77 H.—31.

My own personal observations—which I will state are still incomplete—have not lead me to any definite conclusions with regard to the pelvic angle. The difficulty of measuring this quantity really accurately makes its value in the investigation of large groups of young children somewhat doubtful. It appeared to my mind that the posture and degree of deformity can be classed accurately enough by a careful inspection of the general attitude and balance of the body. Also, I do not feel absolutely certain that our estimation of the pelvic angle afforded a reliable guide as to the degree of faulty posture generally. While it would seem to be more or less definitely associated with incidence of lordosis, kyphosis, and abdominal defect, it apparently has no influence in such a deformity as faulty position of the head. School life seems to have a definite influence on posture, and, other things being equal, the psychological element as a causative factor probably enters to an appreciable degree. The splendid carriage of the head and neck in Maori children is remarkable, and is often apparent even where the abdomen is unduly prominent according to set standard, and even through illness.

even where the abdomen is unduly prominent according to set standard, and even through illness.

Defective posture and imperfect body-balance may assist in the production of foot-deformities, but the frequency with which normal feet are discovered in the habitual "barefoot" child suggest

that the modern footwear is still the prime factor.

13-15

(3) This habitual lordosis-kyphosis-visceroprotic posture, which, though it tends to consistently decrease with age, is still of very common occurrence, resembles very closely the normal infantile positions. It is agreed that this particular posture is correct in a young child. In Native races, which might be considered nearest the ideal, it is still more marked. Why should it necessarily cease

to be correct after five years of age?

It seems quite feasible to suppose that there is a chrysalis stage when the infantile characteristics are still present, and which, together with growth in height and lack of stability, produce the winged-shouldered rather ungainly-looking child—a kind of tadpole stage of development. This transitional stage need not necessarily coincide with any chronological age, and probably spreads over quite a wide range of years. The mental development has little connection with the chronological age. The ages of children in, say, a Standard III class, all approximately at the same stage of mental development, will range from 7 to 12 years. The physical development probably varies even more, and every child may be more or less a law unto himself as to the age at which he will assume the mature adult posture. Our observations on children above 13 years of age are meagre, most children leaving school at 13 years; but figures supplied from an examination of the Otago High School girls show that the percentage of postural defects continues to decrease consistently from 13 to 18 years.

percentage of postural defects continues to decrease consistently from 13 to 18 years.

As to how far school life is responsible for this postural condition, one does not feel qualified to make definite statements with regard to positive influences, but it is possible that over-fatigue, malnutrition, and sedentary life can unduly prolong the chrysalis stage and delay maturity to a

harmful degree.

A point also worth consideration is to what extent remedial measures can hasten or assist the correction of deformities which, in the first place, may be the concomitant of the particular stage of the child's physical development, and which nature herself may correct in due course.

Comparison of Postural Deformities in Children at Different Ages

Comparison of Postural Deformities in Children at Different Ages.								
	Incidence. Per Cent.	Group 3 only. Incidence. Per Cent.					cidence. er Cent.	Group 3 only. Incidence. Per Cent.
1. Position of head—			4.	Chest (all de	formit	ies)—		
$5-6 \text{ years} \dots$	29	$5\cdot 4$		5–6 yea	ars		34	$3\cdot 1$
7-8 ,,	37	4.3		7-8,	,		34	7.0
9–10 ,,	$\dots 42$	8.1		9–10 ,	,		28	$2 \cdot 7$
11-12 ,	47	11.6		11-12 ,	,		27	$7 \cdot 0$
13–15 ,,	59	17.0		13–15 ,	, , ,	• •	28	7· 0
2. Position of shoulders—			5. Abdomen (faulty position)—					
5-6 years	53	14.0		5–6 yea	ars		41	13.0
7-8 ,,	61	20.5		7-8,			56	17.0
9–10 ,,	55	15.5		9–10 ,			50	15.0
11–12 ,,	38	8.0		11–12	,		38	8.0
13–15 ",	37	8.9		13–15 ,			28	8.0
3. Spine (all deformities)—			6.	Genu valgun	ì			
5-6 years	21	8.0		5–6 yea			79	11.0
7–8 ,,	$\dots 41$	11.5		7-8,			67	8.0
9–10 ,,	49	14.0		9–10 ,			61	5.6
11–12 ,,	40	12.0		11–12 ,	,		65	8.0
13–15 ,,	30	9.5		13–15 ,		• •	56	$7 \cdot 0$
7. Feet (all deformities)—				Inciden Per Ce		Group 3 o Incidence Per Cen	e.	
5-6 years				27		1.5		
7–8				39		3.7		
9–10	**			43		4.9		
11–1	- ,,	• •		60		10.9		
	//	* =						

30.5