Dr. Johannes Fleischer the Younger: Premier Physician and Botanist at Jamestown¹

n May 1607, Virginia was founded as the first permanent ▲British colony in North America. Conditions in the early colony were primitive, certainly no place for the delicate or faint of heart. However, a few did leave the comforts of their established homes in Europe to seek a new life in the wilds of the new colony. Eventually the small population of seventeenth-century Virginia could boast a number of well-educated individuals. They came to govern, explore, educate and heal.

Bartholomew Gosnold, the prime mover in the founding of Jamestown, graduated from Jesus College, Cambridge, in 1587, and later studied law at the Inns of John Court Porv. William Strachey, and Sir William Claiborne, all of whom served as Secretary of the Virginia Colony, each studied at Cambridge as well. At least seven clergymen in seventeenth-century Virginia held master's degrees, most from Oxford. These included the first minister in the colony, Robert Hunt, and probably the most influential of the clergymen, James Blair, who founded the College of William & Mary in 1693 and exercised many

of the prerogatives of an English bishop in the province.

The members of the healing profession were, however, generally less well-educated. A number of surgeons were active in Virginia; some were barber-surgeons and others were called "gentlemen." As Louis Wright points out "trained physicians were so scarce in the colonies that laymen often practiced the healing arts."2 Still, the Virginia Company of London, which ran the Colony until 1624, chose the men it sent to Virginia with some care. However. once the regime of the London Company ended many physicians and surgeons in the colony were self educated or products of a local apprenticeship.³

JOHANNES FLEISCHER THE YOUNGER

In fact, the first physician to arrive in Jamestown was not British at all.⁴ Johannes Fleischer the Younger was born in Breslau, Silesia, in 1582. Fleischer landed with the first English settlers at Jamestown in 1607. He was the first Continental European at the settlement. Young Johannes had lost his mother when he was only five and lost his father when he

was eleven, but he managed nonetheless to educate himself. Around 1600 Johannes began to study at Universitas Viadrina in Frankfurt on the Oder.⁵ He wrote his master's thesis, "*Theses medicae de suffusion*," on cataracts. It was published by A. Eichhorn of Frankfurt on the Oder in 1603.

For a time after he earned his degree Fleischer gathered plant specimens in Bohemia, Moravia, Silesia, Thuringia, and the Swiss Alps. He brought these to physician, anatomist, and botanist, Caspar Bauhin, who was compiling an encyclopedia on plants. In 1623, Bauhin would publish in Basel Pinax Theatri Botanici, in which he described, illustrated and classified 6,000 plant species. Bauhin named "Fleisserus" as a contributor who had shared information about plants.⁶ Fleischer eventually studied medicine, anatomy and botany under Bauhin, who was dean of the faculty of medicine and sometime rector in Basel. Under his Latin name, Joannes Fleisserus, Fleischer was awarded a doctorate of medicine from the University of Basel on February 3, 1606. His thesis advisor was Johannes Nicolaus Stupanus, a physician and surgeon. At this time, physicians north of the Alps took up the practice of vivisection developed in Italy. Johannes Fleischer apparently took part in this movement. His doctoral dissertation, "Disputatio chirurgica de hysterotomia" (incision in the uterus as in cesarean section), was published in 1606 in Basel.⁷

TRAVEL PLANS

After receiving his doctorate, Fleischer decided to journey to Virginia to provide Bauhin information on plants along the Mid-Atlantic coast of North America. As a physician, he was, of course, especially interested in medicinal plants. Dr. Fleischer was probably inspired by Thomas Har[r]iot's description of the flora and fauna of North America entitled A Briefe and True Report of the New Found Land of Virginia. It was compiled during the first attempt at establishing an English settlement in 1585 and 1586 in what is today North Carolina. The booklet was published in 1590 in English, German. French and Latin in Frankfurt am Main. Hariot reported that he had found, among other things, "[s]weet gums of divers kinds and many other apothecary drugs of which we will make special mention when we shall receive it from such men of skill in

that kind that in taking reasonable pains shall discover them more particularly than we had done...." Fleischer apparently took Hariot's words as a challenge and decided to investigate the healing plants he had hinted at

Although a newly-minted doctor of medicine like Fleischer might not normally enjoy any special esteem among more senior colleagues. Fleischer was treated with great respect by the physicians of London because of Bauhin's recommendation. In the summer and autumn of 1606, the Virginia Company of London was preparing an expedition which would create the first colony of the company. On December 15, 1606, Dr. Fleischer sent a letter from London to Bauhin in Basel.⁸ He informed his mentor that he had obtained a berth on a ship leaving for Jamestown, praising Virginia for its climate and rich natural resources.9 The Company made room for Fleischer because it would thereby gain the services of a physician. Moreover, if Fleischer discovered medicinal plants, they could be sold to benefit the Company.

It is not clear whether or not Fleischer was aware of the dangers he would face in Virginia. Certainly Hariot hadn't mentioned in his True Report that the first colony had been abandoned after one year mainly because of Indian trouble. He did hint at conflicts when he wrote, "although some of our company towards the end of the year [1585] showed themselves too fierce in slaving some of the people in some towns upon cause that on our part might easily enough have been borne withal...." The fact that the commanders of the Jamestown undertaking offered Fleischer the protection of "12 to 20 soldiers" on his scientific explorations should have alerted him to troubles ahead.

JOURNEY TO VIRGINIA

Fleischer left. London on December 19, 1606, and boarded one of three ships bound for Virginia. The voyage was lengthy and likely tedious. Adverse weather held the ships close to the coast of England for several months, and the end of the journey took the expedition through the Caribbean. According to George Percy, later governor of Virginia, the group "descried the Land of Virginia" on April 26, 1607. Fleischer himself finally reached the area he intended to investigate on May 13. He found himself more than 3,500 miles from his hometown of Breslau, having come farther than any of the British settlers. Yet the conditions he now faced would make it extremely difficult for him to pursue his search for medicinal plants. Not quite two weeks after Fleischer's arrival, on May 26, two hundred Indians attacked Jamestown, killing one and wounding eleven.

On June 22, the ships began their return voyage to England. According to Alexander Brown, "Captain Newport sailed up the Thames on or about August 18; he brought with him the first documents written by Anglo-Saxons on the banks of the James River in America; he made a favorable report of the country to the King's Virginia...."10 Council of However, among the letters Newport carried to London, one was not written by an Anglo-Saxon nor was it in the English language. In a letter to John Chamberlain dated August 18, 1607, Dudley Carleton, a member of Parliament, writes: "Master Porie tells me of a ... Duchman who wrote to him in latin from the newe towne in Verginia, Jacobopolis."11 Although the letter has not as yet been published, it appears as if Fleischer wrote to Bauhin to confirm his arrival in

the colony and to report on the plants he had found on his journey. When the colonists landed in Virginia, they were especially delighted by the red strawberries; they were "four times bigger and better than ours in England," declared one colonist. Bauhin described these American strawberries in his *Pinax Theatri Botanici* along with several other North American plants. Virginia strawberries were introduced into Europe later in the century.

DEATH STALKS JAMESTOWN

The settlers built a fort on Jamestown Island in the James River for protection, but the location of the island proved unhealthy. "The swamps were close and bred mosquitoes in abundance and, with contamination so easy, drinking water was a problem."12 In the first seventeen years of the colony, "six died for every one that lived. A cemetery with unmarked graves would be their only memorial."13 Of Dr. Fleischer's original 104 companions, only thirty-eight were still alive by the spring of 1608. By midsummer, Fleischer had been at Jamestown for about fifteen months and was one of the veterans of the colony. His survival in the midst of so much death can perhaps be ascribed to

his excellent physical conditioning. He had, after all, climbed the Alps and other mountains in Central Europe searching for plants. However, with the summer, the heat returned and with it sickness. The settlers still relied on the salty and murky water of the James River for drinking and cooking. By July 1608, "all the hitherto healthy new arrivals from the Phoenix were now sick, and so were many who had been there longer."14 Carville V. Earle has pointed out that "diseases were transmitted, in all probability, through a contaminated water supply [.... which] became contaminated as summer set in."15 The extreme draught that prevailed in the early years of Jamestown lowered the water level even more than normal, exacerbating the pollution in the water supply.

THE FATE OF DR. FLEISCHER

Capt. John Smith, who had himself elected president, knew that summer was the sickly time in Jamestown. He wisely left on exploring trips during that time, leaving the settlers to face the diseases without him. Captain Smith took the English doctor, Walter R. Russell, with him on his explorations from June 2 to July 20, 1608. When Smith returned from a

second trip on September 7, "[m]any of the settlers were reported dead, and others sick, and supplies housed in the store had been spoiled by rain." With the many sick at the settlement, the services of Dr. Fleischer were no doubt in great demand. Ultimately Fleischer became sick himself and died. The following insert appeared in a handwritten Silesian chronicle for the year 1613:

Note well. In the year 1608, approximately in the middle of summer time in North America, in a town of the country Virginia, English territory, in the presence of Christian persons, after suffering bodily sickness, died and was buried Johannes Fleischer. Doctor of Medicine, eldest son of the deceased Johannes Fleischer. Doctor of Theology and Pastor of St. Elisabeth's in Breslau, at the age of 26.17

Summer in North America lasts from approximately June 21 to September 22, putting Fleischer's death around August 7, 1608. He spent about fifteen months in Jamestown. The first printed notice of Fleischer's death was Bauhin's announcement in his encyclopedia *Prodromos Theatri Botanici*, published in 1620 in Frankfurt am Main. In his volume

on humanism in Silesia, ¹⁸ Manfred P. Fleischer reproduces two lines of verse which Cunrad had included in his chronicle of noteworthy Silesians to remember the life of Johannes Fleischer the Younger:

Teutone quæ tellus profert generamina vidit; India quæ profert vidit & [etiam], & [et] periit.¹⁹

[He saw what plants the German soil brings forth; What grows in India [America] he saw too and died.]

Johannes Fleischer's final resting place is likely an unmarked grave. Stones that might have been

shaped into grave markers were unavailable in loamy Tidewater Virginia. The parent company in London advised the settlers to bury their dead inside the fort to hide them from the Indians. By mid-summer of 1608, so many were dying that no one had the energy to make coffins. A gravevard has been uncovered inside the fort. The dead had been wrapped only in shrouds. Fleischer may well have been buried there. He lives on in memory, however, as the first universitytrained physician and botanist in English America.

GARY CARL GRASSL
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NOTES

- See my article, "Johannes Fleischer, Jr., M.D.: The First Scientist at Jamestown, Virginia" in the Yearbook of German-American Studies 35 (2000), 133–155. The present article is an attempt to update and correct this earlier one. Recent research shows that Fleischer arrived in Virginia not in April 1608 as reported but already in May 1607. As a matter of fact, he arrived with the very first British settlers and was the only Continental among them.
- 2 Louis B. Wright, "Scientific Interest and Observation," *The Cultural Life* of the American Colonies (New York: Harper & Row, 1957), 219.
- 3 Wyndham B. Blanton, *Medicine in Virginia in the Seventeenth Century* (Richmond, VA: The William Byrd Press, 1930).
- Fleischer was one, the other was Georg Hacke. According to the Biographical Dictionary of American Business Leaders [John N. Ingham, Biographical Dictionary of American Business Leaders, H-M (Westport, CT, and London, England: Greenwood Press, 1983), 524], Hacke was born in Cologne, Germany, c.1620, and educated in the schools of that city, receiving a degree of medicine at the university. He practiced medicine on the Eastern Shore of Virginia and Maryland. By 1651, George Hack was a substantial landholder in Accomack County, Virginia. On April 1, 1658, he was made a citizen of Virginia by the General Assembly at Jamestown.
- Viadrina University was founded in 1506. Its students have included Ulrich von Hutten, Thomas Münzer,

- Carl Philipp Emanuel Bach, the brothers Humboldt and the poet Heinrich von Kleist. This university is today called Europa—Universität Viadrina.
- Professor Bauhin indicated in his earlier work. Prodromos Theatri Botanici (Frankfurt am Main, 1620). that his colleague Dr. Fleisserus had supplied specimens of: Gramun palustre junceum racemoso femine, rushes growing in marshes and waters around Frankfurt on the Oder in 1605 (11); Juncus alpinus bombycinus, silky alpine juncus from the mountains of Moravia (23); Orchis palmate flore viridi, abundantly flowering orchids with palm-shaped leaves from the mountains of Bohemia, neighboring Silesia and the banks of the Mommel near Trusetal, Schmalkalden, Thüringer Wald (30); Absinthium alpinum incanum, alpine absinthe buds from the Valesia Valley, Canton of Valais, Swiss Alps, in 1606 (71); Pulsatilla appii folio venalis flore majore, flowers from the forests near Frankfurt on the Oder (94): and Doronicum Helveticum humile crassis folijs, buds of Swiss daisies gathered in July from the Valesia Valley, Canton of Valais, Swiss Alps (97).
- 7 Fleisserus, Joan. De hysterotomia. Diss. Basiliæ, 1606 (Sistematicheskit Katolog by Biblioteka, 1871, Bibliography of Medicine).
- 8 My thanks to Prof. Manfred P. Fleischer of the University of California at Davis for making both a transcription of the Latin manuscript and a German translation available. Dr. Fleischer received this transcrip-

- tion and translation from Library Director Günther Dittrich of Munich, who commissioned the work, which was undertaken by professors W. Ehlers and F. Feigentreu of the Free University of Berlin. I also wish to thank Prof. Miroslaw Syniawa for providing a copy of the original manuscript.
- 9 Fleischer describes Virginia as "eine Kolonie, die sich in höchsten Maße durch ihr mildes Klima und ihren Reichtum an Pflanzen, Mineralien und Tieren empfehlt." Fleischer's high opinion of Virginia apparently echoed Hariot, whose account of the nature and resources of this new land was generally accurate albeit on the rosy side.
- 10 Alexander Brown, *The First Republic of America* (Boston and New York: Houghton, Mifflin & Co., 1898), 45.
- Calendar of State Papers Domestic, Correspondence, Jacobus I, Vol. 28, no. 34, 67, as well as Calendar of State Papers Colonial, Vol. I. America and West Indies, 1574-1660, 7 [http://www.britishhistory.ac.uk/report.aspx?compid=68920]. See also Philip L. Barbour, ed., The Jamestown Voyages under the First Charter 1606-1609 (Cambridge, UK: The University Press [for the Hakluyt Society], 1969.
- 12 Charles E. Hatch, Jr., Jamestown Virginia: The Townsite and Its Story, National Park Service Historical Handbook Series No. 2 (Washington, D.C.: U.S. Department of the Interior, 1949 [Revised 1957]), 6.

- 13 Carl Bridenbaugh, *Jamestown*, 1544–1699 (New York: Oxford University Press, 1980), 45.
- 14 Ivor Noël Hume, *The Virginia Adventure* (New York: Alfred A. Knopf, 1994), 207.
- 15 Carville V. Earle, "Environment, Disease and Mortality in Early Virginia," in *The Chesapeake in the* Seventeenth Century: Essays on Anglo-American Society, Thad W. Tate and David L. Ammerman, eds. (Williamsburg, VA: Institute of Early American History and Culture, c. 1975), 102.
- 16 Hume, op. cit., 19.
 - Vratislaviense Diarium mortuorum Silesiorum et intra Slesiam exterorum ab Ao. 1599 ad A. 1676, Excerpta Ecclesiae Vratislaviensis Elisabethanae Diariis Mortuorum by Nikolaus Polius, cleric at Sancta Maria Magdalena, Breslau [Breslau chronicle of the dead of Silesia and beyond from 1599 to 1676, excerpted from the chronicle of St. Elisabeth's Church in Breslau]. The original of this manuscript is lost. A copy is in the Martin-Opitz-Bibliothek, Berliner Platz 11, D-44623 Herne, Germany. I am indebted to Manfred Fleischer for calling this manuscript to my attention and to Gerhard E. Sollbach. executive director Department of History, University of Dortmund, for sending me a copy of the pertinent section.
- 18 Manfred P. Fleischer, Späthumanismus in Schlesien, Ausgewählte Aufsätze (Munich: Dep'sche Verlagsbuchhandlung, 1984), 181– 182.

19 Johann Heinrich Cunrad, Silesia togata, sive Silesiorum doctrina & virtutibus... clarissi-morumelogia, singulis distichis comprehensa; Dies omnium natales & emortuales, officiorumque abo ipsi gestorum subjunguntur. Ex auctoris MSCto, quod inbibliotheca paterna viderat, edidit Caspar Theophil. Schindlerus. (A collection of biographical sketches and epitaphs of 1,567 Silesian worthies published in 1706 in Liegnitz,

Silesia. The title of the book *Silesia* togata referred to the educated of Silesia; that is, those who understood Latin. This term echoes the historical term *Gallia togata*, referring to that part of Gaul that was Romanized and where the citizens wore togas. Although the Silesian elite did not wear togas, they did understand Latin and thus saw themselves following in their footsteps.

NOMINA EORUM QUI PLANTAS VEL SEMINA COMMUNICARUNT.

Clatius Medicus Alsterodamensis. Angelus Bufti dictus Vidua, Medicus

Arnoldus Gillenius, Ducis Megapolitani Medicus

Baulius Beslerus, Pharmacop. Norinberg. Bernhardus Paludanus, Medicus Enchusanus. Casparus Bartolinus, Hafinia Medicina Profes-

Casparus Hoffmannus, Altorfii Medicina Profeffor.

Casparus Weckerlinus, Medic. Argent. David Vaimarus, Eubecensis medicus.
Daniel Loritius, Ducis Wirtenberg. Med. Everhardus Vorstius, Lugd. Batavorum Medicinæ Profest.

Fabius Columna, I C. Lyncaus. Ferrandes Imperatus, Pharmacop. Neapolitan. Franciscus Pona, Medicus Veronensis. Fridericus Meyer, Argentin. p.m. Fridericus Monavius Med. D. Georgius Fueren, Medicus Hafniensis. Georgius Rumbaum, Med. Uratislav. Georgius Sporlinus Bafil. Med. Candid. Gregorius de Regio Capuccinus. Henricus Heyl, Medicus Dantifcan. Hermannus Hagius, Medicus Arnhemi. Hieronymus Vilcherus, Med. Norinberg. Honorius Belli Vicentinus, Medic. Gretenfis.

Jacobus Albinus, Medicus Hamburg. Jacobus Antonius Cortuius, quintus Patavini hortipræfedus-Jacobus Cargillus, Medicus in Scotia. Jacobus Guilelmi Hooft Amftelredam. Jacobus Hagenbachius, Medicus Bafil. Jacobus Zuingerus p. m. Medicus Bafil. Joachimus Burferus, Medicus Annæbergenfis.

Joan.ab Alen, pharmacop. Bremensis Joan Anatolius Privæus Medicus Vesuntinus Joan. Backmeisterns Professor Rostochiensis. Joan.Bauhinus frater p. m. Archiater Wirtenbergicus. Joan. Fleisserus Uratish Medicus.

Joan. Francus fenior, Medicus Camicenfis. Joan Carolus Rosenberger, Poliater Wormats-Joan. Henricus Cherlerus p.m. Med. Bafil. Jo. Henricus Richinerus p.m. Med. Bafil.

Joan.Dortmannus, Pharmacop.Grüningenfis.
Joan.Neudorffer, Medicus Norinbergenf. Joan Pons, Pharmacop. Veronenfis.
Joan Prevotius, Med. Professor & horti Patavini

septimus prætectus. Joann. Rudolphus Saltzman, Poliater & Medic. professor Argenting: Joan Sigfridus, Helmstadi Medic. Professor.

Joan. Terentius ex fociet. Jefu, qui ex India plantas milit.

Joan. Michael Wolffhardus, Med. Rotebur. Joan. Michael Wolft hardus, Med. Roteour. Laurent, Rofenau, Pharmacop, Lineburgeniis. Laurentius Scholtzius fenior p.m. Med. Uratislav. Leonhard. Doldius p.m. Medieus Norinberg. Lucas Juffus Bafi, Ducis Bipont. Medicus. Ludovicus Fürer, Senator Northufanus. Ludovicus Jungermannus, Professor Giessanus. Matthias de Lobel p.m. Botanographus. Matthæus Lister, Londinensis Medicus. Nicolans Agerius, Phyfices Profeff Argent. Nicolans Gontarenus, Senator Venetus. Olaus Worm, Doctor & Profeffor Haffnia. Paschalis le Coq, Pictaviensis Med. & Profess. Philip.Steph.Sprengerp.m. Pharmacop.Heidelb. Profper Alpinus, Profel. & horti Patavini fextus-prafectus.

Samuel Sattler, Ducis Brunfuic. Medicus. Thomas Platerus Bafil. D. & Profesfor. Vespasianus Robinus, qui Lutetiæ hortum exoticis plantis instructissimum habet, & à quo plura expectamus.

EX-

A PAGE FROM BAUHIN'S PINAX THEARTRI BOTANICI WHICH CONTAINS THE NAMES OF THOSE WHO CONTRIBUTED PLANTS OR SEEDS, AMONG THEM "JOAN. FLEISSERUS URATISL. MEDICUS"