

History of Eyeglasses

In a real sense, the history of opticianry is, in fact, the history of eyeglasses and contact lenses. Here is a brief timeline, featuring more than 65 hallmark events:

5th century BC	The earliest known reference to eyeglasses appears in an ancient Egyptian hieroglyph. It depicts a simple, glass, meniscal lens that could have been concave (minification) or convex (magnification).
1st century AD	The earliest known written reference to eyeglasses appears in the writings of Seneca the Younger, a tutor to the Roman Emperor Nero. He wrote, "Letters, however small or indistinct are seen enlarged and more clearly through a globe or glass filled with water." Nero is also said to attend gladiatorial games wearing some sort of green (most likely emerald) glasses.
1021	The use of a convex (plus power) lens in order to magnify is written about in <i>The Book of Optics</i> by ibn-al Haytham, better known by the singular name Alhazan (965-1040), a Muslim scientist, astronomer, and mathematician. The translation of his book from the Arabic in the 12th century to Latin paved the way for the invention of eyeglasses in 13th-century Italy.
1263	Roger Bacon first mentions that lenses are useful to people with "weakness of sight."
@ 1286	The first eyeglasses probably originated somewhere in Italy in the late 13th century. (It should be noted that some modern anthropologists insist that they may have appeared a bit earlier both in China and India, though much of that evidence is anecdotal.)
1300	The term "eyeglasses" used for the first time.
1301	Guild regulations in Venice, Italy are instituted for the sale of eyeglasses.
1306	In a sermon that took place on February 23, 1306, Giordana da Pisa (1255-1311) said, "It is not 20 years since there was found the art of making eyeglasses, which make for good vision...and it is so short a time that this new art was discovered...I saw the one who first discovered and practiced it, and I talked to him." Giordana's colleague, Alessandro della Spina (1260-1313), also of Pisa, and like Giordana, a Dominican friar, was soon also making eyeglasses. <i>The Ancient Chronicle of the Dominican Monastery of Catherine in Pisa</i> noted, "Eyeglasses, having first been made by someone else who was unwilling to share them, he [Spina] made them and shared them with everyone, with a cheerful and willing heart."
1319	Rules developed to regulate the eyeglass-making trade in Italy, requiring craftsmen to meet certain standards with regard to materials and workmanship.
1352	A portrait by Tomasso da Modina depicts Cardinal Hugh de St. Cher wearing what look like modern-day spectacles.
@ 1440	The invention of the Gutenberg printing press brings books to the masses.
1475	The first-known illustration of spectacles in print appears.
1535	German Spectacle Makers Guild is formed in Nuremberg.
1629	The Worshipful Company of Spectacle Makers is formed in London by Charles I.
1724	London optician Edward Scarlett, Sr. advertises "Sidearms for spectacles."
1752	James Ayscough (died 1759) invents a double-hinged temple piece.
1761	Benjamin Franklin (1706-1790) conceives of the idea of a split, bifocal lens.
1783	Addison Smith is granted the first patent for "double spectacles."
1797	John Richardson invents four-lens spectacles with lenses that rotate in from sides.
1801	Thomas Young (1773-1829) discovers astigmatism.

1806	John McAllister makes round, Franklin bifocals for President Thomas Jefferson, who had designed the lenses himself.
1825	Robert Bate invents a spring mechanism for the traditional lorgnette.
1825	George Airy corrects his own astigmatism with a pair of sphero-cylindrical lenses.
1827	John Isaac Hawkins of London devises and patents trifocals.
1833	American Optical (A.O.) formed in Southbridge, Massachusetts, when William Beecher makes coin-silver spectacles.
1862	Hermann Snellen (1834-1908) develops test types and eye charts to measure visual acuity. (Think 20/20, 20/30, 20/40, etc.)
1883	A.O. produces first ophthalmic lenses in the United States.
1887	Swiss ophthalmologist Adolph Fick first conceives of the contact lens.
1894	First school for refracting opens in Boston. Eventually it will become the New England College of Optometry.
1898	Formation of the American Associations of Opticians. Name changes in 1910 to the American Optical Association. In 1919 it becomes the American Optometric Association.
1904	British scientist, Dennis Taylor, develops a process to artificially age ophthalmic lenses for the purpose of reducing reflections, marking the genesis of the anti-reflective technology of today.
1926	The Opticians Association of America (OAA) is founded. Originally it was known as the Guild of Prescription Opticians.
1935	Introduction of Anti-Reflective (A.R.) coatings developed by Alexander Smakula of Zeiss.
1939	Plastic contact lenses introduced by Theo Orbig and John Muller. PMMA (polymethyl methacrylate) was originally discovered in 1915 as a paint binder.
@ 1942	Acrylic lenses pave the way for modern plastic lenses of today.
1947	Armorlite introduces the first ophthalmic, plastic (CR-39) lenses.
1949	The state of Florida's legislature makes opticianry a licensed profession in the state, creating the Board of Opticianry and the parameters within which it must operate - Florida Statute 484, part I.
1953	Polycarbonate discovered by Dr. Hermann Schnell while working at Bayer.
1959	Working at Essilor, Bernard Maitenaz creates Varilux lenses, the first commercially successful progressive lens.
1959	Zeiss releases ophthalmic, glass lenses with an A.R. coating.
1962	First lightweight, plastic ophthalmic lenses were made.
1964	The first commercially successful photochromic, glass lenses - Photogrey - are introduced by Corning.
1965	National Eye Institute (N.E.I.) established.
1971	The Food and Drug Administration (FDA) approves Bausch and Lomb's soft contact lens design.
1972	Essilor introduces Varilux II - a classic mono-designed progressive lens.
1974	Bausch and Lomb begins marketing contact lenses to the public.
1974	Zeiss releases plastic, ophthalmic lenses with an A.R. coating.
1976	The American Board of Opticianry (ABO) and the National Contact Lens Examiners (NCLE) are formed.
1978	Rigid Gas Permeable (RGP) contact lenses introduced
1981	FDA first approves some soft contact lenses for extended and overnight wear.
1983	Zeiss Gradal progressive lenses with identical visual conditions for both eyes in all directions released.

1983	Polycarbonate ophthalmic lenses formally enter the marketplace under the trade name Gentex.
1987	Introduction of disposable contact lenses.
1989	Optima produces higher-quality polycarbonate lenses.
1990	Transitions, headquartered in Pinellas Park, Florida opens its doors.
1991	Transitions offers its First-Generation of Transitions - plastic, photochromic lenses.
1992	Transitions introduces its Second-Generation of Transitions lenses.
1993	Varilux Comfort lenses introduced, featuring swift adaptation and comfort.
1996	Introduction of 1-Day disposable contact lenses.
1997	Transitions releases its Third-Generation Transitions lenses; also begins to offer Transitions in polycarbonate material.
2000	Essilor introduces the Panamic progressive lenses, touting them as the widest field of any progressive lens available up to that time.
2001	PPG releases ophthalmic lenses in a new material called Trivex. It features impact resistance that rivals polycarbonate, has a higher Abbe value for clearer optics, is not chemically sensitive, and is now the absolute lightest material available.
2002	Silicone Hydrogel contact lenses first introduced.
2006	Varilux Physio lens, high-resolution lens first introduced by Essilor; other lens manufacturers soon offer similarly designed lenses.
2007	iScription is the first lens to combine subjective refractive information and personalized wave-front technology to create a truly "individualized" lens.
2012	Varilux S series introduced by Essilor, which calls it "a premium range of progressive lenses powered by Nanoptix - a technology designed to ensure equilibrium in motion, and SynchronEyes - guaranteed to provide wide-angle vision.
2013	The latest Progressive Lens Identifier lists information on more than 250 unique progressive lens designs; two of them feature minimum fitting heights of only 11 mm.
2015	On-line refractions begin to appear on the Internet.
2018	Acuvue releases Transitions contact lenses in April.



13th Century Painting by Italian artist Tommaso da Modena, thought to be the first depiction of eyeglasses in Western art.