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The Surgeon's Duty to Serve: The forgotten life of Paul F Eve, MD



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Paul Fitzsimmons Eve was one of the great surgeons in the South during the 19th century.¹ He completed his surgical training in Europe and served in several foreign wars as well as the American Civil War. He published more than 500 articles, introduced 14 operations to America, was president of the American Medical Association, and edited the *Southern Medical and Surgical Journal* and *Nashville Journal of Medicine and Surgery*. Additionally, he held the chair of surgery at 5 different medical schools and was the first professor of operative and clinical surgery at Vanderbilt University. Eve led a rich and colorful life; however, his legacy has been largely forgotten, even by surgeons in the South.



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Early years

Born on June 27, 1806, in Forest Hall, GA, on the Savannah River, 6 miles south of Augusta, Paul Eve was the son of Captain Oswell and Aphra Ann Eve and was the youngest of 11 children. His father, a merchant and rice planter by trade, served as captain of a Pennsylvania company during the American Revolution. While growing up in Pennsylvania, Oswell Eve was classmates with Benjamin Rush, a founding father who signed the Declaration of Independence, and William Shippen, Jr., the second surgeon general in George Washington's Continental Army.²

After preparatory school, Eve attended Franklin College in Athens, GA, which would later become the University of Georgia. Eve received his degree in August 1826 and elected to attend medical school at the University of Pennsylvania due to his father's connections within the medical profession in Philadelphia.

After 2 years of studies, Eve received his medical degree in 1828 and chose to pursue surgical training in Europe. Bound for England in 1829, Eve sailed for 28 days across the North Atlantic aboard a ship loaded with cotton. While in London, he attended lectures by Astley Cooper, James Paget, and James Abernathy. In 1830, Eve traveled to Paris, France and studied for 18 months under surgical giants of the early 19th century: Larrey, Dupuytren, Roux, Lisfranc, Cruveilhier, and Velpeau.³ He made lasting relationships with these surgeons and would correspond with them over his lifetime.²

Eve was in Paris on July 26, 1830, when the French monarch, Charles X, was overthrown by his cousin, Louis-Philippe, the Duke of Orleans. During this July Revolution, as it would become known, Eve gained his first experience in treating combat casualties.⁴ Later that same year, while Eve was still in Paris, Polish nationalists revolted against their Russian occupiers and ignited the November Uprising, or Polish-Russian War of 1830–1831.

Service to Poland

The Polish officer, Casimir Pulaski, had come to America's aid during the Revolutionary War, and Eve felt he should "repay Poland for the heroic Pulaski, who died during the siege of Savannah in our Revolutionary War."⁵ Pulaski, known as the "Father of the American Cavalry," was killed in action at the Battle of Savannah while leading a cavalry charge against British forces. The Polish general died near Eve's home in Georgia, and Eve was likely familiar with the account of Pulaski from his childhood.

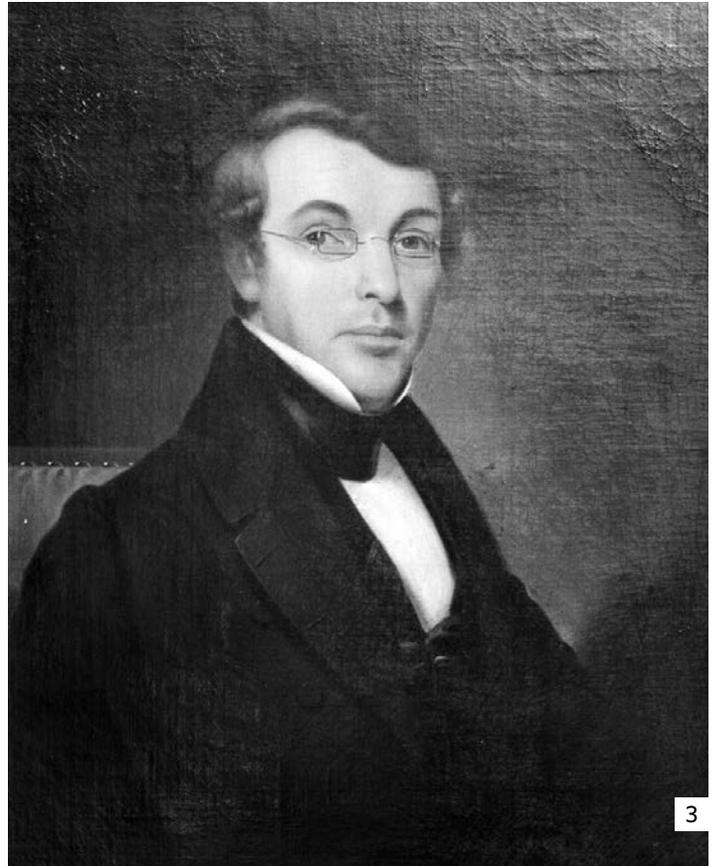
Aided by letters from his friend and consummate defender of liberty, the Marquis de Lafayette, Eve traveled to Warsaw from Paris. Reaching Poland in the spring of 1831, he first served in a hospital and was later sent to the front as surgeon to

General Turner's division.⁶ The war lasted only a few months and Warsaw fell to Russian forces in 1831. Eve was captured in neighboring Prussia. After developing cholera, Eve was able to obtain his release by letters again written on his behalf by General Lafayette.

Before traveling to Warsaw, Eve had formed a committee in Paris to raise funds to support the rebellion in Poland. After the conflict, the committee formally recorded its "admiration and praise for the zeal of Dr. Paul F. Eve of Georgia, who sacrificed his abilities, his time and even his own person for the Polish cause."⁵

During the November Uprising, on the recommendation of Count Place, chief of the Army Medical Service, Eve was awarded the Gold Cross of Honor of Poland, or *Virtuti Militari*.⁷ One of the oldest military decorations still in use, the *Virtuti Militari* is awarded for bravery and service and is similar to America's Congressional Medal of Honor. Eve was no mercenary; he refused payment for his service to Poland during the uprising.

In 1931, to celebrate the centennial of the November Uprising, the Polish government honored Eve's service by erecting a memorial on Greene Street in Augusta, GA (Figure 1). The American ambassador to Poland at the time, John North Willys, attended the event and remarked that Eve's "pioneer labor in establishing good relations has made easier the task of those



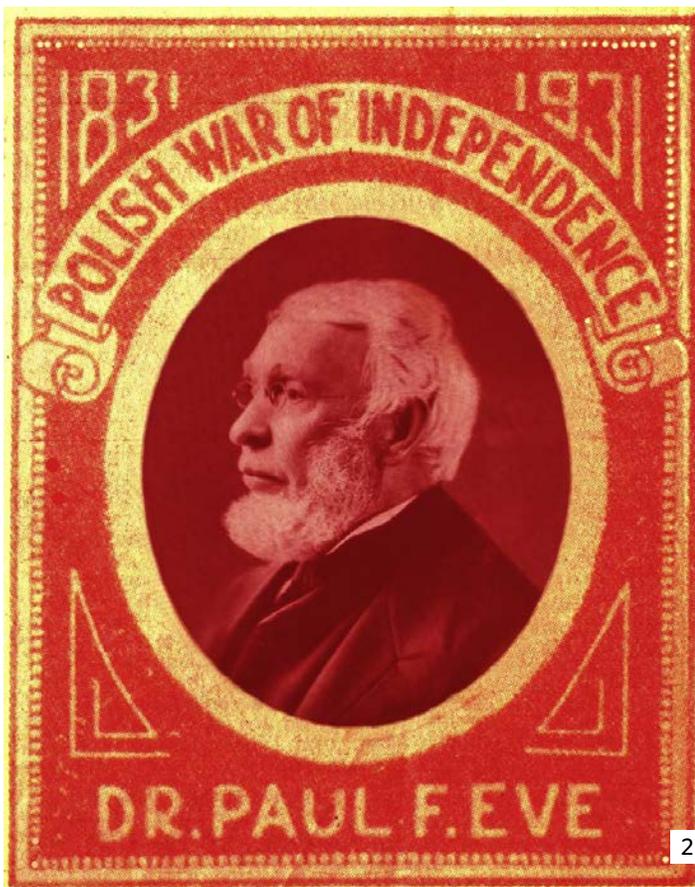
following him now."⁷ The Polish government also issued a commemorative postage stamp in his honor (Figure 2), and the Polish Army Medical Corps dedicated a plaque in Eve's memory at the Military Medical School in Warsaw.⁶

Eve returned to America in 1832, and was appointed professor of surgery at the newly opened Medical College of Georgia (Figure 3). He served on faculty in Augusta for 17 years and was elected vice president of the American Medical Association in 1847.

Mexican-American War and Second War of Italian Independence

In 1846, the Republic of Texas was annexed by the United States, leading to the Mexican-American War. Eve was the first physician to volunteer his services, and he entered Mexico with a Georgia regiment.⁴ He was given command of hospitals that received combat casualties from the Battles of Monterrey (May 1846) and Cerro-Gordo (April 1847). Eve recorded a vivid account of a penetrating chest wound suffered by General James Shields at the Battle of Cerro-Gordo.⁸ General Shields would survive the injury and go on to serve in the Civil War.

After the Mexican-American War, Eve succeeded Samuel D Gross as professor of surgery at Louisville Medical Institute in 1849. However, on learning that Gross was dissatisfied with his appointment at the University of the City of New York and wished to return to Louisville, Eve returned the chair in



surgery to Gross. In 1851, Eve joined the faculty of the Medical Department of the University of Nashville and succeeded AH Buchanan as professor of surgery. Eve cultivated surgical excellence in Nashville and was elected president of the American Medical Association in 1857, the first Tennessean given this distinction.

Eve returned to Europe in 1859 during the Second War of Italian Independence, a conflict involving the Second French Empire and the Austrian Empire. He visited the battlefields at Magenta (June 4, 1859) and Solferino (June 24, 1859), and also toured hospitals in Turin, Italy. Eve recorded several accounts of his travels during this war in the *Nashville Journal of Medicine and Surgery*.^(9,10) Additionally, he left copies of the *Nashville Journal of Medicine and Surgery* in Paris for his friend, Felix Larrey, son of Dominique Jean Larrey and surgeon to Napoleon III.²

American Civil War

When the American Civil War started, Eve was 55. In the spring of 1861, before Tennessee had seceded, he was appointed Surgeon General of the provisional Army of Tennessee: but he declined the position, preferring instead to enlist as a private in the Rock City Guards.¹¹ He continued to treat combat casualties in Nashville hospitals. After Tennessee's secession, he was finally appointed surgeon in the Confederate States Army on December 20, 1861.



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On February 6, 1862, Fort Henry on the Cumberland River fell to General Ulysses S. Grant's forces. With the invasion of Nashville imminent, Eve fled in the middle of the night on February 16, 1862, taking with him an instrument case from the University of Nashville. His family had already left the city, and he joined them in Augusta, GA. Within a week, Eve was made commander and surgeon of the Gate City Hospital in Atlanta. The 400-bed hospital, originally a hotel, was constantly overcrowded due to its proximity to a train depot. In just the first few months of 1863, Eve documented that the Gate City Hospital had already treated 1,253 casualties.¹²

After the war, he returned to the University of Nashville to resume his clinical activities. He left Nashville briefly in 1868 to take a position at the Missouri Medical School in St Louis. However, he soon returned to Nashville to become the first professor of operative and clinical surgery at the newly opened Vanderbilt University (Figure 4).

Contributions to surgery

In an era when surgery was notoriously dangerous, Eve successfully performed the principal operations of his day with low mortality. In 1846, he published his outcomes after 51 consecutive amputations, including 14 of the lower extremity. Although mortality rates in some European series, including those of Larrey, Roux, and Dupuytren, approached 50%, Eve had not lost a single patient.¹³ He described nothing "peculiar" about his method of amputation but put great importance on the compress placed over the wound.

Eve was perhaps best known for his work on lithotomy, an ancient operation to remove urinary calculi in the bladder. Eve's 100 cases of lithotomy were presented to the American Medical Association's annual meeting in San Francisco in 1867. He recorded only 8 deaths in 100 operations, a feat unparalleled at the time. The significance of this publication was not lost on Eve, who stated, "This may be the most complete synopsis ever made on the subject, certainly in our country."¹⁴

In 1850, Eve performed the first successful hysterectomy in the United States. Charles D. Meigs, professor of obstetrics at Jefferson Medical College, remarked that this operation had previously been attempted in Europe only 19 times. On April 24, 1850, Eve was called to see a 28-year old woman with an "incomprehensible mass" in her pelvis. After obtaining the patient's consent, he elected to resect the mass by a vaginal approach. During the operation he discovered the mass involved the uterus, and only after the hysterectomy was complete did Eve clearly see the cancer originated at the cervical os. The young woman lived for 3 months afterward, later dying from metastatic disease.¹⁵

Eve, it is said, introduced 14 new operations to America, 16 including removal of the crista galli to treat a skull fracture,¹⁷

removal of a nail from the left bronchus by tracheotomy,¹⁸ myotomy for the treatment of lower extremity deformity,¹⁹ trephination over the lateral sinus for a depressed skull fracture,²⁰ and the vaginal hysterectomy.¹⁵ Additionally, Eve's *A Collection of Remarkable Cases in Surgery*, an 823-page tome representing "uncommon events and strange circumstances," was meant to provide surgeons and trainees at least "one practical lesson: that is, not to be easily discouraged in desperate surgical cases."²¹

Legacy of service

Eve died suddenly on his way home after visiting a patient on November 8, 1877, at the age of 71, and was buried in Augusta, GA. After his death, memorial services were held at medical schools across the world and lecturers stopped their classes to pay respect to Dr. Eve.¹⁶ His close friend, Samuel D. Gross, said, "The history of my whole life presents no warmer friendship than that which it held for this great and good man."¹⁶

Eve was a model of distinguished service to community, country, and his fellow man. He diligently attended to his patients until his last day, and he advanced our understanding of surgical diseases and their management. Eve served his fellow man in Polanddborne out of duty to Poles for the efforts of General Pulaski. He aided his own country and its combatants in the Mexican-American War, and he served the South during the Civil War. Furthermore, Eve elevated the safety and reputation of surgery, and at a time when all American doctors were generalists, he helped establish surgery as a discipline in medicine. His undying spirit to serve was evident even late in life when he noted, "This head may have grown gray in hard service, and the evidence of old age has become apparent, but cut a little deeper, look within, and see if the fire kindled on the professional altar nearly a half century ago is not burning as brightly, as cheerily, and as vigorously as ever."²²

Perhaps Eve's most cherished appointment was his selection as a centennial representative to the International Medical Congress at Philadelphia convened in 1876 to celebrate the signing of the Declaration of Independence.³ In preparation for his speech, Eve wrote, "This great branch of the 'Healing Art' will not suffer, nor retrograde, at the hands of those to whose care it is confidently committed. Using the idea of the great Nelson at the Battle of Trafalgar, we would say that 'Surgery expects every man to do his duty.'"²³

The deep sense of duty that stirred Eve to serve continues to inspire 21st century surgeons. Duty binds us all to our patients and communities. Some surgeons labor in underserved areas of America and others are committed to resource-poor regions abroad.^{24,25} Today's surgeons treat combat casualties on the battlefield as members of the United States Military Health System, in addition to serving active-duty personnel and their

families.²⁶ Duty moves many to care for the veterans who have aided our country in times of conflict.²⁷ The promise of increasingly effective and safer therapies drives us to innovate for the benefit of humanity. Finally, duty to our colleagues pushes us to invest in the future by training the next generation of surgeons. Embracing a sense of duty to our community, country, and humankind, so embodied by Paul F. Eve, should be a part of professional life in medicine in the 21st century and is his chief legacy to us.

Acknowledgment

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Legends

Figure 1. Unveiling of the memorial honoring Eve for his service during the Polish-Russian War of 1830-1831. (Photo courtesy of the Tennessee Historical Society and the Tennessee State Library and Archives.)

Figure 2. Commemorative postage stamp honoring Eve's service to Poland during the Polish-Russian War of 1830-1831. (Photo courtesy of Eskind Biomedical Library, Historical Collections. Photo has been modified from the original.)

Figure 3. A young Paul Eve while professor of surgery at the Medical College of Georgia. (Photo courtesy of the Tennessee Historical Society and the Tennessee State Library and Archives.)

Figure 4. A rare photograph of Eve in his later years while in Nashville. (Photo courtesy of the Tennessee Historical Society and the Tennessee State Library and Archives.)