSTUVWXYZABCDEFGHIJKLMN
Letter of Key-word	P	PPPPPPPPPPPPPPPPPPPPPPPP
Letter of Message		. A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Cipher		
Letter of Key+word	Q	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Letter of Message		. A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Cipher		QRSTUVWXYZABCDEFGHIJKLMNOP
Letter of Key-word	R	RRRRRRRRRRRRRRRRRRRRRRRRRRRRRR
Letter of Message		ABCDEFGHIJKLMNOPQRSTUVWXYZ
Cipher		RSTUVWXYZABODEFGHIJKLMNOPQ
T C II	s	S S S S S S S S S S S S S S S S S S S
Letter of Key-word		A B C D E F G H I J K L M X O P Q R S T U V W X Y Z
Letter of Message		
Cipher		S T U V W X Y Z A B C D E F G H I J K L M N O P Q R

Letter of Key-word	Т	Τ '	ГΊ	T	Т :	гт	Т	ТТ	Т	Т	T '	ТТ	Т	Т	T 7	ГΊ	Т	Т	Т 7	Т	Т
Letter of Message		A :	ВС	D	E	G	Н	I J	K	L	M I	N O	Р	0	R S	Т	U	V 1	W 2	Y	Z
Cipher		T	UV	W	X	Z	A	BC	D	Е	F	G H	I	J	KI	. M	N	()	P (	Q R	S
Letter of Key-word	U																			UU	
	• • • • •																			XX	
Cipher	• • • • •	U	, ,,	-77	1 /	A	. Б	C: 1	) E	r	G	H	J	K	د با	M P	0	P	Q I	RS	T
Letter of Key-word	Λ.	Λ.	V V	V	V	V V	V	V	VV	V	L	V 1	V	V	V	V	T	V	1. 1	VV	V
		A :	B (	D	$\mathbf{E}$	F G	П	Ι.	Ј К	E L	M	N (	) P	Q	R	S I	U	V	W.	XΥ	Z
Cipher																				ST	
	***	11.11	* 11	w	33° Y	· w		11.1	17.11	. 11	'11'	w	. 11.	111	1171		. 11.	11" 1	17.11	. 11. 1	
Letter of Key-word.	**																				
																				Y	
Cipher		11 -7	1	/1	AE	. C	1)	E F	- (r	11		il D	L	M	7/ (	<i>)</i> 1'	Q	1í	9 I	U	1
Letter of Key-word	X	X Y	X	X	X = X	X	X	Z = Z	X	X	X	X Z	X	Χ	X	Z Z	X	X	X X	X.	X
Letter of Message		AI	3 C	D	E F	' G	H	I J	К	L	М	N C	P	Q	RS	S T	U	V	M, Z	Y	Z
Cipher		X	ĭ Z	A	ВС	1)	E	F G	H	I	J	K L	M	N	0.1	) Q	R	S '	ΤU	1.1	$\bar{W}$
		7. 7		77	7. 7.		31	7. 1		1.	3,0	7° X	7-	37	· ·		7,	χ.	7. X	Y	7.
Letter of Key-word	Y																				
Letter of Message																				Y	
Cipher		1 /	12 2	. 15	C L	E	1'	G F	1 1	٠,١	11	L M	7/	0	l, (	Į Ii	3	1	0 1	. H.	77
Letter of Key-word	Z	Z. 7	Z. Z.	Z	Z = Z	Z	Z	ZZ	Z	Z	Z .	Z Z	Z	$Z_{i}$	Z. 7	. Z	Z	Z	Z 7	. Z.	Z
Letter of Message		A 1	ВС	D	EF	G	H	I J	К	L	M :	N 0	P	Q	R	T	U	V 1	11. 7	Y	Z
Cipher		Z .	A B	C	DE	F	G	II I	J	K	L	M N	0	P	Q I	S	T	U	1. 1	X	Ŷ
•																					

## TABLE II.

Letter of Key-word																										
Cipher		A	B	$\mathbf{C}$	1)	E	F	G	H	1.	J. E	ĹΖ	. M	N	-0	P	-Q	R	S	Т	U	V	11.	Y.	J.	Z
Letter of Message		A	B	C	D	Ē	F	(T	H	1.	J I	<b>( )</b>	M	N	()	P	()	R	S	T	U	V	11.	X	Y	Z.
Letter of Key-word	В	В	В	В	В	В	В	В	В	В	ВІ	ВІ	3 B	В	В	В	В	В	В	В	В	В	В	В	В	В
Cipher																										
Letter of Message		Z	Α	В	C	D	E :	F (		H	[ ,]	К	L	M	N	0	Р	Q	R	S	T,	U	İ.	W	X	Υ
Letter of Key-word	C	C	C	C	С	C (	C (	C (	0 (	0 0	: C	: C	C	С	С	C	C	С	С	С	C	C	C	C	C	C
Cipher										U																
Letter of Message		Y	Z	A :	В	C_I	) I	E J	ř (	} }	I	J	K	L	M	N	()	P	Q	R	S	Т	U	V V	W	X
Letter of Key-word		D																								
Cipher		A	В	C	D.	ΕI	7 (	1 1	1 1	I J	K	L	M	N	()	Р	0	R	S	Т	U	V	W	X	Y	7,
Letter of Message		X	Y	Z.	A	B (	) I	) ]	č I	r G	H		,J	К	L	M	N	0	P	Q	R	S	T	IT.	<u>į.</u> 1	V
Letter of Key-word																										-
Cipher																										
Letter of Message	)	W.	X	Υ .	% .	A I	3 (	Ϊ	E	F	Ğ	П	I	J	K	L	М	N	0	P	Q	R	S	T	ŢŢ,	V
Letter of Key-word	F	F	F	F	F	FI	? J	7 F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
Cipher		Α	В	C :	D.	ΕI	3 G	1 1	I	J	К	L	M	N	$\cap$	P	Q	R	S	Т	U	V.	W	X	Y	$Z_{-}$
Letter of Message		1.	И.	X	Y .	Z. J	I	3 0	D	E	F	G	Н	I	J	K	L	M	N	()	P	Q	R.	S '	T I	CT

Letter of Key-word	G	GGGGGGGGGGGGGGGGGG
Cipher		ABCDEFGHIJKLMNOPQRSTUVWXYZ
Letter of Message		UVWXYZABCDEFGHIJKLMNOPQRST
Letter of Key-word	II	ниннининниннинниннинниннин
Cipher		ABCDEFGHIJKLMNOPQRSTUVWXYZ
		TUVWXYZABCDEFGHIJKLMNOPQRS
Letter of Key-word	I	
Cipher		ABCDEFGHIJKLMNOPQRSTUVWXYZ
Letter of Message		STIVWXYZABCDEFGHIJKLMXOPQR
Letter of Key-word		
Cipher		ABCDEFGHIJKLMNOPQRSTUVWXYZ
Letter of Message		R S T U V W X Y Z A B C D E F G H I J K L M N O P Q
Letter of Key-word	К	KKKKKKKKKKKKKKKKKKKKK
Cipher		ABCDEFGHIJKLMNOPQRSTUVWXYZ
Letter of Message		QRSTUVWXYZABCDEFGHIJKLMNOP
Letter of Key-word		T L L L L L L L L L L L L L L L L L L L
Cipher		ABCDEFGHIJKLMNOPQRSTUVWXYZ
Letter of Message		PQRSTUVWXYZABCDEFGHIJKLMNO
Letter of Key-word		MMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMM
Cipher		A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Letter of Message		OPQRSTUVWXYZABCDEFGHIJKLMN

## TABLE II.-Continued.

											_		_												-		-
Letter of Key-word																									N		
Cipher		A	В	C	Ð	$\mathbf{E}$	F	G	Η	I	J	K	L	M	N	0	P	Q	$\mathbf{R}$	S	T	U	V	W	X	Y	Z ·
Letter of Message		N	()	P	Q	R	S	Т	Ū	V	W	X	Y	Z	À	В	С	D	Е	F	(ř	П	I	J	K	L	M
Letter of Key-word	0	0	0	0	()	0	О	0	0	0	О	О	О	0	О	O	О	0	0	O	О	О	О	0	0	О	О
Cipher		A	В	C	D	Ε	F	G	$\mathbf{H}$	Ι	J.	K	L	M	N	0	Ρ	0	R	S	T	U	V	W	X	Y	Z
Letter of Message																		-							J		
Letter of Key-word		P	P	P	P	P	Р	P	Р	Р	P	P	Р	P	P	é	P	P	Р	P	Р	P	P	P	P	Р	P
Cipher																									X		
Letter of Message		L	М	N	0	P	Q	R	S	Т	U	V	W.	X	Y	Z	A	В	C	D	Е	F	G	H	I	J	K
Letter of Key-word	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cipher		A	В	C	D	E	$\mathbf{F}$	G	Η	I	J	К	L	M	N	0	P	Q	R	$\mathbf{S}$	Т	U	V	W	X	Y	Z
Letter of Message		K	L	М	N	0	Þ	()	R	S	T	Ü	Ţ,	W	X	Y	Z	Ā	В	C	D	Е	F	(ř	Н	1	J
Letter of Key-word	-R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Cipher		A	В	С	D	Е	F	G	$\mathbf{H}$	I	J	K	L	M	N	0	P	Q	R	S	${\bf T}$	U	v	W	$\mathbf{X}$	Υ	Z
Letter of Message		J	K	L	М	N	0	P	Q	R	S	T	U	V	W	X	Y	Z	A	В	C	D	Е	F	G	11	I
Letter of Key-word	s	s	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	s	S
Cipher		A	В	C	D	E	F	G	II	I	J	К	L	M	N	0	P	Q	R	S	T	U	V	W	$\mathbf{X}$	Y	Z
Letter of Message																									F		

Letter of Key-word	Т	TTTTTTTTTTTTTTTTTTTTTTTTTTTTT
Cipher		A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Letter of Message		HIJKLMNOPQRSTUVWXYZABCDEFG
Letter of Key-word	TF.	עיט עע
Cipher		A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Letter of Message		GHIJKLMNOPQRSTUVWXYZABCDEF
		V V V V V V V V V V V V V V V V V V V
Letter of Key-word	V	A B C D E F G II I J K L M N O P Q R S T U V W X Y Z
Cipher		F G H I J K L M N O P Q R S T U V W X Y Z A B C D E
Letter of Key-word	W	WWWWWWWWWWWWWWWWW
Cipher		A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Letter of Message	· • • • • •	E F G H I J K L M N O P Q R S T U V W X Y Z A B C D
Letter of Key-word	X	X X X X X X X X X X X X X X X X X X X
Cipher		A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
T 435		DEFGHIJKLMNOPQRSTUVWXYZABC
Letter of Key-word	Y	YYYYYYYYYYYYYYYYYYYYYYY
Cipher		ABCDEFGHIJKLMNOPQRSTUVWXYZ
Letter of Message		CDEFGHIJKLMNOPQRSTUVWXYZAB
		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
Letter of Key-word	Z	Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z
Cipher		B C D E F G H I J K L M N O P Q R S T U V W X Y Z A
Letter of Message		DODET GHIJALMAUP QASIUVWAIZA



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