

Ask Andy

Glasses Correct Images

Andy sends a complete, 20-volume set of the World Book Encyclopedia to Serge Rochelle, age 12, of Petawan, Ont., for his question:

How do glasses help the eyes? Some of us need glasses to get a clear picture of the distant scenery. Others need glasses to read a page of print. But this does not mean that the eyes are sick or damaged. They just need a little help to do their work better. The lenses in a pair of glasses do what the eyes would do for themselves if they could.

All day long, your eyes are busy taking colored, three-dimensional movies. They work much like a camera, though they are far better than the best man-made camera. Each eye is a round ball. The cornea is that bulge on the front of the eye ball and the lens is a window pane of transparent tissue behind it. The cornea and lens work together to cast pictures on the retina, which is a kind of movie screen inside the back of the eyeball.

The scenery outdoor, a room and even a page of print are very large pictures. These large pictures must be condensed in perfect detail to tiny, tiny pictures. The tiny copies must fall exactly on the retina. The outside picture reaches the eye on beams of light and they must be tapered at just the correct angles.

This job is done by the lens and the cor-

nea. When viewing a close object, the lens squeezes up and becomes thicker. When gazing at the distant scenery, the lens relaxes and becomes thinner. This adjusts the tapering angles of the light so that pictures from near and far focus exactly on the retina.

Nearsighted people see close objects clearly, but distance objects are blurred. This is because the light is tapered to form a picture just in front of the retina. Glasses with concave lenses cause the light rays to fan out a little before they reach the eye. The eye can taper these rays to form a picture farther back where it focuses directly on the retina.

Other sight problems call for different types of eye glasses. The expert to consult in all cases is an oculist. He is a doctor qualified to test the eyes and order the right glasses. The optician is the man who makes the glasses and frames and carries out the orders of the oculist.

Andy awards each day a full set of the World Book Encyclopedia for the first question he selects to answer. When a second question is answered a large world globe or atlas is awarded. Questions are accepted from teen-age or less-than-teen-age readers. They should be addressed to the Register-Guard, 975 High St. Eugene, Andy prefers that questions be written on postcards rather than in letter form.

Typewriter Specializes In Speed

Capacity 15,000 Words Per Minute

WASHINGTON — New typewriters are fast, versatile, and good spellers.

One machine turns out 15,000 words of faultless copy per minute, but it never will expedite business correspondence. The device is designed to transcribe data from high-speed computers.

An experimental phonetic typewriter takes dictation, checks the sounds against its "correctly records" the words. A "spelling memory" unit, and new carriageless electric typewriter can tap out 186 words per minute—if the typists fingers are nimble enough.

Modified keyboards also speed typing, the National Geographic Society says. Chemists are able to type technical symbols into their reports instead of laboriously drawing them by hand. Insurance company secretaries need strike only one key to write the word "age."

The modern machines are a far cry from the slow, clumsy early models. Though Queen Anne of England granted a patent for a "writing machine" in 1714, it was not until 1867 that Christopher Latham Sholes of Milwaukee invented the first practical typewriter.

Sholes, who once said, "All my life I have been trying to escape being a millionaire," sold the rights to his invention for \$12,000 to E. Remington & Sons, a small-arms manufacturer. Remington improved it, and produced the first commercial typewriter in 1873.

Remington No. 1 resembled an ungainly sewing machine, complete with a foot treadle to return the carriage. It printed only capital letters. An ornate model decorated with mother-of-pearl was shown at the 1876 Centennial Exposition in Philadelphia. It was completely overshadowed by another exhibit—Dr. Alexander Graham Bell's telephone.

But the typewriter slowly caught on—helped by promotion claims that it offered a complete safeguard against "pen paralysis, loss of sight and curvature of the spine."

Speed contests also helped sell the typewriters. One company had a stable of racing typists who trained daily on souped-up stock models adjusted for hair-trigger response.

In 1880, the New York YWCA offered a course on the "mechanical chirographer" for strong young ladies. The institution was accused of an error in judgment because the female mind and constitution were too frail to survive the rigors of six months of typing instruction.

The women survived, and the typewriter soon opened thousands of offices to women for the first time.

To Your Good Health

Ingrown Toenails 'Man-Made'

By DR. JOSEPH G. MOLNER

Dear Dr. Molner: My son has an ingrown toenail. What can be done about it?—MRS. B.G.

Ingrown nails are man-made, almost always.

They are painful and potentially dangerous. If an infection starts, you have real trouble.

Causes vary. Commonest of all is improper trimming. You can give your fingernails an artistic curve because they are not subjected to constant pressure. The toenails are.

If the nail is gradually bent downward until the corner is embedded in the flesh, then subsequent growth can be excruciatingly painful.

Therefore, never permit the corner of the nail to be cut so short that the edge can be pressed down into the flesh. We usually say that nails should be "cut straight across." This is not precisely accurate. You don't, obviously, want square, sharp corners on the nails. But you do want to give the nail only a very gentle curve, and you certainly never should cut it too short.

Add to this shoes that are too tight, too narrow or too short, and you have all the makings of an ingrown nail. Tight socks also can do the damage; they hold the nail down tightly against the flesh.

Deformities of the foot or the toe, and sometimes defects of the nail itself can be part of the trouble, but not always.

Corrective measures? Trim nails so they have to grow over the toes and can't dig in. Wear shoes and stockings of larger size.

And place some cotton pack-

ing (moisten it with alcohol as an antiseptic) under the nail, thus gradually training it to grow upward just enough so it cannot thrust into the toe. The nail grows slowly, so do not expect a few days of this procedure to fix everything.

Where such methods are not sufficient, the problem deserves to be in professional hands, either your regular doctor or a podiatrist. In some cases part of the edge of the nail must be removed; sometimes the entire nail should be removed.

Dear Dr. Molner: You have

Matter of Fact



You personally may not have received more mail last year, but the mail volume processed during the last fiscal year increased to approximately 64,933,000,000 pieces as compared with 63,675,000,000 the preceding year.

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written concerning diabetes that the normal amount of sugar in the fasting state is 120 milligrams. In the hospital where I have my tests, they use 60 to 80. The difference is confusing.—W.M.

That is understandable. It is a difference in the laboratory method being used, and the 120 figure is older and hence more familiar to most people. The newer method of measuring is thought to give a true glucose value.

Dear Dr. Molner: I once had duodenal ulcers. Two years ago my stomach became obstructed and I was operated on for gastroenterostomy and cutting of the vagus nerve. Recently I have begun to have the old familiar symptoms of ulcers again. Is this possible after such surgery?—MRS. A. M.

Yes, it's possible for new ulcers to form at the site of the surgery. X-rays should prove whether this has happened, and if so, you'll probably have to resume the old ulcer routine. I hope further surgery won't be necessary.

Tattooing Not Old

Tattooing has been practiced less than 200 years in the Western World, says the National Geographic Magazine. Early visitors to Tahiti found both men and women decorated with "tattoos." Some sailors underwent the painful operation of having their skin pricked with a sharp bone dipped in soot and coconut oil. They set the style for the traditional mark of a seaman.

