Greek Alphabetic Numerals

A Greek papyrus scroll dating from the last quarter of the third century B.C., and now in the Cairo Museum, will serve to illustrate the principle of the Greek alphabetic numeration. The contents of the papyrus have been published by Gueraud and Jouguet. "It obviously served an educational purpose," they write. "It was a kind of textbook that gave the child practice in reading and calculating, as well as various notions useful to his education. . . . While he was learning to read, he also learned to know numbers. The sequence of numbers comes after tables of syl-lables, and this arrangement is natural enough, since Greek letters also had numerical values. It is logical that after learning how letters were combined to express syllables, the pupil learned how they were combined to express numbers."

The numeration in question uses the twenty-four letters of the clas-sical Greek alphabet, plus the three obsolete letters digamma, koppa, and san (fig. 17-1). These twenty-seven signs are divided into three groups. The first, for units, consists of the first eight letters of the classical al-phabet, with digamma for the number 6; the second, for tens, contains the next eight classical letters, with koppa for 90; the third, for hundreds, contains the last eight classical letters, with san for 900 (fig. 17-2).

UNITS				TENS				HUNDREDS			
A	α	alpha	1	I	ι	iota	10	P	ρ	rho	100
B	β	beta	2	K	κ	kappa	20	Σ	σ	sigma	200
Γ	γ	gamma	3	Λ	λ	lambda	30	T	τ	tau	300
Δ	δ	delta	4	M	μ	mu	40	Y	υ	upsilon	400
E	ε	epsilon	5	N	ν	nu	50	Φ	φ	phi	500
Ϝ	ϛ	digamma	6	Ξ	ξ	xi	60	X	χ	khi	600
Z	ζ	zeta	7	O	ο	omicron	70	Ψ	ψ	psi	700
H	η	eta	8	Π	π	pi	80	Ω	ω	omega	800
Θ	θ	theta	9	Ϙ	ϙ	koppa	90	Ϡ	ϡ	san	900

Fig. 17-2. The Greek alphabetic numeration, whose principle is similar to that of the Hebrew numeral letters