

THE REPORT OF AN EXAMINATION OF THE EARS OF 1,000  
SCHOOL-CHILDREN BETWEEN THE AGES OF THREE AND  
SIXTEEN YEARS IN THE HANWELL DISTRICT SCHOOL,  
INCLUDING THE OPHTHALMIC SCHOOL.

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THE Hanwell District School receives the children of the poorest class from Southwark and the City of London; the Ophthalmic receives those children who are suffering with eye troubles, especially ophthalmia, from all the Metropolitan Poor-Law Schools.

For permission to make the examination I am indebted to the Governors. I must also express my best thanks for great help to Dr. Littlejohn, who is in medical charge of the combined schools, and also to Mr. Sydney Stephenson, who has care of the ophthalmic department.

The object for which the examination was undertaken was to ascertain what proportion of children suffer from diseases of the ear, in order that attention might, if necessary, be drawn to the subject; and that, as so many of the dangers to life and hearing have their origin in childhood, means might be taken to guard against them during that period of life.

In conducting the examination, each child was placed 18 feet away, and simple questions in a quiet whisper were asked: (1) With both ears unclosed and the eyes shut; and (2) with one unclosed ear first turned to me, and then the other. After the result was noted, the ears, nose, pharynx, and in a large number the naso-pharynx, were examined.

If necessary, tuning-fork tests were applied, but in all the middle-ear cases politzerisation was employed, in order that the diagnosis might be strengthened by the improvement obtained.

A distance of 18 feet was used, as it was found to be a convenient one in the first room in which the examination took place, and was therefore employed all through.

The test erred on the side of leniency, but formed a good working standard. The whispered voice test is often deceptive to the examiner, but in nervous, stupid, or very young children it is the only one possible; a positive result can usually be obtained, and is less deceptive than a child's answer to the watch. Examination of the naso-pharynx for adenoids was made in *all* children in whom the ears were affected, and those in whom from any appearance or symptom they might be suspected.



## ANALYSIS OF SEX AND AGE.

	MALE.																	FEMALE.																	Total.
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Total.	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total.				
Years	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		

  

	MALE AND FEMALE.																	Total.
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Total.		
Years	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	

## CLASSIFICATION.

	MALE.																	FEMALE.																Total.	
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Total	3	4	5	6	7	8	9	10	11	12	13	14	15	16					
Years ..																		Total																	Total
1. NORMAL Ears and Hearing ..	15	13	12	15	13	13	24	19	15	19	22	7	1	1	1	190	3	1	8	11	15	17	19	24	16	7	14	13	2	1	151				
2. " " with enlarged tonsils and adenoids ..	1	1	1	2	2	4	2	2	1	1	1	1	1	1	1	16	1	2	1	3	1	1	1	2	1	3	3	2	1	1	13				
3. " " with adenoids ..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	2	3	1	2	1	2	1	2	1	2	1	1	1	18				
4. " " with enlarged tonsils no adenoids ..	1	1	1	2	2	4	1	5	3	5	2	1	2	1	1	29	1	1	1	1	1	1	3	9	2	1	2	1	2	1	20				
5. " " with abnormal band in nasopharynx ..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0				
6. Abnormality of articulation otherwise normal ..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0				
7. Foreign body in the ear ..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	1	1	1	2	1	2	1	1	1	1	1	1	1	1	5				
8. Foreign body in the nose ..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0				
9. Foreign body in the nose ..	1	2	3	1	2	1	1	1	1	1	1	1	1	1	1	15	1	2	2	3	2	2	2	1	2	1	2	1	1	1	18				
10. Furunculosis ..	1	2	3	1	2	1	1	1	1	1	1	1	1	1	1	0	1	2	2	3	2	2	2	1	2	1	2	1	1	1	2				
11. Eczema ..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
12. Hemorrhages in membrane ..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
13. ? Congenital perforation in Shrapnell's membrane ..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	8				
14. Acute middle ear suppurative ..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2				
15. Depressed membrane and deafness with enlarged tonsils and adenoids ..	1	2	4	1	1	5	3	6	3	3	2	1	1	1	1	29	6	2	3	4	1	3	1	1	6	5	3	1	1	1	1	64			
16. " " " " ..	3	3	4	4	6	1	8	5	6	3	4	1	1	1	1	47	2	3	3	1	3	2	4	1	3	4	3	1	1	1	1	35			
17. " " " " ..	2	3	1	1	1	1	1	1	1	1	2	1	1	1	1	16	1	1	1	1	1	5	1	1	1	1	1	1	1	1	9				
18. Middle ear deafness, membranes normal, commencing sclerosis? ..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6				
19. Chronic middle ear suppurative with enlarged tonsils and adenoids ..	1	2	1	1	1	2	1	1	1	1	1	1	1	1	1	10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10				
20. " " " " ..	1	1	1	4	2	3	2	1	3	4	1	1	1	1	1	23	1	2	2	4	3	2	7	4	3	1	1	1	1	1	1	28			
21. " " " " ..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
22. " " " " ..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
23. Post-suppurative middle ear trouble with enlarged tonsils and adenoids ..	1	1	1	1	1	3	3	2	4	7	1	1	1	1	1	23	1	1	1	1	2	3	5	2	7	4	5	1	1	1	1	32			
24. " " " " ..	1	2	4	4	7	12	4	14	7	7	4	1	1	1	1	66	2	3	3	4	3	4	8	5	5	9	4	1	1	1	1	116			
25. " " " " ..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	7				
26. " " " " ..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2				
27. " " " " ..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
28. Internal ear deafness ..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	43	1	1	1	2	1	3	3	3	1	5	3	1	1	1	1	25			
Totals ..	21	21	32	46	43	41	60	56	64	62	65	26	3	5	1	546	15	11	29	29	34	31	50	57	51	47	54	39	5	2	1	454			



I am perfectly well aware of the defects in the examination, and also that the number examined is insufficient for statistical work.

The following table is introduced to compare the Main School, which receives children from the City of London and Southwark only, with the Ophthalmic, which receives them from *all* the Metropolitan Poor-Law Schools. On the whole the tables correspond, the most marked differences being seen in the *depressed membranes* and *post-suppurative* tables. Those described as *normal* are nearly identical :

	OPHTHALMIC SCHOOL.			MAIN SCHOOL.			Total Ophthalmic and Main.
	Male.	Female.	Total.	Male.	Female.	Total.	
1. Normal ears and hearing ... ..	64	54	118	126	97	223	341
2. Normal ears with enlarged tonsils and adenoids ... ..	6	5	11	10	8	18	29
3. Normal ears with adenoids ... ..	1	5	6	2	3	5	11
4. Normal ears with enlarged tonsils ... ..	13	7	20	16	13	29	49
5. Normal ears with abnormal band in post-nasal space ... ..	—	—	0	1	—	1	1
6. Abnormality of the auricle ... ..	1	—	1	2	—	2	3
7. Foreign body in the ear	2	3	5	6	9	15	18
<i>Less</i> ... ..	1	1	1	3	5	8	9
	1	—1	—2	—3	—4	—7	—9
8. Foreign body in the nose, rhinolith ... ..	—	—	0	1	—	1	1
9. Cerumen ... ..	12	10	22	3	8	11	33
10. Furunculosis ... ..	—	—	0	—	2	2	2
11. Eczema of auricle ... ..	—	—	0	1	1	2	2
12. Hæmorrhages in membrane, with adenoids ... ..	—	—	0	1	—	1	1
13. ? Congenital perforation in Shrapnell's membrane ... ..	1	—	1	6	1	7	8
14. Acute middle-ear inflammation ... ..	—	—	0	1	1	2	2
15. Depressed membranes and deafness, with enlarged tonsils and adenoids ... ..	3	8	11	26	27	53	64
16. Depressed membranes and deafness, with adenoids ... ..	11	12	23	36	18	54	77
17. Depressed membranes and deafness; no enlarged tonsils or adenoids ... ..	7	1	8	9	8	17	25
18. Middle-ear sclerosis ... ..	—	1	1	—	5	5	6

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	OPHTHALMIC SCHOOL.			MAIN SCHOOL.			Total Ophthalmic and Main.
	Male.	Female.	Total.	Male.	Female.	Total.	
19. Chronic middle - ear suppuration, with en- larged tonsils and adenoids ... ..	3	2	5	7	8	15	20
20. Chronic middle - ear suppuration, with adenoids ... ..	4	9	13	19	19	38	51
21. Chronic middle - ear suppuration, with enlarged tonsils; no adenoids ... ..	—	—	0	—	1	1	1
22. Chronic middle - ear suppuration; no en- larged tonsils or adenoids ... ..	5	3	8	6	2	8	16
23. Post - suppurative middle - ear trouble, with enlarged tonsils and adenoids ...	2	4	6	21	28	49	55
24. Post - suppurative middle - ear trouble, with adenoids ...	10	13	23	56	37	93	116
25. Post - suppurative middle - ear trouble, with enlarged tonsils; no adenoids ...	—	—	0	5	2	7	7
26. Post - suppurative middle - ear trouble, with purulent dis- charge from the nose; no enlarged tonsils or adenoids ...	—	—	0	—	1	1	1
27. Post - suppurative middle - ear trouble, no enlarged tonsils or adenoids ...	15	14	29	28	11	39	68
28. Internal ear deafness	—	—	0	1	—	1	1
	159	149	308	387	305	692	1,000

It will be seen that :

1. The ears were normal in ... ..	432
2. The external ear was affected in ... ..	49
3. The middle ear ... ..	518
4. The internal ear ... ..	1
	1,000

The hearing was more or less deficient in 520—that is to say, that with one or both ears they were unable to pass the whispered voice-test at 18 feet. Many of these were unnoticed by the teachers, the deficiency only being noticed on examination. It may

be thought this number should correspond with the table above, but some, although they had definite signs of old suppuration, were able to pass the test.

It is interesting to consider some items in the table more in detail :

5. **The abnormal band in the post-nasal space** has a vertical membranous septum running downwards for a slight distance from the septum. There was no history, and it was not causing any symptoms.

6. **The abnormalities of the auricle** were slight :

1. A boy aged 6 years. Eversion of the concha on the left side only.
2. A girl „ 13 „ „ „ „
3. A boy „ 7 „ A square-shaped left auricle. The antihelix thin and expanded. No lobule. The right side was normal.

7. **The foreign bodies in the ear** numbered 18; 9 of them were suffering from other troubles, 6 were in males, 12 in females; 9 were in the right ear and 9 in the left.

#### MALES.

1.	Aged 9 years.	A piece of a wooden match $\frac{1}{2}$ inch in length	Right ear.
2.	„ 6 „	A pea ... ..	Left „
3.	„ 10 „	A piece of folded paper ... ..	Left „
4.	„ 11 „	A piece of cotton-wool ... ..	Left „
5.	„ 12 „	A small splinter of wood ... ..	Right „
6.	„ 12 „	A pea ... ..	Right „

#### FEMALES.

1.	Aged 5 years.	A piece of folded paper ... ..	Right ear.
2.	„ 7 „	„ „ ... ..	Left „
3.	„ 7 „	A blue bead ... ..	Left „
4.	„ 9 „	„ „ ... ..	Left „
5.	„ 9 „	A piece of cotton-wool ... ..	Left „
6.	„ 9 „	„ „ ... ..	Right „
7.	„ 10 „	„ „ ... ..	Left „
8.	„ 10 „	„ „ ... ..	Left „
9.	„ 10 „	„ „ ... ..	Right „
10.	„ 11 „	A dried pea ... ..	Right „
11.	„ 12 „	„ „ ... ..	Right „
12.	„ 12 „	A piece of dried grass ... ..	Right „

8. **Rhinolith in the Nose.**—This was present in the left side of a boy aged six years. There was no pain or irritation. The nucleus could not be made out.

12. **Hæmorrhages in the Membrane.** — There were numerous hæmorrhagic spots in the posterior and antero-inferior segments of the left membrane, with injection of the malleal vessels. The boy

had received a blow on the ear immediately before examination. Adenoids were present.

13. ? **Congenital Perforation in Shrapnell's Membrane.**—In these cases a perforation was present in one or both ears, but no sign or history of discharge or pain could be obtained. The "query" is placed on account of the difficulty of obtaining an accurate history. The fact that some were somewhat deaf and that others had adenoids, with depression of the membrane, assists in adding to the doubt.

1. A boy aged 9 years. In right ear only. Otherwise normal.
2. A boy aged 9 years. In both ears. Membranes depressed with adenoids, but passed hearing test.
3. A boy aged 11 years. In both ears. Tonsils and adenoids, but passed hearing test.
4. A boy aged 12 years. In both ears. Right membrane depressed; tonsils and adenoids. Hearing deficient in right.
5. A boy aged 12 years. In both ears. Both membranes depressed; tonsils and adenoids. Hearing deficient in left.
6. A boy aged 12 years. In both ears. Adenoids. Hearing deficient in right.
7. A boy aged 13 years. In both ears. Otherwise normal.
8. A girl aged 13 years. In both ears. Both membranes depressed; tonsils very large; slight adenoids. Hearing deficient in both.

14. **Acute Middle-ear Inflammation.**—The number is very small. This is accounted for by the fact that such cases were sent to the infirmary as soon as they were observed, and were, therefore, not well enough to come for examination. It must also be noted that many children had a history of earache, but no sign was present, and the hearing test was passed.

15, 16, 17. **Depressed Membranes with Deafness.**—It is interesting to note that out of 166 cases, 141 had adenoids; the remaining 25 were due in the most part to colds, recent or remote.

18. **Sclerosis.**—The six cases noted were all females. In each the deficiency of hearing was marked; the membranes were not depressed, and little improvement followed on inflation. A query should perhaps be placed before them.

1. Aged 8 years. Hearing deficient in both ears. Slight adenoids.
2. Aged 10 years. Hearing deficient in both ears. Slight adenoids and slightly hypertrophied tonsils.
3. Aged 13 years. Hearing deficient in both ears. No adenoids.
4. Aged 13 years. Hearing deficient in both ears. Adenoids and hypertrophied tonsils, with true hypertrophy of both inferior turbinals, right side especially.
5. Aged 14 years. Hearing deficient in right ear. No adenoids.
6. Aged 15 years. Hearing deficient in left ear. Large mass of adenoids.



19, 20, 21, 22. **Chronic Middle-ear Suppuration.**—Eighty-eight children were suffering from chronic suppuration from one or both ears. It is needless to point out that all these, while having deficient hearing, were also in danger of their lives. At the very least six wanted the complete post-aural operation performed at once; curetting and ossiculectomy were required in many; seventy-one had adenoids. The following classification includes all the cases:

Both ears discharging	...	...	...	...	...	16
Right ear    ,,	...	...	...	...	...	46
Left ear     ,,	...	...	...	...	...	26

#### Cases requiring the Complete Post-aural Operation (6).

1. A girl aged 10 years. *Right ear*: A scar was present over the mastoid region. The ear had discharged for a long time. There was total loss of the membrane, the handle of the malleus being dissected out. A large mass of adenoids was present. *Left ear*: A cicatrix in the posterior superior segment.
2. A girl aged 11 years. *Right ear*: A depressed scar was present over the mastoid. The ear was discharging. There was total loss of the membrana tensa. The handle of the malleus was dissected out; its tip had been lost. *Left ear*: In same condition, but there was not a mastoid scar.
3. A boy aged 12 years. *Both ears* were discharging profusely. There was a bony protuberance from the posterior deep meatal wall on both sides. Details of the middle ears could not be accurately determined, but a perforation involving the posterior inferior segments could be seen.
4. A boy aged 13 years. *Left ear*: Discharging a long time. No sign of ossicles or membrane. Marked sagging of the posterior superior deep meatal wall. *Right ear*: Discharging. Total loss of membrane. Handle of malleus dissected out. A granulation coming from the anterior superior segment.
5. A boy aged 8 years. *Right ear*: Discharging freely. A scar was present over the mastoid. The superior half of the middle ear was obstructed by firm tissue, a granulation appearing below. *Left ear*: Normal.
6. A boy aged 9 years. *Right ear*: Discharging. Marked prolapse of the posterior superior deep meatal wall. No details to be made out in middle ear. *Left ear*: Inferior cicatrix. Had had adenoids removed.

#### Perforation in Shrapnell's Membrane (5).

- 3 in the right ear: 1 with granulations; 1 with posterior inferior cicatrix in the left ear; 1 with posterior perforation, but no discharge in the left ear.  
 2 in the left ear: 1 with a posterior perforation and discharge in the right ear.

**Perforation involving the Posterior Superior Segment, with Loss of the Descending Articular Process of the Incus (11).**

- 5 in the right ear : 2 with a cicatrix in posterior segment and loss of process in the left ear ; 1 with a posterior inferior perforation with discharge in the left ear.
- 6 in the left ear : 1 with granulations and loss of the handle of the malleus on that side, and a posterior inferior perforation with granulations in the right ear ; 2 with an inferior cicatrix in the right ear.

**Perforation in Membrana Tensa (66).**

Both ears were discharging in	10
The right ear was    "       "	36
The left       "       "	20

**Both Ears.**

RIGHT.	LEFT.
1. Total loss of membrana tensa, and of tip of handle of malleus.	Total loss of membrana tensa, and of tip of handle of malleus.
2. Total loss of membrana tensa.	Total loss of membrana tensa.
3.       "       "       "	"       "       "
4.       "       "       "	" and loss of tip of handle of malleus.
5. Inferior kidney-shaped perforation.	Inferior kidney-shaped perforation.
6. Inferior kidney-shaped perforation.	"       "       "
7. Anterior inferior perforation.	"       "       "
8. Inferior perforation.	Inferior perforation.
9. Anterior inferior perforation.	Anterior inferior perforation.
10. Posterior superior perforation.	Posterior inferior perforation.

**Right Ear Discharging.**

*(a) Cases in which there had been Suppurative Trouble in the Left (15).*

RIGHT.	LEFT.
1. Inferior perforation with granulations.	Cicatrix with loss of articular process of incus.
2. Inferior perforation with granulations.	Cicatrix with loss of articular process of incus.
3. Inferior perforation.	Inferior perforation ; no discharge.
4.       "       "	"       "       "
5.       "       "	Inferior cicatrix.
6. Inferior kidney-shaped perforation.	Posterior cicatrix.
7. Inferior kidney-shaped perforation.	Inferior perforation ; no discharge.
8. Anterior inferior perforation.	Posterior superior cicatrix.
9.       "       "       "	Anterior inferior cicatrix.
10.       "       "       "	"       "       "
11.       "       "       "	Posterior inferior cicatrix.
12.       "       "       "	Inferior perforation ; no discharge.

RIGHT.	LEFT.
13. Posterior perforation with granulations.	Inferior cicatrix.
14. Posterior inferior perforation.	Posterior inferior cicatrix.
15. Large loss of membrana tensa.	Posterior superior cicatrix with loss of tip of articular process of incus, the remains displaced forwards.

(b) *Cases in which the Right Ear only was affected (21).*

Inferior perforation	3
Kidney-shaped perforation	2
Anterior „	6 ; 1 with granulations
Anterior inferior „	4
Anterior superior „	1, with granulations
Posterior „ „	1
Large loss of membrana tensa	4 ; 2 with granulations
	1 „ „ and loss of handle of malleus.

**Left Ear Discharging.**

(a) *Cases in which there had been Suppurative Trouble in the Right (13).*

LEFT.	RIGHT.
1. Inferior perforation.	Anterior cicatrix.
2. „ „	„ „
3. „ „	Posterior perforation ; no discharge.
4. „ with granulations.	Inferior cicatrix.
5. Anterior inferior perforation.	Anterior inferior cicatrix.
6. „ „ „	„ „ „
7. „ „ „	Anterior cicatrix.
8. „ „ „	Inferior perforation ; no discharge.
9. Posterior perforation.	„ „ „
10. Posterior inferior perforation.	Posterior superior cicatrix.
11. „ „ „	„ „ „
12. Large loss of membrana tensa.	Posterior cicatrix ; loss of articular process of incus.
13. „ „ „	Posterior superior cicatrix.

(b) *Cases in which the Left Ear only was affected (7).*

Inferior perforation	2 ; 1 with granulations.
Anterior inferior perforation	1
Anterior superior „	1
Posterior „	2
Posterior inferior „	1

**Granulations in the Middle Ear (13).**

In both ears, 1 ; in right ear, 9 ; in left ear, 3.

23, 24, 25, 26, 27.—**Post-suppurative Middle Ear ; total 247.**—An extraordinary large proportion. The number of these who had adenoids was 171.

Both ears had been affected in	110
Right ear only „ „	81
Left „ „ „	56

A detailed account of them will be extremely tedious, so that only a few of the details will be given.

*Perforation or Cicatrix in Shrapnell's Membrane (28).*

In both ears, 9.

In right ear, 14, 7 of which had had suppurative trouble in the left.

In left ear, 5, 4                   "                   "                   "                   right.

*Loss of the Articular Process of the Incus (28).*

In both ears, 6; 1 with an adhesion from remains of incus to head of stapes.

In right ear, 11; 1                   "                   "                   "                   "

5 had had suppurative trouble in the left.

In left ear, 11, 9 of which had had suppurative trouble in the right.

*Patent Dry Perforations (57).*

In both ears, 7; in right ear, 27; in left ear, 23.

*White Deposits in the Membrane (13).*—These were chiefly seen in connection with suppurative trouble.

In both ears, 1; in right ear, 6; in left ear, 6.

*Exostosis.*

A boy aged 9 years, with deficient hearing and healed suppuration in both ears and with adenoids, had a small, sessile, rounded exostosis growing from the posterior deep meatal wall.

**If the present and past suppurative troubles be considered together, it will be seen that 335 children were affected.**

In both ears, 126; in right ear, 127; in left ear, 82.

*Perforation or Cicatrix in Shrapnell's Membrane (33).*—Omitting the 8 (?) congenital cases.

In both ears, 9; in right ear, 17; in left ear, 7.

*Caries of the Articular Process of the Incus (39).*

In both ears, 8; in right ear, 14; in left ear, 17.

*Adenoids Present in 242.*

**(28) Internal Ear Deafness.**

Only 1 case was observed. A boy aged 14 years, could not pass the hearing test with the right ear. The membrane appeared normal. There was no sign of congenital syphilis. He had had the tonsils and adenoids removed. He had had scarlet fever. With the tuning-fork air conduction was better than the tone, and when placed in mid-line of skull the sound was referred to the left ear.

All cases of severe deafness are not admitted to the schools, but are sent elsewhere for lip-reading tuition. This accounts for their absence.

**Nasal and Naso-Pharyngeal Affections.**—Many children suffered from "running nose." The discharge is apparently very irritating,

as many suffered from an eczematous condition of the upper lip as a result. Further research as to this condition is necessary. It may be noted here that cracks, edged with white, sodden epithelium, at the angle of the mouth were also common, and could not be accounted for. The one case of rhinolith has already been referred to.

*True or Lobulated Hypertrophy of the Inferior Turbinals.*—This was noticed in 5 cases.

1. A boy aged 11 years, with post-suppurative middle-ear trouble on both sides and adenoids. The hypertrophy affected both inferior turbinals, extending to the posterior end on the left side, but not on the right.
2. A girl aged 13 years, with commencing sclerosis and enlarged tonsils and adenoids. Both inferior turbinals affected, the right especially.
3. A boy aged 11 years, with depression of both membranes and enlarged tonsils and adenoids. Both inferior turbinals affected.
4. A boy aged 14 years, with depression of both membranes and adenoids. The anterior end of both inferior turbinals affected.
5. A boy aged 14 years, with depression of both membranes and enlarged tonsils and slight adenoids. Both anterior ends of the inferior turbinals affected, the left especially.

*False or Smooth Hypertrophy of the Turbinals.*—This was especially marked in 3 cases.

1. A girl aged 12 years, with depression of both membranes and slight adenoids. The middle and inferior turbinals on both sides were affected.
2. A boy aged 11 years, with post-suppurative trouble on both sides, but no adenoids. Both sides were affected, the right especially.
3. A girl aged 11 years, with depression of both membranes and enlarged tonsils and adenoids. Both middle turbinals were affected.

*Pus in the Nose.*—Observed in 3 cases.

1. A girl aged 10 years, with post-suppurative trouble (loss of articular process of incus) in both ears, but no adenoids. A purulent discharge was present on the right side, with eczema of the vestibule.
2. A boy aged 8 years, with post-suppurative trouble in both ears, but no adenoids. The nose was broadened, both middle turbinals were enlarged, with muco-pus in the middle meatus of both sides.
3. A boy aged 7 years, with post-suppurative trouble in both ears, but no adenoids. The turbinals were all enlarged on both sides. A muco-purulent discharge was present.

These cases suggested nasal and aural infection during some specific fever. (The last two cases are classed in the main classification under other headings.)

*Spurs and Deviation of Septum.*—Slight spurs and deviations were common, but were only marked in 2 cases, in both of which the block was on the left side.

*The band in the post-nasal space* has already been referred to.

*Adenoids.*—It is a mistake to think that all children have them; in many the vault of the naso-pharynx looked and felt perfectly smooth. It is not too much to say that the healthiest-looking children were, as a rule, quite free. They were present in 434, although slight in amount in 39. They were associated with enlargement of one or both tonsils in 174 instances. Some aural trouble was present in 394. On the other hand, in 40 the ears were normal.

*Hypertrophied tonsils*, one or both, were seen in 231 children.

*A mucous cyst in the right tonsil* was found in a boy aged 8.

There is no disguising the fact that the report is a startling one, and clearly shows that the subject should be thoroughly taken in hand. I have endeavoured to ascertain from our colleagues all over the world what steps are taken in the matter, and I here wish to give my cordial thanks to those who have so kindly written to me. Dr. Arthur Hartmann, of Berlin, informed me that in the majority of the large cities in Germany school physicians are appointed to the schools to examine chiefly the eyes and ears, and to see that treatment is applied when necessary. (This step was taken by the German Government at Dr. Hartmann's suggestion.) Dr. Rohrer, of Zurich, sent me the official school pamphlet of the Canton of Zurich ("Bericht über die Verhandlungen der Züricherischen schul-synode," 1901), in which is a report of the medical examination, in the years 1899 and 1900, of the children who have reached the age for compulsory education. 108,297 children were examined, and 117 per 1,000 were found to be in some way affected as to their ears. No details as to the method of examination were given.

Dr. Lagerlöf, of Stockholm, stated that in that city in 1901 two aurists were appointed by the town government to examine all the poor school-children. The schoolmasters call on the parents of those affected to inform them of the necessity for treatment.

Professor W. R. Smith, the Medical Officer of the School Board for London, informs me that at present there are no measures taken for the examination and treatment of the eyes and ears of the children in the schools of the Board.

It is quite clear, therefore, that in some few countries—Germany, Switzerland, and Sweden, for example—the importance of the subject has been recognised, and as far as possible dealt with. It is earnestly to be hoped that more will follow their example.

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