THE HUMAN EYE.

PECULIARITIES OF NATURE'S PHOTOGRAPHIC CAMERA.

Dangers in Obtaining a Spectacle Prescription — All Persons Need Glasses Late in Life—Points About Nearsightedness.

"It takes years of hard study for an ophthalmic surgeon to learn how to fit glasses," said an oculist to a Washington *Star* reporter. "No two persons' eyes are quite alike, and few patients have both eyes the same; in each case a dozen different possible defects have to be looked out for and remodled by glasses ground in special ways if they exist. It is apt to take an hour or more for a skilled oculist to find out just what glasses you require, but the confident optician will call your attention to a few rows of different sized letters at the other end of the shop, ask you what rows you can read and sell you a pair of spectacles according, off hand. Of course it is always a more or less wild guess on the optician's part, infinitely more apt to be wrong than right, and if you will consider that every bit of error as to fit in the glasses means just so much continual strain upon the eyes of the wearer, you will see what an immense amount of harm must be done in this way. The thing to do, if you need glasses, is to go to the ophthalmic surgeon for the prescription, as you would go to any other physician if you had a pain, and then take the prescription to the optician, who is the eye-doctor's apothecary, as it were, to be filled. The glasses are prepared for you—if need be, specially ground—and you have the satisfaction of knowing that they are precisely what they require.

"Were people afflicted with near sightedness in ancient times?" Inquired the reporter.

"Oh, yes, was the reply, though probably not to the same extent. We read, write and study more than the ancients did, and for this reason near-sight is more common with us, for it is the excessive use of the eyes at the near point that propagates the troubles. In old times troubles with the eyes were regarded as afflictions sent by heaven, for which there no cure. Nero, who fiddled while Rome was burning, was so near-sighted that, although he had the very best seat in the amphitheater at the gladiator shows, he could not see what was going on. One day he discovered that a certain concave emerald in his collection of jewels aided his vision materially, and from time he always carried the emerald about with him and, when he wanted to see anything at a distance, looked through it. He regarded the stone as a talisman and supposed that its properties were magical."

"Is it true that every person needs spectacles at some period of life?"

"Decidedly, if the person lives to be forty-five years of age. At that age, or at any rate before fifty is reached, the crystalline lens, which is of the consistency of jelly in childhood, has gradually hardened to the consistency of wax, so that the muscles which change the focus of the eye for various distances, by altering the shape of the lens, find it difficult to do their work. You will perceive that after looking at an object across the street, to examine your finger attentively requires a distinct effort of the eye. You have to exert the muscles that control the shape of the lens in order to make the focus right for the near point. If the lens has got hard, through advancing age, a continuous effort of this sort, as in reading, becomes tiresome, and thus it is that the middle-aged man or woman finds the first indication of what is ignorantly termed 'failing sight' in the blurring of the letters in the book or newspaper. Now, the fact is, of course, that the ocular organ is just as good as ever, save for the fact that it needs a little help in the way of a glass lens to make the focus right for reading and thus save the muscles work. The sight for distance, under such circumstances, still remains as good as ever, because the lens in its natural focus and shape is adapted to distant vision. But the middle-aged person, as a rule imagines that the blurring of the letters signifies impaired sight. He or she is aware that glasses will make reading easy again, but hesitation is felt in adopting them on account of the widespread saying that, once taken up, spectacles can never be done without again. The truth at the bottom of this lies in the fact that, when one's sight has once been restored by artificial means, one is not disposed to throw the help away again. Not realizing the middle-aged person keeps on straining the eyes until they become somewhat damaged, for want of artificial aid in reading or sewing, and finally the glasses are adopted—bought, in nine cases out of ten, from the ignorant opticians, to cause more trouble, very likely, later on. And all the distress might have been saved by simply going to the oculist when the annoyance first began to be felt and procuring the proper glasses. This is what every person at forty-five years of age ought to do, for there is one that arrives at the age of fifty, at the utmost, who does not need assistance for close vision."

"Is it true that near-sighted eyes improve as they grow older?"

"Pah! That is another popular delusion. Near-sightedness may grow worse with age, but not better. Likewise, it is nonsense to suppose, as is so commonly asserted, that the near-sighted eye is unusually strong. How should the abnormal egg-shaped eye be stronger than the spherical eye? The near-sighted eye is not necessarily weak, but it is a sick eye, in the sense that it usually belongs to a person who is imperfect constitutionally. The reverse of near-sight is oversight, which is occasioned by flatness of the erb of vision. It is the case of nearly all cases of 'weak eyes,' and of nine out of every ten cases of 'squint.' Any child afflicted with either of these troubles should be taken at once to the oculist and have glasses prescribed for it. Thousands of people go through life without half the use of their eyes, when the whole trouble is simply due to a slight malformation which proper convex glasses would remedy at once. In the case of a confirmed squint it may be necessary to cut the shortened muscle of the squinting eye, which removes the difficulty and sets the organ straight again. Let me add, while I think of it, that there is nothing against which the ignorant should be warned more carefully than the 'eye waters' sold at apothecaries' shops, which almost invariably contain sugar of lead. This chemical applied to a sore eye makes an opague deposit on the cornea, which may soon render the unfortunate purchaser of quack eye remedies permanently blind."

Uses for Old Shoes.

It may be a surprise to some people to learn that the old shoes cast into the ash barrel are liable to reappear in the boudoir and parlor. An inquisitive reporter who saw a couple of rag pickers quarreling over a lot of worn out and seemingly worthless foot gear interviewed one of the chiffoniers and found that they sold them to the manufacturers of wall paper. He followed up the clew, and on questioning the foreman of one of these establishments, elicited the following bits of information:

"We buy," said the foreman, "all the boots and shoes that the scavengers can bring us. We pay different prices for the different qualities of leather. A pair of fine calfskin boots will bring as high as fifteen cents. We don't buy cow-hide boots. The boots and shoes are first soaked in several waters to get the dirt off from them. Then the nails and threads are removed, the leather is ground up into a fine pulp and is ready to use.

"The embossed leather paperings which have come into fashion lately, and the stamped leather fire screens, are really nothing but thick paper cover with a layer of this pressed leather pulp. The finer the quality of the leather the better it takes the bronze and old gold and other expensive colors in the designs painted on them. Fashionable people think they are going away back to the mediæval times when they have the walls of their libraries and dining rooms covered with embossed leather. They don't know that the shoes and boots which their neighbors threw into the ash barrel a month before form the beautiful material on their walls and on the screens which protect their eyes from the fire.

"We could buy the old shoes cheaper if it were not for the competition from carriage makers and bookbinders and picture frame makers. I don't know how many other trades use old shoes and boots, but the tops of carriages are largely made of them, ground up and pressed into sheets. Bookbinders use them in the cheaper forms of leather bindings, and the new style of leather frames with leather mats in them are entirely made of the castoff covering of our feet."—*New York Herald.*

Tenement vs. War Life.

According to statistics recently made public, 1,113,254 privates and 33,101 officers crossed the German frontier into France in 1870-71; of these 113,821 were wounded and 475,000 were taken sick. There were killed in battle 17,255, or only one and one-half per cent., and 11,023 died subsequently of their wounds, making 28,278, or about two and one-quarter per cent., who died by the arms of the French, while 14,648 died from diseases. "Considering that the war lasted nearly two years," observes the *American Architect*, in reference to these figures, "the total mortality of about forty in a thousand does not seem very frightful, since many a civilized city keeps up a yearly average of twenty-two or twenty-three deaths to each thousand inhabitants. It is, at first sight, rather startling to discover that the mortality incident to the most important war which perhaps ever took place in Europe was apparently no greater than would have resulted from putting the troops to live during the same space of time in New York tenement houses or in the poorer quarters of Paris."

The Modern Sea Rovers.

A correspondent of the New York *Herald*, writing of the people of the Faroe Islands, says: "I imagined I could see a resemblance to the early viking boats in their buoyant, high-bowed, cedar crafts of to-day. The dress of the boatmen was primitive but picturesque; homespun knee trousers and long home knit stockings; coats also of homespun, with button holes worked in red worsted; caps of native manufacture, consisting of a deep band of cloth gathered at the top after the fashion of the masculine nightcap of former days or the toboggan cap of the present. Under this simple head tire were features unmistakably Norse; flaxen hair, light blue eyes, florid, sunburned skin, and reddish, frizzled beard. This was my first sight of sea king progeny on their sea girt isles. By them I was soon landed among their dwellings on a ragged beach, slippery with the putrid refuse of fish and redolent of drying cod.

The whole shore was a panorama of the codfish industry. Men do the fishing at night and the women, girls and boys cure the 'catch' during the day. At the edge of the water on boards and stones they are busy at the different processes of curing. Some behead and eviscerate, while others are engaged in washing the split and flattened bodies. After being thus cleaned they are spread over the stones which line the shore, and hung upon poles and lines until the entire beach is occupied with their savory stock in trade in the various stages of drying.

The boys are attired like their fathers, and the girls and women in short woolen gowns, with scant red shawls about their shoulders and handkerchiefs in lieu of hats. Formerly the drying of fish was dependent altogether on air and sun; now artificial means are adopted; wooden buildings heated by steam have been erected and are now used for this purpose, especially in the winter season.

Let epicures who gloat over a many coursed menu think of a family group in the Faroes, under a turf roof, around a turf fire, partaking of a meal of barley bread and milk, whale steak and fat, or maybe a single dish of boiled sea fowl, and learn the secrets of eupepsia, contentment and longevity! After their evening meal, which is usually a pot of sea birds, the long winter evenings are occupied in spinning, weaving, knitting and teaching.

Held by Feudal Tenure.

Byron Island, one of the Magdalen group on the Canadian coast, is still held by a feudal tenure. The ancestor of one Captain Coffin received by royal favor in early times, when little value attached to the gift, a title to the whole domain. The landlord lives abroad and manages his estate by a resident agent. The rents are small and often uncollectable. Evictions are not common, and there is no serious quarrel over the land question, but the fact that the occupants of the soil cannot own their own homes is a serious hindrance to enterprise and improvement in developing the resources of the island.

SOME of the inconveniences of having two wives are exemplified in the case of William Williams, late of Osage County, Kansas, now no more. Even if a man can manage to keep the ladies quiet during his life, directly he is dead they begin to fight over his will.

FRANCE has 81,130 public schools and 5,600,000 pupils.

THE production of soap in England is about 45,000 tons per week.

WORK on the new building for the library of Congress at Washington is making rapid progress.

Pullets Should be Laying.

Young pullets ought all to be laying this month. Later hatched ones if not laying by December, will probably, if left to themselves, not lay before spring when eggs are down to 15 cents per dozen. Therefore get the pullets to laying early when prices are highest. Rev. S. W. Squires, of Franklin, Mass., says: "Last winter for twelve hens I used four large cans of Sheridan's Condition Powder. I believe it is the best preparation known to increase egg production. I saved part of the eggs for hatching after forcing the hens four months for all they were worth with the Sheridan's Powder, and I never had a greater per cent. of fertile eggs or more vigorous chickens. I do not believe I can afford to be without the Powder to give health and vigor to young hens." Six cans of Sheridan's Powder will pay a good dividend in eggs. I. S. Johnson & Co., 22 Custom House Street, Boston. Mass. (the only makers of Sheridan's Condition Powder), will send for 50 cents, two packs of Powder; for $1.00 five packs; for $1.20 a large 2½ can, postpaid; six cans for $5.00, express prepaid. A copy of the best Poultry paper for 5 cents. Send stamps or cash.

Fish have been caught in the Gulf of California at a depth of 1400 feet.