

ical administrator in tropical places where Eastern and Western folk have met, and where the inevitable clash between the two has occurred.

In such places and circumstances the result has too often been that sooner or later the weaker folk—those whose ancestors have been age-long “savages”—have died out in the presence of those whose ancestors long ago turned from “savagery” to civilization. This dying out of the weaker folk has happened even when the stronger people have done their best to avoid this extirpation.

The real ultimate cause of “the decrease of natives” when in contact with civilized folk lies, perhaps, in the difference in hereditary mentality—in the incapacity of the “savage” to take on civilization quickly enough. However sedulously the missionary, the government official, and others who take a real interest in so doing, may teach civilized precepts to the essential savage, the subject of this sedulous case—however advanced a savage culture he may have attained—will, at least for many generations, remain a savage, *i. e.*, for just so long as he is under influence of the civilized teacher he may act on the utterly strange precepts taught him, but away from that influence he will act on his own hereditary instincts.

The manner in which the native dies out—even when well looked after—varies. He may be killed out by some disease, perhaps trifling but new to him, with which he does not know how to cope, and with which—if he can avoid so doing—he simply will not cope in the ways which the civilized man would teach him; or he may be killed out by the well-meant but injudicious enforcement on him of some system of unaccustomed labor; or, again, he may die out because deprived of his former occupations [*e. g.*, fighting and the gathering of just so

much food as sufficed for him] and thus restricted to a merely vegetative existence; or in many other more or less similar forms his extermination may come about.

But all such effective causes are reducible to one, which is that he is not allowed to act on his own hereditary instincts, that he can not at all times have, and often would not use, judicious and disinterested guidance from civilized folk, and that consequently he, the “savage,” can not and too often does not care to keep alive when in the presence of civilized folk.

EVERARD IM THURN

GEORGE MARCGRAVE, A POSTSCRIPT

In the *Popular Science Monthly* for September, 1912, I published a biographical sketch of “George Marcgrave, the First Student of American Natural History.” A copy of this paper was sent to Dr. Alfredo de Carvalho, Pernambuco, Brazil, president of the Instituto Archeologico e Geographico of that city, and a profound student of the history of his country and especially of that period during which the Dutch occupied Pernambuco and the adjacent parts of Brazil. He wrote me of his study of Marcgrave, who did his natural history work at and around Pernambuco, or Recife as it is called by the Brazilians, and sent me a copy of his article—“Um Naturalista do Seculo XVII, Georg Markgraf, 1610-1644”—in *Revista do Instituto Archeologico e Geographico Pernambucano*, Vol. XIII., pp. 212-22, 1908. I greatly regret that this paper was not included in my bibliography of George Marcgrave.

In speaking of Marcgrave's death it was stated in my sketch that this occurred on the Gold Coast of Africa, by which term was meant all that pestilential region around the Gulf of Guinea. However, the Gold Coast proper is a section of the coast lying west of the Bight of Benin, and there is good reason to believe that Marcgrave died in Angola at or near San Paulo de Loanda, some distance south of the mouth of the Congo.

In my paper all the intimate and personal

data concerning Marcgrave's boyhood, his 11 years of preparation for his life work, and his 6½ years of exploration and study in Brazil, were taken directly from a sketch found in Manget's "*Bibliotheca Scriptorum Medicorum*" (1731), and from authors who had gotten their data from this article. At the time the paper above referred to was written I had not had an opportunity of examining Manget's huge folio, and as the three gentlemen who had looked it over for me found nothing to indicate who was the author of the sketch of Marcgrave therein contained, I was at first inclined to think Manget himself the writer. However, the sketch was written in the first person by a man who personally knew Marcgrave, Count Moritz, Piso, and all the other principals in the Dutch expedition to Brazil of 1637-38, and as Manget was not born until some years after Marcgrave's death, I had to content myself with referring to "the unknown writer in Manget."

During the Christmas holidays, 1912, while at work in the libraries at Washington, I went to the Surgeon General's Library and personally looked over the sketch of George Marcgrave contained on pages 262-264 of Manget's volume II., but found absolutely nothing to indicate who was the writer. However, on the adjoining pages were a number of short sketches of various Marggrafs (the German spelling of the name), all of which were worked over. Presently I came to Christian Marggraf (1612-1687) who, it was stated, published "*Prodromus Medicinæ Practicæ*" in 1674, "*Materia Medica Contracta*" in 1674, and in 1715 "*Opera Medica Duobus Libris Comprehensa*." Following the last title came this highly interesting statement:

In hac libro anteponitur vita fratris ejus natu majoris Georgii Marcgravi quam infra subjectam videas. (In this book there is placed at the front the life of his older brother, George Marcgrave, which you may see appended below.)

Search was immediately made through the catalog of the Surgeon General's Library, and the *Prodromus* and the *Materia Medica* were both found, but the *Opera Medica* was lacking. This search was extended to a number of the

large libraries throughout the east, but none of them contained the *Opera*. However, Mr. Charles Perry Fisher, Librarian of the College of Physicians, Philadelphia, kindly informed me that the "*Opera Medica*" simply consists of the "*Prodromus*" and the "*Materia Medica*" united and republished under the new title "*Opera Medica*" in 1715. Since the book could not be found in America, an effort was made to locate it in Europe, and a copy in perfect condition was reported in the Library of the Faculty of Medicine in Paris. This book was wanted that it might be ascertained whether Manget had published everything that Christian Marggraf had written about his brother George. About this time a letter was received from Dr. Perlbach of the Royal Library of Berlin, which effectually cleared up the whole matter. (I had previously written Dr. Perlbach, who had supplied me with much valuable data for the original paper on George Marcgrave.)

He stated that the Royal Library of Berlin does not contain "Christian Marggravius: *Opera Medica Duobus Libris Comprehensa, Amstelodami apud Franciscum van der Plaats, 1715, 4°*"; but that it does have his "*Prodromus Medicinæ Practicæ, Lugduni Batavorum, ex officium Arnoldi Doude, 1673, and 1674, 4°*" (it seems probable that the printing began late in 1673 and ran over into the next year); also it has the same "*Editio 2 auctior Lugduni Batavorum apud Cornelium Bontestyn, 1685, 4°*." Further the Royal Library also has "*Materia Medica Contracta, Lugduni Batavorum apud Arnoldum Doude 1674, 4°*," and the same "*Editio 2 aucta Amstelodami apud Henricum Wetstenium 1682, 4°*."

Touching the matter particularly in hand, Dr. Perlbach then concluded:

In the second edition of the *Prodromus* (1685) there are found (following the preface [dated at] *Lugduni Batavorum, Calendis Februarii, 1685*), four unpagged leaves containing the life of George Marcgrave, which Manget, *Bibliotheca Scriptorum Medicorum II.*, pp. 262-64, prints word for word with the edition of the author. I have compared the two texts, and with the exception of some

typographical errors and a line omitted by Manget they agree word for word.

The line referred to merely tells us that Count Moritz had added Marcgrave to his expedition as his friend and associate.

There is internal evidence in the sketch in Manget which now clearly corroborates the above, for in the last paragraph the writer refers to "this man of most delightful memory standing to me as an older brother." Now also is made clear the dislike, amounting almost to hatred, of this writer for Piso, who is charged with doing everything in his power to enhance his reputation at the expense of Marcgrave's, calling Marcgrave "my domestic," minimizing his importance as a member of the expedition, his work as a collector and observer of natural objects, and his standing as a scientific man.

Exceedingly unfortunate is it that Christian was never able to carry out his purpose expressed in these words:

His [George's] Brazilian itinerary, if God will so permit, I shall publish, because it contains an exact description of his voyage to Brazil, together with notes on winds, rains and calms. It will not lack accounts of fishing and hunting with the barbarians, and geographical descriptions and notices of places.

By this is probably meant a publication of George Marcgrave's journals, of which notice is made in the body of Christian's sketch and concerning which all the known facts are given on page 254 of my paper (1912). This, however, he unfortunately never lived to do, for the sketch was dated February, 1685, and he died two years later in his seventy-fifth year.

Of Christian Marcgrave I am able to give only this small but interesting bit of information. In my copy of the "Historia Naturalis Brasilæ" by William Piso and George Marcgrave (Leyden and Amsterdam, 1648), which bears as a book-plate a coat of arms and underneath the word LAETVAERENNYDT and the name of the maker of the plate, there are on the fly leaf opposite the engraved title page two short handwritten sketches in French, one of Piso, the other of Marcgrave. At the close of that on Marcgrave is found this interesting statement:

His brother Christian, born at Liebstadt in Meissen, was made a doctor by the Faculty of Medicine at Franeker in 1659, and occupied the chair of pathology at Leyden until death overtook him in 1687. We learn that his two books printed separately were afterwards united and published under the title "Opera Medica Duobus Libris Comprehensa," Amsterdam, 1715, in quarto.

Lower on the same page is found, in the same handwriting as the above, this sentence:

Cet ouvrage a été vendu 32 francs a la vente des livres de M' l'heritier.

Franeker is a town in Friesland whose university, founded in 1585, was abolished by Napoleon in 1811. "Cet ouvrage" of course refers to the "Historia Naturalis Brasilæ." There is nothing whatever to indicate who this "monsieur the heir" was, whether heir of the man of the book plate or of an earlier or later owner.

One more point may be added. In a recent catalogue of Dulau and Co., of London, there appeared in an advertisement of Piso and Marcgrave's work the statement that the figures were engraved by de Bray. No information has been obtainable as to who de Bray was or why he was chosen to engrave these figures. That the work was very poorly done an inspection of the "Historia Naturalis Brasilæ" shows.

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THE EFFECTS OF THE KATMAI ERUPTION ON MARINE VEGETATION

UNDER an appointment as scientist in kelp investigation in the United States Bureau of Soils¹ the writer visited the coast of southwestern Alaska in the summer of 1913. During June and July the coast of much of the region affected by the eruption of Katmai volcano in June, 1912, was visited. The events attending this eruption have been described

¹ This expedition was a part of the general investigation of the fertilizer resources of the United States carried on under the direction of Dr. Frank K. Cameron, of the U. S. Bureau of Soils.