the middle line. It did not run in straight lines, but spread out somewhat like a coruscation of sheet lightning. It was over in a few seconds, but quivered a little, not being absolutely momentary. After one explosion, another, and often a third or fourth, would follow in quick succession, and then he would be quite free for half an hour or an hour. The scalp was not in the least tender. The pain was quite bearable; in fact, at first it rather amused than hurt him; but, as the day went on, it became worse, and the explosions were attended by a feeling as if the left half of the head were being suddenly crushed. In the evening, the explosions were both more frequent and more prolonged. On some occasions, there was the suggestion of a pain passing into the cheek and lower jaw, involving, in fact, the whole half of the head; but, in these parts, its course could not be traced with accuracy. Neither in the upper nor in the lower jaw did it run along the course of known nerve-trunks. The bicuspid tooth of the lower jaw was aching a little all day; but it was a steady ache, attended with a feeling of general numb swelling about it, and with tenderness on pressure, which prevented eating, but without any explosions of severe pain. My friend became very nervous in the evening, feeling sure that he was about to be the victim of "tic-douloureux."

I found that, on the previous day, he drank a bottle of claret instead of his usual modicum of a third; that he had eaten much more liberally of meat than was his wont; and that, on the day on which his neuralgia began, he also felt his ankles and wrists puffy and aching; and, finally, that his urine began on that day to deposit uric acid freely. Knowing that he had for long been threatened with gout, I assured him that the neuralgia was gouty, and made him take a full dose of bicarbonate of potash at bedtime. On the next morning, both the toothache and the sheet-lightning pains in the head had ceased, and nothing remained but a very slight perception of general ache in that side of the head.

Although it is easy, in this instance, to feel confident as to the influences which were at work, and to say that the neuralgic shoots, and probably the tooth-ache also, were caused by a gouty state of the blood (lithæmia), yet it is more difficult to explain the local mechanism of the pain. The scalp-pain always began in one and the same spot, and that not one to which any anatomical peculiarities attach. Was it a periosteal pain, and due to changes (neuritis?) in some ganglia, or other peripheral nerve-organ? Such seems the most probable hypothesis.

I could sympathise much with my patient, having often experienced pain of a somewhat similar kind. From my own observations, I can quite confirm the accuracy of his distinction between pains which are like forked lightning, and those to which the comparison of sheet-lightning may be applied. The latter are less severe, as a rule, and always less momentary than the others. They spread over a wider area, and do not feel to run in such straight lines. Both of them differ from another kind of explosive pain, in which the shoots extend for equal distances around the centre of starting. This might be called the star-shaped pain, or bomb-shell explosion; but, if the latter term be used, it must clearly be understood that the pain denoted, although always radiating, is by no means always of any terrible degree of severity.

THE AIMS AND CLAIMS OF THE BRITISH MEDICAL TEMPERANCE ASSOCIATION.

An Abstract of a Paper read at the Tenth Annual Meeting of the Association.

By J. J. RIDGE, M.D., B.S., B.A.Lond., Honorary Secretary.

After reference to the great increase in the number of medical abstainers since the formation of the Association, many more being still unenrolled than the 341 who have already joined, Dr. Ridge proceeded:

"Our first aim is to form a rallying point for medical abstainers through the length and breadth of the land. We are constantly discovering in busy cities, or in country towns and villages, medical men who are total abstainers, but whose fame as such is not known far beyond the neighbourhood in which they dwell. It is gratifying to all who are interested in the temperance cause to find so many of these solitary adherents, and a source of help and encouragement to them to learn that they are not alone, but are associated with an ever increasing number of their medical brethren. The Association makes such men acquainted with each other, and mutual sympathy strengthens individual zeal.

The object of the Association is thus very clearly stated in the

constitution: "to advance the practice of total abstinence in and through the medical profession, and to promote investigation as to the action of alcohol in health and disease." We aim to stimulate the interest of medical practitioners in the subject of total abstinence. The future of the temperance movement depends on the adoption of right views of the position and action of alcohol on the human organism, both mind and body. What those views should be, ought to be decided by medical scientists. The effect of alcohol on body and mind is part of that physiology which is the "proper study" of the profession. The world waits for a clear and authoritative declaration. There has been too often given it hitherto the "uncertain sound" of contradictory statements, a display as confusing, and often amusing, to the public, as it is injurious and discreditable to us. Practical men have adopted total abstinence, temporarily or altogether, to enable them to accomplish feats of strength, skill, or endurance. Soldiers, engineers, labour-masters have enforced total abstinence on occasion for the purpose of attaining most easily the highest efficiency of their men, and have been delighted with the result. If the profession, or any members of it, set their faces against a principle thus practically tested and triumphant, it is high time that they realised that they are running their heads against a rock, and must suffer the inevitable consequences. It is necessary to declare that the highest development of health and strength, the soundest condition of mind and body, are only possible when intoxicating liquors are abstained from. The Association enables the profession to declare this in the best and most natural way, by showing that each member practices what he preaches.

For, after all, and very properly, the public will judge us more by what we do than by what we say. Our special knowledge involves a special duty. The medical abstainer is a living beacon, whose silent yet eloquent example influences many far beyond his ken, saving them from the alcoholic rocks and quicksands, on which some would otherwise be inevitably shipwrecked.

We advocate total abstinence because we are in earnest, and practical reformers, dealing with human nature as we find it. Our ultimate aim is the extinction of all the special evils which the action of alcohol is able to produce, and the diminution of all other vices, diseases, and troubles by how much they are now aggravated by alcohol. The method which commends itself to our common sense is ourselves to discontinue to drink alcoholic liquors, and to induce all whom we can influence likewise to abstain. Our end is attained in proportion as our means are adopted. A medical abstainer has more influence than any: "Truth, from his lips, prevails with double sway."

I need hardly remind medical men that the harm arising from the use of alcohol is not to be measured by the unsteadiness of the legs or the thickness of the speech. We are all aware that a great deal of perversion of function takes place before these occur. We know that it affects the brain, upon which it exerts a paralysing action, weakening first of all the highest powers of the mind, those which are least automatic, those which are most connected with the individual, or are the latest acquisitions of the race. It produces progressive paralysis of the judgment on the sensory side, and of the will on the motor. It lengthens the time required for a voluntary effort; and, while reducing self-control (that is, temperance), leaves the lower reflex centres to act for a time more automatically; these reflex actions are, with larger doses, one by one weakened and extinguished—the most complex first, until at last only respiration and circulation remain, or may themselves be narcotised.

I am convinced that all will admit that this gradual paralysis of mental and moral control is of more importance than any paralysis of mere muscular power or co-ordination. Hence it is not desirable to practice any habit which can produce such results. This is a clear, safe, and easily understood practice, such as the profession should recommend for the moral elevation and physical development of the masses.

Some contend that medical men have no special concern with morals; but we are still men, bound to promote the good of others, and surely unable to repudiate our obligation, because we have special knowledge and greater influence. The fact that morality is affected by a material agent—alcohol—makes it peculiarly the province of the physician. We ought to let our fellow-creatures know that alcohol saps the foundation of morality, by rendering self-control more difficult, and at last impossible. Alcohol degrades a man, or a nation. It takes the individual back through the stages of youth and childhood, to the unconscious and merely animal condition of the new-born babe; and it has a greater effect on the young, and on those low in the scale of intelligence and general self-control. The same applies to nations; its power being more irresistible and destructive, the lower a nation is in the scale of civilisation. Physicians, then, ought to exert their

individual and associated influence to stay this plague, proclaiming that alcoholic liquors are injurious to the highest interests both of the individual and of the State.

As to alcohol as a medicine, our Association leaves every member perfectly untrammelled. Some of us use it often; others consider it dangerous, and so unjustifiable, to put such beverages into the hands of patients, and think it more scientific to administer it in the same way as we give other drugs. Others have little or no faith in it, and never awake a dormant appetite for drink, or implant in their patients that craving, or those ideas about alcohol, which may hereafter prove their ruin for time and eternity.

The recent revelations of Dr. Ogle, on the great mortality of medical men from the effects of alcohol, explode one assertion, namely, that education in physiology, and in the nature of alcoholic liquors, will obviate the evils of alcohol-drinking. Hence we are sure of our ground, that only total abstinence from any narcotic can prevent that narcotic from claiming its full tale of victims.

We ask medical men to reconsider their position in the light of ever-accumulating experience. We desire to see all promoting temperance, by recommending total abstinence from that which renders it more difficult, or, perhaps, impossible. We desire them to join our Association, in order to raise a powerful and united voice in favour of total abstinence. We welcome medical students as associates. Each must realise his responsibility, and act accordingly, resolving that "what one man can do" to stay the ravages of alcohol, that, God helping him, he will do.

ON THE VALUE OF BORIC ACID IN VARIOUS CONDITIONS OF THE MOUTH.

By A. D. MACGREGOR, M.B., Kirkcaldy.

BORIC ACID is now officinal, and justly so. It has long been used in various metallurgical and ceramic operations, and more recently its preservative power has been abundantly demonstrated. It is this antiseptic power which gives it its great therapeutic value. It is a very stable compound—one of the most stable of the acids; it is not volatile, and only exerts its action when in solution; fortunately, however, it is soluble in more than one menstruum. Up till now, its chief application has been in connection with modern surgery, where the boric ointment, lint, and lotions all hold a prominent place. There are spheres of usefulness for it, too, in medicine: and one of these is in diseases of the mouth. It is the benefit of its local action we usually wish to gain, for, though sometimes given internally—as in irritable conditions of the bladder—its topical antiseptic effect is more often desired. In connection with its local application in various diseased conditions of the mouth, its solubility in water and glycerine, its unirritating character, its comparatively innocuous nature, and its almost tastelessness, are greatly in its favour. More particularly is this the case in treating such conditions in children, whose oral cavities cause them so much annoyance. Speaking generally, boric acid will be found useful in all conditions of the mouth, fauces, pharynx, and nose, where there is any abrasion of the epithelium; whether it be used as a powder, gargle, mouth-wash, pigment, or confection. More definitely, I may say, it is not contra-indicated in any of the forms of *stomatitis*, though scarcely severe enough for the graver varieties.

In *simple catarrhal stomatitis*, a mouth-wash, containing from 10 to 15 grains to the fluid ounce, speedily cures the condition, and exercises the same beneficial influence in the *ulcerative* form, though there in addition to the rinsing of the mouth, a local application in the form of the powder or pigment, should be made to the individual follicular ulcers. The powder simply consists of finely powdered boric acid, mixed in various proportions with starch; the pigment is a solution of boric acid in glycerine (1 in 4 or 5). In both cases, the addition of chlorate of potassium is advantageous; indeed, I usually combine it, but it is not essential.

Nothing I know of is at once so rapid and so efficient, in the treatment of *parasitic stomatitis* or *thrush*, as this remedy. The youngest children do not object to its application, and, occasionally, you have to caution against its too frequent use. The *oidium albicans* quickly succumbs to its influence. I am well aware of the great value of nitrate of silver, in many of these conditions; but, I am also alive to its extremely disagreeable and persistent taste, and the dislike which precocious children at once take to it. For thrush in children, I especially recommend boric acid, either as a mouth-pigment or as a confection. Honey and sugar have both been condemned, as being inadmissible, in combination, for the treatment of thrush; but, so far as children are concerned, I must say I consider a confection

(though made with honey), which has been impregnated with boric acid, gains more by its palatableness than it loses by the tendency of the saccharine matter to further the growth of the fungus. The boric acid at once does away with this tendency. Let the pigment be frequently painted with a brush over the patches, never omitting to do it after food has been taken; or, a little of the confection, simply allowed to dissolve in the mouth; and the days of the fungus will soon be ended. I have found boric acid, combined with its salt (borax), markedly beneficial. Borax alone, however, is not nearly so good.

In *pharyngitis*, and *relaxed conditions of the throat*, a gargle, containing boric acid and glycerine, with either tannic acid or alum in addition, ought not to be forgotten.

Let me allude to another condition, in which I have found combinations of this substance helpful and grateful to the patient. I refer to the condition in which we frequently find the mouth, tongue, and teeth in severe cases of typhoid fever. The mouth is hot; the lips dry, cracked, and glued to the sordes-covered teeth by inspissated mucus and saliva; the tongue dry, or even glazed and hard, brown or black, crusted with a foetid fur. Under such circumstances, a pigment, containing boric acid (30 grains), chlorate of potassium (20 grains), lemon-juice (5 fluid drachms), and glycerine (3 fluid drachms), yields very comforting results. When the teeth are well rubbed with this, the sordes quickly and easily become detached; little harm will follow from the acid present. The boric acid attacks the masses of bacilli and bacteria; the chlorate of potassium cools and soothes the mucous membrane; the glycerine and lemon-juice moisten the parts, and aid the salivary secretion. I consider this application well worth a trial.

So much for the soft parts; a word in conclusion regarding the teeth. Few medical men, I suppose, have ever given a prescription for a tooth-powder (such a matter is beneath their notice), and the selection of the ingredients for the various powders and pastes in vogue for the purpose of beautifying and cleansing the teeth is left entirely in the hands of those who certainly should not know better than medical men. I have frequently trespassed on this debatable ground, and recommended a particular dentifrice. In view of the extremely important part the teeth play in the economy of life, I never hesitate occasionally to inquire as to the attention they receive.

A tooth-powder should possess certain characteristics; it should be antiseptic, cooling, agreeable to taste and smell, and have no injurious action on the teeth. After use, it should leave the teeth white, and a sensation of freshness and cleanliness in the mouth. As an antiseptic in this connection, nothing can displace boric acid. For years I have used the following powder, and can recommend it. Boric acid, finely powdered, 40 grs.; chlorate of potassium, 5ss; powdered guaiacum, 20 grs.; prepared chalk, ʒi; powdered carbonate of magnesia, to ʒi; otto of roses, half a drop. The boric acid in solution gets between the teeth and the edges of the gums, and there it discharges its antiseptic functions; the chlorate and guaiacum contribute their quota to the benefit of the gums and mucous membrane generally; the chalk is the insoluble powder to detach the particles of tartar which may be present, and the magnesia the more soluble soft powder which cannot harm the softest enamel.

It is only right to say that boroglyceride (Barff) can replace boric acid in almost all the forms of administration I have enumerated; it is efficacious, sightly, and pleasant to the taste.

A CASE OF PURPURA: WITH REMARKS.

Read at a Meeting of the South-Eastern Branch.

By EDWARD MACKEY, M.D., M.R.C.P.

Physician to the Alexandra Hospital for Children, and Assistant-Physician to the County Hospital at Brighton.

IDIOPATHIC, as distinguished from symptomatic purpura, is still one of the "unknown quantities" in medicine, as little explained now as when Werlhof first described the "*morbus maculosus*": a hundred years ago (1785). Yet, clearly, the systemic fault must lie either in the blood or in the capillaries (including their nerve-supply), or in both; and this much may be said, that the tendency of modern opinion is to connect the malady with defect of nerve and vessel rather than of the effused fluid.

The same remark applies to *hemophilia*, which, *quâ* hemorrhage, is related to purpura, and in which there is no constant fault in the blood-composition; whilst, in *scorbutus*, such fault may be proved by analysis, and its causation, course, and treatment are markedly different.

Dr. Richardson, indeed, has described an "aqueous" and a