CADENUS (period not over 6)
Columnar tramp using a keyword to shift the order of the columns and at the same time to shift the starting point of each column. The latter is done by attaching a letter of the alphabet (25-letter alphabet as shown with $V$ and $W$ in the same cell) to each row of plaintext in the block. The first column of plaintext goes into the 2 nd column of the cipher block (as determined by the key) but it begins with its 22 nd letter, (Y here), since the key letter ( $\mathbf{E}$ here, of EASY) is attached to the 22nd letter of the key column. Other columns are treated similarly. The final cipher is taken off by rows from the cipher block.
pt: A severe limitation on the usefulness of the Cadenus is that every message must be a multiple of twenty-five letters long.

CT:
SYSTR ETOMT ATTLU SOATL EEESF IYHEA SDFNM SCHBH NEUVS NPMTO FAREN USEIE EIELT ARLME NTIEE TOGEV ESITF AISLT NGEEU VOWUL.

## K: EASY

| pt block |  | CT block |
| :---: | :---: | :---: |
| E A S Y | Key | A E S Y |
| 2134 |  | 1234 |
| a $\underline{\mathbf{s}} \mathrm{e} \mathrm{V}$ | A | $\underline{S} \underline{Y} \underline{S}$ |
| e $r$ e 1 | Z | R E T 0 |
| j m j t | $Y$ | M T A T |
| a t i 0 | $X$ | $T L U S$ |
| n 0 n t | V/W | 0 A T L |
| $h \mathrm{e} u \mathrm{~s}$ | U | E E S |
| e f $u 1$ | T | F I Y H |
| n e $\underline{s}$ | $\underline{S}$ | EAS D |
| 0 fth | R | F N M S |
| e c a d | Q | CHBH |
| e $n$ u s | P | N E U V |
| i s t h | 0 | S N P M |
| a t e v | N | T 0 F A |
| $e r y m$ | M | R E N U |
| $e \mathrm{~s}$ s a | L | S E I E |
| $g$ e mu | K | E I E L |
| $s \mathrm{t}$ b e | J | T A R L |
| a m m 1 | I | M E N T |
| t i p 1 | H | I E E T |
| $e o f t$ | G | 0 GEV |
| $w$ e $n$ t | F | E S I T |
| $y f i v$ | E | F A S |
| e 1 e t | D | LTNG |
| $t \mathrm{e}$ rs | C | E E U V |
| 10 n g | B | 0 W U L |

