

of causality, we cannot think that the difficulties connected with it have been so cleared up as to permit us without further question to apply the principle to determine the existence of objects confessedly not given either in time or space. The reasoning by which space is shown to involve multiplicity of reals seems also to want further explanation. That the intuition of space involves intuition of a manifold is evident; that this manifold is itself not in space, and that the space-manifold must be due to a real multiplicity not in space, are propositions by no means self-evident. Temporal simultaneity of sensations is not, we must consider, sufficient ground for representation of these as in space.

There remains, too, the difficulty which is peculiar to all monistic schemes. They do not render any explanation of the acknowledged difference in kind between material and psychological. It is hardly sufficient to say that these are but diverse modes of appearance of the same unity, for the diversity of appearance is exactly the diversity in need of explanation.

Minor difficulties remain in plenty: *e.g.*, the principle that as each monad is part of a whole it is incomplete and strives after full being, cannot be at once accepted; but without dwelling on these, we may conclude by recommending the essay to the attention of all who are interested in the present remarkable *rapprochement* between physics and metaphysics.

ROBERT ADAMSON.

IX.—REPORTS.

AN INFANT'S PROGRESS IN LANGUAGE.

THE following notes were made in humble following of Mr. Darwin's and M. Taine's example, at first for my own amusement and without any distinct purpose of letting them go further. I found, however, that they grew under my hands, and that the Editor of *MIND* thought further contributions on the subject of children's mental growth would be desirable. Here I have kept in the main to the one point of language, and though I have probably omitted much, I think I have set down nothing as fact which has not been actually and distinctly observed. Exact dates I have not attempted to give, conceiving that they would be of no use unless for the comparison of a very large number of observations. Children differ so much in forwardness that the time of particular acquisitions seems of little importance as compared with their order. Though I have no pretensions to skill in phonetics, I thought it at least desirable to use some consistent notation for the sounds actually produced. For this purpose I have taken the Indian Government system, with a few additional signs which will speak for themselves. I may explain that in this notation, while *á*, *í*, are the long Continental *a* and *i*, unaccented *a* is not the short

Continental *a*, but the obscure or neutral vowel (*Urvocal*) heard in English "at," "that," "but," when not emphatic; when strongly given, it becomes the full sound of *u* in emphasised "but". Thus the Punjab, Lucknow, Kurrachee, of popular use become in the official spelling *Panjáb, Lakhnau, Karachi*. "Governor and Company" would be written *Gawarnar and Kampani*. The vowel-sound in "bank," which does not occur in Indian languages, could be expressed only by some special symbol. I use *á* for the broad sound of *a* in "fall". Words in italics are in the Indian Government spelling. Words between inverted commas are in ordinary English spelling.

Age, 12 months. *M-m* often repeated; *Bá bá* repeated an indefinite number of times.

M-m generally indicated a want of something. *Bá bá* was (1) a sort of general demonstrative, standing for the child herself, other people, or the cat (I do not think she applied it to inanimate objects); (2) an interjection expressing satisfaction. Both sounds, however, seemed often to be made without distinct intention, as mere exercise of the vocal organs.

13 m. *Dá dá; Wa wa* (water, drink); *Wah wah*, with a guttural sound distinct from the foregoing (dog, cat); *Ná ná* (nurse—of course as proper, not generic name).

Dá dá was at first a vague demonstrative. I noted, however, with a query, man as a second and specialised meaning. About six weeks later it became a distinct proper name for the child's father, and has been consistently so used ever since. By this time the significance of pictures was in a general way understood. The child said *wah wah* to figures of animals, and attempted to smell at trees in the illustrations of the *Graphic*. (Six months later she pretends to feed the dogs in a picture.) The fact is curious, having regard to the inability of adult savages, as reported by many travellers, to make anything of even the simplest representations of objects. About this time the ticking of a watch gave great pleasure, and for some months afterwards the child constantly begged to have one put to her ear, or still better, to have it in her hand and put it there for herself. Five or six months later she had left off asking for it.

15 m. *M-m* discontinued. Sometimes *bá bá* used instead; sometimes she simply cried for a desired object.

Imitative sounds to represent dog, cat, sheep, ticking of clock. *Wah wah, miau*, soon became generic names of dog and cat (*wah wah*, which at first included cat, becoming appropriated to dog). I think, however, *wah wah* would include any middling-sized quadruped other than a cat or a sheep. As to cat, her name for it became a few months later *aya-m* or *ayá-m*, which so far as I know she invented for herself. The conventional "gee gee" for horse was very soon understood by her, though she could not form the *j* sound. She

recognised a zebra in a picture alphabet as "gee gee," and showed marked dissent when told it was a zebra.

These imitative sounds were all learnt on the suggestion of adults, but studied from the real sounds; for as made by the child they are decidedly nearer to the real sounds than the *baa baa*, &c., used by adult voices.

"Baby" (or rather *bé bi*). This word was now formed with fair success, but soon dropped for a time. About a month afterwards it was resumed, and became the child's name for herself. This was long before she attempted any other dissyllable. It was pronounced, however, rather as a reduplicated monosyllable.

16 m. *Bâ* (ball), sometimes *ba*. *Tá* (1, thanks; 2, take, when offering something): this was deliberately taught her.

Playing with a ball became a favourite amusement at this time. She would throw a ball out of window and expect it to be returned. When we tried a regular game of ball she seemed to think the point of the game was to get possession of the ball and keep it. A certain capacity for dramatic play was now first observed. The child knew the various animals in a toy menagerie by name, and would make believe to feed them with a spoon. About a month later she was taught a piece of rudimentary drama. The picture of the "little boy that cries in the lane" and gets no wool had fixed her attention in a book of nursery rhymes, by this time constantly in hand, and now, on being asked, What does the little boy that cries in the lane do? she puts up her hands to her eyes and whimpers. She laughs afterwards, which I think is fair evidence that she understands the performance and considers it a good joke.

17 m. *Ní* (knee). This is a real word used in a special, and at the same time extended, meaning. It signifies: *Take me on your knee and show me pictures*; and also expresses in a general way the idea of something (generally the cat) being on a person's lap, so that *ní* not unfrequently means: *I want to see the cat on your lap*. She also puts a toy dog on her knee and repeats *ní* several times with great satisfaction. About this time "baby" came to be freely used as an imperative or desiderative, combined with movements or gestures indicating an object—the sense being, *I want that*.

17-18 m. *Má má*, mother. I have no note of when this word began to be used (probably it was some months before this), but it was well established by this time at latest.

Ná ni or *ñá ni* (granny).

Pí (please). On learning to say "please" in this fashion the child left off putting her hands together to ask for things, which she had been taught to do before she could speak.

Pé pé, pencil (only once heard).

Pá pá. This was taught her as a synonym for *dá dá*, but she would not use it. Both "paper" and "pepper" (as common objects

at the breakfast table) became in her mouth something not easily distinguished from *pá pá*. This may perhaps account for her unwillingness to take up the new name.

Ba or *bö*, book.

"More," or rather *má*, often prolonged to *má-a* or *mo-a*—to ask for more of some food, &c., or to ask for any action that pleased her to be repeated. This word enabled her to form an approach to a sentence: thus *má . . . má má* ("more, mama").

Tá tá (taught her as the usual baby word for good-bye, but extended by herself); always distinguished from the single *tá* noted above. *Tá tá* not only is used to say good-bye, but expresses the general idea of going out of doors. Thus she says *tá tá* to her perambulator, and on seeing one take up a hat or overcoat.

A final nasal sound is now produced: she tries to say "down," what she does say being roughly *dáô*—take me down from my chair—a very frequent request, as she can by this time walk easily, and is fond of running about the room.

The vocabulary is now increasing fast, and almost any word proposed to the child is imitated with some real effort at correctness. The range of articulate sounds is still very limited: *a*, *á*, *i* (short and long) are the only vowels fully under command; *á* occurs in a few words, and is the usual result of attempts to form *o*: thus, *ná*—nose. The long sound of English *i* (*ai*) cannot be pronounced; when she tries to imitate it she says *iá* or *í-a*. No approach is yet made to the peculiar English short sound of *a* in such words as hat, bat. Of consonants *g*, *l*, *r* (the true consonant initial sound; the final semi-vowel, as in more, poor, is easy enough to her), and sibilants, aspirates, and palatals are not yet mastered. "Guy" (a younger cousin's name) is called *dá*, or perhaps rather *dá*, the *d* or *đ* produced far back and apparently with effort; *k* is also produced far back in the mouth, with an approach to *t*. Final consonants are seldom or never given, and the vocabulary is essentially monosyllabic, the only exceptions being in the nature of proper names ("baby," *ná-ni*, *ná-ná*), and even these are reduplicated monosyllables rather than dissyllables proper. She once said "lady" pretty well, but did not take it into use. No construction is yet attempted; the first approach to a sentence above noted has not been repeated. Even with these resources the child already contrives to express a good deal, filling up the meaning of her syllables with a great variety of tone, and also with inarticulate interjections. Impatience, satisfaction, disappointment, amusement, are all very well marked; and perhaps even intellectual dissent (in the case of "zebra" and "gee-gee," see above).

After this time (*viz.*, her 18th birthday, reckoning birthdays by calendar months, as for this purpose is convenient), the child's progress became much more rapid, and it would not have been possible to take down all her new words without giving much more and more continuous attention than I had at my disposal. I also doubt if anything would have been gained by it. The subsequent notes must be taken as being rather selections than a full record.

18-19 m. "Poor" (should perhaps have been set down earlier): no appreciable difference from ordinary adult pronunciation. *Dam* (gum), a word of large significance; see next paragraph.

"Poor" was taught as an expression of pity, but extended to mean any kind of loss, damage, or imperfection in an object, real or supposed. Some of her reasons for assuming imperfection were curious. She said "poor" to the mustard-pot and spoon, taking, as we suppose, the moveable spoon for a broken part. "Gum," on the other hand, with which toys are often mended, is conceived as a universal remedy for things broken or disabled. Later (at 22½ months) she says "poor" to a crooked pin, and on my beginning to straighten it, "dada mend".

The sound of *g* is now coming, and a final nasal is developed. "Down" is pretty well pronounced. *Ding* = dinner—not the meal or meal-time, but a toy dinner service.

Bé bé = biscuit, with desiderative-imperative tone and meaning.

19 m. *O* sound now distinctly made, and *g* distinct by the end of the month. "Guy" is now *gá* instead of *dá*. A final *l* once or twice observed: *tál* = shawl. Final *t* distinctly made: *hat* or *höt* (hot). Soon afterwards *p* (in "top" pronounced *tap* or *töp*); *pu* = foot; after mastering final *t* she said *fat*. The monosyllabic form (one consonant and one vowel) still prevails. *K* is a favourite sound, and she has several words formed with it which are carefully kept distinct. *Ku* = stool. *Kah* (later *kad*) = cod [liver oil], which she considers a treat. *Ko* = "cosy" (on teapot); later *ka-zí* or *ka-zhi*. *Ká* = cold. *Ká ká* = chocolate. *Khi-en* or *kli-en* = clean; her first real dissyllable, for so she pronounced it. *Bè* for biscuit has now become *bek*. *Sh'ad* (thread). She has now observed the process of sewing, and tries to imitate it. Things broken, etc., are now divided into those which are to be mended with *dam* and those which are to be mended with *sh'ad*. Approach to *chu* (sugar) and *shu* (shoe, also sugar) sometimes quite distinct. I also note "jar" as well said, but *s*, *sh*, *ch*, *j*, are on the whole indistinct, and attempts to form them give curious palatal and sibilant sounds which I cannot write down. *W*, *v*, *f*, are now formed, but not well distinguished. *Vák* or *wák* = walk, *fák* = fork. Here also we get intermediate sounds. The *w* is often more German than English, though she cannot have heard the German *w* spoken.

The fork is a toy fork in the set of things generally called *díng* or *dín*. But *fák* has another unexpected meaning. The child likes to look at an old illustrated edition of Dr. Watts's poems, and she has turned "Watts" also into *fák*. It is possible, as M. Taine suggests, that to her there is some shade of difference in the sounds which escapes adult ears. At 20 months 25 days she said *vats* or *váts*. "Walk" has its proper sense as a mode of motion, opposed to riding, in perambulator for herself or in carriage for others. She is much interested in watching callers going away, and says to them *dýi dýi* or *zhí zhi* (gee-gee) . . . *wák*, as if to ask how they mean to go; or perhaps merely to show her knowledge. Sometimes she begins to say *tá tá* to

a visitor, not that she is tired of his or her presence, but that she wants the amusement of seeing the departure.

She has learnt to repeat *no no* after she has been told not to do something, as an act of assent to the prohibition, and she seems to take pleasure in saying *no no* to the cat.

20 m. *Dash* or *dásh* = dust. *Ta'sh* or *tá'sh*, learnt, I think, from "touch," one day repeated several times without assignable meaning, and then dropped. *Tásh*, however, is adopted for (mous)tache. N.B.—Final sibilants are more under command than initial. Final *g* now produced: *geg* = fizgig (toy so called).

At this time a sudden advance was made to dissyllables. Several words were produced with success on or about the same day: "Fanny, honey, money" (these two learnt from the rhyme of "Sing a song of sixpence"), very distinct. "Money," however, seems to be confused with "moon": when told to say moon she says money. Others are attempted with more or less success: as *fá-wá*, flower; *la-ta*, letter; *ha-pi*, happy (taught her as opposite of "poor," but I doubt if she sees the meaning. She has taken up *ha-pi* to stand for "empty," which we tried to teach her, and in that sense uses it without prompting.) *Bá-ta*, butter. The child's own name, Alice, is given as *A-si*, or perhaps *A-ši* (later *á-si*). As to sound, she is now acquiring the English long sound of *i* (*ai*). *R* is still impracticable, and attempts to form it sometimes give *d* (but this was very transient, and *l* soon became the common substitute): compare the converse Bengalese treatment of Skr. *ḍ*, which I believe is in Bengal regularly pronounced as *r*. "P'ram," for perambulator, becomes *thlam*: the *th*, with an extra aspiration, almost $\chi\theta$. A few weeks later this was simplified into *khlam*. There seems to be a difficulty about initial vowels: "egg" becomes *lleg* (or perhaps *yleg* would be nearer), which I can only write symbolically: the sound marked as *ll* or *yl* is something like the Spanish *ll* with an aspiration. A few days later the initial sound was more sibilant and less vocal, say (symbolically) *zhy*.

Early in March (at 20 months) we noted the first attempt at sustained conversation. The child was looking, or pretending to look, for a lost object on the floor. We told her she would get her hands dirty. On this she exclaimed, in a tone of dissenting interrogation, "Dirty!" (*da-ti*), and then, after looking at her hands, holding them out to us, and with triumphant affirmation, "Clean!" (*kle'n*). Here we have not merely vocal signs, but intercourse by speech—one may say an elementary form of repartee and argument. She can now say "yes" (*es*, or *is*, sometimes *as*) and "no" in answer to questions with fair intelligence, though she sometimes answers at random, and sometimes gives the wrong answer on purpose for a joke. One of her new words is *fa-ni* (funny), which she uses in a wider sense than adults, for anything that pleases and surprises her. The imitative name for the cat is dropped, and she now says (for "pussy") *pü-si* (*ü* as in South German, coming very near to *i*). "Funny" is also used to disguise fear, e.g., on being introduced to a strange dog. When left to play

alone she talks to herself constantly. The staple of one of these monologues (Mar. 10) was *á-díú* (formed on "O dear"). I half suspect a dramatic intention in her proceedings.

The peculiar short sound of English *a* (represented by *æ* in Mr Ellis' general notation) is now forming. She can say "bag" nearly like an adult. But as a rule she still substitutes (Indian) *a* or *á*, saying, *e.g.*, "cub," or "kahb," for "cab".

21 m. Progress is now less marked and rapid. New words continue to be acquired, but the power of putting them together does not seem to increase much. The child is, however, now more or less able to answer direct as distinguished from leading questions. Thus, when she had been paying a visit to some relations and cried to go home, she gave afterwards (Mar. 17) a pretty connected account of it in monosyllabic answers. Q.: What did you do to-day at ———?—A.: *Klai* ("cry"). Q.: And what did you cry for?—A.: *Ham* ("home," *i.e.*, I cried to go home). Also, when told not to handle a forbidden object, such as a knife, she will say, in a tone of intelligent acquiescence: *no-dá dá* (*i.e.*, I may not have that, but *dá dá* may). One trisyllable is in common use: *Tenisi* = Tennyson, an illustrated edition, which divides her attention with *Vats* (Watts).

As to sounds, *r* is generally replaced by *l*, or *ll*, or (approximately) *hl*: *hlan* or *llan* = "run". The prosthetic initial sound for words beginning with vowels is now *zh*, or an aspirated *y*.

She begins, too, to put now and then a substantive and adjective together: "clever baby," "happy man" (in picture); the meaning of which she now seems to understand well enough.

21½ m. There is now a distinct advance in constructive power. Substantives and adjectives are freely put together (*e.g.*, "dirty boots"), and I have noted one instance of the use of a real predicate so as to form a complete proposition. The child had been told, half in joke, that cabs were dirty as compared with her perambulator. For some days she had been accustomed to say "dirty" on the mention of cab, "clean" on the mention of perambulator. Now she made the whole statement for herself: *Kábz datí kham* klín* ("cabs dirty, peram' clean"). She still talks constantly to herself, and with a continuity giving more or less evidence of continuous trains of thought. I am informed of dramatic conversations with her doll, such as pretending to make it look at things, and describing them to it.

The doll furnishes an illustration of the process of making generic names. A doll was named "Bessie," in honour of the donor: some time afterwards another doll was given by another person. The child insisted on calling this "Bessie," too. She does not seem to feel the want of a specific distinction between the two dolls: when she does wish to speak of one as distinct from the other she says "other Bessie".

* Simple *k* is now substituted for the initial *kh* in this word; which again, as noted above, had replaced a more complicated aspirate sound.

In like manner, *bet* (bacon) is used with a generalised meaning, nearly = $\delta\psi\sigma\nu$, to denote any dish that appears at breakfast.

22 m. Vocabulary and power of expression are gradually and steadily extending. A certain number of the words called symbolic by some recent philologists have been mastered: "now," "there," "other," or "'mother," are in constant use; the child often says "there it is" (in the compendious form, *zhátis*), and almost always adds "now" to the statement of anything she wants (e.g., "Bring—cake—now"). "Again" is also in use, though not quite so much. The following approach to a complex sentence is reported: "Out—pull—baby—pees" (spectacles). Simpler combinations are freely used: subject and verb, as "run away man"; or, subject, verb, and *régime*, as "mama get Bessie". The sense is generally optative or imperative, but sometimes indicative. She often says *es es* (yes) to emphasise her demands, as: "Es es—baby's book there".

Articulation is firmer, and very distinct. She says "good-bye" better than most adults, but making two separate words of it, and dwelling strongly on the "good". The vowel-range is increased, but *a*, *á* are still favourite sounds. Of consonants *ch*, *j*, and *th* (both sounds) are still imperfect (*th* hard mostly becomes *s*, *th* soft, *z*), and consonantal *r* is not yet formed at all.

At 22 months 1 day, a real verbal inflexion was used. She said of a younger child, "naughty baby"; and being asked why it was naughty answered without hesitation: *klaid* (cried). That she appreciates the general force of the inflexion is shown about a week later by her using "comed" for the participle "come".

At 22 months 10 days, a sentence is noted *ex relatione*, containing not only a direct but an indirect *régime*; "Annie—gave—baby—sugar"; and again, a day or two later, "Dada give *bátá* (butter, *i.e.*, bread and butter) baby". Talk to the doll is now very common, as: "Bessie look," "Bessie walk away": sometimes the child repeats to the doll what has been said to her by elders. She also puts the doll to bed, takes it out for a walk and brings it home, etc. On one occasion she scolded it for two or three minutes, saying "naughty Bessie" with much gravity. We could not discover what the supposed offence was. I may observe on this that I have no reason to doubt that all the play with her doll is purely and consciously dramatic, not animistic; in other words, I have seen nothing to indicate a belief that the doll is really alive, nor is there, so far as I can observe, any tendency to attribute life to other inanimate objects. I think the child is perfectly aware of the difference between animals and things, though I am unable to give specific reasons for this impression. "Again" is now used to strengthen "more": when she wants anything repeated she says "more 'gain". The following is an actual short conversation, on seeing an ivory ring spun teetotum-wise: "Baby do't. . . [after failure to make it spin herself] more 'gain. . . . ma-ma 'gain. . . . ma-ma do't. . . . [then turning to another object of interest] . . . baby's *báts* (basket) . . . ma-ma, take off cover".

Command of general and symbolic language continues to make almost daily progress. *Zót sing* (that thing) is now used to call attention to any desired object the name of which has not been mastered.

At 22½ months, besides the dramatic play with the doll, we have now some quasi-dramatic imitation of grown-up people's action. For some time the child has been accustomed to bring the newspaper to the breakfast table, and she always pretends to read it herself before handing it over. To-day, seeing her mother writing, she scratched the paper with a dry pen, saying, "Baby *lait* (write) ma-ma's letter".

23 m. Fluency and command of language increase. We note the first appearance of a *question*, viz.: "Where's pussy? baby look up 'tairs."

The palatals, dental aspirates, and the peculiar English short *a* (as in "hat") are still imperfect, and *r* is represented by *l*. When *s* comes before another consonant, one of the two is dropped. *K* is in some words confused with *p* or *t*. She says "oken" for "open," "kek" for "take".

The child takes pleasure in quasi-dramatic games and actions with her parents as well as with her doll. Sometimes, when saying good-night, she pretends to refuse a kiss and lets me make a *fausse sortie*, as if annoyed or indifferent, and then calls "dada come back" (or "comed," for she uses this form for present and past indiscriminately, which compels me to set a lower value on her appreciation of inflexions), and gives the kiss after all. (At 23½ months, however, she uses "made" correctly.) I think she considers the thing a joke, but not without a shade of fear that it may be taken seriously. The last time, she completed the performance by saying "goody girl" in a tone of extreme self-complacency.

Seeing lines of dots on a printed page, thus (in a table of contents), she said, "Oh! pins," and made repeated attempts to pick them out. This would seem to have some bearing, however slight, on the gradual character of the process by which our vision of solid objects and perceptions of things as in three dimensions, is acquired.

She now has a settled formula to ask for things she wants, and also to express acquiescence when told she is not to have them, e.g., "baby have *pápá* (pepper)", "baby have *pápá* no." The "no" is not given as it would be by an adult, as a distinct exclamation following a pause. There is no stop and no raising of the voice. When she is impatient, "baby have, baby have, baby have," is rapidly repeated. She is very persistent in trying to get a desired object, and if she cannot have it at once does not give it up, but proceeds to make the best terms she can; e.g., she asks for bacon, and is told it is not for her, but her parents must have it first. She answers, "then baby have bacon". Here is an elementary notion of bargain and compromise. The child is already *πολιτικὸν ζῶον*.

Bacon has lost its former generality, meats which appear at breakfast being now divided into egg, bacon, *sis* (fish), and beef. Once, after calling a new dish "bacon," and being corrected, she said "bacon

no"—recognising, one may say, the logical division into bacon and not-bacon. The child is now able, however, to take up new words very quickly. She has reached, so far as concerns the names of things, the advanced stage of knowledge in which the provisional character of generalisations is recognised.

At about 23 months 10 days she cried violently on finding that her doll's head was coming off, and was pacified only when it was put out of sight with a promise that it should be mended. Her own report of the cause of her grief was "Bessie's head poor". The dramatic personification of the doll may probably count for something in this. But one is not strictly entitled to assume that she would cry less for damage to any other toy.

There are increasing signs of a desire to find explanations. Seeing in an illustrated advertisement a device of a griffin rampant supporting a kind of banner, the child invented a meaning of her own for it: "pussy *ling* (ring) bell". The figure of a man making pottery, which was part of the same advertisement, became "man open door," so as to form a single composition with the griffin. On hearing sounds in the street, knocks at the door, &c., the child readily (and as a rule spontaneously) assigns causes for them, saying "band," "organ," "man," "post," &c., as the case may be. Strange sounds, and at times sounds of a known class coming from an unfamiliar direction, appear to frighten her.

I should add that the greater part of these notes was already written before I saw M. Bernard Perez' very interesting book, *Les trois premières années de l'Enfant* (Paris 1878). I have retouched and rearranged them as little as possible, preferring the certainty of leaving them in an inartificial state to the risk of spoiling by manipulation whatever value they may possess as records made at the time.

F. POLLOCK.

Note-Deafness.—As a sufferer from the infirmity discussed by Mr. Grant Allen in the last number of *MIND*, I have read his suggestions as to its cause with much interest, and subjoin a few particulars for comparison with the case he has described. The writer's parents were both of average musical capacity, with constitutional tendency to deafness on one side. Two brothers with at least average hearing for ordinary sounds, are altogether wanting musically. As a child the writer was frequently treated for deafness; at three-and-twenty enlarged tonsils were removed, since when attacks of deafness have been rare, and always consequent on a cold. This, so far as it goes, tends to connect insensibility to quality of sound with defective sensibility to quantity—unlike Mr. Grant Allen's case, where the hearing was more than ordinarily acute. Like his subject, the writer is conscious of the difference between a full rich tone and the reverse; but finds music at its best only a pleasant noise, and the wailing of an Æolian harp as significant as an elaborate melody. The tone of different bells is also scarcely distinguishable. The defect was naturally dis-