

Treatment of Apoplexy.

Preston, of Baltimore, believes that in the treatment of apoplexy more might be done in the prodromal stage if this condition were more carefully studied and oftener recognized. There are no constant or certain prodromata, but in a considerable proportion of the cases here related the history obtained afterward from the patients showed the existence of headache, vertigo or a sense of fullness in the head, numbness of one side, etc. These symptoms in some instances existed for a week before the apoplectic attack. It is very important to heed these warnings, especially in cases where there is atheroma of the vessels, or where there is high arterial tension without atheroma. Rest, vascular sedatives, nitro-glycerin, large enemata, will often modify the force of the circulation and thus tend to avert the rupture of the artery. Some years ago the writer called to see an elderly woman, stout, with flushed face, headache, and unusually high arterial tension. While waiting for the family physician she was kept absolutely quiet, with ice to her head. While consulting in the next room, the patient, against orders, got up to use the commode; the arteries could stand no further strain, rupture occurred, and she died in half an hour, with all the symptoms of intracranial hemorrhage. Venesection would probably have averted this disaster. It rarely happens that the physician sees clearly enough to make use of bloodletting. After the rupture of the artery has taken place, it is doubtful whether venesection does any good. The most important part of the treatment of apoplexy is rest. There is no way by which the bleeding can be stopped, and it is probable that in the great majority of cases the increased intracranial pressure tends to control the hemorrhage. The ruptured artery or miliary aneurism is small, as a rule, and it is generally soon occluded by clot. If the amount of hemorrhage is moderate and not in a vital part of the brain, recovery, more or less complete, will take place if the clot remain in its first position.

Very often it happens that the original location of the clot was not specially dangerous, but from gravity or as the result of exertion the clot has forced its way through the soft brain tissue and done irreparable injury to more important structures. This can often be seen post mortem and the track of the clot made out. From this it follows that the greatest care should be exercised to prevent any more moving of the patient than is absolutely necessary. If it be possible, the patient should be laid down on a sofa or mattress in the room where the attack occurs and no attempt at movement made for twelve or twenty-four hours. It is better to slightly elevate the head by pillows, since this probably tends to modify the force of the heart's action in the cerebral vessels, and at the same time allows respiration to be carried on rather better than when the patient is perfectly flat. Opening the skull has been resorted to, but it is doubtful whether this is advisable, except in the case of meningeal or cortical hemorrhage. The ice cap to the head is of some use in allaying restlessness, and is extremely good treatment for the relatives and friends. In regard to drugs in this early stage there are practically no therapeutic indications that can be successfully met. The use of ergot and that class of remedies is of more than doubtful propriety. Aconite may sometimes be used to advantage in controlling a too forcible heart's action. As soon as the patient can swallow, it is the author's custom to administer a mixture of bromide and iodide of potassium, 30 to 40 grains of the former and 10 grains of the latter, and this is kept up for several days, then the bromide is omitted and the iodide used alone in increasing doses. In regard to the custom of administering croton oil or some drastic purge during the early stage, although sanctioned by almost immemorial usage, it is not only useless, but exposes the patient to the risk of making dangerous exertions, besides putting him in a filthy condition. The same objections in part apply to blistering and to the use of mustard. It is important to attend to the bladder and draw off the urine at regular intervals. The throat should be kept as free from mucus as possible and the surroundings of the patient rendered comfortable. These points have, perhaps, been dwelt upon with unnecessary minuteness, but one so often sees these cases handled in a mischievous manner. The physician, realizing the futility of any active treatment, is too apt to yield to any suggestion made by the family, and the object of this paper is to insist upon a simple and rational treatment of this condition.—Maryland Medical Journal.

Glycerin for Softening Leather.

Glycerin imparts considerable suppleness to leather, but soon sweats out in damp air. To fix it in the leather, it should first be incorporated with four times its weight of the buttery mass made by dissolving beef fat in warm cod oil. Another method of rendering the glycerin a permanent constituent of the leather is to incorporate it with a small proportion of white of egg. This mixture may be applied alone or may be followed by the above described glycerin oil. A solution of dextrin may be substituted for white of egg if this

latter be too costly. By dissolving a tan stuff in glycerin and mixing it with cod oil and fat, a valuable stuffing for leather may be obtained.

Street Car Fenders Wanted.

By an ordinance of the authorities of Baltimore the street car companies are required to provide their cars with fenders. With this view a commission was formed, consisting of the mayor, city register, and city commissioner, for the purpose of considering the subject of life guards for trolley cars. Mr. Mendes Cohen, Past President Am. Soc. C. E., was employed to investigate and make a report on all fenders which came to his notice. In all, 70 different types were offered, but out of this number, which included nearly all, if not all, of the best known fenders, none met with his unqualified approval.

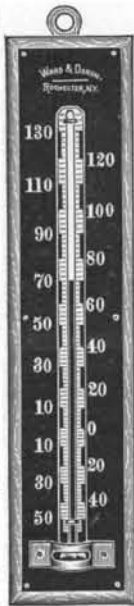
In concluding his report, Mr. Cohen says, in part:

What is needed is a very simple piece of work, the more simple the better.

It is required that the front surface of the car, striking a standing human being, shall be so arranged as to afford a reasonable prospect of saving the person from being dashed to the ground; and, further, so arranged that it shall do the least possible damage by its own impact; and, further, if it fails to do the duty expected of it, and the person does fall to the ground, or is already lying there, that it shall be so devised as to pass over him without causing further injury; and that there shall also be on each car a suitably arranged wheel guard, preferably of angular or "pilot" form, which shall be automatically brought in close contact with the street and rails, in order to prevent the crushing of the victim, whom the front device has failed to save.

EASILY READ THERMOMETERS.

The instrument shown in the illustration, styled by its manufacturers "a distance reading thermometer," is designed not only to be up to a good standard of accuracy for all ordinary requirements, but it presents the special advantage of being easily read at a distance of ten to fifteen feet in the small styles, and at proportionately greater distances in the larger sizes. As large figures are used, they are placed alternately on opposite sides of the scale, which is divided into alternate light and dark spaces by sections of ten degrees, the limit of each section being thus distinctly seen in such manner as to show at a glance the indicated temperature. The tube is filled with red spirits, guaranteed to be non-fading, and the liquid presents to view a wide surface. The makers of these instruments, Messrs. Ward & Doron, of Rochester, N. Y., have had forty years' experience in the manufacture of thermometers.

**The Influence of Sugar and Tobacco on Muscular Effort.**

In 1892 an important series of experiments was undertaken by Dr. Warren Lombard upon the influence of tobacco on muscular effort. The same subject has been investigated by Dr. Vaughan Harley, and the results of his observations are recorded in the first part of the Journal of Physiology for the present year. Dr. Vaughan Harley agrees with Dr. Lombard in considering that the amount of work done by the same set of muscles at different times of the day undergoes periodical variation; so we may accept as a fact that there is a diurnal rise and fall in the power of doing voluntary muscular work, in the same way as there is a diurnal rise and fall in bodily temperature and pulse. It is remarkable, however, that instead of the greatest amount of work being done, as might have been expected, on rising in the morning after a night's rest, it is found that at 9 A. M. the smallest amount of work is accomplished, the powers of doing muscular work in Dr. Harley's case increasing each hour up to 11 A. M. Immediately after lunch there is a marked rise, followed an hour later by a fall; while again an hour later, or about 3 P. M., the amount of work accomplished reaches its maximum. Then, from some unexplained cause, there is a notable fall at 4 P. M., which is succeeded by a rise at 5 P. M., after which a progressive fall takes place during each successive hour until dinner. Even during a prolonged fast more work was capable of being executed from 11:30 A. M. to 4:30 P. M. than at 9 A. M. Dr. Harley admits, however, that further experiments are required to determine this point satisfactorily. It was found in his experiments on the muscles of the middle finger that, in corroboration of a well-known physiological fact, regular exercise caused increase in the size of the muscles brought into play, and at the same time up to a certain point rendered them capable of performing more work. Sugar, taken internally, proved to be a muscular food; since, when taken on an empty stomach, there was on that day an increase of 25.6 per

cent in the work done by the left middle finger, while the right middle finger showed an increase of no less than 32.6 per cent. Dr. Harley varied the experiment of administering sugar in many different ways, but always with the same result; the vigor of the muscles was always augmented. The influence of tobacco was not so marked in Dr. Harley's experiments as in those of Dr. Lombard. Dr. Harley considers that moderate smoking, in one accustomed to it, neither increases the amount of work nor retards the approach of fatigue. It perhaps slightly diminishes muscular power and hastens the onset of fatigue. Dr. Lombard holds that the use of tobacco has a powerful influence in this direction. Such experiments as these, even when no absolutely definite result is arrived at, are of importance, and if carried out with due precaution against error, in a large number of men, would undoubtedly constitute the most satisfactory basis on which a sound system of training should be carried out.—Lancet.

Mouth Breathing.

The mouth is the entrance to the digestive rather than to the respiratory organs.

Mouth breathing is neither natural nor healthful, but nature has so provided, that when, through diseased conditions, the nasal passages are occluded, we may obtain air through the mouth.

The nose, however, is the entrance to the respiratory tract.

Within the cavity of the nose are scroll-like bones, covered with mucous membrane, which greatly increase the surface of exposure in order to furnish the three special functions of heating, moistening and filtering the inspired air. The fact that mouth breathing is injurious is not sufficiently known. The air rushes into the lungs in such volume that its temperature is not regulated, its force is not controlled, it is in no way purified, and can thus easily give rise to diseased conditions of many kinds.

The winter season is the most prolific in the production of these resulting maladies, because of the difference in temperature of the external air and the body; and among the diseases liable to arise are pneumonia, bronchitis, laryngitis, croup, etc.; whereas the same air taken normally through the nose, being prepared for its reception into the delicate lungs, simply fulfills the natural law, and no harm results.

The habit of mouth breathing generally arises from some obstruction in the respiratory tract, but may be prevented in most cases by timely care. Parents realize too little the importance of nose breathing. In the minor ailments of children, when the nose may be slightly obstructed for a time, it can still, by persistent effort, give full respiration; but because it is easier, the child breathes through its mouth and acquires more or less of the habit.

If there is obstruction at any time, it is particularly liable to occur at night, showing itself by restless sleep, heavy breathing, and a cross child in the morning. It is quite safe to say that when a child persistently breathes through his mouth there is something radically wrong. There are several forms of obstruction to free nasal respiration—thickening of the mucous membrane within the nasal chamber, due to repeated colds; the presence, between the nose and throat, of glandular tissue, normal in character but unnaturally developed; enlargements of the tonsils and glands of the neck.

Each of these conditions may be remedied by skillful treatment, and a child who has been restless and snoring may be made to sleep quietly and restfully.

Persistent attempts to breathe through the nose will often be rewarded by success, and prevent the development of the disease commonly called catarrh.

Catarrh itself is not a disease, but a symptom of some obstruction or irregularity within the respiratory tract. It is much easier prevented than cured, while both are possible.

Keep your mouth closed and breathe through your nose.—C. Gurnee Fellows, M.D., in the Northwestern Sanitarian.

Weather and the Mind.

The psychology of the weather is suggested by Dr. T. D. Crothers as a promising subject for study. He says, in Science: "Very few persons recognize the sources of error that come directly from atmospheric conditions on experimenters and observers and others. In my own case I have been amazed at the faulty deductions and misconceptions which were made in damp, foggy weather, or on days in which the air was charged with electricity and thunder storms were impending. What seemed clear to me at these times appeared later to be filled with error. An actuary in a large insurance company is obliged to stop work at such times, finding that he makes so many mistakes which he is only conscious of later that his work is useless. In a large factory from ten to twenty per cent less work is brought out on damp days and days of threatening storm. The superintendent, in receiving orders to be delivered at a certain time, takes this factor into calculation."