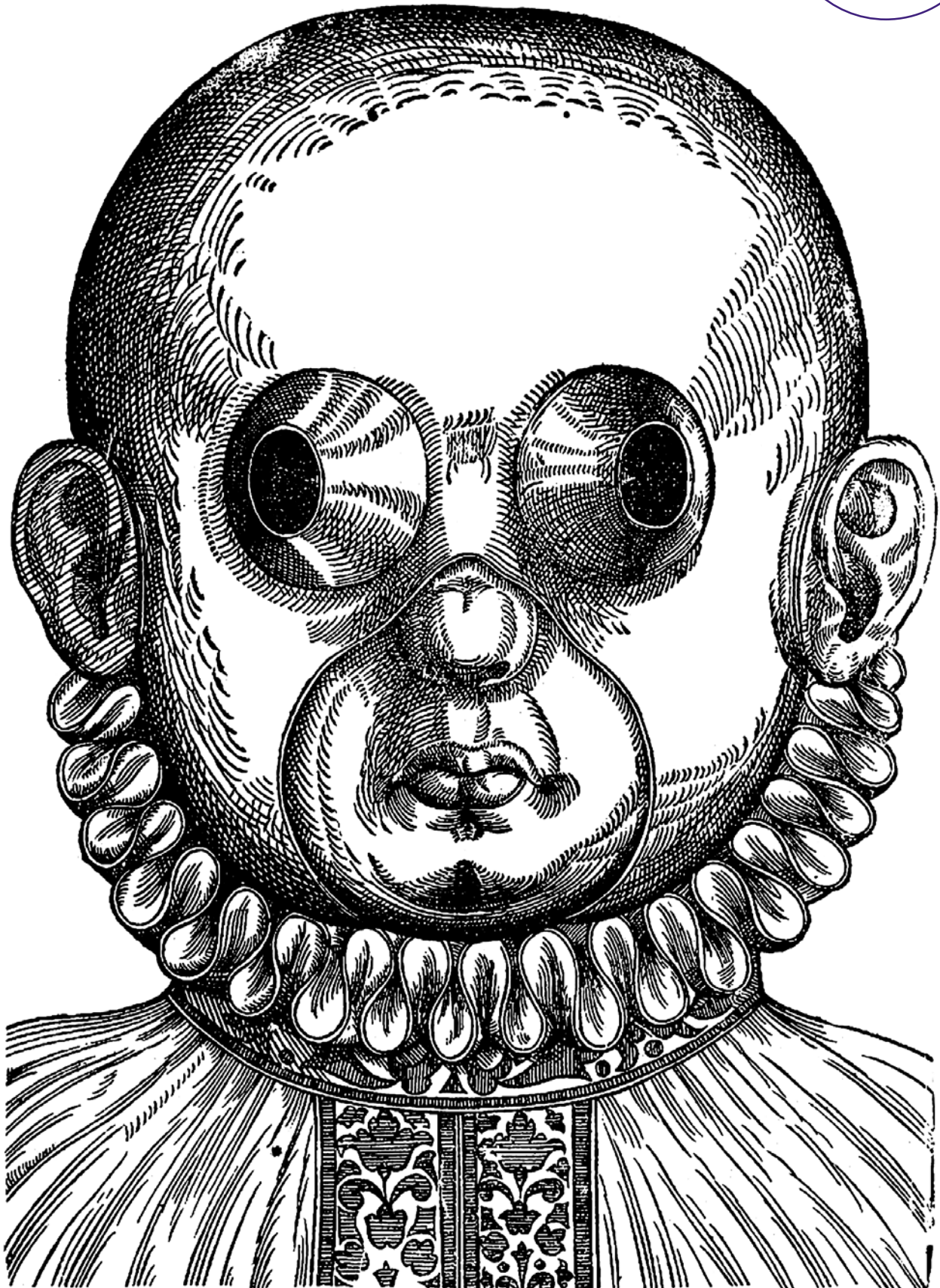




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Ophthalmodouleia: das ist Augendienst, George Bartisch (1535-1606), 1st edition, 1583,  
Spencer E. Sherman; MD Antique Ophthalmology Book Collection

#museumoftheeye

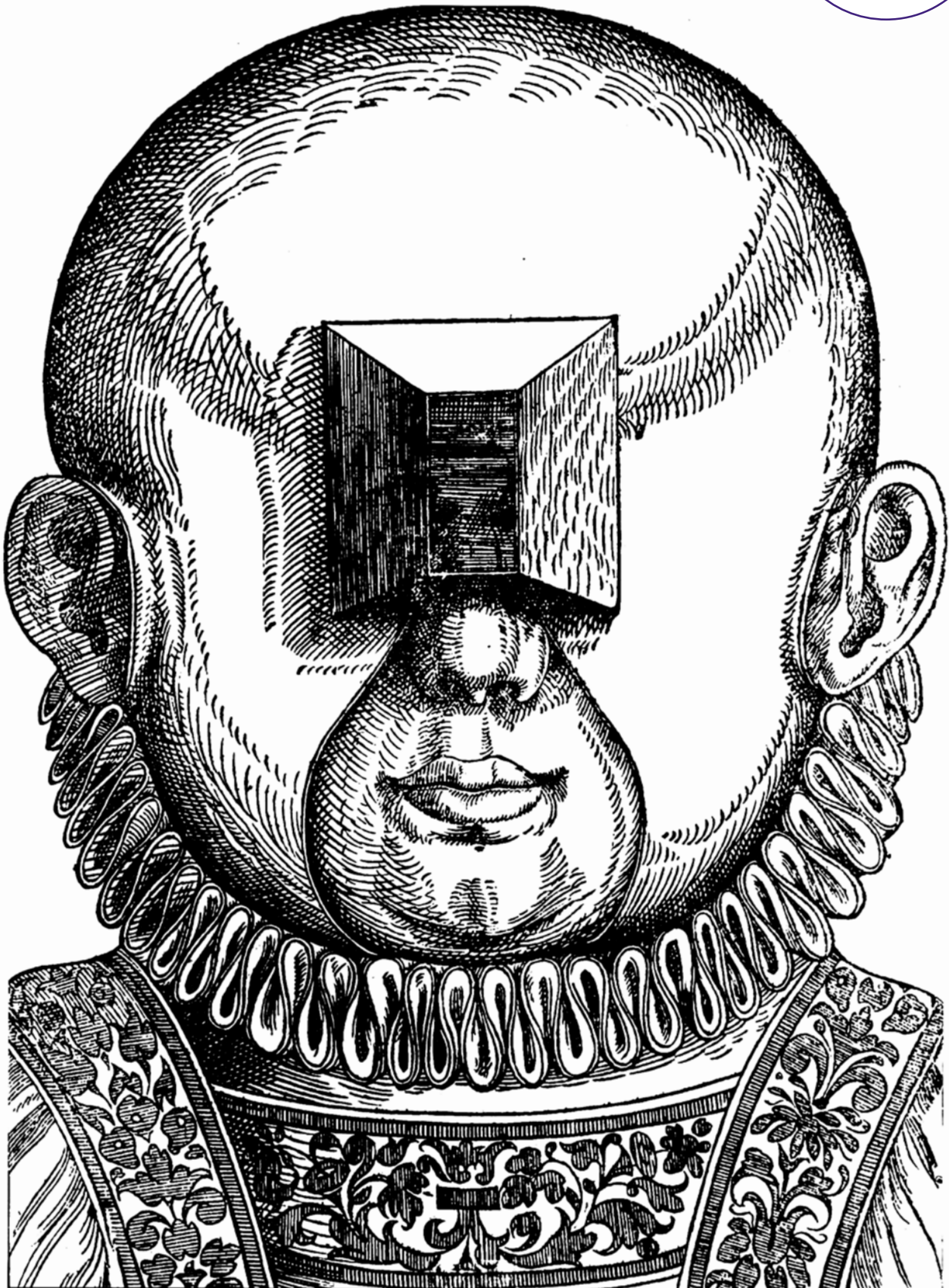




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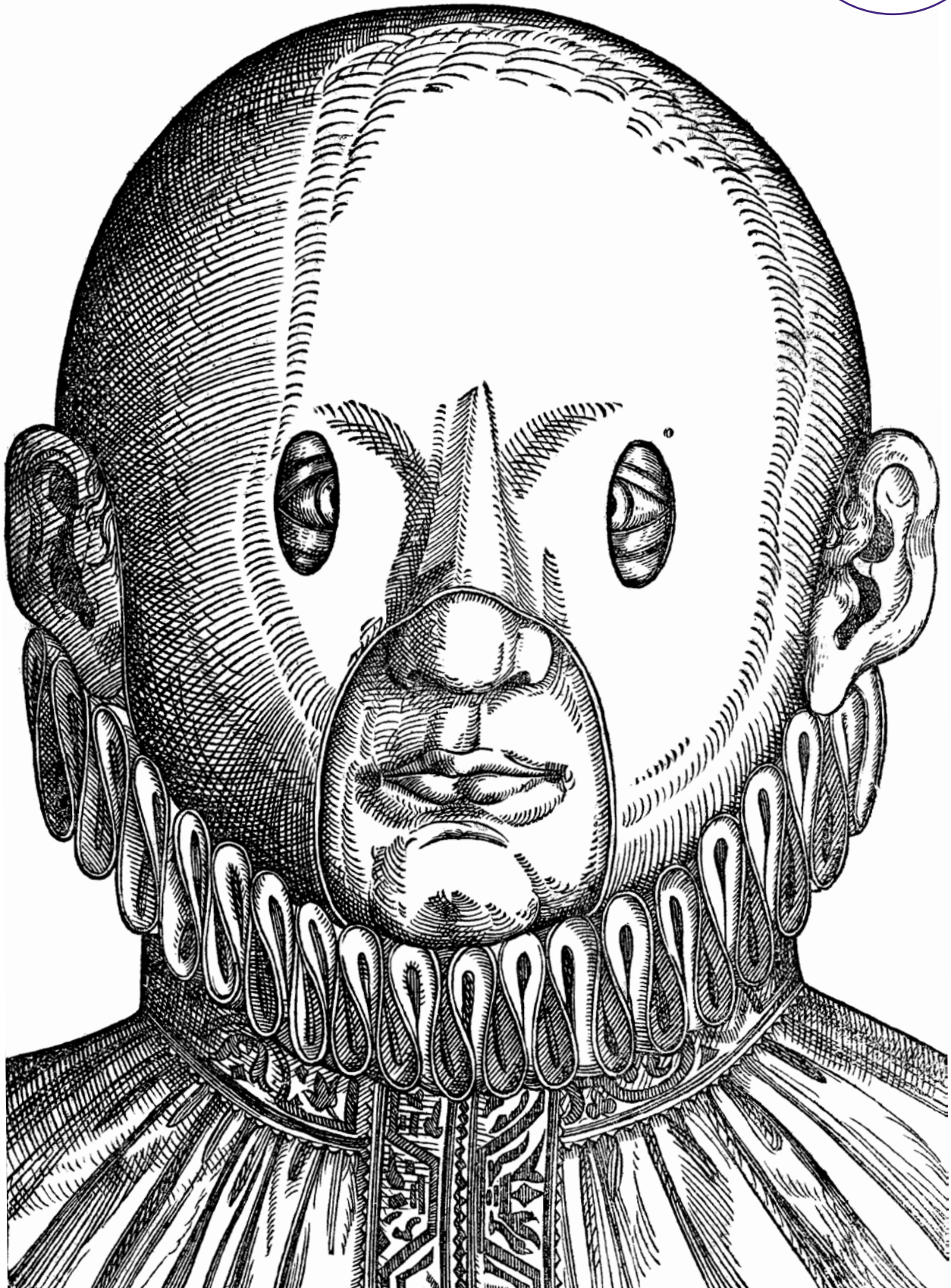




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## **Strabismus and *Ophthalmodouleia: das ist Augendienst (Ophthalmology: That Is the Service of the Eyes)***

These Renaissance-era images depict historic methods used to cure strabismus, a condition in which a person's eyes point in different directions. They are from the first ophthalmic book published in vernacular German, *Ophthalmodouleia: das ist Augendienst (Ophthalmology: That Is the Service of the Eyes)*, written by Georg Bartisch (1535 -1606). This was the first extensively illustrated book for any surgical specialty. It contains 91 full-page woodblock prints, many of which Bartisch made himself. Together, the text and images present an astonishing record of the practice of ophthalmology during the Renaissance period.

During the Renaissance, scientists gained a better understanding of how the eyes work. Johannes Kepler (1571 -1630) described the image formed on the retina and Christiaan Huygens (1629 -1695) was the first to describe how both eyes work together. Unfortunately, there was little that physicians could do to treat misaligned eyes or strabismus. Patients wore masks to force their eyes to look in only one direction, such as these training masks recommended by Georg Bartish in 1583.

### **About Strabismus**

Strabismus is a visual problem in which the eyes are not aligned properly. One eye might look straight ahead while the other eye turns inward, outward, upward or downward. About four percent of the U.S. population has strabismus. It can occur in both children and adults. The condition can be constant or intermittent and can vary in different gazes.

Strabismus refers to several conditions that result in a misalignment of the eyes. The brain controls eye movement by using six muscles attached around the outside of the eye. To align and focus both eyes on a single target, all the muscles in each eye must be balanced and working together.

In normal alignment, both eyes aim at the same spot. The brain then combines the two images into a single, three-dimensional image. This three-dimensional image provides depth perception and the ability to perceive how far away things are. When one eye is out of alignment, two different pictures are sent to the brain, which results in double vision or the brain "shutting down" one eye.





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Ophthalmodouleia: das ist Augendienst, George Bartisch (1535-1606),  
1st edition, 1583; Gift of Christopher Blodi, MD

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## The History of Couching

Cataract surgery was practiced by many ancient cultures. One surgical practice was called *couching*, as depicted in these images. This surgery physically displaces the lens by pushing it out of the line of vision. Another surgical practice is called *needling*, which breaks the lens into smaller pieces. Neither of these surgeries left patients with perfect vision, but they avoided total blindness.

Both needling and couching were still being performed during the Renaissance era. In 1583, George Bartisch (1535–1606) wrote about couching and illustrated the procedure.

Georg Bartisch (1535 –1606) was a surgeon who limited his practice to ophthalmology and hernia repair. His book, *Ophthalmodouleia: das ist Augendienst* (*Ophthalmology: That Is the Service of the Eyes*), was the first ophthalmic text written in vernacular German. It was also the first extensively illustrated book for any surgical specialty. It is an astonishing record of the practice of ophthalmology during the Renaissance period.

Bartisch had much to say about how to fashion a cataract needle and perform couching. He also took pains to describe where to perform the surgery. He warned patients away from itinerant surgeons at the marketplace. Instead, he suggested surgery should take place inside a “light chamber in which the patient shall have his bed and covers; so that he need not go far. The nearer the bed, the better it is.” Sound advice in an age before anesthesia.





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Ex-voto, Silver, 19th Century, The Harriet and J. William Rosenthal, MD Collection

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## **Ex-Votos and Milagros**

*Ex-votos* are small offerings created to ask deities for favors or to thank them for help. From the Latin meaning “from a vow,” ex-votos can take the form of a painting, sculpture or similar item. They are found all through the ancient world but in more modern times have evolved into *milagros*.

Milagros, Spanish for “miracles,” evolved in Western Europe as small, pressed -metal objects shaped to resemble body parts that require healing. Hands, feet, hearts and eyes can all be found shaped out of tin, brass and silver. Milagros are rubbed on the body parts they represent and then used to ask patron saints for cures or to thank them for a miracle. Catholic conquistadores brought the practice to the Americas, where it still thrives in churches and at home altars.

This image is of an object from the museum’s collection. It is believed that this object is meant to be used as a milagro by an individual seeking divine intervention for an eye ailment. It is an oval plate embossed with two eyes and eyebrows, surrounded by a filigree design consisting of flowers, leaves and a cherub with wings at the bottom. It has a loop for hanging.



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# Ophthalmologisches Festessen

Berlin, am 6. August anno 1890.

## MENU.

*Kraftbrühe mit Gemüse* Old Sherry  
*Rinderfilet sauce Madeira* 84er Chât. Portets  
*Kartoffel Croquettes*  
*Rheinlachs mit holländ. Sauce* 84er Ründesh.  
Bischofsberg  
*Vol au Vent à la toulouse* Laubenheimer



### **Ophthalmic Menu from the Grand Hotel Bellevue, Berlin**

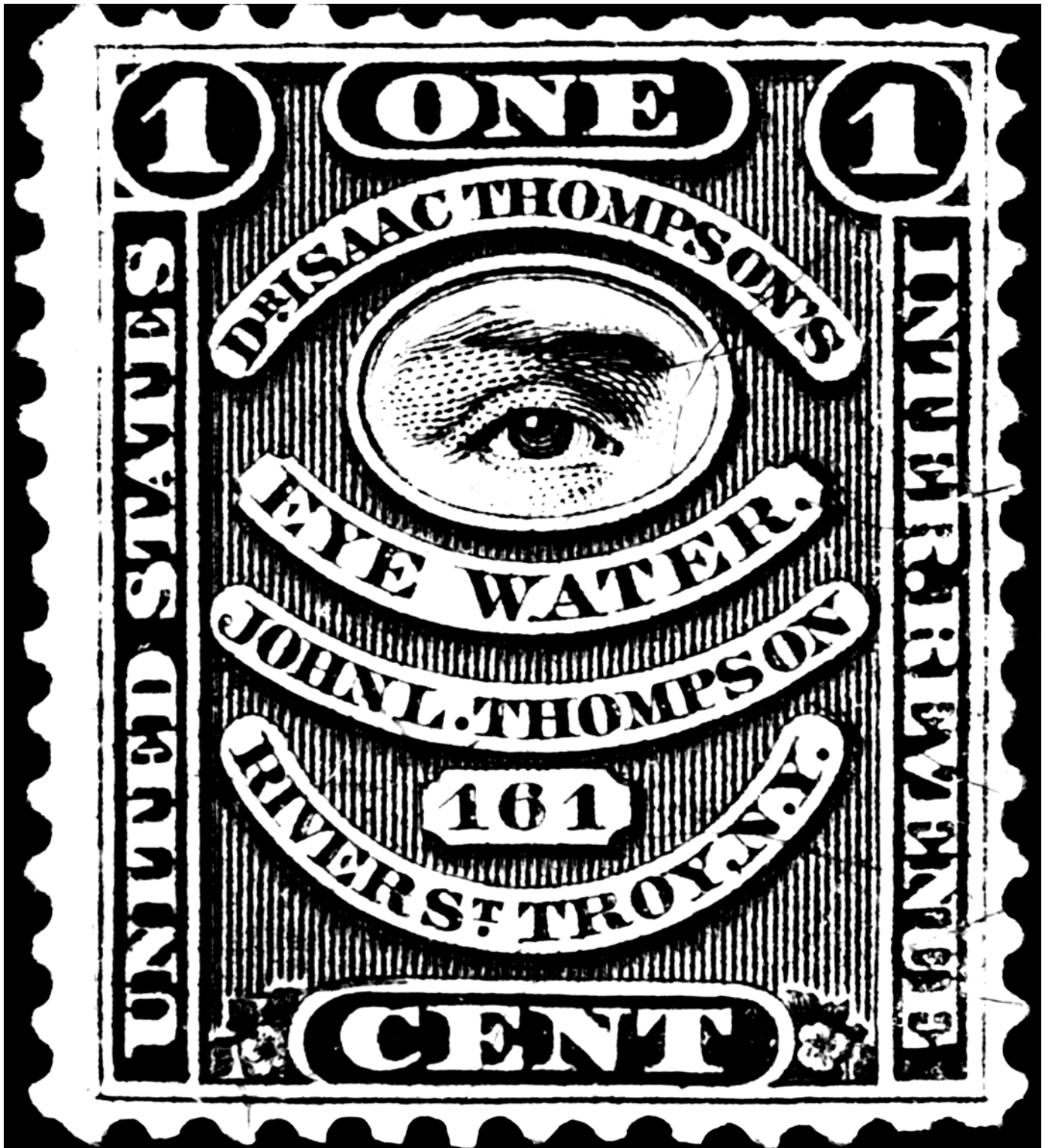
Pictured here is an *Ophthalmologisches Festessen* (Ophthalmic Banquets) menu from the Grand Hotel Bellevue, Berlin. The dinner was held on Aug. 6, 1890. There is no indication of exactly who or what the dinner was for, but all the iconography screams ophthalmology! The text is in German and showcases an elaborate drawing of an owl having eye surgery by fairies. Across the top is a portrait of Albert (Albrecht) von Graefe (1828–1870), a Prussian pioneer of German ophthalmology. The menu was printed by Heinrich Riffarth, a well-known photographic art print house that specialized in selling reproductions of drawings and paintings.



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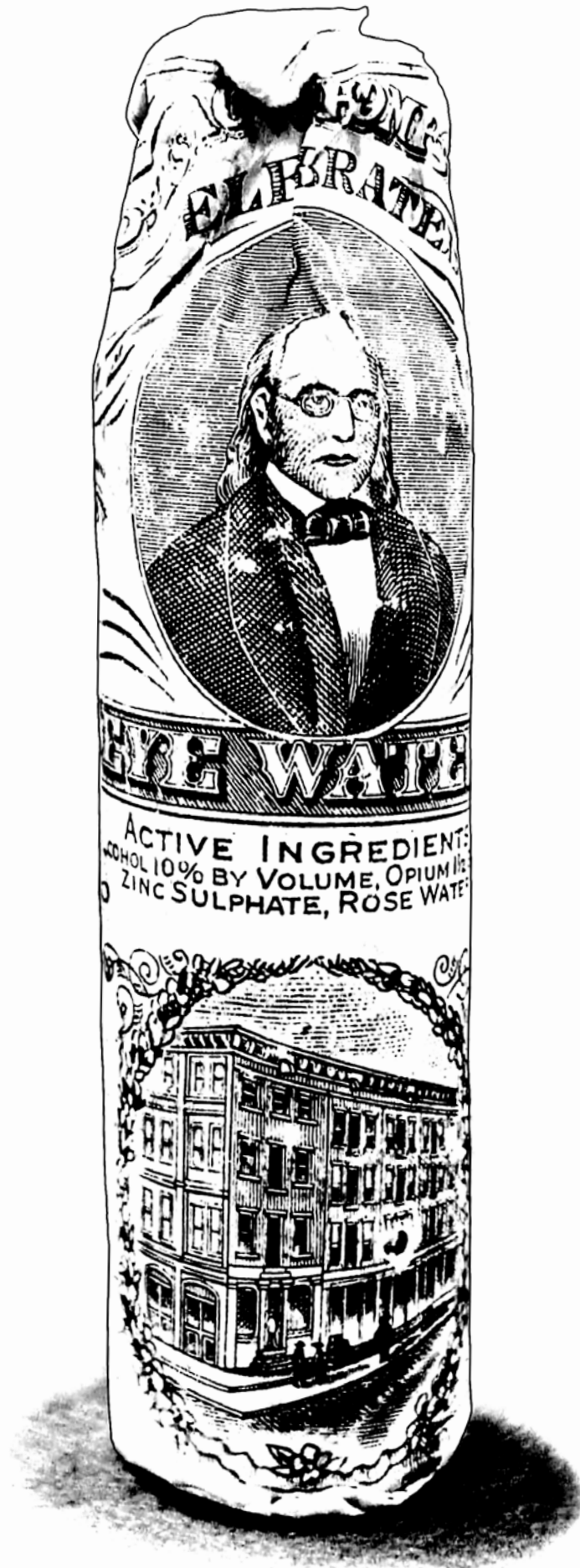




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Dr. Isaac Thompson's Celebrated Eye Water, 1880-1900, Gift of Andrew Ferry, MD

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## **Remembering the Civil War Through Ophthalmic Revenue Stamps**

In 1861, eleven states seceded from the United States of America and formed the Confederacy. On April 12 of that year, the Confederate army attacked the United States at Fort Sumter, South Carolina, starting the American Civil War. The war ended four years later in 1865 when Confederate General Robert E. Lee surrendered to U.S. General Ulysses S. Grant.

The American Civil War was costly both in terms of lives lost and money. In order to help pay the Union Army, the United States Congress passed the Tax Act of 1862. The act required that a stamp be affixed to a wide array of goods and services. Manufacturers were given a discount if, instead of using the government issued stamps, they provided their own dies and cut the stamps themselves. Over 300 companies took advantage of this discount, creating unique stamps that became branding opportunities for their products. Among these companies, 120 were manufacturing over-the-counter medications known as patent medicines.

Prior to the Civil War, patent medicine was big business and the government saw a way to make some money from their popularity. Revenue stamps did so well, in fact, that they were required long after the Civil War was over. The Proprietary Medicine Manufacturers and Dealers Association finally lobbied Congress to repeal the tax in 1883. It's estimated that 8 billion stamps were affixed to products during this period and that 5.3 billion of them were printed from private dies.

One ophthalmic patent medicine company that chose to create a private die revenue stamp was Dr. Isaac Thompson's Celebrated Eye Water. Introduced in New England in 1795, this eye water is believed to be the longest-selling patent medicine. Originally the product contained alcohol, zinc sulphate, opium and rose water and was advertised to sooth eyes. Manufacturing of the eye water ceased in 1955 after 160 years of production.