

The foregoing may be tabulated as follows:—

PARENTS.	OFFSPRING.	
	Congenitally Deaf.	Adventitiously Deaf.
Both parents congenitally deaf.....	1	
One parent congenitally and one adventitiously deaf.....	5	5
One parent adventitiously deaf, one hearing.....	2	
Both parents adventitiously deaf.....	1	1
One parent hearing and one congenitally deaf.....	2	
Both parents deaf, but whether congenitally or non-congenitally unknown.	1	1
Father deaf, but whether congenitally unknown, but of mother no knowledge.....		1

Applying the above to the classification recommended by Dr Bell and approved by Dr. Gallaudet (*Science*, Nov. 28, 1890, p. 295), while it is difficult to decide as to which class some of them should be assigned, I should say that it appears as follows: in Class 1, two; in Class 2, twelve; in Class 3, five; and in Class 4, one.

Let the reader consider the above table, which comprises twenty deaf-mutes, three of whom were never among my pupils (thus leaving seventeen), and remember that it shows the deaf parentage of 2,158 deaf-mutes, and observe that only one of them is the child of parents both of whom were congenitally deaf, that ten are the children of parents one congenitally and one adventitiously deaf, and two the children of one hearing and one congenitally deaf parent, and ask who is advising the promotion of "a deaf variety of the human race." It is not the subscriber. I find no two per cent in this.

"Master, who did sin, this man, or his parents, that he was born" deaf? "Jesus answered, Neither has this man sinned nor his parents." PHILIP G. GILLET.

INDIAN PRESERVES.¹

THE demand for Indian preserves and jams has greatly increased during the past few years. In India, preserves and jellies are made of the pear, quince, mango, tamarind, date, banana, guava, and other fruits. In Singapore, pineapples are preserved whole; and in the Bahamas the manufacture is also carried on, on a large scale, to the extent of nearly 1,000,000 cans annually. Each can of fruit, before the sirup is added, weighs two pounds. From 12,000 to 14,000 can be filled in a day; and 25,000 pines are usually consumed daily during the season. In Singapore much enterprise has been shown in preserving tropical fruits. There are two or three firms who deal largely in them.

The Indian preserves were formerly much in request. Thus, in the thirteenth century the most renowned preserve was a paste made of candied ginger. Among other fruits, etc., preserved in their natural state, in sirup, crystallized with sugar, or made into jelly, are the pineapple, bread-fruit, ginger, jack-fruit, the papaw, mangosteen, pomeloe, guava, and nutmeg. Although in flavor and preparation these preserves may not equal those of Europe, they make an agreeable change.

The pineapple is one of the best of tropical fruits, although it is produced of a superior quality by European cultivators. Its sweet and acid flavor, and pleasant aroma, make it sought after by consumers of all classes. One house in Singapore ships about 70,000 tins of this fruit. Pineapple marmalade (thought by some

to be the most delicious preserve in the world) might also be sold at ten cents per pound in London.

There are two species of guava fruit.—the red guava; and the white, or Peruvian, guava. Both make excellent sweetmeat paste or jelly, which is very pleasant and nutritious, from its superior power of assimilation with the gastric juice, and perfect development of saccharine.

It is said that a hundred different preserves could be made from a judicious blending of the fruits of the East and West Indies and South America.

The jamun (*Syzygium jambolanum*), a sort of long, dark purple plum the size of a large date, makes excellent preserves, and has exactly the flavor of black-currant jelly, to simulate which large quantities are sent from India to England. It is also used for flavoring other jams.

The fruits of *Inocarpus edulis* are preserved in the Indian Archipelago. A sweet conserve is made in India of the fruits of *Terminalia Chebula*. Another is made of the fruits of *Phyllanthus distichus*, at Birbhum in Bengal. The acid calyces of the rosella (*Hibiscus sabdariffa*) are converted into an excellent jelly, which would be highly appreciated in England, if once introduced. Jam and jelly are made in Canada from the fruit of *Shepherdia argentea*.

The fruit of *Spondias*, not unlike a cherry, is made into jelly. The scarlet fruit of the quandong (*Fusanus acuminatus*), the size of a small peach, makes an excellent preserve for tarts in Australia.

The tamarind plum (*Dialium indum*) of Java has a pod filled with a delicate, agreeable pulp, much less acid than the tamarind. The golden drupes of *Spondias cytherea*, or *dulcis*, a native of the Society Islands, are compared, for flavor and fragrance, to the pineapple. The large acid fruits of the kai apple (*Aberia caffra*) of Natal can be converted into a good preserve of the red-currant jelly class. The fruit of *Cornea speciosa* is delicious: it is called "mangaba" by the Brazilians, and when ripe is brought in great quantities to Pernambuco for sale.

The fruit of the goumi, of Japan (*Elaeagnus edulis*), makes excellent preserves, fruit sirups, and tarts. The berries of *Pyrus aucuparia* and of *P. baccata* are made into comfits, conserves, and compôtes. The fruits of *Astrocarpum ayri*, of Brazil, are made into an excellent preserve, which is much esteemed in that country.

The fruit of the Chinese quince (*Diospyros amara*) is converted into sweetmeats, of which the Chinese are exceedingly fond.

The bread-fruit, in sirup or crystallized, may please native palates, but it is not likely to find favor in Europe, being flavorless, and more of a food-substance than a fruit.

Preserved ginger is popular in England, but is not much esteemed on the continent. The Spaniards eat raw ginger in the morning, to give them an appetite; and it is used at table fresh or candied. Among sailors it is considered antiscorbutic. The quantity of preserved ginger imported ranges annually from 1,500 to 2,500 hundredweight, value about \$17,500 to \$21,500. It forms the bulk of the succades received from the Chinese Empire, 18,000 to 20,000 hundredweight coming from Hong-Kong. Some ginger is also received from India. The mode of preparing it in the East is as follows: The racemes are steeped in vats of water for four days, changing the water once. After being taken out, spread on a table, and well pricked or pierced with bodkins, they are boiled in a copper caldron. They are then steeped for two days and nights in a vat with a mixture of water and rice-flour. After this they are washed with a solution of shell lime in a trough, then boiled with an equal weight of sugar, and a little white of egg is added to clarify. The ginger, candied or dried in sugar, is shipped in small squares of zinc. That preserved in sirup is sent out in jars of glazed porcelain of six and three pounds, and packed in cases of six jars. The quality called "mandarin" is put up in barrels.

The papaw (*Carica papaya*) is a fleshy, pulpy fruit, of an orange color, sweet and refreshing, which is eaten as the melon is in Europe. This fruit, however, in sirup or crystallized, has very much the taste of a turnip.

The mangosteen is a fruit about the size of a mandarin orange,

¹ From the Journal of the Society of Arts, London.

of a sweet flavor, accompanied with a slight acidity, and an odor resembling the raspberry. It is the produce of *Garcinia mangostana*, and is one of the most delicious and famous of the fruits of the Indian Archipelago, ranking with the pineapple. Presents of baskets of it are sent from Singapore to India and China. It is a pleasant fruit, with a delicate but characteristic flavor, partaking of the strawberry, grape, pineapple, and peach. The happy mixture of tart and sweet in the pulp renders it no less salutary than pleasant; and it is the only fruit which sick people are allowed to eat without scruple. In Cochin China they sell at from a dollar to a dollar and a quarter the hundred.

The pomalo (*Citrus decumana*) is a large fruit of the orange family, with an acid flavor, frequently bitter. The pulp and thick rind, crystallized with sugar, are eatable, but lose much of their natural flavor. It is better known as the shaddock, and the fruit will exceptionally attain a weight of twenty pounds.

The mammea apple (*Mammea Americana*) is abundant in the West Indies. The pulp is of a sweet aromatic smell, and of a peculiar yet delicious flavor. It is sometimes sliced, and eaten with sugar or wine, and also makes a very good jam by being preserved in sugar. Another tropical fruit, the *Mammea sapota*, is known as American marmalade, from the similarity of the flavor of the pulp to the marmalade made from quinces.

The succulent fruits of *Cicca disticha* have an acid, sweet flavor, and are eaten cooked or made into preserve.

The green, fleshy, gratefully acid fruits of *Averrhoa bilimbe* and *A. carambola* are preserved, and used for tarts and for flavoring various dishes.

An excellent preserve is made from the sweet peel and acid pulp of the comquat or kumquat (*Citrus japonica*), a curious, small, nutmeg-shaped orange in China and Japan.

The red berries of *Carissa carandas* furnish a well-known substitute for red-currant jelly, in India and China.

The Peruvian cherimoyer (*Anona cherimolia*) is a highly esteemed succulent fruit, of a most luscious flavor, containing a soft, sweet mucilage resembling strawberries and cream. It is often called the "queen of fruits."

The mango, the mangosteen, the custard-apple, and the durian are known by repute only to the people of this country; but, while they might easily be frozen and brought here in admirable condition,—dishes fit for the gods,—no attempt is made to utilize these luscious fruits of India in their fresh state, nor is very much done in preserving them.

The durian (*Durio zibethinus*), although it has a strong offensive smell, is eaten greedily by the Burmese, and as many as 40,000 are annually sent to Upper Burmah.

The mango (*Mangifera indica*) is the best fruit in India, as highly valued as the peach with us, and forms a considerable portion of the food of large classes of the native inhabitants. The varieties cultivated are about as numerous as are those of the apple. An Indian gentleman has made colored illustrations of more than two hundred varieties of this fruit. The quality is difficult to judge of from external appearance. There are large and small, elongated and abbreviated, bright orange-colored and green. They vary much in taste, some being of the flavor of honey, some of pineapple, some of orange, while others have distinct flavors of their own. A good mango should be as little stringy as possible, and should not have too much of the turpentine flavor towards where it is attached to the foot-stalk: a moderately aromatic savor there is by no means objectionable.

The young unripe fruits are largely consumed in India in tarts, etc., and mango-fool there takes the place of gooseberry-fool. The half-ripe fruits are also made into a marmalade which resembles much that of apples.

So large is the consumption of this fruit in India, that wagon-loads, bringing collectively twenty tons of the fruit, have entered the Island of Bombay in a single day. The fruit of the finest mangoes have a rich, sweet-perfumed flavor, accompanied by a grateful acidity.

The thick juice is by the natives of India squeezed out, spread on plates, and allowed to dry, in order to form the thin cakes known as amsatta. The green fruit is sliced and cooked in curry; is made into pickle with salt, mustard, oil, and chillies; and also

into preserves and jams by being boiled and cooked in sirup. Some varieties of mango have fruits as big as an infant's head, ovate, with a golden skin, speckled with carmine, and a green-gage flavor.

The finest varieties of this almost unequalled fruit seem to thrive in Jamaica, where it was introduced about a century ago as well as in Bombay. It is the popular fruit there with the negroes.

The Siam mango is a tolerable kind, which sometimes grows to one pound weight. The egg-mango is a small, yellow kind, with too much of the turpentine-flavor, and too acidulous to be much prized. The horse-mango is a very coarse fruit of unpleasant odor, much eaten by the lower classes, and producing cholera, diarrhoea, and dysentery. The Bombay mango, termed "Parsee," is known for its lusciousness and delicacy of flavor, the absence of fibre, firmness of flesh, thinness of skin, and small size of the stone. It must, however, be admitted that on tasting this delicious fruit for the first time, a slight turpentine flavor is experienced.

A raw guava, or even a raw mango, may not be, to every Englishman's palate, a satisfactory exchange for a mellow pear or a juicy peach, but preserved mango and guava jelly are things by no means to be despised. Some of these preserved foreign fruits are delicacies only to be obtained at some of the best West-end houses, at prices too high for ordinary consumers; but if large quantities were sent into the market, and the prices consequently lowered, the demand would become greater, and the sale more profitable, and would probably lead to the introduction of new articles, to the mutual benefit both of ourselves and the growers and preservers of the fruits.

Mango jam is prepared by boiling the mango in sirup, after removing the skins and stones, and the sour juice squeezed out by the free use of forks, and soaking in fresh water. Two pounds of mango to one pound of sugar is the proportion in which it is prepared.

Bilimbi jam is made by removing nearly three-fourths of the juice of the fruits of *Averrhoa bilimbi*, and soaking in water, squeezing the fruit and boiling them in sirup. Nelli jam, from the fruit of *Phyllanthus embelica*, is made in the same manner, proportion of fruit and sugar same as mango.

From Natal there have been shown at the various exhibitions amatungula jam, the produce of the fruit of *Arduina grandiflora*, sometimes called the Natal plum. This jam is firm, nearly like that of the quince, and has a rough acid flavor, but is a curious and agreeable preserve.

The gooseberry jelly from there is the produce of *Physalis pubescens*. It is pleasantly sharp, without having the rough, metal-like acid of the amatungula. The guava jelly has the full taste of the West-Indian preserve. The pineapple jam has the rich, almost too luscious taste for which the Natal pines are famed. The loquat is a very sweet and fine preserve, slightly resembling quince marmalade, but with less pronounced individual flavor. The fruit is very delicious in its unripe state, having the flavor of an apple grafted upon the flesh of the melting peach, with large apple-pips taking the place of the stone, and ripening in massive bunches. Like the peach, the fruit is almost too delicate for a preserve. Its most refined and exquisite qualities do not survive the bath of boiling sugar. The rosella is the preserved fruits or calyces of the *Hibiscus sabdariffa*, which makes a most estimable substitute for red-currant jelly, particularly relished in hot climates. The grenadilla, the purple fruit of a passion-flower (*Passiflora edulis*), is almost without a rival for delicate fragrance and perfume, has a sweetish acid taste, and makes an excellent preserve. The St. Helena peach resembles, in the preserved state, a very excellent yellow plum. The shaddock marmalade might also be spoken of as a worthy substitute for the Seville orange marmalade.

Nature says that the Russian painter Krilof is painting the portraits of typical representatives of the various races included in the Russian Empire. In carrying out his purpose, he has undertaken many long journeys; and he has now a small gallery which ought to be of considerable value from an anthropological as well as from an artistic point of view.