



FEVERS, AGUES, AND CURES

MEDICAL LIFE
IN OLD VIRGINIA



FEVERS, AGUES, AND CURES:
MEDICAL LIFE IN OLD VIRGINIA
An Exhibition - 4 October 1990 - 1 April 1991

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FEVERS, AGUES, AND CURES

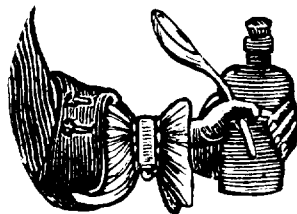
Medical Life in Old Virginia

by

Todd L. Savitt

EAST CAROLINA UNIVERSITY

Guest Curator



AN EXHIBITION

E. Lee Shepard, *Project Director*

VIRGINIA HISTORICAL SOCIETY, RICHMOND

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PREFACE

Today granted si especially dollars the body, miñ most of us granted in minor ach medicine a pharmacy that usual bothering the doctor she finds f treats it, an on our ow ailments, r incredibly performed in the last almost do thought. F proper hor dentistry f having sor and most c

Withou and moder health prol disease kill have been abuse of th for million the most pi to take adv modern m difficulty a enough me serve the n

PREFACE

Today Americans do not take for granted sickness and health care, especially considering the billions of dollars they spend annually to heal body, mind, and spirit. Nevertheless, most of us do take certain things for granted in regard to our health. For minor aches and pains, we go to our medicine cabinet or drive to a nearby pharmacy for an over-the-counter drug that usually takes care of what is bothering us. If we get sick, we go to the doctor. More often than not he or she finds the cause of our ailment, treats it, and sends us home to recover on our own. For the most serious of ailments, modern hospitals and incredibly complex technology have performed so many medical miracles in the last several years that now we almost do not give them a second thought. Fluoridated public water, proper home care, and advanced dentistry have resulted in Americans having some of the whitest, straightest, and most durable teeth in the world.

Without question, modern America and modern Virginia are not free from health problems. Cancer and heart disease kill by the millions. While drugs have been a miracle on the one hand, abuse of them has resulted in tragedy for millions of people on the other. For the most part, poor people are unable to take advantage of the marvels of modern medicine. Rural areas have difficulty attracting and retaining enough medical-care professionals to serve the needs of their communities.

Despite these problems, our generation enjoys far healthier and longer lives than those of our forebears, one of the major points that quickly becomes evident in the exhibition "Fevers, Agues, and Cures: Medical Life in Old Virginia." An examination of any pre-twentieth-century diary or set of correspondence in the collections of the Virginia Historical Society reveals a regular chronicle of ailments, excruciating medical treatment, and all too often death and dying. Illness was the constant companion of all Virginians regardless of age, whether they were white, black, or red, rich and famous or poor and humble. As the exhibit demonstrates, persons no less important than George Washington and Chief Justice John Marshall frequently succumbed to sickness and the primitive medical treatment of their time.

It is our hope that visitors to this exhibition will come away with a fuller understanding of the long and arduous process that led to the advent of modern medicine. We hope that they will gain insight into the unique blending of three medical cultures—European, African, and Native American—in early Virginia. Most important of all, however, we hope they see this as an exhibition not so much about medicine and technology, but about people and how they attempted to cope with the mysterious, invisible forces that constantly attacked and killed them and their loved ones. It is the story of sick children, pregnant



women, of a dying former president, of medicine men and witch doctors, physicians on horseback riding the trails of the Blue Ridge Mountains, and of untrained men and women who worked valiantly, but often in vain, to save the lives of those around them.

Any exhibition of this scope would not have been possible without contributions from numerous sources. The remarkable collection of rare medical books and manuscripts assembled assiduously by Dr. Joseph L. Miller at the turn of the century forms the core of the exhibit and comes to us on long-term loan from the Richmond Academy of Medicine. A number of other institutions listed elsewhere were generous in lending us important objects. Without both planning and implementation grants from the National Endowment for the Humanities, "Fevers, Agues, and Cures" would not have been possible. Thanks to NEH support we were able to assemble consultants from major medical museums and departments of medical history to plan the thematic structure and contents of the exhibit. The Endowment enabled us to retain the fine talents and services of exhibit designer Liza Broudy and Jan Miller Graphics of Newport News. It also made it possible for us to recruit as guest curator Todd L. Savitt of the School of Medicine of East Carolina University, a distinguished scholar in the field of medical history. Professor Savitt's remarkable insights and creativity, not to mention his many

months of research and writing for this catalog, have formed the interpretive core of the exhibition. Members of our staff involved in the project enjoyed every minute of working with him. Finally, Archivist E. Lee Shepard of our staff has performed over and above the call of duty as project director of "Fevers, Agues, and Cures." In addition to adding his own notable abilities as a scholar, Lee's willingness to work long and hard hours (on top of his regular archival duties) with the consultants and his colleagues on staff, especially the museum department, was crucial to the success of the project. I am most grateful to him and to everyone else who helped all of us gain a better understanding of the healing arts in Virginia.

CHARLES F. BRYAN, JR.
Director, Virginia Historical Society

INTRODUCTION

Try to remember the last time you were sick. Perhaps you had a bad cold that hung on and would not go away. You felt achy and feverish, your chest was full of fluid making breathing difficult, and you had a deep cough. You told yourself that you would do anything to get relief from this misery.

Anything?

Imagine yourself living in Virginia in, say, 1840, some 150 years ago. You are suffering from these same symptoms. You have tried, unsuccessfully, every remedy known to you, your family, your friends, and—if you are a slave—your master or overseer. In frustration, and resentful of the cost and inconvenience, you (or your master) summon the family physician. He tells you that the best cure for such a serious respiratory problem is bloodletting over the affected area and asks you to bare your chest for the cups and scarifier he is about to apply.

How do you respond to his request?

Few of us in the late twentieth century would voluntarily strip to the waist so that our family physician could make multiple tiny gashes in our chests to remove a few pints of blood and then sear the skin with hot glass cups to collect it. Our predecessors did, though they accepted such treatments as reluctantly as most of us accept an injection or surgery.

To understand why these earlier residents of the Old Dominion submitted to medical treatments that to us seem useless, silly, and even harmful, try to place yourself back in time as you read this booklet about Virginia's medical past. Forget what you know about modern medicine, about germs,

antibiotics, pain-killers, surgery, and x-rays. Think instead about bad air (malaria), body humors (black bile, yellow bile, phlegm, and blood), and laxatives. If you can walk in your ancestors' shoes you will understand why, in 1840, you too would have submitted to bloodletting. And you will appreciate even better how far medicine has come in the relatively short time since then.

Medical history is more than a simple chronicle of great events and people from the past. It is also a study of the diseases and health practices of ordinary people and of ordinary physicians and other healers in a society. When you finish reading this essay, you should have a better sense of both the history of American medicine and the way people in the Old Dominion fit into that history. Virginia followed the general trends of medical practice, medical education, and health behavior of the rest of the country, but in some respects, as you will see, Virginia differed from other states.

You may wonder why the story told in this booklet ends in the early twentieth century. By 1910 or so all the elements that would soon make medicine modern were present in Virginia: acceptance of germs as a cause of disease, effective and safe anesthesia, improved diagnostic tools and instruments, new hospitals and laboratories, and even telephones and automobiles. The early twentieth century was a transition period, a corridor leading from the old medicine to our current complex medical era. This essay leaves medicine in Virginia poised on the brink of that new age.



POWHATAN

All this state & fashion when Capt. Smith
was delivered to him prisoner
1607

WARRAGONS
CHEROKEES
WARRAGONS



THE VIRGINIAN SEA

ANTECEDENTS

Medical Practices in Three Cultures

When you hear of such diseases as malaria, yellow fever, smallpox, typhoid fever, or dysentery, you probably think of a foreign country, because these maladies are rarely encountered in America today. You might also think of an earlier time in American history when these diseases troubled our ancestors. Each of the diseases mentioned, and others, flourished in the United States at some time in our history. In fact, all of them once existed in Virginia. Where did they come from? To answer this question we must go back to the days before Virginia was settled.

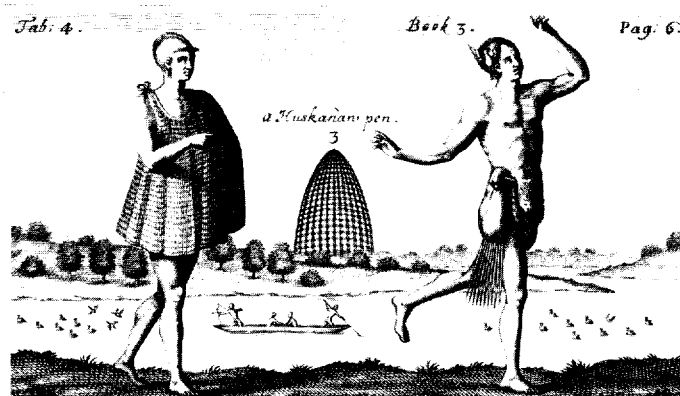
Three racial groups representing three distinct cultures met in what we now call Virginia at the start of the seventeenth century and shaped the course of the area's health. Each group had to adjust both to a new natural environment and to the cultural ways of the other groups. That natural environment included the presence of disease-causing organisms native to Virginia. It also included disease-causing organisms brought by people from the other cultures, because different diseases existed on different continents. Each cultural group also brought with it traditional ways of handling health problems.

Members of the three cultures that met in Virginia between 1607 and 1620—Native Americans, Europeans, and Africans—interacted in friendly and unfriendly ways: breathing on and touching each other, shooting

arrows and guns at each other, talking with and learning from each other. Through these and other modes of contact they spread diseases and health practices among the whole. One historian has called this early interaction of cultures and diseases in the New World the "Columbian Exchange" in recognition of Christopher Columbus's opening of America to Europe in 1492. Virginia experienced what we might call a "Jamestown Exchange" of cultural and biological baggage between the English and the region's Native Americans starting in 1607. Beginning in 1619 there was also an "African Exchange" between blacks forced to immigrate to the colony and English and Native Americans in Virginia.

To understand the effect of those exchanges on the health histories of red, white, and black cultures in Virginia, it is necessary first to look backward at the health histories and practices of these groups before they met. Native Americans and Africans, unlike Europeans, transmitted their learning and folkways and conducted their business affairs orally more than in writing. What we know of health practices and diseases among Indians and Africans, therefore, derives primarily from archaeological evidence, oral tradition, and early descriptions by Europeans.





ANTECEDENTS

The Health Practices of Virginia Indians before Contact

Several tribes of Native Americans populated Virginia at the time of the settlement of Jamestown. In the immediate vicinity of Jamestown lived the Algonquians, ruled by the powerful chief Powhatan. Three tribes of the Iroquois nation lived to the south and west of the Algonquians, and several tribal groups of the Sioux nation inhabited the remaining Virginia land west of the river fall lines. Population estimates vary, but approximately 10,000 to 15,000 Algonquians and an equal number of other Native Americans lived in Virginia at the time of white settlement. Because of the frequent contact Virginia Company settlers had with Powhatan and his people, most English writers of the time described Indian life among the Algonquians of Virginia and not among other tribal groups.

In most traditional cultures health and religion were intimately bound together. Virginia's Indians fit this pattern. Though they treated minor ailments with simple, natural remedies that had proven effective in the past, they cared for more serious health problems with one eye cast toward the supernatural world on which they believed their health depended. Native Americans viewed sickness as the result of their own individual or their people's transgressions against the gods and the natural world these gods controlled. Sickness meant that the internal balance of the body was upset; whatever foreign substance had been



intruded into the body by the bad spirits that had brought on the illness needed to be removed. As Virginia historian Robert Beverley wrote in 1705 after a discussion with a Native American about religion:

if they did not pacify the Evil Spirit, and make him propitious, he wou'd take away, or spoil all those good things that God had given, and ruine their Health, their Peace and their Plenty, by sending War, Plague and Famine among them.

If tribal members could not determine the cause of their health problems and thus the proper way to atone for their transgressions, they went to the tribal priest or shaman (medicine man or conjurer) for assistance. These leaders, especially the shaman, using knowledge of tribal and personal affairs, a variety of magical techniques, and perhaps some secret ingredients, performed necessary rituals and advised the ill or their families how further to remedy the problem.

This magical approach to health and disease also included natural medicines to restore internal balance by purging the body of its evil contents. To induce defecation and vomiting, the Virginia Powhatans prepared infusions primarily from roots and barks of trees and herbs. They also used natural remedies in poultices and other medicines for external wounds and lesions. Though

they lanced skin eruptions and cauterized other skin problems, they rarely, if ever, overtly bled patients the way Europeans of the time treated many illnesses.

Captain John Smith and other observers reported extensive use of sweating by Indians as a curative and preventive technique. Robert Beverley later described the practices of the Powhatans:

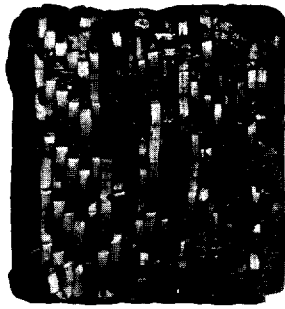
They take great delight in Sweating, and therefore in every Town they have a Sweating-House. . . . [T]hey commonly use this to refresh themselves, after they have been fatigu'd with Hunting, Travel, or the like, or else when they are troubl'd with Agues, Aches, or Pains in their Limbs. . . . They creep in six or eight at a time, or as many as the place will hold, and then close up the mouth of the Stove, which is usually made like an Oven, in some Bank near the Water side. . . . After they have sweat as long as they can well endure it, they sally out, and (tho it be in the depth of Winter) forthwith plunge themselves over Head and Ears in cold Water, which instantly closes up the Pores, and preserves them from taking cold.

For Virginia's Native Americans, health depended on proper relationships with the natural and supernatural worlds in which they lived.

Tribal priests and conjurers played a major role in Native American life, where good and bad health were viewed as results of an individual's personal relationship with the gods. 1

John Smith's MAP OF VIRGINIA (1612) located numerous tribes of Native Americans in the Tidewater region of Virginia at the time of the settlement of Jamestown. 2





ANTECEDENTS

The Health Practices of West Africans before Enslavement in Virginia

Most Virginia blacks originally derived from tribes living along the western rim of Africa from Senegal to Angola. Each tribal group—Ibo, Yoruba, or Ga, for instance—had its own customs and language. We cannot, in this small space, describe the health practices of all West Africans who became slaves in Virginia and will only speak of them in general terms.

Though the specific gods and goddesses, rituals, incantations, potion ingredients, and names of diseases differed from those of Virginia's Native Americans, the basic West African concepts of and approaches to health, disease, and healing were in some ways quite similar. Like Native Americans, West Africans intertwined medicine and religion. Supernatural forces controlled health. Transgressions, either personal or tribal, could affect physical well-being; failure to correct the underlying problem usually meant failure to recover. A tribe, for instance, might attribute an epidemic to its people's violation of taboos and call for days of prayer and sacrifice or some other acts to appease the gods who had been offended.

In the case of individuals, tribal herbalists might recommend remedies that combined the performance of certain rituals, the collecting of special ingredients, and the saying of special words. Alternatively, the sick might turn to a tribal priest or diviner rather than the herbalist if they felt that the problem resulted from a more funda-

mental upset in their lives. The diviner, through sacrifices and elaborate rituals, could discover the nature of the problem and help patients set right the imbalances in their lives.



West African tribal members relied upon the supposed mystical power of amulets, such as these nineteenth-century examples, to protect them from illness, injury, and evil. COURTESY HAMPTON UNIVERSITY MUSEUM. 3-4



ANTECEDENTS

Health Practices in England before the Settlement of Virginia

In some ways seventeenth-century English settlers brought with them medical ideas not much different from those of Africans and Native Americans. Yet there was a fundamental difference in the approach of the Europeans based on the way they viewed the cause, and thus the cure, of disease.

Though seventeenth-century Europeans maintained a belief in divine intervention in their lives, including their state of health, they also saw the natural world as an "it," a thing to be studied and objectively analyzed, rather than as a "Thou," a living thing to be addressed personally and worshiped and appeased. Religion and science sat side by side. Disease resulted from changes in the natural world, both without and within the body; but these changes were not directly manipulated by spirits watching every individual or community or nation. The Renaissance had much to do with this world view.

England was one of the last countries to experience the rebirth of learning we call the Renaissance. Developing in Italy and Spain in the twelfth and thirteenth centuries with the exchange of knowledge between Arabs and southern Europeans, the recovery of ancient Greek and Roman learning—including medical ideas—spread northward over the next few centuries. The thinking of ancient physicians, especially of Hippocrates (460–377? B.C.) and Galen (A.D. 130–



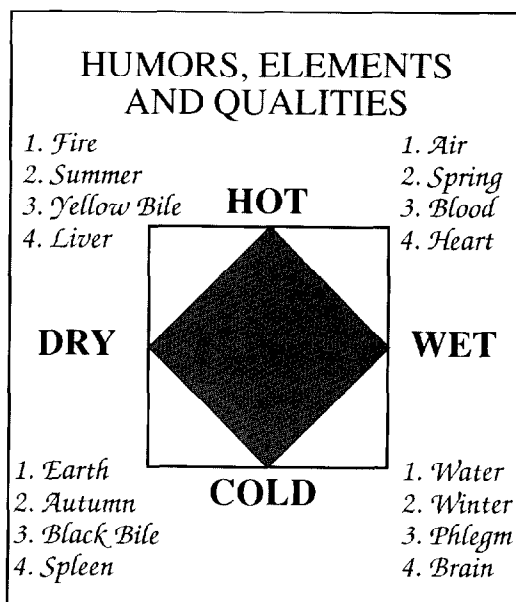
200?), was retranslated from Arabic into Latin, the language of learning during the Renaissance. Galen's ideas, more than those of any other ancient physician, were widely accepted and used. The development of the printing press in the late fifteenth century helped disseminate all these writings to the learned of Europe.

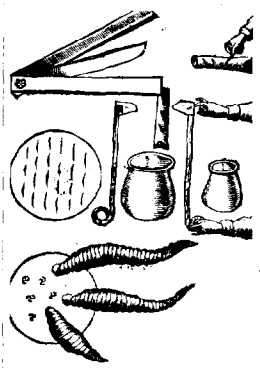
Seventeenth-century English medical practice included a mixture of ideas not so far removed from traditional West African and Native American medicine and of ideas based on the writings of Greeks and Romans who had lived 1,600 or more years earlier. All seemed to stress the idea of balance.

The dominant medical theory of the day looked back to the ancient Hippo-

The medical knowledge of ancient Greek and Roman physicians, such as Galen, was recovered during the European Renaissance and widely distributed with the invention of the printing press. MILLER COLLECTION

This chart of the humoral system indicates how the basic elements of the natural world were related in ancient medical thinking to basic substances in the body (humors). The theory of humors prevailed, despite some challenges, well into the nineteenth century.





7
Deeply influenced by astrology and alchemy, a contentious Swiss medical writer called Paracelsus challenged the dominance of Galen's theories and eventually influenced medical thinking in England.
 MILLER COLLECTION. 7

8
*Methods of bloodletting, including the use of lancets and leeches, are depicted in this illustration from Cinto D'Amato's *Practica Nova* (1669), a barber surgeon's manual.*
 MILLER COLLECTION. 8

9
*The practice of bloodletting to restore humoral balance in Renaissance Europe is illustrated in *Discorsi Intorno al Sanguiare* by Pietro Paolo Magli (1584).*
 MILLER COLLECTION. 9

cratic and Galenic system of humors. Greek thinkers, after studying the natural world, stated that all things were composed of various combinations of four basic elements—air, earth, fire, and water—and possessed differing proportions of two pairs of basic qualities—warmth or coolness and wetness or dryness. Fire and summer, for example, are hot and dry, while water and winter are cold and wet. Corresponding to these four elements in the external world were four humors within the body: yellow bile produced in the liver, blood in the heart, phlegm in the brain, and black bile in the spleen. All were present in appropriate proportions in the healthy body. Each predominated at a certain season of the year and was associated with a combination of qualities of that season. An imbalance of these humors resulted in certain kinds of diseases. Respiratory diseases, for instance, occurred when phlegm predominated over its sister humors, usually in the winter when it was cold and wet outside. To treat such illnesses one used opposite kinds of remedies, ones that contained the qualities of heat and dryness.

The system had its own logic and fit the observations people had made about illnesses. Though not correct by the standards of modern medicine, it fit the needs of its adherents and removed medicine from the realm of the supernatural to allow further study and development.

Restoring humoral balance meant

removing bad or excess humors by letting blood from veins or purging the bowels through defecation or vomiting up stomach contents or sweating out or urinating away excess fluids. It also meant eating and drinking proper foods, wearing appropriate clothes, and taking the right amount of exercise. Most seventeenth-century English people probably treated their ailments without necessarily thinking of humors. Previous experience with such symptoms or the instructions in a popular domestic medical guide indicated that a certain remedy got rid of them. So they tried that treatment again. Their approach was empirical, trial and error, but consciously or unconsciously based on humoral ideas.

At this same time important new ideas were coming from the Continent. In Switzerland, a strange but convincing and dynamic man who called himself Paracelsus (1493--1541) was upsetting the medical establishment. Paracelsus disagreed with the traditional Galenic humoral approach. He wrote his books in vernacular German rather than in scholarly Latin so that all could read his ideas.

Humors were mere speculation with no basis in fact, Paracelsus argued. He advocated observation and medical action based on that direct observation rather than on theory. The basis of disease was chemical, not humoral, and specific, not general as the humoral theory asserted. Paracelsus introduced metallic remedies such as



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lead, sulfur, iron, arsenic, copper sulfate, and potassium sulfate to medicine.

Andreas Vesalius (1514–1564), a Brussels physician trained at Padua, published in 1543 *De Fabrica Humani Corporis* (*On the Fabric of the Human Body*), which disputed a number of Galen's anatomical statements and urged every medical student to undertake a human dissection to learn anatomy firsthand. His book contained accurate drawings of the body, something not previously available.

William Harvey (1578–1657), an Englishman, made another significant breakthrough in overcoming Galen's stranglehold on medical thought. In 1629 he published a book entitled *De Motu Cordis et Sanguinis* (*On the Motion of the Heart and Blood*). Using proof based on his own animal vivisection and dissection experiments, he concluded that the blood circulated through the body and returned to its starting point.

Harvey and Vesalius did not immediately affect the practice of medicine for the masses, however. Most people when sick turned first to folk medicine and home remedies. Astrology was an important component of that popular (and even professional) medicine. Nicholas Culpeper, one of the best known seventeenth-century English proponents of astrology and domestic medicine, explained the theory briefly in his 1654 book, *Pharmacopoeia Londinensis: or the London Dispensatory*:



11

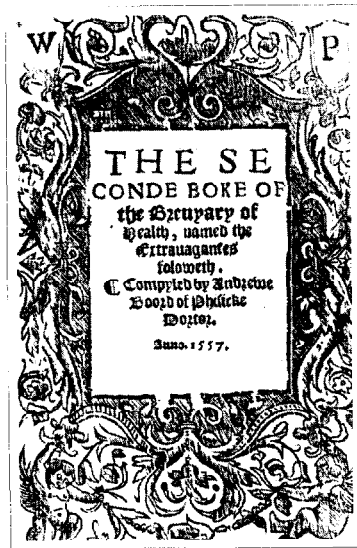
If you do but consider the whole universe as one united body, and man as an epitome of this body, it will seem strange to none but madmen and fools that the stars should have influence upon the body of man, considering he, [being] an epitome of the Creation, must needs have a celestial world written himself. . . . Every inferior world is governed by its superior, and receives influence from it.

Medical practitioners and lay-people used astrology to guide their treatments of the sick. The planets and the demarcated regions of the heavens named with the signs of the zodiac controlled various parts of the body and the kinds of treatments one received. Most astrological healers incorporated the familiar ideas about humors into their systems. To rid the body of phlegm, a cold and moist humor, for example, they advocated the application of the remedy when the hot and dry sun was in a favorable position in the heavens. Practitioners cast horoscopes for the sick based on the time of occurrence of the illness and for newborns at the moment of birth.

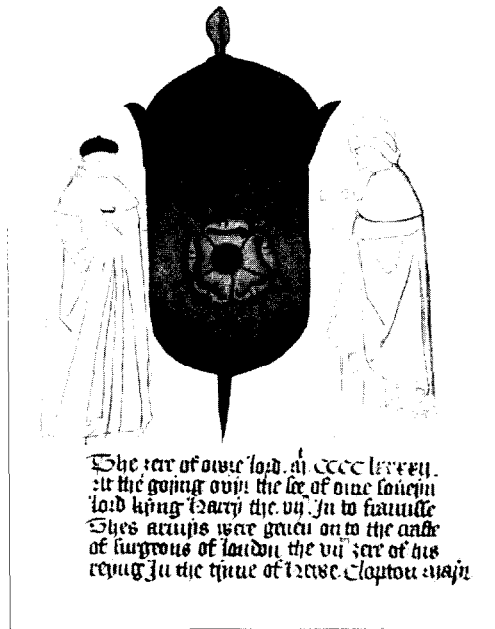
In addition to astrological healers and university-trained physicians, a number of other types of healers practiced in England. Situated in status just beneath the physicians, who were formally chartered in 1518 as the Royal College of Physicians of London, were

Andreas Vesalius disputed some of Galen's anatomical statements, and in his book, De Fabrica Humani Corporis, encouraged medical students to undertake human dissections themselves rather than learning anatomy secondhand from books or from teachers' demonstrations.
MILLER COLLECTION, 16

People in seventeenth-century England often turned to astrologers in matters of health, basing their ideas on the influence of the stars, planets, sun, and moon on the body as illustrated in Jacob Ruoff's De Cosmopoeia Generali et Humana (1680). MILLER COLLECTION, 11



12



13

the surgeons and the apothecaries. Both had organized into guilds that were most powerful in London. Attempts to regulate the practice of medicine outside the capital city failed throughout this period. Even in London proper, however, surgeons, members of the Mystery and Communality of Barbers and Surgeons of London (formed 1520), and apothecaries, originally part of the Grocers' Company during the sixteenth century, acted independently, treating patients not just in surgery or by dispensing medicines, but also in all aspects of health care.

Ordinary practitioners, self-proclaimed and usually trained through experience, constituted another popular group of healers both in London and in the countryside. Midwives (who assisted at childbirth) plied their trade and competed to some extent with regular physicians. For those who wished to treat themselves (and most people generally did and still do try to cope with illnesses at home before calling for outside professional help), English physicians published numerous domestic medical guides.

English medicine appears much more complex and varied than either the West African or the Virginia Native American. This difference results in part from the relatively closed nature of the latter two cultures at the time of Virginia's settlement and the close intertwining of health with religion. Both of those cultures were highly

structured and regulated, with little tolerance for alternative medical ideas that might threaten the existing religious and political system. English medicine was already in a state of flux, accepting new ideas from the Continent and from within its society. Religious healing was only one facet of medicine and was not a mainstay of either the culture or the government. The English populace could pick and choose from among several competing healing systems because the government did not restrict and barely regulated the practice of medicine in the country.

What happened to the medical practices of these three cultural groups when they met in Virginia in the early seventeenth century?



Men and women in sixteenth- and seventeenth-century England routinely turned to domestic medical guides such as Andrew Boord's *BREVIARY OF HEALTH* (1557) to treat incidents of illness. MILLER COLLECTION. 12

The company of surgeons, one of the guilds established by English practitioners of the healing arts, was granted a coat of arms in 1492, flanked here by Cosmo and Damian, patron saints of the barber-surgeons. MILLER COLLECTION. 13

ANTECEDENTS

Diseases on Three Continents

Not only did medical practices differ among the three groups that ultimately came together in Virginia in the early seventeenth century; so, too, did diseases. Because each culture developed in a different part of the globe, separated by large land and water barriers, with different natural environments, and because each culture developed a different life-style, including housing, diet, clothing, and work habits, the English, the West Africans, and the Virginia Native Americans each suffered from a number of diseases unique to themselves.

Not all their diseases were different. Probably all suffered from the common cold, from overeating, overdrinking, overexposure to extreme heat or cold, accidental falls, burns, wounds, difficult pregnancies or childbirths, menstrual cramps, cancerous growths, congenital malformations, and the like. Because we are interested in what happened when the three cultures finally met in Virginia, however, we will mention only the differences in diseases rather than the similarities.

Certain infectious diseases—those caused by viruses, bacteria, rickettsia, protozoa, and parasitic worms—were absent on some continents and overwhelmingly present on others. Diseases unique to those living on one or two of the three continents before the first English settlement of Virginia include:

EUROPE

<i>smallpox</i>	<i>vivax malaria</i>
<i>typhoid fever</i>	<i>bubonic plague</i>
<i>measles</i>	<i>typhus</i>
<i>diphtheria</i>	<i>tuberculosis</i>
<i>whooping cough</i>	<i>influenza</i>
<i>chickenpox</i>	<i>scarlet fever</i>

WEST AFRICA

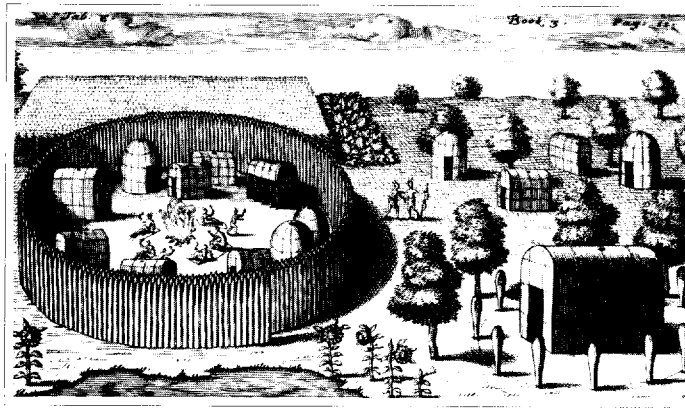
<i>smallpox</i>	<i>yaws</i>
<i>falciparum malaria</i>	<i>hookworm</i>
<i>dengue</i>	<i>filariasis</i>
<i>amoebic dysentery</i>	<i>yellow fever</i>
<i>sleeping sickness</i>	

NORTH AMERICA

<i>nonvenereal syphilis</i>	<i>yaws</i>
<i>bacillary dysentery</i>	<i>ascaris</i>
<i>amoebic dysentery</i>	<i>pinta</i>

These lists are not exhaustive. Many other diseases certainly existed in each locale.





14

MEDICAL EXCHANGE

The Diseases of Three Continents Meet in Virginia

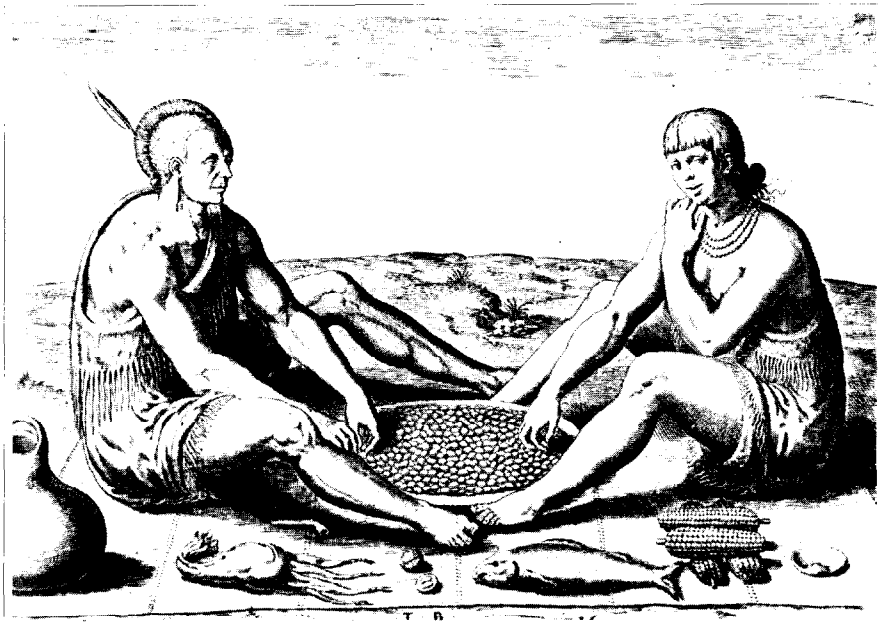
Red, white, and black people met in early seventeenth-century Virginia. Within a hundred years only whites and blacks remained in any numbers. Immigration (willing and unwilling), of course, accounts for much of the increase of both blacks and whites. The military technology of the English settlers also helped protect the numbers of whites and blacks while reducing the numbers of Native Americans. Superior arms and numbers tell only part of the story, however. The remainder has to do with the introduction of new diseases, with the Jamestown Exchange. It was not an even exchange; Native Americans came out the worst.

Of the three groups that met in seventeenth-century Virginia, Indians were the most susceptible to new diseases. Their ancestors had migrated from Asia across the Bering land bridge and spread out over the North American continent centuries before. Germs had a difficult time establishing themselves in America because they and their weakened human carriers could not survive the cold of the Arctic region through which they had to pass. Anthropologists have called that phenomenon the "cold screen." Those people who, generations later, reached the more temperate climates of Virginia arrived free of the serious infectious diseases that plagued their contemporaries in Asia, Africa, and Europe.

As long as this isolation lasted

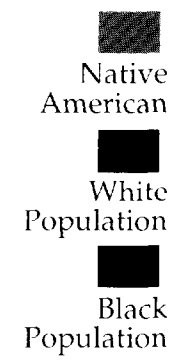
The isolation that Native Americans had enjoyed for centuries from diseases found on the European and African continents was suddenly broken when whites and blacks reached the shores of Virginia. Indians died in great numbers from this devastating medical exchange. 14

When whites and blacks brought new diseases to Virginia, the maladies stressed more than the immune systems of the Powhatans; they stressed the very culture of the Indians. 15



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POPULATION GROWTH IN VIRGINIA



Indians lived free from many of the serious infectious diseases to which humans are subject. When whites and blacks came to Virginia from Europe and Africa with their unfamiliar germs, Indians' bodies were not prepared to ward off the attacks of the new invaders. These diseases ran rampant through Native American bodies and made the Europeans' conquest of Virginia's Indians that much easier.

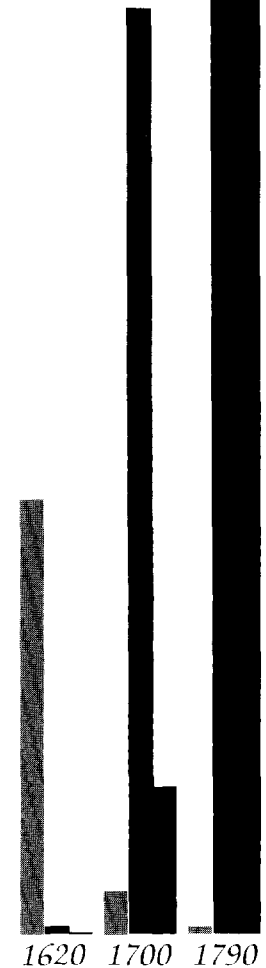
Most of us are familiar with epidemics. The devastating bubonic plague of the late Middle Ages comes to mind when we hear or read the word *epidemic*. When an infectious disease invades a community that has never experienced that disease before, it spreads easily throughout the population because none of the people have developed any immunity to it.

An *endemic* disease, on the other hand, is so prevalent in the population that almost all adults have survived a bout with it as children and become immune. Only children remain as a nonimmune population. Most of the white settlers arriving in Virginia, for example, had already suffered through endemic childhood diseases or had encountered them as adults and survived, thus building immunities against future attacks. No Powhatan had suffered and recovered from measles or smallpox or a number of respiratory diseases brought by the English. When these diseases struck in the New World, many Native Americans were affected, and many died.

The first recorded smallpox epidemic in Virginia occurred in 1667 on the Eastern Shore. The report of it indicates that, as was true in other parts of the New World, Native Americans coped poorly. A sailor infected with the disease passed through the area on foot. He stopped at several Indian settlements and gave smallpox to some tribal members who then spread it widely through the Indian population. Thomas Jefferson, in his famous descriptive book *Notes on the State of Virginia*, implicates smallpox as one of the major reasons that "the [Indian] tribes . . . enumerated [in the census of 1607] were, in the space of sixty-two years [by the census of 1669], reduced to about one-third of their former numbers."

Other diseases unfamiliar to Virginia's Native Americans also struck and destroyed the Indian population of the region. A pandemic of what may have been bubonic plague, for example, spread northward from Florida to New England between 1613 and 1617, reaching Virginia in 1617. Governor Samuel Argall wrote of "mortality far greater among the Indians" than among the white settlers of the area.

In addition to the biological effect of these diseases on Native American health, Virginia Indians were faced with having to formulate a cultural response to a new disease. During times of sickness, family and friends normally nurtured the sick and gave





them food, water, warmth or coolness, companionship, and encouragement to get better. "Virgin soil" epidemics, such as occurred in seventeenth-century Virginia, where entirely new diseases invaded a population, upset that system. Kinship and friendship were of no avail when everyone became ill at much the same time. When smallpox or measles or dysentery affected a large proportion of a community, each individual was forced to care first for himself or herself, then for others. This necessarily selfish behavior doubtless worked against the overall survival of the community. Failure of traditional healers to control new diseases further undermined Native American culture.

The Jamestown Exchange, of course, worked both ways for all three population groups. Fortunately for the English settlers, there were few Indian diseases that they had not already experienced in their own country. West Africans, however, brought a few surprises with them to Virginia's new white residents and to the already disease-pressed Native Americans. The most important surprise was a different form of malaria.

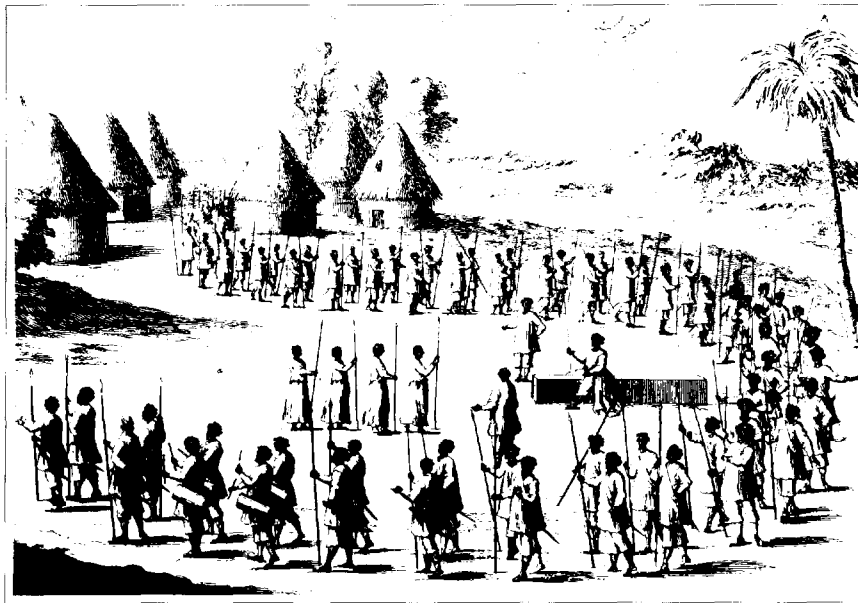
English settlers knew malaria from their home country. The disease causes a typical pattern of chills and fever during the mild months of the year and relapses for several years. The tiny parasitic animal *Plasmodium vivax* enters the human body through a

mosquito's bite and finds its way into the bloodstream and ultimately the liver. There it multiplies and finally erupts from the host's cells back into the bloodstream, where it colonizes red blood cells. When the plasmodium has reproduced many times, it ruptures the red blood cells and re-enters the bloodstream, thereby causing the cycle of chills ("agues") and fever so common in malaria. An appropriate mosquito carrier of the *Plasmodium vivax* resided in the New World just as it had in the Old, so malaria could and did become endemic in Virginia by the mid-seventeenth century.

The surprise came when West Africans brought a new form of malaria to Virginia, a form much more deadly than *vivax*. *Plasmodium falciparum* tends to clog blood vessels to the brain, heart, and intestines and thus cause death. In the late seventeenth century epidemics and seasonal outbreaks of malaria occurred because this new, more virulent form had taken hold. A new Jamestown Exchange had occurred.

For West Africans, as well, there were adjustments to be made. They came from a bad disease environment, arguably the worst of the three. Fevers, parasites, and infectious diseases were rife in their homelands. Yet the germs that commonly cause such severe respiratory diseases as influenza, pneumonia, tuberculosis, and measles seem not to have existed in Africa. Africans did have natural defenses

In England smallpox and measles were endemic and one form of malaria was prevalent, allowing people to build up immunities. None of these diseases existed in pre-seventeenth century Virginia. MULLER COLLECTION 16



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against certain diseases, particularly malaria. If, for example, they possessed, through genetic inheritance, only one gene for sickle cell anemia (two genes for sickle cell meant they would suffer from the disease and probably die at a young age), they were usually immune to *falciparum* malaria; and if they, as was true of most West Africans, lacked an antigen in their blood known today as the Duffy Factor, they were immune to *vivax* malaria.

Up until about 1700 the majority of blacks arriving in Virginia came from the West Indies. Many had already adjusted to the disease climate of the New World. The Jamestown Exchange of diseases did not affect them as greatly as it had Native Americans and new English settlers. After 1700, however, almost all blacks entering Virginia came directly from Africa and thus had no time in the Indies to acclimate to the disease environment. Africans began to experience their own Jamestown Exchange well after the English and Native Americans. Mortality rates ranged as high as 25 percent for Africans during the first year after their arrival in Virginia and more than 50 percent after the first ten years. The terrible living conditions on the trans-Atlantic slave ships meant that most Africans arriving in the New World were in a weakened condition from both malnutrition and disease and were thus unable to resist the inroads of even familiar diseases, much less the

new diseases for which no antibodies had been developed.

The late entry of large numbers of West Africans into Virginia (1700) compared to the English (1607), and the continued immigration of both groups to the colony for the remainder of the eighteenth century, ensured a lasting presence and exchange of diseases from different continents among the three population groups living in the region.

None of the three groups that met in seventeenth-century Virginia escaped the Jamestown Exchange of diseases, though the English may have suffered least and the Native Americans the most. The Europeans, however, did have many health problems. These were not related to the exchange of diseases with other populations but rather to the way in which the English established their settlements and lived their lives in the new environment of Virginia. The lifestyle they chose also affected the health of African-Americans.

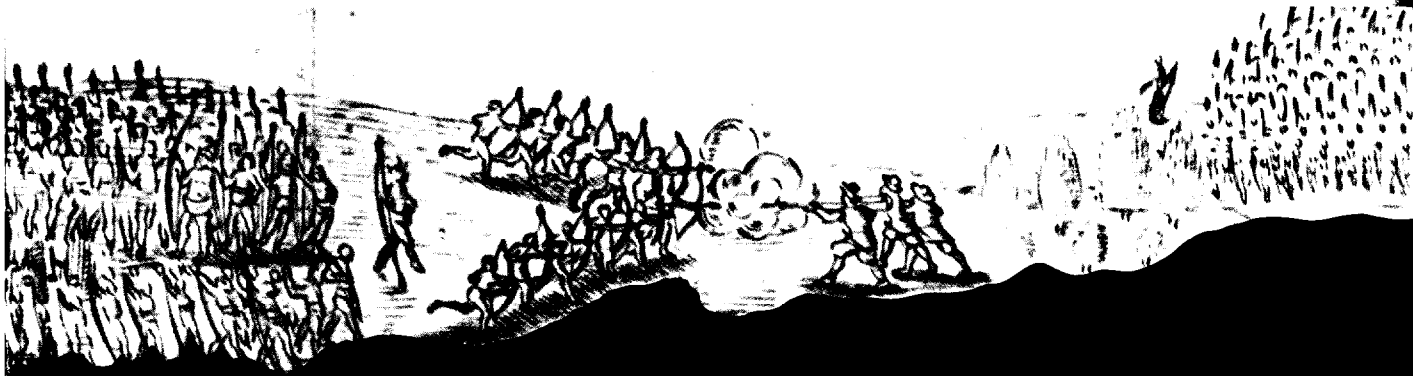


West Africans forcibly imported into America came from a poor health environment and brought with them some devastating new diseases that contributed to Virginia's seventeenth-century medical exchange. COURTESY UCLA ART COUNCIL. 17

I was welcomed to James towne by a violent ague; being cured of it, within three weekes after I began to be distempered with other grievous sicknesses which successively and severally assailed me, for besides a relapse into the former disease, which with much more violence held me more than a moneth, and brought me to greater weaknesse; the flux surprised mee, and kept me many daies, then the crampe assaulted my weake body with strong paines, and after, the gout; all those drew me to that weaknesse, being unable to stirre, brought upon me the scurvie, which though in others it be a sickness of slothfulnessse, yet was it in me an effect of weaknesse, which never left me, till I was ready to leave the world.

*from The Relation of . . . Lord De La Warre . . .
(London, 1611)*





MEDICAL LIFE IN COLONIAL VIRGINIA

English Settlements in the New Environment

Native Americans had lived in Virginia for centuries before the English explorations and had established a pattern of living that fit with the natural environment. When whites arrived and attempted to establish permanent settlements, they, too, had to make environmental accommodation with the land. Their health, their very lives depended on the choices they made. Through ignorance and then seemingly for political reasons, these new settlers made many wrong choices and lost, on average, about 25 percent of their number annually between 1607 and 1624, primarily to disease and perhaps to malnutrition. While Virginia's Indians were dying from European diseases, Virginia's whites were dying from epidemics of their own diseases brought on by the way they adjusted to life in the New World.

Jamestown may have been located on a good defensive site, but it was not a healthy place for a village; the land was swampy and low, and the water supply at certain times of the year was unreliable and dangerous. During most of the year the James River flowed swiftly past the new settlement, carrying the colonists' waste products to sea. In summer and at times of drought or low rainfall, however, the freshwater level of the river decreased and saltwater eddied upstream. Human feces contaminated the river at these times. As one recent arrival to the colony wrote, "Our drinke [was] cold

water taken out of the River, which was at a floud verie salt, at low tide full of slime and filth." To add to settlers' woes, the salty water they were forced to drink at certain times of the year caused salt poisoning, a condition that produced swelling of the body, laziness, and irritability. This same new Virginian wrote in 1607, the first year of settlement, "Our men were destroyed with cruell diseases, as Swellings, Flixes [diarrhea], Burning Fevers [typhoid], and by warres."

Captain John Smith confronted the disease problem in an environmental way during his brief tenure as president of the Council, 1608–9. He noticed that Native Americans dispersed in small groups during the hot summers and fended for themselves until the cool part of the year. By foraging for food in smaller units and avoiding the salty and unhealthy water of the James River, they remained relatively disease-free, though politically and militarily weak. Smith copied that strategy in late May 1609 by scattering one-third of the colonists to Nansemond, south of the James River, and one-third to a spot at the falls of the James, while keeping the other one-third in Jamestown, which thus became much less crowded but still susceptible to disease. His action outraged some colonists, who feared Indian attacks when the colony was at its weakest, but the Powhatans were just as weak during these months. The experiment worked, at least at the two



settlements: the two groups encountered much less serious disease during what had been the unhealthiest time of the year.

Politics may have governed the health of the Jamestown settlers until 1624. Mortality rates generally improved when the colonial leaders moved people away from Jamestown and worsened when they moved them back. Thus, when most colonists lived in the freshwater areas farther up the James after the building of the new town of Henrico in 1613, deaths in the summertime from diseases declined dramatically. It was at Henrico that the first English public hospital was built sometime between 1611 and 1613. The Virginia Company of London intended that hospital, named Mount Malado (or Mount Malady), to serve as a transition station for new arrivals where they could rest and build up their strength after the long journey from England. Then, after acclimating themselves to the weather and the fevers of the new land, these settlers could become full participants in the activities of the settlement and assist in planting the colony of Virginia. When Governor Samuel Argall arrived in 1616 and ordered settlers back to Jamestown and thus to the saltwater areas, the old health problems reappeared. What earlier colonists had learned about disease and getting along with the environment in the new land was forgotten or abandoned. Only when the Virginia Company's demise in 1624

allowed colonists to settle where they pleased did the severe health problems of early white Virginians ease.

Virginia remained a predominantly agricultural and rural colony with few centers of population. Epidemic diseases took root less easily when the population was scattered into the countryside away from the rivers. More stable settlement also meant development of orchards, vineyards, and grain fields, the products of which were made into such beverages as cider, wine, and beer. Settlers no longer relied on possibly contaminated or dangerously salty river water as their primary source of drink, nor did they have to rely on such risky foods as oysters and clams gathered in river beds so often harboring germs during the warm months of the year. Whites learned how to live with the land and make adjustments in order to survive the new disease environment of Virginia, just as Native Americans had done before them.

Health problems eased after 1624 but did not disappear. The Jamestown Exchange of diseases, for example, that had worked so much in their favor when they first arrived began to reverse itself after one or two generations. Maladies such as smallpox, measles, tuberculosis, and other respiratory diseases that had been endemic or at least common in England were not so common in Virginia. Children born and raised in the colony did not necessarily encounter those

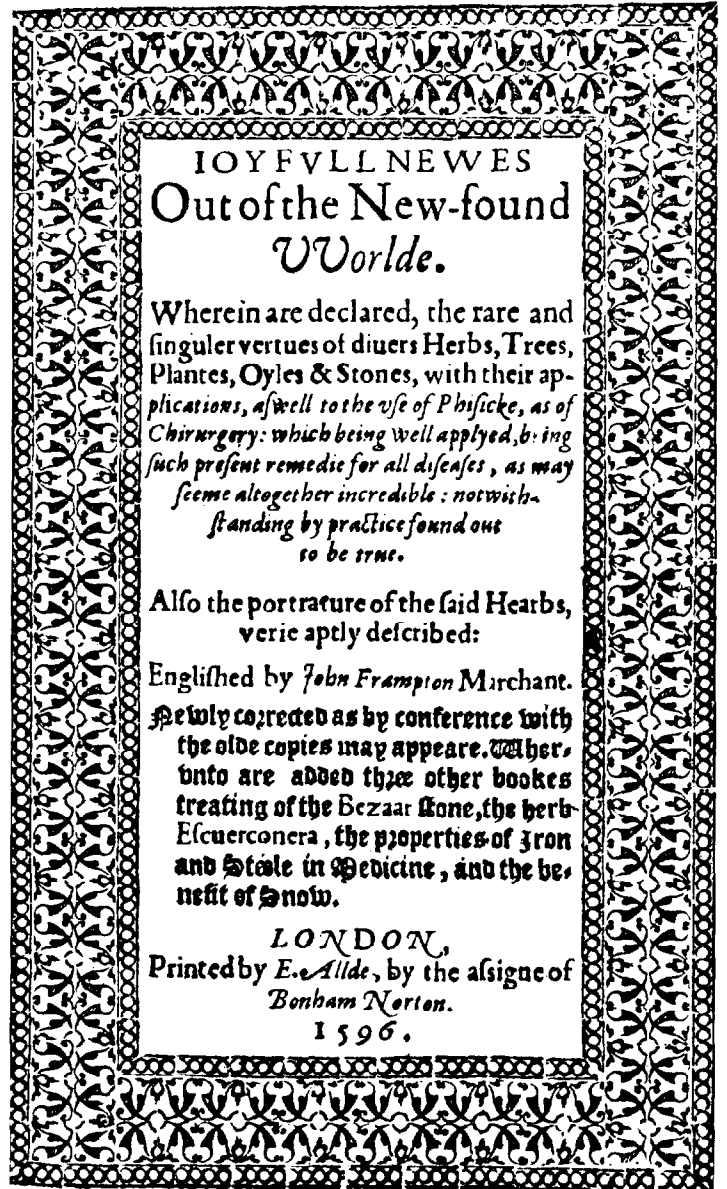
*Early promotional literature included mercantile "Englished" version of a Spanish physician's book, *Yngua Nueva* Out of the New World (1596). It conveyed to readers an idealized image of America's salubrious by celebrating the medicinal qualities of "Juncos, Herbs, Trees, Plants, Oulcs & Stones." 18*

diseases as they grew up on tobacco farms or even in courthouse villages. By late in the seventeenth century, epidemics of smallpox affected not just the Native American population of the colony but also the white and black populations.

Summer fevers such as malaria began to take their toll as the century progressed and conditions for their spread improved. *Seasoning* became a catchword as new residents discovered that they had to pass through one or more bouts with "the fever" as part of their adjustment to a new disease environment. William Fitzhugh wrote in 1687 that his newly arrived sister had had "two or three small fits of a feaver and ague, which now has left her, and so consequently her seasoning [is] over."

Not surprisingly, seventeenth-century promotional literature on Virginia did not place much emphasis on poor health conditions in the new colony. Instead, the pamphlets, books, and broadsides painted Virginia as an ideal place in which to make one's fortune and to live a long, good life thereafter.

Part of the attraction of this new land was one of its products—tobacco. Even before the colony's settlement, reports reached the Old World of the wonders of this newly discovered plant and its medicinal powers. Thomas Hariot, a mathematician whom Sir Walter Raleigh employed to make scientific observations during an



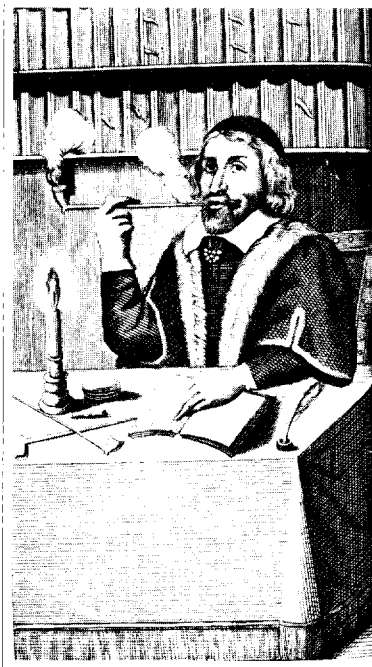
IOYFVLL NEWES
Out of the New-found
Worlde.

Wherein are declared, the rare and
singuler vertues of diuers Herbs, Trees,
Plantes, Oyles & Stones, with their ap-
plications, as well to the use of Physicke, as of
Chirurgery: which being well applyed, bring
such present remedie for all diseases, as may
seeme altogether incredible: notwithstanding
by practice found out
so be true.

Also the portrature of the said Hearbs,
verie aptly described:

Englified by *John Frampton Marchant.*
Newly corrected as by conference with
the olde copies may appeare. Where-
unto are added thre other bookes
treating of the Bezaar Stone, the herb
Escuerconera, the properties of Iron
and Steele in Medicine, and the be-
nefit of Snow.

LONDON,
Printed by *E. Alde*, by the assigne of
Bonham Norton.
1596.



PANACEA;
OR
The Universal Medicine,
BEING
A DISCOVERY
of the
Wonderfull Vertues
OF
Tobacco
Taken in a Pipe,
WITH
Its Operation and Use both in
Physick and *Chyrurgery*.

By D^r EVERARD, &c.

LONDON,
Printed for Simon Miller at the Star in S^t Pauls
Church-yard, near the West-end. 1659.

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expedition to the New World, wrote enthusiastically in his 1588 book *A Briefe and True Report of the New Found Land of Virginia* that tobacco “purgeth superfluous fleame & other grosse humors, openeth all the pores & passages of the body . . . [and] preserveth the body from obstructions” so that users “know not many greivous diseases wherewithall wee in England are oftentimes afflicted.” English and continental Europeans soon made tobacco a fad as they smoked it, sniffed it, chewed it, and ingested it, partially for pleasure and partially because of its presumed healing qualities. Later in the eighteenth century tobacco-smoke enemas were employed as stimulants and as a means of restoring life to those people apparently dead from drowning or electrocution.

Despite the touted benefits of life in the New World, colonists encountered great mortality. In a telling comment a clergyman of the late seventeenth century observed that Virginia’s Indians “seldome live longer than 40 or 50 years. Neither do the English who are born in Virginia live beyond that age ordinarily.”



Some used tobacco for pleasure, some for health. Doctor Giles Everard of London extolled the “wonderfull vertues” of the plant in his 1659 book, *PANACEA*, observing that “the very smoke of it is held to be a great Antidote against all venome and pestilential diseases.” 19

MEDICAL LIFE IN COLONIAL VIRGINIA

Self-Help Medicine

White immigrants came to Virginia knowing that their access to skilled medical assistance, such as it was, would be limited. Though the Virginia Company sent over a few physicians and though some practitioners did migrate during the seventeenth century, trained physicians were few in number and widely scattered. People were on their own, medically speaking, but apparently often content to be so. Of planters in the colony, Robert Beverley wrote,

They have the Happiness to have very few Doctors, and those such as make use only of simple Remedies, of which their Woods afford great Plenty. And indeed, their Distempers are not many, and their Cures are so generally known, that there is not Mystery enough, to make a Trade of Physick there, as the Learned do in other Countries, to the great oppression of Mankind.

The freedom and openness of the new land, the lush natural environment full of new plants, and the limited access of Virginians to physicians encouraged a spirit of independence from the old, seemingly distant medical practices of European physicians. In addition, some of the most popular natural remedies with which settlers had been familiar in England did not grow in the New World, a want that demanded the search for and development of new botanics to



replace them. Thomas Glover, an English surgeon who lived for several years in Virginia, reported in a 1676 issue of the *Philosophical Transactions of the Royal Society* the presence of “great numbers of Herbs, whose names, nature, virtues and operations are altogether unknown to us in Europe.” He speculated that “if the use of them were well known, it might prove a great and beneficial addition to the *Materia Medica* [useful medicines].” People experimented with local herbs, plants, and tree barks to develop remedies suited to the diseases of the new land.

Captive to their medical heritage, some white Virginians bought or brought medical books from the British Isles and the Continent to help them deal with household health problems. Some people possessed only one or two such works; others assembled home medical libraries. Ralph Wormeley owned eighteen medical volumes, Colonel Richard Lee fourteen, the Reverend Thomas Teackle 100, and William Byrd II 141 (out of about 3,500 in his entire library) upon his death in 1744.

Though some people owned learned books on various aspects of health and disease including anatomy, surgery, pharmacy, midwifery, and the practice of physic (medicine), most colonial Virginians who possessed only one or a few medical books probably used a domestic medical guide of some sort. Nicholas Culpeper’s 1675 transla-



Many people believed the cures for New World diseases resided in the New World. John Parkinson, “Apothecary of London,” lauded the Rattlesnake Weed of Virginia in his THEATRUM BOTANICUM, OR THE THEATRE OF PLANTS (1640) as a “most certain and present remedy against [snake] venom.”

A devoted advocate of self-treatment, William Byrd II of Westover relied on many Virginia grown herbs as household remedies. “Sap from the Sweet-Gum Tree, very common in Virginia,” he wrote in the 1730s, was “as healing in its Virtue as Balm of Gilead.”

Every Man his own Doctor.

O R,

The Poor Planter's Physician.

Prescribing

Plain and Easy Means for Persons to cure themselves of all, or most of the Distempers, incident to this Climate, and with very little Charge, the Medicines being chiefly of the Growth and Production of this Country.

But many Shoppers Of Drugs, and many see the Ways that lead To his grim Cave, all dismal, yet to Sense More terrible at th' Entrance, than within. Some, as thou lo'st, by violent stroke th' ill dye, By Fire, Flood, Famine, by Intemperance more In Meats and Drinks, which on the Earth shall bring Diseases dire, and Deaths, still more baneful. LAR Edition of Paradise Lost, Book XI.

The Third EDITION, with Additions.

Printed and Sold by Wm. PARKER, at his Printing-Office in Williamsburg, and London, 1734.

Mary THE *Green's*
Family-Physician,
 AND THE
House - Apothecary.
 CONTAINING,
 I. Medicines against all such *Diseases*. People usually advise with *Apothecaries* to be cured of.
 II. Instructions, whereby to prepare, at your own Houses, all kinds of necessary Medicines that are prepared by *Apothecaries*, or prescribed by *Physicians*.
 III. The exact Prices of all Drugs, Herbs, Seeds, simple and compound Medicines, as they are sold at the *Druggists*, or may be sold by the *Apothecaries*.

The Third Edition Revised and Enlarg'd.
 By **GIDEON HARVEY, M. D.**
 Her Majesty's Physician to the
TOWER.

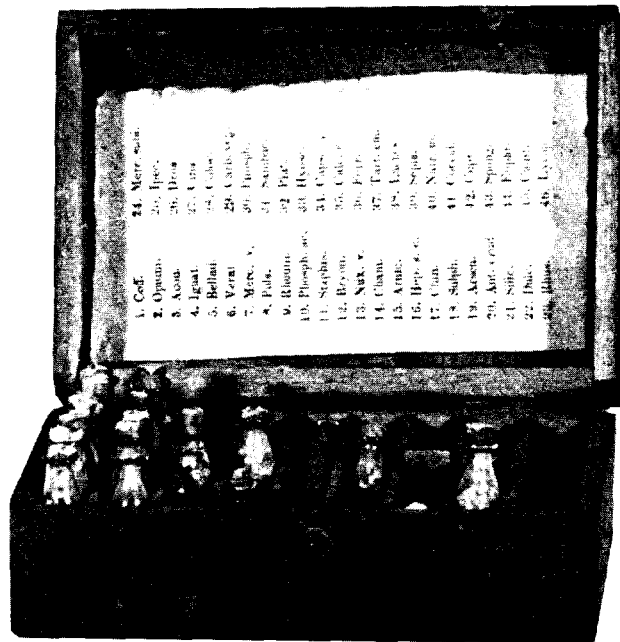
LONDON:
 Printed for *A. REEVE* at the Black Boy in Fleet-Street; and *W. TAYLOR* at the Angel, near Lincoln-Inn-Back-Gate. 1724.

John Custis of Williamsburg owned a copy of Dr. Gideon Harvey's domestic medical guide, *The Family-Physician, and the House-Apothecary* (1704), which eventually found its way into the household at Mount Vernon, when his widowed daughter-in-law, Martha, married George Washington. MILLER COLLECTION.

Issued from the press of Virginia's first printer, William Parks of Williamsburg, Dr. John Tennent's *Every Man His Own Doctor* became one of the most popular domestic medical guides in colonial Virginia. 23

tion of the *London Pharmacopoeia (Pharmacopoeia Londinensis)* from scholarly Latin to English vernacular opened that aspect of the medical world to laypeople, much to the chagrin and anger of English apothecaries. Books such as Culpeper's, though condemned by physicians and apothecaries alike, were popular on both sides of the Atlantic, including Virginia households.

Not all domestic medical guides were written abroad and imported into Virginia. William Buchan, a member of Edinburgh's Royal College of Physicians, published American editions of his *Domestic Medicine*; or, *The Family Physician* that attained great popularity in late eighteenth- and early nineteenth-century Virginia. John Tennent, an English physician who practiced medicine in Spotsylvania County about 1725, wrote *Every Man his own Doctor or, The Poor Planter's Physician*, which quickly became popular in Virginia. Published in Williamsburg in 1734, the book was designed to appeal directly and undisguisedly to Virginia's predominantly rural and agricultural white population who wished to or had to treat medical problems without engaging a member of the local medical profession. Tennent did not win friends among fellow physicians with the book's title, or its subtitle, *Plain and Easy Means for Persons to cure themselves of all, or most of the Distempers, incident to this Climate, and with very little Charge, the Medicines being chiefly of the*



24

Growth and Production of this Country.

Tennent continued his controversial course with Virginia's physicians when he asserted that rattlesnake root, *Polygala senega*, cured pleurisy and other ailments.

Among the remedies colonists used in treating their health problems were some that had to be purchased for home medicine chests rather than gathered. Despite the emphasis on natural curatives, certain botanics and many of the nonplant ingredients for popular cures were not available in the colony and were imported from other colonies or England. Those cures also included patent medicines that local drug merchants, who often were also physicians, obtained from England or that travelers brought with them from the mother country. Doctor George Gilmer of Williamsburg, for example, announced in a 1737 advertisement in the *Virginia Gazette* that he sold "all manner of Chymical and Galenical Medicines" and such English patent medicines as Bateman's Drops, Squires Elixir, and Anderson's Pills.

Colonials themselves were not shy about offering advice on treatments that had worked for them or that they had heard or read about. Letters (and presumably conversations) at all levels of society were full of medical advice. Wrote Richard Henry Lee of Chantilly, Westmoreland County, to Landon Carter of Sabine Hall, Richmond County, in December 1774, "I . . . send you a bottle of Harlem Oil, the only

one that I brot from Philadelphia. The dose is 30 drops on a lump of sugar, in a fit of the flatulent colick. Old Mr. Allen declares from repeated experience that in the above mentioned kind of colick, this medicine is infallible. I wish it may prove so in your case."

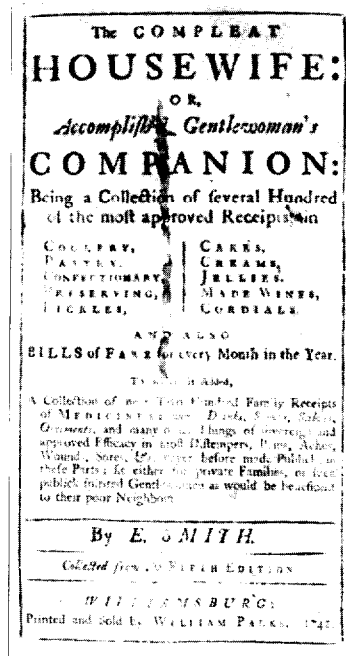
Sometimes friendship extended beyond the mere giving of advice or the lending of medicines to providing actual care for others. William Byrd II was such a person. He prided himself on his ability to cure illness and openly criticized the colony's medical profession. A 1736 letter of Byrd to Sir John Randolph, treasurer of the colony and Speaker of the House of Burgesses, illustrates his sarcastic attitude:

'Tis strange that none of your Physicians shoud hit upon the proper Remedy for your Distemper but DR. [JOHN] CUSTIS [Byrd's brother-in-law] & DR. BYRD. You might have run the whole Gantlope [gauntlet] of Physick without reaching your Complaint. You really needed a plentiful and constant Discharge, or else one of the best Heads in the Country would have been in danger, and probably like several other valuable Persons, you might have out-lived your self. I am glad I had a hand in doing so publick a good.

All too often sickness resulted in death. Dealing with it, even though it was much more common than today, was, of course, not easy. Letters of the

Many colonial homes contained family medicine chests in which Virginians like Attorney General John Randolph stored such remedies as antimony, sulphur, magnesia, spirit of lavender, tincture of castor, Peruvian bark, and "sundry medicines for [the] house."

COURTESY THE COLONIAL WILLIAMSBURG FOUNDATION . 24



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time reflect that sadness and resignation. One downhearted father of three deceased sons wrote in 1772:

No Doubt you have heard of my son's Death after a sore conflict occasioned by getting Teeth (which threw him into Fitts.) [H]e fled from this unfriendly world, into the other the 28th ult. [T]here is but a narrow passage between Death & Life, and it is attended with such important Consequences that it is the greatest Wisdom to prepare for a happy Eternity. My 3 sons have taken possessions of their worldly Inheritance a few feet of Ground contain their Remains.

If Virginia's white residents had a difficult time with illness and death during the colonial period, Virginia's blacks, mostly enslaved in the eighteenth century, had an even more difficult time. At least most whites coming to this new land spoke a common language and shared a common heritage. It is not easy to be sick with a disease never before encountered, unable to communicate easily with those who wished to help or who were angry with you for getting sick when there was work to be done, and being treated with strange medicines and healing techniques that might directly oppose the health beliefs of your religion and tradition. Enslaved blacks did not have the control over their health care, or over their medi-

cines, treatments, and health care providers that even the poorest free white or white indentured servant had.



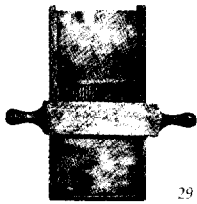
Household guides, such as Elizabeth Smith's *THE COMPLETE HOUSEWIFE*, the first English cookbook published in Virginia (1742), contained numerous recipes for medicinal remedies. 25

Dear friends, and fellow mortals,

I THOUGHT fit to advertise this, for fear any body should be distressed with the same disorder that I was. I had a small spot rise on my neck, and it grew very fast, to the bigness of a pint bowl. I applied to Doctor Hunter; he told me it was one of the worst of cancers, and very much despaired I ever should get it cured. I went to many others, and suffered abundance. It still grew worse, until I fortunately heard of Mrs. Constant Woolson in Prince Edward county, and that she had cured many of that disorder. I accordingly applied to her, and soon obtained relief; I did not suffer so much in the whole cure as I did in 24 hours with others. She seemed to make a trifle of it; and she cured many others whilst I was with her. This from

THOMAS DOSSON.

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doctors made public calls for apprentices. "Wanted immediately," Messrs. Ramsay and Taylor of Norfolk announced in a *Virginia Gazette* advertisement in 1766, "AN APPRENTICE, to serve at least four or five years in the business of Physick, Surgery, Pharmacy, &c. who has had a good education, and whose character will bear a strict inquiry." The successful candidate, they continued, "will be well accommodated with bed, board, and washing." Apprentice training remained popular in Virginia until well into the nineteenth century.

In the colonial period druggists practiced medicine, and most physicians prepared and dispensed medicines as necessary. Seldom did someone restrict practice solely to surgery or physic. There were two medical areas, however, in which people did specialize—obstetrics (midwifery) and dentistry—though general practitioners also cared for patients with those problems.

Dentistry was not yet a profession. Physicians carried with them dental forceps to pull out bad teeth, but they had few dental skills beyond that. There were people who traveled from town to town in the colonies, caring for the special dental needs of the population. These dentists took out advertisements in the *Virginia Gazette* announcing the dates of their expected arrival in various towns so that patients could plan to come in from their farms for care. A typical "Surgeon Dentist," Mr.

Hornby, "from London," announced in an August 1772 advertisement: "He performs all Operations on the Teeth and Gums, extracts decayed Teeth and Stumps, scales and cleans Teeth, and entirely eradicates the Scurvy; he transplants artificial Teeth, so neat as not to be discovered, and to perform all their Functions." He also gave "ADVICE and MEDICINE, to the POOR, gratis."



The colonial apothecary first combined medical ingredients in proper dosages and then prepared pills on a pill roller. COURTESY THE

COLONIAL

WILLIAMSBURG

FOUNDATION. 29

Thomas Dossou gratefully acknowledged the cure of a tumor by "Mrs. Constant Woolson in Prince Edward county" in the *Virginia Gazette* in 1766 when local physicians failed to bring him relief. 30

MEDICAL LIFE IN COLONIAL VIRGINIA *The Valley and Frontier*

For a long time Virginia's colonial population remained concentrated close to the Atlantic coast along the rivers that emptied into the sea and in the rolling hills west of the rivers' fall lines. A shift in the colony's population began to occur in the 1730s, a shift that allows us to turn our attention from the Tidewater to the land across the Blue Ridge Mountains, to the Valley of Virginia, and to the mountains beyond.

In these new white settlements we once again encounter the meeting of cultures, a mixing edged with tension from the start. European settlers had heard about the "savages" and the atrocities they had committed in previous battles with whites who were trying to stake out land in the wilderness. These stories were confirmed by personal experience. During one campaign of the French and Indian War, in July 1755, for example, Dr. Thomas Lloyd of Botetourt County, a surgeon in Preston's Rangers, submitted a bill to the county for "Curing Nathaniel Welcher of a Wound rec'd from the Indians at Mr. Bingiman's on New River" and "For Medicines to 2 Women that was Wounded in their Breasts at Starks on New River."

Iroquois and Sioux, for their part, attempted to turn back the rising tide of white settlement, especially in their Shenandoah Valley burial grounds, but to no avail. Between European firepower and the continued spread of European diseases such as smallpox, measles, and respiratory ailments,



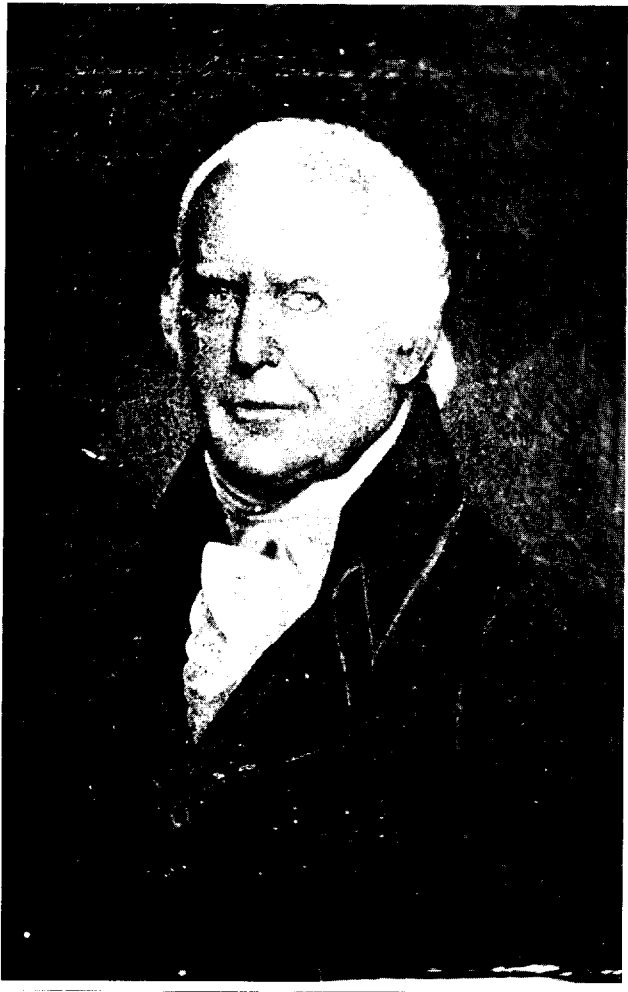
western Virginia's Native Americans lost in numbers and in land.

Some of the whites moving into western Virginia came from Tidewater plantations and villages, but most arrived from the north. They also derived from different stock, European to be sure, but Scotch and German, rather than English. They migrated from ethnic settlements in western Pennsylvania and western Maryland or directly from Europe. The Scotch-Irish, Scots who migrated to the Ulster area of Ireland, and Germans of Reformed or Lutheran denominations, made up the majority of these new Virginians, the former settling primarily in the southern Shenandoah Valley and the latter in the northern end.

Granted patents of land in the Valley, these migrants established farms and villages and retained many of their ethnic ties to Europe. They also brought their diseases with them, most of which the Native Americans of the region had not experienced or had only recently encountered. The effect of this changing disease environment on Native Americans was predictable.

Western Virginia's white residents retained their basic humoral medical belief system, similar to that described for the earlier English settlers, though modified for the new, warmer environment. The Germans and, to a lesser extent, the Scotch-Irish also brought a different language and culture and some different medical folkways to Virginia.

Settlers in the Valley of Virginia often brought with them their own German-language medical guides, which mixed a reliance on the humoral system with astrology and other magical or natural cures.
MILLER COLLECTION 31



32

Adventurous physicians like Scotsman William Fleming brought formal medical practice to the upper Valley in the mid-eighteenth century, attempting, in frontier like parlance, to "gain a truce with the most urgent symptoms" experienced by their patients.

German settlers retained their belief in astrological signs and the zodiac's control over events. Valley almanacs published for the German population always contained horoscopes and phases of the moon to inform readers of the best and most appropriate times to perform certain tasks or apply remedies. The Reverend Joseph Doddridge recalled that during his childhood in the mid-eighteenth century "charms and incantations were in use for the cure of many diseases. I learned, when young, the incantation, in German, for the cure of burns, stopping blood, tooth ache, and the charm against bullets in battle."

The German and Scotch-Irish physicians of the Valley seem to have practiced medicine like their English colonial counterparts farther east. Records of the medicines they used, the books they kept in their personal libraries, and the instruments they owned resemble those of their English brethren.



MEDICAL LIFE IN COLONIAL VIRGINIA

George Washington

The eighteenth century ended in the newly formed United States with the death on 14 December 1799 of its leading military hero and statesman, George Washington, Virginia's native son. Though basically a strong and healthy man, Washington had been subject to the same ills that plagued most eighteenth-century Virginians. The kinds of health problems Washington encountered during his sixty-seven years and the way he dealt with them typify both the state of medicine and the kinds of care available at that time. Washington's death is not significant medically, but it is a convenient occurrence to sum up the state of medicine in the late eighteenth century and to launch a discussion of medicine in the new republic and the new state of Virginia.

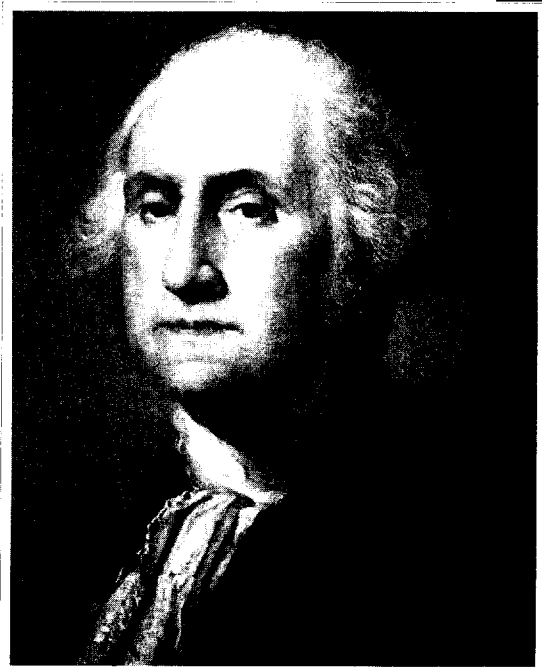
Born in 1732, George Washington survived the high-mortality years of early childhood when intestinal parasites, severe diarrheas, and respiratory problems such as scarlet fever, measles, and bacterial infections took so many young Virginians' lives. At age seventeen he became a surveyor and, presumably in the course of his duties in Fairfax County, became victim to the bite of a plasmodium-infected mosquito. For the rest of his life, Washington suffered from periodic and sometimes severely debilitating bouts of malaria. He had but one bout with smallpox, in 1751, leaving him immune to the disease but scarred for life. Gilbert Stuart chose not to depict

the resultant deep pittings on Washington's face in his famous portrait of the president painted in 1796.

During his lifetime, Washington suffered at least ten attacks of serious illness, some disabling him for as long as a year. Between 1755 and 1768, for example, he contracted dysentery at least three times, once for five weeks during the French and Indian War at Fort Duquesne. In 1789 and 1790, shortly after assuming the presidency, Washington was stricken twice with pneumonia.

Washington's false teeth have always excited interest among the public, perhaps because they survived him and are thus the only tangible remains of our nation's first president. His first tooth extraction occurred in 1754 at age twenty-two, and his last, which removed his last natural tooth, in 1796 in Philadelphia. Washington consulted several dentists over the years and replaced his dentures, in part or in full, at least nine times between 1781 and 1798.

Washington did not have the aversion to or fear of physicians evinced by some other eighteenth-century Virginians. Yet, like most of his neighbors, he preferred to care for himself and for his white and black households without outside medical assistance. To that end, he regularly ordered large quantities of common medicines and even some patent medicines from London. He also owned and presumably used some



33

The medical experiences of that most familiar American figure, George Washington, are representative of many eighteenth-century Virginians' health concerns. 33



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WILLIAMSBURG, *March 12, 1772.*

MR. BAKER, SURGEON DENTIST, begs

Leave to express his Gratitude for the Favours he has received while in this City, and hopes that those who doubted of the Safety of his Art, from its Novelty in this Country, are now convinced both of its Safety and Usefulness. He will leave this Place in a short Time, and, if no unforeseen Accident happens, intends returning next October; when, should he unfortunately have failed of Success with any who have obliged him by their Employ, he will gladly renew his Operations *per ann.* He is rather inclined to mention this, as he is sensible the best Labourers may often prove ineffectual, from Inattention or Neglect; and that from thence the Man, and his Profession too, are frequently brought into Disrepute. Until he leaves this City, he continues at Mr. Mason's, and will wait on Ladies and Gentlemen on receiving their Commands. He performs all Operations upon the Teeth, Gums, and Sockets; likewise transplants natural Teeth, and makes and fixes artificial Teeth, from one single Tooth to a complete Set, so as to escape Disfigurement, without Pain, or the least Inconvenience; and Persons may eat, drink, and sleep with them, as with natural Ones.

His ANTISCORBOTICK DENTIFRICE is quite free from any corrosive Preparation, and is a certain Cure for all Disorders of the Teeth, Gums, and foul Breath. Its superiour Efficacy over any Thing yet offered to the Publick will be evinced in once using: It corrects the vitiated Juices, and renders a juvenile Fragrance to the Breath beyond Description; which no nauseous Tinctures, or cloying Odours of perfumed Essence, can give. It also makes the Teeth white and beautiful, causes the Gums to grow firm to the Teeth, makes the Saliva pure and halfamick, is perfectly innocent, will eradicate the Scurvy, and restore the Gums to their pristine State if the Teeth and Gums have been thoroughly cleaned by some skilful Dentist. The Dentifrice, which is unchangeable, may be had, with proper Directions, at his Lodgings. Each Pot is sealed up with his Coat of Arms, as in the Margin of the Directions, to prevent Fraud.

Printed by

35

medical texts and domestic medical guides. Washington subscribed to the humoral theory of disease and, consistent with that thinking, he did not shy away from recommending bloodletting for his own or his "people's" ailments when he thought it necessary. That same attitude toward bleeding later played a significant role in the president's final illness.

In at least one other respect, Washington was representative of eighteenth-century Virginians with medical problems. Despite a wariness of quacks, he did on occasion use itinerant quacks himself and even purchased a set of the popular Perkins's Metallic Tractors in 1796. These implements were pairs of rods designed, when dragged over the affected part, to remove pains and inflammations from the body.

Washington was already declining in health by 1798, but he remained active at Mount Vernon until two days before his death in December of the following year. The medical story behind his death describes the state of medicine and of approaches to sickness in the eighteenth century.

On Thursday, 12 December, the former president was out riding and seeing to various matters on the estate between 10 a.m. and 3 p.m. The weather, cloudy and cold in the morning, turned worse in the afternoon as rain, sleet, and snow fell alternately. Washington returned home at three, wet but unwilling to change

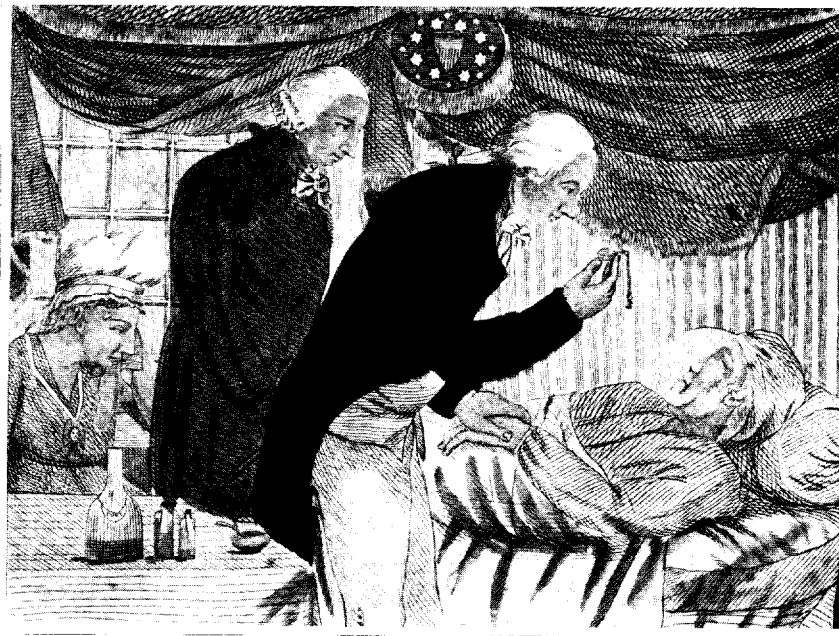
until he had done a few more chores in the house and eaten. The next afternoon, after the snow had stopped, he went outside briefly to mark some trees for removal. Later that evening he complained of a cold and sore throat but told Tobias Lear, his personal secretary, "You know I never take anything for a cold. Let it go as it came."

At three the next morning, Washington awoke feeling sick. He could hardly talk to his wife and could breathe only with difficulty. He had his overseer come and bleed him and tried to swallow a mixture of molasses, vinegar, and butter that Lear gave him to relieve his throat. Washington choked on it and almost suffocated in a coughing fit.

His old friend Dr. James Craik arrived later that morning, took more blood, and applied a blister to his throat. A vinegar gargle and steam inhalation did little to change the president's condition, nor did another bleeding. Craik called in Dr. Gustavus Brown from nearby Port Tobacco, Maryland, and Elisha Dick, a young physician from Alexandria. They arrived between 3:30 and 4:00 p.m., removed more blood, gave the president a laxative and an emetic, and blistered him again. Doctor Dick wished to relieve Washington's breathing problem by opening his windpipe surgically using a procedure known as tracheotomy, something that had been done occasionally in the past

Like many Englishmen and Americans of the time, Washington occasionally fell victim to the salesmanship of itinerant quacks. A British caricature mocks the use of "Perkins' Metallic Tractors," one of the president's own purchases. MILLER COLLECTION. 34

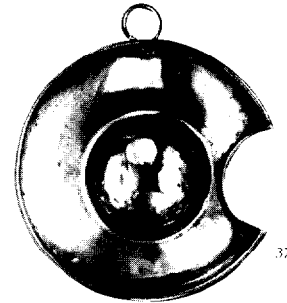
Doctor John Baker, a regular advertiser in the Virginia Gazette, provided General Washington with dental services, from tooth extractions to dentures (1772). 35



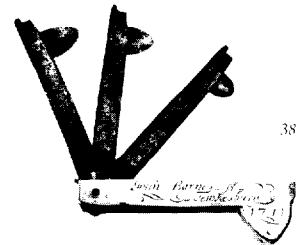
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but never on so illustrious a person as Washington. The two older physicians opposed the procedure, intimidated by the responsibility of caring for the former president and well aware of future public scrutiny of their actions. Dick opposed the excessive bleeding the other two physicians were using but was overruled again.

Washington seemed resigned to his fate and even told Lear at one point, "My breath cannot last long. I believed from the first that the disorder would prove fatal." He died quietly at about 11 p.m. that night. The three physicians published a full account of the events. Brown publicly stated that he felt timid about using tracheotomy and that Dick was correct in thinking that they had bled Washington too much. By one calculation, Washington lost ninety-six ounces (three quarts) of blood, or about half his blood volume. The president probably died of a severe streptococcal infection, aggravated by blood loss and dehydration.



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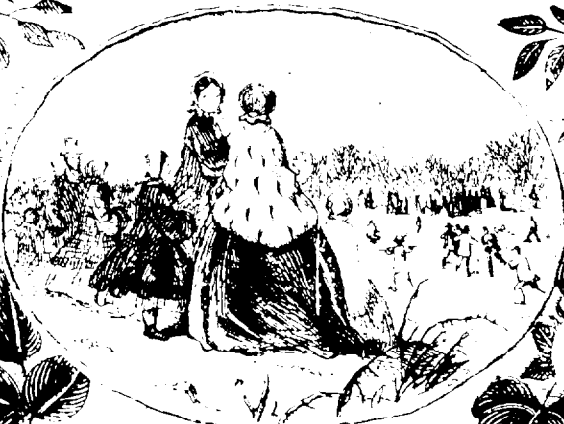
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Doctors James Craik and Gustavus Brown catch over the dying former president in this contemporary print. COURTESY AMERICAN COLONIAL ASSOCIATION 36

Tools of the bloodletter: an eighteenth-century bleeding bowl (etched to accommodate the arm of a patient) and a fleam (with case, for making incisions). COURTESY THE COLONIAL WILLIAMSBURG FOUNDATION 37-38



Medical life in antebellum Virginia—the period from about 1800 to the Civil War—resembles in many ways that of the colonial era. The population was more stable as immigration from Europe and Africa slowed. Consequently, the importation of new diseases declined, except for cholera and yellow fever. Some changes in treatments occurred, although the basic approach to medicine remained as it was in earlier days.



ANTEBELLUM



MEDICAL LIFE IN ANTEBELLUM VIRGINIA

If You Got Sick and You Were White

Let us return to the hypothetical situation with which this essay began. It is 1840, and you wake up feeling sick. What do you do? What are your options? Assume for now that you are a white adult and that you live, like the majority of white Virginians, with your spouse and four children on your small farm some fifteen or twenty miles from the county seat.

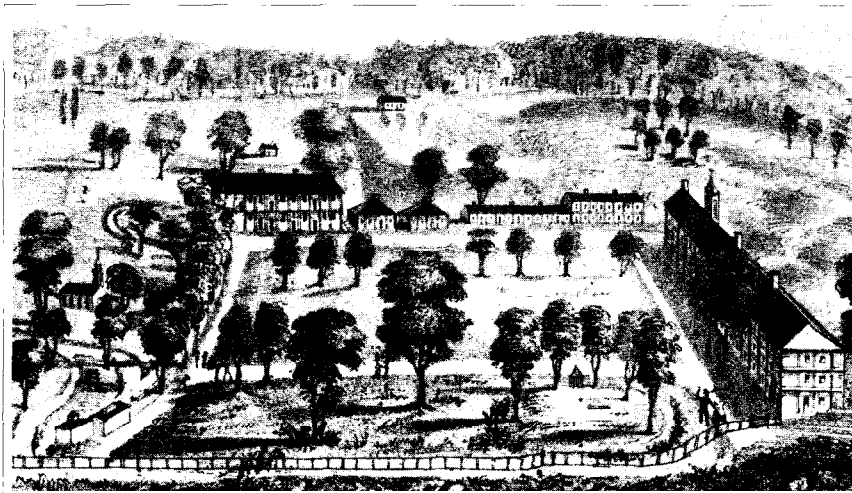
You are not entirely certain what causes disease, but you accept the idea that the environment in which you live, your diet, activities, emotional state, and developmental events such as puberty all affect your body's natural balance and therefore your health. You think about and describe sicknesses in terms of symptoms—diarrhea, continued fever, ague—and classify your remedies by their actions on the body—cathartics for defecation, emetics for vomiting, anodynes to relieve pain, diuretics to induce urination. Your goal in treatment is to restore the natural balance of the body with its environment by adjusting your diet and activities and by taking medicines that promote recovery of that balance.

How did antebellum white Virginians care for their ailments within that basic medical framework? Like their colonial predecessors, they turned first to self-help. Medical recipes copied or pasted into diaries and commonplace books or remembered from previous illnesses served as the first line of defense. Patent medicines and some of

the ingredients in homemade cures could be purchased from drug suppliers and stored in the family's medicine chest, while others were natural botanics that people could gather at appropriate times of the year and prepare as needed. Virginians grew their favorite herbs as well, both for medicines and seasonings.

Richmond resident and United States Chief Justice John Marshall suggested the use of a natural remedy to his son Edward in 1821: "I am very sorry to hear that you are afflicted with sore eyes. Your mother recommends it to you to get the small twigs of sassafras which have young pith, to strip off the outer bark & then split the twigs & cut them into tolerably short pieces & put them in a cup of water & stand there an hour or so when the water will become a jelly. Bathe your eyes in this jelly & [she] thinks it will be of great service."

In addition to medicines, white antebellum Virginians also owned certain implements they believed had medical value. Most had bloodletting instruments. George Washington and other Virginians used Perkins's Metallic Tractors. Interest in applying electricity to cure health problems persisted well beyond the life of Perkins's Tractors. A few decades into the nineteenth century the state's newspapers contained advertisements that often invoked the phrase "medical galvanism" to promote such things as "Dr. Christie's Galvanic Rings, Bands,



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*Madstones, rough lumps
the likes of snakes and
possibly other animals to
draw out the poison, were
used in some Virginia
localities into the
twentieth century.*

COURTESY CLAUDIO
MOORE III, AT THE
SCHENCK LIBRARY

(174) 39

*Virginia's famous
springs attracted both
health and pleasure
seekers, though reported
one health visitor in the
mid-nineteenth century,*

*the presence of a
"number of invalids,
afflicted with various
diseases" sometimes
"rendered the resorts
"very unpleasant, to a
[person] of feeling,
unaccustomed to such
scenes." 40*

Belts, Bracelets and Magnetic Fluid." More than one Virginia household owned a "Magneto-Electric Machine."

Not many households had madstones, however. These medical objects had nothing to do with electricity. They were harder to obtain because they derived, it was said, from small concretions in the intestines of cows and certain other herbivorous animals. Madstones, generally no more than an inch or two in any dimension, were applied to cure rabies and dangerous snakebites. They adhered to a wound for several hours and supposedly drew out the poisons from the body. When the stone fell off the leg, arm, or other part of the body it was soaked thoroughly in milk or some other alkaline substance to remove the poison to make the stone ready for the next person to use. Madstone owners generally shared them (for a fee) with neighbors.

For those who could afford it, the healing waters of western Virginia's world-famous medicinal springs beckoned—Warm Springs, Hot Springs, White Sulphur Springs, and Sweet Springs. Some people went to the resorts primarily for social reasons, to see and be seen; but others took the waters regularly to maintain health or went specifically to treat a troublesome ailment. R. E. Lee stated the prevailing view of the value of taking the waters in an 1838 letter to a cousin: "I am delighted to hear that Mrs. L. has gone to the Va. Springs and I anticipate from

the trip the greatest benefit. I have lost a good deal of confidence in Drs. & medicine for any protracted sickness, and believe that an excursion to some healthy and interesting region will do more to renovate and invigorate the system and enable it to throw off any general or even local disease than any thing else in the world."

Taking advantage of people's normal desire to care for their own health problems, and continuing a tradition begun in England, a number of physicians on both sides of the Atlantic and on both sides of the Mason and Dixon line wrote domestic medical guides. Because the commonly held medical beliefs of the time correlated local environment and life-style with health, most of these books had regional circulation near the homes of the writers. James Ewell of Savannah, Georgia, for example, published a popular book, *The Planter's and Mariner's Companion*, in 1807 that discussed "the diseases common to warm climates."

In their attempt to appeal to a rural audience, the authors of these domestic medical guides included as much information as possible. Doctor Thomas Ewell of Virginia, who was "formerly Surgeon of the Navy Yards at New York and City of Washington," packed into his 1824 book, *The American Family Physician*, discussions of medical care "from infancy to old age," instructions for birthing women "and the diseases peculiar to the sex," and an



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appendix with “Hints respecting the Treatment of Domestic Animals, and The Best Means Of Preserving Fish And Meat.” In the Valley of Virginia, Dr. Ralph Schenck of Botetourt County (“formerly of New Jersey”) published *The Family Physician* in 1842. It covered not only “Diseases which assail the human system at different periods of life” but also chemistry, anatomy, physiology, and materia medica.

Virtually every antebellum domestic medical guide contained instructions for performing one of the most common and popular procedures of the time, bloodletting. Doctor James Ewell, author of one of the home medical guides, believed that everyone should know how to let blood, “since cases of emergency may happen, when the necessity of its being performed is evident, and where life may be lost before medical assistance can be obtained.” Though the procedure goes back to ancient Greece and earlier, Philadelphia physician and signer of the Declaration of Independence Dr. Benjamin Rush was largely responsible for its continued popularity in nineteenth-century America. Rush, a student of William Cullen at the University of Edinburgh, maintained that hypertension or excess blood causing pressure in the circulatory system was the root of most ailments and that bleeding would effectively ease the problem. His ideas, expressed in books, essays, and lectures at the first medical school in the United

States (what became the University of Pennsylvania) received wide distribution and acceptance.

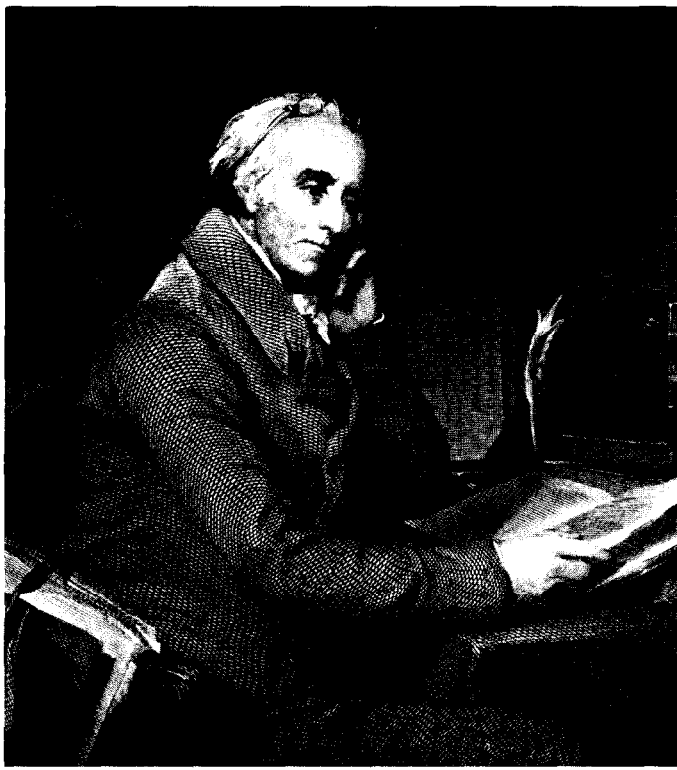
There were four ways to let blood, only three of which actually resulted in the removal of blood from the body. These methods were known as venesection, wet cupping, dry cupping, and leeching.

Venesection—cutting into a vein—was usually done on the same arm vein where blood is taken today for blood-bank donations. The operator took a small, sharp knife known as a lancet and incised the vein, taking care not to sever it and nick the pulsating artery beneath it. Blood flowed from the wound into a strategically placed bowl. Pressure applied to the incision stopped the bleeding when an appropriate amount had been removed.

Wet cupping was more complex. It required use of a scarifier or scarificator, a cube-shaped instrument three or four inches in every dimension. Inside the scarifier were six to thirty-two (and sometimes more) tiny blades attached to axles that rotated when a spring was released. The scarifier was placed on the chest, back, leg, or temple. When the spring was released, the rotating blades passed rapidly through openings in the casing and then back inside the instrument. For the instant they were exposed to the outside, the blades made multiple incisions in the skin under the scarifier, causing blood to flow. At that moment a glass cup that had been exhausted of its air by

Well-stocked medicine chests, like this one belonging to the MacMurdo family of Charlottesville, could be found in many Virginia homes and often included a secret rear compartment for poisonous chemicals.
COURTESY CLAUDE MOORE HEALTH SCIENCES LIBRARY, UVa.

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So important was self-care in antebellum Virginia that newspapers and city directories, such as this one from Richmond (1845-46), carried numerous advertisements for prepared remedies, medicinal ingredients, and even imported leeches. 42

Doctor Benjamin Rush, a celebrated patriot and renowned Philadelphia physician, trained many Virginia medical students and popularized the use of bloodletting among a new generation of American practitioners. 43

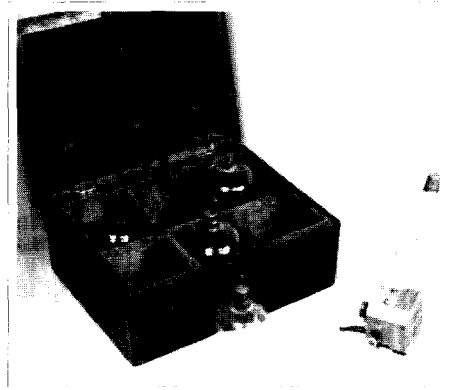
The scarifier and the cups: essential instruments for performing both wet and dry cupping methods of bloodletting. COURTESY TOMPKINS MCCAIV LIBRARY VCU 44

46 ADVERTISEMENTS.

EDWARD F. MARTIN,
LEECHER & CUPPER,
 Leigh Street, between 2d & 3d,
 Receives Monthly, per Adams & Co's Express,
Fresh Spanish, Swedish, German and
Turkish Leeches,
 Direct from the Importers in New York.
 Orders promptly attended to. Reference to any resident Physician.

THOMAS & MCCARTHY,
APOTHECARIES AND DRUGGISTS,
 333 Broad-st. Richmond, Va.,
 Keep constantly on hand
DRUGS, MEDICINES,
PAINTS, OILS, VARNISHES, DYESTUFFS,
WINDOW GLASS, PUTTY, &c.
 For sale on the most accommodating terms. Orders from Country Merchants and Physicians thankfully received and promptly attended to.
 L. B. THOMAS. ED. MCCARTHY.

42



44

burning some flammable material in it was applied over the wound. The cup sucked out blood from the incisions. This procedure could be performed with several cups at once or repeated in different places on the body. Not only did this technique remove blood, but it also irritated the area over the ailing part, causing blistering and "healthful healing."

In dry cupping, the operator used the same procedure as in wet cupping but did not scarify. This approach drew blood to the body surface near the afflicted part and also provided counter-irritation.

Leeching seems the least pleasant technique because a living animal sucked the patient's blood. It had the virtue of versatility, as leeches could attach to any part of the body. One could gather leeches by following the instructions in Schenck's *Family Physician* or purchase them from suppliers who advertised regularly in the newspapers or from a local apothecary shop. To make a leech attach to the skin, operators placed a drop of milk or blood on the spot with the animal. When a sufficient amount of blood had been removed, they put something the leech did not like, such as salt, on the spot and the leech let go. Simple.

Simple, but not always easy to do. Some people preferred to have someone else perform the bloodletting, so they turned to "leechers and cuppers" who usually lived in Virginia's larger



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towns. "Mrs. Woolhouse offers her services to the Medical Faculty and the Ladies of Richmond, as Leecher and Cupper, and trusts by assiduous attention to merit their kind patronage," advertised one such person in the *Richmond Dispatch* in 1855.

When home treatments failed and the patient's condition worsened, it was time to call the physician. For rural Virginians this meant addressing a brief note to the doctor laying out the situation and all previous treatments, sending someone to the physician with the note, and either waiting for the doctor to write a response or escorting him back to the farm. If the messenger found the physician immediately, the process might take a few hours. If he was out on a call, it took much longer. "My Daughter Lucy has been extremely sick for three weeks of a constant fever," wrote William Fleming Gaines to Dr. Thomas Chrystie in 1805, "at the beginning common medicines were used to make way for the bark both of which have proved too weak for the enemy, for the fever continues accompanied with a sick stomach & depression of spirits— . . . I depend on your goodness & friendship in riding up as soon as you can this morning to her relief."

Because physicians and patients shared a common approach to and understanding of medicine, both felt comfortable making patient-care decisions by exchanging notes when necessary. "For the first time we have

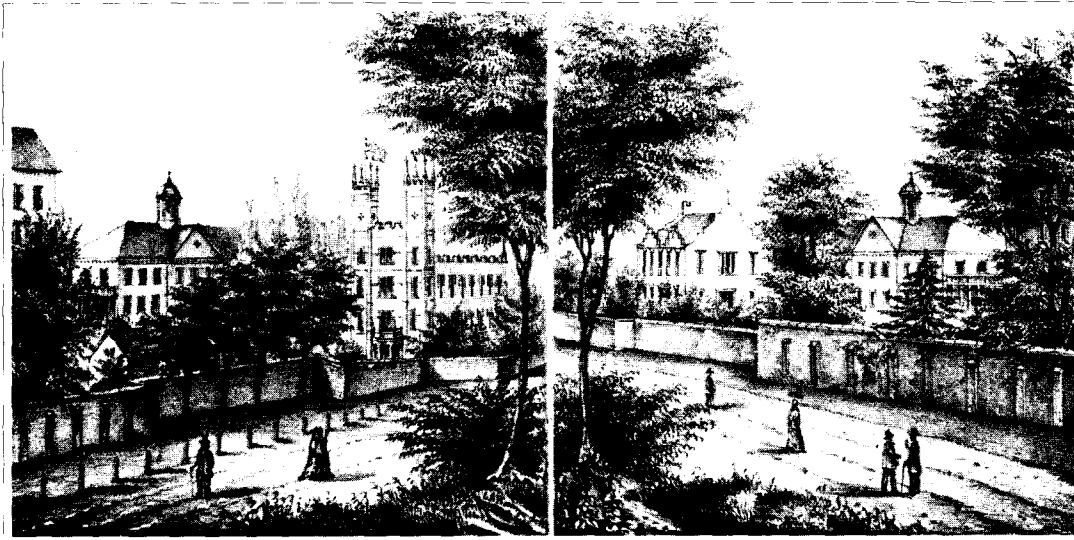
the whooping cough in our family, and I don't know what to do with it," wrote the same planter four years later. "I send to you for advice. Be particular, if you please, as to diet, drink, exercise &c. . . . P.S. My stock of medicine is made up of Jalap, Rhubarb, Calomel, & ipecacuanha, so that you will have the goodness to supply whatever you may think wanting."

The term *physician* derives from the Greek word for nature. When the doctor entered a home he tried to help nature restore the body's normal balance. Physicians, as experts in natural diseases, used medicines to induce or assist "the healing power of nature." Alterations in discharges from body openings, in the blood removed during bloodletting, or in the skin showed that the prescribed regimen was working.

Sometimes, perhaps often, the regimen did not work, and the patient became sicker or even died. Then, as now, physicians could offer no guarantees that their services would indeed result in a cure. Patients might then move on to other healers or treatments, though they were still expected to pay the doctor.

Not all antebellum Virginians could afford care by a physician. The poor generally received medical treatment as part of the care counties provided all indigent residents. Since colonial days, Virginians supported those poor in their parish or county who were too sick, handicapped, mentally incompe-

This nineteenth century print entitled "The Doctor" depicts the robust physician preparing to depart upon his waiting horse while his delirious patient anticipates the prescribed remedy to be administered by her nurse. MILLER COLLECTION. 45



tent, young, or old to care for themselves. Sometimes officials paid a neighbor or friend to keep one or two such people. Many counties later built poorhouses where the indigent and incapacitated could live. Children were often apprenticed to a craftsman or a household to learn an appropriate trade and gain an education. In all these situations the community paid for medical care as well. Regardless of their economic status, people preferred to care for their own ailments first, but the poor did not always have that freedom if they were wards of the county.

Other Virginians who had little control over the medical care they received were the insane. Most families cared for lunatics in their homes, though not always under the best of circumstances. Because the "mentally deranged" did not respond as did other Virginians and could not communicate well, all too often their families and friends assumed they needed no heat, fresh air, good food, or companionship. Families did call in physicians in some cases of insanity, thinking that medicines might restore balance within the body and thus improve the patient's mental status.

If an insane person began to threaten the family or became uncontrollable or a wanderer, the family could turn him or her over to local authorities for confinement in the jail or poorhouse. Care there might be even worse than at home. One visitor

to the Frederick County prison during the summer of 1841, for example, found eight lunatics living in a small, dirty, unventilated portion of the building:

A third apartment which opened into a narrow passage, was if possible still more revolting than either of the former, not because it appeared more uncomfortable or cheerless . . . but because it was the abode of FIVE insane females, three of whom were white and two black; one of each color was chained in opposite corners of the room, whilst the remaining three were permitted during the day to exercise or labour in the adjoining passage.

Virginia supported two state institutions for the insane, one in Williamsburg and one in Staunton. They were called *asylums* because they provided a refuge from the harshness of the outside world and sometimes even an opportunity to recover one's senses and return to everyday living at home. Local authorities sent men and women declared legally insane to these institutions in hopes of curing them. Both the Eastern and Western Lunatic Asylums emphasized "moral treatment," a new approach to patient care that originated in Europe in the late eighteenth century. Patients were treated with respect and dignity but followed regular routines established by the physicians and their staffs and

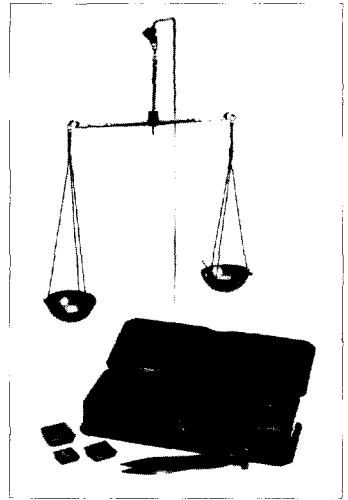
Eastern Lunatic Asylum in Williamsburg (now Eastern State Hospital), the commonwealth's oldest public hospital, provided care to a portion of those Virginians, both white and black, who had been judged "insane."

[Faint, mostly illegible handwritten text, possibly a list or account.]

*The Trustees of The Poor for Essex County
1839
To Thomas Drachman for the
To Making Coffin for Orville Brown the nephew
child of Jerry Brown \$2.00
A. G. Roy Trustee*

completed tasks that fit with their conditions and abilities. Eastern Asylum in Williamsburg, founded in 1773 and the oldest state-supported mental institution in America, housed many more chronic patients with little hope of cure than did the Western Asylum in Staunton, founded in 1828. Both were always full.

A sick person, not insane, poor, or shy, but definitely ready for a change in medical approaches, could turn to one of the alternative healing systems available in Virginia.



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Accounts of the Essex County Trustees of the Poor in the 1830s included costs for the annual attendance of a local physician, the services of a midwife, and the burial of a deceased inmate of the poorhouse.

Dr. J. P. Taylor of Orange County made general inquiries with his mortar and pestle and measured them out on these traveling scales on visits to Montpellier, the home of James and Delley Mathews. COURTESY MR. RANDOLPH ORANGE COUNTY VA.

MEDICAL LIFE IN ANTEBELLUM VIRGINIA

The People's Medical Revolution

People adopted irregular medical systems in revolt against the harsh, expensive, and unreliable treatments of regular physicians. The earliest and most popular of these systems in antebellum Virginia was the Thomsonian.

At least ten Friendly Botanic Society chapters formed across the state, as did many more around the nation, most in the countryside, to follow and discuss the teachings of Samuel Thomson. Shortly before the turn of the century, Thomson, a New Hampshire farmer, started a botanic self-help health movement by protesting the crude, sometimes life-threatening remedies of regular medicine. Thomson based his system on medicines derived from plants, not from the metals (such as the mercury in calomel) and salts used by physicians. According to Thomson, all disease resulted from a loss of internal body heat. Replacement of that heat through the use of lobelia, cayenne pepper, teas, brandies, wines, and steam baths restored the body's natural balance and health.

For twenty dollars one could purchase a box containing Thomsonian medicines and Samuel Thomson's *New Guide to Health* and autobiography, *A Narrative of the Life and Medical Discoveries of Samuel Thomson*. Thomson's domestic medical guidebook was organized by symptoms. One simply followed the directions using the special medicines in the home medicine box. Thomson knew how to

appeal to a rural audience.

The botanic medicine movement, because it grew so large both in Virginia and across the nation, and because it directly opposed physicians with its slogan "every man his own doctor," threatened and upset the regular medical profession. Physicians fought back in print and in legislatures, but the Thomsonians succeeded in eliminating or, in Virginia's case, preventing passage of medical licensing laws, fulfilling the wishes of the movement's founder.

Thomas Nash, proprietor of the Thomsonian Infirmary in Norfolk and a Thomsonian physician (Thomson himself vehemently opposed both infirmaries and physicians for what he founded as a self-help movement), wrote strong letters of encouragement to Thomsonian followers and to those who might stray, such as Major W. H. Shover:

Am sorry to find you still complaining of indigestion. I hope you will carry out my advice and by so doing carry on that thorough constitutional change which is now going on in you. It will be a pity not to take an occasional Steam [bath] & Emetic [lobelia inflata]. I trust my dear friend, you will remember its happy influence. Such a course can be prescribed without danger, and with great benefit. Any member of your family can assist you in it, and I am sure they will if you will.



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Thomas Nash, an antebellum clergyman, advertised his "Botanic Dispensary" in a state business directory and also operated a Thomsonian infirmary in Norfolk in the 1840s and 1850s. 50

MEDICAL LIFE IN ANTEBELLUM VIRGINIA

If You Got Sick and You Were Black

It is 1840, and you wake up feeling ill. You are a black adult living, like about 70 percent of Virginia's African-Americans, on a white-owned farm with ten or more other blacks. Blacks constitute between 40 and 50 percent of the total population of the state, though only about 10 percent of your number are free. How do you handle your sickness?

(We will not discuss free blacks in the Old Dominion because of their small number and our limited space but will concentrate on the remaining 90 percent of the state's black population. In general, free blacks had little money to use for professional medical care when home remedies did not work. Some Virginia physicians provided them with medical care *gratis*, and some whites paid for free black medical care or took the cost of providing such care from their free black employees' salaries. Eastern Lunatic Asylum admitted free blacks throughout the antebellum period.)

The major issue you confront this morning as a sick slave is, Who controls your body? It is, after all, *your* body that ails. By caring for your own illness you are making a statement of autonomy. You know that the rule of this plantation is to report all illnesses to the master or the overseer, or face the consequences. You risk at least a reprimand if not physical punishment for your action. All you want to do is get relief from illness in your own way.

Then, too, you really prefer the



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gentler, herbal treatments that circulate in the slave quarters of this and nearby plantations. Though white medicines and treatment regimens do sometimes seem to cure, they are different from the ones you have learned in the quarters; nor do you particularly like the white physician who comes when ailments do not respond to the master's ministrations. Besides, whites do not understand that sometimes sickness and injury result from conjuring and rooting, things their medicines cannot cure. You decide to treat yourself.

The symptoms persist, however, and your self-help approach fails. Now you're getting worried both because your health is worsening and because you cannot ask your fellow slaves to cover for you much longer. You swallow hard and turn to the master, trying to look as healthy as possible, though it is obvious from the seriousness of your symptoms that you have been sick for a while and have waited to inform him.

Such delays in informing slaveholders of illnesses only confirmed white Virginians' stereotypes of black self-care. In letters about health matters masters typically observed, "I know that negroes especially, are very inattentive to such [health] matters as require attention and trouble." Owners wished to keep their slave investments healthy; they tended to see blacks as people unwilling to care for themselves and their children and incapable of doing so.

Mr Samuel Turner 30

16th Oct 1855
 17th Oct 1855
 18th Oct 1855
 19th Oct 1855
 20th Oct 1855
 21st Oct 1855
 22nd Oct 1855
 23rd Oct 1855
 24th Oct 1855
 25th Oct 1855
 26th Oct 1855
 27th Oct 1855
 28th Oct 1855
 29th Oct 1855
 30th Oct 1855

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Masters, mistresses, and sometimes trusted servants treated ailing slaves in a hospital or cabin in the slave quarters. The quarters actually formed a small village where blacks encountered a variety of public health problems. Close contact in the confined space of the quarters, especially in winter, allowed respiratory diseases to spread easily. If people followed unsanitary waste disposal practices and allowed waste to seep into wells or flow into streams from which drinking water was drawn, parasitic worm and intestinal diseases occurred. Children played close to the earth and put dirty fingers that sometimes contained tiny parasite eggs into their mouths. Insects attracted to decaying garbage and human waste sometimes passed infections to the humans on whom they landed. Poorly cooked food contained parasites or bacteria that could infect all who ate it.

Not surprisingly, under these conditions disease was a major factor in slave life. When plantation remedies failed, slaveholders, without the advice or consent of the enslaved patients, turned to physicians:

Betty a negro woman of mine is very sick, and I am fearful in a very dangerous situation. There had been no appearance of the Menses [menstrual period] for upwards of three months or probably more, till a fortnight ago, Since which time it has continued to flow very largely

attended occasionally with extreme pain in the ear, jaw and teeth. I wish you to visit her as soon as you can, or prescribe.

Physicians used the same approach for all patients, though with some modifications based on whites' medical ideas about blacks. The editor of a prominent Richmond medical journal openly declared in 1855 that "the African constitution sinks before the heavy blows of the 'heroic school'" that advocated, like Benjamin Rush, large doses of medicines and treatments such as bleeding, purgatives, and emetics that depleted the body. Blacks, physicians argued, were more susceptible than whites to certain diseases and more resistant to others. Still, the power of the humoral system often outweighed other considerations for both physicians and slaveholders. Wrote one master to a physician in Hanover County:

Sir, Boston took a dose of Salts [a laxative] & was bled on friday. We took nearly a pint; we stoped because he complained of being fainty. The salts operated three times that day & he had not another passage till last night, which was by injection. I think he is something better than usual this morning, no fever. He wants to eat milk & mush. May he? His cough is not so violent nor so frequent.

Doctor Philip Turner Southall of Amelia County routinely visited and treated slaves on the plantations of his Southside neighbors and recorded his fees in this account book. 54

1849 James B. York

Feb 1st To Board and Medical attendance of	
gentleman sick for 26 weeks	
at \$1.50 pr week amount to \$39 00	
To Wash silver to 4 per expense	
to Richard	4 00
To smooth hat	3 20
1 pair collar do	1 33
2 pr shoes	2 20
3 yds thread for Sewing goods	2 00
1 pr worsted stockings	1 00
3 yds cloth for caps	50
2 Latin books	23
1 French dict 44 pgs	1 60
	<u>\$54 90</u>

1849 J. W. W. W.

To maintain and support of your household		
Prorata from 1st of Jan 1848 to		
this date @ \$1.50 pr week		63 75
To amt of clothing furnished her		5 00
To Wash pr her expenses to Wash		2 25
		<u>70 75</u>

55

In some instances, slaveholders sought the aid of physicians outside their own communities, practitioners such as John Peter Mettaufer of Prince Edward County, whose reputation at curing stubborn ailments traveled by word-of-mouth across the commonwealth:

I have heard that you have been successful in curing some cases of Scrofula [a form of tuberculosis]. I have taken the liberty to send my man Washington to you in the hope that he may be another evidence of your skill. If, after examination, you think that you will be able to relieve him, you will please retain him as long as necessary. . . . My object is the benefit of the negro.

Though masters frowned upon them, black practitioners, both slave and free, were active all over Virginia. Some were herbalists, such as the man owned by Robert Carter of Nomini Hall in Westmoreland County. William Dawson, a neighbor, informed Carter in 1788: "Some of the negroe Children is very Sick. (Janey's youngest). please to let Bro' Tom Coachman come and See it this morning. The Black people at this place hath more faith in him as a doctor, than any white Doctr. and as I wrote you in a former letter I can not expect you to loan your mans time &c for nothing But am very willing to pay for the Same."

Unlike most southern states, Virginia accepted free and enslaved black patients at its Eastern Lunatic Asylum. As this account indicates, masters bore the costs for care and treatment of their slaves at this institution. 55



MEDICAL LIFE IN ANTEBELLUM VIRGINIA

Workers' Health



Good health, in the past just as now, depended on conditions both at home and at work. For most antebellum Virginians, black and white, home and work were located in the same place—the farm. Many farm tasks, especially during planting and harvest times, were tedious, stressful on specific parts of the body, and physically exhausting. Sore muscles, strains and sprains, and tired bodies were the result. Besides experiencing these routine sorts of health problems, agricultural workers found climatic and other external situations also had an effect on their well-being.

Farm laborers, most of whom were slaves, endured the summer heat to a point, but they suffered sunstroke, heat exhaustion, and dehydration when conditions became excessive. Cold weather also took its toll on outdoor agricultural workers, especially on blacks, who were more susceptible to frostbite and not necessarily provided with warm clothing or appropriate coverings for hands and feet. Working with animals put some farm workers at additional risk for diseases recognized only recently: brucellosis (undulant fever), leptospirosis (mud fever), and anthrax. Work in swampy areas exposed laborers to disease-carrying insects, especially to those mosquitoes infected with malarial parasites.

Farm accidents posed another kind of threat to farm laborers. Falls, overturned carts, runaway wagons, drownings, limbs caught in farm machines,

kicks from animals, and cuts from axes or scythe blades were the most common types.

Though most antebellum Virginians labored on farms, a number earned their livelihoods in other occupations that had their own special dangers to life and limb. They worked, for instance, on railroad lines, fishing boats, and canals, in mines, forests, and tobacco factories, and at iron works. Though not as industrialized as some of the northern states, Virginia could boast that it manufactured much of the nation's tobacco in Richmond and Petersburg, produced a good bit of iron at forges in the mountains and at the Tredegar Iron Works in Richmond, mined coal both in the mountains and near the capital, and obtained shingles, timber, and turpentine from the Great Dismal Swamp south of Norfolk.

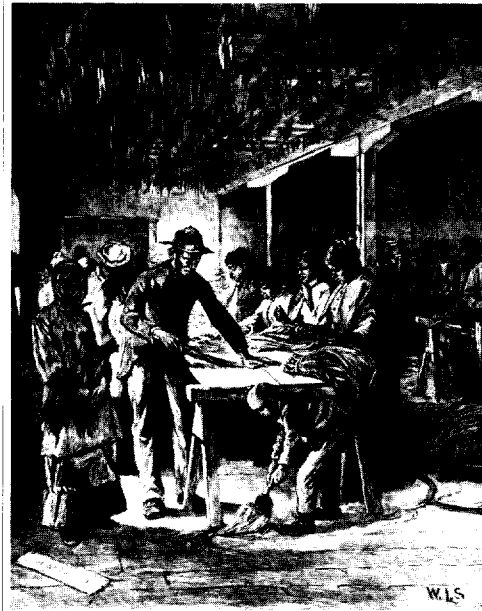
As with agricultural hands, industrial workers were exposed to extremes of climate. Railroad, canal, and road workers in particular endured heat, as the best seasons for construction coincided with the hottest months of the year. Those in tobacco factories were at least shielded from the sun's rays and direct heat, though even there the temperatures were often unbearable.

The environment of the tobacco factory posed other kinds of health hazards as well, the greatest being lung diseases and constant inhalation of tobacco fumes. Tobacco dust irritated eyes, causing excessive tearing; a combination of dust and tobacco juice

Many farm tasks, especially during planting and harvest times, were tedious, stressful on specific parts of the body, and physically exhausting. They could also be dangerous. 56



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from the leaves also caused rashes on the face and backs of hands. The dust liberated during the drying and stemming processes contained enough respirable-sized silica particles to cause a lung disease, tobacosis, only recently recognized, similar to the black lung disease of miners.

Each industry exposed workers to different types of dangers. The hazards of coal mining included methane (marsh) gas explosions, black lung disease (not then recognized), suffocation from lack of oxygen, drowning in flooded mine shafts, and flash fires. Falling trees and rocks, steep cliffs, hot furnaces and forges, unsafe equipment, and nonexistent safety practices threatened the lives of laborers at public works projects, ironworks, and railroad yards.

Testimony to the recognized dangers of some occupations are standard slave life insurance policies written in the 1850s. They specifically exclude coverage for anyone employed "as an Engineer or Fireman in running a Locomotive or Steam Engine, or as an Officer or Brakeman upon a Rail Road, or as an Officer, Hand, or Servant on any Steam or other Vessel, or Raft, or as a Miner or hand in any Coal or other Mine, or in the manufacture or transportation of gunpowder."

Slaves generally made up a majority of the labor force at most farms, tobacco factories, mining operations, iron forges and furnaces, and public works projects in antebellum Virginia.

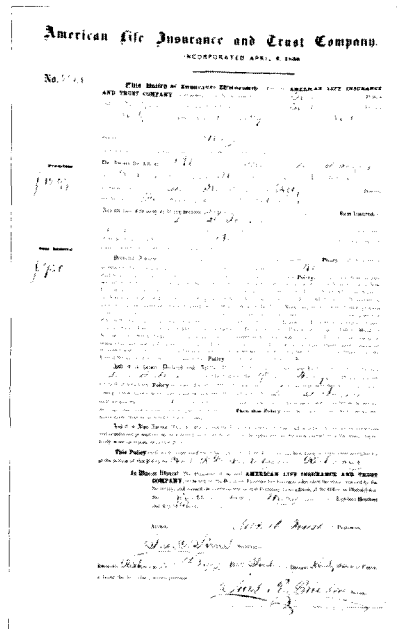
Though plantation owners, the state, and the private operators of industrial concerns usually owned slaves, they also hired slave workers during times of heavy demand or for special tasks that required specific skills. Companies knew that masters were reluctant to send valuable slaves to dangerous jobs and tried to minimize the risks in their advertising. Stated one industrialist in his 1846 newspaper pitch, "[T]here is no work in which slaves are better satisfied and contented than coal-mining. There have been fewer deaths amongst the Company's hands from disease or casualties, since its organization 12 years ago, than will be found in a like number of men any where."

Slave hiring contracts did not always stipulate the lessee's responsibility to provide medical care in case of sickness and the slaveowner's responsibility to reimburse the lessee for doctors' bills and medicines. Virginia custom dictated this to be the practice unless otherwise stated, however.

Slaves, no matter what their work, no matter where their work—farm, city, or industrial site—endured one kind of "occupational hazard" that white workers missed: whippings and beatings. The whip was an integral part of slave life in the Old Dominion. When strong discipline was called for, so, very often, was the lash.

From a medical point of view, whipping inflicted cruel and often permanent injuries upon its victims. Laying stripes across bare back or

Before the institution of state-administered safety standards, industrial workers in Virginia, both black and white, faced numerous hazards in the workplace. 57-58-60



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buttocks caused indescribable pain, especially when each stroke dug deeper into previously opened wounds. It resulted in multiple lacerations of the skin, loss of blood, injury to muscles (and internal organs, if the lash reached that deep), and shock. A wooden paddle, sometimes used instead of the whip, jarred every part of the body by the violence of the blow and raised blisters from repeated strokes. In addition to the possibility of causing death, there was the danger that muscle damage inflicted by any of these instruments might permanently incapacitate or deform a slave.

Doctor Thomas Chrystie of Hanover, for example, was surprised to see his slave Bob arrive home in 1811 in mid-year until he took a second look at him. Then he was outraged and said so in a letter to the man who had hired Bob:

He has been beaten about the Head, arms, & Hands with Sticks or billets of Wood, So as to render his arms entirely useless for the present. in addition, he has been whipt with a keen Cow Hide, So as to leave Upwards of one Hundred cuts on his back & Belly which has brought on Fever & much Inflammation. . . . I give you notice that 'Bob shall not return to your Services that I shall immediately Sue you in damages for the improper beating and that I Shall make you Pay for my attention in curing him and that if he Dies, you need only expect such lenity as the Law will allow you.

Such corporal punishment was part of being a slave laborer in antebellum Virginia.



Slaveowners sometimes took out insurance policies on blacks who labored in Virginia's cities or at industrial sites, testifying not only to the value of bondspersons as investments, but also to the risks of disease and injury routinely faced by these black workers. 59

Married Lady's Companion,

OR,

POOR MAN'S FRIEND;

IN FOUR PARTS.

- I. An address to the Married Lady, who is the Mother of Daughters.
- II. An address to the newly Married Lady.
- III. Some important hints to the Midwife.
- IV. An essay on the management and common diseases of children.

BY SAMUEL A. JENNINGS.

The Year of the Lord prolongeth days; but the years of the wicked shall be shortened. Prov. X. 27.

COPY RIGHT SECURED.

RICHMOND:
Printed by T. NICHOLSON.

MEDICAL LIFE IN ANTEBELLUM VIRGINIA

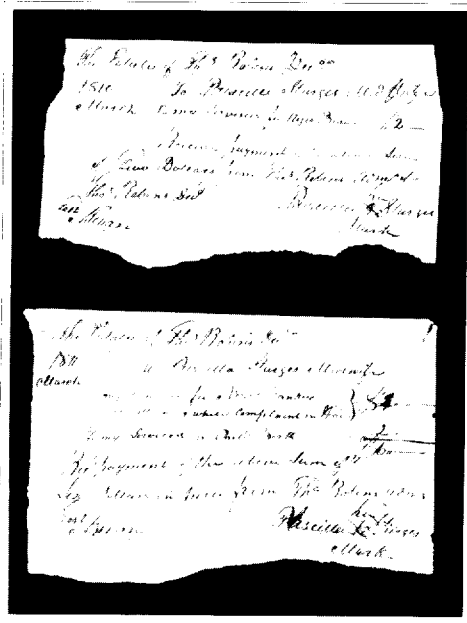
Women and Medicine

Though our discussions of antebellum Virginia medical life to this point have purposely not specified gender except when presenting specific examples, women are singled out in this section because some of their

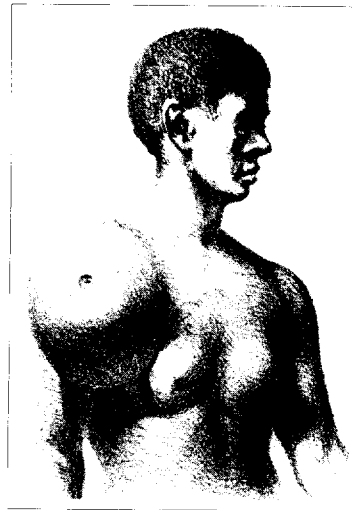
health concerns differed from those of men. Such regular and expected events as menstruation, pregnancy, and childbirth affected women's daily routines in predictable ways. Gynecological and obstetrical diseases and disorders were, of course, not predictable and caused more serious problems.

Because of the nature of slavery, we have better records about the health of antebellum Virginia's black women than of white women. Planters kept track of illnesses and days missed for slaves, but few white women wrote consistently about these personal matters in diaries and letters even to close friends and relatives. Some whites did refer to medical guides that specifically addressed female health concerns, such as Samuel K. Jennings's *Married Lady's Companion* (Richmond, 1804) or *Letters to Ladies* by Dr. Thomas Ewell of Virginia. Our information about Virginia's white women is sketchy, but we can assume





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that they encountered the same sorts of obstetrical and gynecological problems as black women.

Based on plantation records, women in pre-Civil War Virginia complained more of the pain, discomfort, and disorders associated with menstruation than from any other cause. Slaveowners did not usually identify illnesses in their farm or plantation records, but the frequency and regularity with which women of childbearing age appeared on slave sick lists indicate that menstrual conditions were the leading complaint. We learn from such sources as medical journal articles, white correspondence mentioning slaves, and letters to physicians requesting medical help that common problems beyond heavy flow and severe cramping during menstruation included amenorrhea (lack of menstrual flow), abnormal bleeding between cycles (sometimes caused by benign and malignant tumors), and abnormal discharges (resulting from such conditions as gonorrhea, tumors, and prolapsed uterus). Women also developed tumors, cysts, and infections of the ovaries, uterus, cervix, and other reproductive organs.

Slave women were able to use real and contrived female health complaints to get time off from work. Masters found it difficult to separate the sick from the women feigning illness and so often indulged them rather than risk unknown complica-

tions. One Virginia slaveowner complained to traveler Frederick Law Olmsted about such malingering women:

The women on a plantation . . . will hardly earn their salt, after they come to the breeding age; they don't come to the field, and you go to the quarters and ask the old nurse what's the matter, and she says, 'oh, she's not well, master; she's not fit to work, sir;' and what can you do? You have to take her word for it that something or other is the matter with her, and you dare not set her to work; and so she lays up till she feels like taking the air again, and plays the lady at your expense.

Bondswomen of childbearing age received particular care, as masters encouraged the birth of new slaves. Plantation management guides recommended that "pregnant women . . . be exempted from any but the lightest labor for several months before and after confinement." When women, both white and black, were ready to give birth they usually called in midwives. Most were inclined to call on physicians only when difficulties arose and lives were threatened. One Virginia physician estimated that 90 percent of black deliveries and half the white deliveries in the state were performed by midwives, most of whom were black. Not only did women usually prefer other women in

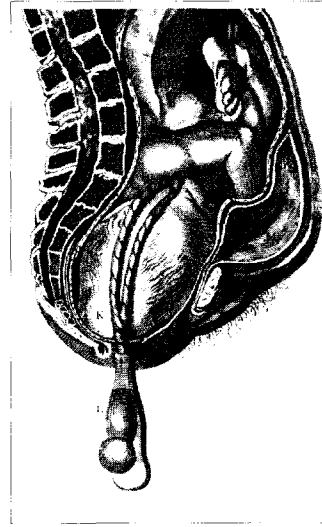
Domestic medical guides addressing the particular health concerns of women, such as *MARRIED LADY'S COMPANION* published by Samuel K. Jennings in Richmond, began to appear with increasing frequency during the early years of the nineteenth century. 61

Midwives attended many antebellum Virginia women because of cost, availability, and the preference of expectant mothers for the presence of women over men in the birthing room. Accounts from the Gloucester County estate of Thomas Robins testify to the midwife's popularity. 62

A Virginia slave woman suffering from a tumor. Illustration from the *VIRGINIA MEDICAL AND SURGICAL JOURNAL* of 1854. 63



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the delivery room, but female midwives also charged less (\$1 to \$3) than male physicians (\$5 to \$20).

Sometimes male physicians were called in preference to midwives. "After [I] got home, I was informed that Sister [a black slave] was about to have her Chile," wrote planter Edward Hundley to his local physician in 1810. "I will take it as a Singular favour if you would ride up and See her. I have Sent for a midwife but I had much rather have your opinion on Such occation." People began to summon physicians into the birthing room as male midwives around the turn of the nineteenth century. More and more physicians were studying and using the ideas of the eighteenth-century British physician William Smellie and other advocates of a more scientific approach to obstetrics. Physicians, of course, discouraged the use of midwives, especially when complications arose.

All women, regardless of race, knew that childbirth was a dangerous procedure for both mother and infant. According to the 1850 federal census, the death rate from complications of pregnancy was slightly lower among Virginia's slaves than among white women. Among the problems women faced were convulsions, retention of placenta, breech presentation, premature labor, and bacterial infection (puerperal or childbed fever) brought on by lack of cleanliness on the part of attending midwives or physicians.

Today physicians perform Caesarean sections in many cases of difficult labor. Safe Caesarean deliveries were not possible in antebellum times, however, before the discovery of anesthesia to eliminate pain, reliable suturing materials and techniques to stitch up the uterus and other tissues, and antiseptic techniques to eliminate germs during surgery. Antebellum physicians in the Old Dominion reported performing six Caesarean operations, almost all of them unsuccessful in saving both mother and baby.

A Caesarean section plays a leading role in one of the enduring legends of Virginia medical history. In the January 1929 issue of the *Virginia Medical Monthly*, Dr. Joseph Lyon Miller published an article asserting that Dr. Jesse Bennett (1769-1842) of Virginia performed the first successful Caesarean section in the United States in 1794 on his wife during a difficult labor. Miller's evidence came from an 1891 book on the history of the Kanawha Valley, now part of West Virginia. A recent historian of the subject has concluded, however, that Bennett was probably not a physician at all (there is no evidence that he had ever studied medicine) but rather a shopkeeper who sold, among his general supplies, some medicines and did some medical prescribing, blood-letting, and treating in the fifteen years before the arrival of trained physicians in the Kanawha Valley. No proof exists

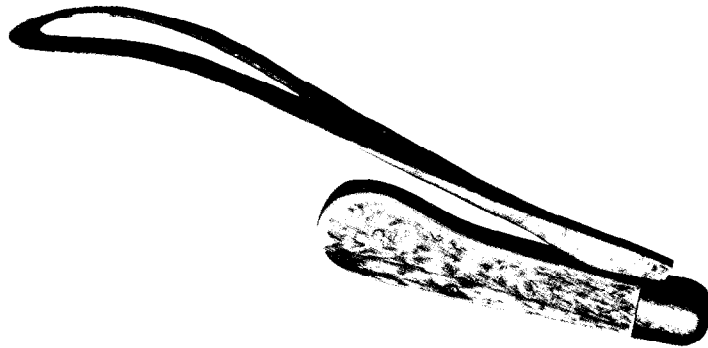
other the sister-in-some for more sul Bennett cannot c first Caes States.

Anot cine relat one true, tauer of I credited vesico-va between that allow into the f urethra. I surgery s Dr. James ery, Alab reliable o uncomfor received t

Thoug Virginia v the regula did treat and in the midwives their freed ranks of t bleeders a wholehea system. T meopathi Conway o sonian me Sinclair of

Physician William Smellie greatly advanced obstetrical practice in England and America with his prolific and detailed writings, but in the absence of the widespread, safe use of advanced procedures like the Caesarean section, many infants still had to be sacrificed in childbirth to save the lives of mothers. Illustrations of delivery with forceps and craniotomy (destruction of the skull) from *TREATISE ON THE THEORY AND PRACTICE OF MIDWIFERY* (1779). MILLER COLLECTION.

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other than the statements of Bennett's sister-in-law related to another person some forty years after the fact. Until more substantial corroboration of the Bennett story surfaces, historians cannot credit Virginia as the site of the first Caesarean operation in the United States.

Another legend of Virginia medicine relating to women's health, this one true, involves Dr. John Peter Mettauer of Prince Edward County. He is credited with successfully repairing vesico-vaginal fistula, a tear in the wall between the vagina and the bladder that allows urine to seep from the latter into the former rather than into the urethra. Mettauer performed his surgery some fifteen years earlier than Dr. James Marion Sims of Montgomery, Alabama, but never perfected a reliable operative procedure for this uncomfortable disorder, so Sims received the credit.

Though few if any antebellum Virginia women entered the ranks of the regular medical profession, they did treat and nurse the sick at home and in the neighborhood and act as midwives. White women, having their freedom, could and did join the ranks of the homeopaths, become bleeders and cuppers, and adopt wholeheartedly the Thomsonian system. They could even go into homeopathic practice such as Margaret Conway of Fredericksburg or Thomsonian medical practice such as Mary F. Sinclair of Alexandria. At least one

free black woman, Jensey Snow of Petersburg, opened a hospital and served the public for over thirty years.



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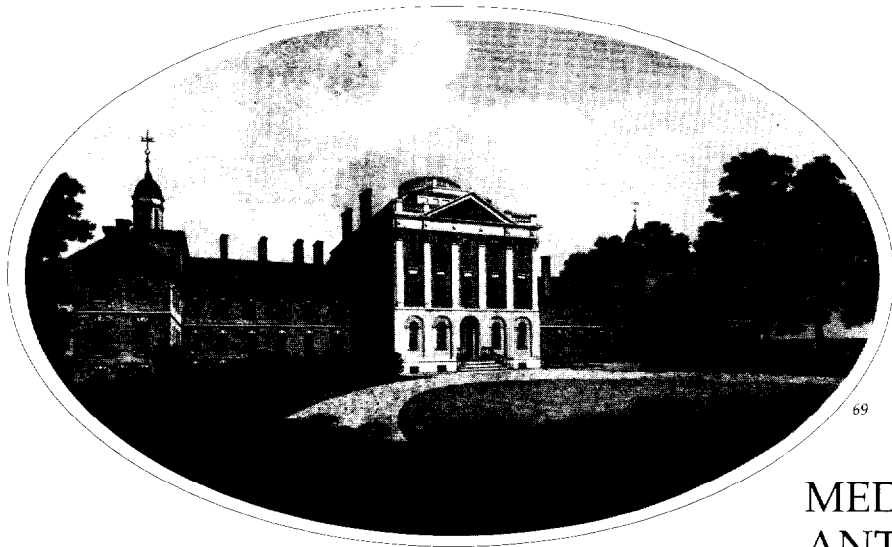


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An unusual version of early obstetrical forceps, this folding instrument descended through the family of Dr. John Mison Galt of Williamsburg. COURTESY THE COLONIAL WILLIAMSBURG FOUNDATION. 66

Silhouette of Jesse Bennett, until recently thought to be a physician and the first to successfully perform a Caesarean section in the United States. MILLER COLLECTION. 67

Doctor John Peter Mettauer of Prince Edward County became well known throughout Virginia for his treatment of gynecological disorders and diseases of the eye. An unusual man, Mettauer asked to be buried in his suit and characteristic top hat. MILLER COLLECTION. 68



MEDICAL LIFE IN ANTEBELLUM VIRGINIA

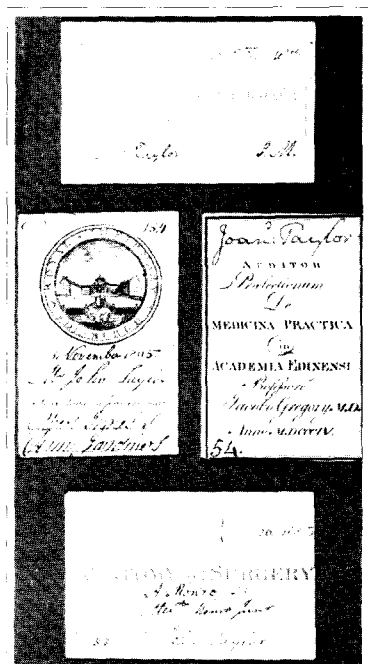
The Medical Profession

At the center of medical life in antebellum Virginia stood the physician. Despite competition from self-help medical guides, and from “irregular” doctors—homeopaths, Thomsonians, hydropaths, and the like—those practitioners (known as regulars or allopaths) who saw themselves as descendants of medical thinkers from Hippocrates on were the dominant medical force in the state.

As far as we know, virtually all regular practitioners in antebellum Virginia were white males. Though a small number of women and free blacks earned medical degrees at medical schools in the North during this period, none moved to the Old Dominion, nor, it appears, did any study at Virginia medical schools (from which they were barred) or become apprenticed to Virginia physicians.

Young Virginia men who wished to study medicine had several options. They could apprentice themselves to practitioners for a set term of years and learn the art and mystery of medicine by watching, reading, and gradually doing the things their preceptors did. Mentors varied in their teaching interests and skills, thus leaving apprentices with varying levels of preparation for medical practice. Apprenticeship was most popular in the early part of the century, though even at mid-century when more and more students attended medical schools, many institutions required that students spend one or two years

A number of Virginia's antebellum physicians trained through apprenticeships, though many were educated in the medical schools of Philadelphia. The latter course of instruction might include practical experience in the wards of the famous Pennsylvania Hospital, under the tutelage of Dr Benjamin Rush. 69



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studying with a preceptor.

Those who could afford to attend medical schools had their choice of institutions. The University of Virginia offered medical instruction when it opened its doors in the mid-1820s and the Medical Department of Hampden-Sydney College in Richmond (later the Medical College of Virginia) admitted students continuously from 1838. Winchester Medical School operated from 1847 to the start of the Civil War, and John Peter Mettauer maintained the Prince Edward Medical Institute from 1837 to 1847 and then affiliated it with Randolph-Macon College as that school's medical department.

Many Virginia medical students preferred to leave the state for their training. They matriculated primarily at the University of Pennsylvania and Jefferson Medical College in Philadelphia, though a small number attended schools in New York, Boston, and Maryland. Fully 30 percent of all pre-Civil War medical graduates of the University of Pennsylvania and 40 percent of its southern graduates hailed from Virginia. The great draw at Philadelphia in the early part of the century was Benjamin Rush. Students flocked to sit at the feet of the Revolutionary War hero and of the other great instructors at the University of Pennsylvania. Even after the passing of Rush's generation, large numbers of Virginia students continued the tradition of studying at the Philadelphia schools.

Some Virginia students went abroad to study medicine, usually to Edinburgh in the late eighteenth and early nineteenth centuries or to Paris in the 1810s through the 1850s.

Most schools required two years of attendance at lectures, though the second year was merely a repetition of the first. Students were expected to obtain experience with patients by working with a medical practitioner in the state during the approximately eight months they were not in classes. They could also observe their professors' demonstrations of medical and surgical practices on paying patients or on indigent patients who came to the medical school clinic or hospital because they could not afford to summon physicians to their homes. The quality of medical education varied widely across the state and the nation, in part, because there was no central body regulating the curriculum, the faculty, and the facilities at medical schools or among those physicians who taught apprentices.

All schools in Virginia taught anatomy and required dissection of a human cadaver, though obtaining bodies was often difficult. Because few antebellum Virginians donated their loved ones' remains to medical schools for dissection, the schools had to resort to covert means of filling the need. They picked on the state's voiceless residents—the poor and people of color.

Medical students, professors, and

John Taylor of Virginia received these tickets admitting him to medical lectures at the University of Edinburgh, Scotland, just after the turn of the nineteenth century. 70

Supplying Virginia's medical schools with sufficient specimens for dissection was a perennial problem in the middle decades of the nineteenth century. Chris Baker, "keeper of the bones," became quite well known locally as he supervised the anatomy specimens at the Medical College of Virginia in Richmond. COURTESY TOMPKINS MCCAWE LIBRARY, VCU. 71

	\$ etc.
1 For every visit of three miles or less.	2 00.
2 For every additional mile.	50.
3 " prescription or advice any where.	1 00.
4 " a night visit any where to 3 miles.	5 00.
5 " night visit over 3 miles double the day visit.	
6 " consultation.	5 00.
7 " detention with patient at night.	5 to 20 00
8 " detention at patients house for days per diem.	5 to 20 00.
9 " cases more than one patient at same house, charge a visit to one and prescription or advice to each other one at	1 00.
10 For written advice or opinion.	5 to 20 00
11 " oral opinion of health or disease.	2 to 5 00
12 " Stethoscopic examination.	5 to 10 00.
13 " Opinion involving a question of law.	10 to 50 00
14 " Post mortem examination in cases of legal investigation.	25 to 100 00
15 " same at request of family or friend.	5 to 10 00.

OBSTETRICAL.

16 For attention in simple labour.	\$20 00.
17 do attention on complicated protracted or instrumental labour.	50 to 100 00.
18 For Delivery of placenta.	10 to 20 00.
19 do do of abortion.	10 00

SURGICAL.

20 For Bleeding at each of visit or advice.	\$1 00.
21 do Bleeding in a vein or arteriomy.	2 to 5 00.
22 do Cupping.	2 to 5 00.
23 do Introduction of seton or forming issue.	5 00.
24 do Pumping stomach.	5 to 20 00.
25 do Dressing recent wounds.	5 00.
26 do Each subsequent dressing.	1 to 2 50.
27 do Opening abscess or exploring tumor.	1 to 5 00.
28 do Vaccination of one person.	2 00.
29 do Same of two at the same time.	3 00.
30 do Each one thereafter in succession.	

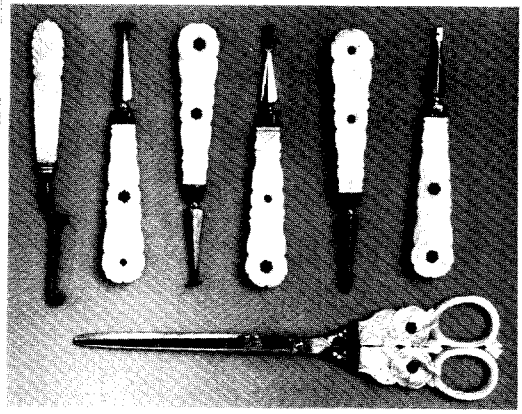
family at same time.	1 00.
31 For Re vaccination.	1 00.
32 do Extracting tooth.	1 00.
33 do Lancing Gums.	1 to 5 00.
34 do Plugging posterior nares.	5 00.
35 do Application of truss.	5 to 15 00
36 do Reduction of prolapsus Ani.	5 to 50 00.
37 do Examination per Vaginem or per anum.	5 to 15 00.
38 do Introduction of pessary.	5 to 10 00.
39 do do of Speculum vaginae, first time.	5 00.
40 do Each subsequent time.	2 to 5 00.
41 do Introduction of bougie to explore uretha.	5 to 50 00.
42 do Caulerization of uretha.	10 to 50 00.
43 do Operation of sounding the bladder.	5 to 50 00.
44 do Introduction of catheter into bladder.	5 00.
45 do Each subsequent time.	1 to 2 50.
46 do Treating stricture of urethra.	20 to 150 00.
47 do Treating syphilis.	20 to 200 00.

hired graverobbers, also known as resurrectionists, disinterred bodies from pauper and black cemeteries in Richmond, Norfolk, Petersburg, Alexandria, Charlottesville, Winchester, and Prince Edward County. Authorities usually ignored these illegal but necessary activities unless an irate citizen filed a complaint. In the 1840s and early 1850s the University of Virginia had to engage in fierce competition for bodies with the Medical Department of Hampden-Sydney College in Richmond. John Staige Davis, professor of anatomy in Charlottesville, called upon former students and professional acquaintances in Richmond, Norfolk, and Alexandria as agents to hire resurrectionists for the university. Only with the signing of an agreement in 1851 between Davis and the anatomist at Hampden-Sydney to share the available supply of bodies in the Richmond-Petersburg area did the war between the two cease.

After two years medical students had sat through hours of daily lectures, passed numerous exams (easier in the poorer schools that wanted to attract students), performed one or two dissections and perhaps some laboratory work or written a dissertation, attended surgical demonstrations at public clinics, and followed outside preceptors around the countryside. They were finally ready to enter practice for themselves. They moved to their new homes, hung up their diplomas inside and shingles outside,

put advertisements in local newspapers, printed business cards or otherwise spread the word of their arrival, and waited for patients. Competition could be keen, especially in towns. To ensure incomes some town physicians operated pharmacies, and some rural physicians operated farms or plantations and practiced only part-time.

Physicians interested in exchanging information about treatments, talking medicine, or simply meeting and socializing with peers organized city- or county-wide medical societies. Such organizations existed in the towns of Richmond, Charlottesville, Winchester, Petersburg, Fredericksburg, and Norfolk and in numerous counties across the commonwealth. Some societies established uniform fees for their members' services in answer to competition from irregular practitioners or from regular practitioners who charged patients at lower rates. Medical societies also took on a political role in attempting to regulate medical practice through licensing laws. The Medical Society of Virginia, really a Richmond association, tried to secure such regulations several times during the antebellum period but failed in the legislature each time. Virginia physicians were also involved in the American Medical Association (AMA) throughout the 1850s, and proudly hosted the 1852 annual meeting in Richmond that selected Dr. Beverley R. Wellford of Fredericksburg to serve as president for the year 1853.



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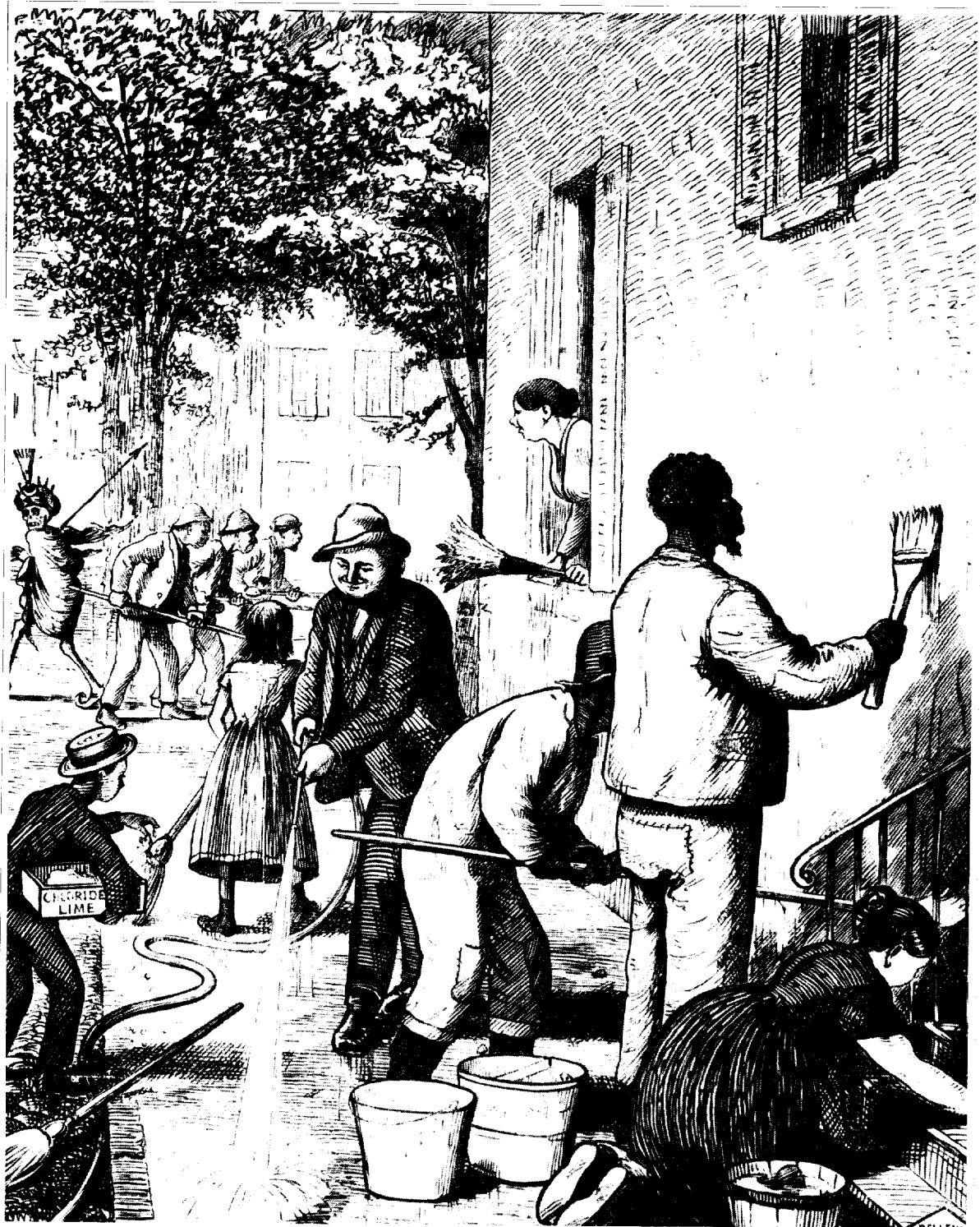
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Most antebellum Virginia physicians did not get involved with the AMA or even with state medical societies. They focused their attention on their own practices and lives. As letters from patients indicate, doctors were on call all the time, even when they themselves were ill. "As you were sick," wrote a man living near Hanover, "I have been persuading . . . [my mother] to send for some other physician, but she appears to want no other, but you. Should you be well enough, I will be very much obliged to you, if you'll ride over to see her to day after breakfast." They went out in bad weather to see patients who needed them, and they sacrificed family life and personal pleasures. "Give my love to sister S. & all the family," wrote Dr. George Watson in 1828, "particularly to Sister Dabney, whom, I am very sorry I shall not see whilst she is down. But he who is to live by the practice of physic in these times is without doubt the greatest slave in the whole community. It is literally a *struggle* for life."

Doctor Watson may have exaggerated a bit, but antebellum Virginia physicians could count on unexpected calls in all sorts of weather to see to all sorts of health problems. Patients expected physicians to come whenever summoned but to send bills and request their settlement only annually. Citizens of the Old Dominion accorded their physicians a mixed status in the community.

In one significant change from the colonial period, specialists in dentistry, like James D. Crockett of Pulaski, some of whose dental instruments are shown here, began to set up practice in Virginia's cities and towns rather than travel through the rural countryside as itinerants. COURTESY TOMPKINS MCCAIV LIBRARY, VCU. 73

Nineteenth century physicians' medicine kits included a variety of drugs, including opium and morphine. COURTESY TOMPKINS MCCAIV LIBRARY, VCU. 74



To be SOLD at Bermuda Hundred, on Friday
the 14th Instant.


A HUNDRED and FIFTY ONE healthy
choice SLAVES.

THESE Negroes have had the smallpox,
but have been well for several weeks, and they are now
removed two miles from the ship. We assure the publick that we
believe there is no danger in catching the infection from them, as
we have had them all shaved, washed, and new clothes put about
them. We would not for any consideration be instrumental in
spreading this infectious distemper in the colony; for two of us,
and our families, have not had the smallpox. We therefore hope
that those gentlemen who want to purchase slaves will attend our
sale. Merchants notes and orders will be received.


CARTER & TRENTS.

N. B. One Negro is now sick. That if we are not certain
have had the smallpox are kept on board, and will be inoculated.
We the subscribers, one of his Majesty's justices of the peace, do
certify that the above mentioned slaves were examined, in our pre-
sence, one by one, by a Gentleman of the physical profession of this
colony, who is well acquainted with the smallpox, as also by Captain
John Clifton; and we do assure the publick that great part of them
were inoculated, and had the smallpox at sea, and the others bear evi-
dent marks of having had it in Africa. That that one had the least
reason to think had not had the smallpox were immediately put on
board the ship. Given under our hands, this 5th day of August,
1770.

JOHN HYLTON,
JOHN SCOTT.



A Prefatory
ADDRESS
TO THE
INOCULATORS.



HE many Inventions late-
ly made known to the
World, in other Arts and
Sciences, must convince
the thinking Part of Mankind, how
large a Tract of Physick also lies yet
uncultivated; and it is the Duty of
every Physician to embrace every, tho'
the minutest, Discovery made in this
Art; but if any Advance of a mo-
mentous Nature shou'd be display'd
to us, it behoves us to wait as our An-
cestors did in former Days; for Hi-
story informs us, that Patients, either

A 2 gave

MEDICAL LIFE IN ANTEBELLUM VIRGINIA *Epidemic!*

Most diseases that struck antebel-
lum Virginians aroused little attention
among the general citizenry or local
governments. The mention of small-
pox, yellow fever, or cholera to an
antebellum Virginian, however, would
elicit quite a different reaction. An
outbreak or even the threat of an
outbreak of any one of these diseases
struck fear into the hearts of residents
of the Old Dominion and provoked
newspaper editors, city councils,
normally dormant boards of health,
and individual citizens into frantic
activity. These diseases were among
the most vicious and fatal of the
period, and they always struck in
epidemic form.

Smallpox was the earliest and most
frequent of the three major epidemic
diseases to plague the Old Dominion.
At its worst the disease, caused by a
virus, produced confluent or discrete
papules, known as pocks, over the
entire body, destroying skin tissue and
causing death from blood poisoning.
Less virulent forms left permanent
scars, such as those on George
Washington's face, but did not neces-
sarily kill patients.

A highly contagious disease, small-
pox infection spread rapidly and easily
from one person to another via con-
taminated air droplets from victims'
respiratory systems or through infected
clothing, bedding, and similar objects.
A bout with the disease usually
conferred immunity from future
attacks, a circumstance that was not

lost on Virginia's slave traders of the
eighteenth century. One advertisement
in a 1770 issue of the *Virginia Gazette*
announced a slave sale at Bermuda
Hundred and explained that some of
the blacks recently had had smallpox
but were well now. "We would not for
any consideration," it continued, "be
instrumental in spreading this infec-
tious distemper in the colony; for two
of us, and our families, have not had
the smallpox." Smallpox was an
alarming disease because of its quick
spread and devastating effects on the
population of an area.

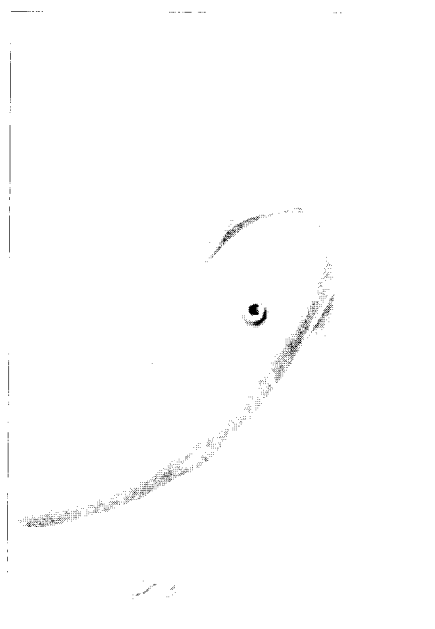
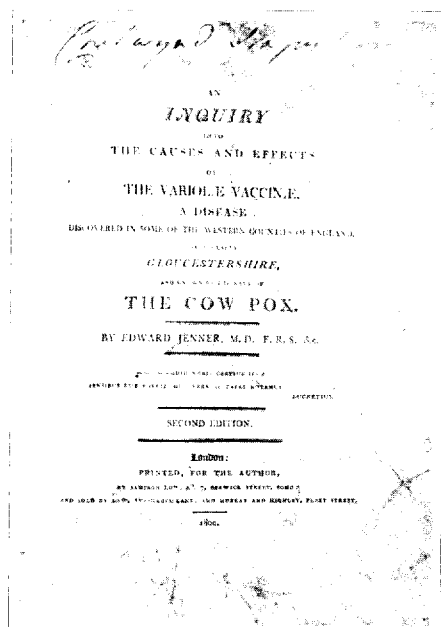
Even in an age when most medical
theories explained the spread of
disease in terms of bad air, locally poor
atmospheric conditions, and decaying
organic matter, people recognized that
smallpox was different. It spread by
contact. Beginning in colonial times,
residents of areas threatened with an
outbreak of smallpox acted on this
assumption by establishing hospitals
known popularly as "pest houses,"
where victims of the disease could be
isolated. Tended by immune people
who had recovered from smallpox or
who had been inoculated or vaccinated
against it, smallpox hospitals were
guarded strictly lest a patient escape,
or a nonimmune person try to visit, or
a contaminated object from a patient be
removed. Such pest houses were often
located in out-of-the-way parts of town
or in the country.

Virginians employed a second,
more controversial and potentially

An illustration from
HARPER'S WEEKLY (1873)
depicts the kind of street
and house cleaning
adopted by Virginia's
urban dwellers when
cholera epidemics
threatened, a good public
health measure that
unfortunately did little to
halt the spread of the
disease. 75

Two means of avoiding a
smallpox outbreak are
mentioned in this 1770
VIRGINIA GAZETTE
advertisement for a
Chesterfield County slave
sale. Traders made it
clear that the slaves had
either been exposed to the
disease previously and
recovered or would be
isolated and inoculated.
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The mixed results of
inoculation—inserting a
tiny amount of smallpox
matter under the skin of a
nonimmune person to
bring on a mild case of
the disease—were discussed
with a wary eye in
America and England as
evidenced by Edward
Stoughton's prescient
remarks to his
Congress in 1766: "I
think it is a very
strange and
unhappy
MILNER COLLECTION 77



dangerous means of stopping the spread of smallpox during the eighteenth century: inoculation. This technique, imported from Asian and African cultures and first employed in Boston in 1721, required the presence of a person with the disease who could provide some live smallpox matter from a pustule. A small amount of that matter was then inserted under the skin of nonimmune people in hopes of passing on a mild case of smallpox from which they would recover. Recovered victims were then immune to future infections.

Inoculation was a dangerous procedure on two counts. First, one could develop a severe case of smallpox and die. Second, authorities controlling isolation could allow those inoculated to leave the hospital and return to their homes too soon, thus starting a smallpox epidemic in the community with tragic results. For this reason many Virginians remained wary of inoculation throughout the eighteenth century.

In 1768 smallpox epidemics erupted in both Williamsburg and Norfolk because physicians allowed recently inoculated patients to return home too soon. So outraged were the residents of Norfolk at Drs. Archibald Campbell and John Dalglish—who had insisted on performing the inoculations at Campbell's house despite the neighbors' objections—that a mob burned the house and forced the removal of recovering inoculees to the city pest house during a thunderstorm. A law

passed by the General Assembly in 1770 restricting inoculation in the colony resulted from the incident.

A new and much safer form of smallpox prevention was discovered in England just before the end of the century. In 1798 Edward Jenner, a country physician, published *An Inquiry into the Causes and Effects of the Variolae Vaccinae, a Disease . . . Known by the Name of the Cow-Pox*, announcing that cowpox, a mild eruptive disease of cattle, remained localized and benign when transmitted to humans but also conferred immunity to smallpox upon those infected. Benjamin Waterhouse, a Boston physician, immediately began promoting the new discovery in the United States, even sending information about it to the soon-to-be president, Thomas Jefferson. Jefferson tried out the vaccine matter on his own white and black families during the summer of 1801, pronounced it good, and spread the word throughout the neighborhood and the state. He even distributed live matter from vaccine scabs to Richmond, Petersburg, and other parts of the state.

As a result of Jefferson's efforts, vaccination became an accepted procedure in Virginia. The state even established the position of vaccine agent to help disseminate cowpox matter to physicians. Had people asked the source of the matter they used on their own bodies and those whose lives they valued, they would have learned that it came from both

A major breakthrough in combatting smallpox came in 1798, when English physician Edward Jenner announced the technique of vaccination. Word of his discovery spread quickly around the world.

MILLER COLLECTION.

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or reputation. You may infer from this fact something as to the true character of the distemper."

In truth, cholera did strike Virginia's dark-skinned residents at a higher rate than its whites. This circumstance resulted from living conditions, nutritional state, availability of clean water, and decreased resistance to disease. During the 1832 epidemic the Norfolk Board of Health concluded that "the best means of preventing the spread and also the fatal termination of the disease, is, close and strict attention to the condition, habits and health of the colored population." In reality, part of the motivation for providing pest houses, hospitals, and homes for the poor was the hope that these measures would help keep the disease from spreading to "respectable" persons and valuable servants.

The third major epidemic malady of antebellum Virginia was, like small-pox, a disease its residents had experienced since colonial times, and, like cholera, a disease whose mode of transmission was baffling. Yellow fever is a tropical disease caused by a virus and transmitted by a certain type of mosquito, *Aedes aegypti*, that abounded along the coastal areas of Virginia and southern North America. The virus enters the human bloodstream when the mosquito bites and wreaks havoc with the small blood vessels of the body, causing vascular congestion, frequent hemorrhages, and destruction of the liver. Black vomit

from hemorrhage into the stomach and yellow jaundice are two visible signs of the disease.

Yellow fever rarely spread inland from the port cities where it struck. In Virginia, Norfolk experienced regular epidemics during the eighteenth and nineteenth centuries, Alexandria less so, and Portsmouth even less. Residents reacted to yellow fever as they did to cholera, by cleaning streets and homes, restricting sale and consumption of foods considered dangerous, and quarantining any vessels suspected of harboring yellow fever patients. None of these activities had any real effect on the disease, though they did raise the general standard of living for the poor whenever yellow fever threatened. Blacks seemed to have a higher tolerance of the yellow fever virus, generally losing a much smaller percentage of their number and suffering fewer severe symptoms during epidemics than did whites.

Probably the best public health measure that could be taken when yellow fever threatened was flight, a course only the free portion of the population could take at will. Residents of uninfected areas did not always welcome Virginians fleeing from yellow fever, cholera, or small-pox, fearing quite naturally that these people carried the disease with them. Even the staff of Eastern Lunatic Asylum in Williamsburg issued a notice at the height of the 1855 yellow fever epidemic in Tidewater announcing that no

The seaport towns of Norfolk and Portsmouth suffered a devastating outbreak of yellow fever in 1855. Many victims were cared for at the naval hospital at Gosport, pictured on far right. 82



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yellow fever patients would be admitted to the hospital.

The worst yellow fever epidemic to strike Virginia was this Tidewater outbreak in 1855. It appears to have been brought by a ship named the *Ben Franklin*, whose most recent port of call was fever-ravaged St. Thomas in the Virgin Islands. The Norfolk health officer found no yellow fever among the passengers and crew, so he allowed them to go ashore but kept the boat in quarantine just in case it harbored the effluvia or bad air that was thought at the time to cause these sorts of diseases. Two weeks later, on 19 June, the captain requested and received permission to take the *Ben Franklin* to the Gosport shipyards near Portsmouth for a much-needed overhaul. On 5 July a worker on the ship took ill and died three days later of what was quickly diagnosed as yellow fever. The disease spread, killing more workers and then some nearby residents. By mid-July yellow fever had infected many in Portsmouth and crossed the river to attack Norfolk's citizens as well. Tidewater Virginia's worst epidemic gained momentum and reached full fury by the end of August. Only with the frost on 26 October did the epidemic finally cease.

Norfolk's 1855 population of approximately 15,000 was reduced to about 6,000 by flight. Almost 2,000 persons died, according to several contemporary estimates (no accurate count was ever made), including as

many as two-thirds of all the whites who remained in town. Portsmouth was similarly depleted. Only about 2,000 whites and 2,000 blacks faced the epidemic out of a population normally amounting to some 6,500 whites and 3,000 blacks. Of these, nearly half of the former and only 5 percent of the latter died.

During the epidemic much of the activity that usually centered around the marketplace was abandoned in favor of the local hospitals, where nursing replaced bartering and small talk. The Howard Association, a national charitable organization, established an infirmary at the old City Hotel in Norfolk to supplement care provided at the city pest house and the naval hospital at Gosport. Relief goods and funds poured in from all over the country. Physicians and nurses, black and white, came from as far away as New Orleans and New York, the northerners at great peril because they had not developed any immunity to yellow fever. After the worst of the epidemic was over, people helped distribute food to recovering victims trying to get back on their feet.



Reporting on The Great Pestilence in Norfolk, William S. Forrest, a local writer, observed that the "city was wrapped in gloom... Most of the inhabitants present were either confined at home by sickness, or in attendance on the sick." 81

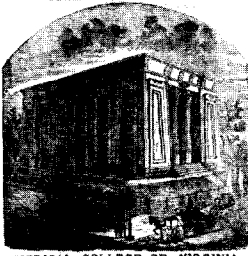


MEDICINE AND THE CIVIL WAR *Southern Distinctiveness*

To discuss the medical aspects of the Civil War fully would require a booklet and then some. We must limit our discussion here to such broad concerns as the argument for southern medical distinctiveness, medical problems on the home front, and general medical issues in the military.

RICHMOND CITY DIRECTORY

**MEDICAL COLLEGE
AND INFIRMARY.**



MEDICAL COLLEGE OF VIRGINIA

The medical Institute of this Institute is necessary to the best Medical in
Institute, and consists of the following:

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 RICHARD T. W. M. D. of the Faculty of Practice of Medicine.
 WALTER W. W. M. D. of the Faculty of Medical Jurisprudence and Toxicology.
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 JOHN W. W. M. D. of the Faculty of Physiology and Medicine.
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 MARY W. W. M. D. of the Faculty of Obstetrics and Gynecology.

F. E. M. D.

Teacher of each Professor
 of the Department of Anatomy 12
 of the Department of Physiology 12
 of the Department of Practice 12
 of the Department of Surgery 12
 of the Department of Medical Jurisprudence and Toxicology 12
 of the Department of Materia Medica 12
 of the Department of Therapeutics and Pharmacy 12
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L. S. JOYNS, M. D.,
Dean of the Faculty.

RICHMOND CITY DIRECTORY

INFIRMARY
OF THE
MEDICAL COLLEGE,
For White Persons and Slaves,
CORNER OF MARSHALL AND COLLEGE STREETS

The establishment is furnished with every convenience for the comfortable and
restorative of the sick, and every facility for their Medical and Surgical treatment.
The patients are under the charge of the SURGEONS OF THE COLLEGE, who
with the most skill, and are under their management by an efficient corps of as-
sistants.

WHITE PERSONS who are taken in, will be furnished with PRIVATE ROOMS,
where they will enjoy every comfort and attention.

The accommodations for SLAVES are ample, and the attention of nurses and
doctors of negroes, both in the city and country, is invited to the advantage offered
by the institution, wherever.

SURGICAL CASES.
NO CASE OF SMALL-POX,
or any other infectious or contagious disease, is admitted.
The Surgeons, including Board Medical Attendants, Surgeons, and Midwives, are
on duty.

White Patients, who are taken in, will be furnished with PRIVATE ROOMS,
where they will enjoy every comfort and attention. \$4 per week.
In private rooms, where they will be attended by a Nurse, \$7 to \$10
per week, and other classes of Patients, \$2 to \$4 per week.

For any period from three weeks, or up to three months, \$1 per day per
bed and the Surgeons, and the Nurses, are charged for a bed and work.

It is to be noted in the above prices, that a small fee is charged for MEDICAL
PRACTICE, varying from \$1 to \$25, according to their importance and difficulty.
\$100 All charges payable on the removal of the patient.

L. S. JOYNS

NEW HOSPITAL

Is now in course of erection, immediately adjacent to the Infirmary, where will be greatly
improved the accommodations for the sick, and an arrangement will be made for the more
expeditious relief.

Attending Surgeons—Professors WILSON, PETERSON and WELLSFORD.
Attending Physicians—Prof. TURNER, COPWAY and MCJAN.
Physicians—Dr. PARKER.
Physicians—Dr. JOYNS, M. D.

Persons desiring of seeing patients in the Infirmary, may address any of the
above named persons.

Though the events leading to the secession of Virginia and other southern states from the Union in 1861 took place primarily in the political arena, a few had a medical twist. Southern physicians, including Virginians, developed and argued for a southern view of medicine that played into the secession movement and the justification of slavery.

Physicians became involved in sectional discussions to the extent that they saw medical practice in the South as differing from northern or western practice. Two key differences between the South and elsewhere, they argued, were the presence of a large black population and a warmer, more tropical climate.

That these two factors necessitated an alteration in medical practice should not seem surprising. Though the basic principles of anatomy, physiology, and chemistry applied no matter where one hung out one's shingle, other aspects of the medical profession, particularly diagnosis, treatment, and prognosis, depended in great part on one's location. Physicians tailored their medical treatments to the situations of their patients, always with the goal of restoring the natural balance within the body. Weather, season, work, family situation, location of housing, and atmospheric influences all affected a person's health and the treatments physicians prescribed to restore it. Race made a difference too, because blacks were considered medically different from whites.

During the distinctiveness of southern climate and health concerns, Virginia physicians began in the 1850s to urge students to remain in the Old Dominion for their training, rather than to seek the restrictive conditions of the North.

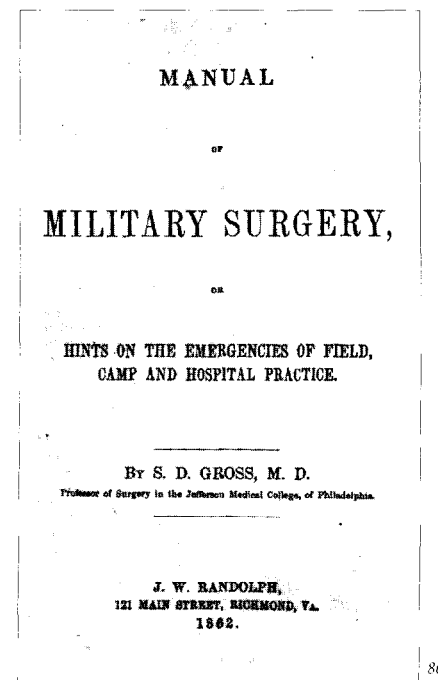


MEDICINE AND THE CIVIL WAR

The Front

Because so many of the battles of the Civil War occurred on Virginia soil, the state witnessed much of the carnage firsthand. These were still the days before antisepsis, before sophisticated surgery, before antibiotics, before germ theory, and just after the introduction of chloroform and ether anesthesia. Death from wound infection was likely to occur if one did not die during or from the surgery. If one was able to avoid battlefield injuries, there were plenty of diseases in the camps to threaten health. Compounding the difficulties for Virginia and all Confederate soldiers and physicians were a lack of medical supplies, especially drugs, instruments, and such pain killers as opium, chloroform, or ether, and a shortage of physicians.

Soldiers incurred three general types of injuries on the battlefield, usually the result of projectiles from guns: severe flesh wounds, broken or shattered bones, and wounds to vital organs. The physicians who accompanied units to the front, called assistant surgeons despite their lack of real surgical experience before entering the military, could do little in the heat of battle other than to apply some first-aid measures such as splinting, bandaging, and ligaturing, do minor surgery, provide comfort and reassurance, perhaps offer some whiskey to kill pain, and transport soldiers back to the field hospital. Ambulances were sorely lacking in the Confederate military, and few of those that were



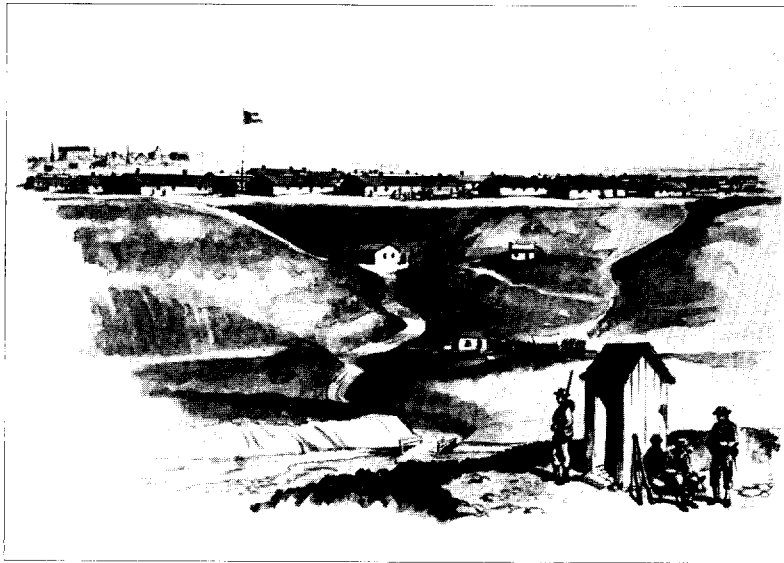
available had springs, making even a short ride from the front to the field hospital a most painful experience for the severely wounded.

Once back behind the lines at a field hospital the wounded soldier received a more thorough examination. The regimental surgeon, in charge of the field hospital, worked with the assistant surgeon in caring for the wounded and the sick from that and previous days. Sometimes, just after major engagements, the medical staff was overwhelmed by the large numbers of wounded men in desperate need of treatment.

The surgeons also faced the difficult task of getting their charges back to the front as speedily as possible without jeopardizing their health. As one private in the Army of Northern Virginia wrote in his diary, these physicians did not always convey a sympathetic impression to the sick and wounded:

Reported at the Hospital this morning and am now on the sick list. We receive very poor treatment at the hands of the Surgeon. He tries to drive us to the front, thinking we are avoiding the dangers of an expected fight. And indeed there are a great many skulkers in the Hospital. My complaint is diarrhea, and in conjunction with that, I am quite prostrated from working at the guns in the last fight. Our battery has again taken position on the lines. I am left in the rear, with the sick.

With the coming of civil war, military authorities in Richmond had to scramble to establish a medical department and train surgeons. They even borrowed instructional texts from U.S. Army manuals and other northern sources.



General Hospital,
Staunton, Va. Nov. 10, 1863.
Respectfully of the 3rd
 Regiment, Company 2, is discharged from the
 Hospital, and ordered to report immediately for
 duty.
 BY ORDER OF THE W. H. HAY,
 SURGEON IN CHARGE.
W. H. HAY
 STAUNTON, P. A. C. A.

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REGULATIONS
of
This Hospital.
 1. No patient will be allowed to
 leave the Hospital, or to go out of its
 gates, without the order of the
 Surgeon in Charge.
 2. No article of Dress or Blanket shall
 be removed from the Hospital, or
 be used for any other purpose,
 without the order of the Surgeon
 in Charge.
 3. No food or provisions falling or
 coming within the scope of the
 Hospital, shall be received, or
 used, without the order of the
 Surgeon in Charge.
 4. The Surgeon of the Hospital
 will receive reports of the
 Surgeons of the Regiments,
 and will forward them to the
 Surgeon in Charge of the
 Hospital.
 In case of an emergency, he
 will report to the Surgeon in
 Charge of the Hospital.
 JOHN H. CLAIBORNE,
 Surgeon, P. A. C. A.

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If a soldier's medical problem required extra or longterm care and transportation was available, the surgeon might send the man to one of the larger general military hospitals, located behind the lines in such cities along major railroad lines as Staunton, Lynchburg, Charlottesville, or Richmond. Field hospitals were often outdoor affairs unless the surgeon was able to commandeer a vacant house or find a cooperative homeowner. General military hospitals, on the other hand, were usually housed in buildings and run in stricter fashion than the more open battlefield hospitals. Unfortunately, like the field hospitals these larger hospitals often lacked adequate staffing and medical supplies. The latter deficiency was much in evidence later in the war when Union blockades and a lack of raw materials and manpower in factories prevented ready renewal of medical stocks.

According to one estimate, fully 60 percent of all Confederate wounded were treated at Virginia hospitals, no doubt because so much of the war was fought on Virginia soil. Richmond quickly became a hospital city, the largest in the Confederacy. Throughout the town, a variety of private buildings—factories, warehouses, stores, churches, and hotels—served as havens for sick and wounded troops.

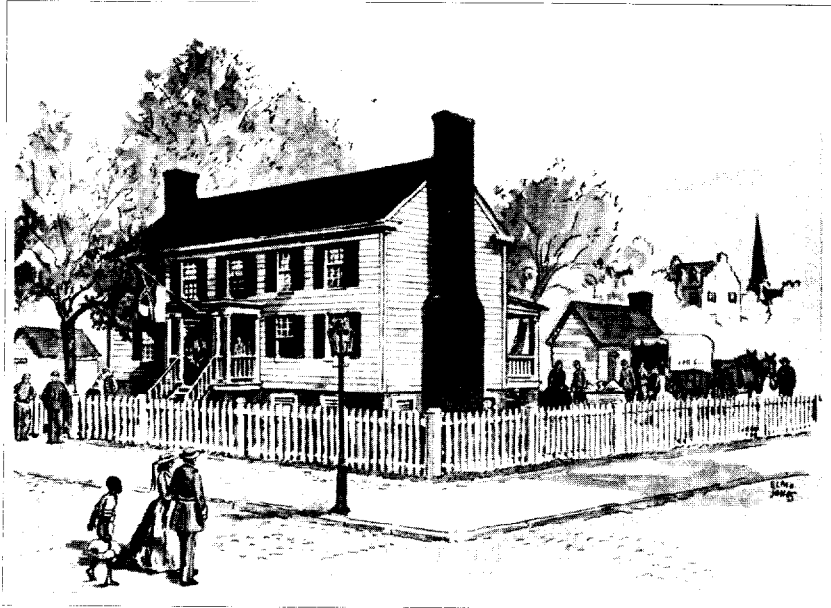
Soon after the start of the war the Confederate Congress decided it needed to appropriate all privately operated hospitals for military use.

Sally L. Tompkins of Richmond had opened a facility, Robertson Hospital, with her own funds shortly after the first battle of Manassas and wished to continue operating it as a military hospital despite the new law. A personal appeal to Jefferson Davis and a display of the fine record the hospital had earned in returning men to military service convinced the Confederate president to keep the hospital in Tompkins's hands. He therefore appointed her a captain in the army assigned to Robertson Hospital at the corner of Third and Main streets. Tompkins, a group of male surgeons and assistant surgeons, servants (most, no doubt, slaves), and a large staff of female assistants cared for over 1,300 patients between August 1861 and April 1865.

Doctor James B. McCaw, a well-known Richmond physician and MCV faculty member, served as medical director and commandant of Richmond's and the Confederacy's largest military hospital, Chimborazo. Built on Chimborazo Hill overlooking the capital, the hospital was like a small city, containing 150 one-story wooden buildings, 100 feet long by 30 feet wide. Each building held from forty to sixty beds. When needed, surgeons could assign an additional eight to ten patients to each of 100 tents. Chimborazo had five ice houses, a bathhouse, a sewage disposal system, a bakery, a brewery, a farm to pasture cows and goats for dairy products, and

The construction of established general hospitals in Virginia's major cities and towns. They were run with strict attention to rules but often without adequate staff or medical supplies.

The hospital on Chimborazo Hill, to the east of Richmond, was believed to be the largest such facility in the world at the time of the Civil War. Some sense of its immensity can be gleaned from this rendering by an artist.



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a boat used to trade cotton, shoes, and yarn for provisions with people along the James River and Kanawha Canal. A self-supporting hospital, Chimborazo served over 77,000 patients during its existence.



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The private hospital operated at the Richmond home of Judge John Robertson, as shown in this rendering by a modern artist, earned a fine reputation for restoring the health of its patients. In large measure this was due to the management skills and discipline of Sally L. Tompkins, whom President Jefferson Davis commissioned as a captain in Confederate service when private hospitals came under the direction of the army medical department.

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MEDICINE AND THE CIVIL WAR *The Changing Scene*

While the war was raging throughout Virginia, civilian life continued apace around it. People still got sick, still needed medicines, still required medical attention. With almost 800 of the state's physicians serving the military medical needs of the Confederacy, with a severe shortage of medical stores, instruments, and drugs across the state and the entire Confederacy, and with a premium on private hospital beds in most towns, civilian medical life on the home front was not easy.

When white men went off soldiering in 1861, they left vacancies in the medical care system. White women filled much of that gap and played an even larger role in domestic medical care than before, especially on plantations with numbers of slaves. When the battlefield came to them, as it did in many parts of both rural and urban Virginia, these women also helped nurse the injured and sick. Black men and women on farms and plantations with missing masters also took on more tasks involving medical care and even gained a bit more freedom to care for their own ailments, though the rules on plantations seem to have remained much the same as before the war. Some slaves did their part for Virginia's war effort when they were hired out to work as nurses and attendants at military hospitals. Those physicians who did not join the military served their state at home by taking on the medical care of their absent colleagues' patients. All of these

The hospital at the Medical College of Virginia in Richmond increased its charges to private patients three times between 1861 and 1863. Medical supplies, medical facilities, and medical resources in general were scarce and expensive for all Virginians on the home front. 92

MEDICAL COLLEGE HOSPITAL.

The FACULTY regret to be under the necessity of announcing a further advance in the charges of this establishment. Experience has proved that at the present exorbitant prices of provisions, medicines, &c., it is impossible to keep the hospital in operation on its present receipts. The Legislature has just passed a bill allowing to the jailor for the maintenance of prisoners, \$2 50 per diem; and for some time past, the charge for board in the private jails of this city has been \$5 per day. At present prices, these rates cannot be considered excessive. The patrons of the hospital, therefore, cannot expect that it shall continue to receive patients—furnishing not only board, but medical attendance and costly medicines—at the present charges, which, for the great bulk of the patients, are lower than the above mentioned charges for board alone.

On and after the 15th of October, the charges will be as follows, both for patients then remaining in the hospital, and for those admitted from that time:

White persons in private rooms,	\$5 per day.
" " public ward,	4 "
Negroes,	3 "

As heretofore, a small fee will be charged for Surgical Operations, and a fee of \$10 for cases of Midwifery. In cases of *Mania a Potu*, the charge will be \$8 per day, invariably in advance.

L. S. JOYNES, M. D.,
President.

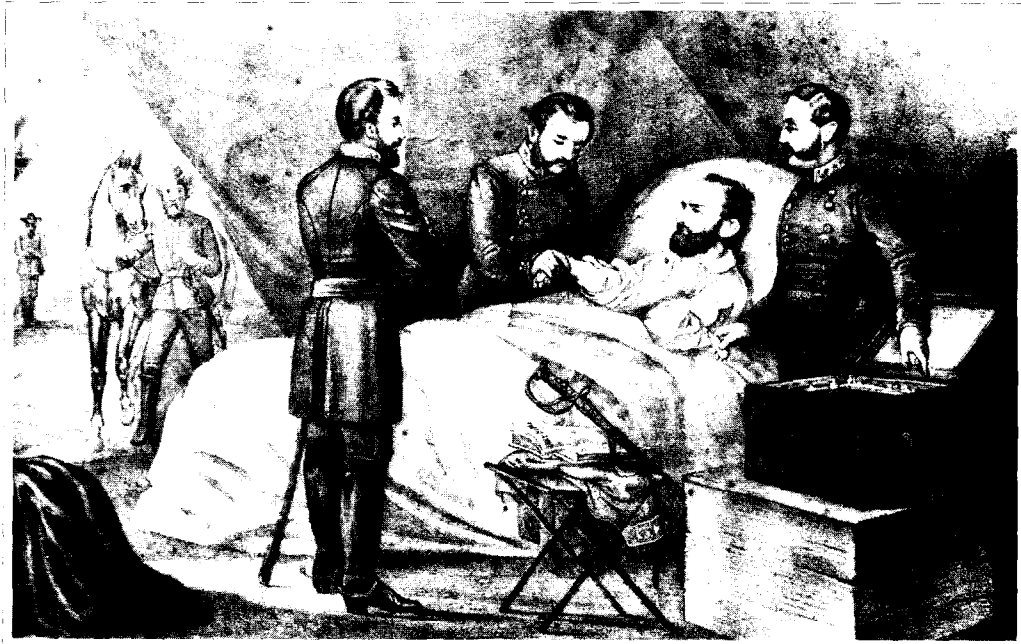
Richmond, Oct. 7, 1863.

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groups became resourceful in the face of shortages of medicines by trying out natural remedies in hopes of finding substitutes.

The Civil War did not contribute much to medical advancement except to provide a cohort of young physicians—those, that is, who managed to survive injury on the battlefields and disease in the military hospitals—with a lot of surgical and medical experience. The management of wounds and infections and common diseases during the war remained similar to techniques used before. Medicine, however, was changing in Europe at the very time the United States was fighting its civil war. Had American physicians, both northern and southern, been able to pay attention to these advances, they might have saved more lives. Take the case of a typical Confederate surgeon, Hunter Holmes McGuire (1835–1900) of Virginia, and his handling of a typical Civil War injury in a typical but very important patient, Thomas Jonathan "Stonewall" Jackson (1824–1863).

In May 1863 Jackson's own men accidentally shot him during the battle of Chancellorsville. Wounded in the right hand and the left shoulder, the general had to be placed on a stretcher and carried through rough wooded terrain to an ambulance. During this difficult walk, one of the men fell and dropped his corner of the litter, throwing Jackson hard to the ground. McGuire, medical director of Jackson's



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unit, met the group on the path and rode in the horse-drawn ambulance with the general to the field hospital at Wilderness Tavern. He kept his finger on the bleeding artery above the general's shoulder wound and successfully stanching the bleeding. Whiskey and morphine helped to lessen the pain somewhat during the uncomfortable ride.

The ball in Jackson's right hand had broken two bones and remained lodged under the skin. The two shoulder wounds were severe and appeared to require amputation of the left arm. Before administering chloroform McGuire received Jackson's permission to amputate if necessary. He removed the ball from the general's right hand and amputated the left arm very rapidly, as he described it, "and with slight loss of blood, the ordinary circular operation having been made." Other than some pain in the right side, Jackson seemed to be recovering well during the next few days. On the fourth day after surgery, however, he complained again of great pain in his right side. McGuire's examination revealed "pleuro-pneumonia," which was treated, as was the custom, with cupping, mercury, antimony and opium, and a blister. His treatments continued for a few more days but failed to cure his patient. Infection, in those days before antiseptics, took Stonewall Jackson's and many another Virginia soldier's life.

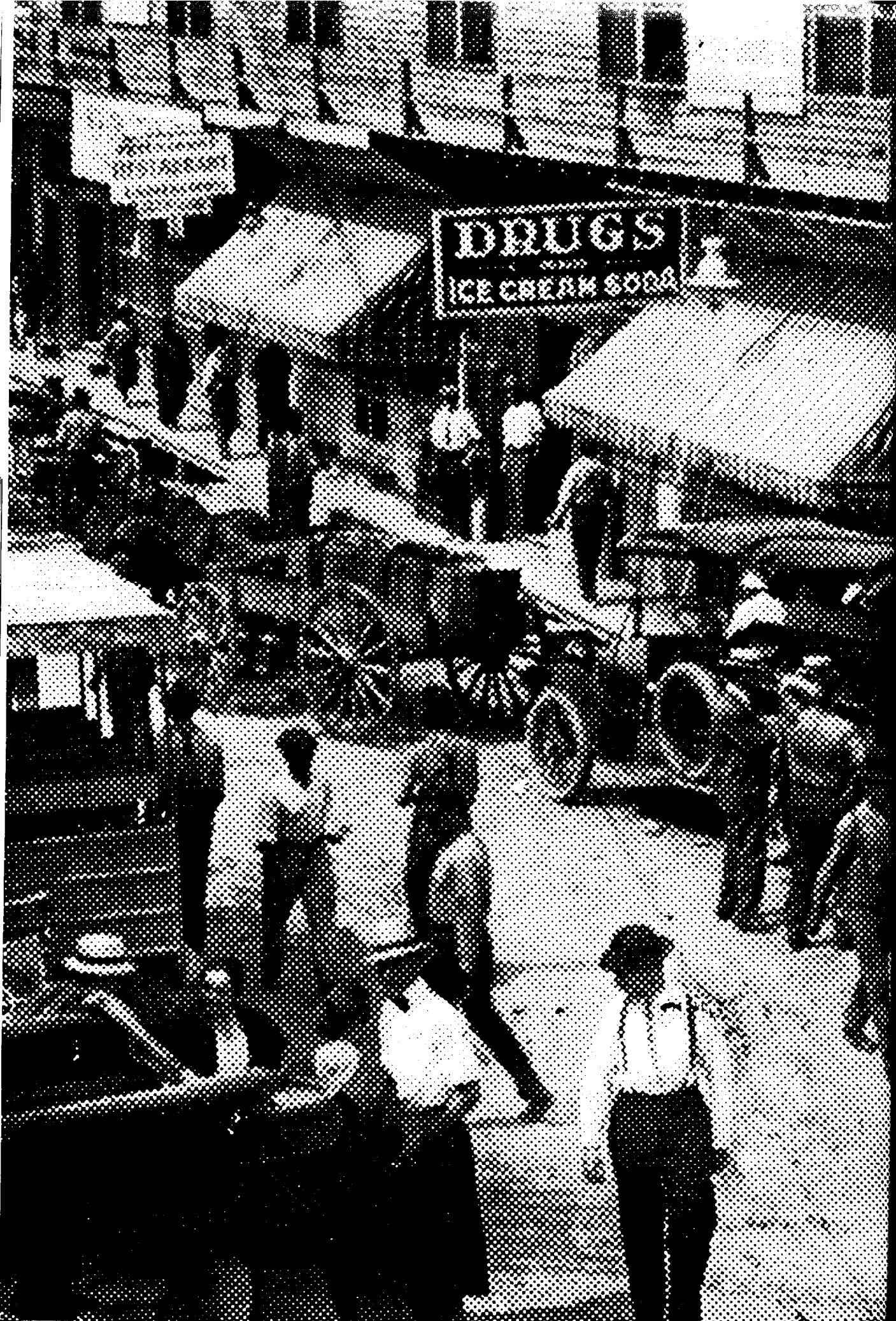
At about the same time that Jackson

was fighting his losing battle with pneumonia and wound infection, Joseph Lister in Scotland was testing the germ-killing abilities of a thick, tarry chemical called carbolic acid. He had read Louis Pasteur's recent speculations about how microscopic germs in the air, invisible to the naked eye, caused infections and wondered if applying carbolic acid to surgical wounds, surgical instruments, and physicians' hands would eliminate the frequent infections that accompanied compound fractures and surgery. Lister's experiments with antiseptic techniques, performed in 1865, proved that wound infections could be prevented by cleansing. He published the results in 1867, too late for Stonewall Jackson and all the others who had died of wound and surgical infection during the Civil War, but in time to save many other Virginians if only they believed him. The era of modern medicine was beginning.



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Mistakenly wounded by his own men, General Thomas J. "Stonewall" Jackson faced amputation of his left arm and the removal of a bullet from his right hand. Doctor Hunter Holmes McGuire, later a prominent Richmond physician and medical educator, worked valiantly to save the general, but infection took the life of the south's great hero in a matter of days.

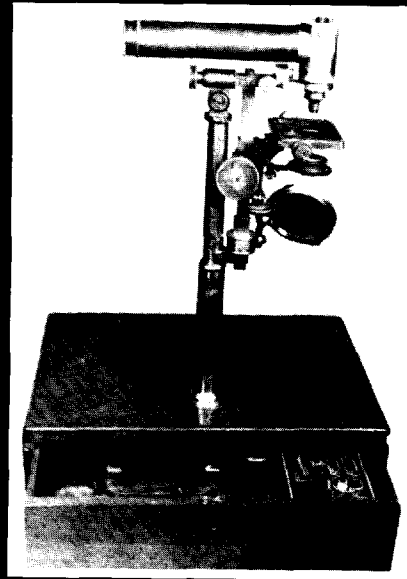


THE DAWNING OF MODERN MEDICINE IN VIRGINIA

If one had to name the most exciting period in the history of medicine, it would probably be the late nineteenth and early twentieth centuries. Between 1855 and 1910 the pace of medical discoveries increased remarkably. Medicine and medical practice changed in Virginia because of those discoveries and also because of certain social and economic forces.

Lister's discovery of antiseptics was just one of several key ideas introduced into medicine in the second half of the nineteenth century. Others included the recognition that all living things are composed of cells (cell theory); that life does not arise spontaneously from nonliving matter; and that germs, tiny living microbes, cause many diseases (germ theory). Once physicians accepted these new ideas, a process that took years in some cases, they began to develop new operative procedures without fear of infection, to introduce sound public health measures knowing how certain diseases spread, to isolate the causative organisms for many infectious diseases, and to study the patterns of pathological changes in the body's cells associated with various diseases.

Earlier in the century the French had pioneered the development of tools and techniques for diagnosing pathological changes in the body, including the stethoscope (for detecting abnormal heart, lung, and bowel sounds) and percussion (tapping on the chest and abdomen to locate shifts



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in locations and sizes of organs and the abnormal presence of fluid in these two body cavities). Clinicians in the late nineteenth century refined these instruments and techniques and added new ones such as the ophthalmoscope (to look at the eye and its blood vessels), the laryngoscope (to look into the throat), the clinical thermometer, and the sphygmomanometer (to measure blood pressure). Regular performance of autopsies allowed physicians to correlate physical findings and symptoms of patients during life with pathological changes inside the body. Doctors might then better recognize this same pattern of findings in future patients and treat those health problems with a fuller understanding of the disease process.

Physicians still evaluated fluids that came from the body, but now they could do it by measuring volume and specific gravity, by counting the various types of blood cells and noting alterations in their size and shape, by searching for germs, and, as in previous times, by noting alterations in color, smell, taste, texture, and volume. Microscopes and techniques to dye cells and tissues different characteristic colors revealed the presence of tiny bacteria and permitted the counting of red and white blood cells in order to characterize different diseases. These were indeed exciting days.

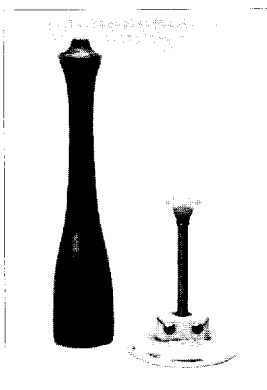
It took time for the new ideas to filter down to everyday practitioners in America and for these generally

Medical knowledge advanced rapidly as the new century approached. The discovery of antiseptics and development of germ theory were among the major medical advances.
COURTESY TOMPKINS-
MCCAW LIBRARY, VCU.

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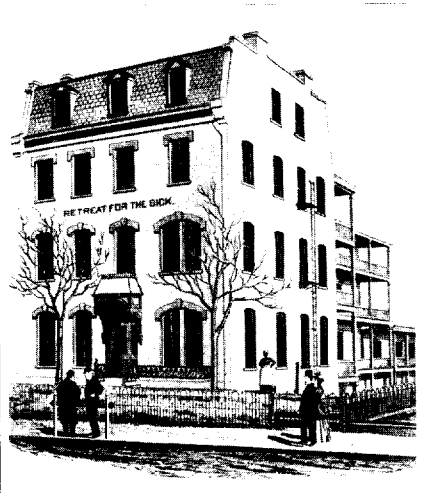


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The establishment of both public and private hospitals was on the rise in Virginia. Retreat for the Sick was founded in Richmond in 1877. 96



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Doctor S.W. Dickinson, to whom these examining tools belonged, moved to Marion, Virginia, late in the nineteenth century, one of many physicians who helped to bring modern medicine to rural Virginia. COURTESY MRS. BARBARA S. KENNIE. 97

Traditional medical instruments were evolving in design and new ones were being created as physicians entered into specialized fields of practice. COURTESY TOMPKINS MCGAW LIBRARY, VCU. 98-99

conservative physicians to absorb and accept them. Virginians were no exception. In response to a speech on the utility of antiseptic surgery presented at the September 1884 Medical Society of Virginia meeting in Rawley Springs, for example, Dr. Hunter H. McGuire remarked that Virginia country doctors did not need to concern themselves about antiseptic technique. "It is generally unnecessary," a fellow physician paraphrased McGuire as saying, because "the pure country air in Virginia [was] in itself aseptic."

Even when they were accepted, most of the innovations actually affected the treatment of diseases very little, though physicians could diagnose and prognosticate better than ever. Clinicians had given up the heroic doses of depletive drugs so characteristic of early nineteenth-century medicine in favor of lesser doses of tonics, stimulants, fortifiers, and relaxants. Bleeding was still used for certain specific problems, and such drugs as digitalis, opium and its derivatives, quinine, mercury, and the newly discovered salicylate preparations (now known as aspirin) had their defined uses. For the most part, however, treatments were still aimed at relieving symptoms rather than at curing diseases. Therapeutics would not catch up with diagnosis until the discovery of sulfa drugs and penicillin in the middle decades of the twentieth century.

The new knowledge allowed

FIFTEENTH ANNUAL REPORT
of the
Hampton Training School
For Nurses



And Dixie Hospital
Hampton, Virginia
1905-1906

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physicians to specialize their practices if they lived in population centers that afforded them a sufficient patient load. Some Virginia doctors began limiting their practices to, for example, eye, ear, nose, and throat (EENT), surgery, obstetrics and gynecology, and neurology, while others decried this trend, saying it spelled the end of the family physician. Doctors, they said, now treated cases of disease rather than diseased people.

As medicine became more scientific, and as new, more complex tests and procedures were introduced, the locus of practice began to shift from the patient's home to the physician's office or the hospital. It was much easier to perform surgery aseptically in the controlled environment of an office or operating room than on a patient's kitchen or dining room table. Blood and laboratory tests could also be done as needed and the patient's condition better monitored during recovery. The number of hospitals in Virginia's cities grew rapidly toward the end of the century as more physicians used them for surgery and diagnostic procedures. The function of hospitals as places for the medical care of the poor began to change as the middle and upper classes were admitted for more sophisticated and complex procedures.

The need for skilled assistants and for improved, knowledgeable patient care in hospitals spurred the professionalization of nursing in the late nineteenth century in the Old Domin-

STATE OF VIRGINIA.

APPLICATION FOR A LICENSE
OTHER THAN LIQUOR.

Geachwood County *Carroll*

Name of Applicant *W. H. Hall*

Signature of Applicant *W. H. Hall*

Nature of Business *Physician*

Amount of Tax provided by law *Five Dollars*

THOMAS BURNS CALDWELL, CLERK

Amount required \$ *10.00*

W. H. Hall

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ion and throughout the United States. St. Luke's Training School opened in 1886 at St. Luke's Hospital in Richmond to educate future nurses in the new medicine. Hampton Training School for Nurses began operation at Dixie Hospital in Hampton in 1891 as the first and only facility for the education of black nurses. Students at St. Luke's still studied blistering, cupping, and leeching, along with anatomy, physiology, and other modern scientific subjects.

The state's medical schools had to keep pace with advancements in medicine, too. If students were not well enough trained they would not pass the increasingly stringent medical licensing exams in states where they wished to practice. The University of Virginia Medical Department, the Medical College of Virginia, and, after 1893, the University College of Medicine, a private school in Richmond, competed for students and status. By 1913 the two Richmond schools had merged, and the state was left with two strong, publicly owned medical schools, U.Va. and MCV.

Virginia's medical profession changed with the times as well. The Medical Society of Virginia, re-established in 1870 after its dissolution in 1859, began meeting annually in various cities across the Old Dominion. One of its major objectives was the enactment of a medical licensure law that included establishment of a board of medical examiners. It took fourteen

Nurses had always played an important role in Virginia health care, but now formal training became available for blacks and whites across the commonwealth. 100

Prospective medical practitioners had to face a panel of physicians after 1884 and demonstrate a basic knowledge of medicine before being licensed. 101

HENKEL'S EYE-WATER.

This lotion is a valuable remedy in inflammatory affections of the eye, such as ophthalmia, blepharitis of the eyelids, inflammation of the conjunctiva, swelling and inflammation of the eye, and inflammation of the glands of the eye, inflammation occasioned by external violence or from some extraneous matter having lodged upon the ball of the eye for some time, or from the abuse of ardent spirits, &c.

DIRECTIONS.

In the morning and at bed time, the inflamed eye should be washed with this lotion, leaving washed it immediately before with cold water. The eye should also be washed four or five times a day with fresh water; and if there should be much discharge, it may be washed more frequently with cold water.

If the eye should be very much inflamed, or very painful, take a moderate dose of purgative pills or salts, twice or three times a week, so long as the eye is inflamed, and refrain from eating meat and rich gross food, and from the use of ardent spirits. Do not expose your eyes to a strong light, and keep out of the wind and dust. Keep your feet warm and dry, and do not breathe your eye with a thick husilage. The head and eyes should be kept cool. So long as your eyes are sore, you should not attempt to read or examine small objects.

The vial should be well shaken before using the lotion. This lotion is prepared in New Market, Shenandoah Co., Va., by

DRS. S. P. C. & C. C. HENKEL.

(HENKEL & Co., Patent, New Market, Va.)

HENKEL'S EYE-WATER

PREPARED IN

New Market, Shenandoah Co., Va., by

DRS. S. P. C. & C. C. HENKEL.



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African-Americans entered the medical profession in increasing numbers as the nineteenth century came to a close. One of these was Dr. William H. Hughes of Richmond.

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Despite advancements in diagnosis and treatment, many patients continued to turn to home treatments and to rely on readily available patent medicines. 103 104

years for such a bill to pass the legislature, but in 1884 Virginia finally had its first medical licensing regulation.

Regulars still felt keenly the competition from irregulars, including homeopaths, remnants of botanic healers, and new groups such as chiropractors and osteopaths, spinal manipulators from the Midwest. Patients continued to try home treatments, patent medicines, and quack devices.

Significantly absent from our discussions of late nineteenth-century medicine to this point have been blacks. As slaves, African-Americans received at least a modicum of medical care from their owners, overseers, and hirers. As free people, however, they were on their own. Few had enough money to pay physicians for needed medical care, so most did without it until emergencies arose. One Richmond physician, David Shelton Watson, wrote in January 1867 about blacks in the area:

Of the Thirty odd thousand colored people in and around Richmond I am probably over the mark in saying that not even one fourth now receive necessary Medical Attention, and probably not one half of these have the ability to pay the smallest fees if sick for any length of time. Those who are able (from the wages they receive) to pay, now waste their money in quack medicines, or are defrauded by impostors.

COOK'S
COMPOUND
SYRUP OF BUCHU,
For Gravel, Chronic Diseases of the Bladder, and Urinary Organs, Retention, or Incontinence of Urine, &c.

Buchu, as a medicine, has long been employed, in many diseases by the Physicians of the East of Good Hope. The modern English and Dutch Physicians observing that it had a decided special action on the Urinary Organs, introduced it into their practice for the treatment of Gravel, Chronic Catarrh of the Bladder and Urethra, Disease of the Prostate, Retention or Incontinence of Urine, &c., and from their recommendations, it has lately been employed in Europe and America, with decided effect, in similar cases.

The **Paris** Bureaux (another article entering into the composition of the Syrup) has been long celebrated on the continent of Europe, and has lately been introduced with complete success, by Dr. Simon, of Germantown, Pennsylvania, as a remedy for irritation of the Bladder.

Previous to presenting to the Medical Profession, a preparation containing the virtues of these articles, in an concentrated form as possible, the substance has been subjected to a series of experiments, which have resulted in a conviction that the Compound Syrup, now offered, will be found the most convenient form for medical use.

BUCHU DIRECTIONS.

An Adult should take Two Teaspoons full, three times a day, in a Wine-glass full of water, drinking freely during its use, of Flaxseed Tea, Gum water, or other mucilaginous drink; the quantity to be either diminished or increased a little, according to the effects. In some cases it may be necessary to intermit its use. These cases are known by observing a greater secretion of Urine than previous to its use; if this occurs, or, on the contrary, there may be a deficient secretion, in either case, if attended with pain, the remedy should be discontinued for two or three days, and then resumed with advantage.

Children may take the medicine in doses proportioned to their age, &c.

Since the introduction of this article a few years ago, it has been extensively used by a number of Physicians in various sections of the country, with the most beneficial results; and did the proprietors deem it necessary, many certificates could be produced from those who have used it successfully. As he does not, however, disseminate the names of these, he is at any advantage, he declares it, and would simply request those who need a remedy of the kind, to try it, and approve or condemn, according to the result.

PREPARED AT
DR. JAMES COOK'S & CO'S
DRUG AND CHEMICAL WAREHOUSE,
FREDERICKSBURG—VA.

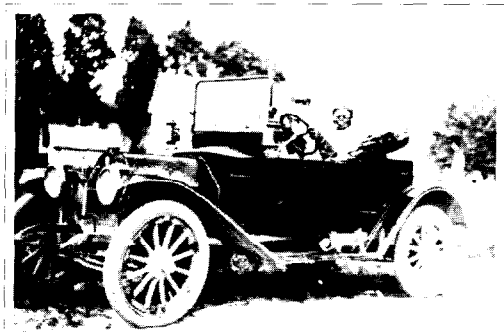
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Local physicians did provide some free care to blacks or accept payment in kind as they did for their white patients. Some labor contracts between white employers and black workers included provision for medical care, though often medical charges were deducted from the annual wage. Sometimes city or county governments provided medical care for indigent blacks either in almshouse hospitals or by hiring physicians.

After the Civil War African-Americans did not rely solely on whites to provide for them medically. The *sub rosa* medical system of neighbors helping neighbors, of local herbalists and midwives, and of conjurers still existed. Both MCV and U.Va. refused to admit black students to their classrooms despite the tax support both received from black and white citizens. Howard University Medical Department in Washington, D.C., Leonard Medical School of Shaw University in Raleigh, North Carolina, and Meharry Medical College in Nashville, Tennessee, all trained a number of black Virginia physicians.

These doctors usually returned to the Old Dominion and practiced among the black population. Excluded from membership in the Medical Society of Virginia, black physicians formed a state-wide medical society that met regularly at the turn of the twentieth century. (The Medical Society of Virginia admitted its first woman physician in 1895 and passed a



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rule admitting women equally with men in 1897.) Virginia's black physicians and black patients had to cope with medical life in an era of increasing segregation and of mounting racism. They also faced, with their white neighbors, an increasingly complex medical world as the twentieth century dawned.

Science was not the only force behind the changing face of medicine in late nineteenth-century Virginia and America. Technology had a profound effect on the way doctors practiced their profession and consequently on the relationship of doctors and patients. Telephones allowed physicians instantly to discuss medical matters with patients and their families. The automobile made it possible for the physician to meet with these people more quickly and easily. Patients could now reach their doctors shortly after a medical situation arose and get advice or care. House calls in horse and buggy were not as efficient as in an automobile, unless the roads were impassable, something that could easily happen in rural Virginia. Physicians could live in town, enjoy the company of other physicians, share new ideas and methods of treatment at medical society meetings, and still see their rural patients in good time.

Some doctors managed to retain portions of the old medicine in their practice of the new, or perhaps they integrated new medicine into their more traditional approach. One such



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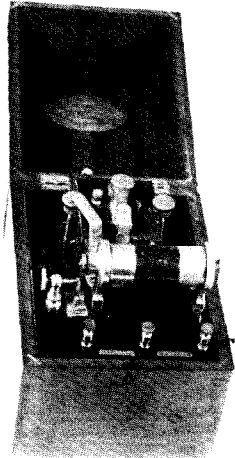
transitional physician was James Edward Copeland of Round Hill, Loudoun County.

Born in 1845 in Hillsborough, Copeland served with the Virginia cavalry during the closing days of the Civil War and remained a staunch advocate and apologist of the southern cause throughout his life. After receiving his degree from Baltimore's Washington University School of Medicine in 1876, he opened a practice in Rectortown, Fauquier County. By 1890 Copeland had moved to Round Hill and remained there until his death in 1937 at age ninety-one.

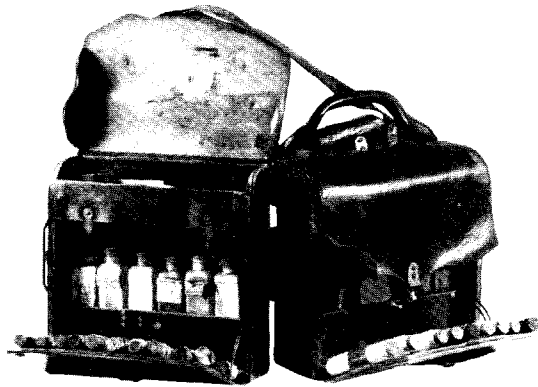
This country doctor kept up with new concepts in medicine by subscribing to and reading professional medical journals, but he applied what he read with extreme circumspection. Typical of his reluctance to change in the face of the new medicine was his strong advocacy of bloodletting in certain situations. In justifying its use for patients with acute pleurisy or acute pneumonia, the Round Hill physician concluded, "How bleeding affects the diplococcus of pneumonia [the bacterium that causes pneumonia], we leave the pathologist to determine."

Copeland owned several pairs of medical saddlebags containing bottles and boxes of the usual medicines of the period. According to his daybooks, he drove out in his buggy in all sorts of weather and in all states of health: "I had no fever this A.M. but felt very weak and have some cough, and back

For years physicians had relied on horses for mobility; the advent of the automobile revolutionized patient care. Doctor William Cosby of Painter is pictured with his driver in both modes of transportation on Virginia's Eastern Shore. COURTESY TOMPKINS-McCAW LIBRARY, VCU. 105-106



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of neck (as grippe) pains. Did not go out until afternoon, and drove around town only." He saw ten patients that day.

Copeland also owned a variety of plasters—strips of gauze treated with substances such as mustard to raise a blister or belladonna to cure intestinal upsets—and at least four electrotherapy machines. These latter were popular among physicians and considered a good form of treatment. The machines relieved physical discomfort by sending an electric charge through all or part of a patient's body.

Copeland was considered an excellent doctor both by his colleagues, who elected him president of the North East Virginia Medical Society in 1887 and vice-president of the Medical Society of Virginia in 1900, and by his patients, whom he served faithfully throughout his career. The contrast between his persistent use of bloodletting and his enlightened actions during a smallpox epidemic, when he took all the proper public health measures to prevent spread of the disease, illustrates the changing medical times. Copeland resisted many innovations in medical theory and practice, but when convinced of the necessity and convenience of new procedures, he integrated them into his treatments. He represents well the state of medicine in the Old Dominion at the turn of the century, the dawn of modern medicine.

WE BEGAN THIS ESSAY WITH A QUESTION:

How would you respond to a physician's recommendation for bloodletting if you were sick?

We suspect this booklet has not changed your mind and that your answer remains a heartfelt "no!" We hope, however, that you understand better why Virginians of European descent, until the present century at least, often said yes and meant it, why Virginia's Native Americans would have said no, and why Virginia's African-Americans might have been divided on the question.

A medical exchange took place in Virginia when three cultures met. Each group had its own medical customs and healing practices, some of which influenced the behavior of the other groups. Sometimes specific practices disappeared, but always the approaches used fit with each group's view of the world. They worked for its members, though they seemed strange, even useless or dangerous, to outsiders. Who knows? We may find ourselves judged harshly one hundred years from now. Some of our current medical practices may appear odd, if not downright harmful, to future Virginians. It is easy but not always appropriate to judge the past through the eyes of the present.



