

Again, the simple removal of the exterior masses or the application of a simple drying powder would not cure the disease if the growth through the epithelium were its cause; well illustrated by *Tinea versicolor*.

3d. *The presence of the fungus aggregates the symptoms and provokes a continuance of the disease.*

4th. *The simplest effective treatment is to keep the meatus free and dry.*

Fungi do not grow in dry situations. Of course, the original disease will require its own special treatment, and here, I think, is the source of all the discrepancies among authors regarding the best remedies.

I have but a single remark more to make; it is that the *Aspergillus flavescens* and *A. nigriscans* of the books are at most only varieties of the common cheese-mould *Aspergillus glaucus*, and if we transplant either as I have done from the ear to other situations like a moist bit of cheese, we produce the green colour and other characteristics of the common form so familiar to us all.

A Simple Cautey. By THOS. C. STELLWAGEN, M.D., D.D.S., Prof. of Operative Dentistry and Dental Pathology in the Philadelphia Dental College.

One of the most useful means of applying the actual cautery has been apparently neglected or allowed to pass unheeded up to the present time, the simplicity of the method being, probably, the cause of its escaping attention.

It has long been a desirable thing, with the practitioner of dentistry, to be able to accomplish the cauterization of what is termed sensitive dentine, often found where the dental caries has attacked the necks of the teeth, near the margins of the gums; most of the cauterants in actual use being unreliable, or to a degree unmanageable, and liable to penetrate deeper into the structure, or injure the mucous membrane by running over it. This, to a certain degree, has been avoided by the use of the galvanic cautery; but the apparatus required for this purpose is both costly and cumbersome, besides being easily deranged, and somewhat difficult to apply to certain surfaces where, by the undercutting of the caries, the platinum point requires to be bent or hooked.

While operating on the 13th of March, for my friend Dr. J. S. Walker, I attempted, by the use of a minute coal of fire upon a match-stick, to obtain the sensation of the superficial portion of such a cavity as above described; meeting with some difficulty in the breaking off of the heated portion, he suggested the use of a harder wood, and I immediately ignited the end of a stick of dental pivot wood, which wood, from its characteristics, being both dry and compressed, proved a most satisfactory and inexpensive means of obtaining the desired effect.

It has since appeared to me that sticks of hickory, or any combustible substance that is dense, tough, and readily consumed in the ordinary atmosphere, might be of service to the general surgeon, but particularly where the throat, nares, ear, uterus, or anus are the points to be cauterized; or for the physician, where immediate vesication is demanded, it could be conveniently used. These sticks might be made more inflammable by soaking in something like a solution of saltpetre, before drying, and passing through the process of condensation, which dentists accomplish by an ordinary draw plate, such as is used for making wire.

To use this, a suitable portion should be burned in the flame of an ordinary match for a few moments, and then, by blowing out the flame, the

incandescent portion at the point may be brought to the shape desired, and the temperature raised by passing rapidly through the air, or *vice versa*, lowered by allowing a trifling coating of ash to accumulate upon the surface. This will burn thus for one or more minutes, according as more or less is charred by the flame, and one or more of the small sticks are used singly or tied together, or the stick made of larger diameter.

It might also be that a tube of some non-conducting material might be filled with an ordinary lampwick, previously prepared, and by a spring regulated to keep the ignited portion of the combustible material constantly pressed out at one end.

DOMESTIC SUMMARY.

Fissures occurring in Long Bones; with Remarks on V-shaped Fractures of the Tibia.—Dr. R. M. HODGES, in an interesting paper with the above title (*Boston Med. and Surg. Journ.*, Jan. 11, 1877) calls attention to fissures, or cracks, occurring in long bones, particularly the tibia.

The term "fissure" applies to a line of fracture varying in length, the sides of which are in apposition, penetrating through, or partly through, the solid shaft of a bone, and unattended by the separation of fragments. The statement of Malgaigne, that if a fissure involves the whole thickness of the shaft it must extend to one or the other extremity of the bone, is entirely at variance with facts. The gravity of this lesion is unquestionable. A force which disrupts, in the most unyielding direction of its fibres, the shaft of an adult long bone, often at a distance from the point where the violence centres, must be powerful enough to cause serious results.

Certain symptoms, under circumstance to be described, justify the opinion that a fissure exists; but the diagnosis is difficult, and sometimes impossible, even when there is a wound of the soft parts.

It is a well-known fact that brittle cylinders tend to break by lines which assume a spiral direction. Any collection of glass tubes will illustrate this point in their broken extremities or the accidental fractures they may have undergone. It will also show that, almost invariably, a crack in the glass extends the spiral a certain distance into the tube, beyond the broken point. The extent to which this principle is applicable to the fractures of bones is still hardly realized, although attention has been called to it by Gerdy, H. Larrey, Houel, and, emphatically, by Gosselin. Fissures exhibit the influence of this law by generally assuming a more or less spiral direction.

Three varieties of crack, or fissure, may be described:—

I. Those unaccompanied by other fracture.

II. Those starting from a fracture.

III. Those accompanied by, but disconnected with, a fracture.

The first variety may be called the true fissure. No example of it exists in the museums of this city. The elaborate article of Poncet¹ admits but three incontestable cases. It occurs so rarely that instances reported have been subjected to searching criticism. Those radiating from bullet-wounds it is claimed should be excluded from consideration. A femur from the museum of Val de Grâce, with an interrupted linear fissure extending nearly the whole length of its anterior surface, figured by Malgaigne, is without history. It has been suggested that in this, as in other specimens without history, the apparent fissures are really "season cracks," and the result of desiccation or weather exposure. That figure by Gürtl (1862) might in fact be called a longitudinal fracture of the humerus, rather than a fissure, so widely separated are the two sides of the cleft. As, however, well-marked examples of fissure are found entirely independent of the lines of coexisting fracture, it would seem

¹ Nouveau Dict. de Méd. et de Chir., article Jambe, 1874.