



Title: Vorbereitung des Plankalküls, logische Formalismen, Schachspiel
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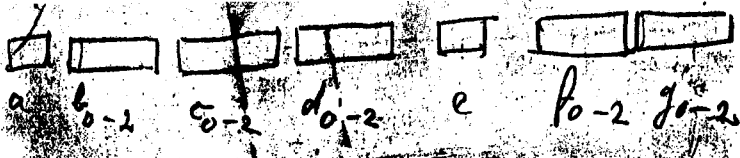


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(187)

012/01

- 1) 1. B. 2) ∞ - $f=c, g=d+1$ | $g \leq d$ $d=e$
 3) ∞ $\times$ $f=c+1, g=d+1$
 4) ∞ - $f=c, g=d-1$ | $d-2$ $d=4$
 5) ∞ $\times$ $f=c+1, g=d-1$

2) ∞ $\left(\begin{matrix} f=c+1 \\ g=d+2 \end{matrix} \right)$ $\rightarrow$ $\left(\begin{matrix} f=c+2 \\ g=d+1 \end{matrix} \right)$

3) ∞ $|c-f| = |d-g|$ $\in \mathbb{N}$
 ∞ ∞ ∞

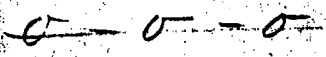
4) ∞ T $f=c$ $\rightarrow$ $g=d$

5) ∞ D $f=c$ $\rightarrow$ $g=d$ $\rightarrow$ $(c-f) = |d-g|$

6) ∞ K $f=c+1$
 ∞ no $g=d+1$



DA



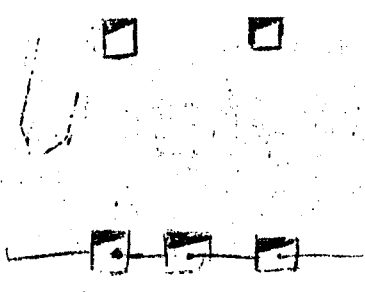
Speichern

Abllesen

	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2
N					a	x														
WV					a	x							a	x						
Z																				
SV																				
WH																				
SH																				
E																				
F																				
A																				
L																				
R																				

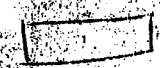
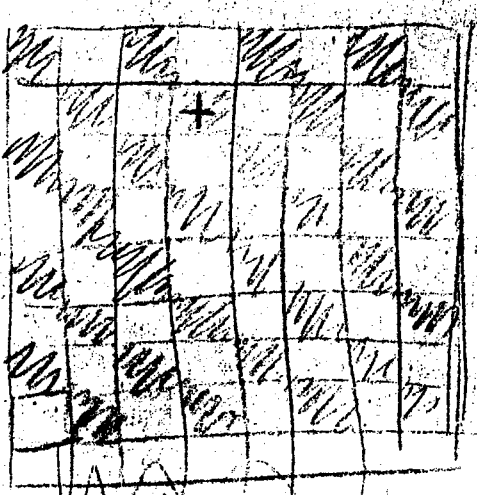
Das Einstellen der Wählnummer und das Ziehen der Relais WV und WH erfolgt bereits in der Tabelle vorher. Trotzdem kann in jedem beliebigen Takt eine Ablesung oder Speicherung erfolgen, da die Takte in der Tabelle sind nur die Takte eingezeichnet, die zur Ausführung einer Ablesung oder Speicherung erforderlich sind. Wenn sich auch der Gesamtvorgang auf mehr als einen Arbeitszyklus erstreckt, so können

(180)



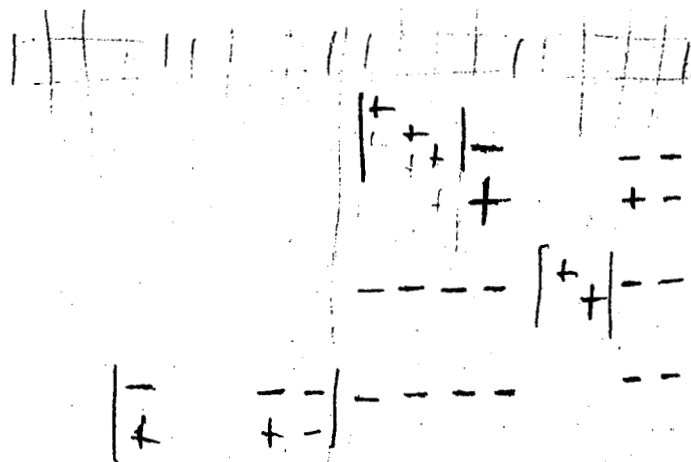
J	31	0
A	28 29	31
M	31	59 60
A	30	90 91
M	31	120 121
J	30	151 152
J	31	181 182
A	31	212 213
g	30	243 244
o	31	274 275
N	30	304 305
O	31	334 335
		365 366

0
3
3
6
4
4

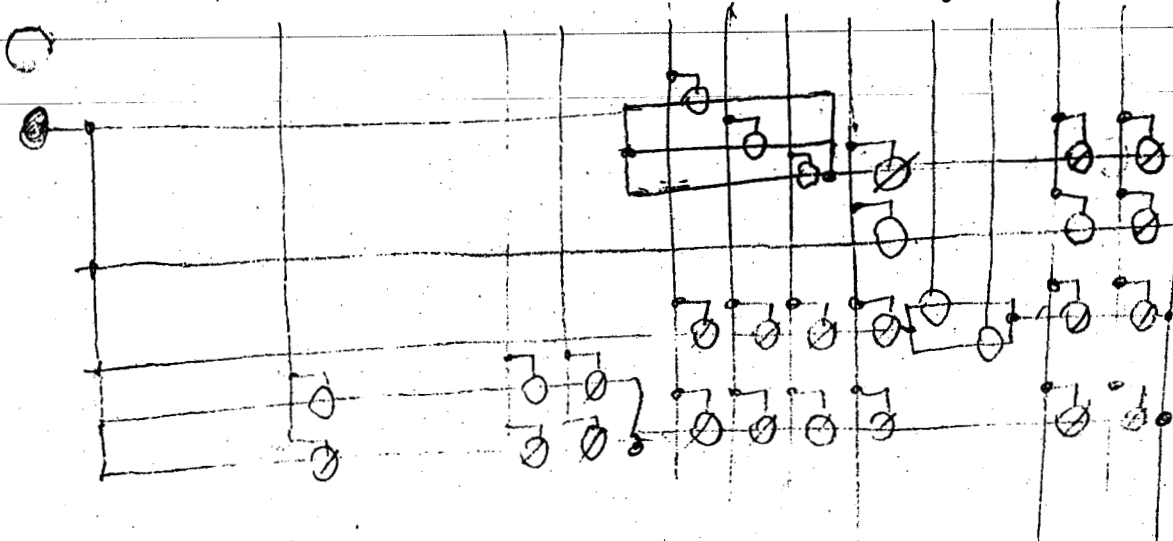


$32 \cdot 4 = 128$

$64 \times 4 = 256$



$a_3 a_2 a_1 a_0$ $b_3 b_2 b_1 b_0$ $c_3 c_2 c_1 c_0$ $d_3 d_2 d_1 d_0$



$$365 \cdot 4 = 52 \frac{1}{4}$$

$$\frac{15}{1}$$

$$125 \frac{12}{12}$$

$$365$$

$$366$$

$$100 / 45$$

$$74 \frac{1}{4}$$

$$24 \frac{1}{2}$$

$$24$$

Dauer-Kalender 1801-1980

Jahre		Monate											
1801-1900	1901-1980	J	F	M	A	M	J	J	A	S	O	N	D
01 206720	26 58 4	0	8	5	8	1	8	2	2	1	0	2	
02 206721	26 58 5	1	1	4	8	2	8	3	3	2	1	8	
03 206722	26 58 6	2	2	8	9	3	9	4	4	3	2	4	
04 206723	26 58 7	3	3	9	10	4	10	5	5	4	3	5	
05 206724	26 58 8	4	4	10	11	5	11	6	6	5	4	6	
06 206725	26 58 9	5	5	11	12	6	12	7	7	6	5	7	
07 206726	26 58 10	6	6	12	1	7	1	8	8	7	6	8	
08 206727	26 58 11	7	7	1	2	8	2	9	9	8	7	9	
09 206728	26 58 12	8	8	2	3	9	3	10	10	9	8	10	
10 206729	26 58 13	9	9	3	4	10	4	11	11	10	9	11	
11 206730	26 58 14	10	10	4	5	11	5	12	12	11	10	12	
12 206731	26 58 15	11	11	5	6	12	6	1	1	12	11	1	
13 206732	26 58 16	12	12	6	7	1	7	2	2	1	12	2	
14 206733	26 58 17	1	1	7	8	2	8	3	3	2	1	3	
15 206734	26 58 18	2	2	8	9	3	9	4	4	3	2	4	
16 206735	26 58 19	3	3	9	10	4	10	5	5	4	3	5	
17 206736	26 58 20	4	4	10	11	5	11	6	6	5	4	6	
18 206737	26 58 21	5	5	11	12	6	12	7	7	6	5	7	
19 206738	26 58 22	6	6	12	1	7	1	8	8	7	6	8	
20 206739	26 58 23	7	7	1	2	8	2	9	9	8	7	9	
21 206740	26 58 24	8	8	2	3	9	3	10	10	9	8	10	
22 206741	26 58 25	9	9	3	4	10	4	11	11	10	9	11	
23 206742	26 58 26	10	10	4	5	11	5	12	12	11	10	12	
24 206743	26 58 27	11	11	5	6	12	6	1	1	12	11	1	
25 206744	26 58 28	12	12	6	7	1	7	2	2	1	12	2	
26 206745	26 58 29	1	1	7	8	2	8	3	3	2	1	3	
27 206746	26 58 30	2	2	8	9	3	9	4	4	3	2	4	
28 206747	26 58 31	3	3	9	10	4	10	5	5	4	3	5	
29 206748	26 58 32	4	4	10	11	5	11	6	6	5	4	6	
30 206749	26 58 33	5	5	11	12	6	12	7	7	6	5	7	
31 206750	26 58 34	6	6	12	1	7	1	8	8	7	6	8	
32 206751	26 58 35	7	7	1	2	8	2	9	9	8	7	9	
33 206752	26 58 36	8	8	2	3	9	3	10	10	9	8	10	
34 206753	26 58 37	9	9	3	4	10	4	11	11	10	9	11	
35 206754	26 58 38	10	10	4	5	11	5	12	12	11	10	12	
36 206755	26 58 39	11	11	5	6	12	6	1	1	12	11	1	
37 206756	26 58 40	12	12	6	7	1	7	2	2	1	12	2	
38 206757	26 58 41	1	1	7	8	2	8	3	3	2	1	3	
39 206758	26 58 42	2	2	8	9	3	9	4	4	3	2	4	
40 206759	26 58 43	3	3	9	10	4	10	5	5	4	3	5	
41 206760	26 58 44	4	4	10	11	5	11	6	6	5	4	6	
42 206761	26 58 45	5	5	11	12	6	12	7	7	6	5	7	
43 206762	26 58 46	6	6	12	1	7	1	8	8	7	6	8	
44 206763	26 58 47	7	7	1	2	8	2	9	9	8	7	9	
45 206764	26 58 48	8	8	2	3	9	3	10	10	9	8	10	
46 206765	26 58 49	9	9	3	4	10	4	11	11	10	9	11	
47 206766	26 58 50	10	10	4	5	11	5	12	12	11	10	12	
48 206767	26 58 51	11	11	5	6	12	6	1	1	12	11	1	
49 206768	26 58 52	12	12	6	7	1	7	2	2	1	12	2	
50 206769	26 58 53	1	1	7	8	2	8	3	3	2	1	3	
51 206770	26 58 54	2	2	8	9	3	9	4	4	3	2	4	
52 206771	26 58 55	3	3	9	10	4	10	5	5	4	3	5	
53 206772	26 58 56	4	4	10	11	5	11	6	6	5	4	6	
54 206773	26 58 57	5	5	11	12	6	12	7	7	6	5	7	
55 206774	26 58 58	6	6	12	1	7	1	8	8	7	6	8	
56 206775	26 58 59	7	7	1	2	8	2	9	9	8	7	9	
57 206776	26 58 60	8	8	2	3	9	3	10	10	9	8	10	
58 206777	26 58 61	9	9	3	4	10	4	11	11	10	9	11	
59 206778	26 58 62	10	10	4	5	11	5	12	12	11	10	12	
60 206779	26 58 63	11	11	5	6	12	6	1	1	12	11	1	
61 206780	26 58 64	12	12	6	7	1	7	2	2	1	12	2	
62 206781	26 58 65	1	1	7	8	2	8	3	3	2	1	3	
63 206782	26 58 66	2	2	8	9	3	9	4	4	3	2	4	
64 206783	26 58 67	3	3	9	10	4	10	5	5	4	3	5	
65 206784	26 58 68	4	4	10	11	5	11	6	6	5	4	6	
66 206785	26 58 69	5	5	11	12	6	12	7	7	6	5	7	
67 206786	26 58 70	6	6	12	1	7	1	8	8	7	6	8	
68 206787	26 58 71	7	7	1	2	8	2	9	9	8	7	9	
69 206788	26 58 72	8	8	2	3	9	3	10	10	9	8	10	
70 206789	26 58 73	9	9	3	4	10	4	11	11	10	9	11	
71 206790	26 58 74	10	10	4	5	11	5	12	12	11	10	12	
72 206791	26 58 75	11	11	5	6	12	6	1	1	12	11	1	
73 206792	26 58 76	12	12	6	7	1	7	2	2	1	12	2	
74 206793	26 58 77	1	1	7	8	2	8	3	3	2	1	3	
75 206794	26 58 78	2	2	8	9	3	9	4	4	3	2	4	
76 206795	26 58 79	3	3	9	10	4	10	5	5	4	3	5	
77 206796	26 58 80	4	4	10	11	5	11	6	6	5	4	6	
78 206797	26 58 81	5	5	11	12	6	12	7	7	6	5	7	
79 206798	26 58 82	6	6	12	1	7	1	8	8	7	6	8	
80 206799	26 58 83	7	7	1	2	8	2	9	9	8	7	9	
81 206800	26 58 84	8	8	2	3	9	3	10	10	9	8	10	
82 206801	26 58 85	9	9	3	4	10	4	11	11	10	9	11	
83 206802	26 58 86	10	10	4	5	11	5	12	12	11	10	12	
84 206803	26 58 87	11	11	5	6	12	6	1	1	12	11	1	
85 206804	26 58 88	12	12	6	7	1	7	2	2	1	12	2	
86 206805	26 58 89	1	1	7	8	2	8	3	3	2	1	3	
87 206806	26 58 90	2	2	8	9	3	9	4	4	3	2	4	
88 206807	26 58 91	3	3	9	10	4	10	5	5	4	3	5	
89 206808	26 58 92	4	4	10	11	5	11	6	6	5	4	6	
90 206809	26 58 93	5	5	11	12	6	12	7	7	6	5	7	
91 206810	26 58 94	6	6	12	1	7	1	8	8	7	6	8	
92 206811	26 58 95	7	7	1	2	8	2	9	9	8	7	9	
93 206812	26 58 96	8	8	2	3	9	3	10	10	9	8	10	
94 206813	26 58 97	9	9	3	4	10	4	11	11	10	9	11	
95 206814	26 58 98	10	10	4	5	11	5	12	12	11	10	12	
96 206815	26 58 99	11	11	5	6	12	6	1	1	12	11	1	
97 206816	26 58 00	12	12	6	7	1	7	2	2	1	12	2	
98 206817	26 58 01	1	1	7	8	2	8	3	3	2	1	3	
99 206818	26 58 02	2	2	8	9	3	9	4	4	3	2	4	
00 206819	26 58 03	3	3	9	10	4	10	5	5	4	3	5	

Beispiel:
 Ermittlung des 4. März 1900:
 Neben 00 steht in der Spalte
 M = März die Ziffer 4, hinzu-
 zuzählen ist der Tag: 4+4=8.
 Vor 8 steht in der unteren Tafel S = Sonntag.

~~ist p. p. n. n.~~

~~E(x)~~ = ~~n~~ ~~f~~, ~~n~~ ~~all~~

1.) ~~n~~ ~~f~~, ~~n~~ ~~all~~

2.) ~~n~~ ~~f~~, ~~n~~ ~~all~~

3.) ~~n~~ ~~f~~, ~~n~~ ~~all~~

~~B~~ ~~L~~ ~~-~~ ~~1~~ ~~5~~ ~~f~~ ~~n~~

~~S~~ ~~g~~ ~~h~~ ~~i~~

~~S~~ = ~~f~~ (x, y)

~~Ag~~ (x, y)

W(x). x ~ ~~f~~

$E(x) [Ag(x, k) \wedge W(x)]$

$E(x) [W(x) \wedge Ag(x, k)] \wedge E(y) [g(y) \wedge Ag(y, x)] \wedge \overline{E(p)} [g(x) \wedge D]$

$\wedge \overline{E(p)} E(x) [Zur(x, f, y) \wedge g(x) \wedge Ag(z, f)] \wedge \overline{E(g)} [F(g) \wedge (\overline{E(s)} (x, y) \wedge g(x))]$

~~Ag~~ (x, y) ~~z~~ ~~h~~ ~~x~~ ~~f~~ ~~g~~ ~~h~~ ~~z~~

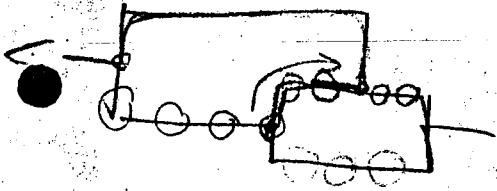
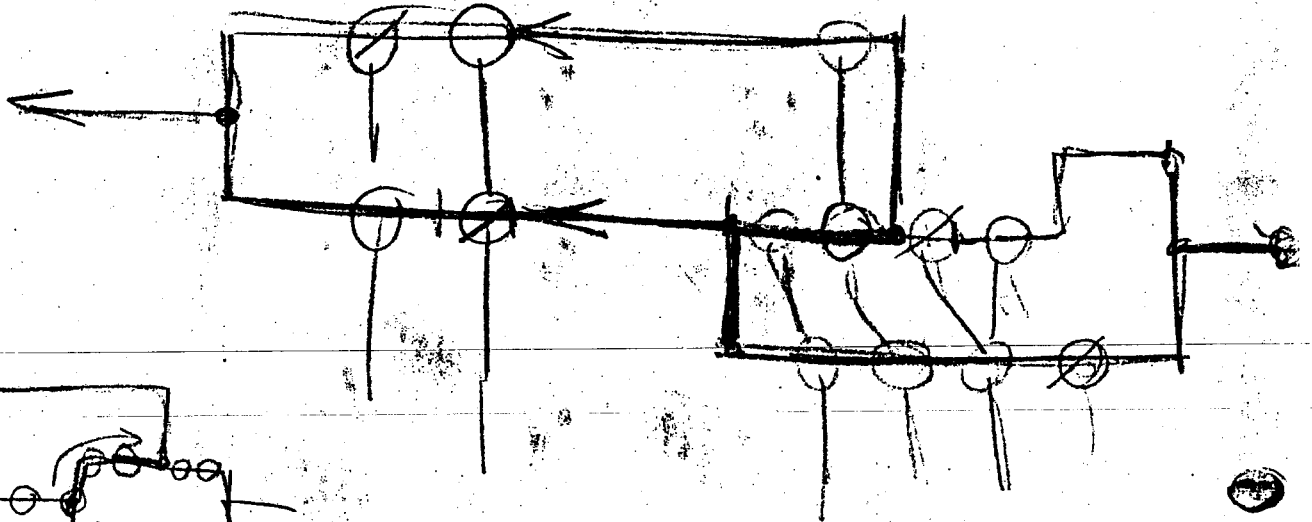
~~z~~ ~~g~~ ~~f~~ ~~g~~ ~~h~~ ~~z~~ ~~n~~

$Bes(x) \wedge (Bes(y) \rightarrow \overline{Rel}(x, y)) \wedge (\overline{Bes(y)} \rightarrow Rel(x, y))$

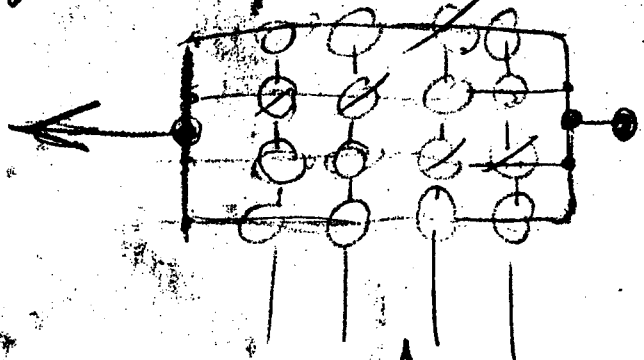
$Sch. (x, y)$	$Bes (x)$		
$Sch. (x, y)$		$Zug (x, y)$	$Zug (x, y)$
$Sch. ' (x, y)$			$Zug (x, y)$
$Sch. ' (x, y)$			Zug

Berlin, den 20. Januar 1940

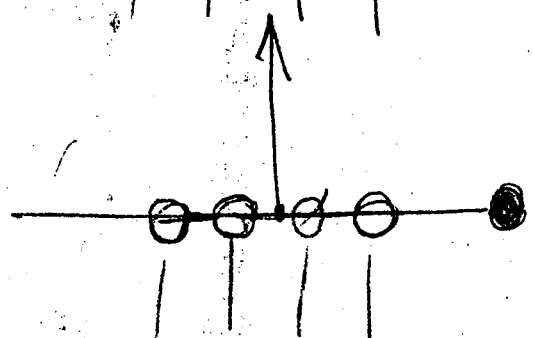
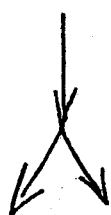
Dipl;



$l > n$ $l < n$ $l = n$



$l > n$ $l < n$ $l = n$



Dipl;

Berlin, den 20. Januar 1940

2. $g(x, y) \rightarrow f: x \neq y$
 1.) $x \sim ky$

(29)

$$(\Delta x \leq 1) \wedge (\Delta y \leq 1) \wedge ((\Delta x = 0) \vee (\Delta x = +1) \vee (\Delta x = -1) \wedge (\Delta y = 0) \vee (\Delta y = +1) \vee (\Delta y = -1))$$

$$(\Delta x = 000) \vee (\Delta x = 001) \vee (\Delta x = 010) \sim \text{~~False~~} (\Delta x = \frac{+001}{000} \text{ or } -001)$$

$$\sim (\Delta x = 0 \dots 0)$$

$$(\Delta x = 0 \dots 0) \wedge (\Delta y = 0 \dots 0) \sim \text{~~False~~} \Delta x \wedge \Delta y = \boxed{0 \dots 0}$$

Out. (x, y) Diag (x, y) Spr. (x, y) Wb. (x, y) Id. (x, y)
 Fr. (x, y) Rr. (x, y) Rs. (x, y)

$$(\Delta x, \Delta y = \begin{pmatrix} \pm 1, \pm 2 \\ \pm 2, \pm 1 \end{pmatrix})$$

$$[(\Delta x = \pm 1) \wedge (\Delta y = \pm 2)] \vee [(\Delta x = \pm 2) \wedge (\Delta y = \pm 1)] \sim \text{Spr.}(x, y)$$

$$\Delta x = 0 \wedge \Delta y = 0 \sim (\Delta x = 0) \vee (\Delta y = 0) \sim \text{True}(x, y)$$

$$(\Delta x = \Delta y) \sim \text{Lf}(x, y)$$

$$(\Delta x = 0) \vee (\Delta y = 0) \vee (\Delta x = |\Delta y|) \sim \text{Da}(x, y)$$

$$(\Delta x = 0) \wedge (\Delta y = +1) \sim \text{Wbset}(x, y)$$

$$(\Delta x = 0) \wedge (\Delta y = -1) \sim \text{Wbset}(x, y)$$

$$|\Delta x| = 1 \wedge (\Delta y = +1) \sim \text{Wbset}(x, y)$$

$$|\Delta x| = 1 \wedge (\Delta y = -1) \sim \text{Wbset}(x, y)$$

$$\neg: a \wedge b$$

$$\neg: a$$

$$h_1: a \wedge c$$

$$f_1: a \wedge \bar{c}$$

$$f_2: \bar{a} \wedge b$$

$$f_3: a \wedge b \wedge c \wedge d$$

$$f_4: a \wedge b \wedge \bar{c} \wedge d$$

$$f_5: a \wedge b \wedge c \wedge \bar{d}$$

$$f_6: a \wedge b \wedge \bar{c} \wedge \bar{d}$$

$$c = \bar{c} \quad \bar{a} \wedge \bar{b} \wedge \bar{c}$$

$$h_2:$$

$$f_1 \sim f_2 \sim f_3 \sim f_4 \sim f_5 \sim f_6$$

$$\alpha, \beta$$

$$\alpha \neq \beta \quad \beta \neq \gamma$$

$$1.) \alpha = \beta$$

$$c = \bar{c} \quad a \sim + \quad b \sim -$$

$$2.) c \sim: \Delta_x, \Delta_y$$

$$[3,3]$$

$$3.) \Delta_x = \Delta_y$$

$$\vec{v} = \vec{v}$$

$$a' \sim [(A_x = 001) \wedge (A_y = 010)] \vee [(A_x = 010) \wedge (A_y = 001)]$$

$$b' \sim [(A_x = 000) \wedge (A_y = 001)] \vee [(A_x = 001) \wedge (A_y = 000)]$$

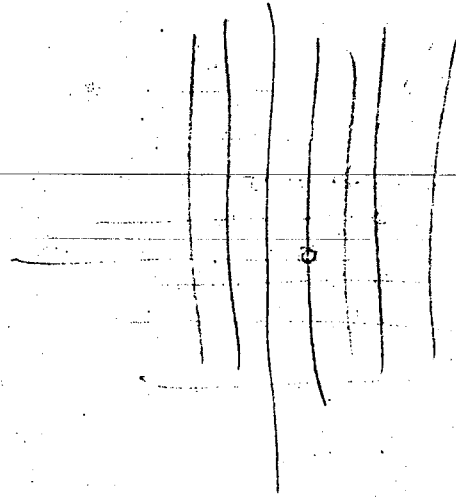
$$\vee [(A_x = 001) \wedge (A_y = 001)]$$

$$\sim (A_x = 000) \vee (A_x = 001) \wedge (A_y = 000) \wedge (A_y = 001) \wedge (A_x = 000) \wedge (A_y = 000)$$

11) $\vec{h} = c \cdot \vec{v}$ $(A_x = \sigma)$?
 $(A_y = \sigma)$?

$\vec{v} = \vec{v}$

$c \cdot A_x = \sigma - A_y \neq \sigma$ — $\vec{v} = \vec{v}$ ✓
 $\vec{v} = \vec{v}$ ✓



1.) $\frac{2}{3}$ $\frac{2}{3}$ $\frac{2}{3}$

2.) $\frac{1}{\sqrt{x^2+1}}$

2019

6) Wiederholung

9/10/1902

272.



1) " 22 Oct 2011 " 20/10/11 20/11/11

2.) " - " - " - " - " - " - "

My wife and son to Mr. ...

$\frac{1}{\sqrt{2}} \left(\begin{matrix} 1 & i \\ -1 & 1 \end{matrix} \right)$

W. C. C. Craft and J. L. L.

2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22nd, 23rd, 24th, 25th, 26th, 27th, 28th, 29th, 30th, 31st, 32nd, 33rd, 34th, 35th, 36th, 37th, 38th, 39th, 40th, 41st, 42nd, 43rd, 44th, 45th, 46th, 47th, 48th, 49th, 50th, 51st, 52nd, 53rd, 54th, 55th, 56th, 57th, 58th, 59th, 60th, 61st, 62nd, 63rd, 64th, 65th, 66th, 67th, 68th, 69th, 70th, 71st, 72nd, 73rd, 74th, 75th, 76th, 77th, 78th, 79th, 80th, 81st, 82nd, 83rd, 84th, 85th, 86th, 87th, 88th, 89th, 90th, 91st, 92nd, 93rd, 94th, 95th, 96th, 97th, 98th, 99th, 100th, 101st, 102nd, 103rd, 104th, 105th, 106th, 107th, 108th, 109th, 110th, 111th, 112th, 113th, 114th, 115th, 116th, 117th, 118th, 119th, 120th, 121st, 122nd, 123rd, 124th, 125th, 126th, 127th, 128th, 129th, 130th, 131st, 132nd, 133rd, 134th, 135th, 136th, 137th, 138th, 139th, 140th, 141st, 142nd, 143rd, 144th, 145th, 146th, 147th, 148th, 149th, 150th, 151st, 152nd, 153rd, 154th, 155th, 156th, 157th, 158th, 159th, 160th, 161st, 162nd, 163rd, 164th, 165th, 166th, 167th, 168th, 169th, 170th, 171st, 172nd, 173rd, 174th, 175th, 176th, 177th, 178th, 179th, 180th, 181st, 182nd, 183rd, 184th, 185th, 186th, 187th, 188th, 189th, 190th, 191st, 192nd, 193rd, 194th, 195th, 196th, 197th, 198th, 199th, 200th, 201st, 202nd, 203rd, 204th, 205th, 206th, 207th, 208th, 209th, 210th, 211th, 212th, 213th, 214th, 215th, 216th, 217th, 218th, 219th, 220th, 221st, 222nd, 223rd, 224th, 225th, 226th, 227th, 228th, 229th, 230th, 231st, 232nd, 233rd, 234th, 235th, 236th, 237th, 238th, 239th, 240th, 241st, 242nd, 243rd, 244th, 245th, 246th, 247th, 248th, 249th, 250th, 251st, 252nd, 253rd, 254th, 255th, 256th, 257th, 258th, 259th, 260th, 261st, 262nd, 263rd, 264th, 265th, 266th, 267th, 268th, 269th, 270th, 271st, 272nd, 273rd, 274th, 275th, 276th, 277th, 278th, 279th, 280th, 281st, 282nd, 283rd, 284th, 285th, 286th, 287th, 288th, 289th, 290th, 291st, 292nd, 293rd, 294th, 295th, 296th, 297th, 298th, 299th, 300th, 301st, 302nd, 303rd, 304th, 305th, 306th, 307th, 308th, 309th, 310th, 311th, 312th, 313th, 314th, 315th, 316th, 317th, 318th, 319th, 320th, 321st, 322nd, 323rd, 324th, 325th, 326th, 327th, 328th, 329th, 330th, 331st, 332nd, 333rd, 334th, 335th, 336th, 337th, 338th, 339th, 340th, 341st, 342nd, 343rd, 344th, 345th, 346th, 347th, 348th, 349th, 350th, 351st, 352nd, 353rd, 354th, 355th, 356th, 357th, 358th, 359th, 360th, 361st, 362nd, 363rd, 364th, 365th, 366th, 367th, 368th, 369th, 370th, 371st, 372nd, 373rd, 374th, 375th, 376th, 377th, 378th, 379th, 380th, 381st, 382nd, 383rd, 384th, 385th, 386th, 387th, 388th, 389th, 390th, 391st, 392nd, 393rd, 394th, 395th, 396th, 397th, 398th, 399th, 400th, 401st, 402nd, 403rd, 404th, 405th, 406th, 407th, 408th, 409th, 410th, 411th, 412th, 413th, 414th, 415th, 416th, 417th, 418th, 419th, 420th, 421st, 422nd, 423rd, 424th, 425th, 426th, 427th, 428th, 429th, 430th, 431st, 432nd, 433rd, 434th, 435th, 436th, 437th, 438th, 439th, 440th, 441st, 442nd, 443rd, 444th, 445th, 446th, 447th, 448th, 449th, 450th, 451st, 452nd, 453rd, 454th, 455th, 456th, 457th, 458th, 459th, 460th, 461st, 462nd, 463rd, 464th, 465th, 466th, 467th, 468th, 469th, 470th, 471st, 472nd, 473rd, 474th, 475th, 476th, 477th, 478th, 479th, 480th, 481st, 482nd, 483rd, 484th, 485th, 486th, 487th, 488th, 489th, 490th, 491st, 492nd, 493rd, 494th, 495th, 496th, 497th, 498th, 499th, 500th, 501st, 502nd, 503rd, 504th, 505th, 506th, 507th, 508th, 509th, 510th, 511th, 512th, 513th, 514th, 515th, 516th, 517th, 518th, 519th, 520th, 521st, 522nd, 523rd, 524th, 525th, 526th, 527th, 528th, 529th, 530th, 531st, 532nd, 533rd, 534th, 535th, 536th, 537th, 538th, 539th, 540th, 541st, 542nd, 543rd, 544th, 545th, 546th, 547th, 548th, 549th, 550th, 551st, 552nd, 553rd, 554th, 555th, 556th, 557th, 558th, 559th, 560th, 561st, 562nd, 563rd, 564th, 565th, 566th, 567th, 568th, 569th, 570th, 571st, 572nd, 573rd, 574th, 575th, 576th, 577th, 578th, 579th, 580th, 581st, 582nd, 583rd, 584th, 585th, 586th, 587th, 588th, 589th, 590th, 591st, 592nd, 593rd, 594th, 595th, 596th, 597th, 598th, 599th, 600th, 601st, 602nd, 603rd, 604th, 605th, 606th, 607th, 608th, 609th, 610th, 611th, 612th, 613th, 614th, 615th, 616th, 617th, 618th, 619th, 620th, 621st, 622nd, 623rd, 624th, 625th, 626th, 627th, 628th, 629th, 630th, 631st, 632nd, 633rd, 634th, 635th, 636th, 637th, 638th, 639th, 640th, 641st, 642nd, 643rd, 644th, 645th, 646th, 647th, 648th, 649th, 650th, 651st, 652nd, 653rd, 654th, 655th, 656th, 657th, 658th, 659th, 660th, 661st, 662nd, 663rd, 664th, 665th, 666th, 667th, 668th, 669th, 670th, 671st, 672nd, 673rd, 674th, 675th, 676th, 677th, 678th, 679th, 680th, 681st, 682nd, 683rd, 684th, 685th, 686th, 687th, 688th, 689th, 690th, 691st, 692nd, 693rd, 694th, 695th, 696th, 697th, 698th, 699th, 700th, 701st,

Wm. W. Phelps

2. B.) 

[Faint handwritten notes]

2.c) - by N_2 - $\sim B$ - $\sim \gamma$
 $\sim \text{end } \gamma$ $\sim K$ $\sim \gamma$ K $\sim \gamma$

$zw(A, B; \xi)$

$A \text{ p } \boxed{3,3}$

$A_{x_{0,1,2}} A_{y_{0,1,2}}$

$B \text{ p } \boxed{3,3}$

$B_{x_{0,1,2}} B_{y_{0,1,2}}$

$\xi \text{ p } \boxed{D,3,3}$

$\xi \in \xi_{x,k} \xi_{y,k_{0,1,2}}$

$zw(A, \Delta x, \Delta y; \varphi)$

$A \text{ p } \boxed{3,3}$

$\Delta x \text{ p } \boxed{1,3}$

$\Delta y \text{ p } \boxed{1,3}$

$\xi \text{ p } \boxed{1,1} \boxed{3,3}$

$\xi_1 \xi_{2,n,1,0} \xi_{2,n,1,1} \xi_{2,n,1,2}$

$\xi_{2,n,2,0} \xi_{2,n,2,1} \xi_{2,n,2,2}$

~~$(\Delta x_2 = 000) \wedge (\Delta y_2 = 000) [a \wedge b]$~~

$(\Delta x_2 = 000) \vee (\Delta y_2 = 000) \rightarrow \overline{\xi_1}$

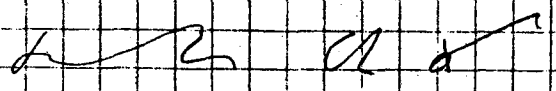
$\overline{\xi_1} \rightarrow (\xi_2 \sim \omega)$

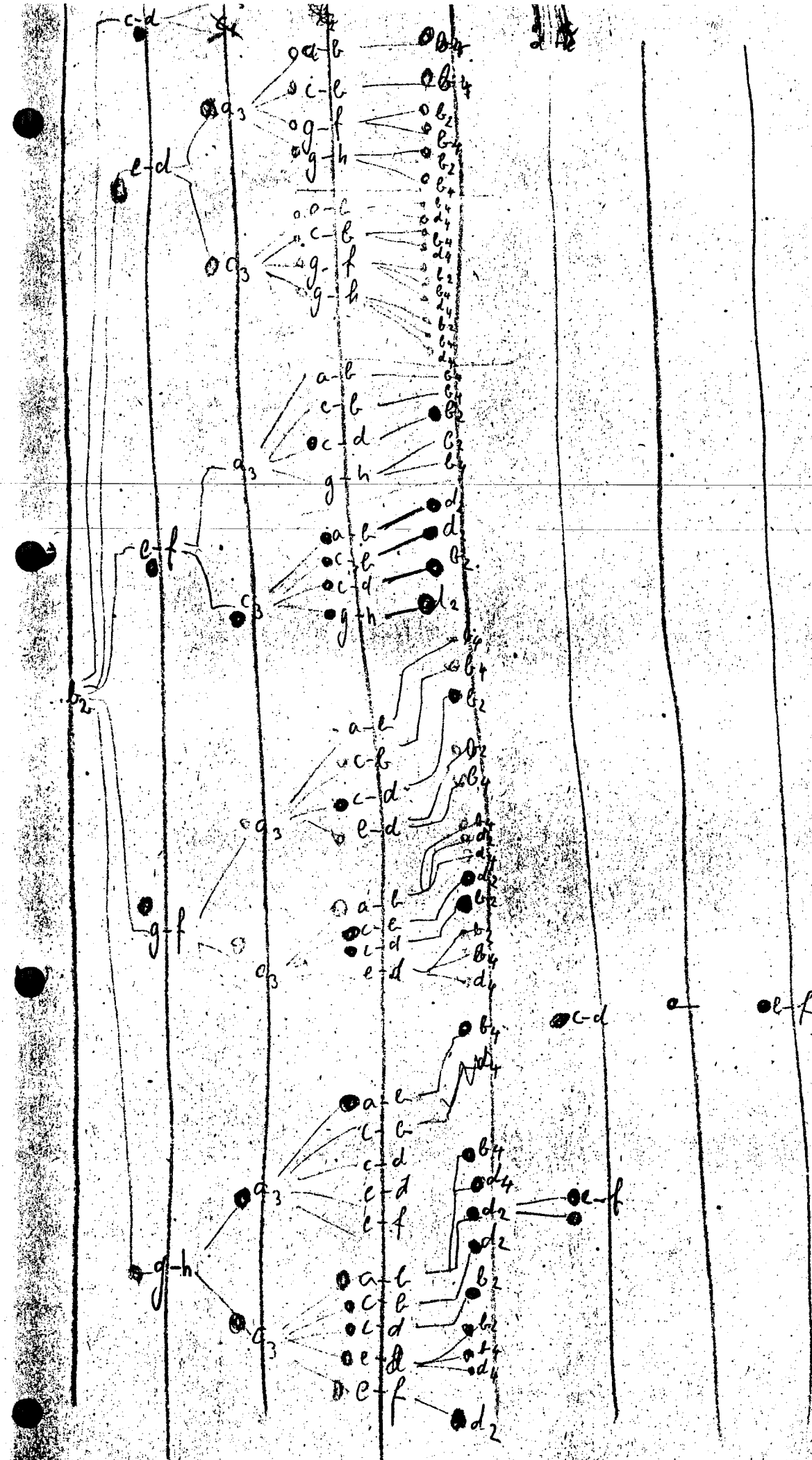
(40 x 120 x 220 mm) und die Konstruktion strapazierfähig, so daß sie im Felde als Zusatzgeräte im Nachrichtenwesen verwandt werden können.

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[Ch. G. L.] 30. 8. 69



Nachrichtengeräte.

Das im Zusammenhang mit der Rechenmaschine entwickelte Speicherwerk lässt sich zu folgenden Nachrichtengeräten ohne Schwierigkeiten abwandeln:

- 1.) Als einfaches Speicherwerk für Schriftsätze aller Art, z. B. Telegramme und Adressen.
- 2.) Als Kiffrier- und Dekiffrier-Maschine.

Voraussetzung ist die Auflösung der Zeichen (Buchstaben) in Kombinationen zweifach variabler Angaben wie es in der Telegraphie und bei Fernschrebmaschinen bereits üblich ist. Bei Benutzung dieser bekannten Einrichtungen lassen sich die genannten Vorrichtungen ohne weiteres einschalten. Jedoch ist ihre Verwendung nicht an diese Einrichtungen gebunden; es lassen sich einfache Vorrichtungen entwickeln, um direkt von der Morsetaste aus zu speichern und zu kiffrieren und umgekehrt.

Kan 1. $KH(x, y)$

$x_0 \sim x_1$: $x \mid \mathbb{D}$
 $y \mid \mathbb{D}$

$x_0 \sim x_2$: $x \mid \mathbb{D}$

$x_2 x_1 x_0$

$y_2 y_1 y_0$

z_v [✓]

$z_2 z_1 z_0$

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$$x_0 \sim y_0 \rightarrow R_0'$$

$$x_0 \cap y_0 \rightarrow u_1$$

$$u_0 \cap R_0' \rightarrow u_1$$

$$u_0 \sim R_0' \rightarrow R_0$$

$$u_0 \equiv +$$

$$x_1 \sim y_1 \rightarrow R_1'$$

$$x_1 \cap y_1 \rightarrow u_2$$

$$u_1 \cap R_1' \rightarrow u_2$$

$$u_1 \sim R_1' \rightarrow R_1$$

$$x_2 \sim y_2 \rightarrow R_2'$$

$$x_2 \cap y_2 \rightarrow u_3$$

$$u_2 \cap R_2' \rightarrow u_3$$

$$u_2 \sim R_2' \rightarrow R_2$$

$$u_3 \rightarrow \bar{z}_v$$

$$\bar{u}_3 \rightarrow \left[\begin{array}{l} (z_0 \sim R_0) \\ \cap (z_1 \sim R_1) \\ \cap (z_2 \sim R_2) \end{array} \right]$$

$$u_3 \rightarrow \left[\begin{array}{l} (z_0 \sim \bar{R}_0) \\ \cap (z_1 \sim \bar{R}_1) \\ \cap (z_2 \sim \bar{R}_2) \end{array} \right]$$

Pl: $d_1 d_2 d_3 d_4 d_5 d_6$

$$d_1 \sim d_2 \rightarrow d_6$$

$$d_1 \cap d_2 \rightarrow d_4$$

$$d_3 \cap d_6 \rightarrow d_4$$

$$d_3 \sim d_6 \rightarrow d_5$$

I	$x_0 y_0$	+	$u_1 z_0$
II	$x_1 y_1$	u_1	$u_2 z_1$
III	$x_2 y_2$	u_2	$u_3 z_2$

5. Ellipsen unter nach dem Punkt 1-4.
dunkel gezeichnet, dass der Punkt
an einer der unteren Punkte als
Linie angeordnet ist, dessen Länge
gleich dem Abstand der Punkte ist
und die von der Ellipse mit einer
ist * und das in der Mitte mit einer
Einkerbung versehen ist, so dass die

Einschreibung auf die Hauptachsen
dieser Ellipsen der Himmelskante an
eine bestimmte Lage Hauptachse
im Abstand der beiden Himmelskante
Ellipsen kann.

6. Ellipsen unter nach dem Punkt 1-4.
dunkel gezeichnet, dass der Punkt
unterhalb der Ellipsenmitte
entsprechend der Kreisprojektion,
die diese Stelle mit einer Kreislinie
und eine der oberen Ellipsen mit 1-4
andererseits versehen ist, so dass der

t_1	t_2	t_3	t_4	t_5	t_6	t_1	t_2	t_3	t_4	t_5	t_6		
+	+	+	+	+		✓	✱	✱	↔	1 st		W	K-DT
				-	+					2 nd		W	D.T
										1 st	↑	W	K B D
											↓	W	K B D T
										2 nd		W	D T
		-	+	+	+		✱	↗	1 st	↗		W	K B' D
											↓	W	K B' D
				-					2 nd			W	D L
			-	+	+				1 st	↗		W	K B' D
										↓		W	K B' D
				-					2 nd			W	D
	-					✱						W	g
-	+					✓	ll					W	
	-						ll					W	

Die Einrichtung des Ellipsenzirkels
auf der Hauptachse lässt sich wie
folgt beschreiben: Man bildet ~~die~~ eine
untere Kante des Rahmens als
Lineal aus, das in der Mitte eine
Kerbe aufweist und deren Länge
gerade ~~zweimal~~ gleich dem Abstand
der Linealkante von der Hauptachse
ist. Zieht man jetzt eine Parallele
zur Hauptachse im Abstand der
Kerbe vom Ende des Lineals und
so lässt sich der Ellipsenzirkel sehr
leicht durch Auflegen des Lineals an
die Parallele auf die Hauptachsen
richten.

Zur Unterteilung des Ellipsen-
umfangs entsprechend der Kreisprojek-
tion, lässt sich auf der oberen Scheibe
eine Kreis-Teilung anbringen. Die
Lage des Zeichenstiftes auf dem Umfang
der Ellipse entspricht ~~entspricht~~ ^(Abb. 1) ~~dem~~
dem Teilstrich, der senkrecht auf der
Führungsachse steht. Um dies

Fr 2. 6. für 2. 7. 10.

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• $N \sim M$: $\Delta x \in P \quad \mathbb{I}_{1,3}$: x_1, x_2, x_3, x_6

$\Delta y \in P \quad \mathbb{I}_{1,3}$: y_1, y_2, y_3, y_6

• $N \sim M$: $T \in P \quad \mathbb{I}_{1,6}$: $t_1, t_2, t_3, t_4, t_5, t_6$

1.) $(\Delta x = 0) \sim d_1 \quad | \quad (\bar{x}_1 \wedge \bar{x}_2 \wedge \bar{x}_3) \sim d_1$
 $(\Delta y = 0) \sim d_2 \quad | \quad (\bar{y}_2 \wedge \bar{y}_3 \wedge \bar{y}_6) \sim d_2$

$(|\Delta x| = 000) \sim d_1$

$(|\Delta y| = 000) \sim d_2$

$d_1 \wedge d_2 \rightarrow \bar{d}_3$

$d_3 \rightarrow (T = - + 1 1 1)$

$\bar{d}_3 \wedge d_1 \rightarrow (T = + + + \dots)$

$\bar{d}_3 \wedge d_2 \rightarrow (T = + + + - \dots)$

$(T = + + + \dots) \rightarrow (|\Delta x| = 001) \sim t_5$

$(T = + + + - \dots) \rightarrow (|\Delta y| = 002) \sim t_5$

$(T = + + + - +) \rightarrow (y_1 \sim t_6)$

$\bar{d}_1 \wedge \bar{d}_2 \rightarrow [(\Delta x = \Delta y) \sim (\bar{T} = + + - \dots)]$

$(T = + + - \dots) \rightarrow [(x_1 \sim y_1) \sim t_4]$

$(T = + + - 1 \dots) \rightarrow [(|\Delta x| = 001) \sim t_5]$

$(T = + + - 1 +) \rightarrow (y_1 \sim t_6)$

abgelesen und durch G. hierunter E_1 und E_2 festgehalten werden kann. In das Mittelstück M ist ferner eine Lagerhülse L eingelassen, in der der Hebel H gelagert ist, der den Schreibstift trägt und durch eine Feder F angedrückt wird.

Die Bedienung ist folgendermaßen: Nach Einstellung der Hauptachsen wird der Rahmen mit Hilfe der Kerben K [Abb. 2] auf die Achsen eingerichtet und durch Drehen des Hebels B die Ellipse gezeichnet, wobei der Rahmen auf das Papier gedrückt wird.

I) $\sim$ be (P)

- a) D mager 1) $\sim$ h. 2) $\sim$ m s m
B) $\sim$ f s m
2) $\sim$ m 1) $\sim$
B) $\sim$ m

- b) $\sim$ so C m 1) $\sim$ h s m 2) $\sim$ h s m
B) $\sim$ h s m

c) $\sim$ m s m

II) $\sim$ be (P)

- a) $\sim$ m s m 1) $\sim$ h 2) $\sim$ m s m
B) $\sim$ h s m

- b) $\sim$ so C m 1) $\sim$ h s m 2) $\sim$ h s m
B) $\sim$ h s m

c) $\sim$ m s m

III) $\sim$ be (P)

- I P mager: a) $\sim$ h s m 1) $\sim$ m s m
2) $\sim$ m s m
B) $\sim$ h s m

- b) $\sim$ h s m 1) $\sim$ h s m 2) $\sim$ h s m
B) $\sim$ h s m

- c) $\sim$ m s m 1) $\sim$ h s m 2) $\sim$ h s m
B) $\sim$ h s m

- II $\sim$ so C m 1) $\sim$ h s m 2) $\sim$ h s m
B) $\sim$ h s m

$\sim$ be (P)

1. K. 1. 2d. /
 1.) 2d. /
 2.) 2d. /
 3.) 2d. /
 4.) 2d. /

1. 1.) 2d. /
 2.) 2d. /
 3.) 2d. /

1.) 2d. /
 2.) 2d. /
 3.) 2d. /

1. K. 1-30.

