

wherever I have heard the question discussed among the general public, there is the greatest surprise expressed that the deaf should have hearing children. The discussions of the past few years have left upon the minds of many intelligent people the impression that the marriages of deaf-mutes are the prolific cause of the increasing number of deaf people in the United States. In considering the sociology of the deaf, it is necessary to bear in mind the following facts:—

The Clarke Institution at Northampton, Mass., opened in 1867. There have been several marriages among the pupils of the school, but none of them have had deaf-mute offspring.

There have been seventeen marriages of the pupils of the Horace Mann School, Boston, but none of the children of these marriages are deaf.

Principal Hutton of Halifax reports thirty marriages of pupils from his school, but only in one case do the children share the infirmity of the parents.

Mr. Mathison, Superintendent of the Bellville Institution, Ontario, says: "Six hundred and sixty-one children have attended, or are in attendance, at this school, and from the records I find that not a single parent of these children is deaf." The principal of the Minnesota School, after an experience of twenty years, and those of California, Alabama, and Mississippi, report a similar state of things in their respective states. But perhaps the most satisfactory statistics concerning the deaf are found in the reports of the Irish Commissioners. In 1881 these commissioners report as follows: "An inquiry having been carried out in the censuses of 1851, 1861, and 1871 as to the children of congenital deaf-mutes, and the result being in each case of a negative character, it was not considered necessary to repeat this investigation, as it appears evident that deafness and dumbness in the parents have no influence in propagating the defect."

In the census of 1871, a minute investigation was made respecting the marriage-state of congenital deaf-mutes, and from 115 unions there were found to be 315 children, of which number only three were deaf. Compare now this result with the number of deaf children from consanguineous marriages, and we find 141 cases of congenital deafness from the inter-marriage in 85 instances of first cousins; in 63 instances of the marriage of second cousins there were 100 deaf children; there were in all 324 cases of deafness from 194 intermarriages among relatives. One striking instance will illustrate the fact that consanguinity in the parents is responsible for a large percentage of deafness.

The Irish Commissioners report that No. 6 in their returns consisted of a family of five children whose parents were second cousins, two of the five children were born deaf. The father married a second time, but this wife was not related to him, and the six children resulting from the union were perfectly developed in all their faculties (Annals, Vol. xxx., No. I., p. 51). In the discussion on the papers read by Professor Bell before some of our scientific associations, he expressed the opinion that consanguineous marriages were not so productive of deaf-mute offspring as people generally supposed. How accurate this opinion is, the facts already quoted will show. No one claims that the mere fact of relationship is in itself a cause for deaf-mute offspring. It is quite probable that some lurking disease, some hereditary taint, becomes intensified in the offspring of consanguineous parents, and the children in consequence become deaf, though

why it should affect the hearing is a problem no one yet has been able to solve.

Professor Bell's indictment of the sign-language has been completely answered by Dr. Williams, the principal of the American Asylum at Hartford. By thirty-two cases from schools where signs are prohibited, he has shown that the pupils taught there have all the peculiarities which mark the diction of children educated by means of the sign-language.

Permit me, in conclusion, to cite an instance which indicates a tendency to be guarded against on the part of the Professor, a tendency, too, which has marked the literature of our deaf-mute press in their animadversions on the published addresses which he has given to the public, but, wherever found, the practice is indefensible.

In his address at the Gallaudet Centennial in Philadelphia, the sweeping statement was made that there were 15,000 children of school age not receiving any education. This statement was at once challenged, but the Professor quoted in his defence statistics given in advance by F. D. Wines of Illinois. There would be some justification for this error, if Mr. Wines had not publicly stated, before Professor Bell at the convention in New York in 1884, that the number of children of school age not under instruction was 5,000. The number of deaf-mutes in the United States at the time of this charge was 33,000. Of these, 15,000 were under twenty years of age. The number of children between ten and twenty years of age was 10,000, and of these 6,900 had been under instruction during the period here considered, so that the claim of 15,000 children not receiving any instruction was very wide of the mark. (See Report to British Government, p. 51.)

W. G. JENKINS.

NOTES AND NEWS.

THE railway tunnel under the St. Clair River, between Port Huron, Mich., and Sarnia, Ont., is rapidly approaching completion. Communication between the headings from the opposite sides of the river was effected on Aug. 25. This tunnel is considered the greatest engineering work of the kind in this country.

—On Saturday, Aug. 23, the remains of John Ericsson, the eminent engineer and inventor, were removed from the vault where they were deposited at the time of his death, in March, 1889, taken aboard the United States man-of-war *Baltimore*, amid imposing ceremonies, and are now on the way to Sweden, the place of his nativity.

—Some habits of crocodiles have been lately described by M. Voeltzkow. Travelling in Wituland, says *Nature*, he obtained in January last seventy-nine new-laid eggs of the animal, from a nest which was five or six paces from the bank of the Wagogona, a tributary of the Ooi. The spot had been cleared of plants in a circle of about six paces diameter, apparently by the crocodile having wheeled round several times. Here and there a few branches had been laid, but there was no nest-building proper. The so-called nest lay almost quite open to the sun (only a couple of poor bushes at one part). The eggs lay in four pits, dug in the hard, dry ground, about two feet obliquely down. Including eggs broken in digging out, the total seems to have been eighty-five to ninety. According to the natives, the crocodile, having selected and prepared a spot, makes a pit in it that day, and lays about twenty to twenty-five eggs in it, which it covers with earth. Next day it makes a second pit, and so on. From the commencement it remains in the nest, and it sleeps there till the hatching of the young, which appear in about two months, when the heavy rain period sets in. The egg-laying occurs only once in the year, about the end of January or beginning of February. The animal, which M. Voeltzkow disturbed, and saw drop into the water, seemed to be the *Crocodilus vulgaris* so common in East Africa.