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Attention is called to the "Wants" column. All are invited to use it in soliciting information or seeking new positions. The name and address of applicants should be given in full, so that answers will go direct to them. The "Exchange" column is likewise open.

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LETTERS TO THE EDITOR.

**** *Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.*

The editor will be glad to publish any queries consonant with the character of the journal.

On request, twenty copies of the number containing his communication will be furnished free to any correspondent.

Deaf-Mutes.

I CANNOT agree with Dr. Gillett that it is not a very great calamity to have a deaf and dumb child. Still less can I agree with him that the deafness is no calamity to the child, but "only a serious inconvenience," as baldness is an inconvenience "in fly-time or cold weather" (*Science*, Oct. 31, p 249).

President Gallaudet dissents from such a view (*Science*, Nov. 28, p. 295), and the deaf themselves will surely not indorse it. The American public also, by their appropriations in aid of schools for the deaf, have expressed a very different opinion. The average *per capita* granted for the education of hearing children is less than twenty dollars per annum, whereas in the case of the deaf it exceeds two hundred dollars.

Dr. Gillett says (*Science*, Oct. 31, p. 248), "Not two per cent of the deaf and dumb are the children of deaf parents." But, if the percentage comes anywhere near that figure, the education of these children alone would cost about one million of dollars. The number of deaf-mutes reported in the census of 1880 was 33,878, and two per cent of this number is 677. At $200 a head, the cost of education would be $135,400 per annum, or $1,083,200 if instruction were continued for eight years.

"Two per cent" may seem a very small matter to unreflective minds, but a little consideration will dispel the illusion. Not one per cent, not even one in a thousand, of the general population, is deaf and dumb. In 1880 the percentage was 0.0675: in other words, there were 675 deaf-mutes to every million of the population. Dr Gillett's "two per cent" means 20,000 to the million, a proportion nearly thirty times as great.

Nor must it be forgotten that Dr. Gillett's percentage is taken upon the whole of the deaf-mute population (which, of course, includes children and unmarried adults), whereas the deaf offspring are the products of the married couples alone.

Indeed, as President Gallaudet points out (*Science*, Nov. 28, p. 295), they are chiefly the offspring of couples in which one or both of the parties were born deaf, or came from families containing more than one deaf-mute. Sporadic deafness (if not congenital) is rarely inherited, and the majority of the marriages of the deaf are free from deaf offspring. How prolific of deaf offspring the remaining marriages must be, if their children alone constitute a percentage of the whole deaf-mute population nearly thirty times as great as the normal percentage for the country!

Dr. Gillett informs us (*Facts and Opinions*, pp. 53–58), that, of 1,886 deaf-mutes who had been admitted to his institution, 293 were known to have married (his statistics included the children then in school). Of this number, 272, or more than 92 per cent, married deaf-mutes; and 21, or less than 8 per cent, married hearing persons. We are not told how many families were formed by these pupils; but, as we know that in the vast majority of cases deaf-mutes choose partners who were educated in the same school with themselves, we may safely infer that the families formed by these pupils were very much less in number than the figures would at first sight indicate. If none of these deaf-mutes married pupils of other schools, then the 272 cases alluded to above formed only 136 families. The true number, however, is probably somewhat greater.

Dr Gillett says (*Facts and Opinions*, p. 57), "These marriages have been as fruitful in offspring as the average of marriages in society at large, some of them resulting in large families of children. It is interesting to know that among all these only sixteen have deaf-mute children." He seems to be unconscious of the fact, that, if you take an equal number of marriages of hearing people, there should not be one deaf child among the offspring (in 1880 there was one deaf-mute for every 1,480 of the general population).

"Only sixteen,"—this expression unfortunately is ambiguous. Does he mean that there were only sixteen deaf children, or did only sixteen of his pupils have deaf children, or were only sixteen of the families formed by the pupils productive of deaf offspring?

In this latter case, how many families were there,—272, or 136?—and how many deaf children? And what percentage of the offspring were deaf, and what hearing? All he tells us concerning this important point is, "In some of the families having a deaf child there are other children who hear."

We are not told in how many of these cases the parents were born deaf, or belonged to families containing more than one deaf-mute, nor how many of the marriages included a congenitally deaf partner.

What I, as a student of heredity, would specially like to know is this: what percentage of the children were deaf in those cases where the married partners were both deaf from birth, and in those cases where both had deaf relatives? I am sure, that if Dr. Gillett will make the calculation, and apply the results to the deaf population of the country, he will realize, as I do, that the question of intermarriage is one that deserves more serious consideration than he has given it in his letter to *Science*.

While, on the one hand, Dr. Gillett does not think it matters much to a child whether he is born deaf or hearing, because "deafness is neither a crime nor a disgrace, nor entails suffering," and because it is so little of a calamity as to be "only a serious inconvenience," like baldness in fly-time, on the other hand, he advocates the intermarriage of deaf-mutes without regard to heredity, because deafness is so great a calamity as to cut them off from