residence, during the time, either at certain places among the mountains, at certain seashore resorts separated from the mainland, where there is little vegetation, or most certainly during a sea voyage. The malign influence of vegetable exhalations in these cases receives support also from the well-known fact that the kindred affection known as "rose-cold" seems to be largely dependent upon such irritants. The writer is acquainted with one gentleman who suffers acutely in September, but is perfectly well in June. His mother-in-law, for very many years and until her death, suffered in precisely the same way, and was also well all the early summer. They were both relieved by removing to Beach Haven, on an island off the New Jersey coast only six miles distant from the home of the mother-in-law. In this coincidence there is, of course, nothing peculiar; but two of the brothers of the gentleman mentioned, with his wife and sister-in-law, have been severe sufferers from acute coryza in June, and are all quite well in September. We have here a group of six cases, five of whom would be properly described as very far removed from the category of nervous persons, who have for many years suffered periodically, in all of whom relief is, at least, associated with the comparative absence of vegetable influences. Of the June cases, two were always better in town, and the attack was not so severe as to require other measures of relief; one is free from attack at Beach Haven; while the fourth, whose attacks are the slightest, gets comfort by keeping most of the time in the house. In none of the June cases is asthma present; but all have noticed great aggravation of their symptoms when exposed to various kinds of pollen, notably that of the horse-chestnut, the ailanthus, and the scented honeysuckle. In one of the June cases, and in one of the September cases, prominence of the inferior turbinated bone has been noted.

The object in citing these cases is not to bolster up the old and exclusive pollen theory, but to submit them merely as cases which show the difficulty which presents itself to any one who attempts a close and exclusive definition which will suit all cases.

Advocates of the purely nervous and anatomical theories maintain that their theory is supported by the results of treatment, and this will be spoken of more at length in its proper place; but the claim is as yet not fully substantiated, and quite a number who have undergone local and tonic treatment are known still to suffer from their old enemy. Whether this will continue to be true when they have undergone a *sufficient* number of applications to the nasal mucous membrane remains to be seen, but it is not as yet proved. It is still *sub judice*, and is subject in some measure to the well-known disposition—or idiosyncrasy shall we call it—possessed by many hay-fever patients, to be cured in succession by many forms of treatment. At the present time (1901) a resort to local treatment is comparatively safe, the results not having proved so satisfactory as was at one time expected.

In his recent work on hay fever, Sajous recognizes the difficulty of precise and exclusive definition, and formulates a theory which is comprehensive, and which may at least serve as a working hypothesis until more extended and complete observation furnishes us with one that is entirely satisfactory. According to this author, hay fever requires, first, an external irritant; second, a predisposition to become influenced by this irritant; and, third, a vulnerable or sensitive area through which the irritant may exert its influence.

It may be safely concluded that autumnal catarrh is largely dependent upon some disorder of the vaso-motor nerves, that the sympathetic system is partially responsible for the trouble, and that many of the symptoms are true reflexes; but what is the precise character of the trouble is not known; undue excitability there may be, and probably is, but that tells us little more than the old term idiosyncrasy. It has, however, the great advantage of directing our treatment into a definite channel. While admitting the implication of the nervous system, it cannot, however, be concluded that pollen has no share in producing the disease. That it has a large and important part as an exciting cause, it seems impossible to doubt. On the other hand, pollen is not the only excitant, but dust, heat, electrical conditions of the atmosphere, and many other things share with pollen the ability to provoke an attack in properly disposed persons.

Treatment has hitherto been of two kinds, namely, palliative at home, or radical by removal to a locality which experience has proved to be exempt from the exciting causes of the disorder. While the former has been unsatisfactory—so much so, indeed, as to lead many sufferers from hay fever to disregard it altogether—there is no doubt that much can be done to lessen the severity of the attacks, and to mitigate the suffering they cause. Leaving out of view, for the present, the local treatment, so much lauded of late as the only radical one, the following line of procedure may be safely followed as rational, harmless, and as proved by experience to be beneficial.

The patient should lead a very quiet life from the beginning to the end of the period, avoiding exposure to draughts, the direct rays of the sun, and any exertion which may tend to quicken the circulation. He should pay particular attention to his diet, especially during the later hours of the day. By this it is not meant that he should go upon a low diet, but that he should avoid anything that is indigestible, or which during digestion gives off a large amount of gas, such as sweet potatoes or lima beans. In many cases watermelons act injuriously, and the individual powers of digestion should always be carefully considered. Keeping this last point in view, there is no reason why rich soups, meats, the less starchy vegetables, and many fruits, should not be indulged in. He will do well to have any peaches he may eat pared before they are brought into the room, and he will be wise if he eats nothing after the early hours of the afternoon.

For the conjunctivitis, or rather the ocular injection, which exists in these cases, a weak solution of brandy and water, or some other mildly stimulating collyrium, will prove most comforting. When obliged to go out in the day-time, dark-colored spectacles will afford considerable relief. Similar locally stimulating treatment will be found beneficial to the coryza. Weak solutions of quinine, of sea salt, or any other suitable substance, will afford temporary relief, and if attention is paid to the specific gravity of the solutions by the addition of a saline, so that they approach that of the blood, they can be frequently repeated without injury, and with positive benefit. In the use of hydrochlorate of cocaine, there is every reason to expect decided benefit. Dr. Da Costa has found it useful in a number of cases, when applied to the nasal mucous membrane, and there would seem to be good grounds to anticipate advantage from its further use in solutions of varying strength. The danger of acquiring the cocaine habit by these applications should, however, not be lost sight of. Stimulating gargles, such as vinegar and salt, are useful by temporarily allaying the intense itching in the roof of the mouth, and lessening the hyperæmia of the mucous membrane of the fauces and pharynx.

When the bronchitic symptoms appear, the use of mild expectorants with opium will be found decidedly useful in allaying the cough, even though they do not abolish it altogether. Neither physician nor patient should allow the fact that the disease is annually recurrent, and that the predisposition cannot be destroyed, to prevent the use of ordinary remedial measures to palliate the severity of the symptoms. Very many cases will be benefited by some such prescription as the following: ℞ Morphinæ sulphatis, gr. i.; extract. belladonnæ, gr. ij.; extract. prun. virg. fluid., syrupi lactucarii, āā fl ℥i. Dose, a teaspoonful every four hours. Beyond the fact that they divert the attention of the patient, counterirritants applied to the chest do not appear to do much good, while they possess the disadvantage of sometimes provoking troublesome skin affections.

When asthmatic symptoms present themselves, opium,

in one form or another, will be found to be by far the most efficient remedy. Two or three doses of one-fourth of a grain each, taken two hours apart in the evening, will be found to diminish the spasmodic tendency most materially, and by cautiously increasing the dose from time to time, or by changing the form of the drug, it will be found possible to maintain the good effects throughout the time of the attack without resorting to a very large dose. In recommending this method of treatment the physician should carefully weigh the risk that the patient runs of acquiring an evil habit, and should always insist that it should be pursued, under competent medical oversight, only when the discomfort is severe. He should, above all, urge its abandonment at the earliest possible day. He should always bear in mind the fact that, while the immediate comfort of the patient may be promoted, his ultimate well-being may be seriously imperilled by a drug which is so potent for both good and evil.

When the physician is called to witness one of those extreme attacks previously described in this article, when the orthopnœa is complete, and the sufferings of the patient are far greater than are usual at any death-bed, he will find that in his hypodermic syringe he possesses an implement of almost magical power. The injection beneath the skin of one-fourth or one-third of a grain of sulphate of morphine will, in the vast majority of cases, afford complete relief in a very few minutes. The practice of the writer has been to use seven minims of Magendie's solution, and he has never witnessed more marvellous effects from any medication. Generally within fifteen minutes the spasm has entirely disappeared, and the patient has fallen into a quiet sleep. Rarely, and only in those cases in which the remedy has been often administered, he has had to use a supplemental injection of four or five minims.

Smoking various kinds of cigarettes, burning saltpetre papers, or some of the various quack compounds so extensively sold often afford some relief, generally just in proportion as an anodyne has been incorporated in the mixture. Chloral will afford relief in some cases, but, apart from the danger which attends its use, it is much less efficacious than the course of treatment above indicated. When resorted to it may be advantageously combined with full doses of one of the bromides. These last-mentioned remedies may often be used with benefit. Twenty grains of the bromide of potassium, repeated every hour until a drachm has been taken, will frequently secure a quiet night. The bromides and chloral may be usefully added to, or alternated with, opiates. Musk, camphor, asafœtida, stramonium, and very many other remedies addressed to the nervous system, have been recommended, and may be tried sometimes with advantage, both from their own intrinsic power, and from the aid they lend to the effort to keep within bounds the dose of opium necessary for the control of spasm.

The treatment above indicated will enable sufferers from hay fever to exist with a minimum of discomfort at home, but in those cases which suffer much from asthma it will be a period of confirmed invalidism at best, and they will long for more radical and more effectual means entirely to abolish the recurrence of the annual attacks. There are very many who merely suffer the inconvenience of a severe coryza and an annoying catarrh, but who are able to go about and attend to business, with discomfort, indeed, but without interruption. Such cases may afford to consider whether they will continue satisfied with palliative treatment, or seek that which, while more severe, is certainly more effectual. But the patient who has had one attack of severe asthma will share the anxiety of his friends that he may escape another such, and will be willing to make great efforts, to endure many discomforts, aye, go even to the ends of the earth, if he may only thereby avoid another attack.

Fortunately, a change of location can be recommended with confidence. Experience has proved that immunity is enjoyed at Bethlehem, and many other localities in the White Mountains, as well as at other elevated locations; at Beach Haven, N. J., Fire Island, N. Y., Halifax, Nova Scotia, and a few other places on the seashore; or, better than all, at sea, out of sight of land. It would be out of place, in an article like the present, to go into a discussion of the reasons for the immunity enjoyed under the circumstances, yet it may be well to refer to certain facts as tending to an elucidation of the matter, or at least as helping us to a knowledge of the conditions essential to immunity. Why certain mountainous regions should be exempt and others not, is not known. It cannot be elevation, for all elevated regions do not afford relief, while those which do are often less high than those where no relief is obtained. It cannot be altogether the absence of pollen, for none of the localities proved to be beneficial are entirely destitute of vegetation. Yet the fact remains, and it is idle to deny it, that autumnal catarrh is escaped at Whitefield, Franconia, Fabyan's, Crawford's, Mount Washington, Gorham, and many other places in the White Mountain region, at many places in the Adirondacks and in the Catskills, at the Straits of Mackinaw, and at some other points in the Northwest. When we come to the seashore, we find that Fire Island and Beach Haven are both situated upon islands of limited extent, somewhat removed from the mainland, and, so far as our present knowledge goes, it is only at places similarly situated on the seashore that exemption from hay fever is enjoyed. These islands are very low, Beach Haven not being more than eight or ten feet above high water. Nor is there an entire absence of vegetation, there being an abundance of marine plants, and the upland flowers, though few in number, are yet amply sufficient to supply pollen to a disastrous degree, did it possess the virulent properties supposed to belong to it by Morell Mackenzie and Blackley. Yet, as was pointed out by the author of this article some years since, very many persons entirely escape their annual attacks of hay fever at Beach Haven, and all enjoy a greater or less measure of relief. While the wind is from the sea complete immunity is enjoyed; when it comes from the land some inconvenience is experienced, but the attacks are always of modified severity.

Although, therefore, it is difficult or indeed impossible to give a satisfactory explanation of the reasons why certain places are safer resorts for sufferers from autumnal catarrh than others, it is well to advise such cases to make trial of one of them, making the selection according to the dictates of individual convenience and inclination. But it is important, when the patient goes to one of these resorts, that he go *before* the time of the expected attack, and observe ordinary hygienic precautions while there. Personal observation leads the writer to believe that it is of importance to anticipate the attack by several days, and that, when it has once begun, it is much more difficult to get rid of it. Yet many persons will arrive at their safe harbor suffering acutely, and find complete relief in a few hours. Nourishing food, light woollen clothing, thin flannel next the skin, the avoidance of undue exertion, and rational medical treatment for any symptoms which arise, will give comfort, even though the exile—for an exile it is when enforced from year to year—may be inconvenient and hard to bear. The writer would especially urge the importance of sending children to some safe place, as he is increasingly convinced that, if there is any hope of breaking up what may be in part a systemic habit, it may be most reasonably indulged in the case of very young persons. To accomplish this is worth every effort, for while autumnal catarrh is not a disease endangering life, and the suffering attendant upon it may be alleviated or borne, its annual recurrence does most seriously interfere with all the avocations of the individual, whether he remains at home or seeks refuge in an exempt locality. Experience would seem to show further that when complete exemption is enjoyed for a series of years, recurring attacks exhibit less severity.

During the years which have passed since this article was written its author has met with quite a number of cases in which the disease has practically disappeared in those who persistently visited exempt localities for a

series of years, and his conviction is strengthened that when the habit of the system is interrupted by such means there is a distinct tendency for the disease to wear out (May, 1901).

The new pathological views to which reference has been made, and which identify the disease in question with certain abnormalities and pathological changes within the nasal cavities, have led to local treatment of greater or less severity, instituted with a view of getting rid of the cause entirely. Any abnormal prominences or growths connected with either the mucous membrane or the bones are attacked by the snare or galvanic cautery and destroyed, or if the trouble is found to consist in turgescence of the erectile mucous membrane, various stimulating applications are resorted to, and with most satisfactory results to those who have used them. The method is recommended by such capable observers, and specialists so skilful in their departments, that it is certainly worthy of more extended trial. As reported, the results have been very good, but it is yet too early to utter any *ex-cathedra* opinions upon the subject. Several who have undergone the treatment referred to have fallen under the writer's notice. Some have thought they were benefited, others that they were not improved, and one, at least, believed that he was worse than before. Most of the cases were met at a hay-fever resort. It is but right to add that some of the cases had not undergone the number of local applications which their attendants thought were necessary to work a complete cure. While the application of mechanical and operative measures may be safely tried within certain limits, there would seem to be danger of carrying the practice too far. It should not be forgotten that extensive tracts of cicatricial tissue may become the seat of more serious disease than hay fever. For the latter we have a tolerably certain and satisfactory palliative, if not a permanently radical cure, in temporary change of residence, while at present operative interference is undertaken only with the *chance* of permanent relief. As has been already stated, this form of treatment is less frequently resorted to at the present time, having proved disappointing to its advocates.

Those who desire to familiarize themselves with the natural history of hay fever will do well to consult the admirable work, "Autumnal Catarrh," by Morrill Wyman, M.D. (New York, 1872), in which they will find the best account of the disease and the most careful study of places where exemption from its attacks exists. Those who desire to know all about the pollen theory, and the extent to which it can be carried, will do well to consult "Experimental Researches on the Causes and Nature of Catarrhus Æstivus," by Charles H. Blackley, M.R.C.S. Eng. (London, 1873), and "Hay Fever: its Etiology and Treatment, with an Appendix on Rose Cold," by Morell Mackenzie, M.D. (London, 1885). This last book is most vigorously reviewed in the *American Journal of the Medical Sciences* for October, 1885, by Dr. John N. Mackenzie, of Baltimore, who has also contributed several papers bearing upon hay fever to various journals, in which he ably upholds the neurotic and anatomical theory of the disease. An able and suggestive paper will be found in the number of the *American Journal* for January, 1886, in which Sir Andrew Clark maintains very similar views, but would account for the asthmatic spasm by temporary and sudden congestion of the mucous membranes rather than by muscular constriction of the bronchial tubes. In "Hay Fever and its Successful Treatment by Superficial Organic Alteration of the Nasal Mucous Membrane," by Charles E. Sajous, M.D. (Philadelphia, 1885), there will also be found an exposition of the modern views, and details of the treatment recently so highly lauded for this most troublesome affection. Other papers upon the subject will be found scattered through the journals by Daly, Roe, Allen, Bosworth, Da Costa, Beverley Robinson, S. S. Cohen, and Hack. The work of Dr. W. C. Hollopeter, of Philadelphia, is among the more recent contributions to this subject.

Samuel Ashhurst.

HAYWOOD WHITE SULPHUR SPRING.—Post-Office.—Waynesville, Haywood County, North Carolina. Hotel and cottages.

Access.—From Asheville, viâ Murphy branch of the Western North Carolina Railroad, thirty miles west. The location of these springs is in the heart of the Alleghanies at the foot of the Great Balsam Mountains, where the peaks tower 5,000 to 6,000 feet in height. The altitude at the springs is about 2,800 feet. The surrounding scenery is of surpassing beauty, not excelled in rugged grandeur east of the Rockies. During the summer and autumn seasons the weather here is generally delightful, the temperature ranging from 56° to 80° F. The hotel is usually crowded with visitors at these times, some of them from remote points. There are two springs, one sulphur, the other iron. The temperature of the water is 54° F. No complete analysis has been made, but we are informed that the waters contain, besides sulphur and iron, salts of sodium, potassium, and magnesium. The present hotel, a large and commodious brick building, with surrounding wooden cottages, is located on the banks of the Richland River, a beautiful trout stream. Numerous attractions in the way of shooting, fishing, archery, tennis, bowling, and billiards are at the option of the guests. The medical properties of the water have been amply attested, especially in chronic functional disturbances of the liver, stomach, and kidneys. Rheumatism and neuralgic troubles are benefited by the hot baths.

James K. Crook.

HEADACHE.—Headache is a frequent manifestation of the most varied disorders of the nervous system and of other organs. Being merely a symptom of so many different morbid states, it cannot be consistently characterized or described as a disease, although it is occasionally of such a nature as to possess the significance of an independent affection.

It may be so fleeting or transient as to be more or less ignored by the patient, or it may attain such a degree of severity or persistency as to lead the sufferer to seek medical advice. Familiarity with its various forms is essential, and it is necessary always to bear in mind that headache is a frequent accompaniment of many constitutional diseases. Hence a description and classification of headache with suggestions as to the means of determining its causation must prove of great practical value. According to many modern observers, we know almost nothing of the structures in which the pain of headache is felt or of the mechanism of its production. As the meninges, especially the dura and a large area of the cranium, receive their sensory supply from the terminal sensory branches of the trigeminus, and as the meninges are also supplied by branches of the sympathetic nerve, it is reasonable to assume that headache is the result of direct or indirect irritation of these nerves.

Psychical disturbances, in the form of depressing emotions such as grief, worry, fright, etc., often produce headache; in such instances it must be due to processes originating in the higher cerebral centres through which superficial pain is perceived. Headache must not be confounded with true neuralgia in which the pain is paroxysmal in character and directly limited to the course of the nerve and its distribution. The idea that the location of the pain in any particular region of the head is always directly related to some special underlying, adjacent or remote pathological process (excepting pericranial inflammation), has not been substantiated by clinical experiences.*

No definite rules can be laid down in regard to this matter that will apply in every case. It may be said, however, after perusal of the histories and observation of a large number of cases, that pain located at certain parts of the head occurs more often in this or that condition of disease. Such information, nevertheless, may

* Recently, Head in his work on "Referred Pain" has endeavored to prove the existence of certain sensitive areas on the scalp in their relation to diseases of internal organs.

prove valuable in suggesting certain lines of inquiry when found associated with other symptoms.

The headache may be confined to the forehead, to the vertex, the parietal, temporal, or occipital region on one or both sides; it may be unilateral as in migraine, or it may affect the entire head, and is then described as general or diffused, or it may occur in various combinations.

Patients usually describe the pain in the head, which frequently dominates all other symptoms, as acute, sharp, throbbing, darting, dull ache, boring, burning, stabbing, etc. It may be transient, paroxysmal, periodical, or continuous, and may vary in degree and location from time to time. As pain is a subjective symptom we can judge of its degree only by the *tout ensemble* of the individual and by its association with unmistakable physiognomical expressions and physical manifestations.

"Traditional psychology may be said to regard pain as a feeling, *i.e.*, a purely mental state or condition, with or more frequently without a physical basis in the nervous system. Physicians do not place much confidence in the patients' statement of the quality or character of the pain, largely because patients have not words, nor experience to prompt the words, in which to describe their pains. The description of pain by a patient seems to be directly proportional to (1) liveliness of imagination, (2) vocabulary, (3) experience" (Witmer). The description is often materially enhanced by the patient's gestures.

Headache, for all practical purposes, may be divided into two classes—functional and organic. The so-called functional forms of headache are by far the more frequent, and include those resulting from various constitutional or psychical disorders, and from causes not situated in the skull or cranial cavity, excepting the disturbances of special-sense organs, such as the eye, ear, and nose, and dental caries. Some special forms of disturbance of the cerebral circulation may also be placed in this category.

The organic form includes all types of intracranial disease, whether vascular, meningeal, or cerebral, and disease of the cranial bones.

The functional forms of headache may be classified and subdivided as follow:

Toxæmic.	1. Retained excrementitious substances. 2. Products of defective metabolism. 3. Infectious germs or their toxins. 4. Various drugs. 5. Graves' disease.
Neuropathic.	1. Neurasthenia. 2. Hysteria. 3. Epilepsy.
Reflex	1. Ocular. 2. Gastric. 3. Nasopharyngeal. 4. Auditory. 5. Dental. 6. Uterine. 7. Sexual.
Circulatory.	1. Hyperæmia. 2. Anæmia.
Migraine.	

Toxæmic Headache.

In which the blood is contaminated by various deleterious agents.

1. Retained Excrementitious Substances.—(The absorption of decomposition and fermentation products developed in the alimentary canal, or the reabsorption of retained excrementitious substances.) (*a*) Constipation. (*b*) Intestinal indigestion. (*c*) Gastric indigestion. (*d*) Uræmia.

(*a*) *Constipation*; (*b*) *Intestinal Indigestion.*—In a very large majority of instances in which headache is complained of, it is due to toxæmia resulting either from constipation, or from intestinal or gastric indigestion. The clinical fact has long been established that auto-intoxication of intestinal origin plays an important rôle in the production of headache, migraine, and vertigo, but such symptoms are evidently more or less dependent upon individual susceptibility. Constipation is not incompatible with apparent health, for some persons may be constipated for a week or more at a time without any complaint of digestive trouble or headache. For this reason, the objection has often been made to the hypothesis of auto-intoxication of fæcal origin. On the other hand, Bouchard, who has made a special study of this subject, believes that constipation should be regarded as a protection against intoxication, and says: "it supposes that all that is absorbable has been absorbed, the aqueous part with what was held in solution." The lengthiest argument, however, will not controvert the familiar fact that thorough purgation causes the rapid disappearance of the headache and associated symptoms in most cases of this character.

In these patients the headache is usually located in the frontal region, but is often diffused over the entire head. As a rule, it is not constant, and may or may not be associated with gaseous eructations.

In some it is accompanied by morbid somnolence during the day and heavy sleep at night, while in others insomnia is complained of. Occasional attacks of vertigo may also occur.

(*b*) *Intestinal indigestion*, with or without constipation, is more frequently productive of headache through auto-toxæmia than as a supposedly reflex cause. The urine is often of high specific gravity and may contain an excess of indoxyl.

(*c*) *Gastric Indigestion.*—It would seem that gastric indigestion, on the other hand (although in some instances occasioning toxic absorption), is more likely to produce headache by reflex irritation through the pneumogastric nerve from fermentation of food and gaseous distention of the stomach. Thus, headache, possibly due to both causes, is frequently an accompaniment of dilatation of the stomach on account of the anomalous fermentations that are the consequences of it. The location of the headache is usually supraorbital or frontal.

(*d*) *Uræmia.*—Headache due to renal disease is of very common occurrence. Two forms are found in nephritic subjects—*uræmic* and *congestive*. Either one or both may be present in the same patient. The *uræmic* form is due to the retention in the circulation of excrementitious products, and may manifest itself in any type of kidney disease, whether acute or chronic. The pain is ordinarily situated in the occipital region, extending to the neck. It may or may not be associated with somnolence, nausea, or vomiting, etc., according to the degree of damage to the kidneys and arterial system. In some cases the headache may be accompanied by vomiting, vertigo, and optic neuritis, thus simulating the general cerebral symptoms of brain tumor. The *congestive* form arises in consequence of disturbed cerebral circulation in the presence of cirrhotic kidneys, with arterio-sclerosis, cardiac hypertrophy, and increased arterial tension. (See "Circulatory" form of headache.)

Puerperal Eclampsia.—Headache which is at times persistent and severe is often a premonitory symptom of a convulsive attack in this affection, and may be associated with delirium, excessive somnolence, mental hebetude, or insomnia. Œdema of the face and extremities is often present. This condition is generally regarded as acute renal disease of pregnancy, the headache and other symptoms being ascribed to some form of toxæmia not yet determined. Unless the urine is carefully analyzed, and the functioning power of the kidneys ascertained beyond question, the uræmic form of headache will often pass unrecognized, thus leading to unexpected and serious consequences.

2. Products of Defective Metabolism.—(*a*) Rheumatism. (*b*) Gout. (*c*) Diabetes.

(*a*) *Rheumatism.*—There are two forms of headache which occur in rheumatic subjects. One is due to auto-toxæmia, the headache generally being diffused and similar to that occurring in other forms of toxæmia. The other is a true muscular rheumatism or myalgia located in the scalp and affecting particularly the occipito-frontalis muscle and its aponeurosis. The pain is increased by active or passive movement of this muscle, and it is common to obtain a history of other attacks of muscular rheumatism, affecting different parts of the body. These patients may also have suffered from acute or subacute articular rheumatism. The attack may last for from a few