

## CHINESE SURGERY.

## DISEASES OF THE EYE.

By G. TRADESCANT LAY, Esq.

THE following remarks were taken from a Chinese work, in six small volumes, entitled the "*Great Summary of Surgery and Therapeutics in Diseases of the Eye.*" In culling from its pages what is really to the purpose, one is obliged to wade through many a puddle of metaphysical jargon, and to encounter a host of ill-defined words. Diagrams are given to illustrate the "five circles" and the "eight empty spaces" within the eye; but as these are imaginary, such diagrams puzzle without instructing: while a few plain definitions, with a figure or two of the parts which are apparent without the aid of dissection, would afford an invaluable assistance to the foreign reader, and remove many a stumbling-block which often makes him ready to throw down the book in despair.

*Operation for Cataract.*—The cataract-needle, or, as the Chinese author calls it, the *golden needle*, is described as having a haft of hard wood, akin to that of our pear-tree, or of the rhinoceros' horn. The length is nearly three inches, and its thickness equal to that of a bow-string: the needle is made of gold, or some amalgam of gold, that the value of the metal might guarantee the success of the operation. No figure is given of this curious instrument in the work before me; and hence I have borrowed one from a native work upon the Veterinary Art, which is mentioned in a chapter touching that important subject in "*The Chinese as they are.*"

The needle itself is somewhat more than an inch in length. One-third of this is sunk into the eye of the haft, while the rest remains to puncture the eye of the patient; it is round and tapering, not large and sharp-edged, lest the animal spirits within the eye-ball should be injured by it. It is kept in a case made out of a goose-quill, and laid up in a square box.

Two or three days before the operation, measures are taken to quiet the air which flows in the arteries, to disperse the venous blood in even proportions, and to equalise the weakness of the bowels; that is, in plain language, to lower the patient, lest he should incur the risk of feverish excitement. As an immediate preliminary, a basin of

water, fresh drawn from the well, is brought to the doctor, who, after laying the patient upon a table, and taking a seat beside him,

dips his hand into the water and allows it to distil upon the eye. This shower-bath in miniature, as it is supposed, causes something like a congelation in the eye, and renders it steady: it answers the purpose of belladonna, in contracting the iris and opening the pupil.

The author, in his prelude to an account of the operation itself, says, that skill and delicacy of hand must be found in the surgeon, and that, from an examination of the outer parts of the eye, he ought to conjecture, with certainty, as to what is amiss in the eye itself. He again refers to the washing mentioned in the preceding paragraph, and says it is intended to prevent a flow of blood: after this the patient is placed upon a chair (an armed one, I suppose), with his hands resting upon cushions made of cotton; two men then take hold of the patient's head, while the operator opens the eye with his finger and thumb to keep the eyelids steady, and to prevent the moving of the eyeball. He then grasps the "golden-needle" with his right hand, if he is to operate upon the right eye, and inserts it about midway between the margin of the cornea and the edge of the conjunctiva, the haft being inclined towards the bridge of the nose. The introduction of the needle must be effected very gently, *man, man*; after which the point is made to return a little towards the operator, that it may lay hold of the lens, and thrust it down or couch it into the vitreous humour. The surgeon then asks whether the patient can see the movement of his fingers, distinguish white from blue, or from any other colour. If this question be answered in the affirmative, the operator endeavours to push the lens further downwards into a region called the "place of the open country," taking care all the while not to injure the iris or aqueous humour within the "region of perfection." This being accomplished, the instrument is gradually withdrawn; the patient is not allowed to go abroad early, lest the lens should return to its place. When the left eye is to be operated upon, the surgeon must use his left hand.

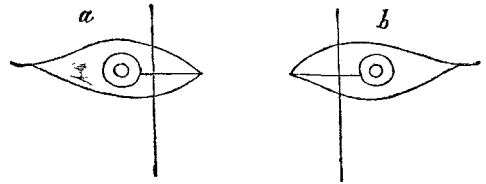
*Applications to the Eye.*—In all questions and processes connected with this subject, it was deemed necessary to consult the calendar, in order to select a propitious day, because the *yang* and the *yin*, or masculine and feminine principles in man, are identical with those in the universe, or heaven and earth. The medicament, whether in the shape of powder, salve, or foil, is applied with an instrument made from a bone of the rhinoceros, because the bones and horns of this animal have long had great therapeutic renown among the natives of China. If foil or salve be used, they should be dipped in milk and water, rubbed till they are well subdued; if powder be employed, it should be ground fine before it is applied. The medicament is to be administered in very small quantities as the eye can bear it. No reference ought to be made to the patient in deciding whether

it should be used sparingly or with a copious hand, nor ought he to complain of pain or fear the application. If the patient be a female and dreads the operation, the surgeon must have a light hand and deal gently with the disease. After the preparation has been applied to the satisfaction of the operator, he should order the patient to shut the eye, elevate the face, and sit some time without moving the eye; he should also further counsel his patient to restrain and limit wandering thoughts, and the habit of speaking much; that is, in customary phrase, to keep himself quiet. Care must be taken that the application is not too strong; if it is, the physician will have no joy, but be filled with apprehension lest he should excite inflammation, and add to the disease. At the end of these directions the author has given a prescription, which contains, among other things not easy to identify, "*bright*" native cinnabar, lapis caliminaris, amber, pearl, or, perhaps, mother of pearl, and *genuine bear's liver*, in equal quantities. In another prescription, mercury, black lead, saltpetre, and borax, are mentioned. The author has thought proper to give special directions as to the manner in which these four ingredients are to be put together. "First take the lead and make it enter the quicksilver by grinding, then add the saltpetre and the borax in equal quantities."

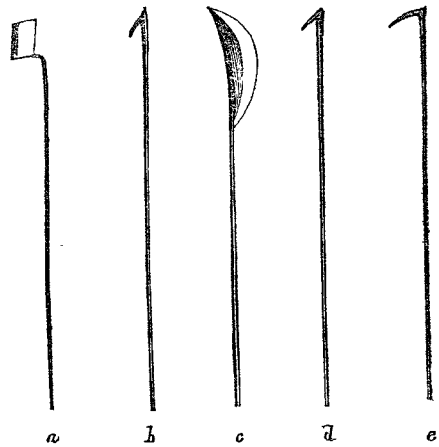
The Chinese seem to value themselves much upon their skill in the use of these caustics; for a little before I left Macao, an intelligent native told me with great satisfaction of a case which had issued successfully. While Dr. Colledge had the care of the hospital at the place last named, a Chinese came to consult him about a staphyloma upon one of his eyes: the doctor told him that the only remedy was the knife. To this he refused to submit, and applied to some native, who, by the interest of a friend at a distance, procured the necessary drugs, which, in the due course of time, removed the protuberance. In what state they left the eye, whether in the possession or with the loss of sight, with an even surface or in a shrivelled mass, was not distinctly stated. My informant added, in the hybrid dialect of the Canton merchants and linguists, "Englishman sabe outside pigeon," *i.e.* are dextrous operators; "Chinaman sabe inside pigeon," *i.e.* he has the entire monopoly of anatomical and physiological knowledge!

**Removal of a Pterygium.**—When applications have failed to reduce this uncomely excrescence, and it begins to encroach upon the cornea so as to endanger the sight, recourse must be had to the process of excision. If the development of this preternatural growth be small, or it has not reached the cornea so as to hurt it, adds the writer, it is better to attempt its reduction more slowly by using a caustic; but if it is not slight, the hook and the knife are called for. By way of prepa-

ration, a little alum is dissolved in warm water: into this solution a dossil of fresh wool is dipped, and applied to the pterygium with the view of making it rise up. A needle is then passed perpendicularly through it, as is represented in diagrams *a* and *b*, which



were exactly copied from the Chinese original. By this means the pterygium is lifted up, and the operator proceeds to cut it off by the knife *c*, beginning near the middle,



and advancing towards the cornea in a circular manner, as I suppose. After this, he cuts from the middle towards the corner of the eye. Great delicacy and lightness of hand are insisted upon as indispensable requisites in the surgeon: if he prefers it, he may use a pair of scissors instead of the knife. These, from their elegance, are called the hwa-tseen, or flower-scissors. Though, if we must speak the truth, the Chinese and their neighbours, the Japanese, succeed very ill in the manufacture of any kind of cutlery. In using the scissors, the operator must be careful not to wound the caruncula lachrymalis, since there is a connection between this and the heart; and hence, if blood is lost, a serious injury is inflicted. The writer seems to recommend the actual cautery, of which diagrams, on the right of the group *d* and *e*, are given.\* We are not, however, favoured with any directions as to the mode of operating in this case. But the author adds, by way of supplement, that if the blood starts out in removing the pterygium, it may be stopped by a dossil of soft lint dipped in water.

\* *a* and *b* of the same group are hooks for raising the pterygium.

*Actual Caution, or Hot-needle.*—In the last of the six volumes, thirteen figures are given, which represent individuals at their occupations and pastimes, or in the stately robes of office, for the purpose of exhibiting the spots where the cautery ought to be applied in diseases of the eye. These spots are situated upon the forehead, temples, back of the hand, and the anterior portion of the leg. Each particular spot has its name, and its relative situation clearly marked out. It is in the survey and mapping of these famous and important spots that the Chinese doctor expends a great deal of pains; in fact, they constitute the principal elements of his external anatomy. If the cautery cannot be applied to the part itself, the question arises, where, then, ought it to be applied? To the solution of this problem, he addresses himself with all the learning, diligence, and physiological tact he is master of. But so refined and recondite are his reasonings, and so great is the natural hebetude and tardiness of my own mind, that I seldom feel much inclination to follow him.

The following is an authentic representation of the *hair-needle*, *maou-chin*, or cauterising instrument:—It is about an inch and three-quarters in length, and has a point “as sharp as the trunk of a musquito.” It is applied in violent nervous pains of the head, when the eyes suffer by sympathy, dimness of sight, staphyloma, *nebulæ*, cataract, sloughing of the cornea, &c.



## PATHOLOGY OF DEATH BY DROWNING.

*To the Editor of THE LANCET.*

SIR:—I beg to inclose the reports of two post-mortem examinations of persons upon whose bodies inquests were held at Islington, and it will be perceived, that although immersion in water appears to have been the cause of death in both cases, the condition of the brain and its vessels was very dissimilar. I remain, Sir, your obedient servant,

R. H. SEMPLE, Surgeon.

Islington, April 22, 1841.

*Post-mortem Examination of Ann Foster, April 20th, 1839.*

The above-named woman was found dead in the New River, and an inquest sat upon the body on the 22nd of April.

There were no external marks of violence, and the body was fat and in good condition.

*Head.*—The jugular veins were not turgid, and when an incision was made into them only a very small quantity of fluid blood

issued from the wound; no blood was observed between the scalp and the skull, nor between the latter and the dura mater; but there were strong adhesions between the dura mater and skull, immediately below the vertex; this appearance was probably due to some previous attack of inflammation of the membrane. The brain did not appear congested or turgid with blood, but, on the contrary, remarkably pale; and its veins, instead of being full and gorged, as in most cases of death by suffocation, were quite inconspicuous; the brain was healthy throughout, its minute vessels not injected, and a very small quantity of serous fluid was found in the ventricles.

*Chest.*—On opening the chest the lungs appeared rather voluminous and filled the cavity; the pericardium contained a small quantity of serous fluid; the heart, viewed externally, appeared rather larger than its usual size. This organ was removed and examined, and a quantity of fluid blood, rather less than half a pound, flowed from the right auricle and ventricle; the left ventricle was hypertrophied in such a manner that the walls were much thickened, while the cavity was diminished in size; the aorta was considerably contracted near its origin, but there was no disease of its valves; the lungs externally appeared healthy and crepitated; the bronchial tubes contained a small quantity of frothy mucus.

*Abdomen.*—The liver was large, but healthy; the stomach appeared about half filled with fluid matter, and on its external surface the minute arteries were injected, indicating some inflammatory action. This organ was tied at both ends, and removed for further examination. The small intestines and the mesentery presented numerous inflammatory appearances; the glands of the mesentery were considerably enlarged. The intestines were examined internally along their whole extent, and marks of inflammation were discovered in patches in various parts, particularly in the duodenum and ileum; they contained a large quantity of semifluid matter, undergoing the natural process of digestion; the large intestines were generally healthy and filled with *fæces*.

The stomach and its contents were afterwards examined. About a quart of fluid matter, consisting of bread, currants, milk, &c., was removed and preserved for examination. The inner surface of the stomach was uniformly overspread by a light pink blush, such as is seen in that organ during the act of digestion. The matter adhering to the mucous membrane of the stomach was carefully scraped off, boiled with distilled water, and filtered; the tests for oxalic acid, arsenic, and corrosive sublimate, were successively applied, but without any marked result. There was no smell in the contents of the stomach indicating the presence of laudanum or prussic acid,