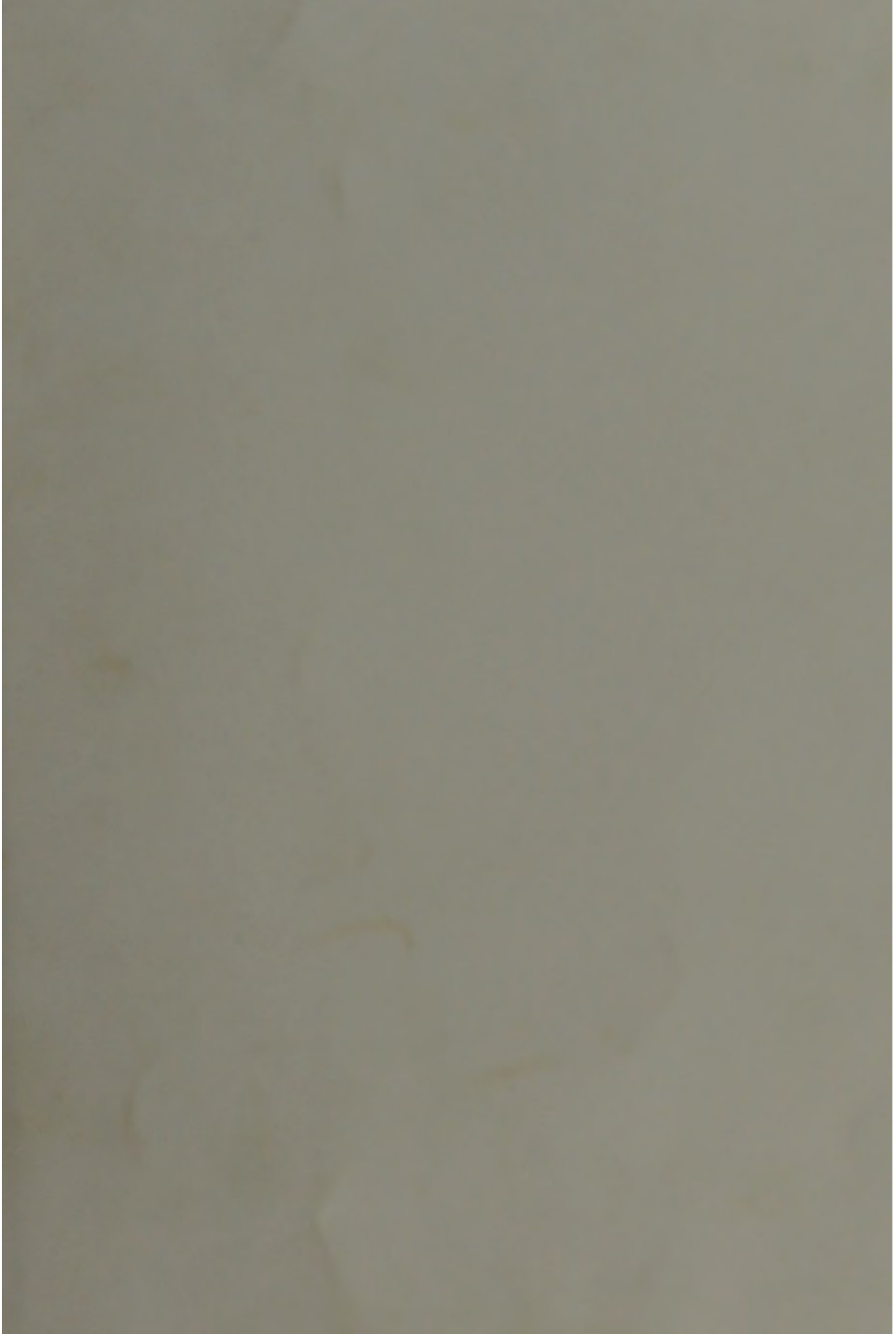
Notes to a synopsis of the diseases of the eye / by Benjamin Travers.



NOTES

TO

A SYNOPSIS

OF THE

DISEASES OF THE EYE.

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NOTES.

NOTE A.

The relations of structure in every organ are such as to render it impossible that any texture can long be singly affected. But it seems reasonable to consider that texture as the proper seat of the morbid action which presents the earliest, or strongest, or exclusive signs of it. I do not therefore adopt the term "Ophthalmitis Scleroticæ," as applied to all the deeper seated inflammations; nor do I consider the corneal and iritic inflammations merely symptomatic, and as having their proper seat and base in the sclerotic, (although in rare instances it may be so,) because from the affinity and vascular connection of the parts, that membrane presents the ordinary appearances of inflammation during their existence. However inflammation may deviate from the ordinary course and the order of local relation, and, however complicated its results may be, it is to be referred to the texture primarily and principally affected, and is thence properly denominated; as in the instances of sclerotitis to which this note refers.

Intolerance of light is considered by some respectable authors to be diagnostic of sclerotic inflammation. This is not my opinion, having in numberless instances witnessed that symptom in the most aggravated degree in the absence of every external sign of inflammation. But on the other hand I am willing to admit, on the ground above stated, that sclerotic inflammation is often present in such instances.

The sympathy of the sclerotic and the ligamentous capsules with the urethra in gonorrhea, is as unquestionable as that which has been more generally observed, because more

frequently occurring, between the latter and the synovial membrane. I have seen cases so nearly resembling that described by Dr. Vetch in his late valuable treatise*, under the head of 'gonorrheal ophthalmia,' (page 243,) that I can vouch for the accuracy of the description. This phenomenon it is not so easy to explain as the coincidence of the suppurative inflammation of the conjunctiva with acute gonorrhea, which, notwithstanding the apparent contradiction of some experiments, I am convinced originates from contact, as is indeed proved by the history of the ophthalmia of infants, and by the fatal effects which have unfortunately fallen more than once under my observation, of an accidental application of morbid matter to the sound organ.

The disposition between remote parts to be reciprocally affected admits of two modes of explanation. First, by a partial sympathy depending on identity of structure (serous, synovial, mucous surfaces). Second, by a mode of the universal sympathy which prevails throughout the system, independent of the alliances of structure and organization, which disposes parts different in properties to be affected reciprocally by the same forms of diseased action; (joints of the hand and foot, stomach and retina, in gout; muscular fibre and ligamentous capsules in rheumatism; skin, mucous membrane, and iris, in syphilis). To the numerous, extensive, and complicated sympathies of the latter class belong many cases of metastasis, in which the secondary often differ from the primary forms of diseased action. Inflammation in one organ occasions in another congestion, and *vice versâ*; and the cessation of an habitual secretion in one, whether natural or morbid, gives occasion to inflammation in another. Preternatural irritability, swelling, pain, spasm, are thus excited by this reciprocal sympathy, in remote organs; or a metastasis, a change of place, strictly speaking, occurs; the morbid action abruptly quitting one part before it appears in the other. But not only does the

* See "A Practical Treatise on the Diseases of the Eye," by John Vetch, M.D. F.R.S.E. London, 1821.

reflected action often differ in its nature from the original, but this, in many instances, continues in undiminished activity, so that the metastasis is only an incidental feature of the association. Now if the sclerotic and the ligamentous capsule are liable to be reciprocally affected, we may refer it to the first stated sympathy of kindred textures, as in the case of hernia humoralis and gonorrhea, whether simply propagated or metastatic; and of rheumatic or scrofulous inflammation passing from joint to joint. But if the above mentioned parts are, as I believe, subject to be consensually affected during gonorrheal inflammation*, I should explain it by reference to the second and more diffused sympathy which connects all organs and textures through the medium of the common sensory, with various degrees of affinity, according to their vital powers and properties.

NOTE B.

In the history of the idiopathic iritis, by Dr. Schmidt of Vienna, a yellowish red tubercle is described as forming upon the surface of the membrane, which enlarges, and at length bursts and discharges its contents into the chamber. This he denominates an abscess, of which the cyst remains visible for some time afterwards. But for the general accuracy of this author's descriptions, I should decide against the correctness of this observation. I have never been able to discover any thing resembling an abscess in the iris, though perfectly familiar with the appearance of a tubercle like that described; and it is highly improbable that lymph should be effused in tubercles, which in some parts become rapidly organized and absorbed, and in other parts form cysts of abscesses, upon the same texture, at one and the same time. Such abscesses would degenerate into ulcers,

* I speak here of true sclerotic inflammation independent of any mixture of puriform conjunctival ophthalmia.

an appearance never witnessed. Pus, as I believe, is never formed in pure iritis.

A species of iritis is described by the same author which he names the arthritic, an inflammation either primary, or secondary in a gouty habit to a common ophthalmia. It is attended with excruciating pain. Its diagnostic signs are the appearance of a narrow white ring at the verge of the cornea, and a varicose disposition of the vessels of the conjunctiva. In spare and irritable individuals the pupil becomes contracted as in the idiopathic iritis, the blood vessels of the iris are varicose, and the disease terminates in a diminution of volume of the eye-ball. In persons of full habit and relaxed fibre, the pupil, on the contrary, becomes remarkably contracted, but not uniformly, being transversely oval. No lymph is effused, but a greenish yellow appearance of the humors is observed, and the lens bulges forward, of a sea-green color. This pain which is periodical, and announced by a burning sensation around the organ and a profuse flow of tears, is of the most severe description. The vessels of the choroid assume the same varicose state as those of the conjunctiva, and the transparent sclerotic presents a dark ring in the situation of the corpus ciliare. Total blindness accompanies this state, and atrophy of the globe ensues.

In this country we have not been accustomed to distinguish gouty inflammations in this organ. If an inflammation, characterised as above, is peculiar to the arthritic diathesis, the distinction is borne out; if not, the division is frivolous. I am unable to decide upon the value of the diagnostic sign first mentioned; not that it has altogether escaped my observation, as being in some instances of deep seated inflammation more strongly marked than in others; but that no evidence has been conclusive to my mind of the existence of a distinct species of iritis affecting gouty subjects. A varicose state of the vessels is the ordinary result of continued inflammation, whatever be the texture affected. The same may be said of the ultimate state of atrophy of the entire organ from interstitial absorption. But to speak my opinion candidly,

the two states which are here described as varieties of iritis, according to the different habits of body in which it appears, are essentially different forms of disease. The fully dilated and transversely oval pupil, the collapsed and disorganised iris, the varicose vessels of the choroid and conjunctiva, the attenuation of the sclerotic and bulging of the ciliary ring, all indicate not an existing inflammation, but a disease gone by; they are slow after changes which ensue upon acute destructive inflammation of the choroid and retina; and the agonizing attacks of pain which I have often witnessed in this precise condition, are the result of an universal congestion of the vessels and consequent distension of the eyeball, for every loss of blood gives temporary relief, and when the loss of volume is observed to commence, these attacks cease and return no more. That the angularities of the pupil are in one form of the iritis (syphilitic) observed to be upward and downward, and in another (arthritic) from side to side; that the sclerotic vessels, in one case, advance boldly to the cornea; and, in another, are separated by a line which is only visible through a magnifier, are circumstances too much of a contingent and casual nature to be admitted, as affording a ground for invariable and specific distinctions; and to look at them as types of corresponding constitutional states, is almost ludicrous.

NOTE C.

This head and that of amblyopsia, page 185, include a very considerable proportion of the cases of functional amaurosis. The amblyopsia may be regarded as the advanced stage of the symptomatic amaurosis, and borders upon paralysis. The disorder of the conjunctival surface, in many instances of pure weakness of sight, unattended by any degree of dimness, is so slight, as either to induce a belief that it has no share in the disease, or that it stands in the relation of an indirect effect, rather than of an exciting cause of the complaint. We must therefore con-

sider it in such cases as a primary nervous affection; or as originating from sympathy with some other organ, or some peculiar state of the system. The existence of such causes, in many instances, is too obvious to escape notice: in others, I have looked for it in vain. Neither has the organ been over-exerted nor oppressed; nor have the functions of the stomach, liver, uterus, &c., varied from a state of health. Excepting the absolute suspension of all such employments as demand the exercise of what may be called active vision, to speak honestly, I know of no remedy for the disease. It is more frequent in early and middle, than in advanced life; and in females than in males. There is no unusual intolerance of light, nothing amounting to actual pain, no defect of vision; in short, the sum and substance of the complaint is the sensation of an effort to see, and the want of power to continue it. The removal of the exciting cause, the first and most important step in the treatment of all diseases, although so negative as almost to amount in the patient's estimation to an abandonment of the case, is in this more efficient than active measures, as abstinence may on some occasions be advantageously substituted for cathartics. Accordingly I have known the complaint materially mitigated by perseverance in this system for six or twelve months, with a scrupulous attention to regimen; and perhaps by extension of the principle, a state of protracted sleep, if it were possible, might be the readiest mode of cure.

A young gentleman who consulted me three years ago for muscæ, a weakness of sight, and inability to exercise his sight in any way requiring continued attention, a painful sensation from looking at pointed objects, as pins, needles, or the corner of a chimney piece*, I have lately seen. There is not now, nor ever has been,

* This is the only example I have met with of this very expressive symptom of a tender, or highly irritable retina. It seems to me to resemble those disagreeable but natural sensations, viz. the teeth on edge, or the *cutis anserina*, when amounting, as in some individuals, to a morbid excess, and excited by impressions of which they alone are susceptible.

the slightest deviation from a healthy appearance of the eyes; the pupils contract freely, and there is no intolerance of light, nor does his uneasiness, though it compels him to desist from employment, ever amount to pain. He has a frame rather spare than plethoric, a healthy complexion, good appetite, animated disposition, and spirits corresponding to his health, if some apprehension about his sight did not occasionally depress him. His education has been from this cause interrupted, and he is unable to indulge his inclination in the choice of a profession.

Before I saw him he had been subjected to different plans of treatment. First, undue determination of blood without any sufficient reason was presumed; for this hypothesis he suffered leeching, cupping, and blistering. Secondly, it was regarded as a nervous affection; evacuations of blood were countermanded, and a particular attention to the bowels, sea-bathing, exercise, and various tonics substituted. I gave my opinion in writing three years ago, that the disorder was purely functional, that the systematic regulation of the bowels, attention to diet and exercise, with as much indulgence of the organ as was possible, comprised all the means of treatment which my experience suggested. That depletion on the one hand and the higher tonics on the other, would not amend, if they did not aggravate the complaint. At the same time, I recommended a trial to be given to the blue pill, the bitter infusion, and blisters. The disease is as nearly as possible the same at this moment, as when I was first consulted. His own observation is, that his sight is evidently more affected by the state of his stomach than any other circumstance, that the more observant he has been of the plans laid down for the regulation of diet, &c. the more tranquil and comfortable has been the state of his eyes. Reading a few pages of a book is infinitely more distressing than the glare of a theatre or a ball room; and the sense of debility is greater during the morning than at any other time. But even though the bowels are perfectly regular, and the digestion strong, the same feeling prevails; and on the other hand, when these functions have been very irregular, it

has often happened, that the state of vision has been as good as at the best.

NOTE D.

Professor Beer refers to many cases of this description, as from suppression of febrile diseases of the skin, scarlatina, variola, &c. in the first period of the eruptions. The pupil in these cases is much contracted and immoveable; the prognosis favorable, if treated early. He has also seen the disease after suppressed chronic diseases of the skin, as psora; after the amputation of the plica polonica, and very many in consequence of an abrupt healing of old leg ulcers. The prognosis in these cases is unfavorable. In that arising from suppressed catarrhus narium, in which the pupil is angular and drawn toward the outer canthus, he considers the prognosis encouraging. He mentions as rare and unfavorable forms of the metastatic amaurosis, those arising from suppressed secretion of milk in lying-in women, and from suppressed passions of the mind.

NOTE E.

An elderly gentleman, the subject of confirmed organic amaurosis, whom I had seen at intervals, died lately, and his friends kindly afforded me an opportunity of examining his head after death. In the year 1816 he first complained of dimness—was unable to mend his pen as usual, changed his spectacles repeatedly—and from writing a small neat hand wrote large and straggling. In walking he imagined that he saw objects on the ground which intercepted his path, and endeavoured to avoid them by taking long and high steps. The flames of the candle at night appeared multiplied and undefined. There was little if anv difference between the two eyes. About the time that is sight grew dim, he complained of uneasiness and on in the head. H

often described the horrible sensation of passing under an archway, with the fear of being crushed by its falling*. His habit was plethoric, and he was apparently in the full vigor of health. As these symptoms, together with much lethargy, was considered to threaten apoplexy, he was freely and repeatedly blooded, and in other respects treated accordingly. He became totally blind and soon afterwards dark. His eyes were perfect in appearance. They had the unmeaning roll characteristic of the disease in its last stage. Pupils a good deal dilated and motionless. A full course of mercury and electricity were employed without any effect. The latter was persisted in for six months.

In the progress of the case he was attacked with fits of a mixed kind, partly apoplectic, with temporary hemiplegia, and in part epileptic; his mind and speech failed him. Great torpor of bowels and indigestion, scantiness of urine and pain in voiding it, coldness and œdematous swelling of the lower extremities, with frequent and severe convulsions of his whole frame, were the symptoms most remarkable towards the close of his life.

On inspection of the head, the ventricles of the brain were found greatly surcharged with serous fluid, and the optic nerves to and from the ganglion opticum shrunk, or rather absorbed; so that they appeared flat instead of cylindrical, and of a straw color instead of a silvery whiteness. In slitting, and cutting them across, it was evident that only the sheath of the nerve remained, the medullary substance had entirely disappeared. The eyes nevertheless were in all respects sound, and had the plumpness and clearness of health. There was no vestige of an apoplectic effusion.

The following case exemplifies the exclusive paralysis of the *nervi motores* referred to in the paragraph to which this note belongs.

* Another morbid horror, somewhat resembling this, I have heard described, viz. the approximation of the walls of the apartment, so as to give the patient the impression of being in a closet just large enough to contain his person. I scarcely need observe that all such delusions have their origin in the sensorium.

Mrs. W. a healthy woman, aged 28, suckling an infant of five months, was attacked, in June 1820, with severe pain in the head on first rising in the morning, which in an hour or two subsided, but after some time it continued during the whole day, affecting chiefly the left side. She, of her own accord, applied leeches to her temples and a blister behind each ear, but without relief. In August following finding the pain almost insupportable, her family surgeon was consulted. The bowels, he informed me, were so obstinately costive as to be with difficulty acted upon by powerful cathartics. Being still unrelieved after brisk and effective purgative medicine, she concluded it to be rheumatism, and wrapped her head in flannel. In crossing the road on the 8th of November following, she felt a sudden smart shock between the orbitar processes, like a pea striking her forehead. From this moment the pain in the head ceased ; but she found the vision imperfect—that is, she saw objects in unnatural positions, and although she could see distinctly with either eye, she could not with both, and therefore tied up one, the left, which was rather the weakest, when engaged in business. Both eyes appeared perfectly healthy, and the pupils were equally active. On the third of December following she first saw objects double, and the strabismus was so marked as very sensibly to disfigure a pretty and pleasing countenance. Both eyes were turned towards the nose, the left most so. Both pupils nevertheless acted freely. She had suffered no return of pain since the 18th ultimo. She was now cupped to twenty ounces from the nape of the neck and temples. Her bowels had been kept in action by the pil. hydrarg. and an occasional purgative draught. Since the double vision began, these were directed to be continued. A large blister was applied to the occiput after the bleeding, and three days afterwards no improvement appearing, each temple was bled with six leeches, and these parts were also blistered. The dose of blue pill was gradually raised to ten grains twice a day, and in a fortnight the mercurial action was established.

Previous to this event, it was noticed that her vision had

been less confused. She was cupped twice in this period to six ounces, and blisters applied behind the ears were kept open for some days. Her mouth continued sore about a month, during which time she gradually recovered single and perfect vision, and the strabismus was corrected. During her recovery she saw but one object on looking stedfastly in a straight direction; but upon turning her eyes to either side, or upwards, she still saw objects double; and even now that her vision in all directions is ordinarily single, whilst in a supine posture, and especially whenever her mind recurs to the subject, her vision is occasionally double.

During her treatment, she was seldom free from a sense of heaviness about the forehead and occiput, and vertigo. The pulse was quick and feeble, countenance pale and haggard, mind irritable and anxious; and she laboured evidently under great debility, both muscular and nervous. The recovery of the eyes was very gradual; no sensible acceleration of the rate of progress was observed during the mercurial influence. She did not however lose what had been gained in sight, though she lost strength. Even since the recovery of the sight, and in a great measure of her flesh and strength by country air, the continuance of weight and uneasy sensations in the head, led me to recommend a seton in the nape of the neck, which she adopted with advantage.

This young woman, I should observe, the mother of several children, acted as her husband's book-keeper, and, whilst pursuing this sedentary and anxious occupation, had been accustomed to drink freely of potent home brewed beer.

This case is contradistinguished to that in which the affection of the retina precedes the strabismus. Here, it is the symptom—there, the cause of the strabismus. The sympathetic affection of the retina in the case just related, is the slightest possible. In the majority of such cases, it is more marked, so that the vision of one eye is much stronger and clearer than that of the other, and *one* eye may be said to

be in fault. When strabismus ensues upon amaurosis, this difference is still more conspicuous. But the prognosis is not least serious when the retina is least affected; a squint from blindness adds little to the case but confirmation that the retina is insensible; but strabismus coming first connects the origin of the disease with the cerebrum, and what alarm we feel in one case for the sense of vision, we feel in the other for life, or, what is of yet more value, for intellect.

I must beg my reader's excuse for still farther lengthening this note. A few days ago I was desired to visit a gentleman between thirty and forty years of age, who had just arrived from the West Indies, on account of a large and hard tumor seated in the abdomen, about the nature of which his medical attendants were in doubt, from its external character, its apparent insulation, and frequent change of place, being sometimes in the epigastrium or beneath the umbilicus, and at other times distinctly felt in the right iliac region, in the position of the caput coli. Sometimes it was concealed and could not be felt any where. The disease was of seven months standing, attended with marked symptoms of stricture in some part of the intestinal canal: a very imperfect and disturbed state of the alimentary functions, frequent hiccough, sharp pains in the belly, and great emaciation.

On the day of my seeing him, he was suddenly seized with a new symptom; viz. convulsions and total blindness; and in the interval of the fits, which were protracted and severe, he complained of pain across the top and front of the head. His pulse was regular, but compressed; his skin was covered with a cold perspiration; except during the convulsive paroxysm, his mind was perfect, but his manner was changed from anxiety to apathy. The pupils were dilated to the utmost, as in hydrocephalus; he had no sense of light, no perception of its interruption. I directed his head to be immediately shaved, and twelve ounces of blood to be taken by cupping from the temples, and above each mastoid process. Afterwards a blister to be applied in the direction of the coronal and sagittal sutures, sinapisms to his feet, and a pill to

be taken, composed of five grains of calomel and half a grain of opium. Two hours afterwards, the convulsions recurring, and his skin being still cold and clammy, he was ordered a cordial draught and a small quantity of brandy in gruel occasionally. At the same time a turpentine glyster was administered; this was soon followed by a very plentiful discharge from the bowels, a warm and copious perspiration, and a sound sleep of several hours. The next morning he awoke free from pain, and his vision was as perfect as ever. He had no return of convulsion or cerebral disorder of any kind. No material change occurred in the symptoms of the original malady during this short but truly alarming attack.

This amaurosis, there can be no doubt, was an example of sympathetic irritation and congestion. The cupping was a precautionary measure indicated by the amaurosis; there was pain, a firm pulse, and this unequivocal symptom of compression; effusion was instantly threatened; a stimulus at this moment appeared hazardous. We expected to see him expire in each fit. The pill, followed by the stimulant glister, was remedial, and for the time saved him.

P. S. Since the above was written, this gentleman is deceased. On inspection, a firm, very irregular, fungoid tumor, of the size of a man's double fist, knobulated, fissured, and of a truly malignant aspect, was found occupying the head of the colon; and by its origin from an extensive surface of the mucous membrane, partially inverting and concealing the termination of the ileon and the cæcum, of which only the appendix vermiformis was seen. He had no other organic disease.

NOTE F.

The different forms of amblyopsia amaurotica enumerated by Professor Beer are as follow:—

Visus interruptus—the person in reading sees only single words or letters.

Visus dimidiatus—S. hemiopsia.
Visus muscorum—S. myodesopsia.
Visus reticulatus—a higher degree of the former.
Visus lucidus—Photopsia. Marmaryge. *(Hipp.)* Sparks and flashes of lightning perceived by the patient.
Photophobia—light painful.
Oxiopsia—a state of vision which enables the patient to see with perfect accuracy the smallest point when deprived of light.
Visus nebulosus.
Visus duplicatus—S. Diplopia, Luscitas, et Strabismus.
Visus coloratus—S. Crupsia, all objects seem colored, green, blue, yellow, &c.
Visus defiguratus—S. Metamorphosia.
Myopia and Presbyopia.
Nyctalopia and Emeralopia.
Amblyopia vaga—periodica—intermittens.

NOTE G.

Professor Walther, in an essay on this subject, has stated some very original and curious notions. He thinks that cataract is the primitive and natural state of the lens, and that congenital cataract is therefore not an altered but an unaltered condition, in consequence of a check given to the developement of the embryon. Like other malformations, it is not owing to the influence of any active or formative cause, but having been originally present in every embryon at certain periods of its existence, does not disappear in its progress to a more perfect state, as it does where this progress is unchecked. The three months' fœtus has a hare lip, and but one cavity for the mouth and nostrils. The iris is imperforate, and so are all the apertures of the perfect body. The eyelids are fastened together over the naked eye, and

the cavity of the umbilical cord being one with the abdomen, exomphalos is the natural and original state.

Walther considers cataract to be always the result of inflammation of the capsule, acute or chronic. By a powerful magnifier he has discovered a wreath of vessels about a quarter of a line distant from the pupillary edge of the iris, forming a concentric circle with the pupil. To this vascular wreath vessels pass in radii from the circumference of the capsule, and into the posterior surface of the iris. Nay, a network of more delicate vessels is described to have been seen deeper seated in the lens itself, "the larger trunks of which are not always derived from the circumference of that body, but evidently come from its posterior surface directly forwards, and then divide into branches*." This is an appearance entirely morbid, the same authority deciding that there is no organized connection between the lens and its capsule in health, and that the lens is nourished by imbibition or absorption of the humor Morgagnii, secreted by the vessels of the capsule, into which it again deposits its waste, being merely furnished with absorbent and exhalent vessels. Hence inflammation of the lens is always secondary to that of the capsule, in the same manner as inflammation of the capsule is secondary to that of the iris. Spots seen in the capsule, whether grey or brown, are, we are told, deposits of lymph, in which the prolonged vessels are seen terminating.

The inflammation of the capsule and of the lens are described as diseases marked by certain signs and appearances. The latter is always chronic like that of the bones, cartilages, and fibrous textures. When the disease is established, the blood vessels of the lens and capsule become varicose. The firm cataract is the termination of inflammation in induration. The milky exemplifies suppuration. The dry siliquous or shrunk cataract is a dry gangrene. The hard cataract when occurring without inflammation is a scirrhus, and the purulent may sometimes be the effect of ulceration

* I quote the words of the Analysis in the Quarterly Journal of Foreign Medicine and Surgery.

of the lens. Other cataracts are considered to be sarcomatous!

The first part of these observations, namely, that referring to the appearances exhibited in inflammation of the capsule, from its consistency and analogy with the phenomena that are open to observation, has been anticipated in the way of hypothesis, and may be admitted with proper allowance for the chances of optical delusion in the employment of a sextuple magnifier. But unfortunately the enthusiastic devotion to system which the author betrays in his pathological notions, (which are to my seeming pure nonsense,) gives an air of marvel to the whole story.

Professor Beer divides cataracts into true and spurious. The true is within the capsule; the spurious is placed between it and the iris. The principal kinds are,

True. 1. Lenticular. 2. Anterior capsular. 3. Posterior capsular. 4. Morgagnian. 5. Capsulo-lenticular. 6. Cystic. 7. Siliquous. 8. Cataract with a cyst or sac containing pus. 9. Trabecular.

Spurious. 10. Lymphatic. 11. Purulent. 12. Sanguineous. 13. Pigmentous.

The distinction and dignity of a name given to each variety, is the only novelty of this list. The cystic is the floating cataract, the capsule opaque and thickened, and the lens more or less absorbed. The siliquous is the capsular cataract, the lens being absorbed, as after wound or rupture of the capsule*. The cyst containing pus is rare. The trabecular is probably the radiated. As to the four last, they are results of iritic inflammation, not cataracts; nor are they in this country confounded with them. They are seldom if ever met with but after blows, wounds, and operations.

* Do the travelled pedants, who deal such heavy blows among their ignorant and besotted countrymen, suppose that these every day forms have escaped our notice? In England, as in Germany, the same things are seen, but their importance is differently estimated; they are differently explained, arranged, and reasoned upon. I am content it should be so.

NOTE H.

THE often mooted questions—first, in what cases topical blood-letting commands an advantage, if in any, over phlebotomy, as usually practised at the arm;—second, whether drawing blood from an artery is of greater efficacy than from a vein, the quantity being the same—may be answered, I think, in a few words. To the first I should reply—if the system is inflamed, i.e. if the pulse indicates that the action of the heart is excited by the state of the organ, or if the activity or rapid progress of the inflammation, however local, threatens the safety of the organ, we ought not to trust to topical blood-letting. In such cases it may be employed subserviently with great advantage, but not principally. If on the other hand no such sympathy is evinced, and the inflammation, though acute, is in its nature weak and slow of progress, the local blood-letting may commonly suffice. But is it in such cases to be preferred? Generally I think it is, because the inflamed vessels are relieved from the state of congestion and tension, and are enabled to recover their contractile tone, at a smaller expense to the system. To pale the inflamed conjunctiva by opening a vein in the arm, supposing there is no disposition to syncope, will require a loss of from twelve to sixteen ounces of blood; whereas this effect will often be produced by a loss of one third of that quantity drawn as quickly from the immediate neighbourhood of the inflamed organ. Syncope from dread of the lancet will produce the best effect of a topical bleeding, and may stand in its stead. It will be no substitute for general bleeding where that is indicated, for the same reason that topical bleeding is no adequate substitute for general. Thus, though a general bleeding will answer the main purpose of a local one, it is least economical when neither the character of the inflammation, nor the danger of its duration calls for it; and therefore in strumous and other weakly habits, in atonic and sluggish inflammations, it is least eligible.

Nevertheless when the inflammation and the part affected are such as to require general blood-letting, and the patient owes his safety to its employment, topical is continually had recourse to with remarkable advantage, and the latter is more eligible as an auxiliary in such cases, than the former as a substitute in those of an opposite description. The difference of the inflammatory action according to the texture of the organ affected, is comprehended in the above general statement.

Leeches are the least effectual mode of topical blood-letting. In many instances the blood derived by them is not sufficient to counterbalance the irritation caused by the wound, and they act as irritants, augmenting the vascularity, swelling, and pain.

To the second question my observation leads me to reply in the negative. The effect upon the heart's action will be determined by the quantity lost, and by that alone—taking the distance from the heart and the size of the current—in any artery which it is usual or would be discreet to bleed from.

NOTE I.

The gratitude of the public, the highest, if not the only reward for public benefit to which an honorable mind aspires, is unquestionably due to Dr. Vetch, for the successful treatment of this formidable disease, especially in its first and most formidable stage. He reprobates the excision of the granulations and the division of the conjunctiva. Although I have seen cases of the absorption of large and even pendulous granulations, and believe that such absorption almost invariably takes place where the disease is left to run its course, abundant experience has convinced me that the employment of the scissars is highly important to the favorable issue of the case, since the preservation of the cornea depends chiefly upon the restoration of the lining membrane of the lids, which this practice essentially promotes. Yet

so highly do I appreciate the importance of caustic and astringent applications judiciously employed, that if the joint use of these remedies were in any case proscribed, I should prefer, as a single measure, the use of the lunar caustic or the blue vitriol, to the employment of the knife.

Dr. Vetch objects to the use of these substances in solution as too stimulant, and contends that when lightly applied in the solid form they act most beneficially. There is much truth in this observation. The fact is, that in this, as in all chronic morbid changes, the treatment rests not upon one, but on a variety or perhaps a combination of measures; not upon this or that form or mode of application, but upon a form and mode suited to the existing circumstances. A topical application made with advantage to-day would probably be hurtful to-morrow. To watch the caprices of the case, the moment of excitement and of relaxation, to subdue, to soothe, or to support promptly, and thus to break the force of each successive relapse, varying the means as the circumstances permit, are points indispensable to conduct the case to a favorable termination, and are those which distinguish the man of science from the empiric. But the local treatment is by no means the only material part of the 'Therapeia' of these cases.

NOTE K.

WHERE these circumstances are not present, the subjects of this inflammation are, in my experience, weakly and of a scrofulous habit; the tame, indolent, shifting character of the disease, while it retains its primitive character, viz. the pink colored zone at the verge of the cornea, vivid one day, and scarcely perceptible the next, render it more difficult to subdue than a fixed and vigorous action; and the practitioner is insensibly betrayed into irresolution by the seeming inertness of the disease and the obvious delicacy of the patient. But diseases, like other dangers, are formidable in proportion as they are disguised, and it would often prevent mischief, if a bolder practice were instituted in the outset than circumstances appear to the inexperienced to warrant.

NOTE L.

THIS statement requires some qualification. What I mean is this; where the mercurial action being fairly established is productive of no sensible improvement, its continued and freer use is attended with no advantage, and is, therefore, constitutionally injurious; but I do not mean to say that the full advantage will always be obtained by a short and gentle course; on the contrary, where in the commencement of the mercurial action the improvement is only sufficient to give encouragement to persevere, a course of three or even four months is often necessary to accomplish the end in view.

In amaurosis supervening on inflammation, especially recent inflammation, the remedy promises most; but even here, if the inflammation has induced perfect amaurosis, it will often restore the iris to its color and activity without materially benefitting vision; for mercury is not a remedy

for paralysis. If however from inflammation—whether the result of injury or spontaneous, whether from the operation of a direct or a remote cause, the state of congestion or atony, the state of serous or lymphatic, perhaps of partial sanguineous effusion—the sensorial function be interrupted, our first hope is topical blood-letting and counter irritation—the second, the action of mercury.

At the distance of four years from a fall on the occiput, followed by severe symptoms of cerebral injury, I have known sight restored to the eye which had ever since been deprived of it, by a full mercurial course. Again and again I have seen the same effect produced by the same agent, where neither injury nor any other cause nor symptom of inflammation had ever existed, and where only a slow moving pupil corresponded to the patient's complaint of dimness, to such an extent as to render indistinguishable the features of a person standing before him: and on the other hand I have never known it to be of any efficacy in cases, ushered in by severe frontal pains, in which blindness was already complete, and the pupil largely and permanently dilated, where the greenish cast of the humors was strongly marked, and the visus lucidus was complained of.

NOTE M.

I CONFESS that I have seen no reason to alter the opinion here expressed, in several trials of this plan of treatment with the tube of M. Dupuytren, since the publication of this work. Through a learned member of the university of Paris, a patient of mine, and also of M. Dupuytren, I requested the professor to favor me with a case that might serve as a report in detail of the treatment which he had adopted. Upon this gentleman the tube operation, though performed by the Baron, was unsuccessful; but as he had previously worn for two or three years a nail-headed style with as little advantage,

the case certainly did not afford a fair chance of success, and the failure was attributed to this circumstance. M. Dupuytren, with the liberal and courteous spirit of a true friend to science, immediately transmitted to me the subjoined report of an interesting case which had very recently occurred; and I have great satisfaction in presenting it to my readers.

" Madame Daive, agée de quarante deux ans, demeurant à Sarre-Louis, vint à Paris dans le mois de Mai 1821, pour consulter Mons. le Professeur Dupuytren pour une tumeur lacrymale d'un côté, et une fistule de l'autre côté.

" Il y a six ans que la malade s'apperçut pour la première fois, que l'œil du côté gauche étoit larmoyant, qu'il se formoit souvent à son grand angle une petite tumeur qui se vidoit par la pression, et qui ne tardoit pas à se reproduire. Cette dame avoit un écoulement involontaire de larmes sur la joue ; l'œil de ce côté étoit toujours chassieux, larmoyant, la narine toujours sêche. Cette petite tumeur augmenta bientôt de volume, la peau qui la recouvroit, s'enflamma, s'amincit; les paupières se tuméfièrent. Ces accidens la firent recourir aux soins d'un chirurgien, qui ouvrit de suite cette tumeur : du pus, des larmes, du mucus, et du sang s'écoulèrent ; la malade fût soulagée, l'inflammation tomba ; mais à la tumeur succéda une fistule qu'il falloit guérir, et voici les moyens qui furent employés.

" On fit d'abord des injections. Quoique continuées pendant un temps assez long, elles n'eurent aucun résultat heureux. Ce premier moyen ayant échoué, on en essaya un seçond ; c'est-à-dire, qu'on tenta de faire passer dans les fosses nasales un ressort de montre. On fit des essais pendant plusieurs jours, leur inutilité fit adopter le moyen suivant, dans l'intention de désobstruer par cautérisation les voies lacrymales. Un stilet rougi au feu fut introduit entre les lèvres de la fistule, et les cautérisa : du gonflement survint ; au bout de quelques jours il diminua ; bientôt les escarres formées se détachèrent ; des bourgeons charnus s'élevèrent ; mais le chirurgien s'appliqua chaque jour à introduire, pendant quelques instans, un cilindre de nitrate d'argent poudré. Cette manière d'agir eut pour résultat l'aggrandisement de

la fistule, l'adhérence de ses bords aux os ; les bords prirent une organisation cutanée : enfin on introduisit pendant long-temps une espèce de broche en plomb—Tous ces moyens loin de guérir la maladie, l'avoient rendue presque incurable. Désirant trouver un remède à son infirmité, Madame Daive se présenta chez M. le Baron Dupuytren ; elle se trouvoit alors dans l'état suivant.

" Au grand angle de l'œil gauche existoit une ouverture de trois lignes de diamètre ; les bords tapissés par la peau amincie, avoient pris l'organisation cutanée dont s'emparent toujours les ouvertures fistuleuses, qui donnent passage à des corps étrangers. Par là s'écouloient sans cesse des larmes qui venoient irriter l'œil, enflammer et excorier la peau de la joue.

" Au grand angle de l'autre œil existoit depuis quatre ans une petite tumeur, plus grosse pendant le temps humide, plus aussi le matin que le soir. Cette tumeur pouvoit être facilement vidée par la pression ; alors il s'écouloit par les points lacrymaux une matière purulente, muqueuse, mêlée à l'humeur des larmes ; la narine de l'un et l'autre côté étoit sêche.

" La guérison de la tumeur lacrymale étoit certaine, celle de la fistule pouvoit être douteuse ; la malade en fut prévenue, et l'opération pratiquée le 4 Mai 1821, de la manière suivante.

" La malade étoit assise sur une chaise placée vis-à-vis d'une fenêtre, la tête appuyée sur la poitrine d'une aide : Monsieur Dupuytren tend alors avec le *medium* et le doigt indicateur de la main gauche, la peau des paupières de l'œil droit, en la portant un peu en dehors, tandis qu'avec la main droite armée d'un bistouri à lame étroite, il fait à la peau qui recouvre la tumeur, une incision perpendiculaire, qui la divise, ainsi que le sac lacrymal. On vit bien que l'instrument n'avoit pas dévié, par la profondeur à laquelle il pénétra sans difficulté, et à la sortie de mucosité purulente. Changeant alors de main, M. Dupuytren saisit avec la droite le bistouri, et avec la gauche le mandrin, revêtu de sa canule en or*. Le bistouri est un peu retiré pour permettre à

* Voyez la description à la fin de l'observation.

l'extrémité du mandrin qui est glissé sur sa lame, d'être introduite à mesure qu'on fait entrer le mandrin ; enfin lorsqu'on est entré à la hauteur du canal nasal, il ne reste plus qu'à l'enfoncer. On est averti qu'il a pénétré assez avant, par la résistance qu'on éprouve à l'enfoncer davantage ; ce qui provient du contact de la canule sur le rebord de la gouttière lacrymale. Voulant s'assurer que la communication existoit entre le sac lacrymal et le fossé nasal, Monsieur Dupuytren ferma l'ouverture antérieure des fosses nasales, et ordonna à la malade de faire des efforts comme pour se moucher, aussitôt on vit de l'air mêlé à du pus et à des mucosités sanguinolentes s'échapper par la petite ouverture ; on y présenta la flamme d'une bougie, elle fut éteinte.

" De l'autre côté l'ouverture fistuleuse permit l'introduction de la canule ; elle fut facile, et chose étonnante, mais qui arrive toujours, c'est que la malade ne sentant nullement la canule, avoit peine à croire qu'on l'eût introduite.

" Restoit à savoir l'issue qu'auroient ces deux opérations. Au bout de vingt quatre heures la petite plaie du côté droit fut cicatrisée, la tumeur n'existoit plus, le cours des larmes étoit parfaitement rétabli, et la narine de ce côté avoit repris son humidité naturelle.

" Plusieurs jours après l'opération, l'ouverture fistuleuse du côté gauche parut un peu rétrécie ; cependant la malade éprouvoit de ce côté la même incommodité.

" Que pouvoit-on faire pour cicatriser cette ouverture ? Devoit-on détruire les adhérences de la peau, enlever les bords de la fistule ? Mais en agissant ainsi, on pouvoit craindre de ne pas réussir, et d'aggraver au contraire l'état de la malade ; aussi ce parti ne fut-il pas adopté.

" Les succès brillans que Monsieur le Professeur Dupuytren venoit d'obtenir dans la guérison de fistules recto-vesicules, uretro-vaginales, par le cautère, lui suggérèrent l'idée d'employer ce moyen. En effet quinze jours après l'opération, l'ouverture fistuleuse n'ayant fait aucun progrès vers la cicatrisation, Monsieur Dupuytren la toucha avec un petit pinceau de charpie trempée dans du nitrate de mercure, avec excès d'acide nitrique ; par-dessus il mit encore de la charpie

hachée, également imprégnée de ce caustique. Du gonflement, de la douleur survinrent ; ils furent calmés par quelques lavemens, des pédiluves (bains de pieds) synapisés, du petit lait, &c.

"Au bout de quatre jours l'escarre tomba, et Monsieur Dupuytren vit avec plaisir que la plaie s'étoit un peu rétrécie. Enhardi par ce premier succès, il fit une seconde, troisième, quatrième, et jusqu'à une septième cautérisation ; toutes furent pratiquées à quatre ou cinq jours d'intervalle, chaque fois on trouva l'ouverture rétrécie. Enfin le 3 Juillet, deux mois depuis l'opération pratiquée, cette ouverture fistuleuse à parois cutanées, organisée depuis plusieurs années, et que plusieurs médecins avoient jugé incurable, étoit parfaitement cicatrisée, le cours des larmes rétabli ; en un mot, il étoit difficile de pouvoir assurer que cette malade avoit eu une tumeur lacrymale d'un côté, et une fistule de l'autre, tant elle étoit bien guérie. On ne pouvoit voir à l'œil que la malade avoit dans le nez deux canules en or, et leur présence se faisoit si peu sentir, que la malade avoit peine à croire qu'on les lui eut laissées. Enfin elle quitta Paris parfaitement guérie, et heureuse d'avoir été délivrée d'une infirmité qu'on avoit jugé incurable."

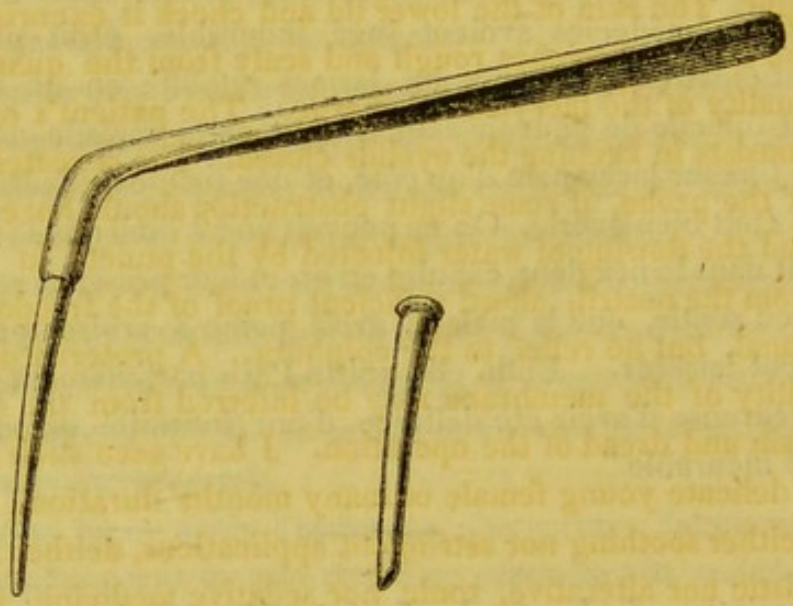
Description de la canule d'or de Monsieur le Professeur Dupuytren.

" Cette canule doit être aussi longue que le conduit nasal ; par conséquent elle est de 10 à 14 lignes, sur une, ou une et demie de diamètre, cependant sa partie supérieure est un peu plus large ; elle offre une légère courbure pour s'accommoder à celle du canal. Un rebord renflé, en forme de bourrelet saillant en dehors, fait le contour de l'ouverture, qui doit aboutir au sac lacrymal ; il est destiné à s'opposer à la chûte de la canule dans le nez, chûte qui permettroit à la maladie de se reproduire ; l'autre extrémité de la canule est taillée en bec de flûte, afin qu'un de ses côtés moins long, ne dépasse point le côté interne du canal nasal qui finit avant l'externe. La canule est portée sur son mandrin formé de deux parties, qui se

réunissent à angle un peu obtus ; l'une d'elles, plus longue, applatie, est celle que saisit la main de l'opérateur ; l'autre se cache dans la canule qu'un renflement subit l'empêche de dépasser.

" Par ordre de M. le Baron Dupuytren,

" MARX."



mandrin. *canule.*

NOTE N.

Though their general complexion is little serious, very embarrassing and distressing cases of this description are sometimes met with. The conjunctival surface is highly irritable, and a profuse gush of scalding tears overruns the cheek, at the moment that the eye is opened and exposed to the light. The skin of the lower lid and cheek is excoriated, and the cuticle becomes rough and scaly from the quantity and quality of the lacrymal discharge. The patient's only relief consists in keeping the eyelids closed. The repeated passage of the probe, if some slight obstruction should have existed, and the flowing of water injected by the puncta in a stream from the nostril, afford sufficient proof of the freedom of the canal, but no relief to the epiphora. A preternatural sensibility of the membrane may be inferred from the excessive pain and dread of the operation. I have seen such a case in a delicate young female of many months' duration; in which neither soothing nor astringent applications, neither antiphlogistic nor alterative, tonic nor sedative medicine, produced the smallest benefit. The congestion of the superficial vessels is inconsiderable: no morbid appearance is seen on everting the upper lid; the orifices of the canaliculi lacrymales are natural; there is no fullness nor uneasiness felt on pressure in the region of the lacrymal gland. What is this disease? Is it an affection of the lacrymal gland? and if so, does it result from any undue excitement, or any morbid irritability, like a 'tic sensitif' of the lacrymal branch of the fifth pair? Is it sympathetic with the surface or the retina? Does it depend on a deficiency of the mucus which dilutes and sheaths the tears, or a chemical change in the quality of the lacrymal secretion, or a spasmodic affection of the orbicularis palpebrarum? Of these suggestions some may be negatived by the absence of

such a symptom during the palpable existence of such conditions; the infrequency of this case, and the frequency of the cases proposed; others are altogether hypothetical, and I will not add to the *'obscurum per obscurius.'*

THE END.

G. WOODFALL, PRINTER, ANGEL COURT SKINNER STREET, LONDON.

By the same Author,

AN INQUIRY

INTO THE

PROCESS OF NATURE

IN REPAIRING

INJURIES OF THE INTESTINES;

ILLUSTRATING THE

TREATMENT OF PENETRATING WOUNDS,

AND

STRANGULATED HERNIA.