Table I

Sperm no.	Length of envelope in μ	Wave-length (λ) in μ	Amplitude (b) in μ	Total length of tail in μ	Ratio b/λ
1	35	23	4	45	0·174
2	33	24	4	38	0·167
3	34	27	3·5	42	0·130
4	35	27	4	42	0·148
5	35	23	4	40	0·174
6	34	21	4	42	0·190
7	32	24	3·5	42	0·146
8	34	24	4	42	0·167
9	32	22	3·8	40	0·170
10	33	24	3·8	40	0·156
11	32	23	4	38	0·174
12	35	29	5	40	0·172
13	29	24	5	40	0·209
14	30	21	3·2	40	0·160
Average	33	24	4	41	0·167

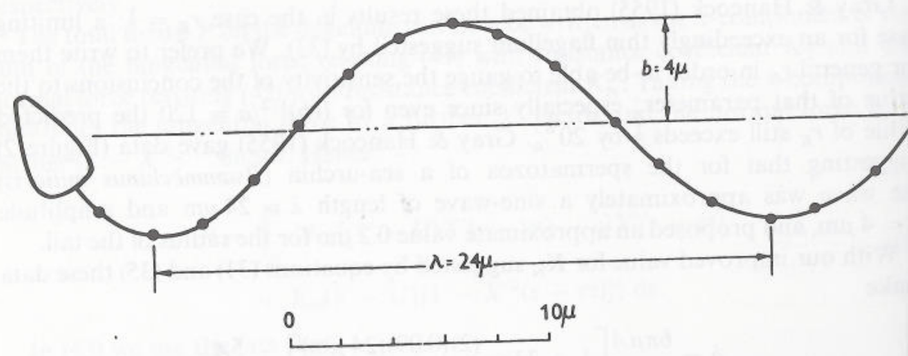

FIG. 2. *This Table 1 and Text-figure 4 from* Gray & Hancock (1955) *illustrate their method of determin a typical sinusoidal representation for a flagellar wave.*

unknown way by the fact that the spermatazoon was swimming in very clo proximity to the glass of the microscope slide, they concluded that the balance evidence favoured the view that the theory with $r_K = 0.5$ was closely correct for t swimming of these spermatozoa.

Hancock (1953, p. 114) had come to the same paradoxical conclusion for t swimming of a nematode, *Turbatrix aceti*, the flow around which is made visil in Figure 3 (the sequence of swimming movements having been given in Figure of Chapter 2). Two out of three observations on *Turbatrix* were found to