

Coimbra *Alentejo*
**ERARIO
MINERAL,**

UTILISSIMO, NAÕ SO' PARA OS PROFESSORES
de Cirurgia, que residem na America Portugueza, a cujo beneficio par-
ticularmente se refereo, mas universalmente para todos, os que pro-
fessão a mesma faculdade; e ainda para quacquer outras pessoas
amantes da conservação da saúde, que nelle acharão especificos,
e generosos remedios para a cura das mais difficulcosas, e gra-
ves queixas, &c.

DEDICADO

A' SANTISSIMA VIRGEM MARIA
NOSSA SENHORA,

VENERADA NO MISTERIO DE SUA IMMACULADA

CONCEIÇÃO.

ESCRITO POR

LUIS GOMES FERREIRA,

*Cirurgião approvado, natural da Villa de S. Pedro de
Rates, e assistente nas Minas do ouro por decurso de
vinte annos.*

Agora novamente impresso, e augmentado com hum
copioso numero de exquisitas, e admiraveis receitas.

T O M. I.



L I S B O A :

Na Officina de M ANOEL DA SILVA.

Anno de MDCCLV.

Com todas as licenças necessarias.

A' custa de Luiz de Moraes e Castro, mercador de livros, mora-
dor no largo do lagar do febo, aonde se achará, e outros muitos livros
curiosos.

Title page from Luís Gomes Ferreira's *Erario Mineral* . . . Lisbon,
Manoel de Silva for Luis de Moraes e Castro, 1755.

A RARE LUSO-BRAZILIAN MEDICAL
TREATISE AND ITS AUTHOR:
LUIS GOMES FERREIRA AND HIS
“ERARIO MINERAL” OF 1735 AND 1755

By C. R. BOXER

THE LILLY LIBRARY recently acquired a copy of an extremely rare two-volume book, which is described as follows in the card-catalogue entry prepared by Mr. Josiah Bennett:

Ferreira, Luís Gomes, *Erario mineral, utilissimo, não so' para os professores de cirurgia, que residem na America Portuguesa, a cujo beneficio particularmente se escreveo, mas universalmente para todos, os que professão a mesma faculdade*. . . . *Agora novamente impresso, e augmentado com hum copioso numero de exquisitas, e admiraveis receitas*. . . . Lisbon, Manoel da Silva for Luis de Moraes e Castro, 1755, 2v. 4to in eights (20.5 cm).

Early owner's name on title; 19th-century owner's name and dates (1834 and 1832) on preliminary leaf of vol. I and verso of title of vol. II. Bound in 18th-century calf, half gilt spine, sprinkled edges; repaired, new endpapers.

This is a copy of the second—and apparently unrecorded—edition of a work first published in one folio volume in 1735, under the same title of *Erario Mineral* (“Mineral Treasury”) but with a less long-winded explanatory subtitle. The first edition is likewise a very rare book, but it is listed in several standard bibliographies, beginning with Diogo Barbosa Machado in Vol. III (1752) of his classic *Bibliotheca Lusitana* (4 vols., Lisbon, 1741-59). Recently, it has been listed by Rubens Borba de Moraes in his *Bibliographia Brasiliana* (2 vols., Rio de Janeiro and Amsterdam, 1958),

Vol. I, p. 262, where this 1735 edition is described as being "very rare." It is indeed. I have been able to trace only seven copies, four of them in Brazil; and I have been unable to find one for sale since I started looking for it some ten years ago, despite constant prodding of numerous antiquarian booksellers in various countries. The existence of this second edition (1755) is not recorded in any of the standard Portuguese and Brazilian bibliographies from Barbosa Machado to Borba de Moraes. It is not to be found in the British Museum Library, nor in other institutional and private libraries which are famed for their holdings of rare Portuguese books. The Wellcome Historical Medical Library at London, so rich in rare works on medical history, does not possess a copy of either edition. The existence of the 1755 edition was first made widely known by its inclusion in the catalogue of the Lisbon bookseller from whom it was purchased by the Lilly Library.

A short sketch of the author's career will be in order before making a brief comparison between the editions of 1735 and 1755 and before tentatively assessing their interest for the history of tropical medicine. Until recently, the only biographical information about Luís Gomes Ferreira was that derived from passing allusions in the text of his *Erario Mineral* and from his description of himself on the title pages of both editions as *Cirurgião aprovado, natural da Villa de São Pedro de Rates, e assistente nas Minas de ouro por discurso de vinte annos* ("qualified surgeon, native of the town of São Pedro de Rates, and dwelling in the Mines of gold for the period of twenty years"). In 1967, the belated publication of the third volume of a series of papers presented at the historical congress held at Rio de Janeiro in 1963, to commemorate the transference of the capital of

colonial Brazil from Salvador (Bahia) to Rio de Janeiro in 1763, included an interesting article by Senhor Ivolino de Vasconcelos on Luís Gomes Ferreira and the 1735 edition of the *Erario Mineral*.¹

Senhor Ivolino de Vasconcelos had recently met in Rio de Janeiro some ladies of a family descended from Luís Gomes Ferreira. They showed him an oil portrait of their ancestor, representing him as a handsome and intelligent-looking young man. Unfortunately, the portrait was not signed, and there is no indication whether it was done in Portugal or in Brazil, but it was obviously painted in his lifetime. The ladies also possessed a copy of the 1735 edition of the *Erario Mineral*. They were able to give Senhor Ivolino de Vasconcelos some information about Luís Gomes Ferreira's parentage and descendants; but they could not add anything to the incidental information given in the *Erario Mineral* concerning his career in Portugal and in Brazil. Neither these ladies nor Senhor Ivolino de Vasconcelos knew of the existence of the 1755 edition. Combining the genealogical information provided by his twentieth-century descendants with the incidental autobiographical references in the *Erario Mineral*, we can reconstruct the outline of Luís Gomes Ferreira's career as follows.

He was born at an unascertained date in the parish of São Pedro de Rates in the Barcelos district (*comarca*) of the province of Entre Minho e Douro in northern Portugal.

¹ Instituto Histórico e Geográfico Brasileiro, *Anais do Congresso Comemorativo do Bicentenário da transferência da sede do govêrno do Brasil da cidade do Salvador para o Rio de Janeiro, 1763-1963*, Vol. III (Rio de Janeiro, 1967), pp. 375-412, Ivolino de Vasconcelos, "Notícia Histórica sobre Luís Gomes Ferreira e sua obra, o *Erario Mineral*."

His father, Caetano Gomes Ferreira, was evidently a man of property, living in a *solar* or manor-house, but his mother's name has not been traced. Luís had at least three brothers, probably younger than himself, who likewise lived for some years in Brazil, but we do not know the dates of their respective births. The first firm date that we have in the *Erario Mineral* discloses that he was working as a surgeon at the Royal Hospital at Lisbon in 1705-6, and it is virtually certain that he qualified there. He sailed for Brazil for the first time in 1707, returning to Portugal after a short stay at Bahia. This round-trip voyage indicates that he probably sailed as a ship's surgeon in one of the annual Brazil fleets. He left for Bahia again in 1708, confessedly attracted, like so many of his compatriots, by the gold rush in Minas Gerais, which was then at its height.² He lost no time in leaving for the gold fields by way of the São Francisco river valley, but he evidently paid another brief visit to Bahia in 1709. He then returned to Minas Gerais, where he remained from 1710 to 1731, apart from serving as a surgeon in the volunteer relief column raised by the Governor of Minas, António de Albuquerque Coelho de Carvalho, to relieve Rio de Janeiro when this city was attacked and occupied by the French under Duguay-Trouin in September-October 1711.

During his twenty years' residence in Minas Gerais, Luís Gomes Ferreira lived at various times in Sabará, 1712-14; at Ribeirão do Carmo (the actual Mariana), 1716-19; at Ribeirão Abaixo, 1716; and in the *arraial* or mining

² C. R. Boxer, *The Golden Age of Brazil, 1695-1750: Growing Pains of a Colonial Society* (Berkeley: University of California Press, 1962; reprinted, 1967), pp. 30-83, for the gold rush in Brazil and its repercussions. Senhor Ivolino de Vasconcelos was evidently unaware that I had quoted largely from the *Erario Mineral* of 1735 in this book.

camp of Padre Faria at Ouro Preto, 1724-25. He also had a country estate (*fazenda*) at Itacolomi near Ouro Preto, between 1721 and 1730 at least, and he evidently travelled around the mining region a good deal. He was still at Sabará in Minas Gerais early in 1731, but before the end of that year he was at Bahia, waiting to embark in the homeward-bound Brazil fleet. This particular fleet reached Lisbon on 27 February 1732,³ and he tells us that he was living at Oporto in March 1733, so it appears that he did not stay very long at Lisbon. The ecclesiastical and civil licenses for the first edition of his book are dated at Lisbon between November 1733 and July 1735, inclusive. At some stage in his career, he married a lady named Dona Maria Ursulina Monteiro da Gama, by whom he had at least one son, Alexandre, who eventually settled in Brazil. Since Luís Gomes Ferreira makes no mention of wife and child in the *Erario Mineral*, it seems likely that his marriage took place in Portugal after his return, but we cannot be sure of this. It is clear that he was still working as a doctor and surgeon in the north of Portugal, with a practice at Oporto, in March 1733, but details of his subsequent career and the date of his death are still unknown.⁴

³ *Gazeta de Lisboa*, dateline of 13 March 1732. The Bahia fleet comprised twenty-five merchant ships, convoyed by the warship *Madre de Deos*, with one ship from Pernambuco and one from Sacramento (Rio de la Plata) in company, or twenty-eight sail in all. Cf. M. Lopes de Almeida (ed.), *Notícias Históricas de Portugal e Brasil, 1715-1750* (Coimbra, 1961), p. 163.

⁴ Augusto da Silva Carvalho, *Médicos e Curandeiros. Trabalho publicado n "A Medicina Contemporanea," revisto e augmentado* (Lisboa, 1917), p. 74, following the Portuguese nineteenth-century bibliographer Inocêncio, erroneously states that Luís Gomes Ferreira left Portugal c. 1725 and returned in 1745. This shows that neither

The bulk of the *Erario Mineral* was written while the author was living in Minas Gerais, as is abundantly clear from the context and wording; but the text received some last-minute additions and interpolations after his return to Portugal in 1732. Among several passages which could be cited to prove this assertion, the following will suffice. At the end of his Treatise VIII, ch. 3, entitled, "Of the disease which is commonly called *cangalha*, and which I call a convulsion of the nerves," and which was very common among slaves, he writes:

But the cure for them, which will ensure no return of this disease, is that slaves so afflicted should leave the climate of the Mines for any of the [coastal] cities or towns; and no cure other than this change of air is necessary. I affirm this, not only because some friends have told me that they have verified this with their own slaves, but also because I found it with one of my own, and he never again had any trace of this disease. It is certain that the climate of the Mines both foment the disease and hinders the progress of its cure, so that none of those who stay there continually are ever completely cured, as I can vouch. My above-mentioned slave left the Mines for the city of Bahia, and having stayed there for eight months without suffering any illness, he came back to the said Mines, where he has now been for the last two years without any return of it.

This passage was obviously written while the author was still in Minas Gerais.

of them can have read the book very carefully, although Silva Carvalho states that one of the two copies [of the 1735 edition] in the library at Mafra had inserted a manuscript advertisement in the holograph of Luís Gomes Ferreira, announcing various patent medicines for sale at his house in Oporto, "no bairro dos ferreiros, ou defronte do pateo das Freiras de São Bento."

Apart from the allusions at the end of the *Erario Mineral* to the author's return to Portugal and his practice at Oporto in 1733, there is the following passage in Tratado II, chapter 2, which deals with "Obstructions of the liver, their symptoms and their cure": "In this same way, I prescribed these two remedies to cure an obstruction of the very reverend Father Manuel João de Carvalho in this city of Oporto, who had contracted this disease of the liver in the Mines, . . . and he went on improving greatly and was finally completely cured, as is well known in this part of the city." This passage was obviously added after the author's return in 1732, as were several others.

The bulk of the *Erario Mineral* was not only written in Brazil, but the work itself was primarily intended for the use of people living in Minas Gerais, as Luís Gomes Ferreira emphasizes in his "Prologue to the reader," which is identical in both editions.

If I am criticized for writing about Medicine when I am a surgical practitioner, I reply that surgery is an inseparable part of medicine. Moreover, in crises of health, the surgeons can supply the lack of medical doctors, and especially in so many and such remote places which are now inhabited in these Mines, where there are often neither doctors nor even qualified surgeons, for which reason the people suffer greatly. To remedy these sufferings, and to give light to the novices in this region, this *Erario Mineral* makes its public appearance.

Luís Gomes Ferreira ingenuously confesses that he had emigrated to Minas Gerais primarily in order to get rich quickly and that the idea of writing his work only occurred to him some years later. He writes in one place:

By the method described above I have cured numberless patients who suffered from severe stitches (*pontadas*) accompanied by spitting of blood, whom I do not name here, since

I have forgotten their names. For if I had realized that I would be living for so many years in these Mines, and if I had taken care to write down from the very beginning some notes and observations at least of the principal cases that passed through my hands, I would have compiled a voluminous work, wherein would also have been found good descriptions of the herbs, roots, minerals, and animals which there are in Brazil and its backlands (*sertões*), all of which would not have failed to please my readers, and would have been very useful for the public weal. But as I had no such expectation, thinking that I would make my fortune in a few years, I did not bother to do so. And now I cannot recall them all for publication; and I only relate what I can remember and as I can find time to write it down.

Despite this disclaimer, he does, in point of fact, give a large number of medical and surgical case histories, together with names, dates, and places, the great majority of which relate to Brazil in general and to Minas Gerais in particular. The second edition of 1755, while still primarily intended for use in Brazil, was also aimed at a wider public, as exemplified in the explanatory subtitle, which is lacking in the edition of 1735: . . . “most useful, not only for practicing surgeons who live in Portuguese America, for whose benefit it was especially written, but for all those in general who follow the same calling; and likewise for any other persons who are desirous of keeping fit, who will find therein specific and lavish remedies for the cure of the most obstinate and serious complaints, &c.” Both editions were dedicated to Our Lady of the Immaculate Conception, as stated in their respective title pages; but the 1755 edition adds: “Now reprinted and enlarged with a great number of exquisite and wonderful prescriptions.” Moreover, the text of the dedication in the (unnumbered) preliminary leaves of the 1755 edition, which is signed by the bookseller, Luís de Moraes e

Castro, makes the same claim. "On the first occasion when it was printed [1735] it was dedicated to you. Now that it comes in an enlarged edition from the press, let it achieve the same felicity." The author's *Proemio* to the 1755 edition is even more emphatic in affirming the inclusion of additional matter: "In these two volumes of this *Erario*, in which it seemed more convenient in this second edition to divide it into two, because as it is so copiously increased, if it was reprinted in a single volume, it would be swollen to an awkward size, . . ."

Unfortunately, I have not been able to locate a copy of the 1735 edition either in the United States or in the United Kingdom, and I last examined one in Brazil ten years ago. I therefore cannot state positively the nature and extent of the additional matter in the 1755 edition. I doubt, however, if this was quite as extensive as the author and the publisher claimed in 1755. A comparison of the numerous references taken from my own notes in 1959 and the many extracts given in Senhor Ivolino de Vasconcelos' article from the 1735 edition, which are scattered throughout the length and breadth of that book, shows that these passages are all present in the 1755 edition in the same wording. I suspect, therefore, that the additional matter was mainly, if not entirely, confined to *Tratado III*, a miscellany of cures, remedies, and prescriptions for almost every imaginable disease, most of which read like old wives' and quack-doctors' nostrums. Luís Gomes Ferreira proudly claims some of these nostrums as being of his own invention, and he was a firm believer in the efficacy of "sympathetic powders" (*pós da Sympathia*). Of three "infallible cures for tooth-ache" which he describes, the following is perhaps the oddest:

Take an equal quantity of verdigris and the best sort of East-Indian cloves (which is the one most like cinnamon in colour) ; mix them well and grind to a powder, which should be put in a pewter plate on the 29th of August, from 11 a.m. to 12 noon, in a place which catches the sun, if there is any. It should then be kept in a pewter cup, so as to enable it to remain in better condition for one, two, or more years. Apply by moistening a finger in oral saliva and putting it on the powder, and then rub the aching teeth with the finger that has the powder stuck to it. Even if the powder touches the other teeth it will not matter, and within the space of a Hail Mary the tooth will cease to ache.

He then goes on to describe how fresh wounds can be “infallibly” healed by the application of this powder, the composition of which was originally a professional secret. “If there is someone—which I cannot believe—who criticizes the diffusion of this and other secrets, he is wrong. For the convenience of the many should prevail over that of the few. Another infallible cure for toothache is to boil a garlic and place it on the ear on the side of the face where the pain is, and the pain will then vanish forthwith.”

Also indicative of his belief in such quack remedies is his advocacy of the use of human excreta in various cases, such as in separating a pair of illicit lovers, without having recourse to legal action. “Take some of the excreta of the male lover and smear it on the soles of the shoes of his mistress, or on the heels thereof; and smear some of the excreta of the mistress on the soles or on the heels of the shoes of the lover. They will forthwith take an unconquerable aversion to each other.” His belief in magic is evidenced *inter alia* by his prescriptions for the cure of sexual impotence caused by witchcraft, some of which are taken, as he acknowledges, from the Portuguese medical classics of

Dr. João Curvo Semedo.⁵ His frequent advocacy of such patently absurd, archaic, and disgusting remedies detracts somewhat from his violent denunciations of the ignorant barber-surgeons, who, he says, abounded in Minas Gerais, and of which one example will suffice. "To cure him, they sent for an ignorant barber, who in Portugal would hardly know how to shave anyone; because unhappily for our sins there are many such in all corners of Minas Gerais, calling themselves surgeons."

I cannot find a categorical statement in the text that Luís Gomes Ferreira was a qualified medical doctor; but if he was, he must have taken his medical degree at Coimbra University, which was the only institution in the Portuguese empire that was entitled to award them. The state of medical education at Coimbra left a great deal to be desired at this period, as we know from the evidence of Gomes Ferreira's more famous contemporary, Dr. António Nunes Ribeiro Sanches.⁶ Here, even more than in most other European

⁵ João Curvo Semedo (1635-1719), the most famous Portuguese doctor of his age, author of numerous medical works containing a lot of nonsense mixed with some sound sense.

⁶ Ribeiro Sanches (1699-1782) received his medical education successively at Salamanca, Pisa, Montpellier, and Leyden after studying law at Coimbra. Court and army physician in Russia from 1731 to 1747, he subsequently settled in Paris, where he contributed the article on venereal disease to the *Encyclopédie* of Diderot, his *Disertation on the origin of the venereal disease* being published at London in 1751. A copy of his rare *Tratado da conservação do saude dos Povos* (Paris, 1756) is in the Lilly Library. For details of his life and work, see Maximiano Lemos, *Ribeiro Sanches: A sua vida e a sua obra* (Oporto, 1911) and David Willemse, *António Nunes Ribeiro Sanches, élève de Boerhaave, et son importance pour la Russie* (Leyden, 1966).

universities, humoral pathology was still the basis of a medical education, and the influence of Graeco-Roman works, particularly those of Galen, was still paramount. Anatomical dissections of human corpses for medical and surgical research had been expressly forbidden in the closing years of King John V's reign (1706-50), though this ban does not seem to have been very rigorously enforced. At any rate, Luís Gomes Ferreira certainly carried out some autopsies in Brazil, and he makes no secret of the fact in the *Erario Mineral*.

One has the impression that medical and surgical knowledge were more backward and hidebound in the Iberian Peninsula than elsewhere in Western Europe, as was deplored by several eminent Portuguese doctors who lived and worked abroad, including Dr. Jacob de Castro Sarmiento and Dr. António Ribeiro Sanches. Even in the more advanced countries, such as the Northern Netherlands, Britain, France, and Italy, medical systems which sometimes were more influenced by philosophical speculations than by scientific certainties were much in vogue. The germ theory of disease and the cellular structure of the body were alike unknown before the great improvement of the microscope in the nineteenth century rendered possible the development of rigorously scientific biology. Effective pharmaceutical drugs such as quinine (chinchona bark) were still extremely rare. One should not be too hard on Luís Gomes Ferreira for advocating the use of so many useless or noxious compounds in the backlands of Minas Gerais. But it is more surprising that he continued to advocate them after his return to Portugal and that he does not seem to have been influenced by foreign works in his own field. He alludes favorably to some foreign surgeons who worked in Brazil during

his time there, including a Hungarian in Minas Gerais and a Frenchman in Pernambuco; but it does not appear that he had any foreign medical and surgical works in his own library.

However that may have been, it would, I think, be wrong to dismiss Luís Gomes Ferreira as being no better than one of the quack doctors (*curandeiros*) and barber-surgeons whom he so vigorously denounces, despite the fact that many of his own remedies were no better than theirs. He repeatedly emphasizes that he always kept an open mind and was ready to learn from experience, not being an adherent of any one of the then-prevalent medical systems. He defends his avowedly empirical methods in his *Proemio* to the reader: "And thus, as it has always seemed to me to be right to obey reason, it has always also seemed to me to be rash to contradict experience; for reason and experience are the two columns which support medicine and surgery. And forasmuch as the works which Nature makes by secret ways are marvellous and stupendous, without reason or our intellect being able to fathom them, it follows that even greater faith should be placed on experience than on reason." This is a maxim which he repeatedly invokes in the *Erario Mineral*, "for when experience speaks, the authorities hold their tongues." We have seen that he regarded medicine and surgery as inseparably connected, instead of being sharply separated, as they often were at this period; and in this he was at one with Dr. Ribeiro Sanches, though not for the same reason.⁷

⁷ . . . "a cauza da perda da verdadeyra Medicina em França foi ha 100 annos o favor e a confiança que derão os Exercitos, e depois o ignorante povo (e muito gente do alto he povo) e esta sorte de homens

Unlike most of his Portuguese colleagues, who had a veritable mania for frequent bleeding and violent purging, Luís Gomes Ferreira was very sparing in his use of these sovereign remedies, as they were then regarded. Cautioning against excessive bleeding, he wrote: "Blood is the light of the candle of life; the more oil there is in the candle, the longer will its light endure. . . I make a great point of telling everyone how important it is to bleed only a little in order to live long" (pp. 52-55 of the 1735 edition). He strongly advocated that patients should be allowed to change their shirts and their bed linen frequently—a practice which many doctors considered to be extravagantly fussy, or even downright dangerous. Surgery was still a very primitive art in most respects, and the unruly population of eighteenth-century Minas Gerais gave Luís Gomes Ferreira many opportunities to improve his skill by frequent operations. Some of the surgical case histories which he relates border on the incredible. He claims the most astonishing cures of severe gunshot, knife, and sword wounds, many of them with the aid of a compound which he had invented. This contained, among other things, liqueur-brandey, "Queen of Hungary's water," incense, myrrh, gum-mastic, rosemary, myrtle berries, and powdered comfrey root. Its application varied in accordance with the nature and the location of the wounds, as exemplified in the following instance.

In the year 1712, I was summoned to cure Francisco Gil de Andrade, a settler in these Mines in the camp of the bar of

chamados nos nossos tempos *chirurgions*, qualidade de homens que nao conheceo a Antiguidade, porque todo o Medico era chirurgiao" (Ribeiro Sanches to Dr. Rodrigo Soares da Silva e Bivar, Paris, 29 October 1764. An unpublished autograph letter in the writer's collection).

Villa Real do Sabará. He had been slashed with a broadsword, which cut him from the nape of the neck, or the hollow of the hinder part of the head, to the cheek below the ear, severing his jugular veins, arteries, muscles, and the nerves of the neck. The wound bled copiously, so that he was extremely weak. I bathed it lightly with cold brandy (and not with warm), just sufficiently to clean that part, but not too thoroughly, so as to avoid provoking a further flow of the blood which was gradually lessening. After washing or bathing the wound, I stitched it up, and gave him the remedy, soaking bandages in it and binding them over the wound with a dry bandage on the outside as a compress, so that the bandage should close the wound better and quite staunch the flow of blood.

On the second day, he suffered a great inflammation of the neck, head and face, for which I did not then apply the remedy again, but I used instead anodynes of egg well beaten with plantain-juice, and I applied bandages soaked in rose-water on top. These were changed frequently, so that they did not dry, with which the inflammation gradually died down, and he was placed on a generous diet. When the inflammation had almost vanished, I reverted to using my remedy; and although the wound reopened a little with the inflammation, as soon as I applied the remedy thereto, it became reunited. It then began to heal in such wise, that within a few days he was completely cured.

On another occasion, he cured within eight days the bailiff of Sabará, who had received an apparently mortal wound from a sword thrust. When Gomes Ferreira reached him, the victim had lost so much blood that "from the spot where he was wounded to his house, which was not far, he had left a stream of blood along the street, which looked as if an ox had just been slaughtered there."

In the field of medicine, despite his belief in the prophylactic virtues of human excreta and urine, sometimes on

the most bizarre occasions, he has also many remarkably acute observations. One modern Brazilian medical authority, Dr. Eustáquio Duarte, goes so far as to claim that his observations on the sores caused by the larvae of blowflies would suffice to place his name among the great pioneers of parasitology, if only his *Erario Mineral*, like the sixteenth-century *Colóquios* of Garcia d'Orta, had found a translator and editor of the calibre of Carolus Clusius (Charles de l'Ecluse) to disseminate a Latin version among the learned men of his day and generation.⁸ If a layman may interpolate his opinion in such matters, this seems to me to be something of an exaggeration. Garcia d'Orta's work, though naturally not without its errors, is vitiated by far less of the quack remedies and sympathetic magic which abound in parts of the *Erario Mineral*.

In any event, it is clear from the detailed case histories which he gives that Luís Gomes Ferreira was deeply concerned about his patients, including the Negro slaves, who were, as he noted disapprovingly, badly treated, poorly fed and housed, and worse clothed. He stressed the vital importance of a doctor having a tactful mien and a good bedside manner in order to gain and keep the patient's confidence.

If the patient is a Black or a Poor White, you must get him to repeat the information which you want two or three times. For since these types are a rough and volatile sort of people,

⁸ Gilberto Osório de Andrade & Eustáquio Durate, *Morão, Rosa & Pimenta. Notícia dos três primeiros livros em vernáculo sobre a medicina no Brasil* (Recife, 1956), pp. 416-18. For Garcia d'Orta and his *Colóquios* (Goa, 1563), see C. R. Boxer, *Two Pioneers of Tropical Medicine: Garcia d'Orta and Nicolás Monardes* (Wellcome Historical Medical Library, Lecture Series No. 1, London, 1963). The Lilly Library possesses a very fine copy of the rare first edition of the *Colóquios*.

they will first of all say one thing, and then, when you ask them again, they will say something else, as has happened to me with all of them. And because I like to make a correct diagnosis, to avoid danger and expense, and not to make the diseases worse than they are, whenever I ask these people about their symptoms, I do so very patiently. Moreover, before I feel the patient's pulse, I chat with him for a while, and I always take it two or three times. For I know very well that as soon as I enter the room and greet him, he gets up if he can, arranging his clothes and making his bow, and while he is flustered like this, his pulse is likely to be altered from what it was before, or what it becomes subsequently. Anyone who doesn't believe this, can try it for himself, and he will see if I am right in what I say. And I will go further, and state that not only is this the case with this kind of people, but with those of all other classes as well.

In this, Luís Gomes Ferreira resembles the great Herman Boerhaave, as well as Ribeiro Sanches and Curvo Semedo, all of whom had the knack of inspiring complete confidence in their respective patients.⁹

Among the common illnesses which afflicted both black and white in Minas Gerais, as elsewhere in Brazil for that matter, were bacillary dysentery, intestinal and hookworms, the *mal do bicho*, and venereal diseases. Gomes Ferreira gives us many graphic case histories of these and other ills, together with his avowedly empirical (and often astonishing) methods of treating them. The dreaded *mal do bicho*, or "disease of the worms," as described by Gomes Ferreira, was evidently *trichuriasis*, whipworm infestation with a high incidence of rectal prolapse. As the whipworm was often found in the autopsy of patients dying of yellow fever, the term *mal do bicho* was likewise used to designate this disease

⁹ Cf. Maximiano Lemos, *Ribeiro Sanches* (1911), pp. 33, 91, 94.

as well.¹⁰ Prevention being better than cure, he recommended bodily cleanliness and the daily bath as the best precautionary measure, another being a dose of brandy (*aguardente*) or of rum (*cachaça*) first thing in the morning. This habit has survived on both sides of the South Atlantic, whence the name *mata-bicho* in Brazil and Angola. The mortality from intestinal worms was also very heavy, especially among infants and young children. Some of his observations on the incidence of this scourge are applicable to the poorer parts of Brazil today. Venereal diseases inevitably were widespread, and some of Luís Gomes Ferreira's cures were painfully drastic, though not more so than those of several of his colleagues in Europe.

The gratitude of his patients varied considerably. He records appreciatively the wealthy landowner who gave him 500 drams of gold after undergoing a successful course of treatment for venereal disease. But he likewise gives the name and address of a man who gave him a very stingy fee after he had promised him a very generous one, if our surgeon cured (as he says he did) his client's brother of an exceedingly dangerous wound.

Luís Gomes Ferreira obviously acted on his own maxim that a surgeon (or doctor) should do his utmost to inspire the confidence of his patients. This fact may well have done more to bring about many of the cures which he effected than

¹⁰ Francisco Guerra, "Aleixo de Abreu, 1568-1630, Author of the earliest book on Tropical Medicine, describing Amoebiasis, Malaria, Typhoid Fever, Scurvy, Yellow Fever, Dracontiasis, Trichuriasis, and Tungiasis in 1623," reprinted from the *Journal of Tropical Medicine and Hygiene*, March 1968, Vol. 71, pp. 55-69. I am greatly indebted to Dr. Guerra for his illuminating comments on the various forms of the *mal do bicho*.

the noxious potions and the patent medicines which he so freely administered. He had unlimited confidence in the efficacy of his own nostrums and a good deal also in his own surgical skill, sometimes offering to forfeit his fee if a cure was not effected within a certain time limit. On the other hand, he fully realized that the boundaries of knowledge were always advancing. He quotes approvingly the dictum of an erudite Jesuit padre, who said that he would gladly exchange all the knowledge which he possessed for that which he did not know.¹¹ Criticizing the baleful effects of the deadweight of tradition on the progress of medicine and surgery, he observed: "If anyone urges that we should be bound entirely by what our forefathers did, this is the same thing as tying the living to the dead."

Apart from its value as a source for the history of tropical medicine, and more particularly as showing the state of surgery and medicine in eighteenth-century Brazil, the *Erario Mineral* forms a fascinating source for the social history of Minas Gerais. Unlike most of his contemporaries, whether in Brazil or in the Caribbean and American possessions of other European powers, Luís Gomes Ferreira shows himself to be genuinely concerned for the hard lot of the Negro slaves. He several times accuses their owners of deliberate neglect and callous cruelty. He also makes an interesting distinction between the *Minas*, or slaves of Sudanese origin from Dahomey and the Guinea coast, and the Bantu slaves from Angola and Benguela. The former

¹¹ I am not sure whether he was referring to the Portuguese Fr. Francisco Soares, S.J. (1605-59), the "sumo philosopho," or to the Spanish Fr. Francisco Suárez, S.J. (1548-1617), the "doctor eximius," both of whom taught at Coimbra. On the whole, the latter seems more probable.

were usually stronger and more vigorous than the latter, and they were likewise more courageous and more resistant to disease. A *Mina* who was seriously ill would often make no complaint until it was too late to do anything effective for him; whereas a Bantu was apt to become demoralized when afflicted with any illness and to give up the ghost without a struggle.¹²

We have only a few glimpses of Ferreira's personal, as distinct from his professional, character in the pages of the *Erario Mineral*. He does, however, go out of his way to emphasize that he was an "Old Christian," with no stain of Jewish blood in his ancestry. In this he reflected the prejudices of his age, which witnessed the last outbursts of inquisitorial fanaticism against the "New Christians" (real or alleged crypto-Jews) in Portugal and Brazil during the reign of King John V.¹³ Medicine and surgery were two of the professions in which the persecuted *conversos* had sought a livelihood for centuries, with the result that many doctors and surgeons were suspected of being crypto-Jews, whatever their real origins were and however genuine their Christianity might be.¹⁴

¹² For the relative importance of Sudanese and Bantu slaves in the various regions of Brazil at different times and places during the eighteenth century, see Afonso de E. Taunay, *Subsídios para a história do Tráfico Africano no Brasil Colonial* (Rio de Janeiro, 1941), and Pierre Verger, *Flux et reflux de la traite des nègres entre le golfe de Bénin et Bahia de Todos os Santos du 17^e au 19^e siècle* (Paris and The Hague, 1968).

¹³ Arnold Witznitzer, *Jews in Colonial Brazil* (New York: Columbia University Press, 1960), pp. 146-47, for the persecution of Brazilian "New Christians" or *Marranos* in the eighteenth century.

¹⁴ Cf. the complaints of Ribeiro Sanches on this score, in Maximiano Lemos, *Ribeiro Sanches* (1911), pp. 9-10, 20-21, 36-37, 51-54, 67-69.

It was stated at the beginning of this article that the *Erario Mineral* was an extremely rare book in either of its two editions, but more especially in that of 1755. I am not altogether clear why this should be so, but two reasons may be tentatively suggested. In the first place, the book was primarily intended for circulation in the district of Minas Gerais, and the greatest number of copies were, in all probability, dispatched to Brazil for sale there. Colonial Brazil was not a country with a wide reading public, nor a place where libraries flourished; books were apt to be discarded, thrown away, or simply left to rot when the original owner died or lost interest in them. It is worth noting that other books which were published in Europe primarily for the Brazilian market are likewise very rare nowadays, such as Jorge Benci's *Economia Christãa dos Senhores no governo dos escravos* (Rome, 1705) and Manuel Ribeiro Rocha's *Ethiope resgatado, empenhado, sustentado, corregido, instruido, e libertado* (Lisbon, 1758).¹⁵ Moreover, the second edition of the *Erario Mineral* was published in the year of the great Lisbon earthquake (1 November 1755), when so many bookshops, as also private and public libraries, were destroyed and when some publishers lost their entire stocks.

Finally, it should be noted that this copy of the 1755 two-volume edition is not provided with the ecclesiastical and civil licenses which were obligatory for all books printed in Portugal before they were allowed to be published and circulated. This is a most unusual feature, although it is

¹⁵ For these two works see Rubens Borba de Moraes, *Bibliographia Brasiliana*, I, 84; *ibid.*, II, 211. Dr. Borba de Moraes is, however, mistaken in his assertion that "many copies" of the *Ethiope Resgatado* are in existence today. On the contrary, intensive research has disclosed the location of less than a half-dozen copies, one of them in the Lilly Library.

true that just at this period the hitherto remarkably efficient Portuguese literary censorship was showing signs of lassitude. A few works were being published clandestinely, such as the *Arte de Furtar*, ostensibly attributed to Padre António Vieira, S.J., with an Amsterdam imprint of 1652, whereas it was in reality written by someone else and printed at Lisbon in 1744, and the highly controversial *Verdadeiro Methodo de Estudar* by Luís António Verney, with its successive editions of 1746-51.¹⁶ Possibly, the publisher of the 1755 edition took advantage of the administrative chaos caused by the earthquake to issue the book without getting the legal and ecclesiastical licenses; but this is a point which, like some others, can be clarified only by the discovery of another one or two copies of this edition.

¹⁶ For the *Arte de Furtar* and its provenance, see Afonso Pena Junior, *A Arte Furtar e o seu autor* (2 vols., Rio de Janeiro, 1946); for the clandestine editions of the *Verdadeiro Methodo de Estudar*, see Antonio Alberto de Andrade, *Vernei e a cultura do seu tempo* (Coimbra, 1966), pp. 453-57.

I may add here that although no bibliographer has described the second edition of the *Erario Mineral*, it is briefly mentioned on pp. 237 and 240 of M. Ferreira de Mira, *História da Medicina Portuguesa* (Lisboa, 1948).