REF ID:A4148934

Ciphered Messages Prepared for Col. Fabyan, of Chicago.

June 7, 1918.

Attached hereto are some telegraph messages which have been prepared for Col. Fabyan, of Chicago. These messages have been ciphered by printer methods, which Mr. Gherardi has described to Col. Fabyan, and have been put into two forms:

a. Perforated tape form

b. Typewritten form.

It is thought the following information will be helpful to Col. Fabyan in considering these messages.

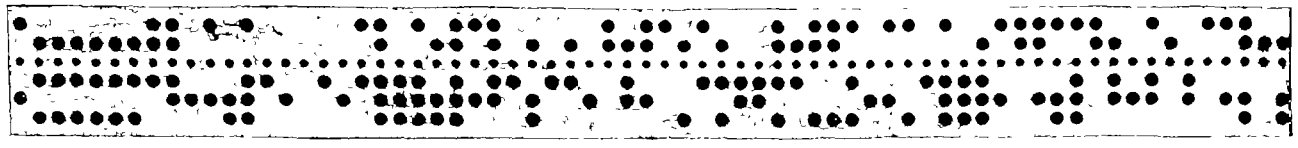
1. Our standard printer alphabet was used in preparing these messages. This alphabet consists of thirty-two characters. What these characters are is shown on the attached sheet marked "Multiplex Perforator Tape."

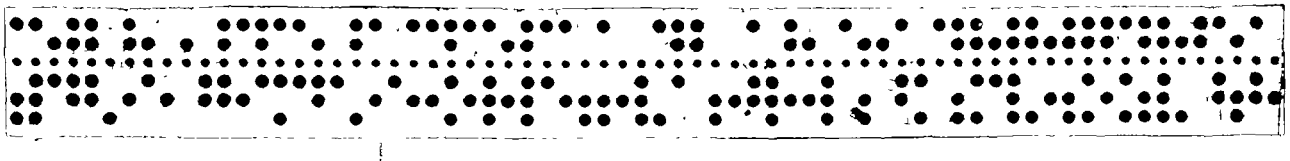
2. The messages enciphered are in military language, and are such as would be met with daily in handling affairs of the Army. For convenience they have been numbered from 1 to 7.

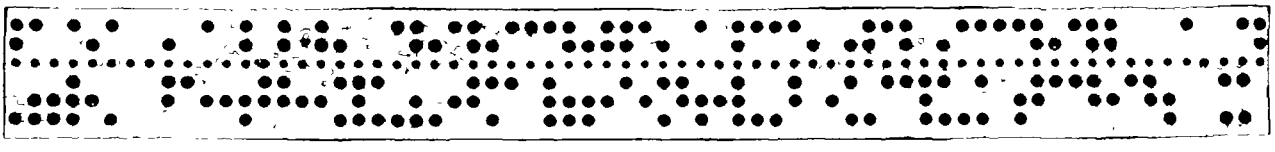
3. In preparing these messages the message to be enciphered was first put in perforated tape form, and then enciphered by combining this tape with one or more others having the characters of the printer alphabet, chosen at random. The perforated tapes prepared for Col. Fabyan were the result of this combination. The typewritten messages have been prepared from the messages in tape form by writing the enciphered message out on the typewriter, employing certain numerals to designate certain printer operations, as will be explained later. The result of combining by printer methods various characters of the printer alphabet is shown on sheet marked "Cipher Square."

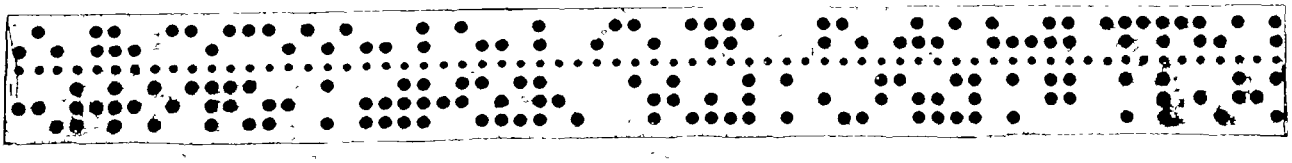
Approved for Release by NSA on 11-19-2014 pursuant to E.O. 13526

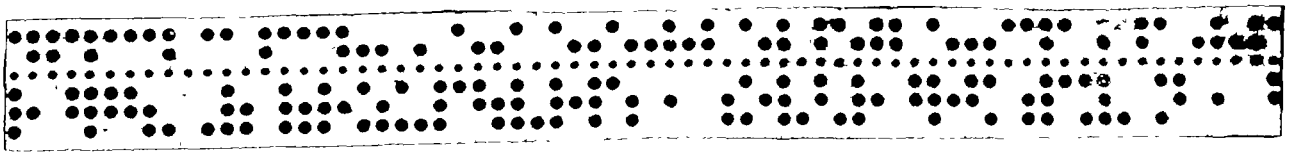
MESSAGE NO. 1 June 3, 1943.

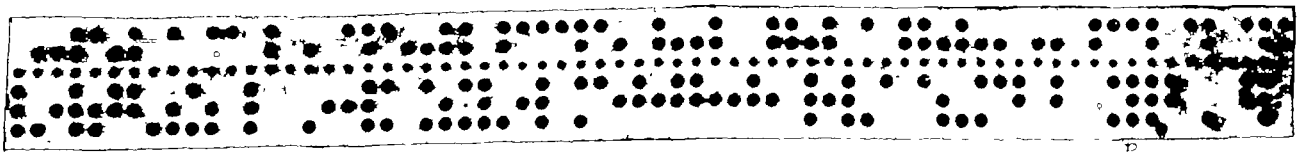












REF ID:A4148984

4. The messages, whether in tape or typewritten form, should be read from left to right and from the top down, as in reading an ordinary page of typewritten matter.

5. Messages Nos. 1, 2, 3, and 4 were enciphered with a single ciphering tape, consisting of 2,000 selections made at random from the printer alphabet of thirty-two characters.

6. Message No. 1 makes use of the first part of this enciphering tape, and does not overlap any of the other messages.

7. Messages Nos. 2 and 3 start at the same point in the enciphering tape, but beyond that section of the enciphering tape used for message No. 1.

8. Message No. 4 utilizes a portion of the enciphering tape employed with messages Nos. 2 and 3, but extends to a character in the enciphering tape beyond the end of either of these two messages.

9. Messages Nos. 5, 6, and 7 make use of two ciphering tapes, one having 1,000 characters and the other 999 characters of both of which being chosen at random from the thirty-two characters of the printer alphabet. In enciphering messages Nos. 5, 6, and 7 the enciphering tapes were started at different points.

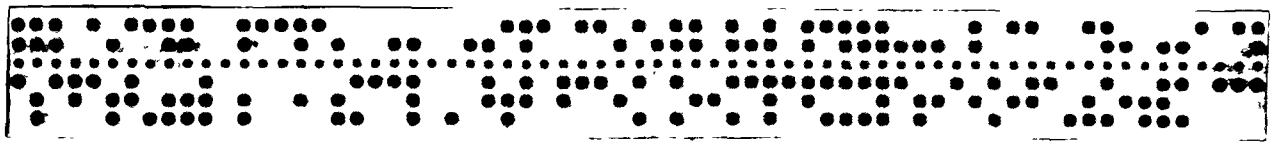
10. As noted under 3 above, the typewritten messages were obtained by transcribing the enciphered message in tape form by means of the typewriter. The figures 2, 3, 4, 5, 6, and 7, appearing in the typewritten form, are the characters which have been used to take the place of the printer functions. What these functions are and what each figure represents are shown in red on the alphabet referred to above.

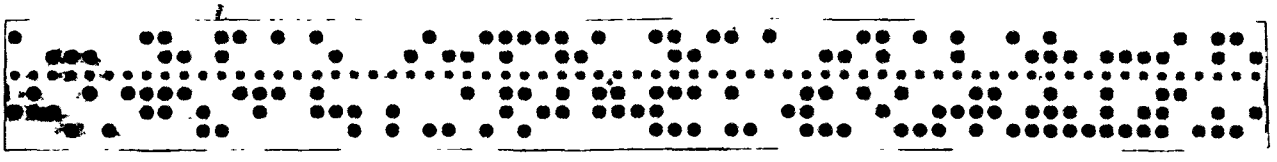
Attached:

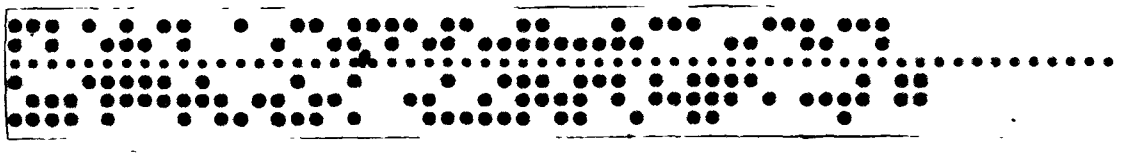
Telegraph messages numbered
1 to 7, in perforated tape
and in typewritten form.
Sheet marked "Multiplex Perforator
Tape"
Sheet marked "Cipher Square"

IFM-BMW.

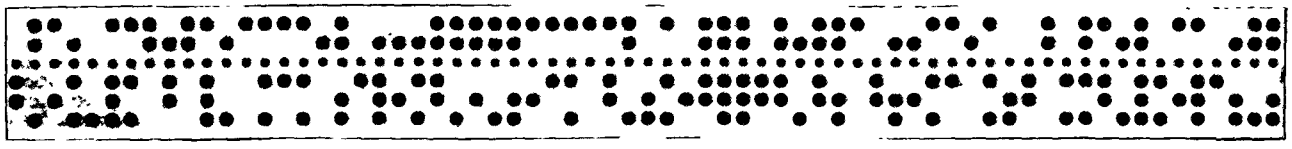
MESSAGE NO. 1 Continued

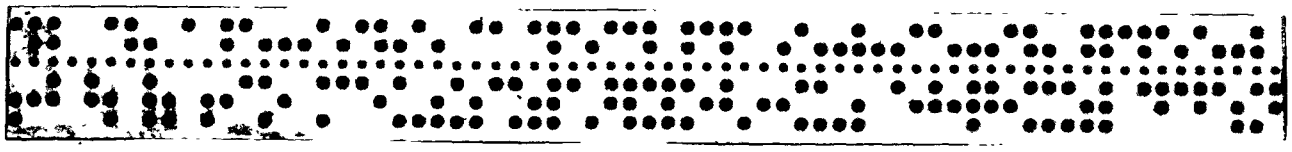


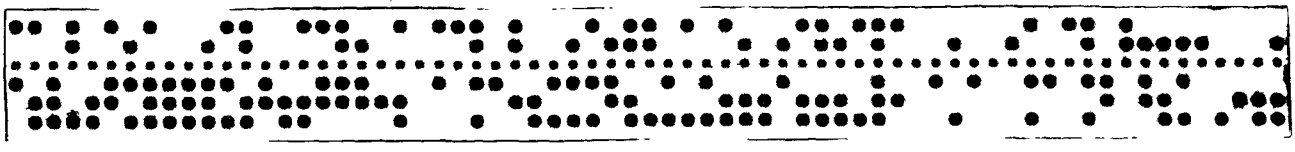


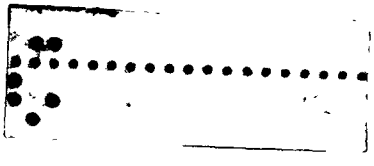


MESSAGE NO. 2 Continued

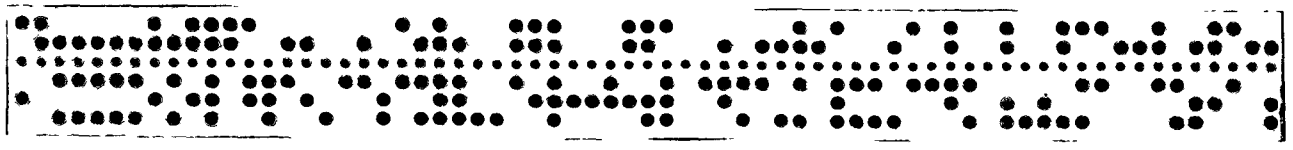


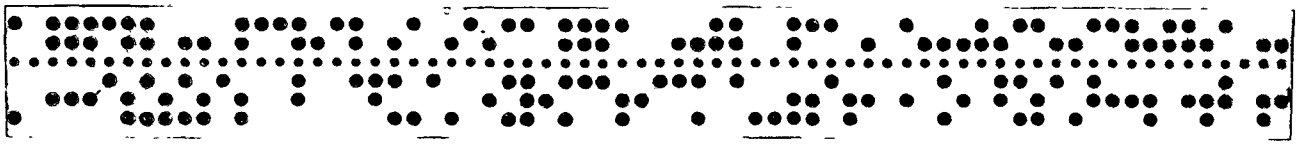


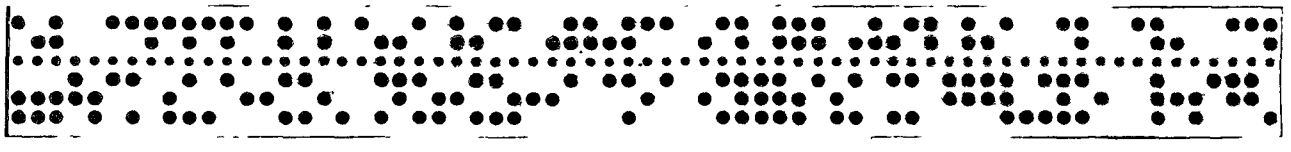


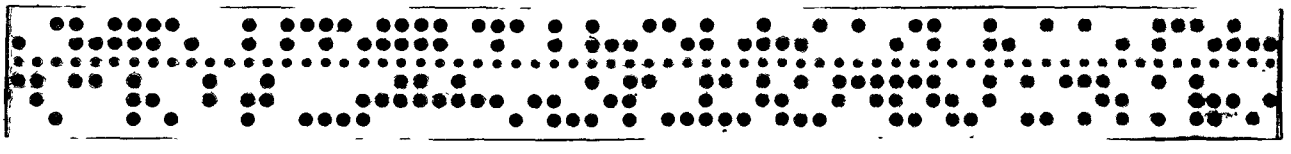


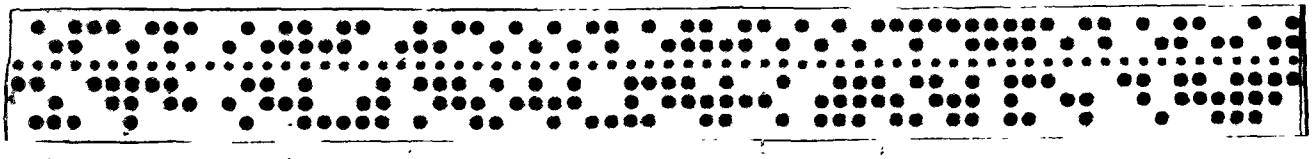
MESSAGE NO. 2

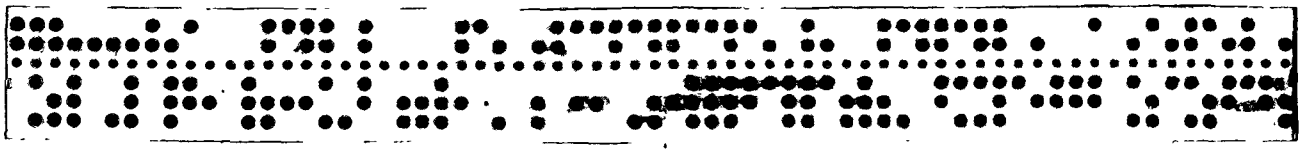












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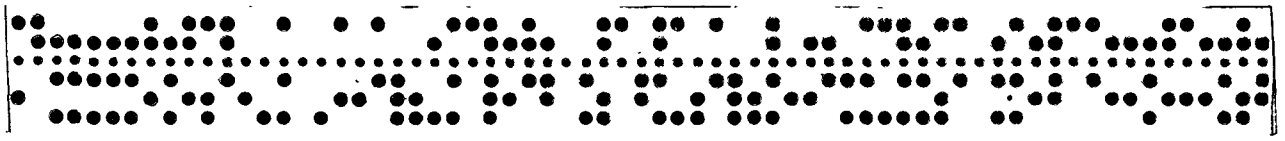
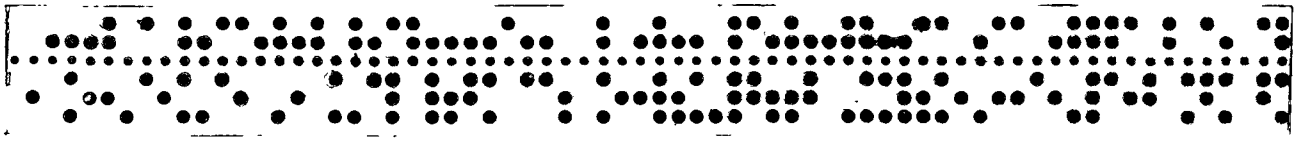
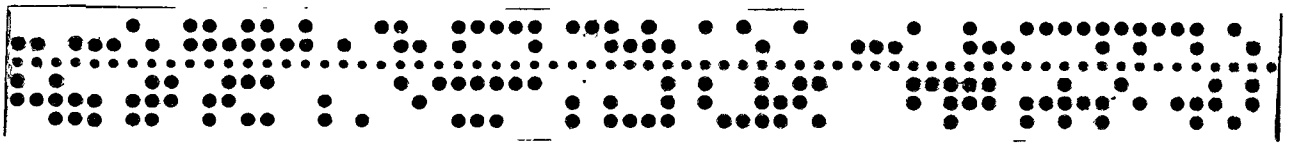
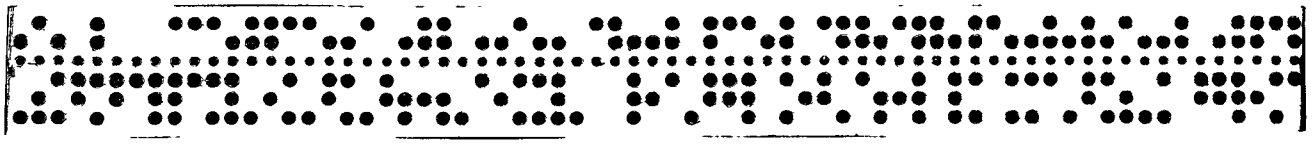
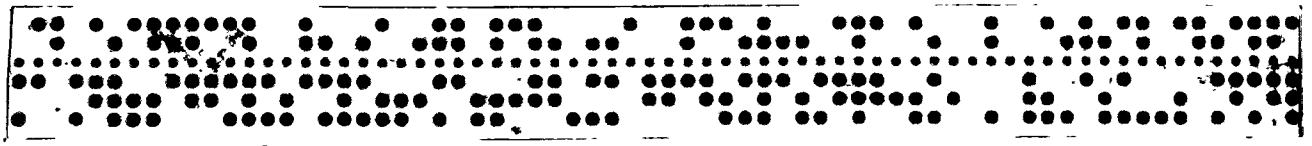
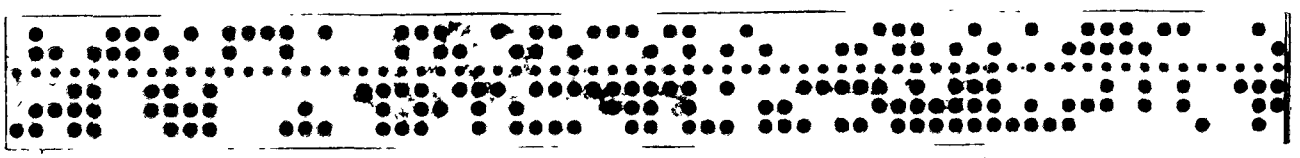




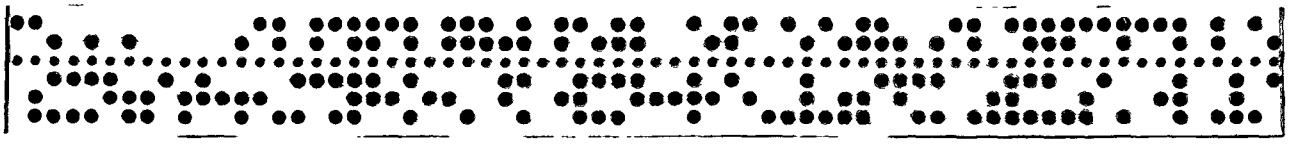


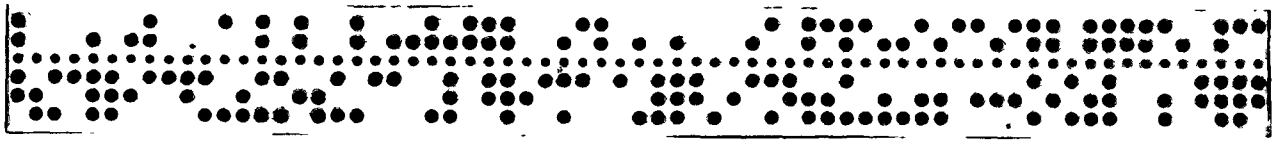


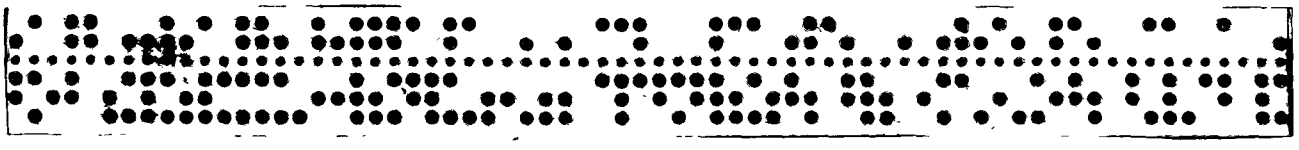


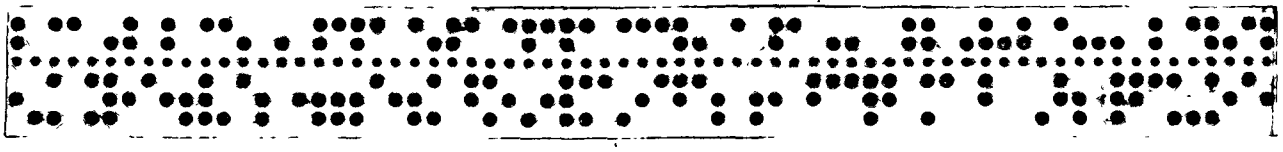


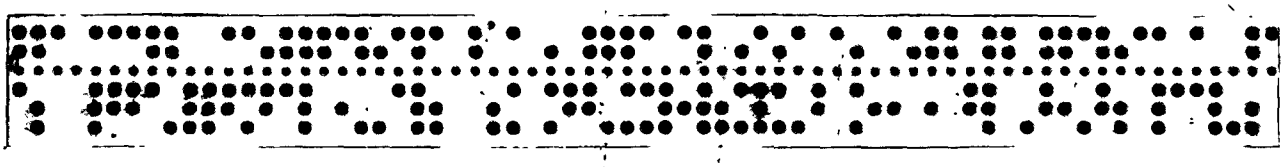
PAGE NO. 3 Continued

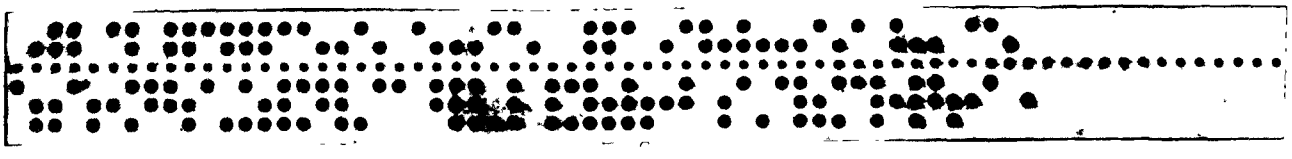


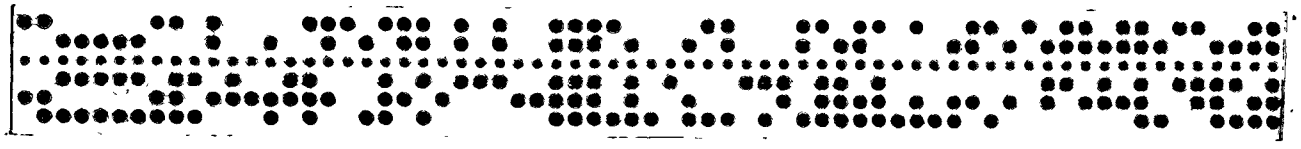


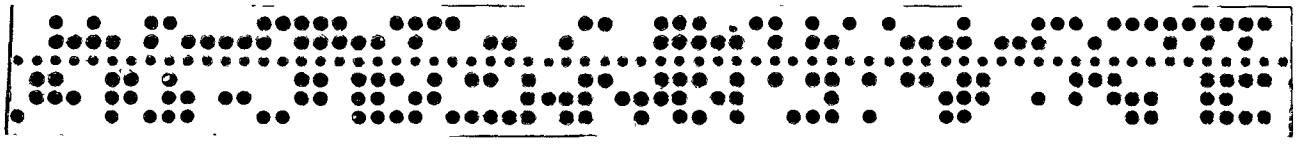


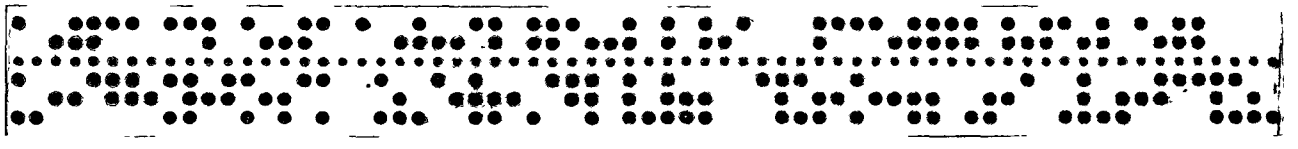


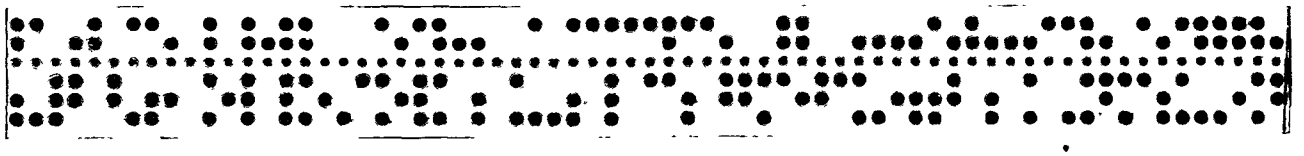


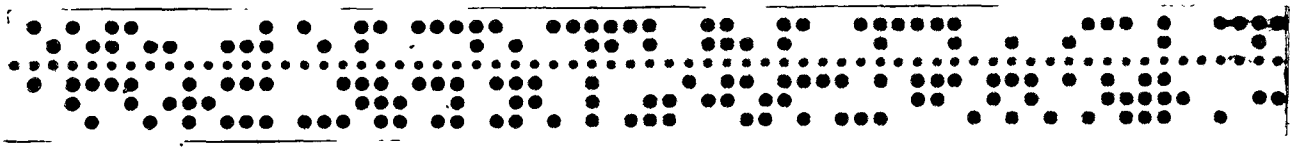


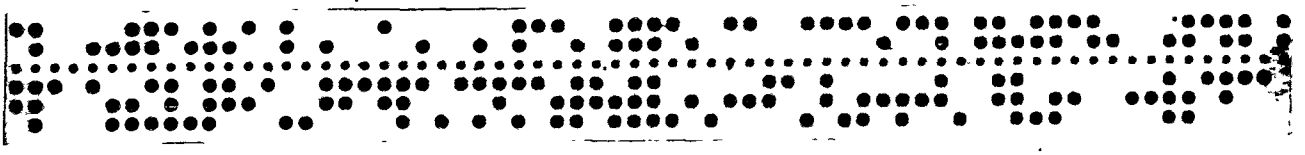












MESSAGE NO. 4 Continued.

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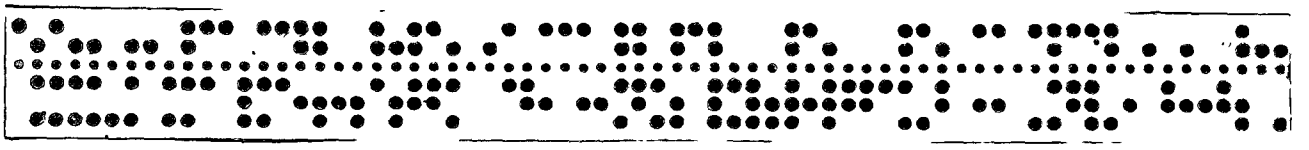

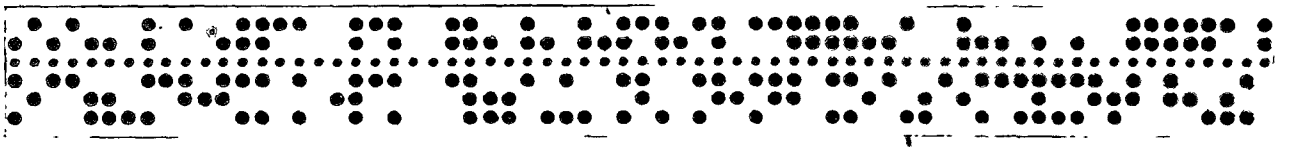

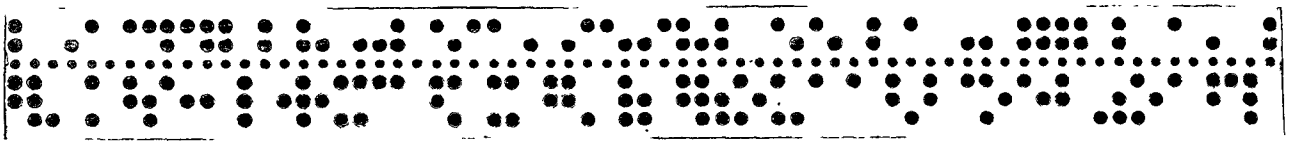

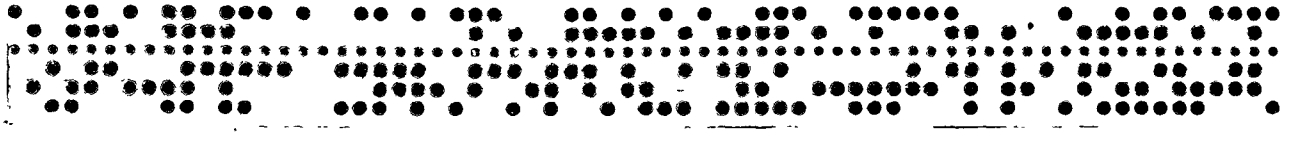

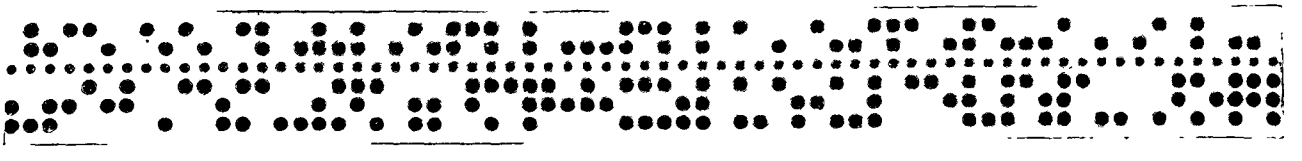

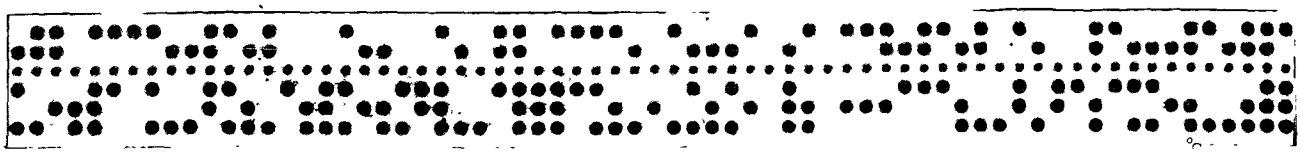

MESSAGE NO. 5 Continued

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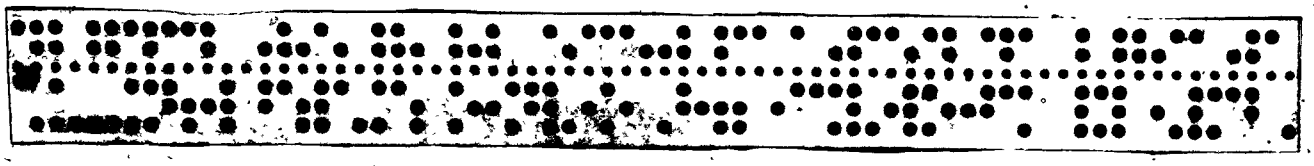
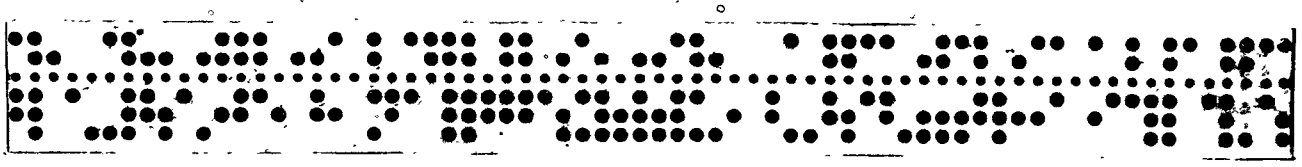
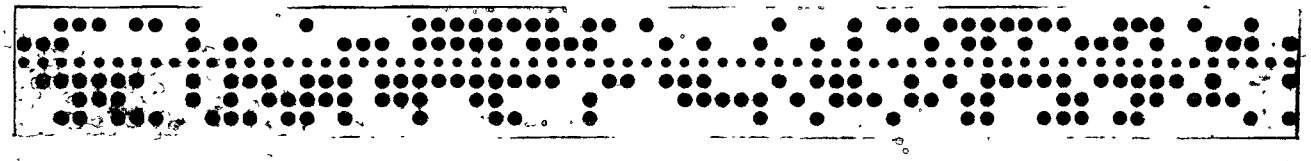
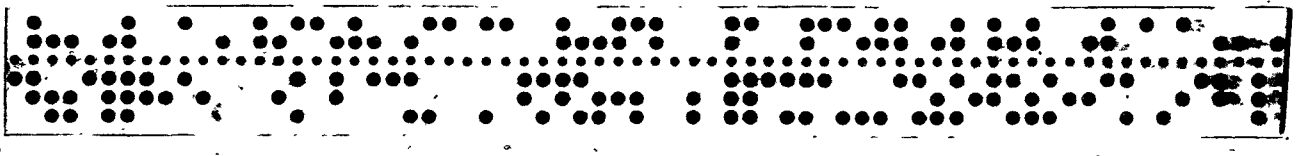
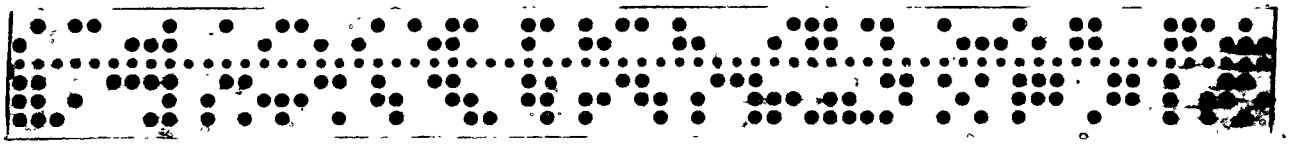
MESSAGE NO. 7

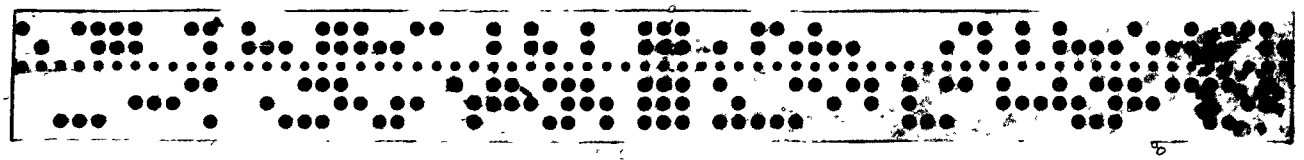












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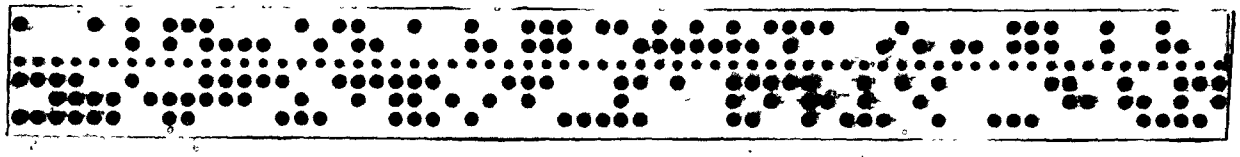

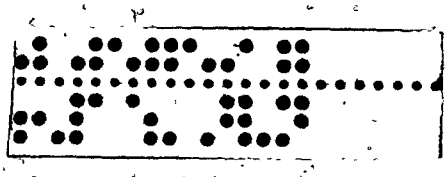

6/1414

MESSAGE NO. 1

DPPPP PPUK4 D0X34 73485 MXC5D K3G3I 4ACJE LSPNN QIWWY 4DZ3X MVDAJ

BXAC4 F8NED 62G2X IKKTJ I4ZNK DUYSC 3WD3D DQDXR 5SDOB 4MZUA 04FMJ

RMEG2 FHE6Q I5WR6 QJY65 LAFGT 4WBOX RZ77C 3D46N K4JPM HZ6LD KPS8X

6GJUD PNB45 ZZF24 PWSUM PZYEB KISKJ 3NOE7 HYARD LMJ5R HD5VF YBRHP

EGGM5 4EPGH 54T2E SGNZ6 WX7H7 JZLNI 6GYMA P2KK7 EQE5E JLF4Q XJAF5

ÉFBW7 ZX0AX EXJPG HLMSC GXTXR VSG2J 2A0YR 5TKZV JANXR CPEB5 SHVTA

YN2J2 AFMLR 5BCKT B8BEM A7L4D 5Y2P6 QMWDK EQSRN JCCJ4 NJAVJ MZ3AU

GWPIN 2O7AY X5NEW 7F5AU 6UMSG FZ66M 76EEJ E6H5I V7T2C BKHNS SRY2Q

J4QI5 3KYQQ 5IGR3 JHDF3 TBQRO VPE3S UDNRL IT3HK IOWSN S7ERO 702ZL

IZKYD K2FN4 XQPEY TE4MP LSJHZ OJMNZ G5GTV LGVST 6ZRQB 60SVK CF6NO

Z4GYB RQEAD GQZGP 5KGVI KLJDX MCIDE JRBFA NN

MESSAGE NO. 2.

DAPPP PPJPJ 5AFMI RT3IO SP5VT TUJ64 4NJ6X 75CHI LQ2XH HLS5K H76T0
WYS22 UHGJS 2GZ7J JJS6Q OPG36 EEK2E UNPZ3 LERYX 4QUUB 43IPA UTT6B
SOR7D 2PRAC YBILF DJGAJ GF7GR BG6NO SYABQ ZUD4Q HJTEP CYOJP YB4RU
AIQDS 7RY5M 56UOP APYAN KCXTH XQ47E 5RO3F FWTNZ U1A5J Z2N76 NAZWZ
GJKKJ NDJZ4 6TQRV SZL5H LKGPZ NSNVY KOTK2 HZ3YN G7QEX GJLR3 YGWSF
VSKD7 RYCJ5 LWBM2 QCEBP DGHCZ WMYCK 6VJDP EGXVF BQEB5 A5QSR BA3FL
KFGVX CUAQ6 V2LVA VF47M 6BJQT K7OOM JEL7G ADDAZ 6JXX5 FIM51 OM6ZA
KYQ53 RNNF7 PBIQB CUNGN WDPTX YACAX LEYSY 263VR PKWJW 6DSYK FWOY4
K55NK LK6EN GRY32 YONAH QFL5H DX3GW 6BJK7 NBAVO EOJSP R2YIS JPZGH
BSHB5 SLFXQ MQDKZ 4RVPL 62IDF RVCDQ PH65E UFIFI GQNSB MWOFP XMMVY
6NOBF KC4B7 SEQ3J OHPYC 6WHZH BGOIB 6GZ5D 75L37 2Y3EQ NACGP 2T40G
NLR

MESSAGE NO. 3.

DAPPP PPJPJ BU4TY 7TD4S MOLY5 5RUC7 H6KNQ ZOSMO Q4RIH YZQPB S7PYR

KESRR PJDRP 6C742 PRJTS 4QLSD 2WRAH WIXAV GCPEI IO7Q4 R5GRT 5EG4C

2WQPV BY4LD D3RW5 UDNAH FP7FQ CRMGG 2FVMA 6CQQ2 AO2TH GR3QY YSU7B

E6LWV 7FTZV OFH72 22F3M KC2ED XD6SJ ED6NZ C7LRP N4N3M X9YVW JYZGP

ZNGJ6 TIRYP VTEAV RUTKF X2Q4F WUGD5 AVQEP PUEKP BLPAN C5JYU HSAHF

VB6UK FY5HO UPMPB ORQUO 6RKCT PPEEN UIBP5 IGHF5 F4BP4 7W7MB LUGYW

TEAPF QKXT6 RMVAA FVBMA EFWOZ 73MQX JIMSG QYPSF XVS5T PEGOH 3PPT6

5OVXV TETGJ KAGEF T73XC EBPHP NGO3O N4GDW HUY5K DQ4JW ACQ7J XPQK4

4XRUD TZVZG 6UCHP EWOXQ QWBSW ES57W MZIKO H3VMR U3NHZ OQHJO HW312

WVAK5 43PSA 3LMVN T4IYN 6RQZG LBGED RDQJH 65AAB 2N5XF CY4KA OPVQG

XHQQP TJR56 QFMQZ O4LOG 7SXUN HN5BY OC6EC MO24P ULDLH JFG7N ZXT3F

7MPJT YEHVJ 3JOXZ I0246 B6S4B PAFED WD5Y3 ZDSKI OEOJE NIIMN AQ32K

2ATFG 2VNUH ZQRSJ U6E7X FFUWM MFYCU 5ADWL S5B7A OY7PN KWQYM D5OPX

PZNEP 4D2JA N5ATK JZKGE X3SMT 6E3G6 UODQN K6SWQ 6XYCV ZI5EC VVZX2

MH56X ORFAG ULIVB PSMJV CODS2 4

MESSAGE NO. 4.

DBPPP	PP3XH	JN4GN	XJELX	[illegible]	[illegible]4455	5ZVT3	GZW3H	NWXV6	XTBTG	JZREC
UJGJ5	LSFVP	65TNK	RAVTW	[illegible]	WZNKA	VVY6E	ZHPLM	4GXS4	OK5QR	VEUTQ
VEHEI	IG5N2	2JEFI	FBBAE	[illegible]	[illegible]	[illegible]	JNYRG	JY7EH	GWIRX	64WUF
V25T5	062E3	MH6DY	DR66A	WO[illegible]A	ZVWOD	CUUMH	OT6ZM	CANZB	R7Q45	25Q4T
3YRXQ	2G7HZ	TBEXE	SUBEC	NHUJN	3PLRG	BCAG2	PEZQC	HSGYW	WJQC7	S2EPU
FLRM4	PPQ7Z	LHKXO	SYXAY	VNZE5	AZ603	JKPOK	Y3HZQ	EFFUT	NPNTI	ZFBM5
47ZEJ	DF537	IGF6Q	XL5CD	3WTCN	3FMIT	3PNQS	BVN65	5ZRTD	DN3ZF	ZBRBD
KTAKV	W6DA2	44V6S	KU3A6	HA44Z	IZ3S7	RII2Q	T6VTY	QAXJM	JQXU5	YRVBP
VN3GR	N4BUL	33PEZ	73QKK	SMAJD	YORWC	EOTST	P2WQ4	E6EIY	UMX3D	A3T

MESSAGE NO. 5.

EPYPP TP2HQ SEMYS J620U GKFP7 2SNDE D4QKH 6E5FM 05DVN N3QZC 7DD7Z
QFXW4 2NR4N 6Y2LP DISGG TQ3F4 GQQEY 745SQ 77U5G QULHW 2QFW2 YK4YF
KAQQR IZ03J PIHVH PNOKA KJWBH AKMT2 Y7FBU DJAMA 45RHP IU7FP EYH2N
CZEVG EKV6H 4YLS2 3ANZN 7IP4U JKAT6 H4S7C 3MAER H6KID 465I5 YS3E7
HYXNX 4ZKSP 4MUKL KGZPE PV6QZ R4B6B FDUV7 V43ZC P6GQX GDFKZ OWGDS
RNELS IOYUT L6PKH MBGAF Q3NNR CRQYQ 037YT IODPL XAS3R 5ZVIG X3LT2
ZNQ4V CMPWJ OXSEY LLKYG W3OMY RGHNX LTU5M XSYBL 4ZPGP D7VB7 DDJIU
SGWTF LN36S PPR6Z L65XP TY44C BRLYB MEW2Z F340V ETBA3 RQWKF CNOOT
LIV37 SMAQ7 UR7OL EU7FZ TSWED HIZGY IK3RR HBLOM 7BSLL ZWUYG QA43C
ACPZZ OTEAZ WMFHA UWGCC GYEE4 JT5Z6 NPHRI B3NMJ ZX6TX UD3KY NAAMI
LKVIC COQCA HJCNF 4HSGF PLXBH VBPSP FXJ4N 4IMCY YQZ2Z ITDPW 236J2
OHBVB TTJQG CC

EPYPP TP2
306-00 53

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MESSAGE NO. 6

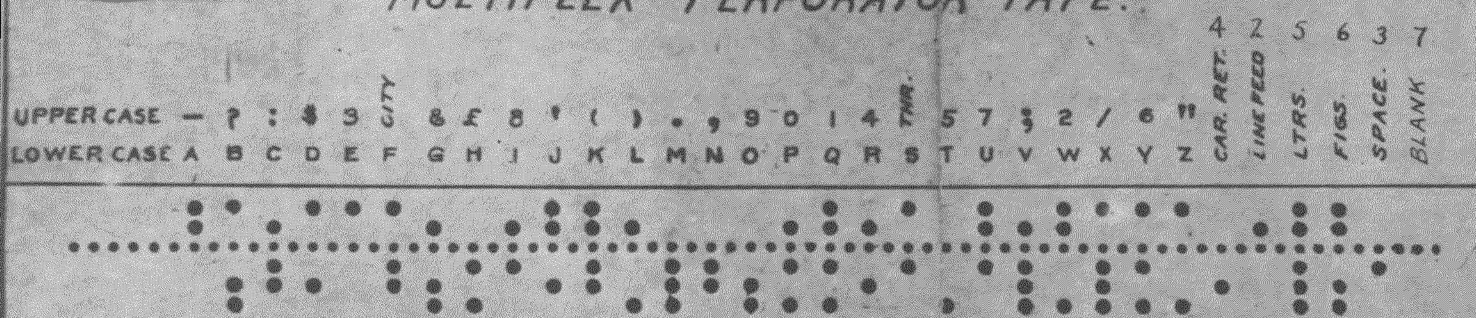
EYUPY YP7TJ ILNAB H6CD4 F2IOE UU34P 7OXTG TW6RB 2XV17 QHDYX X2ZW3
UQLC5 63AAU 5GVR7 OKIUU R3ZWU KUN6S 2HBFA PRG2V PQ6AA 4UCXG WLD46
UWJMV ZYEN2 YK3PW TQNP5 DLSP2 W4JUN UEL77 YPRFM ZGKJP EYU5S EYAVX
RQ2LR HEC3Y WREKZ BUBTL JBY7J GPG3S BPSDW BN75A DJ2US 2H3UN K5L7U
VH37R IHFTE D06A4 QTOXS SGGLY MZ7EK AP77D V6307 UCIM2 RQCYQ YXEW5
UUYPO TEJKK 2NSBB JEKBW JOG2F PJIAM GL62M VAJLA X7DPE AP5RN RHHUE
5WCLW BJWZB 2HG7U EHBHM JK44Q MR4IW EA7LX 76DT5 7F3Q4 DZMDE BJX6P
TOJ4M X5B7B ILCAT DRHQ4 CK5CM HPLTM 7ZIPS DEUVY IYI4L CJH55 HXZVM
YLJKH 47B44 M7AV3 NEDTR UU5RS ZLVLI I74AS BAL4F NLNAO Y6JHK KJ6RR
GO433 GVTMN 7JC7P V2S44 H7SXN APDWG E7PWJ XTWMI KTA37 PHW5N LVJ3J
WCNG4 IIRR6 XC

MESSAGE NO. 7

EWQTW WYQFB JM7CU GXITQ UG7QR JHNXL DYD21 K46BE 4S3P5 ZDVYJ 4FUY7
75H5A RZXHI KETF5 23TZ5 CG3EJ KU42C D7QNS A5SNK K3GYV OVGXQ L47NZ
TK6SF TG6BK MRDS7 D3UM5 E35WS B2IQX FMYZ7 KTVPN OXNV2 CN5UU K5YUU
26S3E INC44 GS4PN K4ZFR S65SU YXGIQ XK3DC RW7P3 KGG3V 5N4S4 27ARY
ECAI3 PZE7Z ENHKP GJBA7 075X3 HQSZL WUHGQ 4KP6H 4RUHE TD3C2 M2VXT
DE3IP 570SH RBDIH 2FOEI KBT7K B76RS FOAG3 3MGDW 60ZQN 7YRP2 XCNAW
NN75A BCQRE 2TZWA J44SQ 7ARLH QVKJL GDE30 KNJPM KO755 57POW ZPURI
N7MTP SANJ4 KGPVF RIUVQ DK2YH MMBOU 46BKC CIHBL SKIMX H4WR3 KUWTZ
XPAIA 25PFU XDTML SRH22 TWWUN 4ANOW VHNGJ TVUEI 6WELC XTQK

EWQTW WYQ
3215226

MULTIPLEX PERFORATOR TAPE.



TO PUNCH UPPER CASE CHARACTERS (NUMBERS AND SYMBOLS) AFTER HAVING PUNCHED LOWER CASE CHARACTERS, FIRST OPERATE "FIGS." KEY.

TO PUNCH LOWER CASE CHARACTERS (LETTERS) AFTER HAVING PUNCHED UPPER CASE CHARACTERS, FIRST OPERATE "LTRS" KEY.

TO RUB OUT AN ERROR IN PUNCHING, BACK SPACE AS FAR AS IS NECESSARY, AND THEN OPERATE THE "LTRS" KEY OVER THE CHARACTERS WHICH ARE TO BE RUBBED OUT, OPERATE SPACE KEY, AND THEN REPUNCH.

AT END OF LINE OPERATE CARRIAGE RETURN TWICE AND LINE FEED ONCE.

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	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	2	3	4	5	6	7
A	7	G	F	R	2	C	B	Q	S	4	N	Z	5	K	6	Y	M	D	I	W	3	X	T	V	F	L	E	U	J	M	O	A
B	G	7	Q	T	O	H	A	F	5	L	P	J	S	Y	E	K	C	W	M	D	V	U	R	3	N	4	6	X	I	Z	2	B
C	F	Q	7	U	K	A	H	G	4	S	E	M	L	2	P	O	B	3	J	V	D	T	X	W	6	5	M	R	I	Z	Y	C
D	R	T	U	7	4	3	W	X	K	2	I	6	Y	S	Z	5	V	A	M	B	C	Q	G	H	M	O	J	F	M	P	L	D
E	2	O	K	4	7	M	6	Y	U	R	O	W	X	F	E	Q	P	J	3	Z	I	5	L	M	H	T	A	S	D	V	G	E
F	C	H	A	3	N	7	Q	B	J	I	2	5	Z	E	Y	6	G	U	4	X	R	W	V	T	O	M	K	D	S	L	P	F
G	B	A	H	W	6	Q	7	C	M	Z	Y	4	I	P	2	N	F	T	5	R	X	3	D	U	K	J	O	V	L	S	E	G
H	Q	F	G	X	Y	B	C	7	L	5	6	I	4	O	N	2	A	V	Z	3	W	R	U	D	B	S	P	T	M	J	K	H
I	S	5	4	K	U	J	M	L	7	F	D	H	G	R	V	T	Z	N	A	P	E	O	Y	6	W	Q	3	2	C	B	X	I
J	4	L	S	2	R	I	Z	5	F	7	3	B	Q	U	W	X	M	R	C	6	N	Y	O	P	V	G	D	K	A	N	T	J
K	N	P	B	I	C	2	Y	6	D	3	7	X	W	A	Q	B	O	S	R	5	4	Z	M	L	G	V	F	J	U	T	H	K
L	Z	J	M	6	W	5	4	I	H	B	X	7	C	V	N	3	S	O	Q	2	Y	N	E	K	U	A	T	P	G	F	D	L
M	5	S	L	Y	X	Z	I	4	G	Q	W	C	7	T	3	R	J	P	B	N	6	2	K	E	D	F	V	O	H	A	U	M
N	K	Y	2	S	F	E	P	O	R	U	A	V	T	7	H	G	6	I	D	M	J	L	5	Z	B	X	C	4	3	W	Q	N
O	6	R	P	Z	B	Y	2	N	V	W	Q	R	3	H	7	C	K	L	X	4	5	I	J	S	F	D	G	M	T	U	A	O
P	Y	K	O	5	Q	6	N	2	T	X	B	3	R	G	C	7	E	M	W	I	Z	4	S	J	A	U	M	L	V	D	P	P
Q	H	C	B	V	P	G	F	A	Z	M	O	S	J	6	K	E	7	X	L	U	T	D	3	R	2	I	Y	W	5	4	M	Q
R	D	W	3	A	J	U	T	V	M	E	S	O	P	I	L	M	X	7	K	G	F	M	B	Q	5	6	4	C	2	Y	Z	R
S	I	M	J	N	3	4	5	Z	A	C	R	Q	B	D	X	W	L	K	7	Y	2	6	P	O	T	M	U	E	F	G	V	S
T	W	D	V	B	Z	X	R	3	P	6	5	2	N	M	4	I	U	G	Y	7	Q	O	A	F	5	N	L	R	G	K	J	T
U	3	V	D	C	I	R	X	W	E	N	4	Y	6	J	5	Z	T	F	2	G	7	B	M	G	L	P	S	A	M	O	M	U
V	X	U	T	Q	5	W	3	R	O	Y	Z	N	2	L	I	4	D	H	6	C	B	7	F	A	J	K	M	G	P	R	S	V
W	T	R	X	G	L	V	D	U	Y	O	M	E	K	5	J	3	3	B	P	A	H	F	7	C	I	2	Z	Q	6	N	4	W
X	V	3	W	H	M	T	U	D	6	P	L	K	E	Z	S	J	R	G	O	F	G	A	C	7	4	M	5	B	Y	2	I	X
Y	P	M	6	M	H	O	K	E	W	V	G	U	D	B	F	A	2	5	T	S	L	J	I	4	7	3	Q	Z	X	R	C	Y
Z	L	4	5	O	T	M	J	S	Q	G	V	A	F	X	D	U	I	6	H	Z	P	K	2	N	3	7	W	Y	B	C	H	Z
2	E	6	N	J	A	K	O	P	3	B	F	T	V	C	G	H	Y	4	U	L	S	M	Z	5	Q	W	7	I	R	X	B	2
3	U	X	R	F	S	D	V	T	2	K	J	P	O	4	M	L	W	C	M	H	A	G	Q	B	Z	Y	I	7	M	6	3	3
4	J	Z	I	M	D	S	L	M	C	A	U	G	H	3	T	V	5	2	F	O	K	F	6	T	X	B	R	M	7	Q	W	4
5	M	I	Z	P	V	L	S	J	B	H	T	F	A	W	U	D	4	Y	G	K	C	E	N	2	N	C	X	6	Q	7	3	5
6	O	2	Y	L	G	P	E	K	I	T	H	D	U	Q	A	F	N	Z	V	J	M	S	4	I	C	R	B	5	W	3	7	6
7	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	2	3	4	5	6	7

In above chart 2 represents Line Feed.
3 " Space.
4 " Carriage Return.
5 " Letters.
6 " Figures.
7 " Blank.

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Printing Telegraph Ciphers.

Colonel G. Fabyan
Riverbank
Geneva
Ill.

June 11, 1918.

Colonel George Fabyan,
Riverbank,
Geneva, Ill.

My dear Colonel Fabyan:

Not having received a reply to the question in my letter of May 25 as to whether you would prefer to have the typewritten ciphered messages or the ciphered tape, I am sending you both enclosed herewith. I am also sending you certain information in regard to the ciphers which is of such a character that I believe if the cipher were to be employed to any extent it would promptly become known to those undertaking to break the cipher. I am not a cipher expert and would not presume to say what can and cannot be done, but should you and Professor Friedman decipher messages Nos. 1, 5, 6 and 7, I shall feel that I owe you both a good dinner. I have no doubt that you can decipher Nos. 2, 3 and perhaps 4. These, however, as you understand are not the arrangement which we propose.

Thank you for the books which arrived a few days ago. I think perhaps if I have time to apply to them that which it

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RECEIPT FOR REGISTERED ARTICLE

pleases me to call my mind, I may be able to master them.

With best regards and trusting to have the pleasure of seeing you again soon

Yours very sincerely,

BG-DH