



Bâtons de calcul



MARTIN GARDNER

KNOTTED DOUGHNUTS

AND OTHER MATHEMATICAL ENTERTAINMENTS



CHAPTER SEVEN

Napier's Bones

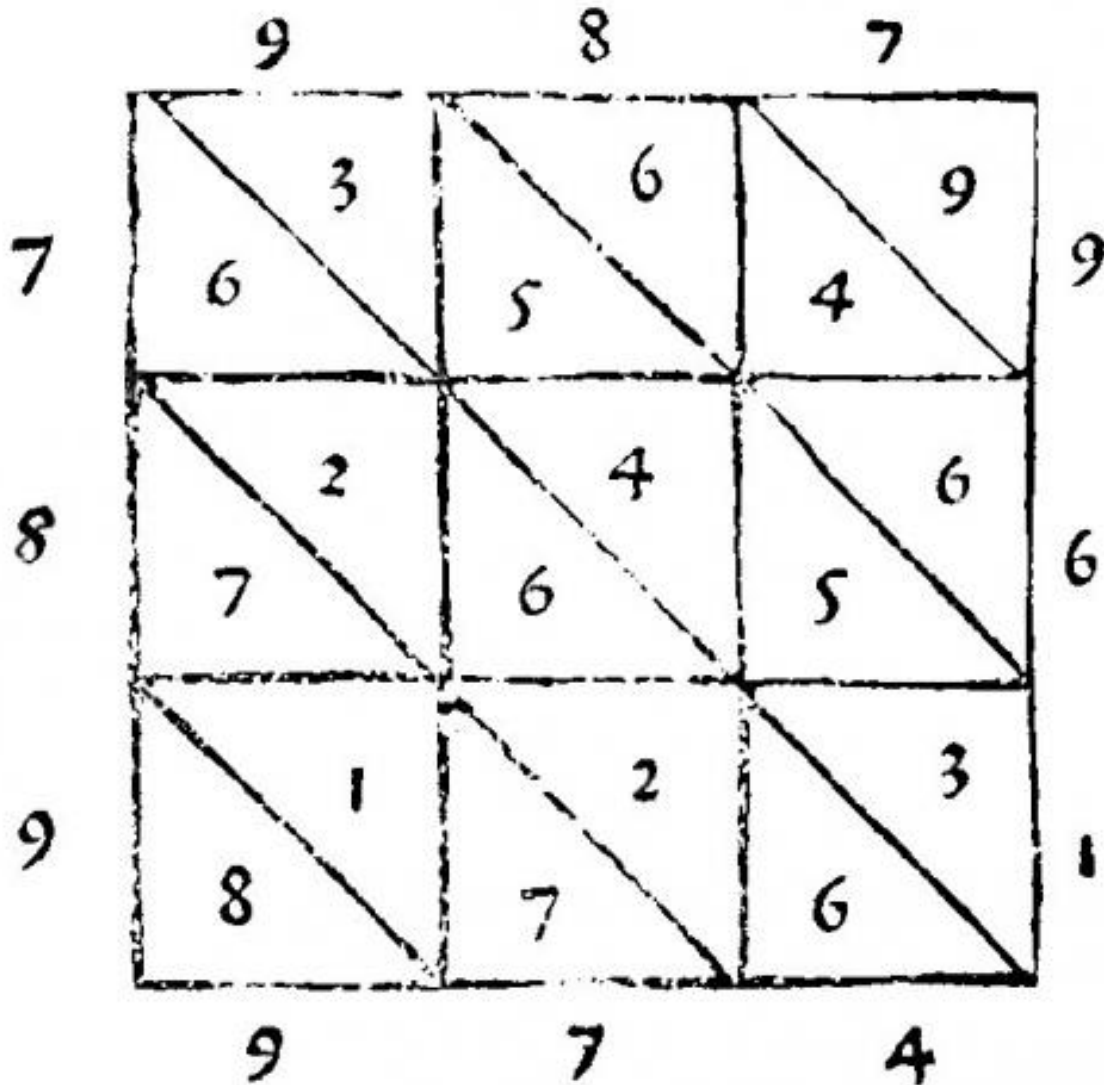


Luca Pacioli (1445-1514)





Summa de Arithmetica geometria proportioni et proportionalita



$$\begin{array}{r} 987 \\ \times 987 \\ \hline 6909 \\ 7896 \\ 8883 \\ \hline 974169 \end{array}$$



- b
- T
- L
- 1
- 10
- 10
- b
- d



RABDOLOGIÆ,
SEV NVMERATIONIS
PER VIRGULAS
LIBRI DVO:

Cum APPENDICE de expeditis-
simo MULTIPLICATIONIS
PROMPTUARIO.

Quibus accessit & ARITHMETICÆ
LOCALIS LIBER VNVS.

Authore & Inventore IOANNE
NEPERO, *Barone* MER-
CHISTONII, &c.
SCOTO.



EDINBURGI,
Excudebat *Andreas Hart*, 1617.

50-1617

décimaux

omorum ca

m canonis

c ραβδος,

giae, seu nu





Tabula prima regule

0	1	2	3
0	1	8	7
0	2	7	9
0	3	9	5
0	4	5	4
0	5	4	4
0	6	9	7
0	7	7	7
0	8	1	1
0	9	6	8
	6	8	

Tabula secunda regule

0	2	3	4
0	2	8	0
0	4	7	9
0	6	9	4
0	8	5	4
0	10	5	5
0	2	9	8
0	4	7	7
0	6	8	1
0	8	6	7
	6	7	

Tabula tertia regule

0	3	1	4
0	3	8	5
0	6	7	4
0	9	9	4
0	2	5	5
0	5	5	5
0	8	9	7
0	2	7	8
0	4	8	1
0	7	6	9
	6	9	

Tabula quarta regule

0	4	1	5
0	4	9	4
0	8	7	4
0	2	9	5
0	6	5	5
0	2	4	5
0	4	9	5
0	2	8	5
0	3	8	1
0	3	6	5
	6	5	

Tabula prima regule

1	2	3	4
1	2	7	9
2	4	9	5
3	6	5	4
4	8	4	4
5	10	4	5
6	2	7	8
7	4	7	7
8	6	9	1
9	8	8	7
	8	7	

Tabula secunda regule

1	3	7	4
2	6	9	4
3	9	5	4
4	12	8	9
5	15	7	5
6	18	7	7
7	21	7	8
8	24	1	1
9	27	8	9
	8	9	

Tabula tertia regule

1	4	7	5
2	8	9	4
3	12	5	5
4	16	8	5
5	20	4	5
6	24	7	5
7	28	4	5
8	32	9	1
9	36	8	5
	8	5	

Tabula quarta regule

2	3	0	5
4	6	9	4
6	9	7	4
8	12	7	5
10	15	5	5
12	18	8	7
14	21	7	8
16	24	1	1
18	27	7	9
	8	9	



2/0			
0	1	2	3
0 0	0 1	0 2	0 3
0 0	0 2	0 4	0 6
0 0	0 3	0 6	0 9
0 0	0 4	0 8	1 2
0 0	0 5	1 0	1 5
0 0	0 6	1 2	1 8
0 0	0 7	1 4	2 1
0 0	0 8	1 6	2 4
0 0	0 9	1 8	2 7
0/2			

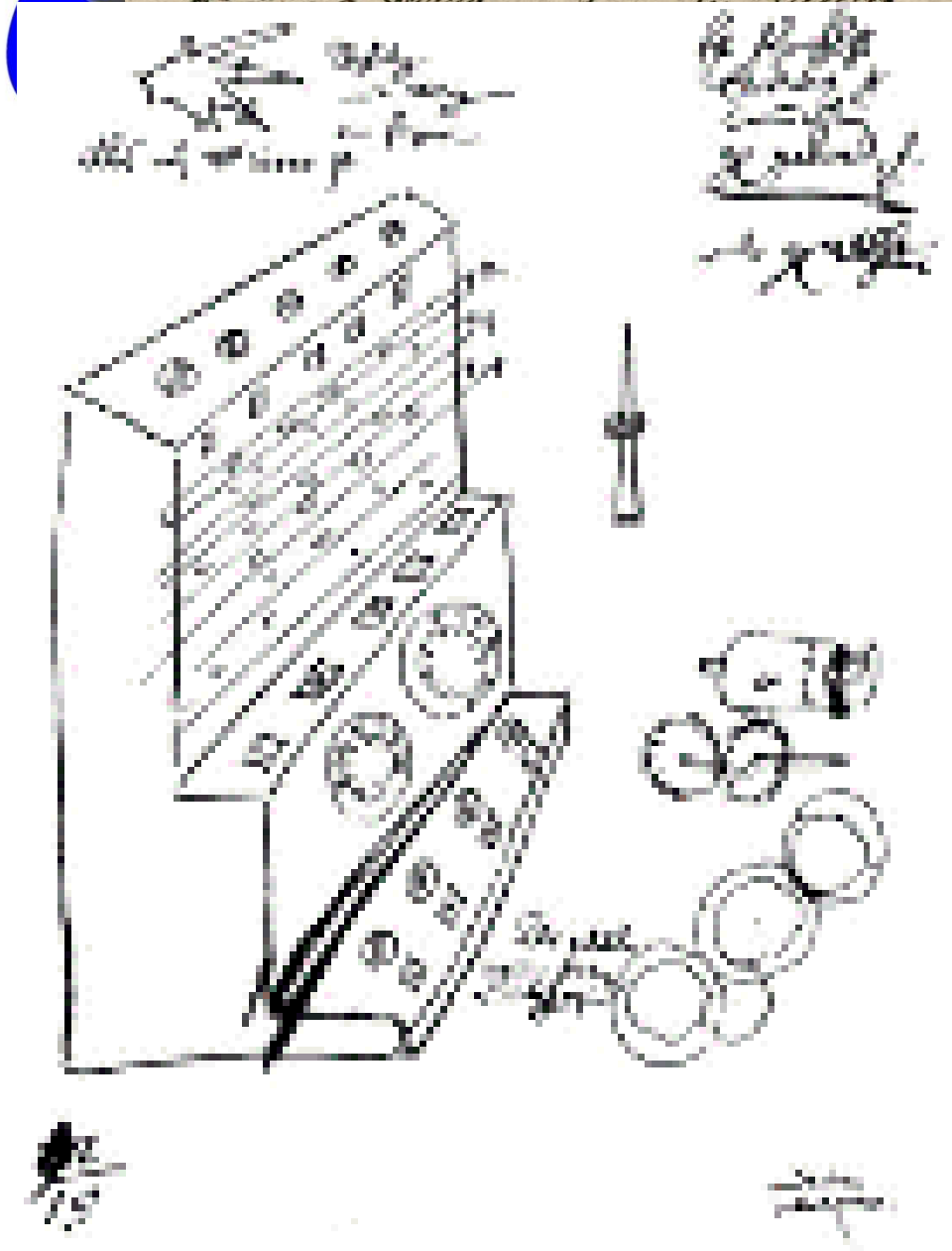
2/0			
0	1	2	3
0 0	0 1	0 2	0 3
0 0	0 2	0 4	0 6
0 0	0 3	0 6	0 9
0 0	0 4	0 8	1 2
0 0	0 5	1 0	1 5
0 0	0 6	1 2	1 8
0 0	0 7	1 4	2 1
0 0	0 8	1 6	2 4
0 0	0 9	1 8	2 7
0/2			

4/0			
4	5	6	7
0 4	0 5	0 6	0 7
0 8	1 0	1 2	1 4
1 2	1 5	1 8	2 1
1 6	2 0	2 4	2 8
2 0	2 5	3 0	3 5
2 4	3 0	3 6	4 2
2 8	3 5	4 2	4 9
3 2	4 0	4 8	5 4
3 6	4 5	5 4	6 3
4/0			

3	8	9	3	6	7							
0	3	0	8	0	9	0	3	0	6	0	7	1
0	6	1	6	1	8	0	6	1	2	1	4	2
0	9	2	4	2	7	0	9	1	8	2	1	3
1	2	3	2	3	6	1	2	2	4	2	8	4
1	5	4	0	4	5	1	5	3	0	3	5	5
1	8	4	8	5	4	1	8	3	6	4	2	6
2	1	5	6	6	3	2	1	4	2	4	9	7
2	4	6	4	7	2	2	4	4	8	5	4	8

$389367 \times 6 = 2336202$





k

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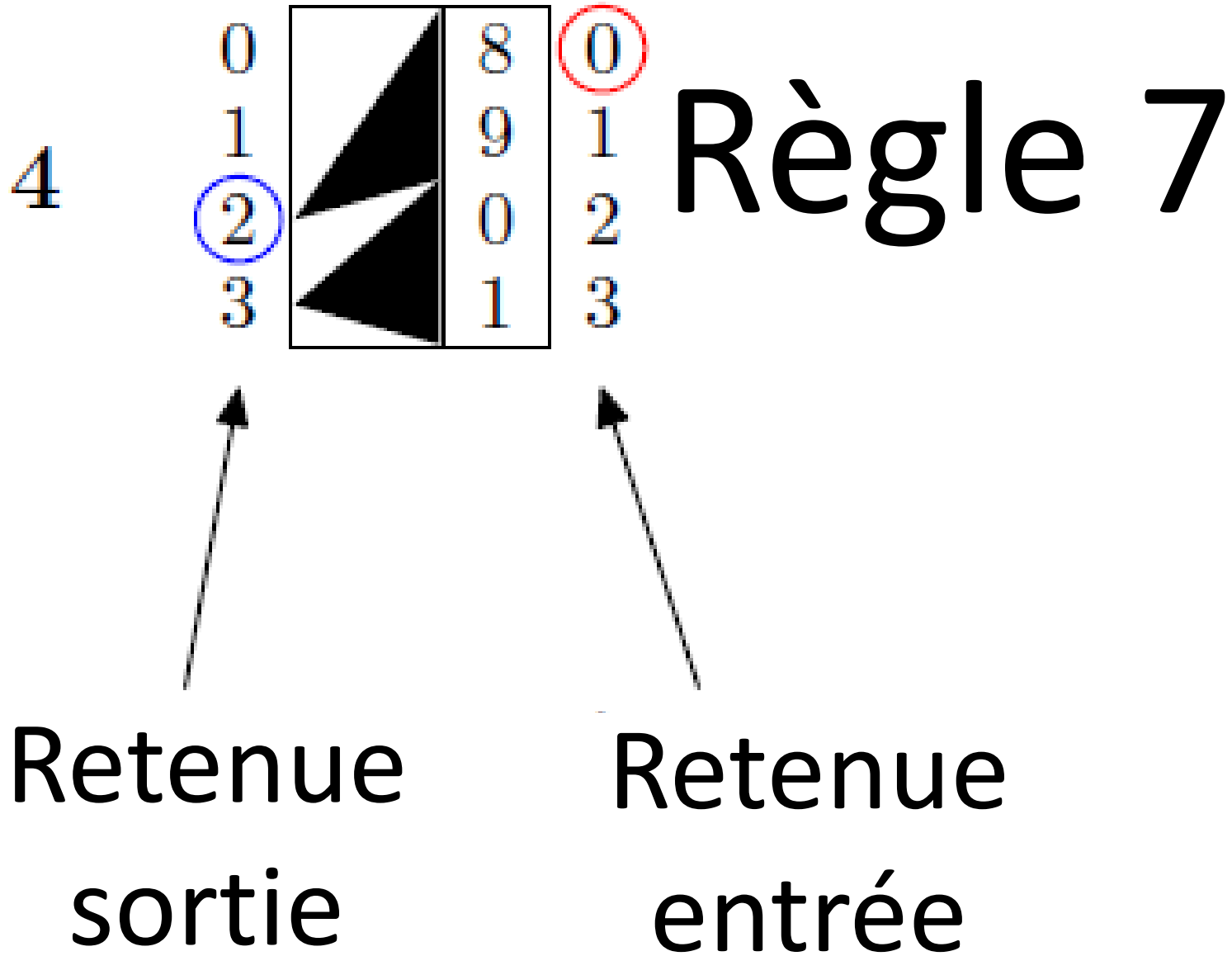


Nouveaux bâtons

- Henri Genaille (18??–1903) (obscur hier, illustre demain)
- Ingénieur ferroviaire (Association française pour l'avancement des sciences 1878)
- Édouard Lucas (1842–1891)
- Édouard Lucas, Récréations mathématiques, volume 3. Paris: Gauthier-Villars, 1893. pp81-83



$$815639 \times 7 = 5709473$$





Merci pour votre attention
Questions?