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MEMOIR

OF

CHARLES ALEXANDER LESUEUR.

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At the close of the eighteenth century, the Institute of France, ever actuated by the desire of advancing the sciences, which are the basis of the durable glory of nations, conceived the project of a voyage of discovery in the southern parts of the Eastern hemisphere. Great Britain had done much for geography and navigation. She had recently founded a colony in New South Wales, singular in its conception, unexampled in its success. She was spreading her empire over various parts of Terra Australis, now termed the Fifth Continent; but still there was an extensive field open for geographical enterprise, as a large portion of the southern coasts of that immense country was yet unexplored.

The French government after a succession of extraordinary commotions, now began to assume some consistency; and the nation, always sanguine in its anticipations, hailed the event as an earnest of future prosperity. Bonaparte was elevated to the dignity of first Consul; and although the wars which had called

into activity his military talents still continued, yet was it hoped that under his auspices France, long the antagonist of England in arms, might be enabled to prove herself to be a successful competitor in those pursuits which tend to the improvement and happiness of the human race.

The measure was suggested to the government; and the proposition of the Institute was seconded by the First Consul, who, as a member of the Academy of Sciences, felt a lively interest in its proceedings. The government yielded to the wishes of the Institute; and at the moment when the army of reserve was about to pass the Alps, to enter Piedmont, Bonaparte issued his orders to hasten the execution of this great enterprise.

As it was intended that this expedition should form an epoch in the history of maritime discovery, neither pains nor cost were spared to render it successful. Two sloops of war or *corvettes*, respectively named the *Géographe* and the *Naturaliste*, were equipped in the port of Havre; and a selection from the most skillful and experienced officers of the navy was made to conduct them. The scientific corps, with their coadjutors, all of whom had been recommended by the Institute, amounted in number to twenty-three; to wit: four astronomers and hydrographers, three botanists, five zoologists, two mineralogists, four artists, and five gardeners. So large and so efficient a body had never been engaged in a similar expedition.

It was not among the officers alone that there was discrimination in the choice. "The midshipmen before they were received," says the historian of the voyage, "underwent rigorous examinations; the most inferior stations had been sought for with avidity, and some of them were filled by young men of the most respectable families in Normandy, impelled by the desire, peculiar to youth, of acquiring knowledge, and of participating in those distant voyages which ever assume a character of greatness and singularity, and which enforce that respect they constantly merit and obtain. Among these interesting young men was my worthy coadjutor, my estimable friend, Mr. Lesueur, the dear companion of my dangers, my sacrifices and my toil."

Charles Alexander Lesueur was born at Havre-de-Grâce on the 1st of January, 1778. His father, who was an officer of the admiralty, bestowed upon him that education which his limited means afforded; there being several other children that equally claimed his paternal care. In French schools the elements of drawing are usually taught. The bent of the lad's mind being towards this art, his desire to excel in it became a ruling passion, which could not fail to produce the happiest results; and, at the expiration of his pupilage, his parent had the satisfaction of finding, in the productions of his pencil, the skill and finish of a master.

The bold cliffs of Normandy, termed *les falaises*, are remarkable for their savage aspect, and their geological formation. That part of them which forms the Cape *la Heve*, near the entrance of Havre, is the most conspicuous object to the mariner as he approaches the port. The shore, at the base of the Cape, is often frequented by the inhabitants; the youth, especially, resort thither for the purpose of collecting the rejectamenta of the sea; and among the cliffs those wander who take an interest in the singularities of nature, or who are pleased with an extensive prospect. Amid these scenes the boyish days of Lesueur were spent; it was here that he imbibed a love of natural history, augmented by his talents for delineation. It was with a view of the ocean perpetually before his eyes that he cherished those visions of fancy, which were at length realized in his voyage to the southern hemisphere.

It is stated above that among the young men who solicited employment in the expedition was Mr. Lesueur, then in his twenty-third year. The zeal and vivacity which he exhibited were powerful recommendations in his favor, independent of respectable influence; but he was warned of the inconveniences and privations to which he would be liable on shipboard, where every appropriate place was already occupied. He however allowed nothing to daunt him; and he was enrolled among the crew of the *Géographe* under the designation of *novice-timonier*, which, in English marine vernacular, might be rendered greenhorn or lubber.

In the enumeration of the geologists, it has been said that there were five. In the original plan of the scientific department, it was designed that there should be but four, two in each ship. Ultimately, at the suggestion of the Institute, a fifth was added; and as this individual, during the whole progress of the voyage, performed a most effective part, in conjunction with the subject of this memoir, it becomes proper to state who he was, and what were the motives of the Institute in favoring the application of the supernumerary.

François Péron was born at Cérilly, a town in the Department of Allier, in the year 1775. His father died while he was yet a child, leaving his mother with but slender means, and three children to support. By dint of rigid economy, she was enabled to place him in the college of Cérilly, the principal of which, attracted by his docility, gave particular attention to his instruction. On the termination of his collegiate studies, the ecclesiastical state was suggested to him; but the stirring events of the French Revolution influenced a mind naturally ardent, and he resolved to embrace the military profession. At the age of seventeen he entered the army as a volunteer; and at the battle of Kaiserslautern he was wounded and made a prisoner by the Prussians, who confined him in the citadel of Magdeburg. At the close of the year

Early

1794, Péron was exchanged, and received a discharge from the army, in consequence of having, through his wound, lost the use of his right eye. This misfortune incapacitating him for military service, he resolved to engage in the study of medicine; and, consequently, he repaired to Paris, where he became a pupil of the School of Medicine; and for the space of three years not only assiduously followed the courses of that school, but also those of zoology and comparative anatomy of the museum at the Garden of Plants.

When the expedition for the discovery of southern lands was preparing to depart, Péron conceived a great desire to accompany it, and made application to the government to that effect. He was refused on the plea that, as the scientific corps was already complete, no addition could be admitted. This answer might have satisfied an ordinary applicant, but it was not sufficient for an enthusiastic mind, fertile in resources, and deriving vigor from opposition. He now sought an interview with M. de Jussieu, one of the commissioners who had made a selection of the naturalists, and begged him to intercede for him. To justify his apparent presumption, he stated his views of what he considered an important omission in the scientific department of the expedition. These were urged with a warmth and energy which evidently shewed that he felt himself capable of supplying the deficiency. Let me go, added he, with emphasis, you shall see what I will do! M. de Jussieu, who listened to him with admiration, advised him to write a memoir, explanatory of his motives, in order that they might be made known to the Institute. This course was promptly followed. The memoir, setting forth the importance of associating with the scientific men of the expedition a medical naturalist, one specially charged with the duty of making researches in anthropology, or the natural history of the human race, was read before the Institute; and, on their unanimous recommendation, Péron received the appointment of a place among the zoologists of the expedition, and was ordered to embark in the corvette, the *Géographe*.

On the 19th of October, 1800, the two ships left the port of Havre, and directing their course for the Canaries, they came to anchor, the beginning of November, in the harbor of Santa Cruz, in the island of Teneriffe. The object of touching at Santa Cruz was to procure certain provisions deemed necessary in tropical climates; which object being accomplished, they took their departure for the Isle of France, where they arrived on the 15th of March, 1801.

Péron and Lesueur, from the commencement of the voyage, seemed to be attracted to each other by mutual sympathy. They were both admirers of nature's works; and perceiving in each other certain qualities which, if properly united, might be pro-

ductive of valuable results, they resolved to labor in concert; and so effectively did they put forth their strength, that they soon became conspicuous to all on board of their ship. The talents of Lesueur, it should seem, were not known, at first, to the artists appointed to accompany the scientific corps; but when these talents were revealed in his masterly drawings of the mollusca and soft zoophytes, with one accord, they pronounced him worthy of a place in their department; and the youthful aspirant was forthwith transferred by the commander-in-chief, from the humble position he occupied among the crew, to the honorable station of painter of natural history, and his appointments and privileges were made to correspond with his rank.

The chief zoologist of the corvette, the *Naturaliste*, was Bory de St. Vincent, a colonel in the republican army of the west, and well known for his learning and scientific attainments. Shortly after the ships came to anchor in the harbor of Port Northwest, formerly Port Louis, he went on board of the *Géographe*, to congratulate with his fellow voyagers on their safe arrival. On entering the cabin he perceived several persons looking over the private journal of the commander-in-chief, which was embellished by many beautiful paintings* of fishes, and of those phosphorescent animals which had been objects of uncommon interest to all the naturalists in their passage from Teneriffe to the Indian Ocean. Bory himself was no mean artist; but when he beheld the paintings in question, his admiration burst forth into eulogy, and he inquired who was the author of these master pieces of art, and where he was. "I was introduced," said he, "to a young man of modest demeanor, who, by a noble zeal, had embarked as a *novice-timonnier*, although worthy to form a part of a scientific expedition, in a manner much more useful to the progress of the arts. His talents had been discovered on board of the ship; and the commander-in-chief had availed himself of them by giving him employment. I have been since informed, that strict justice having been done him, his appointments have been assimilated to those of the principals in each department; and he truly merited this encouragement. I sincerely regret that I have forgotten the name of this skillful young man, from whom the expedition must derive one of its greatest resources."†

After a sojourn of six weeks in the Isle of France, the expedition set sail for the coasts of New Holland. They visited those parts named Endracht's Land and Leuwin's Land. Off the coast

* Ce journal renfermait une multitude de figures de mollusques, de poissons, peints avec une perfection et une vérité dont rien n'approche.—*Bory, Voyage*, t. i, p. 161.

† Voyage dans les Quatre Principales Iles des Mers d'Afrique, pendant les années 1801 et 1802. Paris, 1804. 3 vols., 8°, et Atlas, 4°. Tome i, p. 162.

With respect to the commander's journal, report represented it of no value, excepting what was derived from Lesueur's figures.

of the latter, the ships were separated in a violent gale. The *Géographe* proceeded to the exploration of De Witt's Land; when her stock of provisions and water being nearly exhausted, the commander resolved to depart for the Island of Timor to obtain a supply, and to relieve his crew, dispirited by fatigue and sickness, and thinned by death. On the 21st of August, the ship was moored in the road of Coepang, the chief establishment of the Dutch at Timor. The *Naturaliste* after her separation explored the coasts of Edel's Land, and rejoined her consort on the 21st of September, in the roadstead of Coepang.

"Perhaps there is no country," says the historian of the voyage, "more interesting, and at the same time, there are few so little known as the great Island of Timor. Placed in the midst of the equatorial regions, covered with the most useful vegetables, and abounding with the most precious animals; intermediate between New Holland and the islands of the great archipelago of Asia, it presents in its atmospherical and geological constitution, in its different productions, and in its physical and political revolutions, important subjects of inquiry and meditation."

Timor afforded a rich field for the naturalists, and their industry was equal to their zeal; but an accident which befel Lesueur, on the 12th of September, nearly cost him his life. While pursuing a troop of monkeys, among the rocks which obstruct the course of the river Coepang, he was bitten in the heel by a venomous reptile. He was alone, at some distance from the town. A numbness, which pervaded the whole leg, was a significant indication of what he had to apprehend from such a wound. He hastened toward the fort, as fast as his condition would permit, as his leg had become rigid. To lessen the activity of the virus, he had recourse to a ligature above the knee; the thigh nevertheless began to swell visibly, and when he reached his quarters, he threw himself upon his bed, overcome with fatigue and agony, and exhibiting symptoms of a malignant fever. The surgeon-major, M. Sharidon, fortunately being at home, immediately cauterized deeply the wound, then applied to it a compress, impregnated with ammonia; he also gave the patient a strong dose of the same, and ordered him to be kept as quiet as possible. A copious perspiration took place, the pains began to abate; and in a few days Mr. Lesueur was enabled to be abroad, with no other inconvenience than a stiffness of the knee, which continued for some time, and was long occasionally felt during sudden variations in the temperature of the weather.

On a superficial view of Timor, it would seem to be an earthly paradise. Nature there exhibits her most inviting forms, and is truly lavish of her bounties. The choicest productions of the tropics there attain to their utmost perfection, and the sea and the land seem to vie with each other in contributing to the gratifica-

tions of man. But there is a counterpoise to these enjoyments in a temperature of the most enervating kind, which deranges the vital functions, and facilitates the approach of that scourge of the Indian isles, the dysentery. The natives of Asiatic descent generally escape this disease, by their habitual use of stimulating food, and that powerful tonic, betel. But the Europeans, and the Americans, who visit those shores, soon become subject to its attacks; and in some instances the entire crews of vessels have been swept off in a few weeks.*

Péron, who paid particular attention to the dietetic habits of the Malays of Timor, and their constant use of betel, became convinced of the influence of condiments and tonics in counteracting the malignant effects of the climate. He hence resolved to conform to customs which were evidently the results of observation; and he owed his preservation from the dysentery to this sensible determination. But his advice and example not being heeded by others, the disease made frightful ravages among the crews of the ships; many of the officers were ill; and of the scientific men nearly the whole were affected by it. The chief gardener died at the island; two of the zoologists, a mineralogist, and an assistant gardener, survived but a short time after their departure. Mr. Lesueur, after recovery from the accident, as related above, pursued his labors with renewed ardor. Péron warned him of the danger of rashly exposing himself in such a climate, without those precautions which the experience of the natives had taught them. But relying too much upon the vigor of his constitution, he at length became a participant of the common calamity. He was still sick when the ships left Coepang; but through the exertions of the physicians, and the unremitting attention of Péron, he was restored to health before their arrival on the shores of New Holland.

It now became evident that a longer stay in that unhealthy climate would occasion the entire destruction of the expedition; hence orders were issued for their departure. On the 13th of November they got under weigh, for Van Diemens Land. Their sojourn at Timor had been prolonged to eighty-four days. "A sacrifice of time," says Péron, "the death of many individuals, the great inconvenience of having on board of the two vessels a large number of sick, were the deplorable results of this long sojourn."

On the 13th of January, 1802, the ships reached the southern extremity of Van Diemens Land, and commenced their explorations of that coast, and the adjacent eastern islands. Off Cape Forestier, the *Naturaliste* was separated from her consort in a

* Capt. Flinders, in the *Investigator*, remained only eight days at Timor, and yet, after his departure, the dysentery appeared among his crew to an alarming extent. They got no relief until their arrival at Port Jackson. Some of his best men died.

squall, and the *Géographe* continued her route alone to the straits of Banks and Bass, and thence to the survey of the extensive region which lies on the southern part of the continent, between Port Western and Nuyts' Archipelago; a country named, by the geographers of the expedition, *TERRE NAPOLÉON*, on the supposition that they were the first to explore it, not being aware, at the time, that Captains Grant and Flinders had already explored a considerable part of it.*

The accidents and risks, which generally attend a voyage in unknown seas, were fully experienced by our navigators; but dangers, quite as formidable, presented themselves in other forms, those of want and disease. The scurvy, which had succeeded to the dysentery, pervaded the ship, to an alarming extent. "Already," says Péron, "several men had been consigned to the deep; already more than half of our crew were incapable of any duty; and of our helmsmen, two alone could keep the deck. The progress of this epidemic was frightful. Could it be otherwise? Three-fourths of a bottle of fetid water was our daily ration; during more than a year we had not tasted wine; we had not a drop of brandy; and in lieu of these liquors, so indispensable to European seamen, especially in voyages like ours, we were allowed but three-sixteenths of a bottle per man of the detestable rum distilled at the Isle of France, and which there the negroes alone make use of. Our biscuit was full of insects; all our salt provisions were rotten, to the full extent of the term; and so offensive were these meats, that the most hungry sailors, refusing to partake of them, sometimes, even in the presence of the commander, threw their rations into the sea. In short, there were no refreshments of any kind. And those consolations, on the part of authority, so grateful to the feelings of all, so conducive to the alleviation of the most painful privations—these also were wanting. The officers and the naturalists, reduced to a similar allowance with the men, had equal pains to endure both of body and mind."

Winter had now set in, and it became evident that any farther attempts at discovery, at that period, would be abortive, in consequence of their deplorable state. Relief being absolutely necessary, all sail was made for Van Diemens Land; and the ship anchored, on the 20th of May, in Adventure Bay, on the eastern coast of Bruny island, for the purpose of procuring wood and water. A supply being obtained, she departed for New South Wales. Their condition at this time, may be imagined, when it is stated that not a single person was exempt from the scurvy.

* Capt. Grant, of the *Lady Nelson*, had discovered the eastern part, from Western Port to the longitude $140\frac{1}{2}^{\circ}$, in the year 1800, before the French ships sailed from Europe; and on the west I had explored the coasts and islands from Nuyts' Land to Cape Jervis in $138^{\circ} 10'$.—*Flinders*, vol. i, 191.

Of the crew, but twelve men, out of one hundred and seventy, were in a condition to do their duty.* They were several days abreast of Port Jackson, totally unable, with all their efforts, to get into port, when they were descried by persons on the look-out for them; and the governor of the colony immediately despatched to their assistance a large boat, containing a pilot, and a supply of men. Had this succor not been afforded them, it is probable that in a short time, all must have perished.

The *Naturaliste*, after her separation from her consort, off the eastern coast of Van Diemens Land, sought her in vain at the various rendezvous, and at length was compelled to put into Port Jackson for supplies. She had gone to sea in search of the *Géographe*, when the latter reached the harbor. Much anxiety having been manifested for the safety of the *Géographe*, in consequence of the known condition of the crew, her arrival was welcomed by all the inhabitants of the colony. The sick were immediately conveyed to the public hospitals, and received every attention which the most refined benevolence could suggest. The governor general gave the French commander to understand that he had received orders from the British government to afford every facility to the expedition in his power; and that consequently not only the public stores should be at his service, but that the bills of the commander, without limitation, should receive the guarantee of the colonial government. "Thanks to assistance so ample," says Péron, "we were enabled to reclothe our crews, who were in want of every thing; to repair our two ships, to purchase a third vessel, and, finally, to resume the continuation of our voyage."

In the mean time, the researches of the scientific men met with universal encouragement. An English guard was mounted to protect their observatory. The naturalists, as well as their assistants, were authorized to carry arms, a privilege not granted to all the inhabitants. Guides and interpreters were appointed to attend them in their distant excursions. "In short," says Péron, "the procedure of the English government here, with respect to us, was so noble, so generous, that to fail in the acknowledgment of our gratitude would prove us to be void of every principle of honor and justice."

The permanent settlement of New South Wales had no older a date than 1788, when visited by the French navigators; and yet, in that short period, the colony had advanced in agriculture, in commerce, and in population, to a degree which excited their admiration. The population, from 1030, carried thither by governor Philip, had increased to upwards of 13,000; and the products of the land not only sufficed for their wants, but afforded a

* Péron, in quoting Baudin's Journal, makes him say *four* men: "Je n'avais plus que quatre hommes en état de rester sur le pont, y compris l'officier de quart." This is evidently a misquotation.

surplus for the maintenance of foreign commerce. "Of all the European nations," says Péron, "that which appears to have best understood the true principles of colonization is the English." We need not go beyond North America to be convinced of this important truth; and when we pass in review the various people who have undertaken to plant colonies on our continents, the Spaniards, the French, the Dutch, the Swedes, and the English; what a cheering subject of reflection is it, that these United States owe their stamina to the Anglo Saxon race; and that their language, their habits, and their characteristics, are those which distinguish the most illustrious nation upon the face of the earth.

A stay of five months duration at Port Jackson, afforded the gentlemen of the expedition abundant means to study the economy and policy of that singular colony; and the results of their investigations, as detailed by Péron, are not only instructive, politically considered, but they impart to his narrative a moral effect, which renders it doubly interesting.

In consequence of the diminution of the crews of the two corvettes, by sickness, death and casualties, it was deemed advisable to send the *Naturaliste* to France. In her stead a small schooner of thirty tons, was purchased and fitted out as a tender, provided with means to facilitate the labors of the hydrographers, in their explorations of the coasts. She was named the *Casuarina*.

On the 18th of November, 1802, the vessels sailed from Port Jackson, and directed their course for the Straits of Bass. On the 8th of December, at King's Island, the separation of the corvettes took place; the *Naturaliste* to pursue her homeward voyage, the *Géographe* and the schooner to continue those investigations which the disasters of the previous navigation had interrupted.

The *Géographe*, and her tender, visited in succession the north-west coasts of Van Diemens Land, and the neighboring isles, Napoléon's Land, Nuyts' Land, Leuwin's Land, Endracht's Land, and De Witt's Land. Five months thus employed, amidst difficulties and dangers of no ordinary kind, a want of fresh supplies of provisions and water, compelled them to seek again the Island of Timor, rendered memorable by the calamities of the former visit; and they cast anchor in the bay of Coepang on the 6th of May, 1803. The dreaded dysentery reappearing among them, the vessels were hastily got ready for departure, and on the 3d of June they set sail with the intention of visiting the Land of Arnhem, the Gulf of Carpentaria, and the southwest extremity of New Guinea. After upwards of thirty days of buffeting against the easterly monsoon, the project of continuing their researches appeared to be hopeless, as their stock of water would not suffice for so long a course, and their deadly foe, the scurvy, was once more in the midst of them. The commander therefore resolved to make the best of his way to the only port where the resources

which they stood so greatly in need of, could readily be procured. He was chiefly urged to this measure by his own condition, as he had been, for some time, afflicted with an obstinate spitting of blood. On the 7th of August the *Géographe* reached the Isle of France, to the great joy of all on board, harrassed by unceasing difficulties, and broken down by sickness and want.

It was now ascertained that the commander's disease admitted of no cure; and on the 16th of September, 1803, Nicholas Baudin ended his days, and was buried with all the honors which were due to the *rank* which he had held in the French navy.

In the composition of the *Etat-major*, or officers of this expedition, there was one capital defect, and that was in the choice of the commander-in-chief. Who Nicholas Baudin was, and what were his claims to that distinction which the government conferred upon him, in appointing him to conduct a voyage of discovery, I have not the means of ascertaining; but judging from the whole tenor of his conduct, as exhibited in the narrative of the expedition, and concurrent testimony, it may be said that a more injudicious selection could hardly have been made. Wanting in that sympathy which is an incentive to the sailor's virtues, he was characterized by fickleness, selfishness, arrogance and malignity. To these repulsive qualities may be added that unbounded self-confidence which is so frequently the concomitant of ignorance. Never, it is probable, having made a passage to the seas of India, and not having profited by consulting the numerous histories of voyages to the eastern hemisphere, he naturally concluded, by the inspection of his chart, that the shortest course to the Cape of Good Hope was the most eligible; consequently, after departing from Teneriffe, he stretched along the coast of Africa, instead of standing to the westward, toward the coast of Brazil, thereby to profit by the trade winds, which prevail in those latitudes. The usual obstacles to the direct route—calms, currents, and baffling winds, at length forced him to change his course. The result of this mistake was the loss of much valuable time, which materially affected the whole plan of the expedition, as, including a stay of eleven days at Teneriffe, the ships were one hundred and forty-five days in their passage from Havre to the Isle of France.

The want of nautical skill in the commander being now manifest, disgust and dissatisfaction were every where apparent. Forty of their best seamen deserted. Several of the officers, midshipmen, and scientific men, resolved to remain in the colony. The principal part of them had the excuse of indisposition; but the true cause was their sense of insecurity with one whose incapacity had already been productive of much evil.*

* Of the scientific corps, there remained in the island, Bissy, astronomer—Michaux and Delisse, botanists—Bory de Saint Vincent, zoologist—and Milbert, Lebrun, Garnier, painters.

Social

The general impression is, that as the post of commander in chief of a scientific expedition is one of great dignity, so, the incumbent must necessarily be presumed to be a man of honor. The French government had omitted nothing which might contribute to the success of the voyage. The magazines of Havre were placed at the disposal of the commander; and large sums of money were granted him for the purchase of medicines, bottled wines, spirituous liquors, soup-cakes, preserved meats, essence of malt; in short, every thing which the health and comfort of man, exposed to the vicissitudes of an extended navigation, could seem to require. But on the arrival of the ships at the Isle of France, circumstances occurred which placed the character of Captain Baudin in no equivocal light. It was observed that upwards of eighty cases and trunks, of what had been supposed to be ship-stores, were landed and given to the care of an individual, who had embarked in the *Géographe* under the title of captain's secretary, but who, in reality, was a business associate of the commander.* This man at once set up a shop in Port-Louis, for the exhibition and sale of their merchandize, the value of which was estimated to amount to upwards of three hundred thousand francs! So says Bory de Saint Vincent, who declares that he there saw exposed to sale even the ship's medical stores! an act of consummate baseness, which is perhaps without a parallel in the history of maritime discovery.†

The ships had hardly left the Isle of France, when the commander ordered all on board to be put upon short allowance; that is to say, to each man half a pound of fresh bread every ten days. In place of the ration of wine, to which they had been accus-

* In the passport granted by the French government to Captain Flinders, he was expressly prohibited from engaging in any kind of commerce. Baudin, it should seem, had greater latitude in the passport which he received from the British government; otherwise he would not have dared to make the scientific character of his expedition a cloak for commercial speculation. "Il est bien entendu cependant, qu'ils ne s'occuperont d'aucune espèce de commerce, ni de contrebande." For a copy of this passport, see "A Voyage to Terra Australis," vol. i, p. 12.

† Je songeai sérieusement à me ménager, pour être rétabli au moment du départ de l'expédition, qui pouvait être prochain. Une bonne santé devenait d'autant plus nécessaire pour continuer le voyage, que nous allions mettre à la voile dans un dénuement absolu de tout ce qui peut être propre à adoucir les dégoûts d'une longue traversée: nos vivres devaient être de mauvaise qualité; nous allions, peut-être aller dans des contrées très-malsaines, et ce qu'il y avait de plus alarmant, c'est qu'il ne restait pas à bord un médicament, en cas qu'il y eût des malades. Sans doute, par quelque méprise, en descendant à terre plus de quatre-vingts malles et caisses marquées B, qui devaient y être déposées, on descendit aussi les médicaments de l'expédition, et même des barils de clous à l'usage du bord; car j'ai, depuis, vu vendre ces objets dans un grand magasin nommé dans ce temps, à l'Isle-de-France, le Magasin des Gabares. Ce magasin, très-considérable et tel qu'on n'en avait pas vu dans le pays depuis la guerre, contenait pour la valeur de plus de trois cent mille francs de marchandises d'Europe, sur lesquelles on gagna deux, trois et quatre cent pour cent. On disait que ces marchandises provenaient des malles marquées B, qu'on avait débarquées de nos navires.—*Voyage dans les Quatre Principales Isles des Mers d'Afrique*. Tome i, p. 186.

tomed, they were allowed only three-sixteenths of a bottle of tafia.* Buscuit and salt meat were to be their daily food. "A sorrowful prelude to those misfortunes," says Péron, "which afterwards overwhelmed us."

Immediately after the ships had sailed from Timor for Van Diemens Land, a voyage of two months' duration, abundantly supplied with water, the usual ration was curtailed, notwithstanding the remonstrances of the physicians as to the dangerous effect of an inadequate supply, especially to the sick, who were then numerous. Some of the poor sailors, during the tortures of thirst, were induced to drink their own urine!†

Although there was an abundance of ammunition on board of the vessels, the commander, on the pretext of economy, would seldom allow the boats' crew to be armed, and sometimes refused arms to the officers and scientific men, even when the hostile disposition of the natives was manifest. This prohibition of the means of self-defense could admit of no justification; for the commander could not be ignorant of the sad disasters which had frequently been the result of misplaced confidence in the innocence of savages.

Captain Baudin's system of discipline was one of extreme rigidity; hence when parties were permitted to go on shore, or expeditions were despatched on surveys, he was accustomed to prescribe a stated time for their return, without allowance for difficulties or accidents. To insure the fulfillment of his commands, they were furnished with provisions and water sufficient only for the

* About a gill and a half.

† The following observations, in Surgeon White's Journal of a voyage to New South Wales, are worthy of attention.

"Were it by any means possible, people subject to long voyages should never be put to a short allowance of water; for I am satisfied that a liberal use of it (when freed from the foul air, and made sweet by a machine now in use on board his Majesty's navy) will tend to prevent a scorbutic habit, as much, if not more, than anything we are acquainted with. My own experience in the navy has convinced me, that when scorbutic patients are restrained in the use of water (which I believe is never the case but through absolute necessity), and they have nothing to live on but the ship's provision, all the antiseptics and antiscorbutics we know of will avail very little in a disease so much to be guarded against, and dreaded, by seamen. In one of his Majesty's ships, I was liberally supplied with that powerful antiscorbutic, essence of malt; we had, also, sour-kroust; and besides these, every remedy that could be compressed in the small compass of a medicine chest; yet, when necessity forced us to a short allowance of water, although, aware of the consequence, I freely administered the essence, &c., as a preservative, the scurvy made its appearance with such hasty and rapid strides, that all attempts to check it proved fruitless, until good fortune threw a ship in our way, who spared us a sufficient quantity of water to serve the sick with as much as they could use, and to increase the ship's allowance to the seamen. This fortunate and very seasonable supply, added to the free use of the essence of malt, &c., which I had before strictly adhered to, made in a few days so sudden a change for the better in the poor fellows, who had been covered with ulcers and livid blotches, that every person on board was surprised at it; and, in a fortnight after, when we got into port, there was not a man in the ship, though, at the time we received the water, the gums of some of them were formed into such a fungus as nearly to envelop the teeth, but what had every appearance of health."—*White's Journal*, p. 34. London, 1790, 4^o.

computed period of their absence. These restrictions were a perpetual clog to the scientific men, and, in some instances, were near causing their destruction. At Sharks-bay, Endracht Laud, a party of sailors, under the command of Lieutenant Montbazin, was ordered on shore, for the purpose of making salt. Péron, Petit the portrait painter, and an assistant gardener, accompanied them, These three started along the coast for the purpose of making collections of natural curiosities. Not returning according to appointment, the officer became alarmed for their safety, and despatched persons in search of them. In the mean time a gun was fired from the ship, for the recall of the boat. This was a moment of anxiety to a generous heart. The search was continued, although two guns more told what were the dictates of the stern commander. At length the poor wanderers, who had missed their way, were found when they were on the point of perishing with fatigue, hunger and thirst: they had not tasted food or water for forty-four hours. Péron could scarcely see or hear, and his parched tongue denied him the use of speech. It was late in the evening when they reached their boat. The supply of provisions was entirely exhausted, and there was not a drop of water left to allay their burning thirst. All night long were they compelled to lie upon the beach, in a state between life and death; and it was not until the afternoon of the following day that they were enabled to rejoin the ship. There were they welcomed, however, with that kindness which compassionate hearts know how to exercise. One individual alone stood unmoved amid the general sympathy, and that one was the commander himself, who, in a tone of unusual asperity, demanded why his orders had not been promptly obeyed. In vain did the Lieutenant attempt to justify his disobedience on the score of humanity; in vain did he point to the pallid countenance, and sunken eyes, of those whom he had rescued from death; his crime admitted of no palliation: he was sentenced to pay a fine of ten francs for each gun fired for his recall; "and this atrocious judgment," says Péron, "he had the audacity to record in his journal! Miserable wretch! in order to save his life at Timor,* I shared with him the small supply of some excellent *quinquina*, which I had reserved for my private use."†

* The commander's disease was a typhus fever, which reduced him so low, that for several hours he was supposed to be dying. His restoration was owing to a powerful dose of Peruvian bark, which Péron had brought with him from France.

† Parmi les principales causes de nos désastres, il faut compter surtout l'inconcevable opiniâtreté de notre Chef à ne jamais prendre à bord de ses vaisseaux que la quantité de vivres rigoureusement nécessaire pour le temps qu'il se proposait de consacrer à chacune de ses campagnes, sans jamais tenir compte des difficultés ou des obstacles imprévus qui pouvaient en prolonger la durée. Ses mêmes calculs produisaient des résultats non moins déplorables sur nos embarcations; chacune d'elles ne recevait, en partant, que les vivres absolument indispensables pour le

From the commencement of the voyage the commander conceived a rooted aversion to the scientific corps, and missed no opportunity of evincing it by neglect or incivilities. It may be readily conjectured that a man of uncultivated mind would find himself out of place among persons of good breeding, and might seek to console himself for his inferiority, by an affectation of self-sufficiency. He was wont to say, that the Institute had given him *savants* who were of no use to him: all he wanted was *collectors*. His officers, he pretended, would have sufficed for geography and astronomy; and moreover, that he would rather discover a new mollusk than a new island!*

Such discourses as these, mingled with occasional sarcasms, must have greatly tended to wound the feelings of gentlemen, accustomed to the courtesies of society, and to that deference which worth and talents are entitled to. The learned botanist, André Michaux,† was chiefly induced to retire from the expedition at the Isle of France, by the assurance that his services could not be appreciated by one who determined the value of science on the standard of his contracted intellect.

Amid so much opposition, so many trials of body and mind, it is a subject of wonder that the astronomers and geographers of the expedition performed as much as they did.‡ Their labors

nombre des hommes qu'elle portait, et pour celui des jours qu'ils étaient censés devoir employer à leur mission. Il en était de même pour les divers campements que nous établissions à terre. De là, ces privations pénibles, qui pesaient sur nous à la moindre contrariété que nous éprouvions dans nos opérations générales ou particulières.

Il n'était pas jusqu'au système de distribution de l'eau qui ne fût essentiellement vicieux. Ainsi, pour me borner au cas particulier dont il s'agit maintenant, la ration journalière était d'une pinte par homme. Cette quantité, déjà si modique pour les individus qui restaient à bord du navire, devenait absolument insuffisante aux besoins des matelots qui, sous un soleil brûlant, devaient ramer quelquefois des journées entières; il en était de même pour les naturalistes, qui, par le genre de leurs recherches, étaient obligés de faire des courses lointaines sur ces plages ardentes. Souvent le cri du besoin, plus impérieux que la voix de la raison, réduisait les plus sobres à consommer, dans quelques heures, ce qui devait leur servir pour plusieurs jours, et à s'abandonner ainsi aux angoisses les plus déchirantes. Il n'était pas, sous des prétextes d'économie non moins funestes, jusqu'aux armes, jusqu'aux boussoles même, qu'on ne refusât souvent à nos embarcations.

Sans doute il est pénible d'avoir de tels détails à rapporter; mais ils intéressent trop essentiellement le succès ou même le salut des navigateurs qui doivent courir la même carrière que nous, pour que ce ne fût pas une sorte de crime de les leur taire.—Péron, *Voyage de Découvertes, etc.*, tome II, p. 222, note.

* Il affecta de publier partout que la moitié des membres de l'expédition étaient inutiles à son succès; que l'Institut lui avait donné des *savants* dont il n'avait que faire; qu'il n'avait besoin que de *ramasseurs*, etc. * * * Il prétendait que ses officiers auraient suffi pour la géographie et l'astronomie; et que d'ailleurs il aimait mieux découvrir un mollusque nouveau qu'une terre nouvelle.—Bory, *Voyage*, tome I, p. 189.

† This was the father of the author of the "North American Sylva." He died, not long afterwards, at Madagascar, while engaged in collecting materials for a botanical history of that island. His "Histoire des Chênes de l'Amérique," and "Flora Boreali-Americana," are works of established reputation.

‡ It is but just to add, that they were ably seconded in their explorations by the officers of the ships, particularly by the two Freycinets, and M. de Montbazin.

are an enduring evidence of what may be done by resolute minds under every discouragement. What the naturalists effected, in spite of similar obstacles, shall be related hereafter.

There was one part of Captain Baudin's department which is inexplicable, and that was his total disregard of those sanitary instructions, which had been prepared for him by order of the government, especially in reference to means of preventing that dreadful disease, the scurvy. The conduct of Captain Flinders, on this head, affords a striking contrast. Both were engaged in similar explorations in the same seas; both put into Port Jackson for supplies the same season: the crew of one reduced to the extremity of misery by sickness and want, that of the other in such a state of health—every man doing duty upon deck—that their vigor was the subject of general observation.*

The *Géographe* remained at the Isle of France upwards of four months; and then proceeded homeward. She stopped at the Cape of Good Hope on the 3d of January, 1804. The object of this visit was twofold: to procure fresh provisions, and to take on board for the menagerie of the Museum of Paris, some of the rare animals that are indigenous to southern Africa.

While at the Cape, Péron and Lesueur, the last of the zoologists of the expedition, being solicitous of obtaining exact knowledge on the subject of that anomaly in physiology, the *Tablier*, reported as characteristic of the females of a race of the natives of southern Africa; the governor-general, M. de Janssens, and the chief physician of the colony, Raynier de Klerk Dibbetz, lent all the assistance in their power to this end; and the results of their investigations were of a more definite character than those furnished by preceding travellers. This curious organ or appendage, it seems, belongs exclusively to the tribe named *Houswaana* or *Bofchisman*; and is never observed in the Hottentots, properly so called. It is visible in infancy; and increases in size with the growth of the body. It disappears by the crossing of the *Houswaana* with other races.†

* There was not a single individual on board who was not upon deck, working the ship into harbor; and it may be averred that the officers and crew were, generally speaking, in better health than on the day we sailed from Spithead, and not in less good spirits.—*A Voyage to Terra Australis*, vol. i, p. 226, 4^o.

† Dr. Alard, in his Historical Eulogy of Péron, thus speaks of the *Tablier*: "Depuis long-temps le tablier naturel attribué aux femmes hottentotes, étoit l'objet des raisonnemens des physiiciens d'Europe et des relations contradictoires des voyageurs. Les uns en niaient l'existence; les autres, tout en l'admettant, le décrivait de manières tres-différentes. Péron, après des recherches multipliées, reconnait enfin que cet organe singulier n'est ni un repli de la peau du bas ventre, comme on le croyait autrefois, ni un prolongement des grandes lèvres, comme l'a dit récemment Barrow; mais bien qu'il est un appendice particulier tenant par un pédicule à la commissure supérieure des grandes lèvres, s'élargissant et se divisant par le bas en deux branches qui pendent d'ordinaire, mais qu'on peut écarter, donnant ainsi à cette partie une figure triangulaire. Il reconnait que cet organe se trouve l'attribut général et l'un des caractères distinctifs d'une certaine nation sauvage et cruelle, connue des Hol-

It fortunately happened that there were at the public hospital of Cape Town, two females of this extraordinary people, an adult and a girl of twelve or fourteen. These were examined with all that care which so interesting a matter required; and Lesueur's drawings of the *Tablier*, the first, probably, that had ever been made by a competent artist, illustrated two Memoirs on this subject, which were read to the Institute of France in the year 1805. These drawings, four in number, were afterwards engraved; I cannot learn whether or not they have been published. I have in my possession impressions of the plates, presented to me by my ever-regretted friend; and I treasure them as memorials of one, in whose society I have passed many a pleasant and instructive hour.

A stay of twenty-one days at the Cape of Good Hope sufficed for the objects of the visit; and on the 24th of January the *Géographe* set sail for France. She arrived at the port of Lorient on the 25th of March, 1804, after an absence of upwards of three years and five months. The Naturalist had returned to Havre in June, the preceding year.

Rumors of Captain Baudin's misconduct had affected the public mind, to the prejudice of the expedition; and even the government appeared to regret that the voyage had been undertaken, under the impression, that, as respects its ultimate objects, it had

landais sous le nom de *Boschismans*, et des Hottentots, sous celui de *Houzuanas*. Les jeunes filles l'apportent en naissant, et il ne fait que croître avec l'âge; il diminue et se perd dans les générations successivement produites par le mélange des *Houzuanas* et des Hottentots ordinaires."

Some three or four years after the publication of Dr. Alard's Memoir, an adult female of this race was exhibited in Paris, where she died in December, 1815. An account of her is given in the "*Histoire Naturelle des Mammifères*," by the late Baron Cuvier, after an autoptical examination. From this account we extract the following passages.

"Les premières recherches durent avoir pour objet cet appendice extraordinaire dont la nature a fait, dit-on, un attribut spécial de sa race.

"Ou le retrouva aussitôt; et tout en reconnaissant que c'était *exactement* ce que Péron (Lesueur) avait dessiné, il ne fut pas possible d'adopter la théorie de cet infatigable naturaliste.

"En effet le tablier n'est point, comme il l'a prétendu, un organ particulier; plusieurs de ses prédécessurs avaient mieux vue: c'est un développement des nymphes."

It is much to be regretted, that, as this illustrious naturalist differed in an essential point from Péron, he did not support his opinion by figures of the tablier. Of the accuracy of Lesueur's drawings there is no doubt: it is admitted by Cuvier himself. Must we then conclude that the question is settled? or is it still a moot-point?

The two figures of the Houswana woman, which accompany Cuvier's essay, by no means correspond with his description; and this is equivalent to the assertion, that they are unnatural or not characteristic. The head, especially, has scarcely a feature of the original. A work, professedly scientific, should seem to require more attention to accuracy.

Among the supplementary plates before mentioned, there is a medallion portrait of the adult female Houswana, who was examined by Péron and Dr. Dibbetz at the Cape of Good Hope. This miniature was drawn by Nicolas-Martin Petit, from nature, with that care and skillfulness which distinguish his works among the illustrations of the "*Voyage aux Terres Australes*." The configuration of the head is so dissimilar to that of Cuvier's figures, that one would be tempted to believe they were taken from individuals of different races.

hereafter

turned out to be a failure. On the return to Paris of Péron and Lesueur, they experienced a coldness of reception, on the part of members of the Institute, which sorely afflicted them. In a moment of despondency, Péron was induced to wish that he had never returned. But he soon rallied the forces of his vigorous mind; and waiting upon some of the prominent men of the Academy of Sciences, he begged them to suspend their judgment until the results of the expedition could be ascertained; assuring them of his ability to show, that, notwithstanding all its crosses and disasters, it would not suffer in comparison with any that had preceded it, since the days of Cook and D'Entrecasteaux.

There was but one course for the disheartened naturalists to pursue, and that was an appeal to the fruits of their manifold labors. The collection of upwards of forty thousand specimens of animals, which had been sent home from Port Jackson by the Naturaliste, and the more numerous collection brought in the Géographe, were at the Museum of Natural History, without an indication of their intrinsic value. At the instance of Péron and Lesueur, a committee of the Academy of Sciences, consisting of Messieurs Laplace, Bougainville, Fleurien, Lacépède and Cuvier, was appointed to examine these collections. In the performance of their duty they made a preliminary report, the tendency of which was to disabuse those public functionaries and Academicians, who had permitted their judgment to be warped by prejudice or misrepresentation. Finally, at the meeting of the Class of Physical and Mathematical Sciences, held on the 9th of June, 1806, a comprehensive report was made, from which the following summary is taken.

“Of the five zoologists appointed by the government, two remained at the Isle of France. Two others perished at the commencement of the second campaign, by diseases contracted at Timor. Péron alone was left; but supported by his invigorated ardor, and the efforts of his coadjutor Lesueur, a zoological collection was made, the extent and importance of which become more and more manifest. It is composed of more than one hundred thousand specimens of animals, several of which will constitute new genera; and the new species, according to the report of the Professors of the Museum, are upwards of two thousand five hundred. If we call to mind that the second voyage of Cook, fruitful as were its discoveries, made known not more than two hundred and fifty new species, and that all the united voyages of Carteret, Wallis, Furneaux, Mears, and even Vancouver, did not produce as great a number,—it results that Péron and Lesueur alone have discovered more new animals than all the traveling naturalists of modern days.

“An imperfect method of description has hitherto greatly impeded the progress of zoological science. Travellers, and espe-

cially several of the Linnean school, have sanctioned this method, because it is easy and expeditious. Limiting themselves to present, in a specific phrase, more or less short, certain characters, omitting a notice of those which, according to this method, were useless for the distinction of the new species from those already known, they thereby obtained only relative descriptions, scarcely sufficient for the wants of Science at the period of their discovery; and which became useless in proportion as new objects required new terms of comparison. Péron has avoided this error; and his definitions, founded upon a general and invariable basis, embrace all the details of exterior organization of the animal, establish all its characters in an absolute manner, and will consequently survive the revolutions of methods or systems.

“A description, nevertheless, how complete soever it may be, can never give a sufficiently just idea of those singular forms, which have no precise term of comparison in objects previously known. Correct figures alone can supply the imperfection of language. Here, the labors of which it is our duty to render an account, acquire a new interest. Fifteen hundred drawings or paintings, executed by M. Lesueur, with extreme precision, reproduce the principal objects which were collected by his careful industry, and that of his friend. All these drawings, either made from living animals or recent specimens, form the most complete and the most precious series of the kind that we have any knowledge of.

“Now we would venture to ask what labor more interesting and complete than that in which is comprised so many important and new animals; than that in which all the circumstances of temperature, of places, of seasons, of habitudes, of food, have been scrupulously observed and collected: wherein all the descriptions have been made from perfect individuals, after a uniform and established method; wherein all the essential objects have been drawn or painted in a natural state, with the greatest exactitude, and in all their details; wherein all these same objects have been preserved with so much care that there are but few of them of which the immediate examination may not serve as a medium of comparison and verification, as well for the description as for the drawing! We do not hesitate to declare that such labors are infinitely superior to all those of the same nature which have hitherto been effected until the present day by any similar expedition, either of our own country or of foreign nations.

“The value of the accession to the Museum of Natural History has been enhanced, not only by the objects presented to Péron and Lesueur personally, by strangers, in the various countries they visited, but even by those which they procured at their private expense, and for the purchase of which they were sometimes obliged to contract onerous debts. They have reserved

nothing for themselves ! a proceeding so much the more generous as it is without a precedent among any of their predecessors.

“ You have seen by what we have said of the labors of Lesueur, that he was almost every where an associate in those of Péron. The history of Man is not less indebted to him. All the details of the existence of the natives have been designed by him with the most scrupulous accuracy. All their musical instruments, those of war, of hunting, of fishing, their domestic utensils ; all the peculiarities of their clothing, of their ornaments, of their habitations, of their tombs ; in a word, all that their rude ingenuity has been able to accomplish, is found united in the productions of this skillful and indefatigable artist. The principal site of the coasts explored by the expedition ; different views of the town of Sydney, the capital of the English colony of New South Wales, its plan, &c., give to the Atlas of the History of the voyage, edited by his friend, a new character of importance.

“ Such are the labors, as numerous as they are interesting, of which you have appointed us to render you an account. They receive additional value from the unfortunate circumstances in the midst of which they were performed. Notwithstanding the foresight and orders of the government, privations of every kind bore heavily upon all the individuals attached to this great enterprise. Diseases extended their ravages among the crews of the two vessels. Of the twenty-three persons presented by you to the First Consul, for divers scientific researches, three only have returned to their native land, after having accomplished the entire voyage. Some, early discouraged, abandoned the expedition ; others have remained sick at different places ; the remainder are no more. Surrounded by so many disasters, Péron and his constant friend never allowed themselves to be overcome ; at every epoch of the voyage they manifested the most honorable attention to their duty.”

The testimony of the distinguished men composing the above named committee could not fail to receive the approbation of the government ; and shortly after their preliminary report, the Minister of the Marine issued orders for the publication of the narrative of a voyage, that it was now evident would redound to the honor of the nation. And who so fit to edit this important work as he whose talents and industry had been so signally displayed throughout the whole course of the expedition ! Péron, then, in the character of historian, set to work with alacrity ; and aided by his indispensable associate, Lesueur, arranged those rich materials which appear to such advantage in the first volume of the “ Voyage des Découvertes aux Terres Australes.”

A remarkable feature in the history of this enterprise presents itself to our reflection. In the composition of the scientific part

of it, no precaution, which an enlightened foresight could suggest to ensure success, seemed to be omitted; and yet, such was the course of events, in the department of zoology, one of the prominent objects of the voyage, little would have been done without the efforts of two obscure young men, who had been permitted to embark in the expedition, more with the view of gratifying their importunate desire of seeing foreign countries, than from any expectation of benefit from their services. Without the advantages derived from family connections, from fortune, from reputation, Péron and Lesueur had the bravery to aspire to distinction, and their endeavors were crowned with signal success.

After many difficulties, chiefly resulting from the financial embarrassments of the government, the first volume of the History of the voyage made its appearance in the year 1807; but the Atlas by no means contained as many illustrations as had been prepared for it by Lesueur. This omission was a disappointment to the public, especially to those who had been favored with a view of the invaluable collection of drawings in the possession of the artist, liable to accidents, and the loss of which would be irreparable.*

The constitution of Péron shaken by the trials of the voyage, gave no signs of amendment on his return; and it was not long before it became evident that a pulmonary affection was the cause. His exertions in the performance of his duty, were not relaxed thereby; and his second volume was commenced with unabated zeal, until it was ascertained that he was taxing his mind at the expense of his physical powers, which would ill afford such an expenditure. By the advice of his medical attendants, he was induced to undertake a journey to the southern provinces, not in the expectation of a cure, which he knew was impossible, but in the hope that a more genial climate than that of Paris might tend to mitigate those sufferings which were becoming intolerable. His inseparable friend accompanied him to Nice, where they spent a winter. But it was apparent that a change of scenes, instead of being promotive of repose, so greatly needed, served merely as a stimulus to exertion. The shores of the Mediterranean presented objects too inviting to be resisted; and Péron engaged anew in those active pursuits, which his feeble body was unable to sustain. On his return to Paris he resumed the narrative of

* When Mr. Lesueur came to America, he brought these drawings with him. It was thought at Paris that they ought to have been deposited in the library at the Garden of Plants; and some feeling was exhibited on the occasion, among the Professors of the Museum of Natural History. In justification of Mr. Lesueur it may be said, that, as it took him the labor of years to furnish these drawings, the greater part of which had been merely sketched during the voyage, and he received no compensation for this extra labor, he consequently conceived he had a right to retain them, as his private property. The remedy for this grievance was very obvious; but the government did not care to resort to it.

the voyage; and had superintended the printing of the thirtieth chapter, when he was warned by the last symptoms of his disease, of his approaching fate. He consequently retired to his native village; where in the bosom of his family, he ended his days, on the 14th of December, 1810, in the 36th year of his age.

The death of Péron, in the midst of his labors, when so much remained to be done, occasioned a suspension of the history of the valuable discoveries which had been made by him and his coadjutor, Lesueur. The regrets of the zoologists of Europe, on this event, might have been spared, had Lesueur been enabled to turn to account the voluminous materials in his possession; for Péron had bequeathed to him the whole of his manuscripts. But the master spirit, who knew how to employ these materials, was no more; and Lesueur shrunk from a task which his disheartened mind felt conscious it was unable to perform.

The duty of completing and publishing the second volume of the history of the voyage now devolved upon Captain Louis Freycinet, the same who commanded the schooner *Casuarina*, fitted out as a tender at Port Jackson. The long interval of nine years between the publication of the two volumes should seem to show that more than ordinary embarrassments impeded a work of national importance undertaken by order of the government. The Atlas to the second volume, which appeared in 1816, contains only maps and plans. At least eight and twenty plates, of various illustrations, although finished, were suppressed; and amongst them those before mentioned of the *Tablier* of the Houswaana African.*

Lesueur, accustomed for so many years to an intimate association with Péron, became inconsolable at his death. His usual occupations no longer afforded him that pleasure they were wont to do when there was a kindred mind to participate in them. He would fain have sought in foreign countries, that tranquillity which was not to be found at home; but there were domestic ties to restrain him: his aged father was living and stood in need of his assistance. At length an opportunity was afforded him to gratify his desire for travelling, without inconvenience of a pecuniary nature. Mr. William Maclure, then a resident of Paris, had projected a voyage to the West Indies, and thence to the United States; and made a proposition to Mr. Lesueur to accompany him as a travelling companion. The offer was gladly accepted; and in the autumn of 1815, they departed from France, and arrived at Barbadoes on the 29th of December of the same year. They afterwards visited in succession St. Vincent, St. Lucia, Martinico, Dominica, Guadaloupe, Antigua, St. Christo-

* In the second edition of the "Voyage aux Terres Australes," advertised in Bertrand's catalogue for January, 1831, it is said that there are twenty-five new plates; hence it is probable that those of the *Tablier* were withheld from publication. My supplementary atlas is composed of twenty-eight plates.

phers, St. Bartholemew, St. Eustatia, St. Thomas, St. Johns, St. Croix, with some of the inferior islands. The marine animals of these regions afforded ample employment for Lesueur; and among the fishes and the mollusca he gathered a rich harvest.

In the latter part of the Spring of 1816, Messieurs Maclure and Lesueur arrived in the United States from St. Croix, and immediately set out on their travels through New York, New Jersey, Pennsylvania, Maryland, Rhode Island, Massachusetts, and Connecticut. They finally established themselves permanently in Philadelphia, where Mr. Maclure was formerly domiciliated, when engaged in the active pursuits of a commercial life.

The habits of the Americans, particularly their domestic economy, do not always make a favorable impression upon the mind of a native of France, especially when he comes among us without a knowledge of the English language. Mr. Lesueur, however, had no reason to be dissatisfied with his transatlantic residence. His reputation had preceded him; and the cordial welcome which he received from the most distinguished men of science of the city, could not be otherwise than grateful to one who knew how to appreciate such disinterested kindness. The American Philosophical Society lost no time in enrolling him among its members; and the following year, 1818, he was elected into the Academy of Natural Sciences, and became one of the most efficient supporters of that rising Institution.

The branch of natural history which chiefly attracted the attention of M. Lesueur, when in the United States, was Ichthyology. In Botany and Ornithology much had been done by American Naturalists; but the fishes, which constitute an important item in our commercial statistics, had been in a measure overlooked; at least the few essays which appeared from time to time, on this subject, only served to render the deficiency more apparent. A systematic work, therefore, upon the Fishes of North America, became a leading object with Lesueur; and the means for the accomplishment of it increased so rapidly as to justify the expectations of the friends of natural science of seeing it carried into effect. But a coadjutor was wanting in this enterprise, one whose literary acquirements should enable him to give that consistency to the materials of the naturalist, without which they would be of but little avail. A competent associate, then, not being attainable, the project remained in embryo. A foretaste, however, of these rich materials, was occasionally given in the Transactions of various learned Institutions. Of these opuscles I shall speak in the sequel.

Mr. Lesueur, at the instance of several individuals, who were desirous of profiting by his skill in natural history painting, gave them a series of lessons, at his private residence. He also taught the elements of drawing to the pupils of two respectable female seminaries of Philadelphia. His increased income, by these means,

placed him in that state of independence, which is the cardinal object of every honorable mind.

At length the inclinations of Mr. Lesueur were subjected to a severe trial. After a residence of nine years in Philadelphia, fortunate in a good state of health, happy in an extensive circle of acquaintance, who esteemed and honored him, with active employment for his vigorous intellect and his felicitous pencil,—he was induced by the urgent solicitations of Mr. Maclure, to join the settlement of Socialists at New Harmony, on the Wabash, in the state of Indiana. It was a sense of duty alone which governed him in this determination. If his tastes, if his feelings had been respected, he would have been permitted to remain where his talents had an appropriate field for exertion, and would not have been constrained to forego all the advantages of a well regulated society, for those imaginary benefits to be derived from a condition of association, which had never been subjected to the test of experience. The company of Mr. Thomas Say, at New Harmony, tended to reconcile Lesueur to his lot; and to mitigate that aversion which the discordant elements of the community could not fail to provoke. The two naturalists often made excursions together; and found in the solitudes of the wilderness those consolations which spring from a congeniality of tastes and pursuits. But the attachments of friendship were again destined to be severed. In October, 1834, Mr. Say ended his days; and this deprivation was the more painful to Lesueur, as it seemed to presage the termination of all the plans of scientific enterprise which he had fondly cherished since his residence in the Western hemisphere.

A journey down the Mississippi to New Orleans, served for a while to divert his thoughts from their gloomy forebodings, but failed to suppress them. A return to his native country became the subject of his meditations; still there were difficulties in the way, which, for a time, could not be well surmounted. He retraced his steps, therefore, to New Harmony, and engaged anew in his favorite occupations; but the charm was broken; and he saw no relief for his harrassed mind, but by abandoning a situation which promised advantages that resulted in disappointment and sorrow.

In the year 1837 Mr. Lesueur bade a final adieu to the Wabash and directed his course to New Orleans. There he embarked in a vessel bound to France; and after a prosperous passage, the high coasts of Normandy, the remembrances of happy days, were visible in the horizon. It is for him who has long been a sojourner in distant lands, to judge of the feelings of one who revisits his native country, after an absence of two and twenty years. The heart of Lesueur was formed of the softest mould; and when the turrets and steeples of his beloved *Have* greeted his view, his emotions, expressed by his tears, showed that time had neither diminished his patriotism, nor chilled the sensibility of his soul.

In the month of September, 1838, the writer of this Memoir visited Paris; and had the happiness of embracing his old friend, whom he had not seen for thirteen years. Mr. Lesueur was then residing at No. 16, Rue Neuve St. Etienne, not far from the Museum of the Garden of Plants. He had brought from the United States a valuable collection of specimens of natural history; and all his precious drawings and manuscripts, the fruits of his researches in his voyage with Péron, and those subsequently made in the West Indies, and on the continent of North America. Perhaps no individual then living possessed a greater fund of materials for works of the highest interest in natural history; materials destined, in a great measure, it is feared, to be useless, for the want of that mind which alone could direct their application.

Sometime in the year 1843 or 1844, the project of founding a museum of natural history in the city of Havre, was set on foot; and Mr. Lesueur, who had taken a great interest in the measure, was looked to as one eminently capable of filling an important office in an establishment, which was indebted to his personal exertions for much of its favor with the community. In 1845 he was chosen Curator of the Museum; and he removed to Havre in order to superintend the building, which was advancing towards completion.

On the 9th of May, 1846, he thus writes to me: "I hasten to acknowledge the receipt of your letter of the 13th of April, which reached me via Paris. I am occupied at this time in arranging the collections of our cabinet. As my presence is now essential, I have taken a small country house, not far from Havre. It is situated in a quiet valley, a short distance from the sea, which is visible from our windows. Should you return to France, you must come and stay with us. We have a small chamber reserved for your accommodation. Come without ceremony, and partake of our pottage, which you know is excellent. How rejoiced I should be to see you once more! A little omnibus stops daily at our door, and you would be spared the fatigue of going and coming. Our Museum, with its library, would afford you recreation in town, and when fatigued you might retire to my apartment, so that you need not fear ennui."

The letter from which the foregoing extract is made, derives additional value from the circumstance that it was the last that I ever received from my estimable correspondent, whose life was near its close, although nothing, in his external condition, indicated such an event. It was his practice to set out early in the day from his country residence, for the museum; but on the 11th of December, the weather being unsettled, and feeling himself indisposed, he resolved to remain at home. During the ensuing night he complained of oppression at the breast; and a physician prescribed blisters, without suspecting immediate danger. The disease was beyond the reach of remedy; and he expired on the

morning of the 12th of December, 1846, in the 68th year of his age.

The disposition of Mr. Lesueur was social and amicable; and knowing how to accommodate himself to circumstances, he every where met that welcome which his simple, unobtrusive manners could not fail to secure. Accustomed, from early life, to abstemiousness, his economical habits became confirmed, when the means of indulgence were placed within his reach. But although little inclined to self-gratification, he was liberal to others, even in cases where prudence would justify reserve. On departing from France for America, he placed all his disposable means in the hands of his father, among which resources was included the pension that was granted to him by the French government, after his return from the voyage to New Holland. At the death of his father, which took place not long after his establishment in Philadelphia, an attorney was chosen to manage his pecuniary concerns in France; it being his intention to create a fund, to which he might have recourse in case of need. It does not appear that he gave himself much concern with respect to this agency; and on his return to Paris he had the mortification to find that the agent had betrayed his trust, by appropriating to the use of his own family the entire fund, which amounted to the sum of forty thousand francs! The feelings of Lesueur were sorely tried at this event; and the wrong was the more sensible, as it was perpetrated under the guise of friendship. Notwithstanding this heavy loss, at a time of life too, when the infirmities of age began to be felt, he had still a remnant left, the produce of his industry, which modicum he shared with a brother, whose necessities were greater than his own.

At the base of Cape la Hève there is a small valley, in the centre of which the humble spire of the Church of Saint Adresse strikes the view of the voyager, as he directs his course for the port of Havre. Within the precincts of this rural temple repose the remains of Charles Alexander Lesueur: an appropriate resting place for the ashes of one, who, after many wanderings in distant regions, was permitted by Divine Providence, to breathe his last sigh in the bosom of his family, and amidst those very scenes which had awakened the aspirations of his youthful heart.

It was the design of Péron and Lesueur to publish an extensive work upon the Medusa, after the completion of the History of the voyage to Terra Australis. The death of Péron interrupted the project; but Lesueur subsequently issued a programme of this work, with specimens of the plates engraved and colored after his beautiful drawings. It is probable that the great expense attending such an undertaking, was the cause of its being abandoned.

The following is a list of the writings of Lesueur.

1. In the "*Annales du Muséum d'Histoire Naturelle*," years 1809 and 1810, volumes 14 and 15, conjointly by Péron and Lesueur:—

Histoire générale et particulière de tous les animaux qui composent la famille des Méduses.

Sur les Méduses du genre Equorie.

Histoire de la famille des Mollusques ptéropodes.

Histoire du genre Firole.

Notice sur l'habitation des animaux marins.

Notice sur l'habitation des Phoques.

2. In the "Mémoires du Muséum d'Histoire Naturelle," by Lesueur alone.

Tome V, 1819.—Notice de quelques Poissons déconverts, dans les Lacs du Haut Canada, durant l'Été de 1816.

Tome VI, 1820.—Description de plusieurs animaux appartenant aux Polypiers Lamellifères de M. le Chevalier de Lamarek.

Tome XV, 1827.—Notice sur deux Espèces de Tortues du genre Trionyx de M. Geoffroy Saint Hilaire. Two quarto plates accompany this notice; but the author afterwards published five sheets, containing twelve figures of these Tortoises, folio size, carefully lithographed by himself.

3. In the "Nouveau Bulletin des Sciences, par la Société Philomathique."

Année 1813:—Mémoire sur quelques nouvelles espèces d'animaux mollusques et radiaires dans la Méditerranée, près de Nice.

Année 1814:—Note sur deux Poissons, non encore décrits, du genre Callionyme et de l'ordre des Jugulaires.

Sur une nouvelle espèce d'Insecte du genre Cymothoa de Fabricius.

Mémoire sur quelques Flustres et Cellépores fossiles; par MM. Desmarest et Lesueur.

Année 1815:—Mémoire sur l'organisation des Pyrosomes, et sur la place qu'ils semblent devoir occuper dans une classification naturelle. Note sur le Botrylle étoilé; par MM. Desmarest et Lesueur.

Année 1817:—Description de six nouvelles espèces de Firoles observées, par MM. Péron et Lesueur dans la mer Méditerranée en 1809, et établissement du nouveau genre Firolode.

4. Journal of the Academy of Natural Sciences of Philadelphia—articles prepared by Lesueur while at Philadelphia.

Vol. I.—Description of six new species of the genus Firola.

Characters of a new genus, (of the family of Pteropode Mollusca,) and descriptions of three new species upon which it is formed.

Description of three new species of the genus Raja.

A short description of five (supposed) new species of the genus Muræna.

Description of two new species of the genus Gadus.

Description of a new species of the genus Cyprinus.

An account of an American species of Tortoise, (*Testudo geographica*), not noticed in the systems.

A new genus of Fishes, of the order Abdominales, proposed under the name of Catostomus.

Description of four new species, and two varieties, of the genus Hydrargira.

Observations on several species of the genus Actinia.

Description of several new species of North American Fishes.

Observations on a new genus of Fossil shells.

Description of several new species of the genus Esox, of North America.

Vol. II.—Description of a new genus, and several new species of fresh-water Fish, indigenous to the United States.

Descriptions of two new species of Exocetus.

Descriptions of several new species of Cuttle-fish.

Observations on several genera and species of fish belonging to the natural family of the Esoxes.

Descriptions of five new species of the genus Cichla of Cuvier.

Description of three new species of the genus Sciaena.

On the *Onykia angulata*.

Description of a *Squalus* of very large size, which was taken on the coast of New Jersey.

Vol. III.—Descriptions of several new species of Ascidia.

Description of a new species of Cephalopod of the genus Loligo.

On three new species of parasitic Vermes, belonging to the Linnean genus Lernæa.

Descriptions of two new species of the genus Batrachoid of Lacépède.

Vol. IV.—Description of several species of the Linnean genus Raia, of North America.

Description of several new species of Holothuria.

Description of two new species of the Linnean genus Blennius.

Vol. V.—Description of a new fish of the genus Salmo.

Description of four new species of Murænophis.

Description of a new species of the genus Saurus.

Transactions of the American Philosophical Society, new series.

Vol. I, (1818).—Description of several species of Chondropterygious Fishes of North America, with their varieties.

A celebrated naturalist having expressed an opinion that the cliffs of Normandy were uninteresting, on the score of organic remains; Mr. Lesueur, who was of a different sentiment, undertook an investigation of the stratification of the bluff forming *Cape la Hève*; and his discoveries were of a nature to call the attention of geologists to a locality which had been neglected and decried. In the latter part of the year 1843, he published a sheet, entitled, "Vues et Coupes du Cap de la Hève." This lithographic drawing presents numerous details of uncommon interest; and is a pleasing evidence of the versatility of the talents of the author.