

persons who had never laboured under the complaint. Among others, were several instances of midwives, previously occupied with patients in scarlet-fever, carrying the disease to women whom they attended in labour. Several remarkable contrasts, in point of susceptibility, to contagious disease, were observed; some catching it by the slightest communication, while others remained safe after the most thorough and continued exposure.

Within the last few years, typhus and small-pox, with its modified form, and scarlet fever, have prevailed in various parts of this country. Typhus, as reported by Dr Kerr, appeared in Aberdeen in the beginning of summer 1818, being brought there by a female pauper lunatic from Glasgow. "About 2400 cases," says he, "were treated in our public institutions from the 1st September 1818 to the 1st of September 1819." Scarlet fever even now prevails, or did so very lately, in several parts of Aberdeenshire.

Alford, April, 1821.

III.

Report of Cases Treated at the Ophthalmic Hospital, Chatham, communicated to Professor Thomson. By ANDREW SMITH, M. D., Hospital-Assistant.

A KNOWLEDGE of the lively interest you take in the investigation of the diseases of the eyes would alone, without the tie of a promise made on leaving the depot-hospital at Edinburgh, have been a sufficient inducement for me to draw up and transmit to you the following account of the diseases which occurred in the Ophthalmic Hospital at Chatham, and of the means which were adopted to remove them, during the ten months in which I lately did duty as medical assistant to that institution.

Chatham, as you are already aware, is the station to which the greater part of our soldiers, from whatever cause rendered unserviceable, are sent previous to being placed upon the pension-list. They consist, in general, of men rendered unfit for farther military duties, either by actual disease or its consequences, by length of service, old age, or a general decay of the constitu-

tion, and are, with a few exceptions, persons addicted to most of those irregularities and vices which tend to produce disease, or retard its removal when once brought into action. Under such circumstances, you must easily conceive what disadvantages are to be experienced,—what difficulties are to be daily encountered,—and what extreme and constant caution is necessary in practising upon such a class of individuals.

In the treatment of the diseases of the eyes these inconveniences were particularly felt, and we had occasionally to contemplate with sorrow the ravages of disease, which experience warranted us in concluding might have readily been stopt, in persons blessed with more sound and vigorous constitutions. Amongst the instances of acute ophthalmia, which were, comparatively speaking, but few, it was now and then found impossible to carry into effect a plan of treatment sufficiently active to ward off the consequences of over vascular action; whilst in chronic inflammation, the removal or amendment of which often depended so much on the improvement of the general health, difficulties not less strong and insurmountable at times presented themselves, but which will come more in place to be noticed hereafter. The success of the treatment, however, upon the whole, was highly satisfactory,—a circumstance which was to be attributed, in a great measure, to the zeal and abilities of Staff-Surgeons Lindsay and Murray, who held successively the principal charge, aided by the judicious and very superior arrangements of the much and justly esteemed principal medical officer at the station, Dr James Forbes, Deputy-Inspector of Hospitals.

The diseases had in general been contracted on foreign stations, particularly in those of warm climates, such as the East Indies, West Indies, Ceylon, Cape of Good Hope, Gibraltar, Malta, Ionian Islands, &c. and had all of them been more or less modified by the effects of hospital-treatment, previous to their reaching Chatham. The individuals who appeared to have suffered most were those bearing marks of the scrofulous diathesis, and such of that class, particularly, whose eyes were naturally weak or full, prominent and light-coloured. The observance, indeed, of the latter circumstance, in so many instances, led me to pay considerable attention to the subject, and to endeavour, if possible, to ascertain whether eyes of any particular colour were more subject to disease than others, and the results of my investigation are contained in the following Return, No. I. To be able, however, to draw any general conclusions, it would be necessary also to determine what proportion the light colours bear to the dark in healthy eyes, which I

have done, as far as my opportunities would admit, and given in the same Return. From it you will see that the proportion of light eyes amongst the individuals of the latter description was considerably greater than what it was in those affected with disease, which certainly goes directly against the opinion I previously entertained, and which I have both heard verbally stated, and read in authors, that persons with light-coloured irides were more prone to ocular disease than those in which they are of an opposite character. Without an inquiry, however, of this kind, and carefully contrasting the numbers of each, one would very naturally be led to conclude, that light eyes were more subject to disease than dark ones, as much more than half the number of the patients which came under treatment, belonged to the first division, but not more than ought to have done, had the colour no property of predisposing to disease whatever.

No. I.

COLOURS.	Diseased Eyes.	Totals of Light and Dark.	Proportion of Light to Dark.	Healthy Eyes.	Totals of Light and Dark.	Proportion of Light to Dark.
Light Blue	45	116	Nearly 2 to 1	590	1500	Nearly 5 to 2
— Grey	37			239		
— Brown	21			313		
— Mixture*	13			358		
Dark Blue	30	60		300	663	
— Grey	14			151		
— Brown	13			128		
— Mixture	3			84		
	176	176	2 to 1	2163	2163	5 to 2

In by far the greater number of the patients the morbid action commenced first in one eye, yet in most of them the other, either from the same cause, from sympathy, or in consequence of some past excitement, sooner or later also suffered, as you will see by reference to Return, No. II. From it you will find,

* Under the head of Light and Dark Mixture, I include all those colours which appeared to be compounds of the other three, or which do not readily admit of a simple definition.

that out of 134 cases in which one eye was first affected, the other in 110 of these was subsequently attacked, some in the course of a few hours, and others not till after two, four, six, eight, ten, twelve, and even sixteen months; the most common time, however, was between the second and thirtieth day. Of the two eyes, the right, in most of the cases, was the one which first took on the diseased action, but whether that was purely accidental, or arose from its having a greater tendency to become diseased than the left, I have not yet, even from inquiries directed to the subject, been able clearly to ascertain. The night, as you will see from the same Return, appears to have been the period the most favourable for the developement of those complaints, particularly of such of them as were of an inflammatory character, which constitute by far the greater proportion of the cases. This may be accounted for, *1st*, By the great diminution of temperature and heavy dews which generally take place during the night in hot climates, and to which soldiers on guard (a situation in which many of our patients were first attacked) must unavoidably be exposed; *2dly*, By the greater chance there is of catching cold, a very frequent cause of the complaint in question, during sleep, and perhaps more or less covered with perspiration, upon being exposed to the very slightest exciting causes, such as lying opposite or near to an open door or window; and, *3dly*, By the difficulty, I may say impossibility, of foreign bodies which may have accidentally got under the lids before going to rest, making their exit during sleep, and, consequently, their retention there must produce an unnatural stimulus, which, if continued for a sufficient length of time, gives rise to a more or less severe attack of active inflammation,—a circumstance I have frequently had occasion to observe in the course of my own practice.

No. II.

Number of Cases.	Of which one eye was first affected.	Of which both were affected at the same time.	Of which one only was affected.	Number of Eyes affected during the Day.	Number of Eyes affected during the Night.	Eye first affected, and the number of each.	
						Right.	Left.
176	134	42	24	184	202	95	39

With regard to the causes of the different diseases, I may here observe, that sudden variations of temperature, exposure of the eyes to strong lights or currents of air, external injuries, mechanical and chemical stimuli, were assigned as having been the principal agents in producing the morbid changes observed. As these, however, will be treated of with more propriety, when we come to the description of the several diseases themselves, I shall take no farther notice of them here, nor indeed trouble you with any more observations, but proceed to give separate statements, of the nature, causes, and treatment of the different complaints, in the same order as they stand in the general return, No. 3, which is intended to show you, at one view, the total number of patients treated, and also what proportion of them had been under cure, previous to their arrival at the invalid depot.

No. III.

DISEASES.	TOTAL TREATED.					Of which were treated from the commencement in the Ophthalmic Hospital.		Of which were treated partly in the Ophthalmic Hospital.	
	Acute.		Chronic.		Total.	Acute.	Chronic.	Acute.	Chronic.
	One Eye.	Both Eyes.	One Eye.	Both Eyes.					
Ophthalmia Simplex -	8	15	6	20	49	22	15	1	11
Mucosa -	1	8	1	11	21	7	6	2	6
Purulenta -	1	2			3	1		2	
Pustulosa -	2	5	1		8	5		2	1
With granulated Lids -				14	127			14	127
Lippitudo -		4		10	14		3	4	7
Psorophthalmia -			3	1	4		2		2
Hydrophthalmia -			1		1			1	
Iritis -	8	1	2	1	12	9	2		1
Staphyloma -			11		11				11
Cataract -			6	4	10		4		6
Amaurosis -				4	4				4
Entropion -			4	2	6		1		5
Pterygium -			3	1	4				4
Hordeolum -		2			2	2			
Hemeralopia -				2	2				2
Tumor fungos. e callo oculi			1		1				1
Totals	20	37	53	183	293	46	33	26	188

Ophthalmia Simplex.—Forty-nine cases of this disease were admitted into hospital. In twenty-three of them the inflammation was in the acute stage, and in the other twenty-six it had passed into the chronic form. Of the former class, eight had the disease in one eye, and the rest in both; of the latter six in one, and twenty in both. Thirty-seven of these patients were treated, from the commencement of the disease, in the Chatham establishment, but the other twelve had been under treatment elsewhere previous to their arrival there. The disease for which they were taken into hospital was perfectly removed in all but one, and in his case there only remained a very slight redness of the eyeballs, with some watering, especially on exposure to a strong light, or a current of air. In two of the number treated from the first; in the ophthalmic hospital, a slight opacity of one cornea of each remained, which was occasioned, in the first of them, by the healing of an ulcer that existed on his admission, and in the other by the cicatrization of a superficial wound of the cornea, which was the cause of his being taken into hospital. In four of the twelve, who had been under previous treatment, more or less extensive opacities of the cornea, from the healing of ulcers in a former disease, existed when they were discharged, and in a fifth case both eyes were disorganized, in consequence of a severe injury received, by the unexpected explosion of a mine; but in all of them every symptom of inflammation was completely removed, previous to their leaving the station.

Ophthalmia Simplex Acuta.—In the greater number of instances this disease occurred in a very mild form, and yielded for the most part readily to very simple treatment. The symptoms and appearances of the inflammation were varied considerably, not only by the duration of the disease, but also by the nature of the exciting cause: An increased vascularity and redness of the external parts of the eyeball and linings of the palpebræ, lachrymation, intolerance of light, sensation of sand or gravel under the lids, with itching, smarting, and more or less pain in the eye itself, or in the surrounding parts, were the symptoms which most commonly presented themselves to our notice. *The increased vascularity* in most of the cases was general, and affected not only the eyeballs, but also the lining of the lids; the vessels were observed for the most part to run as nearly as possible in straight lines, seldom to give off many branches, and in general, to terminate about half a line behind the cornea, although now and then they were seen reaching to the very margin of that tunic, and in a few instances even extending for a short way on its surface. Their number and

size varied very much in different individuals, in some only a few small branches were observed ramifying here and there on the surface of one or both eyeballs, and giving rise to but little redness, whilst in others, they were so numerous and matted together, as to give the whole eyeball a uniform red appearance, which was for the most part of a bright scarlet hue. *An increased flow of tears* was a symptom which attracted very general notice, especially in the commencement of the disease, and may be said to have occurred in all of the cases except five; in these it was rather diminished than increased, and the patients complained of an unusual dryness of the whole eyeball, with pain or soreness on moving the lids, and a sensation of heat and burning in the organs themselves, which symptoms were completely removed by a copious lachrymation, which in all the five occurred in the course of the disease for the most part about the third or fourth day. By one part of the patients, the tears were described as being very hot and acrid, scalding and excoriating the parts over which they passed, whilst by the others, they were stated to produce almost a directly opposite feeling, which peculiarities there was no possibility of accounting for by any evident dissimilarity of disease. *An uneasiness of eyes upon exposure to light* was a symptom which occasionally occurred, although not so generally as to warrant its being set down as one of the regular characteristics of conjunctival inflammation. It was most evident in cases in which the inflammation was either deep seated, or more or less modified by the scrofulous diathesis, and in them it sometimes proved very troublesome and difficult to remove. *The sensation of something rough below the eyelids, described as resembling sand or gravel*, was a very regular symptom in the commencement and early stage of this species of ophthalmia, and appeared to be principally occasioned by the enlarged blood-vessels of the lining membrane of the palpebræ; as in the instances in which these were divided, and their contents allowed to escape, the sensation immediately vanished, and did not return at least till they had regularly filled again. *Itching and smarting of the edges of the tarsi*, particularly towards the canthi, were sensations frequently complained of, and sometimes continued for several days, though in general they very soon gave place to a greater or less degree of pain, a symptom, which, next to the increased vascularity, was certainly one of the most common attendants on acute ophthalmia. It was said by some to have been the first circumstance which led them to discover their disease, whilst others asserted that it did not prove troublesome till after most of the other symptoms already described had been experienced.

The pain differed considerably in its site, nature, degree, and duration, in different individuals; some complained of it as being seated either in the eyeball itself, or directly under the upper lids, others referred it to the eyebrows, temples, forehead, or occiput, and in a third class it affected several of these parts at the same time. When it occurred in the eyeball, it was for the most part of a dull aching description, or else acute and attended by a sensation of a deep internal pulsation. In a few instances it was said to resemble the pricking of pins, and frequently to dart from the eye right across to the posterior part of the head. When it felt as if it had its site in the lids, it was for the most part of a darting or pricking nature, and again, when in the head, it was in general dull, and attended by a sense of weight and uneasiness in the forehead, yet occasionally it was very acute, lancinating, and accompanied by much throbbing of both the external and internal carotid arteries, with considerable increase of temperature of the face and lateral parts of the head. In respect to severity and duration it varied very much, in some, (whatever was the description of pain,) it was so severe as to prevent them either sleeping or lying still for a moment, but in the greater proportion of cases, it was very slight, indeed in several of them not more than a simple tenderness and soreness of the affected parts. In the cases in which it was very severe, or of a pricking description, it generally occurred in paroxysms, varying from two minutes to an hour, or even two, while again, in the instances in which it was dull or pulsatory, and affecting either the eye and head at the same time, or only one of them, it was for the most part pretty constant, at least, the individuals were seldom entirely free from it, although frequently it suffered considerable exacerbations and remissions. The evening was the time when pains of the last description generally became aggravated, in which state they continued till about two or three o'clock in the morning, when a change most frequently took place.

In addition to these general symptoms, a few others of less consequence were now and then complained of, such as a sense of fulness and over distention of the eyeballs, inability to move them freely in their sockets, more or less dimness of vision, &c. When the latter symptom was complained of, there was always an unusual dulness, and muddiness of the cornea, observable on examination; and as that was more or less distinct, vision was found to be more or less impaired, and the patients, under such circumstances, generally described surrounding objects as appearing to them involved in a thick fog, or as seen through a thin gauze.

Causes.—Cold acting either directly on the eye, or through the medium of the constitution, appeared, from the statements of the patients, to have been by far the most general cause of the inflammatory complaint we have just been describing. Its effects appeared to have been most severe, when conjoined with a current of wind, strong examples of which were lately furnished us, by the arrival of two detachments of invalids from the Mediterranean, most of whom suffered more or less from inflammation of the eyes, upon their reaching the cold windy latitudes of England, and in nearly forty patients, the disease under different forms existed to such a degree, on their arrival at Chatham, as to render them objects for immediate hospital treatment. From the same causes, many individuals, either on guard during a stormy night, or lying opposite to open doors or windows, became affected with the complaint in question. By sleeping on the cold ground in the open air, during a longer or shorter period in a summer's night, the same state was occasionally produced, even where there was no wind, and but little sensible cold, to a person in motion. In such cases, the disease was probably occasioned by the action of the humid atmosphere, which is generally found to a greater or less height, on the surface of the earth during the night, after a hot summer's day, and which seems to be particularly hurtful to soldiers on guard in warm climates. Exposure of the eyes to a bright light, especially when long continued, was assigned as another cause of ocular inflammation, and instances occurred where the strong glare of the sun, particularly when reflected from sandy or rocky strata, as is frequently the case in our southern and eastern colonies, gave rise to more or less severe attacks of ophthalmia. Much exertion of the eye in looking at minute or distant objects, was said by a few to have produced their disease; thus a tailor became affected with inflammation of both eyes, after two days almost constant labour at his trade, the greater part of which time he was employed in sewing a coat which required very much attention; and a serjeant, while in the habit of using, almost constantly during the day, the telescope, to watch the motions of a neighbouring telegraph, became affected with the same complaint. External injuries, mechanical and chemical stimuli, were also found to have had occasionally their share in producing the disease, although not to the same extent as the other just mentioned.

Treatment.—The cure was attempted, in every case, by general or local remedies, either alone or conjoined. Amongst the former may be classed abstraction of blood from the system, emetics, nauseating doses of antimonials, purgatives, &c., and to the latter belong local blood-letting, blisters, and the various

washes, drops, and unguents. General blood-letting was employed, in cases in which the pain was very severe, or where the constitution sympathised much with the local disease, as was occasionally the case when it arose from exposure to cold; but in none of them was it ever carried to the great extent recommended and practised so frequently some time ago by many practitioners of this kingdom. It was found to matter but little from whence the blood was taken, provided the necessary quantity was abstracted, and on this account a vein of the arm was generally opened in preference either to the external jugular or temporal artery; indeed, any advantage which might result, from a quantity of blood abstracted by the latter method, appeared to me to be more than counterbalanced, by the excitement and fresh irritation, necessarily excited by opening that artery, and then stopping the hæmorrhage when the desired quantity had been taken. The application of bandages, or ligatures of any description, round the head of a person affected with inflammation of the eyes, cannot be strongly enough reprobated, especially if that degree of tightness which is often necessary to restrain the bleeding from an wounded artery, as they must naturally retard the free passage of blood to the upper parts of the head, and consequently cause an increased action of the vessels below the point of obstruction, which must to a greater or less extent involve those of the eyes. If it be supposed that the temporal artery has much share in keeping up the inflammation, it had better be secured at once by a ligature, which I have in a few instances seen done with considerable benefit. The quantity of blood abstracted was regulated by the severity of the symptoms, the nature of the constitution, and the effects produced. In none was less than a pound ever taken, and in few more than two at one time, although it was occasionally found necessary to repeat at intervals the abstraction of the same quantity two or even three times, before the activity of the disease could be said to be overcome, and the inflammation brought to such a state, as it could be treated properly, by the other remedies to be hereafter mentioned.

Emetics.—In many cases where the constitutional excitement was but slight, and the pain of the head was dull and aching, the free evacuation of the stomach by an emetic often proved highly serviceable; for not only did it frequently remove entirely the pain, but likewise effected an evident diminution in the degree of severity of the local inflammation, and, if followed up by proper local treatment, and an occasional purge, was often found sufficient to remove the disease. I may here remark, in case that an inspection of the eye be made during the action

of the emetic, that the vascularity often appears even more increased for a time, yet, after all exertion is over, and the patient has remained quiet for a few minutes, the change for the better will begin to be perceptible. In cases in which the inflammation runs very high, and where there is considerable danger from a momentary increase of action, the remedy we have now been speaking of ought certainly not to be employed, till after blood-letting has been premised. Where occasion for its use occurred, six grains of tartrate of antimony were in general dissolved in a pint of common water, the half of which was ordered to be taken immediately; and, should full vomiting not be produced in the course of half an hour, the remainder was to be exhibited. This medicine, when given as above mentioned, generally acted also very freely on the bowels, and thereby rendered the immediate exhibition of simple purgatives unnecessary.

Nauseating doses of antimonials were seldom had recourse to in the first instance, unless the disease was of a very mild description. They were seldom if ever given till after the increased action had been previously more or less reduced, by a general or local abstraction of blood, or by the effects of a full vomit. They were found very useful in cases in which there appeared to be a great tendency to inflammation, and where the symptoms showed a disposition to become aggravated again, as soon as the system had recovered from the state it had been brought into by previous evacuants. In such cases, if nauseating doses of the tartrate of antimony be administered directly after the emetic, the system will for the most part be kept in such a languid state as to guard against a subsequent increase of disease. The same practice was also found very useful in cases where the inflammation had attained such a degree of severity as to render the employment of full emetics improper. In order to insure its full effect, it must be given in very small doses, and frequently repeated, perhaps *a quarter of a grain* every half hour, but this must be regulated according to circumstances, as what will only produce slight sickness in one person, will occasion copious vomiting in another.

Diaphoretics were a class of remedies not much trusted to when the disease appeared to be simply local; but when it depended on, or was one of the symptoms of a general constitutional derangement, they were frequently administered with evident benefit. In catarrhal ophthalmia they were particularly employed, and certainly with such advantage as to entitle them to a distinguished rank amongst the remedies recommended for the cure of that species of inflammation. The compound pow-

der of ipecacuanha, either alone or combined with the pulvis antimonialis, was the medicine most generally prescribed; if alone, fifteen grains were ordered morning and evening, but if combined, only twelve, with three of the James powder. By these doses a pretty moderate, yet constant determination to the skin was kept up, which was generally soon followed by a diminution of the disease, not only of the eye, but also of the constitution.

Purgatives.—You will, perhaps, be astonished that I have not taken an earlier opportunity of mentioning this remedy, especially as it is a general law in our profession, that the *primæ viæ* in all diseases, but more particularly in those of an inflammatory nature, ought to be fully and repeatedly evacuated as soon as possible. This apparent omission is accounted for by some of the remedies already mentioned (antimonials either as vomits or only to produce nausea) having almost, in every instance, at the same time acted freely as a purge, which rendered it unnecessary to exhibit medicines solely with that intention, for such a time as the use of the above preparation was persisted in, which was, in most of the cases, till the severity of the inflammatory symptoms had evidently been reduced. After it was discontinued, however, it was customary to prescribe occasionally a dose of sulphate of magnesia, so as to keep the bowels moderately open.

Local remedies.—Abstraction of blood, either directly from the inflamed part, or from its immediate vicinity, is certainly a part of the local treatment deserving of our first and not least serious consideration. That was effected either by cupping, the application of leeches to the lids or temples, or by scarification of the inner surface of the palpebræ. By the first method blood was often taken in considerable quantity, either from the temples or nape of the neck, but as its operation was attended with considerable pain, and was in some instances, when done in the former situation, followed by a good deal of fresh excitement, it was a practice not very generally employed, indeed I may say never, except where, from some peculiarity of constitution, the use of leeches was followed by a troublesome inflammation and swelling of the parts, as actually occurred in several instances. The second method, or that by the application of leeches to the lids or temples, was the plan most generally adopted, and certainly with the greatest success. The temple close to the outer edge of the orbit appeared to be the most eligible and safe situation for applying them, as in several cases, in which they were placed upon the lids, a good deal of irritation, swelling, and soreness of these parts occurred, which

prevented for a time not only the necessary examination of the diseased parts, but proved a great impediment to the application of the other remedies. In several instances, in which the local vascular action had been overcome to a certain extent by other treatment, the application of two or three leeches to the inner surface of the lower lids was followed by immediate and lasting benefit, but if employed before the action had been previously more or less reduced, the irritation caused by their bites and everting the lid, more than compensated for any amelioration which the quantity of blood drawn produced. As soon as they became detached the bleeding was encouraged by warm fomentations, either with simple or medicated fluids.

Scarifying the lining membrane of the palpebræ was a third way in which local depletion was sometimes performed, but seldom, if ever, till after the disease had passed its height. In cases in which there existed a considerable degree of turgidity of the vessels about the fifth or sixth day, accompanied by little or no pain, and where some of the other modes of detracting blood had been previously practised, much advantage was often experienced from dividing them across with the shoulder of a lancet, encouraging the bleeding for a few minutes by warm fomentations, and then dropping over the surface of the lid some of the vinum opii, or solution of nitrate of silver. In several cases of this description, the method of treatment just stated was employed, and in the greater number of instances the vessels never were observed again to attain the same degree of distention, the disease from that time yielding quickly to the use of slightly stimulating applications.

Blisters were very frequently employed in the treatment of acute inflammation of the eyes, and certainly often with very marked advantage. They were applied according to circumstances; either to the temples, forehead, back of the ears, nape of the neck, or arms. The back of the neck or behind the ears were the situations, however, which were in general made choice of; as, when applied to the temples or forehead, the excitement which they produced was sometimes found to extend as far as the eyes, and in these cases to be injurious rather than beneficial. They were found most useful in cases in which either general or local blood-letting had been previously employed, and where there still existed a good deal of local increased action, without much pain, or where the latter symptom, if it did exist, was of a dull aching description, and either confined entirely to the eye, or affected the head at the same time. In such cases a blister applied either to the nape of the neck, or behind one or both ears, and kept discharging for some time by the savine cerate, often

produced an evident diminution of the inflammation, and insured a speedy cure.

Collyria.—Medicated washes, if we except the decoction of poppy heads or chamomile flowers, were but seldom employed during the active stage of inflammation, as the pressure which was necessary to be made by an eye-glass in order to insure the fluids being kept for any time in actual contact with the diseased part, was found to be productive of considerable fresh irritation. The decoction of either of the anodynes above mentioned was, in several cases in which the disease ran high, employed as a fomentation, and with great relief. They were for the most part used immediately after the application of leeches, as at that time their anodyne effects were equally well obtained, whilst their degree of temperature encouraged the bleeding. In cases of a more slight description, water, either pure or with a little acetate of lead dissolved in it, and made tepid, was frequently employed for washing the external parts of the lids. As soon as the activity of the disease was overcome, a weak lotion of sulphate of zinc, in the proportion of two grains to an ounce of water, was applied three or four times a-day, by means of an eye-cup, and was directed to be kept in contact with the inflamed parts about ten minutes each time. In several cases in which the pain was very severe, and not alleviated either by blood-letting or the use of any of the anodyne fomentations just mentioned, considerable and lasting relief was often procured by exposing the affected parts to the steam arising from a camphor and opium mixture, * when brought to a boiling heat for ten minutes, two or three times a-day.

Drops.—When the disease happened to be very active, and accompanied with much pain and profuse lachrymation, a solution of opium, or some other anodyne, was dropped between the edges of the tarsi, near the outer canthus, five or six times a-day; but in cases in which the inflammation was more moderate, the *tinc. opii* was employed in the same way twice a-day, and in no case with the least bad effects, in few with but little apparent advantage, and in far the greater number, if properly persevered in, with perfect success. When the linings of the lids continued affected, with increased redness, after the general disease had been removed, a solution of the *nitras argenti*, in

* ℞ Mist. camphor. ℥ij.
Tinct. opii ℥ss.
Liquor ammon. acet. ℥ij.
Aquæ rosarum ℥iv. M.

the proportion of four grains to an ounce of water, was found to be the most effectual remedy for removing it, when dropped on the surface of the lids, gently everted, two or three times a-day. When that preparation, however, did not succeed, the tincture of kino, or a saturated solution of alum or tartrate of antimony, applied, by a camel-hair brush, to the diseased parts, generally soon removed it. The liquor plumbi acetatis, either pure or diluted, with an equal proportion of the watery solution of opium, was also occasionally employed in cases of this description, and often with much advantage.

Unguent.—In but few instances of this disease did there appear to be any necessity for the use of ointments; but when a case did occur in which the lids felt stiff and uneasy in the morning, nothing more was in general employed than common white ointment, (*unguentum ceræ*,) or a little citrine ointment, mixed with a large portion of almond oil.

Having now given you a separate account of the different remedies employed, I shall just state, in a summary way, the practice which was for the most part pursued, when a pretty smart case of acute ophthalmia was admitted. General or local blood-letting, according to the nature and severity of the symptoms, generally commenced the treatment. This was in most cases followed by an emetic of tartrate of antimony, and the eyes, after its operation was finished, were directed to be fomented with warm water, or a decoction of poppy head or chamomile flowers. A blister, in the course of a day or two, (perhaps sooner,) was applied behind the ears, or to the nape of the neck, and a solution of the extract of opium was regularly dropped between the lids several times a-day. As the pain and other symptoms of acute inflammation subsided, a gradual change was made in the treatment, from the soothing and anodyne applications to those of an astringent and slightly stimulating nature, such as the *lot. aluminis*, *lot. zinci sulphatis*, and drops of the *vinum opii*. The two former were used by means of an eye-cup, and in that way kept in contact with the inflamed part for ten minutes four times a-day; the latter was dropped between the tarsi night and morning; by which practice, together with proper diet, a cure was, for the most part, effected in ten or twelve days.

Ophthalmia Simplex Chronica.—This form of disease had in every instance been preceded by more or less acute inflammation, which had either been reduced by previous treatment, or overcome simply by the efforts of nature. The disease in all of them was removed by the means of cure employed, though most readily in those in which the active inflammation had been sub-

duced, by the interference of art. The degree of severity of the acute stage, as far as could be ascertained, had varied considerably in the different individuals, though in most of them it had been mild, and in some even so transitory, as not to have attracted much attention, for several were not aware of the eyes being inflamed till it was mentioned to them, either by some of their comrades, or the inspecting medical officer. When it had come on in this gradual and insidious way, its cure was always more tedious and difficult than under almost any other circumstances; and even in some a slight degree of redness and watering continued for several weeks after their dismissal from hospital, which seemed only to give way to the effects of time. *

The general symptoms which marked this complaint, were an increased vascularity and redness of the external parts of the eyeball, and lining of the lids, lachrymation, diminished transparency of the cornea, and a more or less impaired state of vision. The degree of inflammation varied according to the duration of the disease, or the severity of the acute stage, and may safely be said to have exhibited all the different gradations, in respect to severity, which the acute stage already described is said to have done. In some, the redness was principally confined to the lids, whilst in others, its principal site was the external tunics of the eyeball, and in a third set, it was found affecting all those parts at the same time. The vessels ran in a tortuous winding direction, and terminated for the most part at, or a little behind, the edge of the cornea; though in a few instances they were observed extending for a line or more on its surface, and in those cases the nebulosity was always most distinct. They had in general the appearance of being suffering from over distention, and seemed as if they did not possess the power of relieving themselves from their gorged state. Their contents were of a dull purple hue, which afforded an almost certain mark, by which we could distinguish the chronic form from the acute stage. In several cases, there appeared to be a double set of vessels affected. The first were quite superficial, and evidently

* I am at present in the habit of meeting with daily examples of this fact amongst the numerous recruits which are almost constantly arriving here (military depot, Isle of Wight) from the different parts of the kingdom. In many of them, either from the single or conjoint action of intemperance, irregular hours, and long marching, especially in wet and windy weather, a species of chronic inflammation of the eyes is produced, which I find to require more time and trouble to effect its removal than even that of the most severe forms of acute ophthalmia, or of the chronic stage, which, from mismanagement, sometimes succeeds to them.

connected with the conjunctiva, as they could be readily raised or moved about with that membrane, but the other was more deep, and had its site either in the cellular membrane, connecting the conjunctiva and sclerotica, or on the surface of the latter, and was in general of a darker colour, and larger size than the superficial set. They could be seen extending to the very edge of the cornea, but never distinctly to penetrate its substance, although there is reason to believe that they did so, because the turbid and muddy appearance of that tunic was always most distinct in this peculiar form of inflammation. The colour of the blood in these two sets of vessels appeared to differ considerably, being in the deep-seated of a dark purple hue, and in the superficial of a light red; but whether that apparent dissimilarity was real, or only depended on the different situations of the vessels, I cannot pretend to decide; yet at the same time, I feel inclined to be of the latter opinion, as I have repeatedly remarked deep-seated vessels of their usual dark colour, running forwards to the edge of the cornea, and there becoming superficial, and extending backwards for some way on the surface of the conjunctiva, with their contents to all appearance of a much lighter hue from the point of reflection. *An increased flow of tears* was always a more or less troublesome symptom, particularly on exposure to a bright light or a current of wind. They were in general said to produce a sensation of cold to the parts over which they passed, and, therefore, had a quality the directly opposite of that which they were said to possess in the acute inflammation. *Diminished transparency of the cornea, and dimness of sight*, were symptoms which varied much in degree, according to the duration and severity of the present or preceding disease. In cases of considerable standing, or where the inflammation during the acute stage had run high, the usual shining transparent state of the cornea had given place to a dull milky appearance, which, according to its density, rendered vision more or less imperfect, and made all objects appear to the patient as if involved in a mist, or seen through a thin gauze or veil. This state, as has been already mentioned, was always most distinctly observed, in cases in which the inflammation was deep seated, and in them also its removal was effected with the greatest difficulty. Where the inflammation was but slight, or of recent date, very often neither of these symptoms existed, and now and then we met with instances of dimness of vision, according to the statements of the patients, without there being any unnatural appearance of the cornea. In a few patients, slight, constant, or periodical headaches, proved an annoying symptom, but they appeared to be more rheumatic than the consequence of the

local disease, and were generally removed by perseverance in the use of bark and the mineral acids. In several individuals, especially where the disease had existed for some time, a small nodule of fatty matter was observed under the conjunctiva, near to the inner margin of the cornea, which always remained unchanged, after all the other symptoms had been removed. *

Causes.—Improper treatment during acute ophthalmia, constant exposure of the eyes to bright lights, or much exertion of the same organs in examining minute objects, constant and immoderate indulgence in the use of spirituous liquors, irregular hours, cold winds, &c. were found to have been the principal sources of the disease in question. The first of these was the least frequent, the second and third were more common, but the three last were by far the most general.

Treatment.—Stimulants and astringents were the remedies usually employed for the cure of chronic ophthalmia, and were generally applied in the form of washes or drops. Of the former, the principal were those composed of sulphate of zinc, alum, nitrate of silver, or spirit of wine and vinegar; of the latter were the *vinum opii*, *liquor plumbi acetatis*, *solut. argenti nitratis*, *tinctura kino*, *tin. aloes et myrrhæ*, *vinum myrrhæ*, &c. The sulphate of zinc lotion was found most useful in cases in which there was a degree of weakness of the eyes, with copious lachrymation, and where the vascularity was not very much increased. In such cases it was used in the proportion of two grains of the sulphate to an ounce of pure water, and kept some considerable time in contact with the inflamed parts, by means of an eye-glass, three or four times a-day. The alum wash was principally employed where the relaxation of the conjunctival lining of the lids was considerable, and where the blood-vessels were much distended, and run rather superficially. It was applied five or six times a-day, in the proportion of five, six, or eight grains to an ounce of water, and kept in contact with the inflamed part ten minutes each time. The nitrate of silver in the proportion of one grain to an ounce of water, was employed as a collyrium, with most advantage in cases in which the disease was principally seated in the lining of the lids, and where there was, or appeared to be, a tendency in that membrane to

* Having observed this circumstance so frequently in old cases of chronic ophthalmia, and in the eyes of persons who had been much subject to ocular inflammation, I make now no hesitation in giving it as my opinion, if that appearance is observed, that the individual must, sometime or other, have been subject to considerable disease of that eye, and seldom, if ever, do I find it not verified by the persons on statement.

become excoriated, or affected with superficial ulcerations. The last, or that composed of spirit of wine, vinegar, and water, according to the formula given in Cooper's Surgical Dictionary,* was found particularly useful in cases in which there was considerable relaxation of the conjunctiva covering the eyeball and lining the lids, accompanied by profuse lachrymation, and slight intolerance of light, with more or less preternatural redness of the tarsi. It was generally employed at first of the undermentioned strength, and then increased or diminished, according to the effects it produced.

Of the drops, the *vinum opii* was that most frequently employed, and I may add, was by far the most successful. It was used in almost every instance, and only now and then did there occur cases in which it proved hurtful; in them its application was followed by much smarting, and a profuse discharge of hot tears, with increase of vascularity, &c., sometimes requiring the application of leeches, and anodyne lotions, to allay the excitement. In several cases its effects appeared to diminish after using it for some time; but as soon as this was observed, it was discontinued for a few days, and some of the others were employed, by which means the action was changed, and then its use was resumed again with success. It was applied by making the patient incline his head a little backwards, and then gently raising the upper lid, and allowing two or more drops to fall from the extremity of a quill filled with it, near the outer canthus of the affected eye, which practice was repeated again in the evening, or oftener if necessary. It ought never to be repeated till after all the marks of the excitement produced by the previous application had completely disappeared, as if sooner it was apt to excite active inflammation. *Liquor plumbi acetatis* was used, either pure or diluted with an equal portion of the watery solution of opium, where there was much general relaxation, or where the disease was of long standing, and marked by much vascularity, particularly of the conjunctiva lining the lids. It, like the former remedy, excited a very considerable increase of redness for the time, but often in the end effected a complete removal of all the morbid symptoms. *Solut. argenti nitratæ* of various strengths was found useful in cases of the same description, as the last drops, and also in those in which the disease was principally seated in the lining of the lids, more parti-

* R. Acet. Distillati ʒi.
Spirit. Vini Tenuor ʒss.
Aque Rosæ ʒviii. M.

cularly where there was a tendency to ulceration of the conjunctiva or edges of the tarsi. We generally commenced using it in the proportion of two grains to an ounce of distilled water, and gradually increased it to six, as the eye became accustomed to its action. I have often observed it when used of the latter strength at first, or after some time even stronger, produce no evident benefit, yet, when diluted so as to contain about two or three grains to the ounce, the change was often very soon perceptible. This probably arose from the former possessing a greater stimulating power than was conducive to the restoration of the healthy action, yet not sufficiently strong to excite active inflammation, and thereby effecting no marked alteration on the disease, till it was brought to that degree of strength which was suitable for effecting the former of those purposes. *Tinctura kino*, tinct. aloes et myrrhæ, vinum myrrhæ, &c., were all found useful in cases in which the affected parts had become accustomed to the action of the others already described, and under such circumstances, they were frequently employed with great advantage. By the cautious and constant employment of some one or other of the drops or washes enumerated, a cure in by far the greater number of cases was readily effected, yet in a few, the amendment went on so slowly, as to induce us to try some additional remedies, such as blisters, setons, local blood-letting, &c. The former of these remedies was generally applied to the back of the ears or nape of the neck, and kept discharging for some considerable time; the second was invariably placed in the back of the neck, and retained there till the disease was removed from the eyes; and the last was generally effected by scarifying the linings of the lids, and encouraging the bleeding for a short time by warm fomentations; after which, the vin. opii or solut. argenti nitratis was diffused over their surface. This last mode of cure was only had recourse to, when the vessels were very inactive, and so much gorged with blood, that they appeared to be but little affected by any of the local remedies already noticed.

Ophthalmia Mucosa.—Twenty-one cases of this disease were treated, nine of which were acute, and the remainder chronic. In two patients the complaint was confined to one eye, and in the other nineteen it affected both; in all of them a cure was effected, by the treatment employed. As the mucous or puriform discharge, which was invariably present in this form of inflammation, constituted almost the only difference between it and the common ophthalmia, already described, it would only be troubling you with unnecessary repetitions, were I to enumerate the various symptoms here, or even detail the treatment,

where it did not differ materially from that employed in simple inflammation of the external tunics of the eye. I shall therefore content myself with simply stating the diagnostic marks, referring you for the general characters of the disease to the species of ophthalmia above alluded to. The discharge, as has just been remarked, formed the principal, indeed I may say the only mark of distinction, between the two diseases of which we have just been speaking. It was more or less copious, according to the duration of the complaint or the severity of the inflammatory symptoms. In some it was so trifling, as only to be seen towards the inner extremity of the lower lids, in the morning before the patient had washed himself, or on the inner surface of the lids, rendered visible on gently everting them; in others it was very copious, besmearing not only the whole of the tarsi, but also the outer surface of the lower palpebra, and forming a medium by which the former were found to adhere during the night. It differed very much in appearance and consistence in different individuals; in some it was thin and slightly yellowish, resembling bad cream, whilst in others it was thick and ropy, like mucus or flakes of lymph. When of the former description, it was generally found collected towards the inner canthi, or all along the edges of the tarsi, about the roots of the ciliæ, when again of the latter, it was seen principally on the inner surface of the lower lids, and about the point of reflection of the conjunctiva on the eyeball. This difference of situation probably depended on the nature of the fluid discharged, being, when thin and puriform, readily washed away by tears, but when thick and ropy not much affected by them. The vascularity of the lining of the lids, in proportion to that of the eyeball, appeared to be much greater in this species of inflammation than in the common acute ophthalmia, which circumstance, together with the discharge and other appearances, tend, in my opinion, to prove, that the primary seat of the disease was in the lining of the lids, and that the inflammation of the conjunctiva covering the eyeball was merely symptomatic of it. In a few of the cases which co-existed with acute catarrh, small spots of effused blood were observed here and there under the conjunctiva, an appearance which I have very frequently remarked in severe catarrhal ophthalmia, so often, indeed, that I should now have very little hesitation in ordering a patient to bed, who might present himself thus affected, and prescribe the remedies necessary for combating the ocular disease, and its complication, the catarrh, without making any particular inquiries of the individual himself. You may perhaps say that this would be placing too much faith in mere appearance, par-

ticularly as ecchymosis under that tunic does occasionally arise from other causes, such as blows on the eye, foreign bodies, especially when of a rough or pointed description, getting under the lids, &c. That effusion of blood does occur from these causes I must readily admit, but, at the same time, I would remark, that, when thus induced, the appearances are very different from those exhibited by it, in the modification of disease we have just been describing. When occasioned by a blow, it is for the most part pretty extensive, dense, circumscribed, and of a bright scarlet colour, with little or no surrounding inflammation, at least till some time after the accident. When it is the consequence of the action of extraneous bodies getting under the lids, it is in general also considerable, and confined principally to the upper and lower parts of the eyeball, where it is covered by the palpebræ, and is seen occurring at the extremity or in any part of the course of a vessel, upon which the foreign body may have acted; but when it occurs in catarrhal inflammation, it appears in very thin, small, irregular spots, generally at the termination of small vessels, and so slight as to conceal from view the ramifications of other small branches which it may happen to cover, it is observed on all parts of the globe, but more, if any thing, towards the canthi than under the lids, and is occasionally seen very distinctly close to the outer and inner edges of the cornea. In addition to the appearance of the effusion itself, there was a peculiar watery look of the eyes, which was of considerable advantage towards forming a ready diagnosis, and was such, that, if once carefully observed, it was, in general, easily recognised again. It is not that copious discharge of tears, observed in acute ophthalmia, but it is a shining watery appearance of the whole eye-ball, and a distinct collection of the lachrymal fluid, all along the inner edge of the lower tarsus, which, however, does not collect to such an extent, as to run over the lids and cheek, unless when the former are forcibly shut, and then it is only for the moment, as immediately upon their being opened again, the same appearance is exhibited, and only disappears as the severity of the disease abates. The inflammation in most, if not in all the cases, was said to have been occasioned by cold, acting either directly on the eyes, or through the medium of the constitution. The treatment of such of the acute cases as were not complicated with catarrh, may be said to have differed but little, if at all, from that already detailed under the head of Simple Acute Ophthalmia. When, however, much constitutional excitement existed at the same time, which could be traced to the influence of cold, the plan of cure was principally directed to effect its diminution or

removal, as along with it the local inflammation was, in general, found to disappear. With this intention, twenty or thirty ounces of blood were drawn from the arm, a tartrate of antimony emetic was immediately exhibited, and the patient was directed to have a warm bath in the evening, which was to be followed by a scruple of Dover's Powder. If the local increased action happened to run high, as a precautionary measure, four or six leeches were applied to each temple, and the eyes fomented with some tepid anodyne fluid. Next day, if the affection of system was not found to have been sufficiently reduced, the depletion was again repeated, as also the warm bath and the diaphoretic. About the third day, by this treatment, not only the constitutional, but also the local disease, was found to have undergone a very considerable diminution, and the latter, in general, to be in such a state as to require the employment of stimulating and astringent applications, to stop the mucous discharge, which then was found to be one of the principal marks of disease of the eye. With this view, a solution of the nitrate of silver, to the proportion of from three to six grains to an ounce of water, was found to be by far the most successful remedy, when cautiously persevered in. In cases, however, in which it did not appear to effect any considerable improvement, by the third, or, at farthest, the fourth day, a blister was applied to the back of the neck, and kept discharging till the disease was nearly, if not entirely cured. The last remedy, in every instance in which it was employed, was followed by immediate benefit, and soon by a total cure. As long as any constitutional affection existed, the warm bath, the pediluvium, diaphoretics, and gentle purgatives, were occasionally prescribed. Where the complaint was mild, or of a chronic form on admission, the solution of the nitrate of silver was immediately employed, and if it was found to be of long standing, or attended by any considerable discharge, a blister was applied to the back of the neck, and kept discharging till the healthy action was nearly if not completely reinstated, which was sooner or later effected in every instance of the disease which I have just been describing.

Ophthalmia Purulenta.—In only three cases admitted was the discharge so copious, as to warrant their being set down as examples of purulent ophthalmia. In all of them the disease was in its acute stage, and in two affected both eyes, but in the third it was confined to one: they were all cured by the treatment employed.

Symptoms.—A sensation of stiffness and inability to move the lids with their usual degree of freedom, sense of weakness and weight on the upper part of the eyeball, and an increased

discharge of tears, were the symptoms first complained of in this disease. These in the course of a few hours were followed by a still more copious lachrymation, sensation of sand or gravel under the lids, intolerance of light, swelling of the palpebræ, particularly the upper ones, and an increased vascularity of the whole of the conjunctiva, covering the eyeball and lining the lids, with severe pain, confined in one of the cases to the eye itself, and accompanied by a sensation of pulsation in the bottom of the orbit, but in the other two, affecting both the eye and head at the same time. On the morning following the appearance of these symptoms, the tarsi were found more or less firmly glued together, and upon a separation being effected, a sudden and copious discharge of tears, mixed with a puriform fluid, took place, which was followed by temporary relief. The discharge from this time kept gradually increasing, till about the third day, when it, as well as the other symptoms of active inflammation, were found to be at their height, and chemosis commencing to form. The last symptom, when once it commenced to make its appearance, increased very rapidly, and was followed by an evident diminution of the redness of the conjunctiva, and a sensation as if the eyeball was nearly quite fixed in its socket. In two of the cases the chemosis was general, forming a complete ring round the cornea, but in the other it was partial, and occurred only towards the outer canthus. In one it was so very considerable as nearly to cover the whole of the cornea, but in the other two it was more trifling, and did not conceal above a line and a half of that tunic, all around its circumference. At first the swelling was of a dark red colour, but as it increased it gradually got more and more pale, till at last it exhibited nearly the appearances of a piece of muscle, from which the blood has been well washed. The degree of vision was not in the least impaired from any affection of the cornea, though it was now and then for a moment confused, by strings of mucus or pus extending across the anterior part of the eyeball, and either impeding the passage of the rays of light to the retina, or giving to them a wrong direction. The constitutional irritation in all was pretty considerable, towards the commencement of the disease, being marked by a quick, hard, and strong pulse, hot skin, thirst, loss of appetite, &c. As the activity of the local inflammation abated, the intolerance of light, swelling of the palpebræ, and puriform discharge diminished, and the lining of the lids became of a brick-red colour, and very much relaxed and thickened. As the chemosis disappeared, in like manner did the conjunctival tunic of the eyeball become much relaxed, which was marked by the formation of folds or doubling

of that membrane, in different situations, during the varied motions which the organs were required to perform.

The disease, in two of the cases, was traced to the action of a cold wind, while on sentry; and in the other it appeared to have been occasioned by a severe blow on the eye, while in a state of intoxication. The treatment in the early stage was very active, and directed with a view both to the alleviation of the constitutional and local disease. The patients, on admission, were immediately ordered to bed, and a vein in the arm was opened, from which blood was allowed to flow till syncope, or a state nearly approaching to it, was produced. This for the most part happened by the time thirty or forty ounces had been abstracted, provided the orifice was sufficiently large, and the patient kept sitting up during the whole of the operation. After the arm was bound up, a tartrate of antimony emetic was immediately exhibited, which in general produced a free evacuation, not only of the stomach, but also of the intestines. The operation of this remedy invariably left after it a considerable degree of languor and debility, which was accompanied by an evident diminution of the inflammation of the eye, and the celerity of the pulse, and to keep them in that state was now the object of our treatment. For that purpose, the nauseating doses of antimonials, which have been already mentioned under the head of Acute Ophthalmia, were exhibited, and, as an additional security, six leeches were applied to each temple, and a blister to the back of the neck, which was directed to be kept open by the application of savine cerate. After the leeches had fallen off, the bleeding was encouraged by fomenting the temples with a decoction of poppy heads. During the first two or three days of the disease, the matter was frequently washed away from the surface of the eyeball and linings of the lids by the same fluid, and a moderately strong solution of opium dropt between the tarsi five or six times a-day. Should the pain, inflammation, or constitutional irritation again increase in spite of these measures, the general blood-letting was repeated, as also the application of the leeches, and the patient was ordered to continue the use of the antimonials, and have a warm bath, in the evening. When the activity of the complaint had been thus reduced, and the chemosis was now very considerable, an attempt to moderate that symptom was made, by cutting out a portion of the conjunctiva, at its most prominent part, and allowing the serous fluid to escape. This operation was invariably followed by much advantage, if not performed till after the active inflammation was overcome, as the swelling disappeared much sooner about the parts where the excisions were made, than any where

else. The anodyne decoction was now changed for a solution of alum, in the proportion of about six grains to an ounce of water, which was generally at first used warm, by injecting it under the lids five or six times a-day, by means of a common elastic gum syringe, such as that which is sometimes used in the operation for hydrocele. As the eye became accustomed to the change, it was used cold, and its strength also increased to ten grains, while, at the same time, the vinum opii, or a weak solution of nitrate of silver, was used instead of the solution of opium. By these means the chemosis, puriform discharge, and increase of vascularity, were generally in the course of six or eight days very much diminished. The alum wash was still continued, as also the solution of nitrate of silver; the latter however of an increased strength, containing about six grains to an ounce of water. This remedy produced a considerable effect in diminishing the discharge and removing the inflammation from the eyelids, and when continued, with the alternate use of the lotio zinci sulphatis and lotio aluminis, a complete cure was effected. In all the cases the vascularity of the lining of the lower lids continued much increased, with considerable lachrymation and slight purulent discharge, after all diseased appearances were removed from the eyeballs. These symptoms were in time removed, by the drops of the solution of nitrate of silver, together with the use of the *dilute citrine ointment*. The bowels, during the whole progress of the cure, were kept moderately open, by small and repeated doses of neutral salts.

Ophthalmia Pustulosa.—Eight individuals affected with this form of inflammation came under treatment; in seven of them the disease was confined to one eye, and in the eighth it affected both. In two it was of several days standing, and had been modified by previous treatment, while in the others it was in its very commencement, and yielded readily to the treatment employed. Two of them had laboured under a similar complaint twice before, and all the others had been generally subject to weak eyes. The increase of vascularity was only partial, and occurred in three towards the inner canthus, in four towards the outer, and in the eighth case on the upper part of the eyeball. Close to the margin of the cornea, corresponding with the increased vascularity, there was regularly observed a small pustule, filled with a whitish puriform fluid, around which the vessels appeared to terminate, considerable lachrymation in all, and in six slight intolerance of light. The pain, which was always present in the commencement of this disease, was generally referred to the spot where the pustule afterwards appeared, and was described as being of a pricking description, but in none

was it either violent or of long duration. The exciting cause in all appeared to have been cold acting directly on the eyes. The treatment pursued was particularly simple, and at the same time very effectual. On admission the patient was ordered a purge of neutral salts, and the pustule was freely touched, with a piece of pointed caustic, so as to produce a slough. In the course of the day, if the pain at all increased, two or three leeches were applied to the temple, and the eye was fomented with warm water. The following day the slough began in general to separate, but the vascularity had not diminished. The solution of nitrate of silver, in the proportion of six grains to an ounce of water, was now dropt on the slough, twice a-day, and continued till a cure was effected. For the first two or three days after the caustic was applied, no diminution of the inflammation was perceptible, but as soon as the slough had regularly separated, and the small ulcer began to heal, all marks of inflammation were found to vanish with amazing rapidity, and the eye often in the course of a day got completely free from disease. Much advantage was always found to result from confining the patients to the ward, and carefully guarding against exposure to cold, or currents of air. The diet in this, as well as in the other varieties of inflammation, was at first very low, and gradually increased as the symptoms gave way.

(*To be continued.*)

IV.

Case of Stricture in the Intestines, accompanied with Scirrhus Liver. By T. M. GREENHOW, Esq. Surgeon, Newcastle-upon-Tyne.

MRS L. a lady of about 64 years of age, thin, and of a sal-low complexion, had been for some years subject to stomach complaints, and had occasionally passed gall-stones. During the summer of 1818, she was attacked with slight inflammation of the liver, which was removed by the ordinary treatment. For some time afterwards she enjoyed unusually good health. In November 1819 I was again consulted by her. I found her spirits greatly depressed in consequence of some late afflictions in her family; and that, having withdrawn from an active employment in which she had been for many years engaged, she

ous when for want of it delusive doctrines are in any quarter maintained.

The preceding considerations have not merely the effect of repressing forwardness in drawing our conclusions, but that of inspiring activity, because they do not discourage the hope of future discoveries; they forbid us equally to reject any practical expedient with haste, or to admit any with rashness; and it is allowed that an ample field is open for exertion, which those who are concerned in the subject cannot conscientiously neglect to cultivate.

A minute view of the general nature of the agency of external bodies on the animal economy has also the effect of introducing the mind to a more intimate familiarity with the laws of life, and thus imparting a greater interest to all the practical researches connected with it.

II.

Report of Cases treated at the Ophthalmic Hospital, Chatham, communicated to Professor Thomson. By ANDREW SMITH, M. D.

(Continued from No. LXVIII. p. 375.)

Ophthalmia with Granulated Lids. *—MORE than half of the patients who came under treatment, were affected with a greater or less degree of inflammation of the eyeballs, complicated with a granulated state of the lining of the lids. They had all been treated for a longer or shorter period, on account of the inflammation, in one or more hospitals, previous to their reaching Chatham; yet much still remained to be done, towards removing the cause which kept up the increased vascularity, and which, judging from the morbid appearances exhibited on admission, did not seem to have been much the subject of previous attention; or at least, if it had, the success of the treatment had not been such as was necessary for eradicating the disease.

* In making use of the term Granulations, I do not thereby intend to assert that they absolutely are such, although, from having carefully watched their commencement, progress, &c. I am much inclined to consider them in that light.