SCIENTIFIC INSTRUMENTS

GAGGLES OF GLASSES

Among the many different types of antique eyeglasses you might see at auction are nose spectacles, lorgnettes, pince-nez, and scissors spectacles. What is the difference?

• Nose spectacles began as early as the 13th century and have no sides.
• Lorgnettes, on the other hand, have a little handle on one side. (In 2000, Christie’s sold a jeweled two-color gold and enamel lorgnette marked Fabergé for $32,900.)
• Pince-nez, like nose spectacles, have no sides; they stayed in place by “pinching the nose.” They came much later than nose spectacles—c. 1840. Christie’s sold a set of late 19th/early 20th century pince-nez for $1,850 in 2005, but they can be had at far lower prices; one eBay bidder recently got the pair above for $125.
• Scissors spectacles, of course, look a lot like a pair of scissors. There are two lenses on a Y-shaped frame, with one lens sticking up in front of each eye. George Washington gave scissors spectacles to Lafayette; the Smithsonian Institution now owns that pair.

KEEP AN EYE OUT FOR...

When picturing a glass eye, many think of a ping-pong-ball-shaped glass piece. Wrong. Dr. Gary Edwards explains that a glass eye is more like a curved slice from the front of a ping-pong ball, and not sphere at all. These days, “glass” eyes are actually made of acrylic; traditionally, they actually were made by blowing glass. An artist would paint the small curved piece of glass to match a real iris and pupil as closely as possible.

Today, with more cures for eye-related conditions and better surgical techniques, the need for glass eyes is low. But collectors of both ophthalmic items and antique dolls look for vintage ones; examples turn up on eBay for $20–$40. Edwards recently sold a box of 21 blown glass eyes from around 1900 for $599. —L.G.

ANTIOQUES ROADSHOW INSIDER

SPECTACULAR SPECTACLES...

...and other ophthalmic antiques: Don’t overlook these visual artifacts that reflect the history of vision care.

By Laura Gehl

Eyeglasses are one of the greatest inventions of all time, yet they are taken for granted,” says Dr. David Fleishman, retired ophthalmologist and international authority on antique eyeglasses.

Fleishman started collecting glasses some three decades ago with a lucky find at the Brimfield flea market in Massachusetts. For just $25, he got his hands on a pair of c. 1600 leather-framed eyeglasses in a wooden case. Since then, he has been offered $8,000 for that pair of spectacles (and said no).

Fleishman explains that leather-framed eyeglasses are generally the oldest antique specs you can buy. Slightly more than 100 pairs of these leather-framed eyeglasses are known to exist—about 20 in the U.S. and the rest in Europe. Anything earlier than these would probably be in a museum.

Thirty-five years later, after amassing Chinese eyeglasses, Japanese eyeglasses, solid gold eyeglasses, and early American eyeglasses, Fleishman is still adding antique spectacles to his collection.

Just this year, he bought a pair of glasses on eBay that he hopes will stay in his family for generations. The glasses have tiny lenses, each one smaller than a dime. They were made by John McAllister, the first optician in the U.S., based on the drawing of a very special client: Thomas Jefferson. Fleishman paid $3,100 for the pair.

Getting a pair of antique glasses with its original case is a definite win for any collector. But a really special case, such as one made of sharkskin or solid gold, might also come up for auction on its own. Fleishman bought a case made of silver, ivory, mother of pearl, and tortoiseshell for $350 in 2003.

He also bought a pair of Nuremberg nose spectacles inside a wooden case at Skinner Inc. several years ago. The case pre-dated the spectacles by about 100 years and likely held leather-framed glasses originally. Fleishman liked both the glasses and the case, despite the fact that they definitely did not belong together.

Sometimes a group of cases may appear at an auction as well. In 2003, Christie’s sold a lot of four Chinese eyeglass cases made of lacquered wood incised with flowers, birds, and poetry for $1,016.

Dr. Laura Gehl, former editor of Science Weekly, writes on scientific and medical topics for adults and children. In Insider, she has covered antique medical instruments (July 2014), microscopes (May 2014), binoculars (April 2014), and telescopes (March 2014).
Dr. Gary Edwards is a collector of antique ophthalmoscopes and surgical instruments. Until 1851, he explains, the inside of the eye could be seen only after a person’s death, through dissection. Trying to look into the eye was like looking into a dark room through a keyhole. The invention of the ophthalmoscope allowed doctors to look into the eyes of their patients. Back in the mid-19th century, before the distribution of electricity into our homes and buildings, an ophthalmologist would use a gaslight or candlelight reflected off of a mirror. Other than the addition of an electric light, ophthalmoscopes haven’t changed much since 1851. Nonetheless, about 100 different models of ophthalmoscopes exist, because many famous ophthalmologists created their own versions. Edwards’ collection includes instruments by Liebreich, Loring, Knapp, and Wessely. If money were no object, Edwards would love to own a Helmholtz ophthalmoscope. Herman von Helmholtz (1821–1894) invented the first ophthalmoscope in Germany in 1851. Today his instruments go for about $10,000.

KERATOMES AND CATARACTS
“The evolution of cataract surgery is one of the most dramatic changes in modern medicine,” Edwards says. You’ll likely agree if you contemplate Edwards’ antique keratomes (or keratomes).

Back in the late 1800s and early 1900s, a keratome—looking like a small arrowhead at the end of a stick—would be used to stab into the eye in order to remove the entire lens. The cataract victim, er, patient, would then be forced to wear glasses as thick as magnifying glasses in order to compensate for the loss of the lens.

That was the best-case scenario, of course. Many surgeries failed, resulting in loss of the eye and the need for a glass eye. Compare that version of cataract surgery to today, when an incision is made with a laser and a manmade lens is effortlessly inserted into the eye to replace the defective lens.

Other antique surgical tools in Edwards’ collection include muscle hooks, long L-shaped instruments for fixing crossed eyes; lens scoops and lens spoons for getting cataracts out of the eye after incision; iris spatulas for pushing the iris around; and iris scissors for cutting a hole in the iris in case of glaucoma.

Edwards also has lid clamps, used for preventing bleeding when operating on an eyelid. “They look like something from a horror movie,” he says, “but they were state of the art at the time.”

These types of early instruments turn up at various auction houses and are fairly reasonable in price. For example, Christie’s sold a box of c. 1880 surgical instruments for $976 in 2011.

STARTING OUT
If you’re interested in starting a collection of ophthalmic antiques, there are two collectors clubs you might want to consider joining: the Ocular Heritage Society and the Ophthalmic Antiques International Collectors’ Clubs.

Gary Edwards suggests choosing one area to specialize in—only spectacles, for example, or only ophthalmoscopes. Figure out what interests you, he adds; otherwise, it’s just too much.

If you get into the category by buying fairly common items, like a Loring ophthalmoscope (which can be had for $50–$150 at auction), it shouldn’t matter, because you didn’t yet have one in your collection. Gradually, Edwards says, you’ll figure out what’s common and what’s not and you’ll be ready to pounce when a rarity becomes available.

For antique spectacles, David Fleishman advises looking for round frames. They tend to get collectors excited, because round-frame specs come from an earlier time period than oval-frame glasses.

Solid gold frames are also valuable to collectors, Fleishman says, and not just for the obvious reason (who doesn’t love solid gold?). They’re exceedingly rare; untold numbers of gold frames were melted down over the years. You can sometimes obtain large lots of glasses at auction. Skinner Inc. sold 15 pairs of 19th- and early-20th-century spectacles for just $170 in 2011, and a group of 12 eyeglasses from similar time periods went for $120 in 2009.

Occasionally, you might find something particularly special in a large lot. Fleishman remembers buying 50 glasses as a single lot at Sotheby’s for around $3,200. In that lot was one pair of glasses that by itself was worth the total price Fleishman paid: a pair of Benjamin Franklin’s bifocals.

SOURCES & RESOURCES
- ArtificialEyeClinic.com: Click on “History” for material on artificial eyes.
- AntiqueSpectacles.com: Articles, photos, and links related to antique eyeglasses.
- EyeAntiques.com: Dr. Gary Edwards’ site.
- Gemmary.com: Info on a range of antique scientific instruments.
- OcularHeritageSociety.com: Collector club and forum.