

supplies. There were at the time of my visit sixty resident pupils, several without other family or home, whom the school thus undertakes to train thoroughly for a special purpose, and establish in respectable positions after they leave.

Most of the pupils, however, enter into the second category of day-scholars, wisely handed over to the *Educatório* authorities by the directing-board of the free schools of Palermo. This contingent, principally, swells the number actually receiving instruction here to the already mentioned figure of seven hundred, all of them taught by young women who have themselves been approved of by the institution. These teachers come from the normal-school of the *Educatório*, the department which, so far as I could judge from visible results, appeared to me the crowning success of the place. Between 1876 and 1899, one hundred and thirty-six young women have been drilled in the work of teaching in various branches, but all on a sound basis of middle-class training. Thirteen of them are now engaged in the school itself, all but two as regular teachers or professors. A school at Randazzo, with a kindergarten, employs no less than eight. And the eagerness with which such instructors are sought throughout the country is proved by the fact that thirty-four of them are engaged in various public schools about the island. As a sign of the care exercised in completing the work of the school, I may add that a trained teacher is not, on leaving, thrust out to find or struggle for a position as best she may, but the authorities (and chiefly the admirable director of the *Educatório*) secure appointments for such as have no family to return to, or are unable to wait for work. Some of these positions being in the newly acquired colony of Eritrea, a colonial section became imperative; and I was much interested in hearing that Arabic, taught by a young Egyptian lady, forms an important item in the programme.

In the practical department, or work-school, are taught a variety of useful pursuits, such as needlework of several kinds, designing, drawing, and so forth, all without views to the "accomplishment" element in education, but merely in order to further the growth of the feeling of self-help and social usefulness in the learners, who subsequently convey them into the home or the world of work. Some of the drawings, it may be mentioned, were executed by tiny girls of twelve years of age, and, although taken from complicated and difficult relief models, would be a credit to any art-school. In fact, the quality of the work done in all departments has proved so uniformly excellent that graduates of the *Educatório* are now entitled to offer themselves as candidates for all the Government girls' schools in town or country, without further examination. Besides all this valuable and thorough training, great care is observed in keeping up the original higher moral purpose of the institution by gently dwelling on the teacher's vocation with all the self-discipline involved in the right comprehension of it; character and conduct are constantly insisted on, not only in regard to the internal administration of the school, but as indispensable elements in the recommendation given to any teacher aspiring to a place. And as this appears to be achieved through no system of punishment whatever, but by the constant example of the head and his staff, it would seem as though the admittedly difficult problem of deal-

ing with Sicilian character has been solved, so far as the women are concerned, within the four walls of this secularized convent. I am glad to be able to say that I have never been more profoundly impressed with the results of such a method than in this special instance. Perhaps the only regrettable feature connected with it is the professedly imperative necessity of restricting the benefits of such education and training to members of the Catholic Church.

But much the most encouraging reflection, after such a visit as this, is that here, after all, apparently, is the truest hope for those who have not yet lost their faith in the future of Sicily—and of Italy. In spite of economic confusion, of political insecurity even more alarming, work of this kind is being carried on all over the country, in corners unvisited by the tourist, through the efforts of a host of patient and modest teachers. It is my sincere conviction that their generation will see its reward. P. T. L.

THE CASPIAN SEA.

KRASNOVODSK, October 13, 1900.

When the imagination properly takes in the facts, it gives one a strange sensation to be sailing about over the waters of the Caspian Sea, and to wander over its low-lying shores. For, except when we look at our barometer, it is difficult to realize that we are in the centre of a vast depression in the surface of the earth nearly 100 feet (exactly 84 feet) below the level of the sea. But our barometer has reached its limit and is no longer of use. When we inquire further, and examine the facts more carefully, we learn that a sandy ridge of only twenty-three feet in height is all that prevents the backward flow of the Black Sea into the northern part of the Caspian, through the long and swampy depression of Lake Manytch; while everything around indicates that the Caspian basin was once full to overflowing, and that the present sea is but a survival of a vast oceanic depression.

The Caspian Sea is 740 miles long and from 200 to 400 miles wide. Its area is about 181,000 square miles, but its drainage basin is immensely larger. The Volga alone brings into it the drainage of more than 500,000 square miles of European Russia, and the Ural, 80,000; while six other rivers from the Caucasus and the table-lands to the south and southeast, contribute the quota furnished by two or three hundred thousand more. Indeed, the water pouring into the Caspian probably exceeds that brought into the Black Sea by the Danube, the Don, and the other streams emptying into it. And yet the Caspian Sea is not full. That it was once full and running over is shown by a variety of considerations. It is surrounded on its whole northern end and on its southeastern side by wide, low plains, but little above its level, which are everywhere impregnated with salt, and which contain the shells of mollusks like those now inhabiting the sea. All over these areas are scattered minor depressions, many of which are considerably lower than the sea, and are either completely dried up, having salt deposits in the bottom, or are partially filled with water much saltier than that of the ocean.

A curious fact about the Caspian Sea itself, however, is that its water is much less salt than that of the ocean. In the shallow northern portion of the sea, which receives the drainage of all central and

southern Russia, the water of the Caspian is so fresh, especially in the early summer months, as to be drinkable; while in the deeper southern portion the water is less salt than that of the Black Sea, and only one-third as salt as the ocean. At first thought, this would appear to be inconsistent with the theory that the Caspian basin is a partially dried-up portion of an oceanic belt, for in that case it would seem that, as with Great Salt Lake and the Dead Sea, the water ought to increase in saltiness as it becomes less in volume. An interesting process is found to be going on, however, which constantly tends to reduce the salinity of the water, and which helps us to understand how those vast salt deposits which underlie central New York, eastern Ohio, and southern Michigan might have been formed. Of course we do not refer to the constant inflow of fresh water, for that is all removed by evaporation, but the Caspian Sea is surrounded on its most arid sides by numerous and large bays connected with the main body of water by narrow and shallow channels through which currents are constantly flowing from the sea, but not back into it. This is because the evaporation is so great that the inflowing currents are barely sufficient to supply the waste from that source. The consequence is, that an enormous amount of salt is carried off from the sea into these receptacles and there detained. One of the longest of these is the Karaboghaz, or Bitter Water, a bay nearly one hundred miles in diameter, situated about midway on the eastern shore, and connected with the sea by a channel only five feet deep and four hundred and fifty wide. Through this the water of the Caspian is constantly flowing at a rate which is never less than a mile and a half an hour, and is usually three miles an hour. Von Baer, who has investigated the matter most carefully, estimates that through this channel alone 350,000 tons of salt is daily withdrawn from the central body of the sea. Many similar basins have already been filled with the salt which has crystallized from the water thus brought into them and evaporated.

There is, however, another probable explanation of the low salinity of the Caspian Sea which has not been properly considered. This is to be found in the recentness of the causes which have brought about the present conditions of things. The process of desiccation over the basin of the Caspian has necessarily gone on with great rapidity since its outlets were elevated above sea level. For, while the rainfall is less than a foot per annum, the evaporation is probably three feet. When, therefore, its area was twice as large as at present, its level was very likely reduced as much as a foot per annum, notwithstanding the inflow of its great rivers. With its present contracted surface it just balances these contributions. This rapid process of evaporation resulted in leaving a large part of the salt stranded over the outlying abandoned bed. It has not had time to get back into the sea. It is probable, also, that the original saltiness had been much reduced by the overflow into the Black Sea, which would have continued for some time after the original elevation of the region.

As we have already said, the greatest contributor of water to the Caspian Sea is the Volga, which brings into it a large part of the drainage of all Russia. But, about 300 miles above its present mouth, this river so

nearly approaches the trough of the Don, which empties into the Sea of Azov, and is so nearly on a level with it, that a canal fifty miles long is made to connect the two. It is evident, therefore, that slight physical changes might divert the waters of the Volga into the lower valley of the Don, and so into the Black Sea, thus robbing the Caspian of its present main supply. The result of such a diversion would be a great contraction of its area and lowering of its surface. Curiously enough, such a contraction and lowering of the surface even since the Christian era is witnessed to by historical evidence. The city of Derbend is situated on the west shore of the Caspian, where a spur of the Caucasus Mountains comes down to the water's edge. This has always been a fortified point, and is reported to have been strengthened by Alexander the Great. But the foundations of masonry are ascertained to extend more than fifty feet below the present level of the sea. Moreover, it is reported that the natives proposed to conduct Alexander across dry-shod, which could only have been done if the shallow ridge running across the sea from the Caucasus Mountains near Baku to the Grand Balkan near Krasnovodsk had been laid bare by a general lowering of the water. This condition of things is supposed to have continued down to about the fifth century of the Christian era.

In view, also, of the historical references to such a fluctuation in the lower course of the Volga, there would seem, therefore, little doubt that far-reaching physical changes have occurred in this region in comparatively recent times. How profoundly these have affected the complex movement of population in Western Asia and Eastern Europe is a question of the greatest interest. It is instructive to find, also, how generally the study of the physical conditions of the East is confirming the sources of ancient history, and rendering easy of belief many statements which an incomplete knowledge of the conditions had tended to discredit. And still the Caspian Sea has a future far greater than its past. Its fisheries, its petroleum products, and its commerce are building up great and rich cities upon all its shores. A single company in Petrovsk pays \$200,000 for its fishing privileges at the mouth of the Kura River. Astrakhan, at the mouth of the Volga, is a city of 120,000 inhabitants, and the commerce passing through it is comparable to that going through the Sault Ste. Marie. A small district near Baku produces more oil than the entire United States, and the city already has a population of nearly 200,000; while Krasnovodsk, the railroad terminus from which I write, on the eastern shore, though dependent on distilled water, and water brought in on the cars, now commands the commerce of a large part of Central Asia.

G. FREDERICK WRIGHT.

Mlle. Robespierre.

PARIS, January 2, 1901.

We may see, in our own time, how rapidly history is changed into legend and transformed according to the passions of the hour. A legend has connected itself with the sister of the famous Terrorist Robespierre, and M. Lenotre, in his valuable volume, 'Vieilles Maisons, Vieux Papiers,' has taken the trouble to tell us the real truth about her. The legend was formed after the publication in 1834, a long time after the Ter-

ror, of the 'Memoirs of Charlotte Robespierre.' These Memoirs were published from a manuscript after the death of Mlle. Robespierre, by a "Robespierrist arriéré," says M. Lenotre. Her testament, written with her own hand on the 6th of February, 1828, was examined by M. Lenotre at the office of a notary of the La Tournelle quarter. It is thus worded:

"Wishing, before paying to Nature the tribute which all mortals owe to her, to make known my sentiments towards my eldest brother, I declare that I always knew him as a man full of virtue; I protest against all the letters, detrimental to his honor, which have been attributed to him; and, wishing to dispose of what I shall leave at my death, I hereby constitute Mlle. Reine-Louise-Victoire Mathon my universal legatee."

The Memoirs are written in the same spirit. "Oh," says M. Lenotre, "in what tender colors Robespierre is painted in them! What sensibility, what amiable resignation! The heroes of Florian are Tiberiuses beside him; every line celebrates the mildness of his character, the purity of his heart, his even temper, the simplicity of his life, etc." When the men of Thermidor attack her brother, she utters imprecations against them. She represents herself as having for forty years bemoaned this well-beloved brother, and she repeats on every occasion, "Oh, had he only lived!" "Well," adds M. Lenotre, "if he had lived, perhaps Charlotte would not have written a line." He has gone over old documents kept at the General Security department. "Mlle. de Robespierre," he says, "probably thought that nobody would ever look there for the refutation of her romance."

The mother of Charlotte Robespierre died young; the father, "called to foreign parts by mysterious interests," left Arras in 1766 and never reappeared. Robespierre and his brother Augustin were taken in by their grandfather, a brewer; their young sister Charlotte, by her aunts, two old and pious maids, who were very poor. By the protection of the Bishop of Arras, Charlotte was admitted into a charitable establishment administered by a Jesuit. The two brothers were educated, the eldest at Louis-le-Grand, with the help of the Abbé de Saint Waast. In 1781 we find them living with their sister in a small house at Arras, which is still shown to strangers. In 1789 Maximilian, who had a legal position, was elected to the States-General. After the session of the Constituent Assembly, he was appointed "public prosecutor." His sister helped him with the little money she had to establish himself in Paris.

Robespierre lived in the house of a cabinet-maker named Duplay, in a house in the Rue St. Honoré, which is still preserved in part. Duplay, his wife, and children became for Robespierre a sort of family; they were very proud of him, flattered him in every way, and, when Charlotte came from Arras to live with him, they tried to disgust her and quarrelled with her. Charlotte took lodgings in the same quarter, in the Rue St. Florentin, and persuaded her brother to live with her. He consented for a while, but the Duplays soon brought him back triumphantly to their own house. The younger Robespierre tried to console her by taking her with him on a mission to the army of Italy. Unfortunately, he took also with him a young lady of easy virtue with whom Charlotte soon quarrelled. Augustin ordered his sister to leave the army, and

she returned to her deserted apartment in the Rue St. Florentin.

The Duplays kept guard around Robespierre; they felt, or affected to feel, continued apprehensions about him, they were persuaded that all the world was conspiring against their lodger. One day Charlotte, who wished to reconcile herself with her brother, sent to him, through a friend, two pots of confitures. Mrs. Duplay sent them back angrily. "Take this away; I don't want her to poison Robespierre." After a while Robespierre sent for his sister. He received her amicably, but told her that, in her position, she could not remain in Paris, she had better return to Arras. She consented, and left for Arras with Lebon, pro-consul of the province of Artois. As soon as she arrived, she was denounced as an aristocrat to the popular society of the town, at the instigation of Lebon himself, if we may credit the author of 'The Secrets of Joseph Lebon.' The pro-consul was an intimate friend of the Duplays. Charlotte was much frightened, and placed herself under the protection of an enemy of Lebon, Florent Guyot, a member of the Convention, who was at the time the commander of Lille. Guyot sent her back to Paris, but she dared not return to her apartment in the Rue St. Florentin, which was too near the house of the Duplays. She took refuge in the house of Citoyenne Laporte, wife of a judge of the revolutionary tribunal of Paris, a quondam glove and perfumery merchant.

Charlotte was staying still at his house on the famous day of the 9th Thermidor. Forty years afterwards the Memoirs speak thus of this event: "I rush out in the street, my head bewildered and despairing. I call, I look for my brothers; I learn that they are at the Conciergerie. I run thither, I beg with clasped hands to see them; I fall on my knees before the soldiers; they turn me away. My reason goes; I don't know what happened, what became of me. . . . When I came to myself I was in prison." Charlotte was carried away by her imagination. In reality, as soon as she heard of the arrest of her brothers, she left her apartment. She never showed herself at the Conciergerie, but prudently took refuge in the Halles quarter, at the house of a Mme. Béguin, under an assumed name. She was however, discovered there by the spies of the Committee of General Security three days afterwards, and conducted to the Section of the Contrat Social (are they not admirable, these names of General Security, Social Contract, etc.?).

"It must be said," writes M. Lenotre, "that in the face of danger the behavior of this sister of the Gracchi was deplorable. She disavowed her brothers with a disconcerting ease, told how they had turned her out and she had nearly been their victim. She swore that if she had suspected their infamous plot, she would have denounced them rather than see her country perish. She did not forget the woman Duplay, whom she accused of all her misfortunes, and who, at the same hour, mad with terror, strangled herself in the prison of Sainte-Pélagie, where she had been thrown on the evening of the 9th Thermidor. Citoyenne Béguin was not more discreet; she knew, for certain, that Robespierre had determined to send to the guillotine all those who showed any interest in his sister. In these interrogatories, all the mysteries of the Duplay house were revealed—the frequent visits of Fouquier-Tinville to the 'Incorruptible'; the way in which were fabricated, in the family circle, the lists of the condemned; the daily relations entertained with some of the members