professor who has had as long experience of teaching as any man in London, that duplicate courses, as a rule, are superfluous, troublesome, and objectionable, as consuming time that might be spent in practical study. Three subjects, or thereabouts, might be taken in hand and mastered by the student in each session, those which are lightest being set apart for the summer courses, which last for only half the time of those in the winter. If these subjects were managed as follows, the student would not find himself, as now too often happens to him, to be overwhelmed with work, and confused by the number of his engagements.

First Winter Session Anatomy. Physiology. Dissections.
First Summer Session. : Applied Chemistry. Pathology. Materia Medica.
Second Winter Session $.$ $\left\{ \begin{array}{lll} \text{Medicine} & . & . & . & . \\ \text{Surgery} & . & . & . \\ \text{Dissections} & . & . & . \end{array} \right\}$ $\left\{ \begin{array}{lll} \text{Hospital} \\ \text{Practice} \end{array} \right\}$
Second Summer Session (Midwifery) Hospital Therapeutics (Practice
Third Winter Session (Clinical Medicine) Hospital Clinical Surgery) Practice
Third Summer Session . (Medical Jurisprudence) Hospital Comparative Anatomy

PRACTICAL REMARKS

ON THE USE OF

COUNTER-IRRITATION IN INFLAMMATORY AND CONGESTIVE DISEASES OF THE EYE.

By J. VOSE SOLOMON, F.R.C.S., PROFESSOR OF OPHTHALMOLOGY IN QUEEN'S COLLEGE, AND SURGEON TO THE EXE HOSPITAL, BIRMINGHAM.

It is the opinion of some ophthalmic surgeons that blisters are useful only by withdrawing the patient's attention from his malady-"bon pour distrait." Clinical facts, however, are altogether opposed to this limited view of their influence. On several occasions I have seen the depletion and active cell-formation excited by a blister behind the ear, destroy the material by which a wound of the cornea had become united. The day preceding the vesication the aqueous humour was retained in its chamber,—the day after, it escaped through the unsealed aperture. In a word, the nutrition of the cornea was depressed.

Of the beneficial effect upon an inflamed choroid of active derivation seated in the neck, my mind was deeply impressd several years ago by two cases—both men advanced in years,-in whom acute choroiditis followed the reclination of cataract, and a carbuncle the application of a blister to the nape. The ophthalmia entirely disappeared as the slough began to separate, and good vision was restored.

A very large number of eye diseases are curable without

counter-irritants; nevertheless there remains a by no means insignificant number where strikingly good results attend upon or follow their use.

As means of exciting counter-irritation, I employ the thread seton, the moistened lunar-caustic stick, blisters, croton-oil liniment, emetic tartar plaster, and the pea issue.

As regards the situations suitable for their application, I use a single thread in the temple, two or three when the mastoid region is selected, several in the nape of the neck.

The moistened caustic-stick is rubbed sometimes across the forehead, just above the brow and root of the nose, more often over the brow, temple, and malar bone, occasionally upon the superior lid. I never direct blisters or croton oil to be put on the temples as counter-irritants, but reserve them for the mastoid region and nape of the neck.

Pustular irritation should be confined in its application

to the posterior half of the scalp.

The arm is the preferable site for the pea issue, which is best made by an incision. In a male adult I seldom insert less than three peas or more than four.

A single thread seton in the temple proves of special advantage where the conjunctival layer of the cornea is vascularised. The more interstitial (the deeper) the keratitis, the less valuable is the thread as a therapeutic agent. Indeed it is useless, in the specific interstitial form, until the stage of resolution has become established, when absorption is perhaps promoted by it. As a remedy against the superficial vascularity which often lingers after all active disease has subsided it is very valuable.

In all cases of vascular ulcer, fascicular keratitis, and pustules of the cornea, it may be advantageously employed at the onset of the attack. (In catarrho-pustular conjunctivitis, it has no effect.) The seton is not, however, the sole remedy for these diseases, nor in all cases the most

effective.

Many children who are affected with keratitis get rapidly better without any medical or surgical treatment, after being submitted to the dietetic and hygienic influences of a well-constructed hospital. I took some pains to illustrate this fact five or six years ago, in order to correct the undue estimate attached by certain of my medical friends to the administration of a mixture of emetic tartar and opium in cases of keratitis attended with photophobia.

Where the inflammation of the cornea is manifested by zonular redness and superficial cloudiness of the membrane, I prefer to employ atropine drops, and the moistened caustic stick in place of a thread; also in that form of keratitis where we find thickening and vascularisation of the margin of the epithelium corneæ, and a ciliary conjunctival vascular wreath instead of a zone. The stick should be lightly applied over a good breadth of surface. Severe vesication is unnecessary; ulceration I esteem baneful.

The seton ought not to be inserted too near the eye. The most convenient place is well back in the short hair of the temple; and if the needle is carried in the direction of the trunk of the temporal artery, the formation of a thrombus

will be prevented.

In some patients the disease of the cornea proves obstinate until the thread gives rise to a free discharge of pus. The thread should not be removed till some ten or fourteen days after all pathological vascularity has subsided, for if withdrawn too soon the red vessels which traversed the cornea reappear.

In superficial vascularity of some duration the seton rarely fails to cure. It has been assumed throughout these remarks that the keratitis is altogether independent, in respect to its origin, of mechanical irritation of the lids,

and of disease of the lachrymal apparatus.

When both eyes are affected, I insert a seton in each temple. And if a single thread fails to excite sufficient irritation, it must be doubled.

In cases of double keratitis, treatment, not necessarily by seton, of one eye is sometimes followed by improvement of the other; and I may here remark, that any sort of treatment which relieves the photophobia is often a step towards

improvement of the child's general health.

A seton in the temple is not, in by far the large majority of cases, "a severe remedy." It will, however, sometimes give rise to abscess, erysipelas, or severe phlegmonous in-flammation. The occurrence of abscess may be prevented by the daily cleansing and shifting of the thread, and the occasional use of a poultice. Erysipelas is due, I believe, to lack of hospital hygiene, as I have never noted its occurrence among out-patients. Owing to the proneness of certain young persons to phlegmonous irritation, I have found the seton in them to be totally inadmissible as a means of relief.

It has been attempted to determine the relative value of two applications—as, for instance, the painting of tincture of iodine upon the lids, and the instillation of prussic-acid drops,—by confining each one to the right or left eye of a patient affected with double keratitis and photophobia. Inferences so derived are untrustworthy and valueless, inasmuch as keratitis, and some other ophthalmiæ, do not run the same course in both eyes, or terminate in the same amount of structural change, whether left to run an undisturbed course, or submitted to constitutional treatment alone, or to the influence of local agencies only.

In chronic interstitial keratitis, emetic-tartar pustulation

upon the nape of the neck is a good remedy.

In relapsing iritis, unconnected with important adhesions of the membrane to the capsule of the lens, or to the cornea,

an issue in the arm, consisting of two or three peas, proves productive of very satisfactory results.

A seton over the mastoid is useful in certain obstinate inflammations of the choroid.

In the retinitis of albuminuria pustulation over the nape with croton-oil liniment is, I have satisfied myself, a valuable addition to other treatment.

Where an ophthalmia is complicated by cerebral congestion the efficacy of irritation upon the neck or occiput admits of no doubt.

In gouty affections of the choroid and chronic ophthalmia blisters behind the ear, or mild irritation over the nape with croton oil, are remedies which should not be forgotten.

Counter-irritation of any sort is unnecessary, and often highly injurious, when applied to infants at the breast.* It is almost without value in the acute stage of an ophthalmia, which is characterised by a copious purulent or nuco-purulent discharge.

When the pain from a counter-irritant is so severe that the health of the patient becomes seriously disturbed, its employment should be omitted, or changed for one of a

milder kind.

It is, I hope, scarcely necessary to observe, that in forming an estimate of the value of any remedy in a given disease we must take into account what duration it had attained at the time the special plan was instituted; also its average term of existence when ordinary methods of cure are adopted; also whether we are treating a mild or severe type of disease. No one would dispute that the purulent ophthalmia of new-born infants is sometimes very destructive to the cornea, yet every experienced surgeon has seen a large number of cases where the disease was so mild that ordinary domestic cleanliness almost sufficed to cure the complaint, without serious changes, if any, taking place in the cornea.

Of the mode of action of counter-irritants we have yet to learn something. Blisters are highly compound in their action; they influence the vaso-motor nerves, deplete from the bloodvessels, and set up an active cell formation; a new superficial disease is established, which diminishes the supplies that feed the primary disorder. A blister on the nape, by its action on the vaso-motor nerves, contracts the bloodvessels of the eyeball, and, by lessening cerebral fulness, depletes the eye. The moistened caustic stick relieves irritation of the peripheral sensory nerves, promotes active epithelial changes, and rapid metamorphosis of the diseased ocular tissues; it also controls the palpebral movements, and so obviates friction of the sensitive corneal surface. Setons, issues, and open blisters act in some cases, I believe, as emunctories as well as depletants; nor would I altogether ignore the opinion that they do some service by withdrawing the patient's attention from his disease.

Birmingham, March, 1870.

HYDRATE OF CHLORAL AND ITS USE IN PRACTICE.

By J. SWIFT WALKER, M.D., MEDICAL OFFICER OF HEALTH TO THE BOROUGH OF HANLEY.

When any new remedy is brought before the profession, if each one would record his experience of its therapeutical effects, the long list of drugs in the Materia Medica would be considerably shortened.

As my experience of the hydrate of chloral has been somewhat extensive, I may state that it is with great difficulty patients can take the large doses recommended by some,—say thirty grains. Some people cannot take as much as ten grains, unless its pungency is covered by a thick vehicle, as syrup, or, as Mr. Squire recommends, with peppermint-water and syrup, or syrup of tolu.

permint-water and syrup, or syrup of tolu.

It has not the power of controlling pain in cancer of the uterus or the stomach, or in any malignant disease, like opium or morphia, and it is of little utility in allaying cough in phthisis or bronchitis. It is very useful as a substitute for hyoscyamus in hysteria, nervous debility, anæmic cephalalgia; and then I have administered it in doses of

ten grains, in conjunction with a little syrup to cover its pungency.

It has a marvellous effect in cardialgia, where there is excessive secretion of the gastric juice, also in allaying sympathetic palpitation in dyspepsia.

One of its best properties is that it does not produce headache, as other narcotics; its action is without excitement, and it does not constipate the bowels.

Hall Fields Cottage, Hanley, Feb. 1870.

Reviews and Hotices of Books.

A System of Surgery, Theoretical and Practical. In Treatises by various Authors. Edited by T. Holmes, M.A. Cantab. Second Edition. Vol. 11., pp. 937. Longman and Co. 1870.

This volume is devoted entirely to local injuries, and contains all those articles which appeared in the corresponding part of the first edition, with the exception of that on Diseases and Injuries of the Eye. It has, in addition, the treatises on Burns and Scalds and on the General Pathology of Fractures and Dislocations, which were formerly in the first volume. It is excellently illustrated by woodcuts, over 130 in number; and we are glad to see none of those miserable chromo-lithographs which disfigured the last part. The subjects treated of in this volume differ from those in the first in being all matters of simple observation and almost entirely removed from theory, and consequently far less liable to be affected by great changes of opinion such as we have seen in pathology in the last twenty years. The alterations in the various articles are therefore comparatively few, and in no case do they involve any important change of principle either in pathology or treatment.

Many of the articles have undergone no change worthy of notice; in fact, we cannot see where any alterations could be advantageously made in them. Among these are Mr. Holmes's on Burns and Scalds and on the General Pathology of Dislocations, Mr. Prescott Hewett's on Injuries of the Head, Mr. Pollock's on Injuries of the Abdomen, and Mr. Birkett's on Injuries of the Pelvis. Mr. Hornidge might have taken advantage of the second edition to insert in his article on the General Pathology of Fractures a more complete account of the various immovable appliances used in their treatment—such as starch, plaster of Paris, glue-bandages, &c. The book is certainly incomplete while it does not contain a detailed and accurate description of the mode of application of these bandages, as at some hospitals, both in this country and abroad, scarcely a fracture is treated without one of them.

We find many very interesting and valuable additions to Professor Longmore's article on Gunshot Wounds, as we should naturally have expected when we consider that since the first edition of this work appeared the American war has been brought to a close, and the greater part of the surgical statistics and reports of the army surgeons have already been published. During the same time we have also seen in Europe the Schleswig-Holstein and Bohemian campaigns. In spite, however, of the enormous experience that military surgeons have thus had in the last ten years, we find no general principle contained in Professor Longmore's article in the first edition has been changed in the present one. The copious bloodletting for hæmorrhage from penetrating wounds of the chest seems to have been finally abandoned, but the question of trephining in gunshot wounds of the head appears to be a little unsettled again by the remarkably favourable statistics of that operation derived from the American war. Conservative surgery of the lower limb seems to have met with but little success, the mortality after primary excision of the knee having been

^{*} I have recently seen some cases of infants and young children in which serious mischief followed the application of iodine as a counter-irritant upon the forehead or face.