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OPHTHALMIC FOLK-LORE

BY

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Introduction

IN no branch of medicine has the supply of folk-lore been more abundant than in the case of eye diseases, which in this respect resemble diseases of the skin, especially warts, and pulmonary tuberculosis, as I have illustrated in previous papers on the folk-lore of these subjects (1940-1941). Although the literature is very copious, most of the information is to be obtained from works devoted to folk-lore rather than from text-books of ophthalmology, most of which tend to ignore it or give it a stepmotherly treatment.

Apart from the literature on the Evil Eye, much of my information I have derived from the great work of Hovorka and Kronfeld, of Vienna, entitled *Vergleichende Volksmedizin* and the valuable contributions of Dr. van Schevensteen, the distinguished ophthalmologist, of Antwerp, to the first three International Congresses of the History of Medicine held in Antwerp, Paris and London in 1920, 1921 and 1922, dealing respectively with popular errors connected with ophthalmology and religious practice in ocular folk-lore in Belgium (1920), plants in eye diseases (1921) and remedies of human origin in eye diseases (1922).

Nomenclature

In striking contrast with the numerous popular synonyms connected with the anatomy and physiology of the sexual organs in both sexes which amount to several hundreds, the organ of vision has barely twenty synonyms, of which the following are examples "baby cries" (rhyming slang), "blinkers," "crystals"

(Shakespeare, Henry V, ii, 3), "day lights," "glaziers," "goggles," "optics," "peepers," "squinters" and "winkers."

Historical Note

Although ophthalmology reached a high degree of development at a early period of its history, rational views concerning its aetiology and treatment were for a long time associated with the grossest errors and absurdities (Shastid), the earliest examples of the kind being furnished by the Ebers Papyrus and the Assyrian Medical Texts translated by Campbell Thompson. These errors and superstitions were gradually discarded by the medical profession, but many of them continued for many centuries to form part of folk-medicine.

In Pliny's Natural History, which is one of the chief storehouses of all forms of folk medicine, the importance which he attached to the eye in particular, which he describes as the most precious portion of the human body (XI, 52) is shown by the numerous references to the eye throughout his work. The bulk of his contributions to this subject is devoted to human, animal, plant and mineral remedies for diseases of the eye in the later books (XXV, 91-103; XXVIII, 47; XXIX, 37-38; XXXII, 24), but his work also contains remarks on visual acuity (VII, 21), growth of the eye after removal (XI, 35), colour of the eye (XI, 35), and the eye as guide to the character of the individual (XI, 59). Pliny, was a credulous bookworm and not a man of science, and many of the remedies which he proposes were not only disgusting but also injurious. Obviously erroneous statements connected with the eye made by him include such examples of acuteness of sight as the Iliad written parchment so small as to be enclosed in a nutshell (VII, 21), ability to distinguish objects at a distance of 135 miles (*ibid*), as well as his descriptions of fabulous animals such as the catoblepas (VIII, 32), and basilisk (VIII, 33), the sight of which caused everyone who looked at it to fall dead on the ground, and denial of sight to moles, worms, grasshoppers and locusts (XI, 52).

Of subsequent works dealing with the folk-lore of eye disease mention may be made of *Leechdoms, Wort-conning and Starcraft in Early England* (O. Cockayne), of which an excellent summary has been made by R. R. James; Payne's Fitzpatrick lectures on *English Medicine in Anglo-Saxon Times*; Henslow's *Medical Works of the Fourteenth Century*; Moncrief's *Poor Man's Physician* (2nd ed., 1716); and Wesley's *Primitive Physic*, of which the 24th edition was published in 1824.

Aetiology

A number of popular explanations have been offered to account for the occurrence of ocular diseases generally or some isolated eye condition. Among the most widely held is the doctrine

of maternal impressions, of which van Schevensteen (1921) gives the following examples:—Pregnant women should avoid looking at deformed persons or their child will suffer; in Silesia the child of a woman who has closed the eyes of a corpse will be born blind or have sunken eyes; in Silesia also and in Bohemia a pregnant woman should never look at the moon or her child will be short-sighted. Swedish peasants believe that if the mother looks through a hole in the door of a house the child will have a squint. In the Bukovina it is held that a squint may be caused by looking through a sieve (Hovorka and Kronfeld, Vol. II, p. 804). Other fanciful explanations of the occurrence of a squint are imitation of a squinter, watching the movements of a shuttle, trying to look at two pleasant objects at the same time, sucking a thumb while gazing at it fixedly, or trying to get sight of a scar on the eyebrow, nose or cheek (van Schevensteen, 1921).

According to Pliny (XXX, 46), if one wants a child with dark eyes the mother should eat a rat. An infective theory accounts for the belief in Maine and Ohio that if you look at a person who has inflamed eyes you will catch the disease (Bergen, p. 139). In Palestine, where a cat is a favourite animal, its killing is regarded by the fellahin to be a great sin which will most surely bring a misfortune on the offender. Hanauer relates that when a fellahin lost his eyesight he and others attributed this to divine retribution, as in his youth he had been in the habit of killing cats. Among the Australians of North West Queensland blindness caused by no visible trauma is regarded as punishment produced by human magic for the carrying off of foreign women (Hovorka and Kronfeld, Vol. II, p. 806).

Other folk-lore suggestions as to the cause of eye disease, which it is difficult to take seriously, are cutting off the moustache, watching a horse defaecate (*Am. Encycl. and Dict. Ophthalm.*, Vol. XIII, p. 10314, 1918), excessive coitus or masturbation (van Schevensteen, 1921), wearing gutta percha soles on your boots or shoes (Lean), and taking back a gift, a belief held in the West Indies (Black p. 173).

Popular beliefs and superstitions

By far the most important of these is the doctrine of the Evil Eye owing to its great antiquity, its persistence in many parts of the world and its effects.

Evil Eye

This term has been applied to certain persons and much more rarely to animals, plants and even inanimate objects supposed to possess the power of doing harm to others without actual contact but merely as the effect of a glance. The owner of the evil eye, popularly known as a "blinker," may be aware of his endowment or be unconscious of it until his attention has been drawn to the

peculiarity. The victim of the evil eye is said to be "overlooked," "fore-looked" or "eye-bitten" (Dyer, p. 315, 1883). The effects of the Evil Eye are supposed to be death after a mysterious illness, in which orthodox medical aid is of no avail, accidents of any kind or less serious diseases or symptoms such as fits, fever, headache, hiccough, indefinite malaise, impairment of function, especially of sexual capacity, particularly on the wedding night, disease of domestic animals, injury to crops, fruit trees and other possessions. Special eye diseases or symptoms such as trachoma, strabismus and exophthalmos have also been attributed to the malignant glance.

Literature.—The literature on the subject of the Evil Eye is enormous, as is shown by the bibliography prefixed to Seligmann's work (1910), but the principal works published during the last sixty years which I have consulted are those of Tuchmann (1884-1885), Elworthy (1902), Seligmann (1910, 1927), and Gordon (1937).

Historical.—According to Seligmann (Vol. I, p. 12, 1910), the oldest document in which reference to the Evil Eye is to be found dates back to the seventh century, B.C. and is drawn up in two languages, *viz.* Assyrian and Accadian. There are numerous references to the Evil Eye in the Old Testament (Deut. XXVIII, 54, 56; Prov. XXIII, 6), the Apocrypha and the New Testament (Mat. VI, 22, Mark VII, 22, Luke XI, 34), as well as in the Talmud and Koran.

In classical antiquity the superstition is alluded to in Theocritus (VI, 39), Virgil (Ecl. iii, 103), Tibullus (Eleg. 1, 2, 54), Petronius (Sat. 131), Persius (ii, 31), Pliny (*Nat. Hist.*, XXVIII, 7), Plautus (Captivi, iii, i, 23), and Aulus Gellius (VII, 2) among others. The legend of Medusa whose glance was so terrible that it turned man into stone is obviously connected with the myth of the Evil Eye. According to an editorial in this *Journal* (Vol. XXIII, p. 574, 1939), in Britain reference to the belief in the Evil Eye can be traced back to the following passage in Beowulf (ca. 1000 A.D.), "Now is the bloom of thy strength for a little while. Soon it will be that sickness or the sword . . . or javelin's flight or ugly age or glance of eye shall darken thee." In his essay on Envy (1625), Lord Bacon writes, "We see likewise that the Scripture calleth envy the Evil Eye. There seems to be acknowledged in the act of envy an ejaculation or irradiation of the eye."

Prevalence.—Although belief in the Evil Eye is not so prevalent as it was, it is by no means extinct. Indication of its prevalence at one time is shown by the large number of synonyms for the belief which are to be found in Tuchmann's article, *viz.* in Ancient and Modern Greek and Latin, French and French dialects, Italian, Spanish, Portugese, Roumanian, English, German, Dutch, Flemish, Swedish, Danish, Hungarian, Russian, Hebrew, Arabic, Turkish, Egyptian, Persian, Sanskrit and Malay. In Europe it appears to

be most frequently met with in countries in the Mediterranean basin, particularly Italy and most of all in Naples, where the local name is *jettatura*. In the Balkans, as Miss M. E. Durham (p. 244, 1928), has shown, the high infant mortality which is really due to defective hygiene, is attributed to the Evil Eye. In England the belief still survives, especially among the old inhabitants of country districts in several counties, such as Somerset, Devon (Whistler, p. 88), Herefordshire (Leather, p. 50), Lincolnshire (Rudkin, p. 199), and Yorkshire (Hartland and Wilkinson, p. 69). In Scotland belief in the Evil Eye exists in Caithness, Sutherland, Ross-shire, Inverness-shire, Elgin, Argyll, Perthshire, Lewis, Harris, both Uists, Barra, Skye, Tiree and Islay (MacLagan). According to Gregor (p. 34), in some families in the North-East of Scotland the Evil Eye is supposed to be inherited and to be handed down from generation to generation. In Ireland, where the belief is still widespread, especially in Tipperary (Nuttall-Smith, p. 239), the oldest written account of the superstition is that of the Formorian giant Balor named "of the Evil Eye," who was reputed to strike whole armies dead with the terrible power of his gaze (Wood-Martin, Vol. I, p. 150, 1902). In the United States it is chiefly confined to the colonies of Italians and other foreigners in large cities and rural districts. In India and China, as well as among the Arabs and Turks the Evil Eye is particularly feared owing to the harm it may inflict on horses and camels (*Encycl. Brit.* 14th ed., s.v. Evil Eye). Belief in the Evil Eye is by no means confined to uneducated persons, as it has been met with in the highly intelligent. The most striking example of the kind was Théophile Gautier who not only wrote a short story entitled *Jettatura* on an innocent possessor of this sinister quality, but was also a firm believer in the superstition himself, and was careful to avoid having anything to do with his contemporary Offenbach, the composer, who was supposed to possess a malignant glance (Bergerat, p. 166). Believers in the Evil Eye, as in other forms of superstition, are not very willing to impart their views on this subject to strangers, probably being vaguely conscious of the absurdity of such a belief. It is therefore likely that this particular superstition is more widespread than is generally supposed.

Possessors of the Evil Eye have been accredited with certain physical peculiarities which serve to warn others of their approach and enable them to take the necessary precautions. These qualities may be confined to the eyes or be more general in character. The ocular manifestations are double pupils (Pliny, VII, 2), squint, tremor, specks on the cornea, blood-shot eye, bushy and meeting eyebrows (Seligmann, Vol. I, p. 66, 1910, *et seq.*), absence of lacrymal secretion and loss of one eye. According to Krappe, in Mediterranean countries the Evil Eye as a rule is of a blue colour,

while in northern countries it is black. The general symptoms consist of bodily defects or malformations. The fascinator is usually old, ugly, thin and melancholy and leads a solitary existence. According to Lady Wilde (1889), red hair is supposed to have a most malignant influence, as is shown by the proverb "Let not the eye of a red-haired woman rest on you." According to Seligmann (Vol. I, p. 87, 1910), members of certain professions and occupations have been accredited with possession of the Evil Eye, and most of all clergymen of all kinds, and also scholars, poets, smiths, executioners, grave diggers, beggars, criminals and prostitutes. A few prominent persons have been credited with its possession, *viz.* Lord Byron, Napoleon III, Queen Marie Amelia of Portugal, Offenbach, the composer, several Italian dukes and two popes, Pío nono and Leo XIII (Seligmann, Vol. I, pp. 114-18, 1910).

Susceptibility to Evil Eye.—Certain physiological functions, such as eating, sleeping, coitus, menstruation, pregnancy, and parturition, probably because the victim is less prepared than usual to resist an attack, are regarded as predisposing to visitation by the Evil Eye. Generally speaking women are more susceptible to the Evil Eye, especially young women and brides in particular. Their liability is greatest during menstruation, the later months of pregnancy and the puerperium. In Morocco during the last ten days of pregnancy the midwife has to spend the nights in her patient's room to keep off the Evil Eye, and at the moment of birth the patient is kept covered for the same reason, and only the midwife is allowed to see the genital organs (Legey).

According to Crooke, a high caste Hindu woman is forbidden to appear in public during pregnancy unless she is protected from the Evil Eye by special charms and amulets. Children are also specially susceptible, especially good-looking ones, owing to their likelihood of exciting envy in the fascinator, and children on the night before baptism or circumcision (Gordon). A large number of animals are liable to be affected by the Evil Eye, as is shown by the fact that Seligmann (i, 210, *et. seq.*), gives a list of 27, but the commonest victims are cows, and calves, sheep, pigs, horses, mules and camels.

Plants.—Trees and other members of the vegetable kingdom are liable to be affected by the Evil Eye. Harland and Wilkinson relate the story of a Yorkshireman who to prevent his injuring any one passing by used every morning to fix his eye on a pear tree with the result that it withered away. Miss Durham (99, 1909), tells a similar story of a bunch of grapes affected in the same way: In France melons, peas and beans; in Ireland mushrooms; in Hungary flowers; in Columbia figs; and in Norway and Sweden the harvest are said to have been similarly affected (Seligmann, Vol. I, p. 224, 1910). Inanimate objects do not escape visitation by the Evil Eye. This particularly applies to articles of food such as milk, butter,

beer, eggs, meat and fish, which dry up, become rotten or otherwise deteriorate, clothes and weapons (Seligmann, Vol. I, p. 234, 1910 *et. seq.*).

Evil Eye in Animals

The possession of an Evil Eye, though not so frequent as in man, is attributed to numerous animals, which Seligmann, (Vol. I, pp. 120-35, 1910), classifies as follows:—1. Mammals, such as lions, tigers, jaguars, panthers, hyaenas, wolves, horses, sheep, dogs and cats. 2. Birds, such as ostriches, eagles, falcons, owls, sparrow-hawks, ravens, crows, magpies and cocks. 3. Reptiles such as vipers, adders, boas, rattle-snakes, and blind worms. 4. Insects such as spiders and grasshoppers, and 5. Molluscs which attack the exhausted swimmer. Inanimate objects have also been accredited with the power of fascination, the commonest being statues of the gods or saints, peacock's feathers, the photographic camera, and the sun, moon and stars (Seligmann, Vol. I, p. 163, 1910).

Prophylaxis and treatment. As the same methods are used both as a safeguard against the Evil Eye and as a cure for the disease or harm of any kind inflicted by it, the two may be considered together according as they are of human origin, or derived from animals, plants, minerals and miscellaneous sources.

Remedies of human origin. Saliva, especially fasting saliva, has been used both for the prevention and cure of the effects of the Evil Eye from an early period. In classical antiquity it is mentioned by the authors already named. The saliva was projected on the face, bosom or clothes of the person needing protection or relief or, as in the peasant in Theocritus into the spitter's own bosom. According to Dan Mackenzie spitting is still a popular method in Somerset and India for warding off the Evil Eye. In Ireland, Lady Wilde (1890), states it is the custom to avert the Evil Eye from a child by spitting upon entering a cabin, and a stranger unfamiliar with the practice is asked to do the same. Further details of the use of saliva in this connection will be found in Miss Sclare's essay on saliva superstitions. Much less frequently stale urine was employed especially for horses and cattle which were sprinkled with the fluid (Maclagan, p. 135). Under the heading of protection or cure of human origin may be ranked various manual gestures figured in Elworthy's work (237, *et seq.*), which consist in shooting out the middle finger, inserting the thumb between the index and middle finger or holding up the index and middle finger in imitation of a sacerdotal blessing. The obvious obscenity of the first two methods is attributed by Krappe to the belief that the sexual organs, which are the seat of fertility, are sufficiently powerful to repel all attacks of the Evil Eye.

Animal remedies.—Numerous animals, domestic and wild, have

been used for protection or cure of the effects of the Evil Eye, such as a bull, cow, horse, ass, sheep, cock, hen, cat, hyaena, wolf, mole, toad, stork, and herring, their flesh, hair, heart or eye being used (Seligmann, Vol. I, p. 288, 1910). In Mourzak, in Central Africa, the people set up the head of an ass in their gardens to avert the Evil Eye from their crops (Elworthy, p. 121). In his recent paper W. Fogg states that inhalation of the smoke arising from the burning skin of a gazelle, chameleon, the body of an owl or powdered molar tooth of a camel, is used by the folk doctors in Morocco for averting the Evil Eye. In Willoughton, in Lincolnshire, according to Rudkin, a strip of sheep or goat skin suspended from a horse's collar will avert the Evil Eye.

Plants.—A large number of plants have been recommended for protection against the Evil Eye, especially those remarkable for their peculiar colour, penetrating scent, toxic action, or natural protection in the form of prickles or thorns (Seligmann, Vol. I, p. 284, 1910). They are given externally, being hung over the house door or baby's cradle, less frequently internally. The following plants, among others, are mentioned by Seligmann (*ibid.*), laurel, rue, onions, garlic, flea-bane, dandelion, mugwort, vervain, mistletoe, mandragora, dill, absinthe, elder, hound's tongue, honeysuckle and mulberry tree. In Herefordshire, according to Mrs. Leather, the rowan tree was placed above every cottage door on May morning, or in the pig's cot and even stuck in the seed bed as a protection against the Evil Eye. The willow also enjoyed a similar reputation.

Mineral remedies.—By far the most important mineral for protection against or cure of the effects of the Evil Eye is salt, which has been used either alone or in combination with other substances especially bread, cheese, garlic, dill, cummin or rue. It is administered either by mouth or by sprinkling it on the person or clothes of the person to be protected (Seligmann, Vol. II, p. 33, 1910, *et seq.*). Other mineral remedies mentioned by Seligmann (Vol. II, p. 7, 1910, *et seq.*), are iron, in the shape of nails, horse shoes, keys, shovels, sickles, ploughshares, knives, daggers and swords, brass, lead, mercury, gold coins and precious stones.

Under the heading of mineral remedies may be placed the various amulets for protection against the Evil Eye or treatment of its effects which have been used from the earliest time down to the present day, and are depicted in Elworthy's book (121, *et seq.*). They consist of gold, silver, bronze, coral, horn, jet, teeth, crab, clam or cowry shells, and were often of an obscene shape. They were worn outside or inside the clothing, and frequently contained words from the Scripture, Koran or other sacred writings. Dr. W. L. Hildburgh, who has made a special study of amulets to protect against the Evil Eye in various countries, especially Spain (1906, 1908, 1913, 1914), Portugal (1908) and Italy (1938),

emphasises the difficulty in obtaining reliable information on the subject, owing to the reluctance of the natives to enlighten strangers.

Necklaces of coloured beads are also credited with a power over the Evil Eye. In a recent visit to countries in the Mediterranean basin Miss Lake noticed that in Athens, the Greek Islands, Cyprus, Jaffa, Jerusalem, Cairo, Malta and Algiers, horses, mules and even motors had strings of large beads prominently displayed. Some years ago a ponderous necklace of "lucky stones" or stones with a hole in them was hung up behind the door in Catterick village (Yorks.), in the belief that it would protect the house and its members from the Evil Eye ("Choice Notes," 129).

Miscellaneous remedies.—These consist in hydrotherapy in the form of washing in or drinking water from holy wells or springs, wearing clothes turned inside out, or change of clothing, especially of a bride or bridegroom, the bride donning the bridegroom's clothes and vice versa, the application of tar to the body (Elworthy, p. 132), and irregularities in the drawing or colouring of Oriental carpets (Hawley).

Apart from the Evil Eye the popular beliefs and superstitions connected with the eyes, though extremely numerous, are comparatively insignificant and innocuous. There are, for example, many current beliefs concerning the relation of the colour of the eyes or the appearance of the eyebrows to the character of the individual. In his paper on "Scottish Folk Medicine," Rorie quotes the following lines:—

"Green-eyed greedy,
Brown-eyes needy,
Black-eyes never blin'
Till it shames o' its kin."

In her work on "Current Superstitions in the United States," Miss Fanny Bergen gives the following examples, among others, of oral tradition relating to eyelashes. "Throw an eyelash over your shoulder. If it falls from your finger in doing this, your wish will come true. If it remains on your finger, your wish will not come true (New York)." "Find a stray eyelash; place it on the back of the hand and wish; blow it off. If it blow off at the first trial the wish will come true (St. John, N.B., Pennsylvania)." "Put a loose eyelash on the back of your hand. It signifies a letter. Wish from whom the letter may come, carry it thrice times around your head, then throw it over your shoulder, and you will get your wish." In Boston and Michigan hazel eyes betoken a good disposition. According to Hovorka and Kronfeld (Vol. II, p. 806), widely opened eyes are supposed to indicate lack of understanding, deep seated eyes mistrust and jealousy, and prominent eyes frivolity and good nature. The same writers also allude to the belief that thick eyebrows are the sign of an energetic character and scanty eyebrows

of the reverse. The following superstitions are reported by Bonnerjea—"If the right eye itches, you will be pleased; if the left you will have sorrow." "It is a very bad omen if you dream of losing an eye; your friends and relations will die, and you may even lose your liberty."

In his excellent work entitled "Popular Fallacies explained and Corrected," Mr. A. S. E. Ackermann has collected the following erroneous beliefs connected with the eyes: A cat sees better in the dark than in the light; bats and moles are blind; blind men do not smoke; nearly all persons who were blind were born so; electric light is bad for the eye; the sight of a sailor is better than that of a landsman; and in certain diseases of the eye it is taken out, washed and replaced. The popular errors mentioned by van Schevensteen (1921), are that short sight and squint become cured as age advances; that wearing spectacles impairs vision; that extraction of a canine tooth is particularly difficult because its root is supposed to extend up to the eye; that cessation of a chronic discharge may give rise to eye disease; and that day light causes purulent conjunctivitis in the newborn.

In addition to these more or less absurd fallacies are a number of erroneous views which were widely held by educated persons and not a few medical practitioners, to which Mr. H. M. Traquair, the well-known Edinburgh ophthalmologist, has recently drawn attention, such as the belief that eyesight has been destroyed or ruined by fine needlework, microscopical study or work with white paper, that the loss of one eye entails impairment of visual capacity in the other, that operation for cataract should be delayed until it is ripe, and that the eyes should be bandaged in acute inflammatory conditions.

Treatment.—The folk-lore methods for treatment of various eye diseases will be first considered, and will be followed by a short account of some of the specific diseases in which these methods were employed. It is important to bear in mind, as Hovorka and Kronfeld (Vol. II, p. 781) have pointed out, that a large proportion of ocular affections for which folk-lore treatment has been used has not been differentiated, and that in only a small minority has a specific treatment been supplied.

Folk-lore Methods

These may be considered under the following headings:—

1. Animal remedies, including those of human origin.
2. Plant remedies.
3. Mineral remedies.
4. Transfer.
5. Hydrotherapy.
6. Charms.
7. Odd numbers.
8. Invocations of Patron Saints.

A combination of two or more of these remedies not infrequently takes place.

Animal Remedies.—A very large number of remedies for various ocular complaints are supplied by animals of which the following is an alphabetical list :—ass, bear, beaver, buck, bug, buzzard, cat, cock, crab, crocodile, crow, dog, eagle, eel, falcon, fox, frog, goat, goose, hare, hawk, heron, hyaena, lice, lizard, mouse, nightingale, owl, partridge, peacock, pigeon, quail, scarab, sheep, snail, stag, stork, swallow, tortoise, viper and vulture. In most of these animals it was the flesh that was eaten, while in the rest the bile, milk, blood, dung, and eyes were administered.

Bile.—According to van Schevensteen (1923), the bile of various animals has enjoyed a great reputation in the treatment of eye diseases from a remote period. In the Assyrian Medical Texts translated by Campbell Thompson (1923-24), we read "Thou shalt disembowel a yellow frog mix its gall in curd and apply to his eyes." Sir James Frazer (*Magic Art*, Vol. I, p. 154), states that the Ancient Greeks said that smearing the eyes of a blear-eyed person with the bile of an eagle gave him an eagle's vision. Pliny (XXIX, 38), also recommends the bile of the following animals for various ocular conditions :—asio, a bird of the owlet tribe, boa, cock, goose, hen, hyaena and partridge. In Ancient Wales the following method was used for pain in the eye (Burroughs and Wellcome, *Ancient Cymric Medicine*). The bile of a hare, eel or stag was mixed with fresh urine and honey suckle leaves and the gum from an ivy tree, boiled and when cold applied to the corner of the eye. "It will be a wonder," says the anonymous writer, "if he who makes use of this does not see the stars at mid-day." In the Middle Ages application of the bile of a fish as a remedy for blindness was suggested by the story in the Apocrypha of Tobit losing his sight through sparrows muting warm dung into his eyes, and of his subsequent recovery when his son Tobias stroked his eyes with the gall of a fish (Tobit IV and XI). Thomas Moulton, the author of "The Perfect Oculist," whom Mr. R. R. James regards as a quack, declares that "the Gall of all ravening Birds, as also of Partridge, doth clear the Eyes and sharpen the Sight if any one of these be decocted with Juyce of Fennel and clarified Honey and dropt into the Eye."

According to Mazeyrie (197), in the Bas Limousin the bile of a cock, peacock or stork is used for treating ulcers of the cornea, while the bile of a heron, falcon, buzzard, nightingale and dove serves for dispensing clouds in the eye. In Swabia goat's bile is smeared over the eyes to strengthen the sight (Hovorka and Krönfeld, Vol. II, p. 783).

Milk.—Bitch's and ass's milk has been used for various ocular complaints (Cabanès, Vol. I, p. 80, 1910), and in the Bas Limousin ass's milk is specially employed for blepharitis, eczema of the lids and corneal ulcer (Mazeyrie, 203).

Blood.—In the fourteenth century the local application of blood

from a swallow's wing was regarded as a cure for blood-shot eyes (Henslow), and in the seventeenth century Moncrief stated that "diseases of the watry humor" could be cured by putting pigeon's blood into the eye.

Dung.—The administration locally or internally of animal faeces has been carried out for a variety of ocular affections from the earliest times. Jastrow, Jr. attributes the use of such a remedy originally to the hope of disgusting the demon who was the cause of the disease by the foul smell and of driving him away. The method, however, persisted long after the belief in such a deity had been abandoned.

Pliny (XXVIII, 28, XXIX, 37-38), mentions the use of the dung of various animals for the following conditions—blepharitis, corneal opacities, short sight, cataract, and films of the eyes.

In the Middle Ages, according to van Schevensteen (1923) the School of Salerno advocated coprotherapy for pannus, and the Quatuor Magistri of Salerno mention another remedy for this condition in which the faeces of a green lizard were mixed with cuttle bone. Even to-day this revolting remedy has not become entirely extinct. Cabanès and Barraud report the case of a girl who had been suffering from conjunctivitis for several months in spite of the most energetic treatment, but made a rapid and complete recovery after fresh cow dung had been applied to her eyes thrice daily. According to Bourke (311), the dung of young geese was the principal component of the *Aqua Ophthalmica Imperatoris Maximiliani*. The same writer (315), states that inflamed or running eyes were treated by the external application of the dung of swallows, prairie hens, pigeons, goats, horses, lizards and dogs. To counteract the unpleasant odour a little musk or camphor was added.

Eyes.—There are several cases on record in which local or internal administration of the eyes of various animals has been administered to a patient with defective vision in the hope that they will restore his sight. The following are examples—(1) In the forests of North West Brazil lives a sharp sighted falcon which is killed by the Koleua Indian who pokes out its eyes and drops the fluid into his own (Frazer, "Spirits of Corn and Wild," Vol. II, p. 104). (2) In Northern India it is believed that if you can eat an owl's eyes you will be able to see in the dark (*id.* 144). (3) Cabanès (*Remèdes d'autrefois*, 80), states that dog's eyes have been given for ophthalmia. (4) In the case of swollen eyes, the eyes of a live crab are extracted and placed on the patient's neck while the crab is put back into water (Cockayne, Vol. II, p. 99). (5) "The eyes of a crow hung about the neck strengtheth a weak sight and doth preserve the sight" (Moulton, 106).

Human Remedies.—The following is a list, in order of their

importance, of various substances of human origin employed for ocular conditions:—saliva, milk, urine, dung, bile, menstrual fluid, woman's hair, brain and cerumen.

Saliva.—In a recent paper, to which I have already referred, entitled "A Collection of Saliva Superstitions," Miss Rachel Sclare gives numerous examples of the curative properties attributed throughout the ages to saliva and particularly fasting saliva. The best known examples of the kind are the cures of blindness performed by Christ (St. Mark, VIII, 22, 2, and St. John, IX, 6), and Vespasian (Tacitus, Hist., IV, p. 81 and Suetonius, Vespasian, VII), respectively. Pliny (XXVIII, 7-12), also states that ophthalmia (*lippitudines*), may be cured by anointing the eyes with fasting saliva and that a woman's saliva is highly efficacious for blood-shot eyes, especially if she has abstained from food and wine the previous day. Belief in the therapeutic use of saliva is still far from extinct. In the Highlands, according to Mrs. Moodie, inflammation of the eyes is treated by rubbing them with saliva as by bathing them with milk and water. Lady Wilde (1890), states that in Ireland fasting spittle is considered to be of great efficacy for sore eyes, especially if mixed with clay taken from a holy well. In Germany a sty is treated by rubbing it morning and evening with fasting saliva and in Croatia a cure is supposed to result from spitting three times into the patient's eye (Hovorka and Kronfeld, Vol. II, pp. 794-795). In Belgium (van Schevensteen, 1923), states that application of a little saliva on the lids after prolonged work often produces temporary relief and that removal of a foreign body from the eye by the tongue is a method of choice in certain industries. According to Legey (200), in Morocco the saliva of a Cherifian descended from Sidna Mohammed, of an Assaoui or of a very pious man is supposed to cure chronic affections of the eye such as trichiasis, corneal ulcer or granulations of the conjunctiva. The cure is effected by the Cherifian placing the patient in front of him and spitting three times in his eyes.

Milk.—Woman's milk has enjoyed a high reputation as an ocular remedy from the earliest times and in a large number of countries, the chief indication for its use being relief of pain (van Schevensteen, 1923). It has been used either alone or in combination with animal, plant or mineral remedies.

Urine.—Human urine, used externally as a lotion or as a drink, has been a very popular remedy for ocular diseases from the earliest times. Pliny (XXVIII, 18), states that it is good for the cure of albugo, films, and marks upon the eyes. An early English remedy for "mist of the eye" was child's urine mixed with virgin honey (Cockayne, Vol. II, p. 309). According to van Schevensteen (1923), it has a great vogue in Belgium as well as in France, Holland, Germany and neighbouring countries. It is not without danger,

however, as numerous cases have been reported of purulent ophthalmia being due to local application of urine from a man or woman suffering from gonorrhoeal urethritis or vaginitis.

Dung.—Though it has not been so frequently employed as the excrement of animals, several examples have been reported by the older writers of the therapeutic use of human dung in the treatment of ocular diseases. The Ebers Papyrus, for example, mentions the local use for a film in the eye of the dried dung of a child mixed with fresh milk, and Marcellus recommends anointing the eye with a mixture of Attic honey, meconium and the milk of a nursing mother (van Schevensteen, 1923). According to Liébaut (quoted by van Schevensteen), the fluid distilled from the dung of a red haired man is a sovereign cure for lacrymal fistula, corneal opacities and lacrymation.

Bile.—According to van Schevensteen (1923), human bile as a remedy for ocular diseases was introduced later and employed much less frequently than the bile of animals. It figured, however, among the drugs recommended by the School of Salerno for the cure of cataract, and in China it has been regarded as a panacea for eye diseases provided that it has been taken from a dead enemy.

Menstrual Blood.—Among other remedial properties of menstrual fluid, Pliny (XXVIII, 23), quotes the opinion of many writers that menstruating women can give relief to defluxions of the eyes.

According to van Schevensteen (1923), menstrual blood is used by women in France for treating eye diseases in their infants and is also employed in Morocco in the form of a liniment for albugo.

Woman's hair.—Pliny (XXVIII, 20), states that woman's hair burnt in an earthen vessel or used in combination with litharge will cure granulations or sloughing of the eyes and the same view was held by Marcellus ("De Medicamentis," VIII).

Human brain.—Van Schevensteen (1923) quotes the following prescription from the Ebers Papyrus:—"Human brain divided into two parts, one is put in honey and smeared on the eye at night, the other half is dried, reduced to fine powder and applied to the eye in the morning." Van Schevensteen remarks that this method does not seem to have been remarkably successful as no further notice of its use has come down to us.

Cerumen.—Another rare form of a human remedy mentioned by van Schevensteen (1923), is cerumen, the use of which was advocated by Guillaume de Congeina, the pupil of Roger Frugardi, for the treatment of cataract and by Marshall for pain in the eye. Cabanès (Vol. I, p. 8, 1910), quotes from the *Ephémérides d'Allemagne*, the story of an old priest who had worn spectacles for a long time, but finally succeeded in dispensing with them by smearing his eyes with cerumen.

Plant Remedies.—In a richly documented article on plants in

diseases of the eye, van Schevensteen (1922), has collected about seventy such remedies still in use in Belgium, of which about twenty were mentioned by Pliny. The best known of these are cabbage, centaury, dandelion, elder, eyebright, fennel, garlic, leek, lettuce, lily, lily of the valley, mugwort, onion, parsley, plantain, rose, rue, saffron, spurge and swallow wort. These and many other plant remedies, which have now been relegated to folk medicine, at one time formed part of orthodox practice, as will be seen from Cockayne's collection of early English ophthalmology and R. R. James's "Studies in the History of English Ophthalmology." Plant remedies were given locally in the form of lotions, collyria, cataplasms, decoctions and powders, or by ingestion as in the case of euphorbia. They were administered either alone or combined with animal remedies, as in Moncrief's work, or associated with incantations or charms.

The ocular conditions for which plants were used were dimness of vision due to various causes, blood-shot eyes, corneal opacities, purulent conjunctivitis, but in a high proportion of cases the exact ocular condition is not stated.

Mineral Remedies.—Although much fewer than animal or plant remedies mineral remedies for eye diseases have been used from the earliest times, as is shown by the Assyrian Medical Texts translated by Campbell Thompson, which contain antimony, arsenic, cinnabar, copper dust and iron sulphate.

Among precious stones the sapphire for some time enjoyed a reputation as a cure for diseases of the eye. According to Thorndyke (Vol. II, p. 263), William of Avergne, bishop of Paris (1180-1249), alludes several times to the virtues of gems, and relates how the sapphire "of its own motion springs into a diseased human eye and cleanses it of its noxious humors." Fernie relates that the church of Old St. Pauls possessed a famous sapphire which was kept expressly for helping infirmities of the eye in all persons thus affected. Amber also has been credited with efficacy in eye troubles. Lupton (X, p. 8), states that "pieces of amber put or tyed to the hinder part of the head doe help the running or watriness of the eyes with a marvelous success." The belief that gold rings in the ears are good for sight is still current especially among sailors, though less frequent than it was. It has also been recommended for chronic eye diseases (Hovorka and Kronfeld, Vol. II, p. 785). In Scotland according to Gregor (39), a lotion prepared with milk and water from a perforated ball made of Scotch pebbles, which has been in the possession of one family for at least six generations, is credited with the power of curing all diseases of the eye. In modern Egypt, according to Walker, a necklace of stones of different colours is supposed to protect patients with ophthalmia from the loss of their eyes. In his "Catalogue of a Collection of Objects illustrating the

Folk-Lore of Mexico," Starr mentions *concha marina* or pearl shell, the powder scraped from which mixed with salt and seed is used for growths in the eye.

Hydrotherapy.—Attribution of healing power to wells, springs, fountains, streams and water from any other source is exemplified in many places in this country and abroad. James (27) makes the very probable suggestion that this belief is due partly to the general cleansing effect of the water, partly to the salts dissolved in holy wells, and perhaps chiefly to the psychological effect. According to Pliny (XXXI, 3), the hot springs near Cicero's home at Puteoli were good for the eyes.

Cornwall, as M. and L. Quiller Couch have shown, is remarkably rich in wells supposed to cure eye diseases. Other wells, according to Dan McKenzie (p. 235, 1927), with the same virtues are those in Yorkshire at Rosebury Topping, St. Gawen's well between Tenby and Milford Haven, and St. Augustine's well in Leicestershire. The same writer states that out of 129 healing wells described by Hope, Quiller Couch and others 29 served for ocular complaints. In Shropshire and Worcestershire the eyes are bathed with rain water collected on Ascension Day (Wright, 243). Holy wells for the treatment of eye disease are also to be found in Scotland (Black, 8), and Ireland (Lady Wilde, 1890), and Gomme. Holy wells still exist in many parts of Guernsey, and are resorted to for various diseases, especially inflammation and weakness of the eye (Hull). According to (Mazeyrie, 233), Bas Limousin, where water has always been the basis for any ocular treatment, possesses numerous wells credited with miraculous powers. Cabanès and Barraud relate that in the village of Termes and in the gorges of Tarn little basins in a rock in which rain has collected are reputed to cure eye diseases. The patients wash their eyes in the water and throw pins into it.

Sailors regard sea-water as an excellent remedy for eye disease according to Rappoport, who says that one has only to bathe the eyes with sea-water seven to eight times daily holding the head a little inclined for quarter of an hour. This little operation should be performed in the morning before sunrise and in the evening after sunset.

Transfer.—There seem to be only a few instances on record of belief in the transfer of ocular diseases to other persons or animals, such as I have illustrated in the case of skin diseases (1940), pulmonary tuberculosis (1941) and venereal diseases (1942). One example is to be found in Marcellus ("De Medicamentis," VIII), of which Lynn Thorndyke (1,589) gives the following translation: "The first time you hear or see a swallow, hasten silently to a spring or well and anoint your eyes with the water and pray God that you may not have sore eyes that year and the swallows will

bear away all pain from your eyes." Here an animal remedy is associated with a religious factor, and the curative power of water as well as with the idea of transfer. The only other examples of the kind which I have been able to discover are those reported by Bergen in the case of a stye: "Take a small piece of paper, rub it on the stye, go across the road three times and say each time

'Sty, Sty, go off my eye
Go in the first one that passes by."
Repeat at a cross road (Talladega, Alabama).
"Sty, Sty, leave my eye
And take the next one that passes by."
(Massachusetts, Indiana, California).

Charms.—The important part played by charms in the popular treatment of eye diseases at different periods of history is illustrated by Campbell Thompson in the Assyro-Babylonian era, by Warren Dawson in Ancient Egypt, by O. Cockayne, J. F. Payne and R. R. James in Early England, and by Hovorka and Kronfeld later down to the present day. They were specially used in the treatment of sore eyes, styes, cataract, and corneal opacities. Their use persisted for many years, and it was not until the seventeenth century that they became very much less prevalent. (Black (170), who states that many magic writings were simply invocations of the devil, citès the case of a woman who obtained an amulet for sore eyes, which cleared up on her refraining from weeping. When a friend, however, opened the paper in the amulet she found the words "The Devil scratch your eyes out and defaecate in their sockets." The woman lost her faith, began to weep again and her eyes became as bad as before.

Odd Numbers.—The use of odd numbers either alone or more frequently in association with other methods of treatment is a well recognised method of folk-lore medicine and has already been exemplified in the course of this paper in the case of styes.

Patron Saints.—Doubtless owing to the alarm caused by any disturbance of vision and the eager desire to seek more powerful aid than that provided by orthodox practitioners, there are more patron saints for ocular troubles than for any other disease. Van Schevensteen (1921) alone mentions no less than 19 saints in Belgium including the Virgin Mary whose aid is sought for diseases of the eye *viz.*—St. Adèle, St. Alène or Aline, St. Antoine, St. Bernard, St. Blaise, St. Claire, St. Godelieve alias Godolène or Godoleva, St. Laurent, St. Léger, St. Léonard, St. Liévin, St. Lucie, Marguerite de Louvain, St. Ode, St. Odrada, St. Paul, St. Quirin, the Virgin Mary and St. Wivine. Three more are mentioned by Mazeyrie in the Limousin, *viz.*—St. Jean Baptiste, St. Martial and St. Pardoux; two by Delaunay—St. Jean de doigt in Finistère and

St. Odile in Alsace and St. Juliane by Pettigrew. The reason for selection of these patron saints is not obvious except in the case of St. Léger, the martyr whose eyes were put out, and St. Claire and St. Lucie whose names suggested recovery of vision, St. Adèle who cured her blindness by miraculous means and St. Paul for the temporary blindness which attended his conversion.

A pilgrimage is made by those suffering from ocular trouble to the church or shrine connected with the particular saint and in the case of their cure *ex-votos* made of wax, wood, iron or silver were left by the grateful patients. In the case of the Virgin Mary, Lady Wilde (1889) states that Tober Maire (Mary's Well) near Dundalk, has a great reputation for cures and thousands used to visit it on Lady Day for weak eyesight. Nine times they had to go round the well on their knees, always westward. Then they drank a cup of water, and not only were they cured "but were as free from sin as the Angels in Heaven."

Ocular diseases and folk-lore remedies

A short account will now be given of the chief eye diseases for which folk-lore remedies have been employed, *viz.* sore eyes, styes, foreign bodies and cataract.

Sore eyes.—There are a large number of animal, vegetable and other cures recommended for the condition or conditions vaguely described as sore eyes which, like the German equivalent "*wehe Augen*," may well include not only conjunctivitis, but keratitis, iritis, blepharitis, trachoma and other ocular troubles. The animal cures include anointing the eyes with the grease on the surface of water in which a red snail has been seethed (Henslow, 107), putting a spider in a nutshell and hanging it round the neck (Bonnerjea, 239) and applying the lung of a hare to the eye (Cockayne, Vol. I, p. 143). In Aberdeenshire, says Black (63), anyone who wishes to cure sore eyes is recommended to catch a live frog and lick its eyes and then the patient's.

The vegetable cures consist in the use of a large number of plants either separately or in combination, especially fennel, rue, vervain, endive, betony and rose (Levens, 11). In Cornwall lycopodium or club moss is employed, but to be effective must be gathered at sunset and on the third day of a new moon (Dyer, p. 282, 1889). In Lincolnshire a poultice of rotten apples is recommended (*Id.* 287). Wesley advises drinking eyebright tea and washing the eyes with it. In Palestine the eyelids are rubbed with a figleaf (Spoer). Lastly hydrotherapy in the form of rain water collected on Ascension Day is employed in Shropshire and Worcestershire, as well as water from St. Augustine's well in the suburbs of Leicester and Gawen's well in Pembrokeshire ("Choice Notes," 203), while Moncrief (207)

declares that the condition is cured by the application of cold water in the beginning of the inflammation.

Styes.—It is a remarkable fact that so comparatively insignificant a condition should have more folk-lore connected with its treatment than any other ocular disease. The best known popular remedy in this country is rubbing it with a tom cat's tail. Several modifications, however, of this method exist. In North Hants., for instance, the cure must take on the first night of the new moon, the cat must be black, only one hair must be plucked from its tail and with that the styne must be rubbed nine times (Black, 151). In Somersetshire, Devonshire and Cornwall the styne is rubbed outwards from the nose with a wedding ring (Wright, 247). In the Highlands of Scotland, according to Mrs. Grant, the chimney crook is heated until it is red and then pointed at the styne with the words "Pooh! Fire to thee, Fool." In Ireland, says Lady Wilde (1890), nine thorns should be pointed in succession at the eye without touching it and then thrown away over the left shoulder, or one gooseberry thorn should be pointed at it nine times.

The following cures are mentioned by Hovorka and Kronfeld (Vol. II, pp. 794-5). (1) In Germany the styne is stroked three times every morning with fasting saliva or the eye is touched with fresh barley corns and one says "fly away, fly away." (2) In Bavaria a gold piece or a gold ring is used for rubbing the styne. (3) In Croatia the styne is said to be soon cured if another person spits three times into the patient's eye. (4) The Magyars place a barley corn on the edge of a well in the belief that the styne will last as long as birds do not carry it off. A barley corn is also used in Russia and then thrown to the fowls. (5) In Styria dry plums or figs or a mixture of butter, white of egg and oil of lilies are applied and the styne is stroked with a black snail.

Lastly, in addition to coprotherapy in the form of a poultice of cowdung the following methods are employed in Palestine (Spoer). (1) The styne is rubbed with gold which has been inherited. (2) An old coin is rubbed on the wrist. (3) A house of feathers is made and set on fire. (4) A loaf is bought from the house of a shech, half is eaten by the patient and the other half is given to a black dog. As this animal is regarded as the home of an evil spirit the gift to the dog may be regarded as propitiating the evil one.

Foreign bodies.—Examples of the employment of magic in the removal of foreign bodies from the eye have been recorded from the earliest times down to the present day. In ancient times, as Campbell Thompson has shown, the medical texts of Assyria contain incantations used for this purpose.

The insertion of crab's eyes into the conjunctival sac was recommended by Fabricius Hildanus (1560-1624), in Styria where spitting three times into the closed eye is also used. In North East Scotland

according to Gregor (35), certain families are supposed to possess the power of charming away particular diseases, and the power goes down from one generation to another. In one such family which had the power of extracting moles from the eye, the following procedure was carried out. The operator passed his hand repeatedly over the affected eye while he uttered in Gaelic the following words "The charm that the Great Origin made to the right eye of the good son, take the mole out of his eye and put it in my hand."

Women in the Western Islands of Scotland were also reputed to be able to remove moles from the eye, though at some distance from the person affected. Dalryell suggests that the source of such superstition is to be found in different passages of Scripture relating to Elisha's staff and the handkerchiefs and aprons of St. Paul.

In Ireland, according to Lady Wilde (1890), an incantation is uttered by a "fairy woman" over a plate of water. The patient is then told to look steadily at the plate and the mole will drop into the water and the eye become clear. Another magic method for the removal of foreign bodies in the eye is practised in Donegal where a certain wise woman having been informed that a distant patient's eye has got a splinter in it, fills a bowl of water and walks with it to the door. Two mouthfuls of water are taken with no result, but on the third trial the messenger reports that the foreign body is floating in the bowl (Black, 139). In British East India, according to Sutherland, sesame oil is dropped into the eye after rolling up the lid and a woman's milk is squeezed into the eye. Another common folk-lore practice for removal of foreign bodies at the present time which is practised in several industries and in the cab of a train, is for the sufferer to get his mate to extract it with the tip of his tongue. Leslie's well known picture of Uncle Toby and the Widow Wadman, which forms the frontispiece to the second volume of Hovorka and Kronfeld's work well illustrates the preliminary steps to removal of a foreign body.

Cataract.—According to Hovorka and Kronfeld (Vol. II, p. 798), knowledge of cataract dates back to the earliest period of civilization, though there do not appear to be any grounds for the supposition that the Ancient Egyptians undertook the operation of needling. The fable of a blind goat being cured by running a sharp reed into eye is told by Galen and Aelian. Similar animal remedies are mentioned by Pliny (XXIX, 38), such as the ashes of a weasel and the brain of a lizard or swallow. Guillaume de Congeinna of Salerno, quoted by van Schevensteen (194, 1923), recommended human bile or cerumen as a sovereign remedy. According to Bourke human dung has been used for cataract.

The following cures are mentioned by Hovorka and Kronfeld (Vol. II, pp. 801-4). In the village of Demjanci in the Poltava government a red thread is attached to the ear with an earring and

a magic formula is whispered. Powdered sugar, crushed crystal, or frozen cowdung is put into the eye. In Poltava the bile of a sturgeon or partridge and the blood of the latter are also dropped into the eye. Fish bile is also employed in Mongolia. In the Kanew district prayers are addressed to the Virgin Mary, Father Nikolaus and St. George for their help.

Plant remedies in Slovakia consist in applying a geranium to the occiput with the object of breaking up the cataract, or pulverizing a peach kernel, mixing it with powdered sugar and dusting it over the cataract. Another local remedy, which is employed by the Magyars, is the powdered shell of a lark's egg.

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